Federal Aviation Administration

TM

U.S. Terminal Procedures Publication

Northwest (NW) Vol 1 of 1

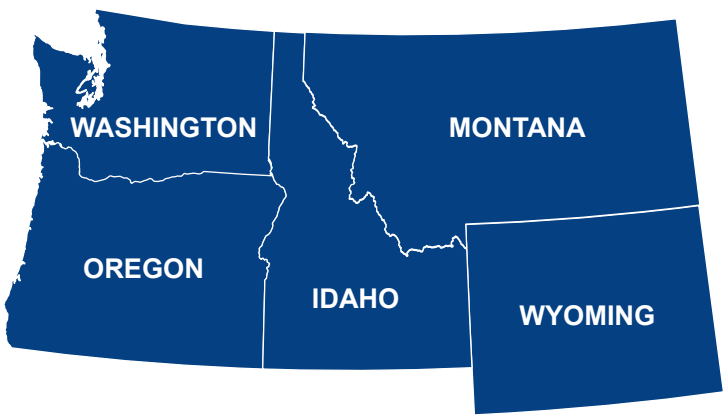
Effective: 0901Z

30 JAN 2020

to: 0901Z

26 MAR 2020

Consult the Change Notice (CN) effective 27 FEB 2020 for revised Instrument Procedure Charts for this volume



Consult NOTAMs for latest information

Consult/Subscribe to FAA Safety Alerts and Charting Notices at:
http://www.faa.gov/air_traffic/flight_info/aeronav/safety_alerts/

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CORRECTIONS, COMMENTS AND/OR PROCUREMENT

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

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

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

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

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

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

INOP COMPONENTS 19339

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

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

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

(1) ILS, PAR, LPV, GLS minima

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

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

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

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

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

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

(4) Sidestep minima (CAT C-D)

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

(5) All Approach Types, All lines of minima

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

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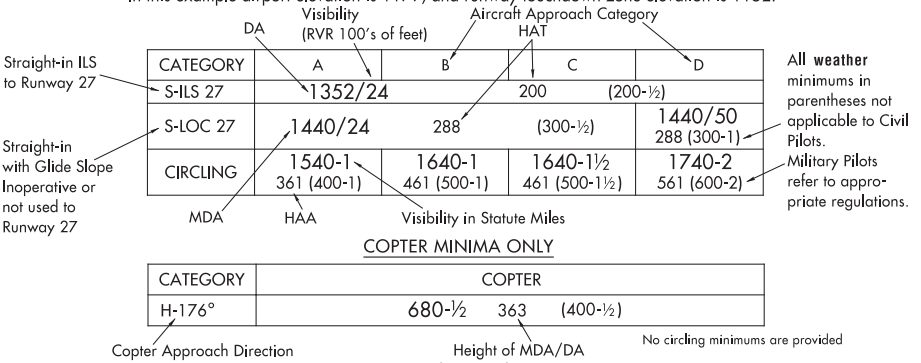
TERMS/LANDING MINIMA DATA 19339

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.



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 RESTRICTED 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 restricted temperature. Pilots familiar with cold temperature procedure in the Notice to Airman Publication (NTAP) and correcting all altitudes from the IAF to the MA final holding altitude do not have to reference the NTAP. Pilots wishing to correct on individual segments must reference the NTAP airport list for affected segments. See Notice to Airman Publication (NTAP) Graphic Notices General for complete list of published airports, temperature, segments, and procedure information. www.faa.gov/air_traffic/publications/notices. Pilots will advise ATC with the required altitude correction when making a correction to any segment other than the final segment. See following Cold Temperature Error Table to make manual corrections.

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. However, if it is necessary to operate at a speed in excess of the upper limit of the speed range for an aircraft's category, the minimums for the category for that speed shall be used. For example, an airplane which fits into Category B, but is circling to land at a speed of 145 knots, shall use the approach Category D minimums. As an additional example, a Category A airplane (or helicopter) which is operating at 130 knots on a straight-in approach shall use the approach Category C minimums. 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

TERMS/LANDING MINIMA DATA 19339

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TERMS/LANDING MINIMA DATA 19339

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.

TERMS/LANDING MINIMA DATA 19339

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

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.

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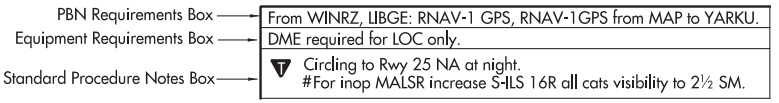
GENERAL INFO 19003

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 EQUIPMENT REQUIREMENTS

Users will begin to see Performance-Based Navigation (PBN) Requirements and Equipment Requirements 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 procedures 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.



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)

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GENERAL INFO 19003

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)

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ODALS	Omnidirectional Approach Light System
ODP	Obstacle Departure Procedure
OM	Outer Marker
PAR	Precision Approach Radar
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 19339

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°

HOLD 8000
Arrival
090°
270°

090°
(IAS)
270°
4 NM

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 Mandatory Airspeed
120K Minimum Airspeed
250K Maximum Airspeed
180K 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 but underlie the final approach course are shown in screened color.

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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LEGEND 19339

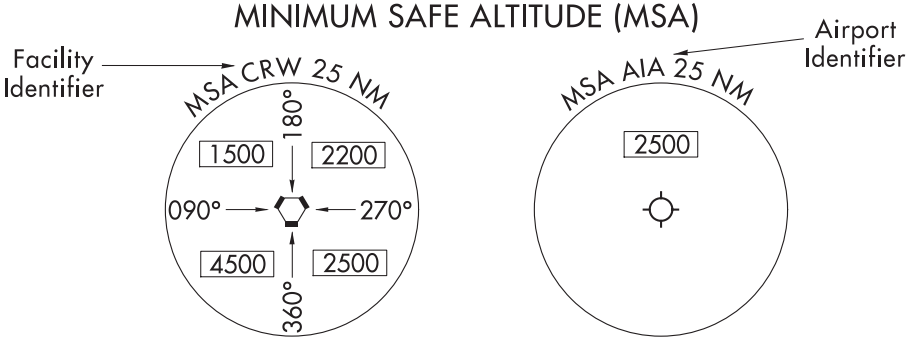
LEGEND 19171

INSTRUMENT APPROACH PROCEDURES (CHARTS)

NW-1, 30 JAN 2020 to 26 MAR 2020

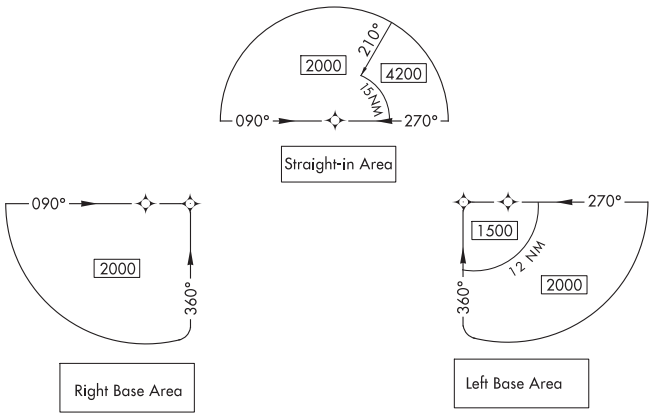
PLANVIEW SYMBOLS

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 W-Warning
P-Prohibited 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

LEGEND 19171

NW-1, 30 JAN 2020 to 26 MAR 2020

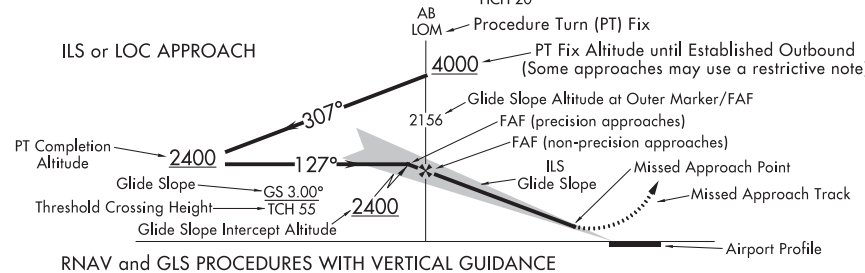
PROFILE VIEW

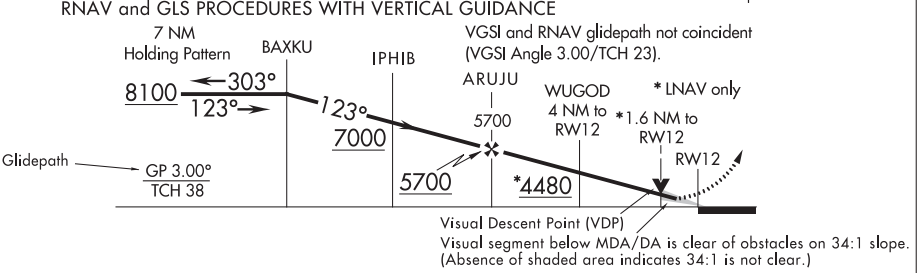
Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".

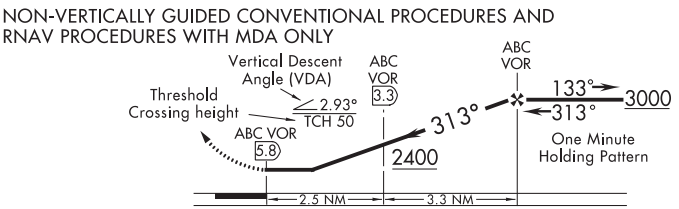
1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: GS 3.00°, TCH 55.

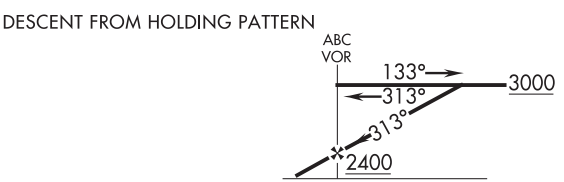
2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle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

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









ALTITUDES

- 5500 Mandatory Altitude
- 2500 Minimum Altitude
- 4300 Maximum Altitude
- 3000 Recommended Altitude
- 5000 Mandatory Block Altitude 3000
- 2400 Glide Slope/Glidepath Intercept Altitude and final approach fix for vertically guided approach procedures.
- ▼ Visual Descent Point (VDP)

PROFILE SYMBOLS

- 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.

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

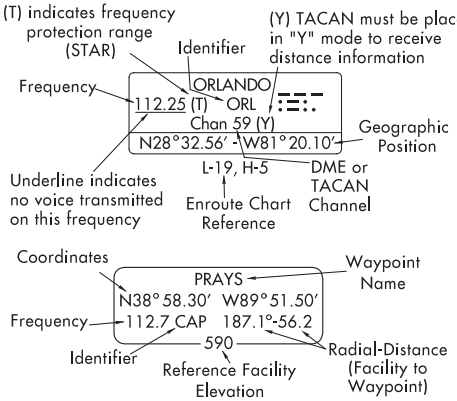
LMM, LOM (Compass locator)

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



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 Mandatory Altitude (Cross at)

2300 Minimum Altitude (Cross at or above)

4800 Maximum Altitude (Cross at or below)

15000 / 12000 Block Altitude

Altitude change at other than Radio Aids (STAR)

INDICATED AIRSPEED

175K Mandatory Airspeed

120K Minimum Airspeed

250K Maximum Airspeed

AIRPORTS

(DP) · (H) 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)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LEGEND 19059

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

0.3% DOWN ←

Runway Slope.....0.8% UP →
(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.

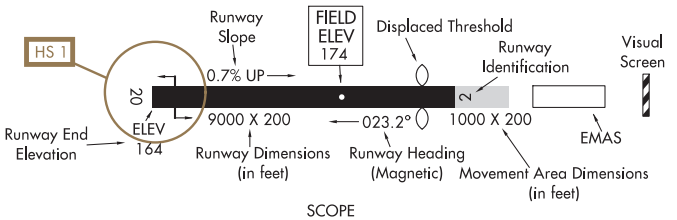
True/magnetic North orientation may vary from diagram to diagram

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

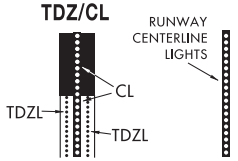
LEGEND 15344

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).

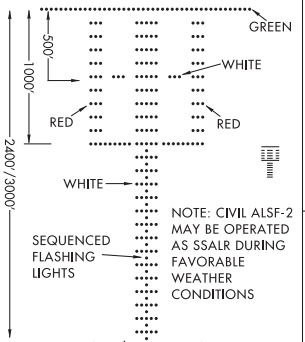
RUNWAY TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS



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

APPROACH LIGHTING SYSTEM

(A) **ALSF-2**

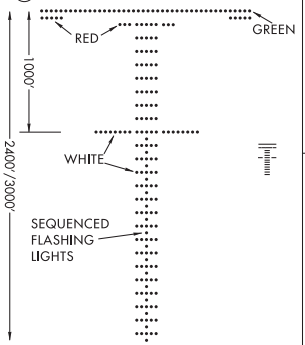


NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS

(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

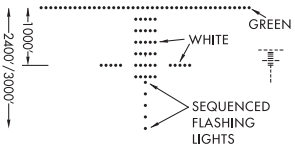
(High Intensity)

SAME AS INNER 1500' OF ALSF-1

SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM

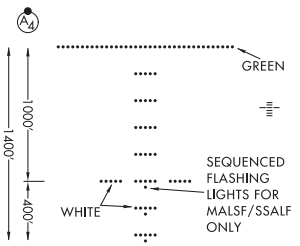
with Runway Alignment Indicator Lights

(A3) **SSALR**



(High Intensity)
LENGTH 2400/3000 FEET

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



LENGTH 1400 FEET

MEDIUM INTENSITY APPROACH LIGHTING SYSTEM

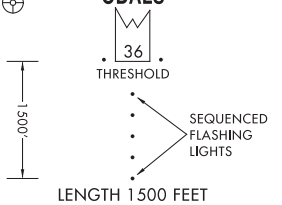
with Runway Alignment Indicator Lights

(A5) **MALSR**

SAME LIGHT CONFIGURATION AS SSALR.

OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM

ODALS



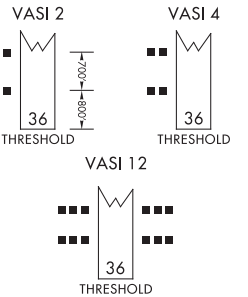
LENGTH 1500 FEET

(V) VISUAL APPROACH SLOPE INDICATOR

VASI

VISUAL APPROACH SLOPE INDICATOR WITH STANDARD THRESHOLD CLEARANCE PROVIDED.

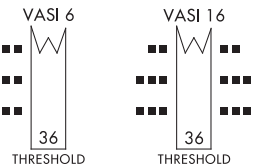
ALL LIGHTS WHITE — TOO HIGH
FAR LIGHTS RED, NEAR LIGHTS WHITE — ON GLIDE SLOPE
ALL LIGHTS RED — TOO LOW



(V3) VISUAL APPROACH SLOPE INDICATOR

VASI

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



LEGEND 15344

NW-1, 30 JAN 2020 to 26 MAR 2020

LEGEND 18256

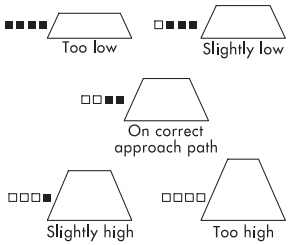
INSTRUMENT APPROACH PROCEDURES (CHARTS)
APPROACH LIGHTING SYSTEM - UNITED STATES

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

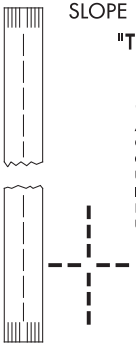
PAPI



Legend: □ White ■ Red

(V1) "T"-VISUAL APPROACH SLOPE INDICATOR

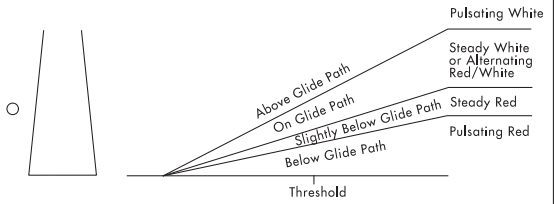
"T"-VASI



"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

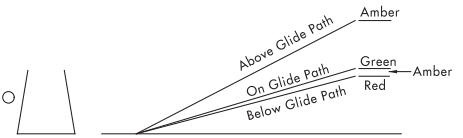
PVASI



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

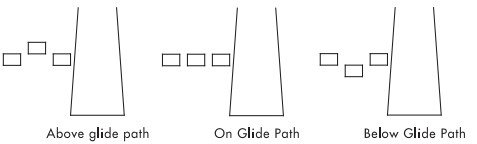
TRCV



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.

LEGEND 18256

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

FREQ PAIRING 15008

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		

NW-1, 30 JAN 2020 to 26 MAR 2020

FREQ PAIRING 15008

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
LOC RWY 34 10
NDB RWY 34 11
DPS .....ARLINGTON TWO 12

ASTORIA, OR
ASTORIA RGNL(AST)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS .....M
IAPS .....ILS RWY 26 13
RNAV (GPS) RWY 08 14
RNAV (GPS) RWY 26 15
VOR RWY 08 16
COPTER LOC RWY 26 17
COPTER VOR RWY 08 18
DPS .....ASTORIA THREE (OBSTACLE) 19

AUBURN, WA
AUBURN MUNI(S50)
TAKEOFF MINIMUMS L
DIVERSE VECTOR AREA L
IAPS .....RNAV (GPS)-A 21
AIRPORT DIAGRAM 22
DPS .....BLAKO ONE (OBSTACLE) (RNAV) 23

AURORA, OR
AURORA STATE(UAO)
TAKEOFF MINIMUMS L
DIVERSE VECTOR AREA L
ALTERNATE MINIMUMS .....M
HOT SPOT .....P
STARS .....HELNS SIX Z16
IAPS .....RNAV (GPS) RWY 17 24
RNAV (GPS) RWY 35 25
LOC RWY 17 26
AIRPORT DIAGRAM 27
DPS .....GLARA TWO (RNAV) 28
GNNET TWO (RNAV) 29
NEWBERG TWO (RNAV) 30

BAKER, MT
BAKER MUNI(BHK)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS .....M
IAPS .....RNAV (GPS) RWY 13 31
RNAV (GPS) RWY 31 32

BAKER CITY, OR
BAKER CITY MUNI(BKE)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS .....M
IAPS .....RNAV (GPS) RWY 13 33
VOR/DME RWY 13 34
VOR-A 35

BEAR LAKE COUNTY
---SEE PARIS, ID

BELLINGHAM, WA
BELLINGHAM INTL(BLI)
TAKEOFF MINIMUMS L
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SANDPOINT, ID		
SANDPOINT(SZT)		
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IAPS	RNAV (GPS) Y RWY 20	698
	RNAV (GPS) Z RWY 20	699
	RNAV (GPS)-B	700
	LOC-A	701
SARATOGA, WY		
SHIVELY FIELD(SAA)		
TAKEOFF MINIMUMS		L
ALTERNATE MINIMUMS		M
IAPS	RNAV (GPS) RWY 05	702
	RNAV (GPS)-B	703
	NDB-A	704
SCAPPOOSE, OR		
SCAPPOOSE INDUSTRIAL AIRPARK(SPB)		
TAKEOFF MINIMUMS		L
DIVERSE VECTOR AREA		L
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IAPS	RNAV (GPS) RWY 15	705
	LOC/DME RWY 15	706
	VOR/DME-A	707
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IAPS	RNAV (GPS) RWY 12	708

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STARS	CHINS FOUR	Z6
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	JAWBN SIX	Z20
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IAPS	ILS OR LOC RWY 14R	709
	ILS OR LOC RWY 32L	710
	RNAV (RNP) Z RWY 14R	711
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	ILS RWY 34R (SA CAT I - II)	732
	ILS RWY 16C (CAT II - III)	733
	ILS RWY 16L (CAT II - III)	734
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	RNAV (RNP) Z RWY 16C	736
	RNAV (RNP) Z RWY 16L	738
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	RNAV (RNP) Z RWY 34C	740
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	RNAV (RNP) Z RWY 34R	742
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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.

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NAME	TAKEOFF MINIMUMS	NAME	TAKEOFF MINIMUMS

AFTON, WY

AFTON MUNI (AFO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 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 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 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 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 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 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 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, 30 JAN 2020 to 26 MAR 2020

AUBURN, WA

AUBURN MUNI (S50)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 16091 (FAA)

TAKEOFF MINIMUMS: Use BLAKO (RNAV) DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 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 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 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 1 14317 (FAA)

TAKEOFF MINIMUMS: **Rwy 13,** NA-Environmental.

DEPARTURE PROCEDURE: **Rwy 31,** climbing right turn heading 010° to 9000 on 343° bearing from BKU NDB to UMWEL INT and hold, continue climb in hold (hold north, right turns, 163° inbound) to 9000. Expect further instructions from ATC.

TAKEOFF OBSTACLE NOTES: **Rwy 31,** fence 168' from DER, 498' left of centerline, 6' AGL/2967' MSL. Structure 173' from DER, 499' left of centerline, 10' AGL/2974' MSL. Windsock on building 1015' from DER, 727' left of centerline, 37' AGL/2998' MSL. Rod on antenna 3832' from DER, 136' left of centerline, 112' AGL/3073' MSL.

BAKER CITY, OR

BAKER CITY MUNI (BKE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

BELLINGHAM, WA

BELLINGHAM INTL (BLI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 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 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 09183 (FAA)

DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY

MILEY MEMORIAL FIELD (BPI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 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 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 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 18312 (FAA)

Rwy 10L, heading as assigned by ATC.

BLACKFOOT, ID

MCCARLEY FIELD (U02)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 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.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BOISE, ID

BOISE AIR TERMINAL /GOWEN FIELD (BOI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 10042 (FAA)

DEPARTURE PROCEDURE: Use GOWEN DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 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 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 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 5A 15316 (FAA)

TAKEOFF MINIMUMS: **Rwy 2,** 300-1 or std. w/min. climb of 402' per NM to 700. **Rwy 20,** 300-1¼ or std. w/min. climb of 495' 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 heading 197° to 4000 and OLM VORTAC R-346 to CARRO INT/OLM 19.43 DME thence...

... Continue climb in hold (hold N, right turns, 166° inbound) to 4000 before proceeding on course.

TAKEOFF OBSTACLE NOTES: **Rwy 2,** bushes beginning 380' from DER, 521' left of centerline, up to 16' AGL/456' MSL. Trees beginning 1011' from DER, 709' right of centerline, up to 75' AGL/495' MSL. Trees beginning 1209' from DER, 621' left of centerline, up to 53' AGL/473' MSL. Trees beginning 1674' from DER, 889' left of centerline, up to 141' AGL/541' MSL. Trees beginning 2625' from DER, 878' left of centerline, up to 141' AGL/561' MSL. **Rwy 20,** bushes beginning 1' from DER, 488' left of centerline, up to 22' AGL/462' MSL. Trees beginning 177' from DER, 379' left of centerline up to 74' AGL/514' MSL. Trees beginning 372' from DER, 554' right of centerline, up to 69' AGL/489' MSL. Trees beginning 2217' from DER, 402' left of centerline, up to 97' AGL/517' MSL. Trees beginning 3022' from DER, 158' right of centerline, up to 135' AGL/555' MSL. Trees beginning 3315' from DER, 107' left of centerline, up to 127' AGL/547' MSL.

BREMERTON,WA (CON'T)

BREMERTON NATIONAL (PWT) (CON'T)

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 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 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 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. 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.

CON'T

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

BURLEY, ID (CON'T)

BURLEY MUNI (BYI) (CON'T)

Rwy 20 (CON'T), 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 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 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 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 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 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 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 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 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 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 4 10042 (FAA)

TAKEOFF MINIMUMS: **Rwy 4,** std. with a min. climb of 400' per NM to 8000' or 4200-3 for climb in visual conditions. **Rwy 22,** std. with a min. climb of 385' per NM to 7400' or 4200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 038° to 5900, then climbing left turn via COD R-171 to COD VOR/DME or for climb in visual conditions to cross Yellowstone Rgnl at or above 9400, then via COD R-189 to COD VOR/DME to cross COD VOR/DME at or above MEA for route of flight. **Rwy 22,** climb heading 218° to 6600, then climbing left turn via COD R-180 to COD VOR/DME or for climb in visual conditions to cross Yellowstone Rgnl at or above 9400, then via 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,** trees beginning 100' from DER, 262' right of centerline, up to 79' AGL/5199' MSL. Rising terrain beginning 1723' from DER, 304' right of centerline, up to 5146' MSL. **Rwy 22,** poles beginning 1 NM from DER, 406' right of centerline, up to 60' AGL/5332' MSL. Rising terrain beginning 1 NM from DER, 109' right of centerline, up to 6235' MSL. Rising terrain beginning 5074' from DER, 131' left of centerline, up to 5428' MSL.

COEUR D'ALENE, ID

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 9 10042 (FAA)

DEPARTURE PROCEDURE: use COEUR D'ALENE DEPARTURE.

COLSTRIP, MT

COLSTRIP (M46)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 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 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

CORVALLIS, OR

CORVALLIS MUNI (CVO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6A 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.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 2 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 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 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 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 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 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.

DILLON, MT

DILLON (DLN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3A 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 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 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 11349 (FAA)

DEPARTURE PROCEDURE: **Rwys 3, 21,** use LAMON DEPARTURE.

EASTSOUND, WA

ORCAS ISLAND (ORS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 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.

EASTSOUND, WA (CON'T)

ORCAS ISLAND (ORS) (CON'T)

Rwy 16 (CON'T), 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 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.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ENNIS, MT

ENNIS-BIG SKY (EKS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14037 (FAA)

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

EPHRATA, WA

EPHRATA MUNI (EPH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 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 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 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 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, 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, 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 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.

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FORSYTH, MT

TILLITT FIELD (1S3)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 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 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 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 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

GILLETTE-CAMPBELL COUNTY (GCC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 16315 (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. **CON'T**

NW-1, 30 JAN 2020 to 26 MAR 2020

GILLETTE, WY (CON'T)

GILLETTE-CAMPBELL COUNTY (GCC) (CON'T)

Rwy 21 (CON'T), 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. **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 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 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 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 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 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 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 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 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, 30 JAN 2020 to 26 MAR 2020

GUERNSEY, WY

CAMP GUERNSEY (GUR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 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 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 04162 (FAA)

DEPARTURE PROCEDURE: Use HAMEY RNAV DEPARTURE.

HARLOWTON, MT

WHEATLAND COUNTY AT HARLOWTON (HWQ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 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 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 11181 (FAA)

DEPARTURE PROCEDURE: use DIVIDE DEPARTURE.

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HERMISTON, OR

HERMISTON MUNI (HRI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 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 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 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 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 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 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.

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JOHN DAY, OR

GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 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 06215 (FAA)

DEPARTURE PROCEDURE: Use SKOTT DEPARTURE.

KELSO, WA

SOUTHWEST WASHINGTON RGNL (KLS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 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 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 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: **Rwy 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

NW-1, 30 JAN 2020 to 26 MAR 2020

LA GRANDE, OR

LA GRANDE/UNION COUNTY (LGD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 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 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 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.

LANDER, WY (CON'T)

HUNT FIELD (LND) (CON'T)

Rwy 22 (CON'T), 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 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 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 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.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

LEWISTOWN, MT

LEWISTOWN MUNI (LWT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 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 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 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 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 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 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 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

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 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 08325 (FAA)

TAKEOFF MINIMUMS: **Rwy 4,** 400-1¼ or std. w/ min. climb of 238' per NM to 400, or alternatively, with standard 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 ... **Rwy 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 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 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 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 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 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 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 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 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 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 16203 (FAA)

TAKEOFF MINIMUMS: **Rwy 2**, NA-Obstacles.

DEPARTURE PROCEDURE: **Rwy 16, 20,34,** use NEWPORT DEPARTURE.

NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 15176 (FAA)

TAKEOFF MINIMUMS: **Rwy 4,** 900-3 w/min. climb of 300' per NM to 1500 or std. w/min. climb of 475' per NM to 1200 or 1600-2½ for climb in visual conditions. **Rwy 13,** 400 -2½ w/min. climb of 250' per NM to 2500 or 1600-2½ for climb in visual conditions. **Rwy 31,** 300-1¾ or std. w/min. climb of 280' per NM to 300.

DEPARTURE PROCEDURE: **Rwy 4,** Climb heading 046° to intercept OTH VOR/DME R-340 northwest bound to 1800 before proceeding on course. **Rwy 13,** climb heading 135° to 1300 before proceeding on course. **Rwy 22,** Climb heading 226° to 700 before proceeding on course. **Rwy 31,** Climb heading 315° to 800 before proceeding on course.

VCOA: **Rwy 4, 13,** obtain ATC approval for climb in visual conditions 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 4,** ol on ant 383' from DER, 207' right of centerline, 22' AGL/35' MSL. Ship 1000' from DER, on centerline, up to 140' MSL. Ol on bridge 1886' from DER, 629' left of centerline, 89' AGL/93' MSL. transmission towers beginning 4259' from DER, 677' right of centerline, up to 215' AGL/228' MSL. Bridge beginning 4741' from DER, 580' right of centerline, up to 265' AGL/268' MSL. Trees beginning 1.2 NM from DER, 34 ' left of centerline, up to 150' AGL/660' MSL. Trees beginning 1.6 NM from DER, 897' right of centerline, up to 147' AGL/767' MSL. Buildings beginning 1.6 NM from DER, 776' left of centerline, up to 73' AGL/393' MSL. **Rwy 13**, bushes beginning 38' from DER, 175' left of centerline, up to 18' AGL/33' MSL. Vehicle on road, 193' from DER, 237' left of centerline, up to 15' AGL/30' MSL. Bush 193' from DER, 145' right of centerline, up to 20' AGL/37' MSL. Trees beginning 346' from DER, 49' right of centerline, up to 62' AGL/76' MSL. Buildings beginning 504' from DER, 211' right of centerline, up to 65' AGL/106' MSL. Tree 628' from DER, 52' left of centerline, 24' AGL/38' MSL. Poles beginning 880' from DER, 14' right of centerline, up to 77' AGL/114' MSL. Trees beginning 2537' from DER, left and right of centerline, up to 150' AGL/349' MSL. Spire 3467' from DER, 1122' left of centerline, 55' AGL/243' MSL. Poles beginning 1 NM from DER, left and right of centerline, up to 140' AGL/247' MSL. **Rwy 22,** 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, 15' left of centerline, up to 82' AGL/232' MSL. Trees beginning 5985' from DER, 1419' right of centerline, up to 108' AGL/188' MSL.

OAK HARBOR, WA

A J EISENBERG (OKH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 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 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. **CON'T**

OLYMPIA, WA (CON'T)

OLYMPIA RGNL (OLM) (CON'T)

Rwy 35 (CON'T), 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 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 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 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.

ONTARIO, OR (CON'T)

ONTARIO MUNI (ONO) (CON'T)

Rwy 33 (CON'T), 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 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 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.

CON'T

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

PASCO, WA (CON'T)

TRI-CITIES (PSC) (CON'T)

Rwy 12 (CON'T), 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 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 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 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 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 09351 (FAA)

DEPARTURE PROCEDURE: use KNURL ONE DEPARTURE.

POLSON, MT

POLSON (8S1)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 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 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 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 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.

PORT ANGELES, WA (CON'T)

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

Rwy 13 (CON'T), 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, 30 JAN 2020 to 26 MAR 2020

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

20030

PORTLAND, OR

PORTLAND INTL (PDX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 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)

ORIG 15092 (FAA)

Rwy 3, heading as assigned by ATC; requires minimum climb of 360' per NM to 4500. **Rwy 10L,** heading as assigned by ATC; requires minimum climb of 350' per NM to 4700. **Rwy 10R,** heading as assigned by ATC; requires minimum climb of 400' per NM to 3600. **Rwy 21,** heading as assigned by ATC; requires minimum climb of 430' per NM to 3000. **Rwy 28L,** heading as assigned by ATC; requires minimum climb of 370' per NM to 3800. **Rwy 28R,** heading as assigned by ATC; requires minimum climb of 340' per NM to 4500.

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO (HIO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7A 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. **CON'T**

NW-1, 30 JAN 2020 to 26 MAR 2020

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO (HIO) (CON'T)

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.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 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 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.

PORTLAND, OR (CON'T)

PORTLAND-TROUTDALE (TTD) (CON'T)

Rwy 7 (CON'T), 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 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 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 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 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 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. **CON'T**

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PULLMAN/MOSCOW, WA (CON''T)

PULLMAN/MOSCOW RGNL (PUW) (CON'T)

Rwy 5 (CON'T), 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 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 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.

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RAWLINS, WY

RAWLINS MUNI/HARVEY FIELD (RWL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 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. 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 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 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.

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REXBURG, ID

REXBURG-MADISON COUNTY (RXE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 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 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.

RICHLAND, WA (CON'T)

RICHLAND (RLD) (CON'T)

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.

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RIVERTON, WY

RIVERTON RGNL (RIW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 15344 (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 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 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.

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ROSEBURG, OR

ROSEBURG RGNL (RBG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 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 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 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. 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 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 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: **Rwy 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 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 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 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 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 17257

TAKEOFF MINIMUMS: **Rwy 14L,** 500-2¾ with minimum climb of 270' per NM to 700 or standard with minimum climb of 708' per NM to 500 or 1000-2½ for VCOA. **Rwy 14R,** 500-2 with minimum climb of 315' per NM to 700 or standard with minimum climb of 500' per NM to 600 or 1000-2½ for VCOA. **Rwy 32L,** 400-1⅞ with minimum climb of 235' per NM to 800 or standard with minimum climb of 425' per NM to 500 or 1000-2½ for VCOA. **Rwy 32R,** 400-2 with minimum climb of 230' per NM to 800 or standard with minimum 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 e, 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.

SEATTLE, WA (CON'T)

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

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. 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. **CON'T**

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WA (CON'T)

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

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.

SEATTLE, WA (CON'T)

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

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WA (CON'T)

SEATTLE-TACOMA INTL (SEA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4B 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 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 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 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

SHERIDAN, WY

SHERIDAN COUNTY (SHR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 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 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.

SIDNEY, MT (CON'T)

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

Rwy 1 (CON'T), 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. 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.

CON'T

NW-1, 30 JAN 2020 to 26 MAR 2020

SIDNEY, MT (CON'T)

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

Rwy 29 (CON'T), 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 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 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. **CON'T**

NW-1, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WA (CON'T)

FELTS FIELD (SFF) (CON'T)

Rwy 22L (CON'T) 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. **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 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 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 2 19003 (FAA)

Rwys 3, 8, 26, headings as assigned by ATC. **Rwy 21,** headings as assigned by ATC; requires min. climb of 290' per NM to 3200.

STEVENSVILLE, MT

STEVENSVILLE (32S)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 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 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 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 13346 (FAA)

DEPARTURE PROCEDURE: Use DALLES DEPARTURE.

THERMOPOLIS, WY

HOT SPRINGS COUNTY (HSG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 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.

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TILLAMOOK, OR

TILLAMOOK (TMK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 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 10322 (FAA)

DEPARTURE PROCEDURE: Use ATASY DEPARTURE.

TORRINGTON, WY

TORRINGTON MUNI (TOR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 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 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 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 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 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 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.

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WENATCHEE, WA

PANGBORN MEMORIAL (EAT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 16315 (FAA)

DEPARTURE PROCEDURE: Use WENATCHEE DEPARTURE.

WEST YELLOWSTONE, MT

YELLOWSTONE (WYS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 12040 (FAA)

DEPARTURE PROCEDURE: use TARGY DEPARTURE.

WHEATLAND, WY

PHIFER AIRFIELD (EAN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 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

17061

Diverse departures not authorized.

MILITARY DEPARTURE PROCEDURE: **All Rwys:** USE NASWI ONE (OBSTACLE) DEPARTURE.

TAKEOFF OBSTACLE NOTES: **Rwy 7,** terrain 1902' 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.

WILBUR, WA

WILBUR (2S8)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13066 (FAA)

DEPARTURE PROCEDURE: **Rwys 2, 20,** Use WIPES (RNAV) DEPARTURE.

WORLAND, WY

WORLAND MUNI (WRL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 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 11013 (FAA)

DEPARTURE PROCEDURE: Use ZILLA DEPARTURE.

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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[3]
[1]Category C, 1100-3; Category D, 1200-3.
[2]Categories A, B, 900-2; Category C, 1100-3; Category D, 1200-3.
[3]Category C, 800-2¼; Category D, 900-3.

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.

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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)…….. **NDB Rwy 11**[1]
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]
NA when local weather not available.
[1]Categories A, B, 1300-2; Categories C, D, 1300-3.
[2]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 22**[1]
RNAV (GPS)-B[2]
VOR-A[3]
[1]Category C, 800-2¼; Category D, 900-2¾.
[2]Categories A, B, 1100-2; Categories C, D, 1100-3.
[3]Category D, 900-2¾.

COEUR D'ALENE, ID
COEUR D'ALENE-PAPPY BOYINGTON
FIELD (COE)……..**ILS or LOC/DME Rwy 6**
RNAV (GPS) Rwy 6
VOR/DME Rwy 2
NA when local weather not available.

CORVALLIS, OR
CORVALLIS
MUNI (CVO)……..……**ILS or LOC Rwy 17**[1]
VOR Rwy 17[2]
VOR Rwy 35[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/DME Rwy 3[1]
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[2]
RNAV (GPS) Y Rwy 16R[2]
RNAV (GPS) Y Rwy 34L[2]
RNAV (GPS) Y Rwy 34R[2]
VOR-A[3]
VOR or TACAN Rwy 16R[2]
VOR or TACAN Rwy 34L[2]
[1]LOC, Category D, 800-2½.
[2]Category D, 800-2½ .
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

EVANSTON, WY
EVANSTON-UINTA COUNTY BURNS
FIELD (EVW)……**ILS or LOC/DME Rwy 23**
Categories C, D, 700-2.

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
GILLETTE-CAMPBELL COUNTY (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, 900-2; Category C, 1100-3; Category D, 1300-3.

GRAY AAF (KGRF)
JOINT BASE LEWIS MCCHORD, WA……..**LS 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.

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[1 9]
LOC/DME BC-C[13]
RNAV (GPS) Y Rwy 9[4]
RNAV (GPS) X Rwy 27[4]
RNAV (RNP) Z Rwy 9[6]
RNAV (RNP) Y Rwy 27[6]
RNAV (RNP) Z Rwy 27[68]
VOR-A[7]
VOR/DME-B[5]
[1]NA when control tower closed.
[2]Categories A, B, 1800-2; Categories C, D, E, 1800-3.
[3]Categories A, B, 1300-2; Categories C, 1300-3.
[4]Categories A, B, 1600-2; Categories C, D, 1600-3.
[5]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[6]NA when local weather not available.
[7]Categories A, B, 2900-2; Categories C, D, 2900-3.
[8]1000-4.
[9]Categories A, B, 1800-2; Categories C, D, E, 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]
[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**
Categories A, B, 900-2.

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**[1]
RNAV (GPS) Rwy 35[1]
VOR/DME-A[2]
[1]Category D, 800-2½.
[2]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

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[24]
RNAV (GPS) Y Rwy 26[4]
RNAV (RNP) Z Rwy 8[2]
RNAV (RNP) Z Rwy 12[2]
RNAV (RNP) Z Rwy 26[2]
VOR Rwy 8[3]

[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Categories A, B, 1100-2; Categories C, D, 1100-3.
[4]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.

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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 Rwy 16[12]
VOR Rwy 34[12]
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 4**[1]
RNAV (GPS) Y Rwy 4[2]
VOR-A[3]
VOR/DME-B[2]
VOR/DME Rwy 4[2]
[1]ILS, Category A, 700-2; Category B, 900-2; Category C, 1100-3; Category D, 1200-3; LOC, Category B, 900-2; Category C, 1100-3; Category D, 1200-3.
[2]Category B, 900-2; Category C, 1100-3, Category D, 1200-3.
[3]Categories A, B, 1300-2; Categories C, D, 1300-3.

NAME — ALTERNATE MINIMUMS

OAK HARBOR, WA
AJ EISENBERG (OKH)……**RNAV (GPS) Rwy 7**
NA when local weather not available.

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.

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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[6]
RNAV (GPS) X Rwy 28R[6]
VOR-A[5]

[1]ILS, Category A, 700-2; Categories B, C, 800-2; Category D, 1000-3; Category E, 1200-3. LOC, Category D, 1000-3; Category E, 1200-3.
[2]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3; 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]Category D, 1000-3.
[5]Categories A, B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.
[6]Categories C, D, 1100-3.

PORTLAND-
HILLSBORO (HIO)…..……..**ILS or LOC Rwy 13R**[1]
RNAV (GPS) Rwy 13R[2]
RNAV (GPS) Rwy 31L[2]
VOR/DME-C[2]
NA when local weather not available.
[1]LOC, Categories A, B, 1500-2; Categories C, D, 1500-3.
[2]Category D, 800-2½.

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.

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]
VOR/DME Rwy 23[13]
[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Categories A, B, 1000-2; Category C, 1000-2¾; Categories D, E, 1000-3.

RENTON, WA

RENTON
MUNI (RNT)……..…**RNAV (GPS) Y Rwy 16**[1]
RNAV (GPS) Rwy 34[23]
[1]Categories A, B, 900-2; Category C, 1000-3; Category D, 1700-3.
[2]Categories A, B, 900-2; Category C, 1000-3.
[3]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

RIVERTON
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[23]
LOC Y Rwy 31[23]
RNAV (GPS) Rwy 13[4]
RNAV (GPS) Rwy 31[3]
[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, 800-2¼; Category D, 1100-3.
[4]Category C, 900-2½; 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]Category A, 800-2; Category B, 900-2; Category C, 900-2½; 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.

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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 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.

VANCOUVER, WA

PEARSON FIELD (VUO)……..**LDA-A**

Categories A, B, 900-2

NAME ALTERNATE MINIMUMS

WALLA WALLA, WA

WALLA WALLA
RGNL (ALW)……..**ILS Y or LOC Rwy 20**[13]
ILS Z or LOC/DME Rwy 20[23]
RNAV (GPS) Rwy 2[35]
RNAV (GPS) Rwy 20[3]
VOR Rwy 20[36]
VOR/DME Rwy 2[4]

[1]ILS, LOC, Categories A, B, 1200-2; Categories C, D, 1200-3.
[2]ILS, Categories A, B, 800-2; Category C, 1000-2¾; Category D, 1200-3. LOC, Category C, 1000-2¾; Category D, 1200-3.
[3]NA when local weather not available.
[4]Category D, 800-2½.
[5]Category C, 1000-2¾; Category D, 1200-3.
[6]Categories A, B, 1000-2; Category C, 1000-3; 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, 30 JAN 2020 to 26 MAR 2020

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[7]** **VOR-A[8]**		

[1]ILS, Categories A, B, C, D, 700-2.
[2]NA when control tower closed.
[3]Category D, 800-2¼.
[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;
Categories C, D, 1100-3.
[8]Category C, 800-2¼; Category D, 800-2½.

NW-1, 30 JAN 2020 to 26 MAR 2020

RADAR INSTRUMENT APPROACH MINIMUMS

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, 19283 USA) ELEV 301

RADAR - (E) 128.2 139.925 239.0 317.4 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

RADAR INSTRUMENT APPROACH MINIMUMS

RADAR MINS
19339

N1

WHIDBEY ISLAND NAS (KNUW), (AULT FLD), WA (Amdt 2, 19255 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]	3.0°/43/765	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	**340**-¾	301	(300-¾)
	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 ⅞ 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.

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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

17341

NW-1, 30 JAN 2020 to 26 MAR 2020

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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	Twy A1 and Rwy 21 apch hold bar.
	HS 3	Rwy 17 and Twy A hold bar.
	HS 4	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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NW-1, 30 JAN 2020 to 26 MAR 2020

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HOT SPOTS

(CONTINUED)

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
LEWISTON, ID		
LEWISTON-NEZ PERCE COUNTY (LWS)	HS 1	Twy C and Twy G int close proximity to Rwy 12-30.
	HS 2	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 C 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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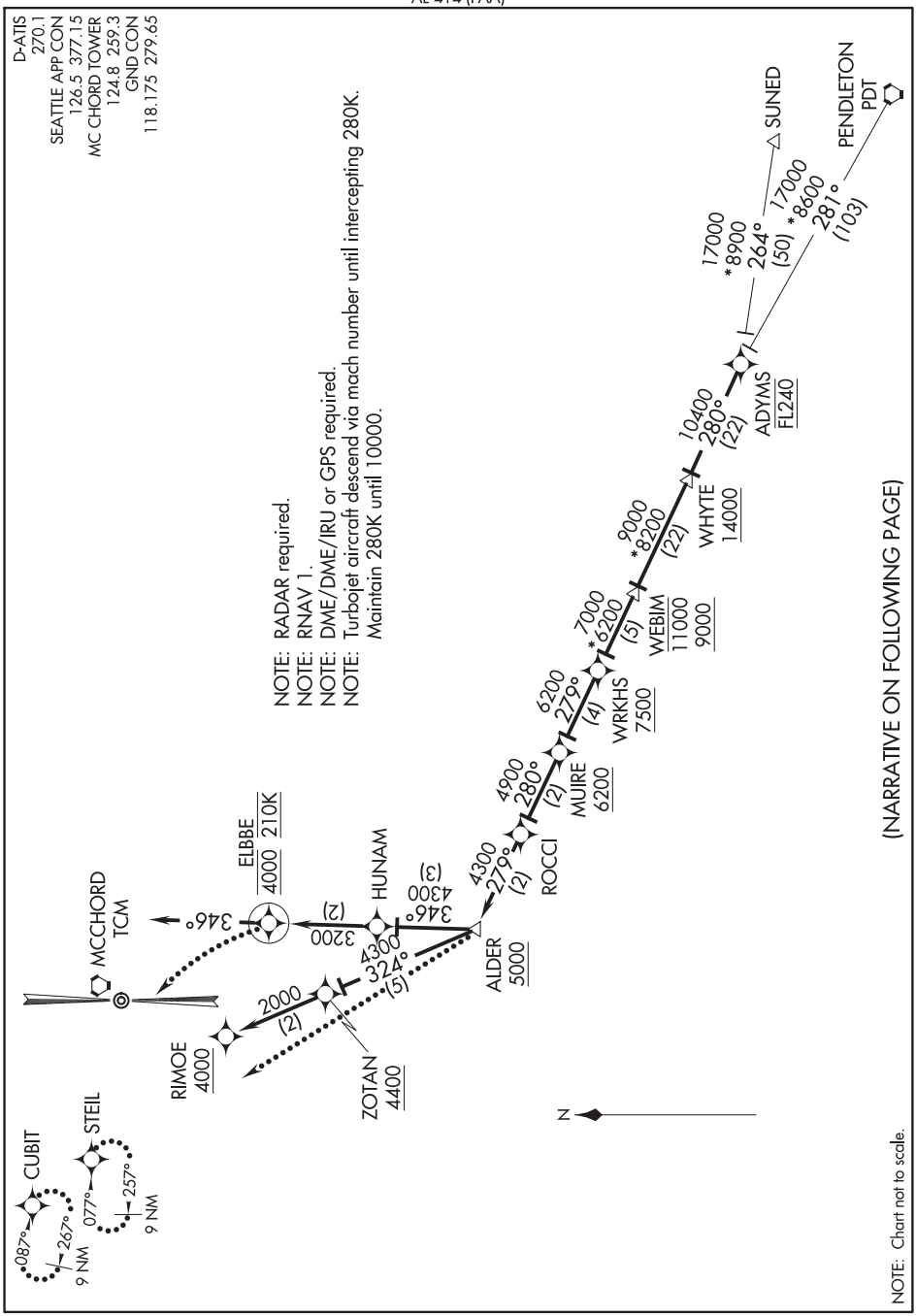
(ADYMS.ADYMS2) 17117

ADYMS TWO ARRIVAL (RNAV)

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
AL-414 (FAA)
TACOMA, WASHINGTON



ADYMS TWO ARRIVAL (RNAV)
MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
TACOMA, WASHINGTON

(ADYMS.ADYMS2) 15OCT15

NW-1, 30 JAN 2020 to 26 MAR 2020

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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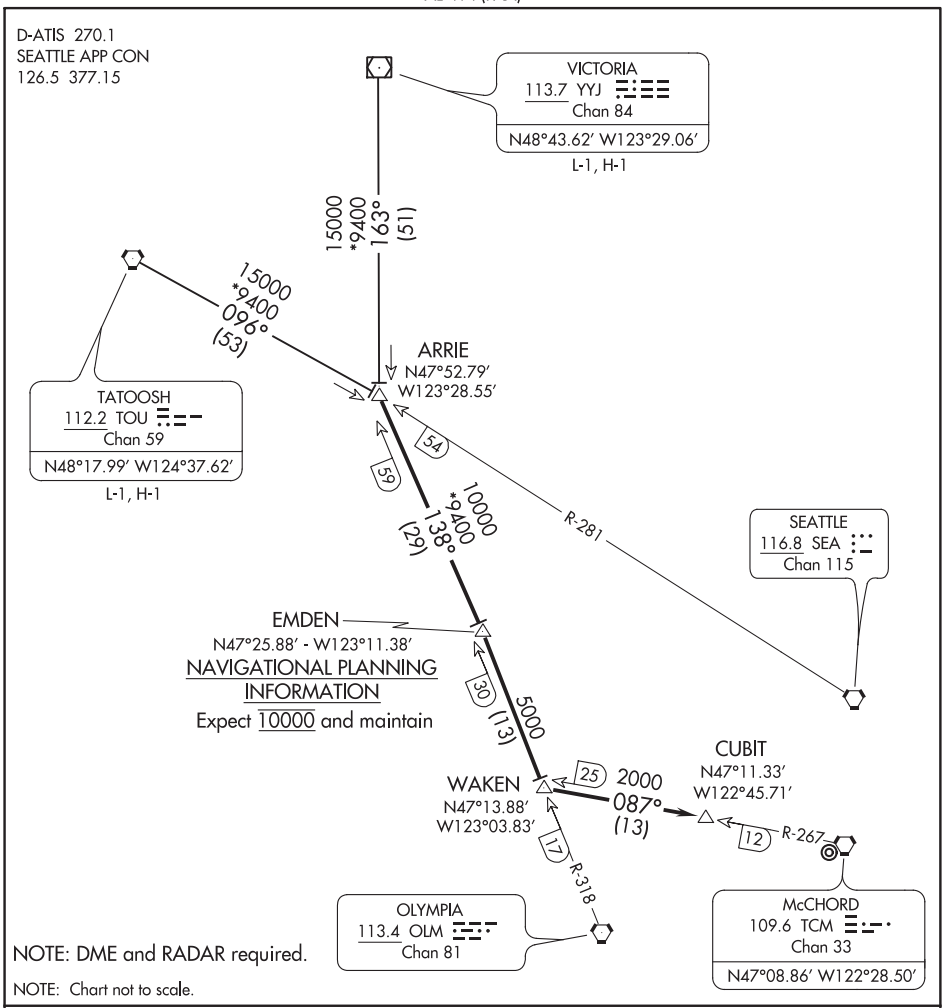
(ARRIE.ARRIE7) 19227

ARRIE SEVEN ARRIVAL

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

AL-414 (FAA)

TACOMA, WASHINGTON



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NW-1, 30 JAN 2020 to 26 MAR 2020

ARRIVAL ROUTE DESCRIPTION

TATOOSH TRANSITION (TOU.ARRIE7): From over TOU VORTAC on TOU R-096 to ARRIE. Thence. . . .

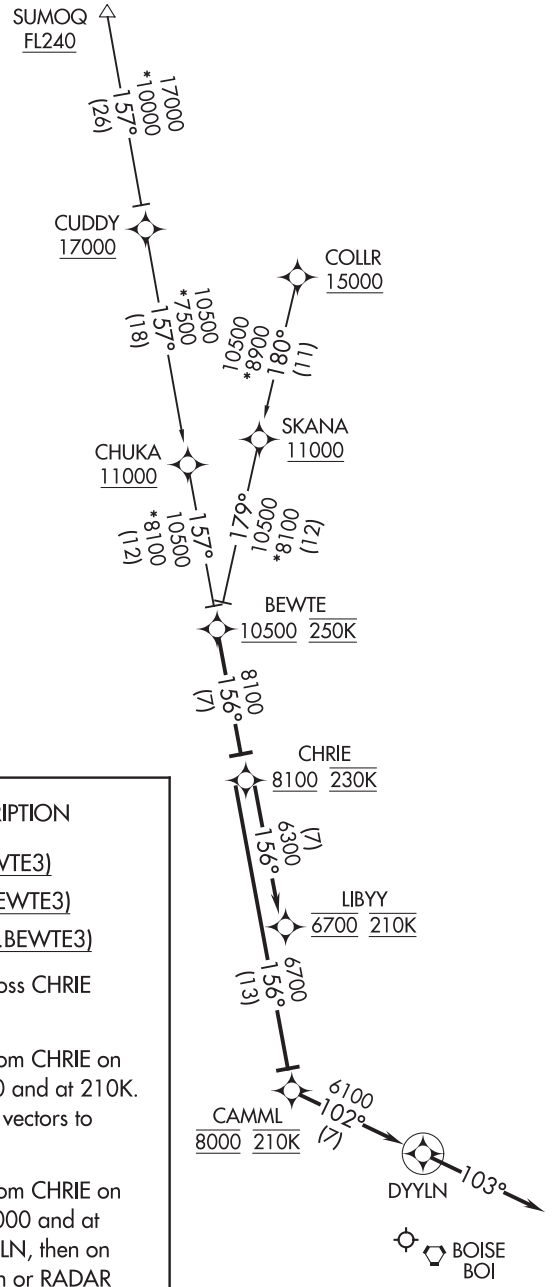
VICTORIA TRANSITION (YYJ.ARRIE7): From over YYJ VOR/DME on YYJ R-163 to ARRIE. Thence. . . .

. . . .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.

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.

NOTE: Chart not to scale.

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.

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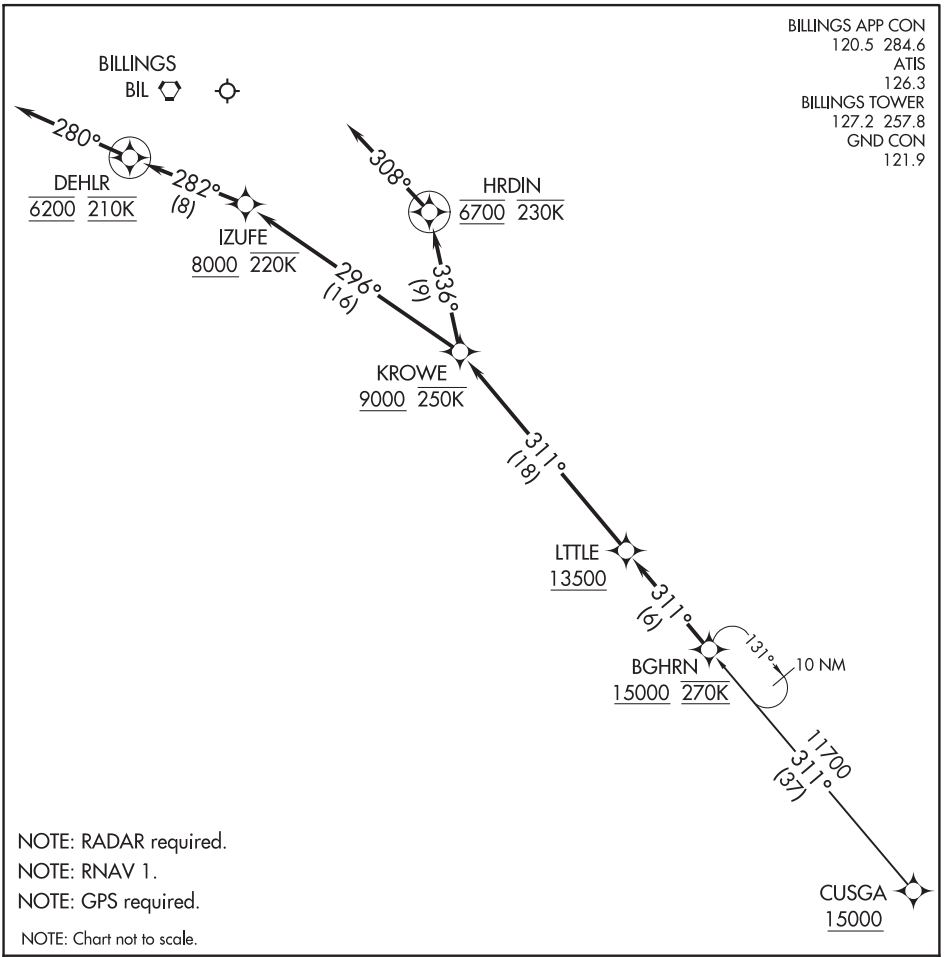
(BGHRN.BGHRN3) 18256

BGHRN THREE ARRIVAL (RNAV)

AL-48 (FAA)

BILLINGS LOGAN INTL (BIL)
BILLINGS, MONTANA



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

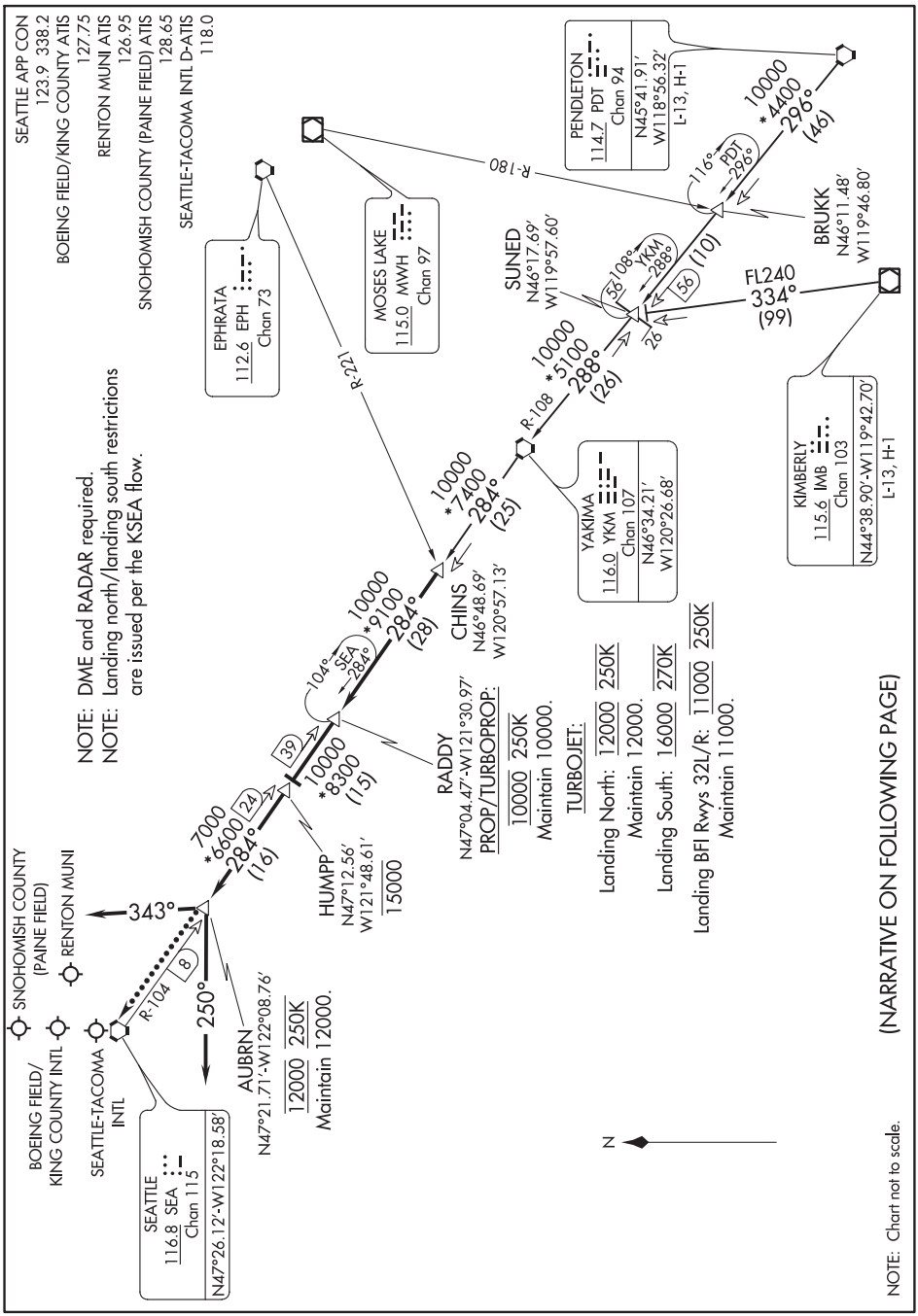
ARRIVAL ROUTE DESCRIPTION

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.



NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

CRAZI THREE ARRIVAL (RNAV)

(CRAZI.CRAZI3) 13SEP18

BILLINGS LOGAN INTL (BIL)

BILLINGS, MONTANA

(CRAZI.CRAZI3) 18256

CRAZI THREE ARRIVAL (RNAV)

AL-48 (FAA)

BILLINGS LOGAN INTL (BIL)

BILLINGS, MONTANA

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°

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.

NOTE: Chart not to scale.

Z8

(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, 30 JAN 2020 to 26 MAR 2020

DEVYN TWO ARRIVAL (RNAV)
(KYCKR.DEVYN2) 07DEC17

EVERETT, WASHINGTON
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

NW-1, 30 JAN 2020 to 26 MAR 2020

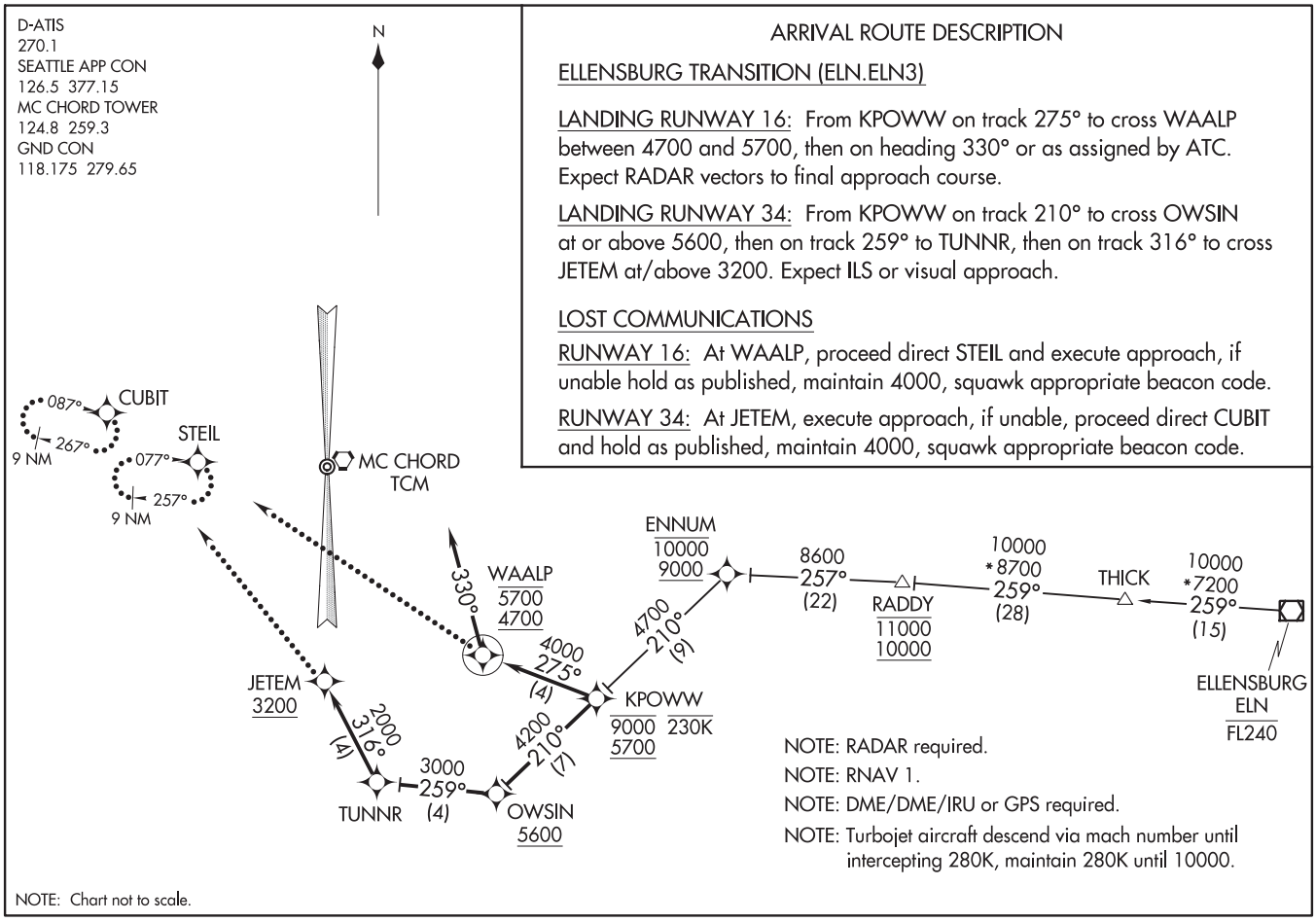
ELLENSBURG THREE ARRIVAL (RNAV)

(ELN.ELN3) 10NOV16

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

TACOMA, WASHINGTON

Z10



ELLENSBURG THREE ARRIVAL (RNAV)

(ELN.ELN3) 19227

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

AL-414 (FAA)

TACOMA, WASHINGTON

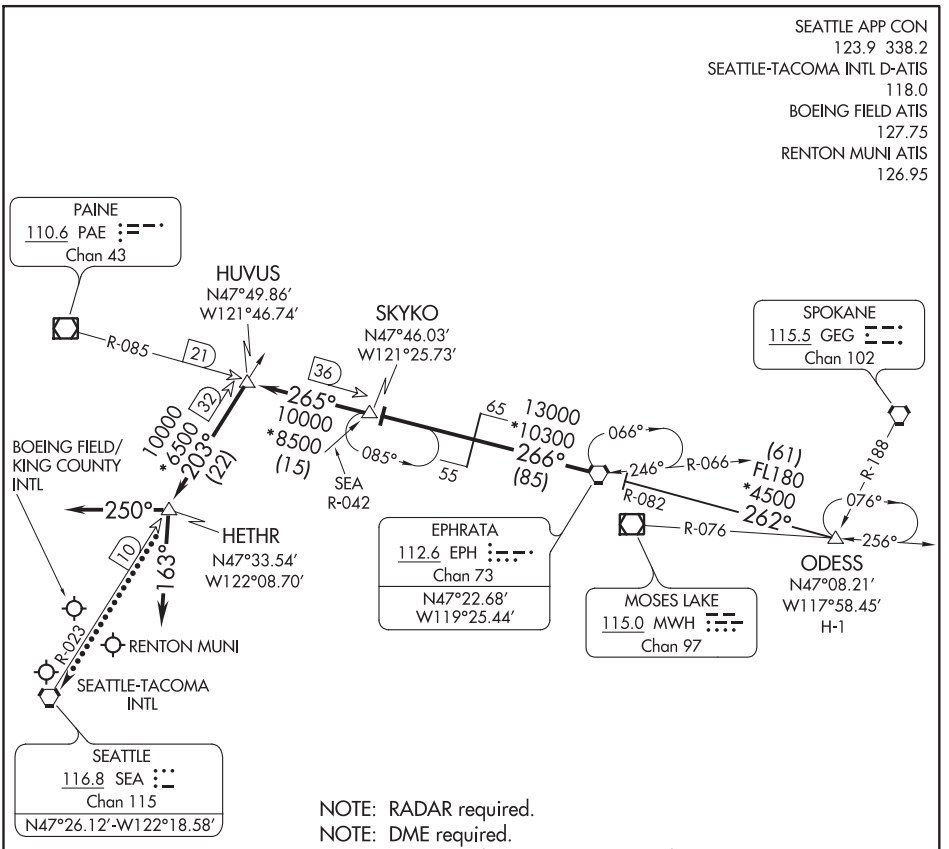
(EPH.EPH8) 17173

EPHRATA EIGHT ARRIVAL

AL-582 (FAA)

SEATTLE, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 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.

SEATTLE APP CON
123.9 338.2
SEATTLE-TACOMA INTL D-ATIS
118.0
BOEING FIELD ATIS
127.75
MCCHORD FIELD D-ATIS
109.6 270.1
RENTON MUNI ATIS
126.95
JAKSN
N47°53.19'-W121°42.22'
PROP/TURBOPROP: 10000 250K
Maintain 10000.
TURBOJET: Landing North: 16000 270K
Landing South: 12000 250K
Maintain 12000.
Landing BFI or RNT: 11000 250K
Maintain 11000.
ONSET
N48°57.48'
W118°00.00'
LOSTT
N48°11.69'
W120°14.91'
KRUZR
N48°04.65'
W120°34.68'
WITRO
N47°46.83'
W120°08.20'
ODAHL
N47°49.67'
W120°47.91'
GLASR (16)
N47°51.26'
W121°11.57'
HETHR
N47°33.54'-W122°08.70'
TURBOJET: Landing North:
12000 250K
Maintain 12000.
WOODI
N47°46.12'-W121°51.80'
TURBOJET:
Landing North:
14000
TEMPL
N47°43.79'
W119°29.06'
H-1
ELLENSBURG
117.9 ELN
Chan 126
CRANBROOK
112.1 YXC
Chan 58
N49°33.30'-W116°05.26'
H-1
SPOKANE
115.5 GEG
Chan 102
N47°33.90'-W117°37.61'
L-13, H-1
MULLAN PASS
117.8 MLP
Chan 125
N47°27.41'-W115°38.76'
L-13, H-1
PAINE
110.6 PAE
Chan 43
SEATTLE
116.8 SEA
Chan 115
N47°26.12'-W122°18.58'
BOEING FIELD/
KING CO INTL
RENTON MUNI
SEATTLE-TACOMA INTL
MCCHORD FIELD
(JOINT BASE LEWIS-MCCHORD)
NOTE: Landing north/landing south restrictions are issued per the KSEA flow.
NOTE: DME and RADAR required.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.
N
NW-1, 30 JAN 2020 to 26 MAR 2020

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. . . .

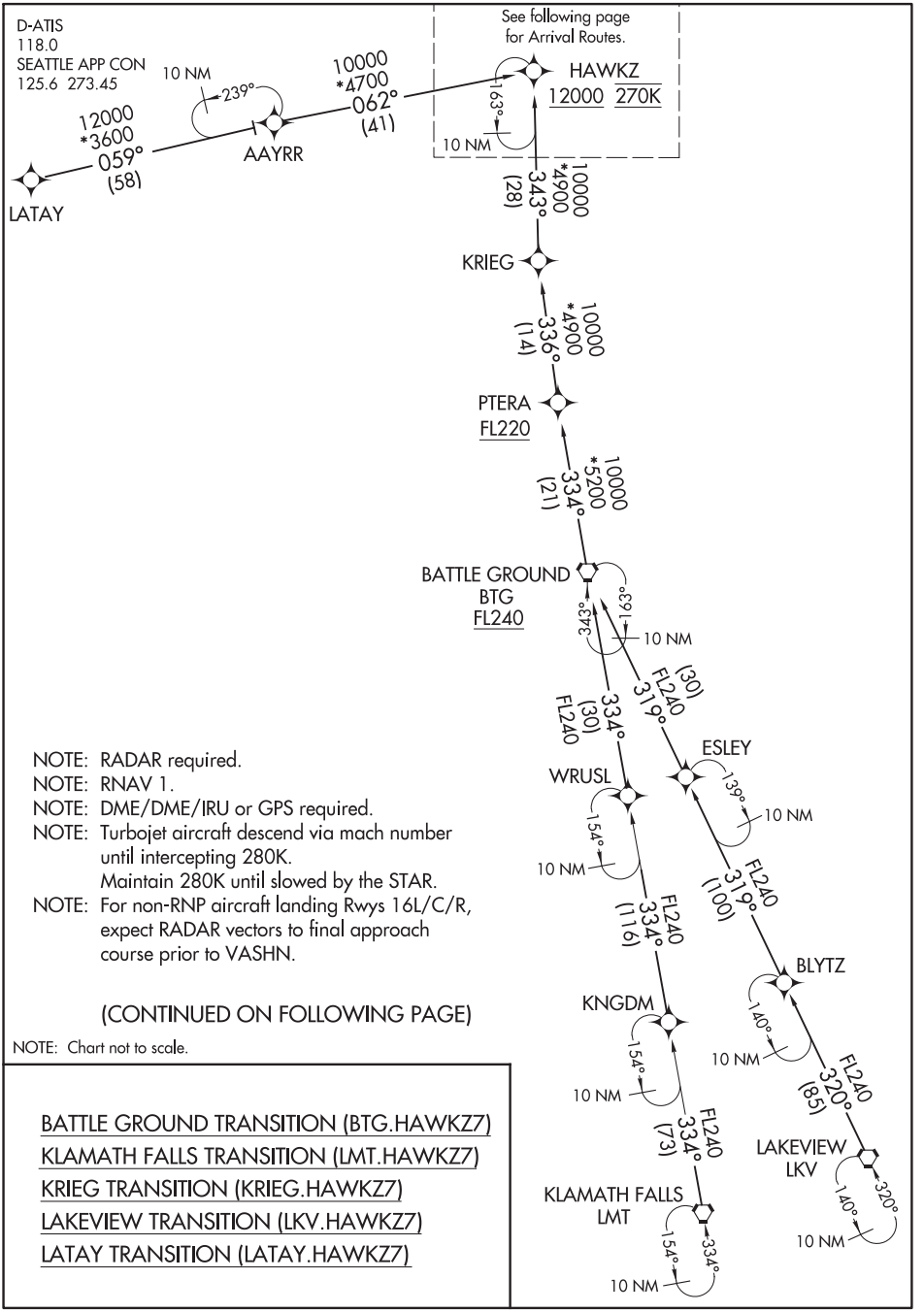
. . . .from GLASR on PAE R-075 to JAKSN, then on SEA R-023 to WOODI, then on SEA R-023 to HETHR. Thence:

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HAWKZ SEVEN ARRIVAL (RNAV) Arrival Routes

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.

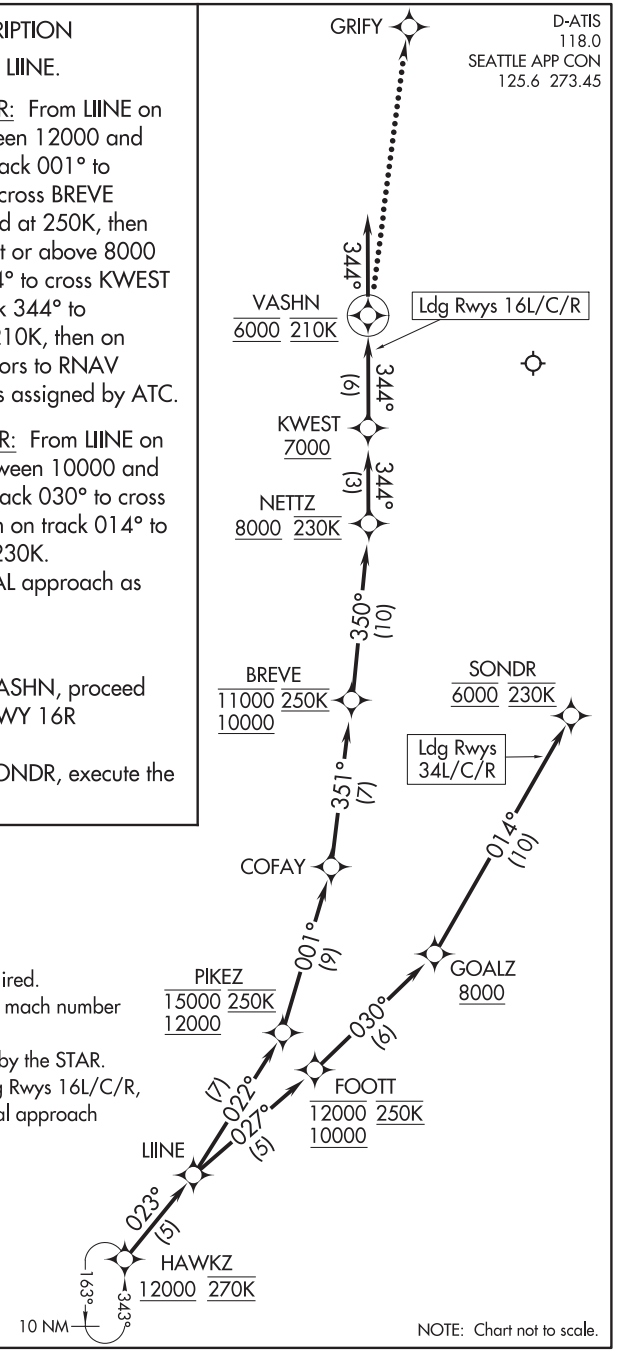
LANDING RUNWAYS 34L/C/R: From LIINE on track 027° to cross FOOTT between 10000 and 12000 and at 250K, then on track 030° to cross GOALZ at or above 8000, then on track 014° to cross SONDR at 6000 and at 230K. Expect RNAV (RNP)/ILS/VISUAL approach as assigned by ATC.

LOST COMMUNICATIONS

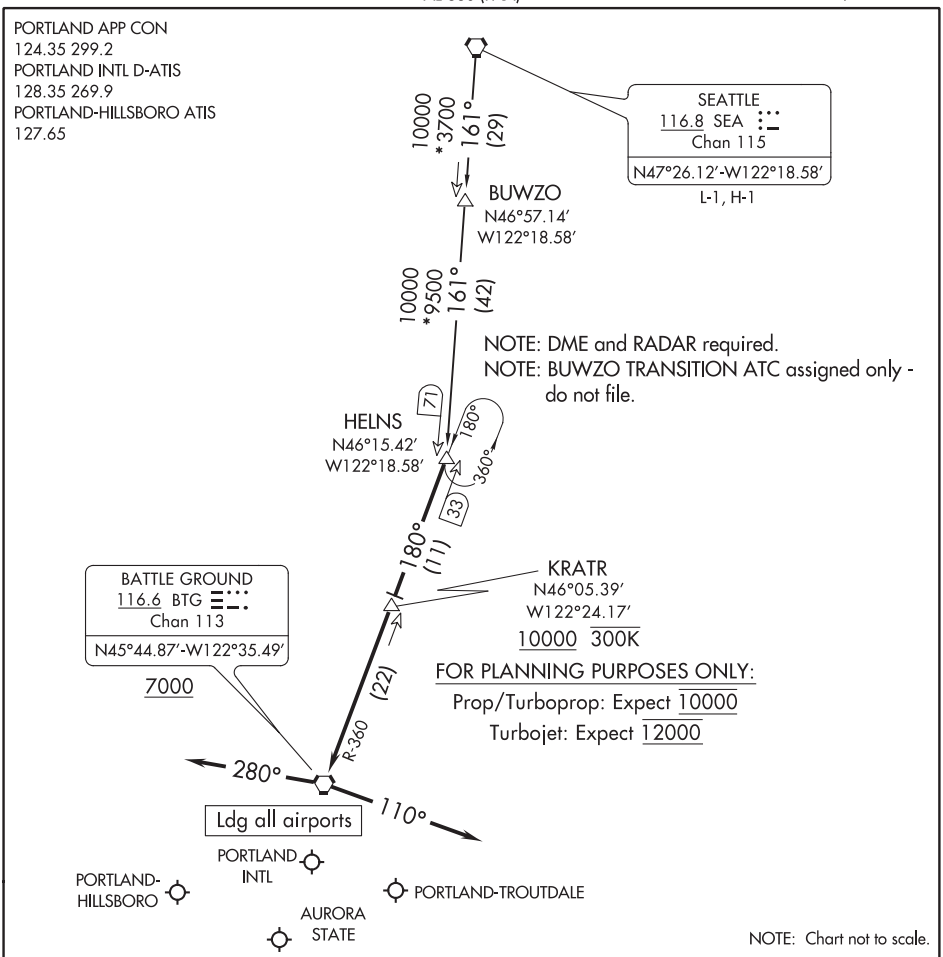
LANDING RUNWAY 16: At VASHN, proceed to GRIFY and execute the ILS RWY 16R approach.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(HHOOD.HHOOD4) 17341 AL-330 (FAA)

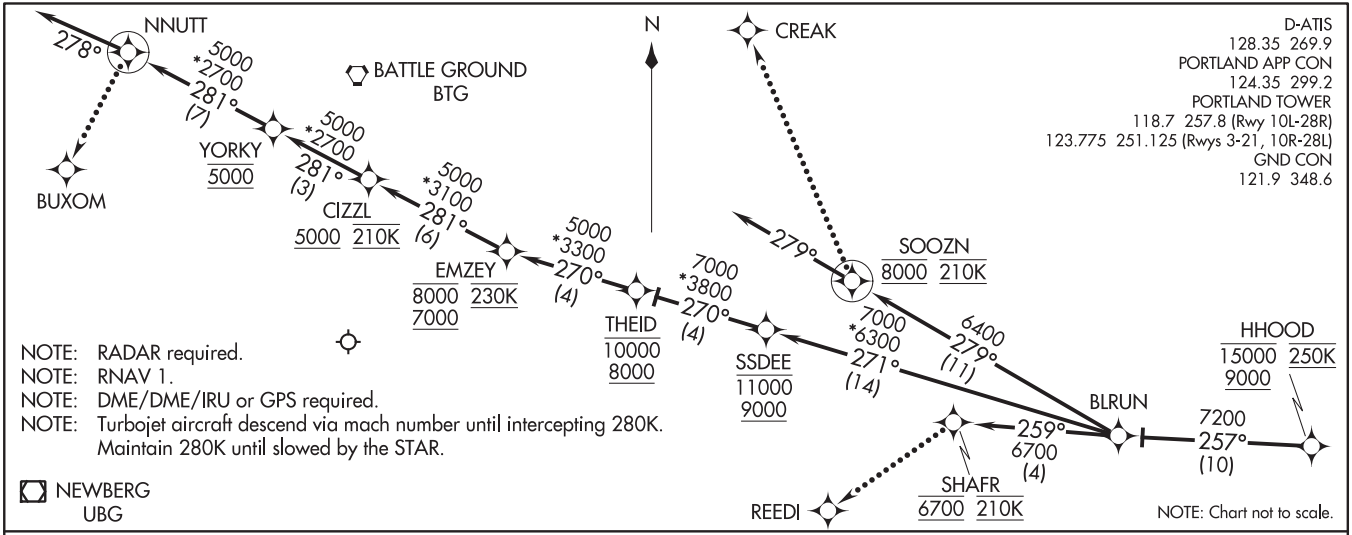
HHOOD FOUR ARRIVAL (RNAV) Transition Routes

PORTLAND INTL (PDX)
PORTLAND, OREGON

HHOOD FOUR ARRIVAL (RNAV) Transition Routes
(HHOOD.HHOOD4) 07DEC17
PORTLAND, OREGON
PORTLAND INTL (PDX)
NW-1, 30 JAN 2020 to 26 MAR 2020

HHOOD FOUR ARRIVAL (RNAV) Arrival Routes

(HHOOD.HHOOD4) 07DEC17



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.

(HHOOD.HHOOD4) 18200
HHOOD FOUR ARRIVAL (RNAV) Arrival Routes

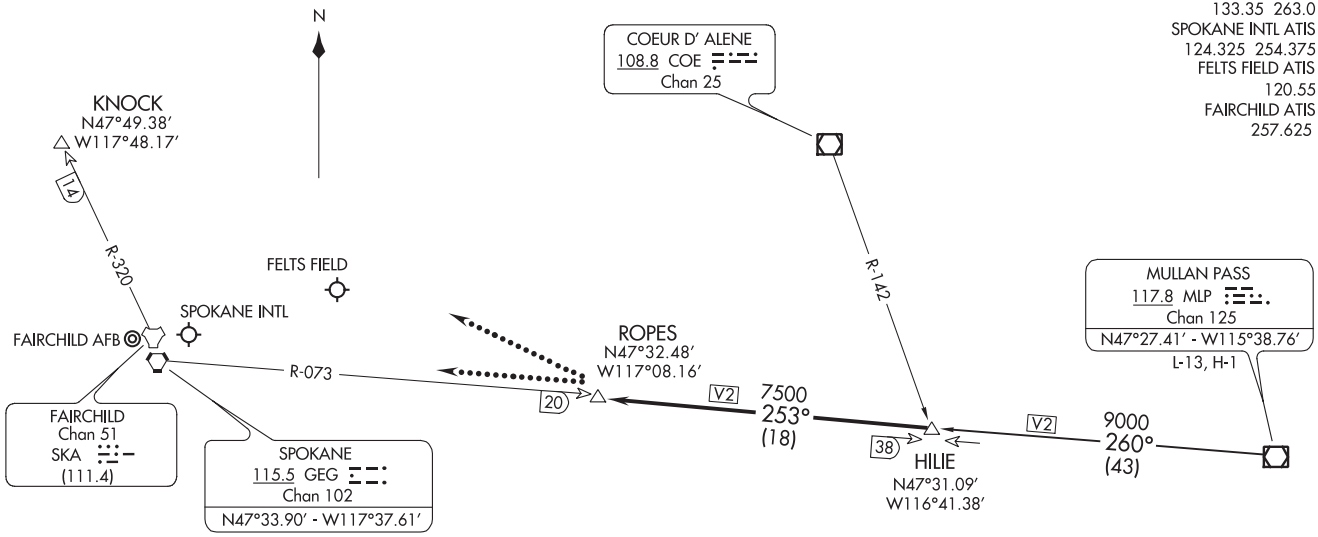
AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON

Z18

PORTLAND INTL (PDX)
PORTLAND, OREGON

HILLIE TWO ARRIVAL (HILLIE.HILLIE2)



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.

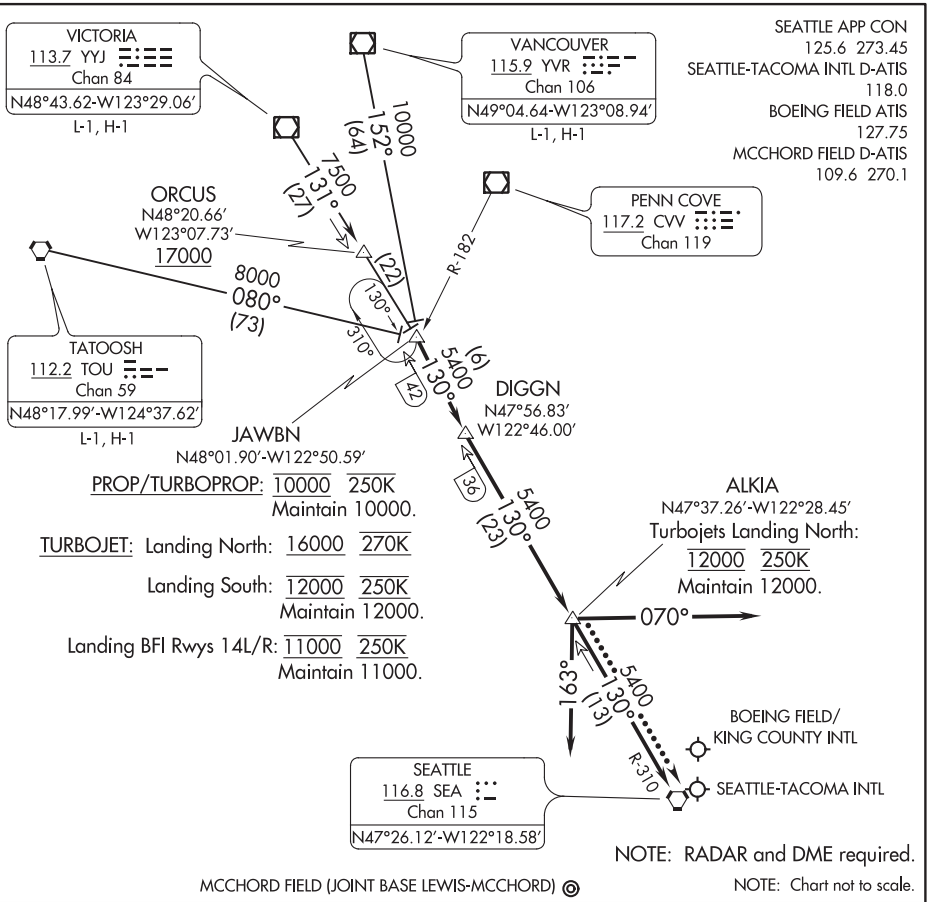
NOTE: DME and RADAR required.

NOTE: Chart not to scale.

JAWBN SIX ARRIVAL

AL-582 (FAA)

SEATTLE, WASHINGTON



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

JAWBN SIX ARRIVAL

SEATTLE, WASHINGTON

(JAWBN.JAWBN6) 01FEB18

(KOURT.KOURT3) 17341

KOURT THREE ARRIVAL (RNAV)

AL-57 (FAA)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

BOISE, IDAHO

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.

KOURT THREE ARRIVAL (RNAV)

(KOURT.KOURT3) 07DEC17

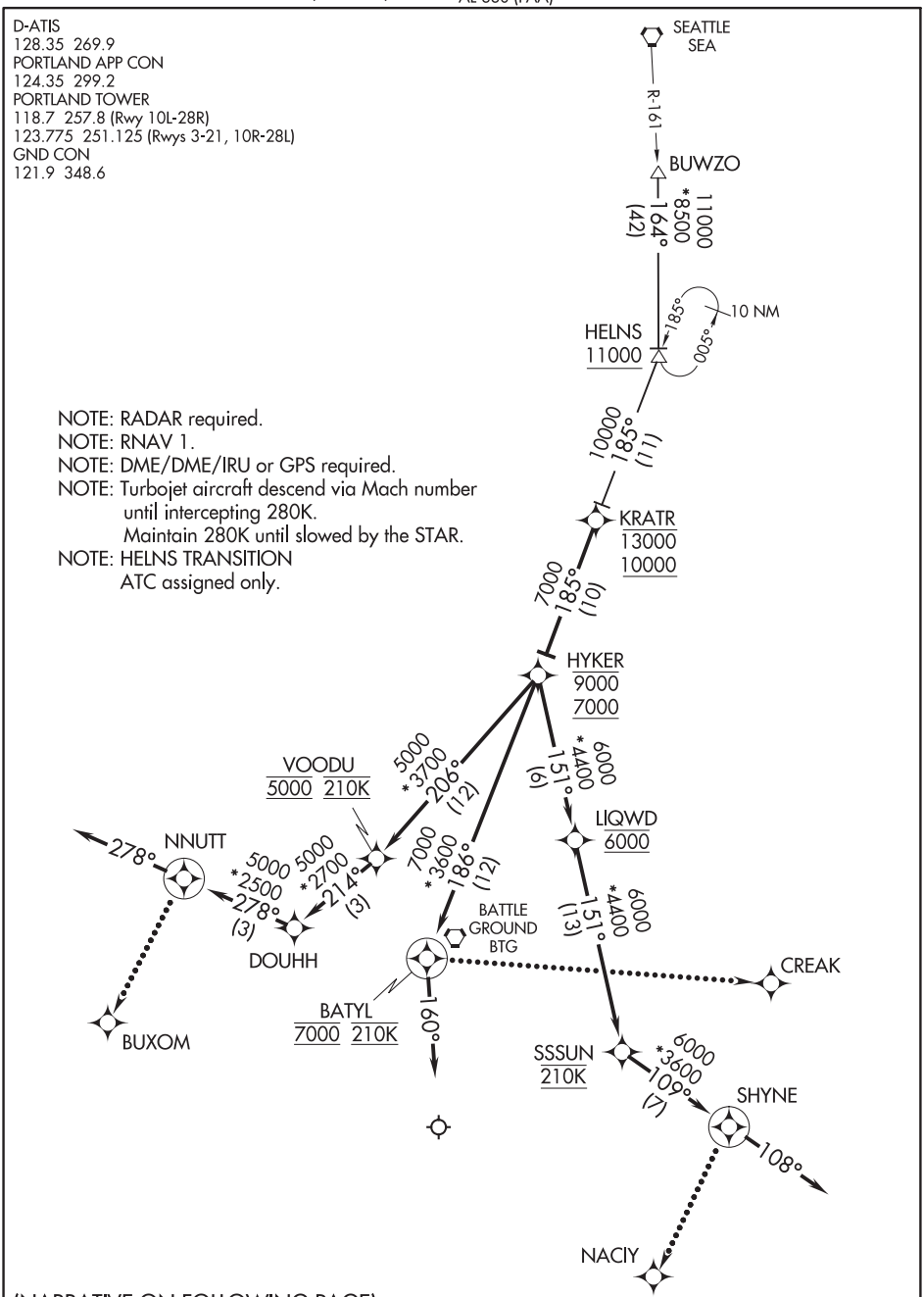
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

BOISE, IDAHO

NW-1, 30 JAN 2020 to 26 MAR 2020

KRATR TWO ARRIVAL (RNAV)

AL-330 (FAA)



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

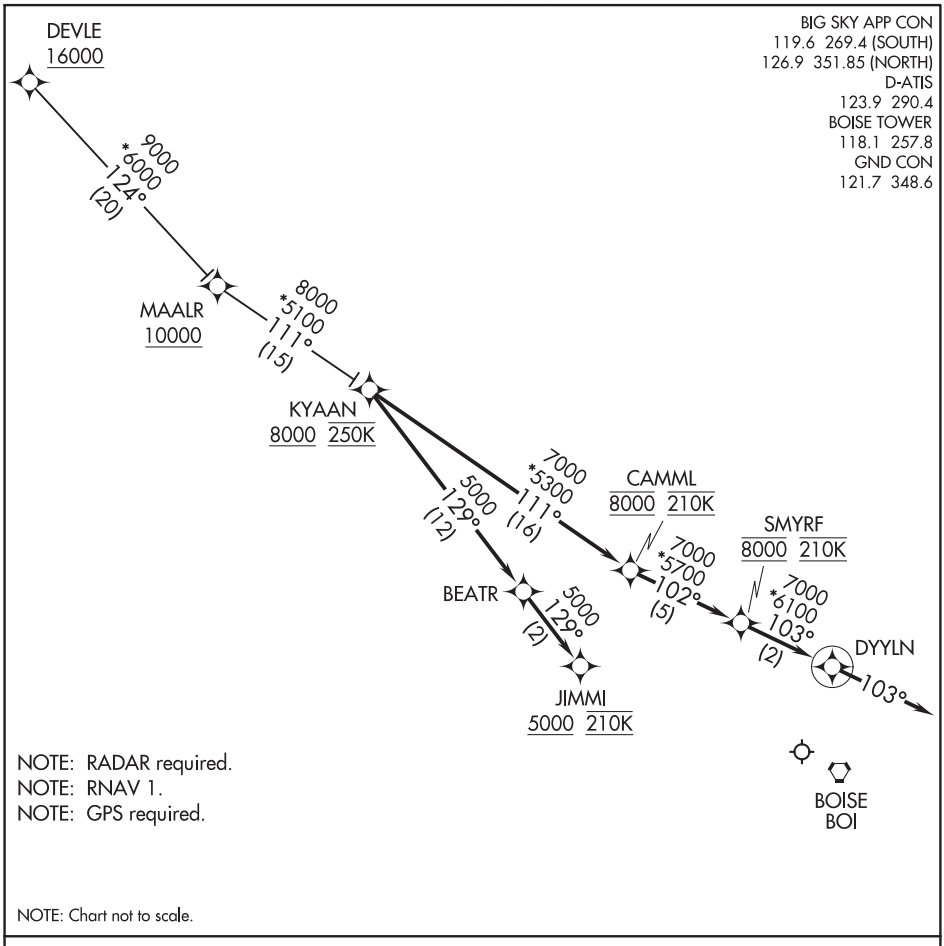
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

(KYAAN.KYAAN3) 17341

KYAAN THREE ARRIVAL (RNAV)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
AL-57 (FAA)
BOISE, IDAHO



NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.

NOTE: Chart not to scale.

NW-1, 30 JAN 2020 to 26 MAR 2020

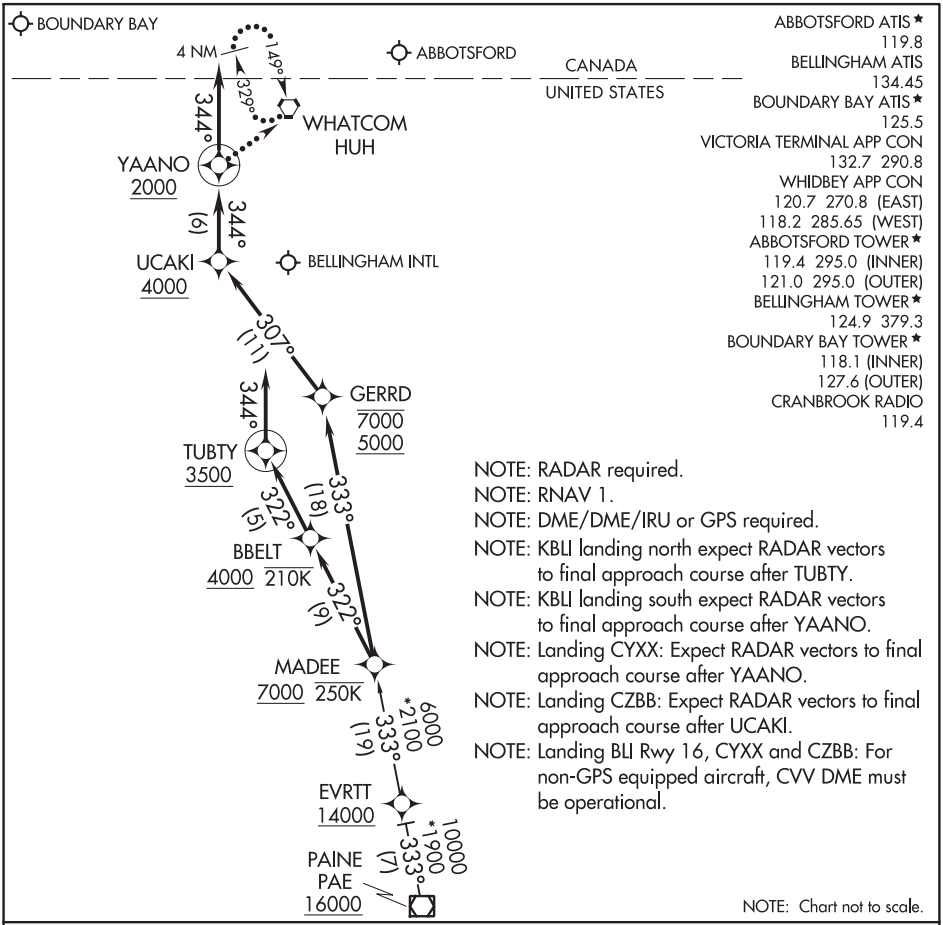
NW-1, 30 JAN 2020 to 26 MAR 2020

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.



NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

BUHNR TRANSITION (BUHNR.MARNR7)
JIGEB TRANSITION (JIGEB.MARNR7)
ROESH TRANSITION (ROESH.MARNR7)
TATOOSH TRANSITION (TOU.MARNR7)
VANCOUVER TRANSITION (YVR.MARNR7)
VICTORIA TRANSITION (YYJ.MARNR7)

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.

VANCOUVER
YVR
FL200

D-ATIS
118.0
SEATTLE APP CON
125.6 273.45

9000
*2800
153°
(27)

ROESH

VICTORIA
YYJ
FL200

10000
*3500
132°
(27)

9000
*4400
153°
(36)

ORCUS
17000 280K

9000
*4400
132°
(21)

JIGEB
12000

BUHNR
12000

9000
*4400
133°
(14)

9000
*4400
152°
(8)

TATOOSH
TOU
FL200

10000
*5100
086°
(51)

LOOOO
17000 280K

10000
*5000
087°
(22)

10 NM

312°

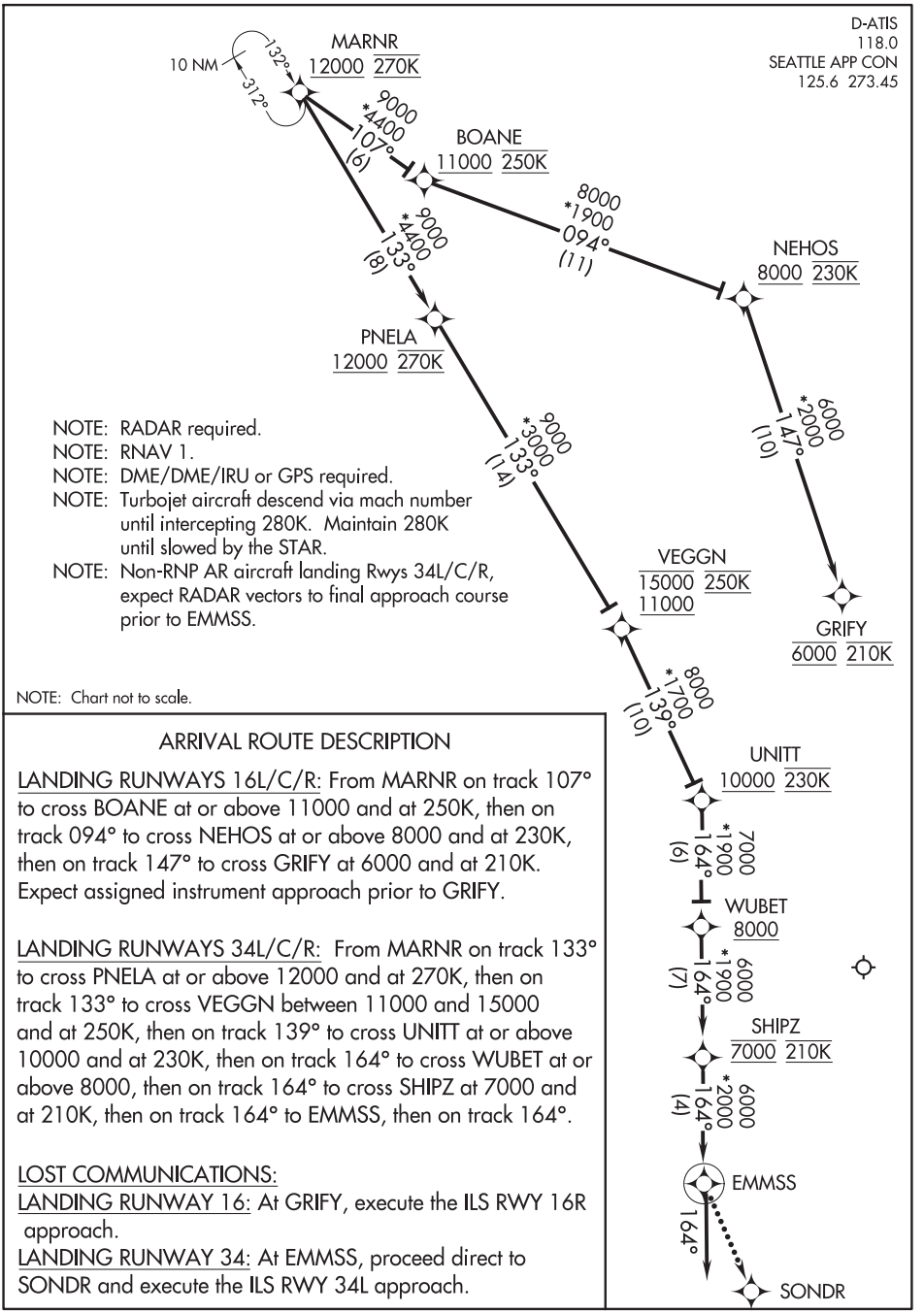
MARNR
12000 270K

See following page for Arrival Routes.

NOTE: Chart not to scale.

(CONTINUED ON FOLLOWING PAGE)

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.

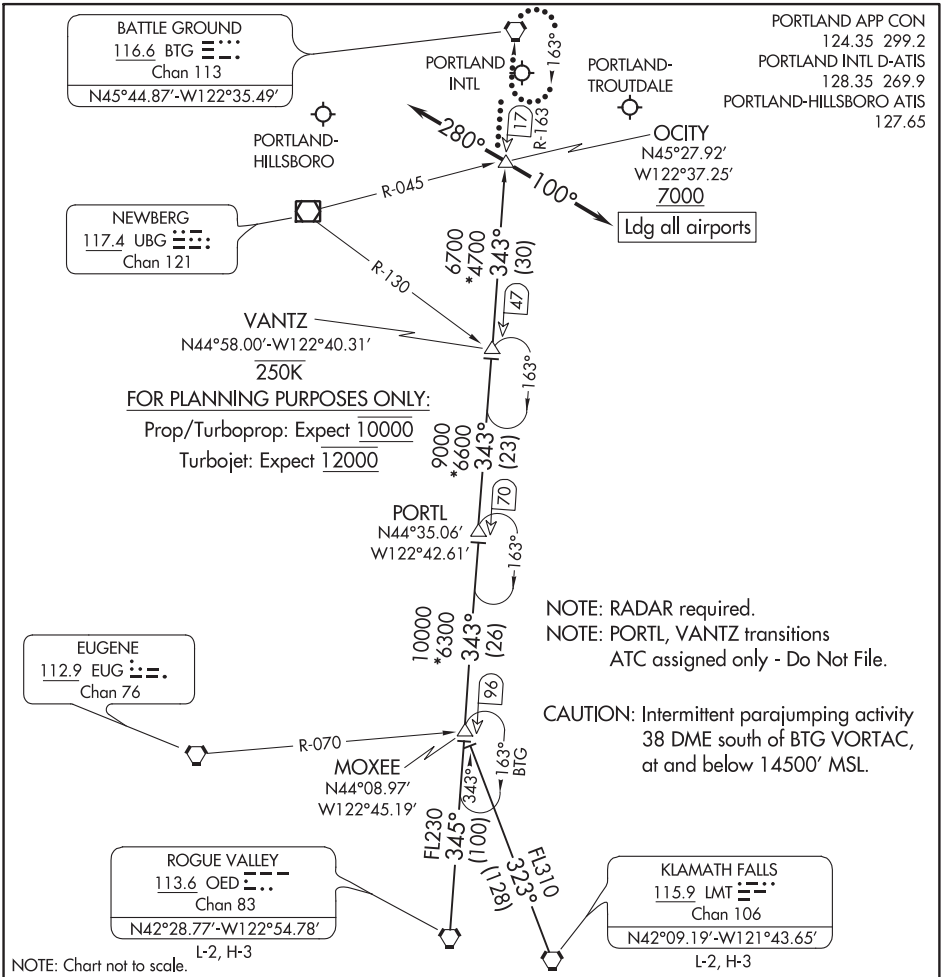
NW-1, 30 JAN 2020 to 26 MAR 2020

(OCITY.OCITY3) 20030

OCITY THREE ARRIVAL

AL-330 (FAA)

PORTLAND, OREGON



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.

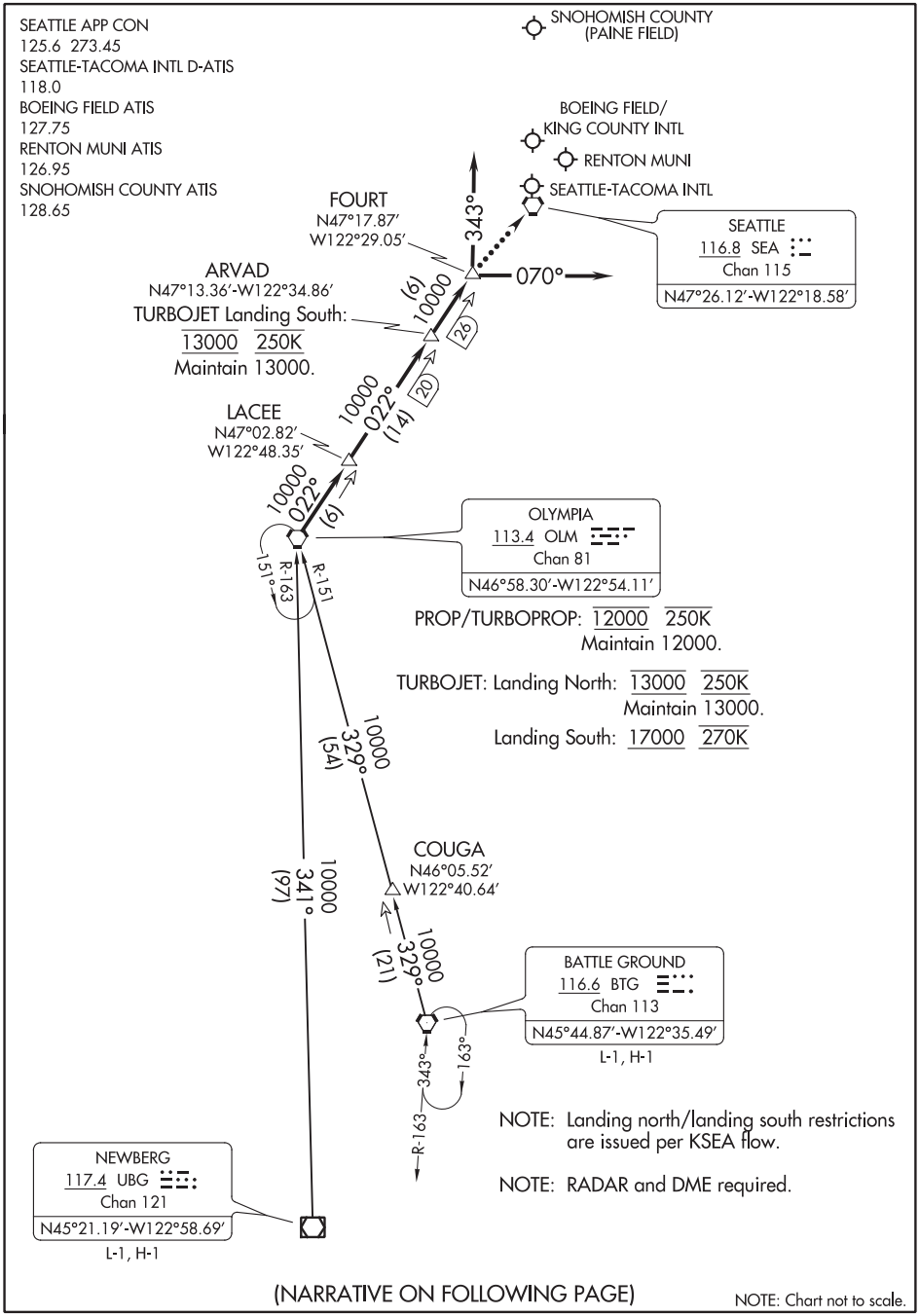
LOST COMMUNICATIONS: After OCITY, proceed direct BTG VORTAC and hold.

OCITY THREE ARRIVAL

PORTLAND, OREGON

(OCITY.OCITY3) 30JAN20

NW-1, 30 JAN 2020 to 26 MAR 2020



(NARRATIVE ON FOLLOWING PAGE) NOTE: Chart not to scale.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

ARRIVAL ROUTE DESCRIPTION

HOSTS TRANSITION (HOSTS.PARMO3)

From MYRUN on track 101° to cross PARMO at or above 8000 and at 250K.

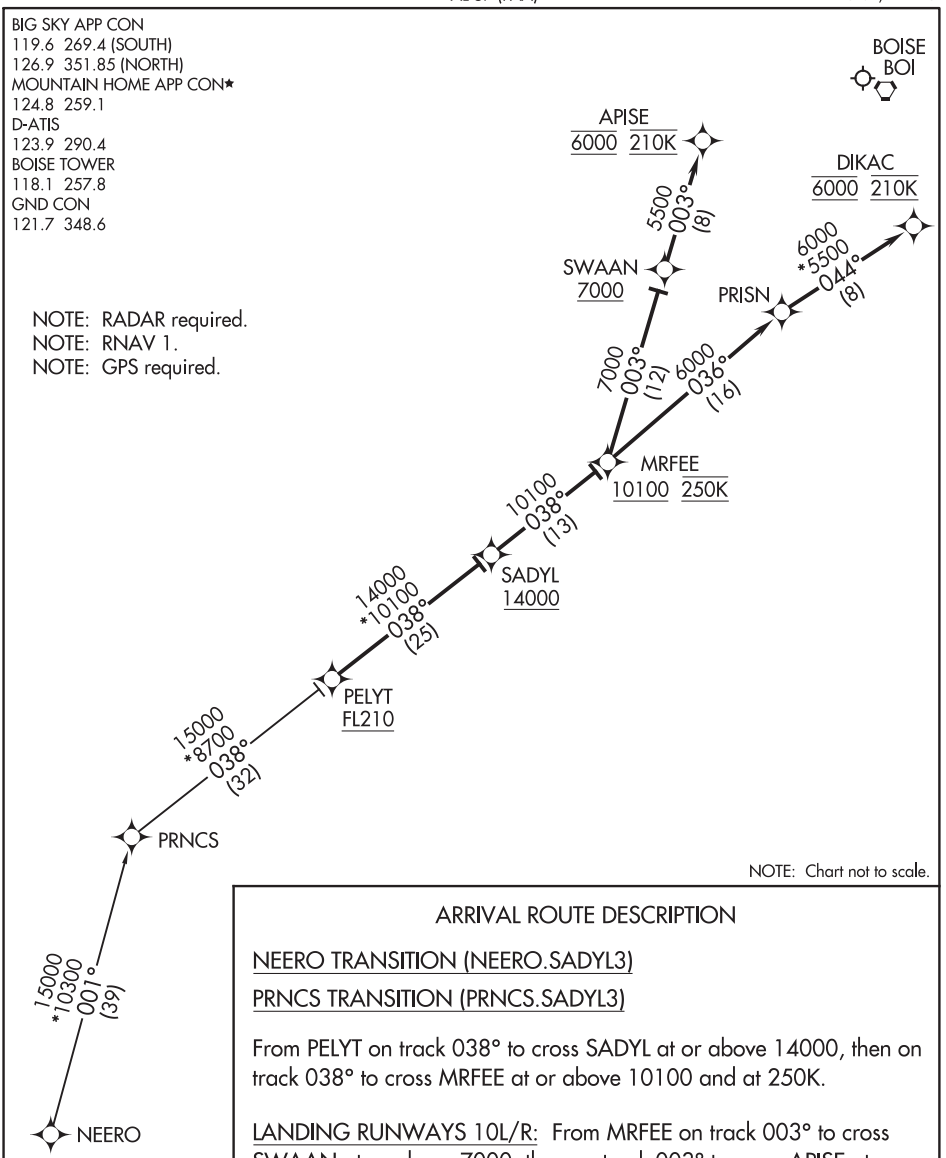
LANDING RUNWAYS 10L/R: From PARMO on track 101° to cross JIMMI at or above 5000 and at 210K. Expect assigned approach or RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From PARMO on track 116° to NIICK, then on track 102° to DAGTT, then on track 102° to cross EKEME at 7000 and at 210K, then on track 102° to ZEENO, then on track 102°. Expect assigned approach or RADAR vectors to final approach course.

(PELYT.SADYL3) 17341

SADYL THREE ARRIVAL (RNAV)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
BOISE, IDAHO
AL-57 (FAA)



ARRIVAL ROUTE DESCRIPTION

NEERO TRANSITION (NEERO.SADYL3)

PRNCS TRANSITION (PRNCS.SADYL3)

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 036° to PRISN, then on track 044° to cross DIKAC at 6000 and at 210K. Expect RNP approach or RADAR vectors to final approach course.

SADYL THREE ARRIVAL (RNAV)

(PELYT.SADYL3) 07DEC17

BOISE, IDAHO
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

NW-1, 30 JAN 2020 to 26 MAR 2020

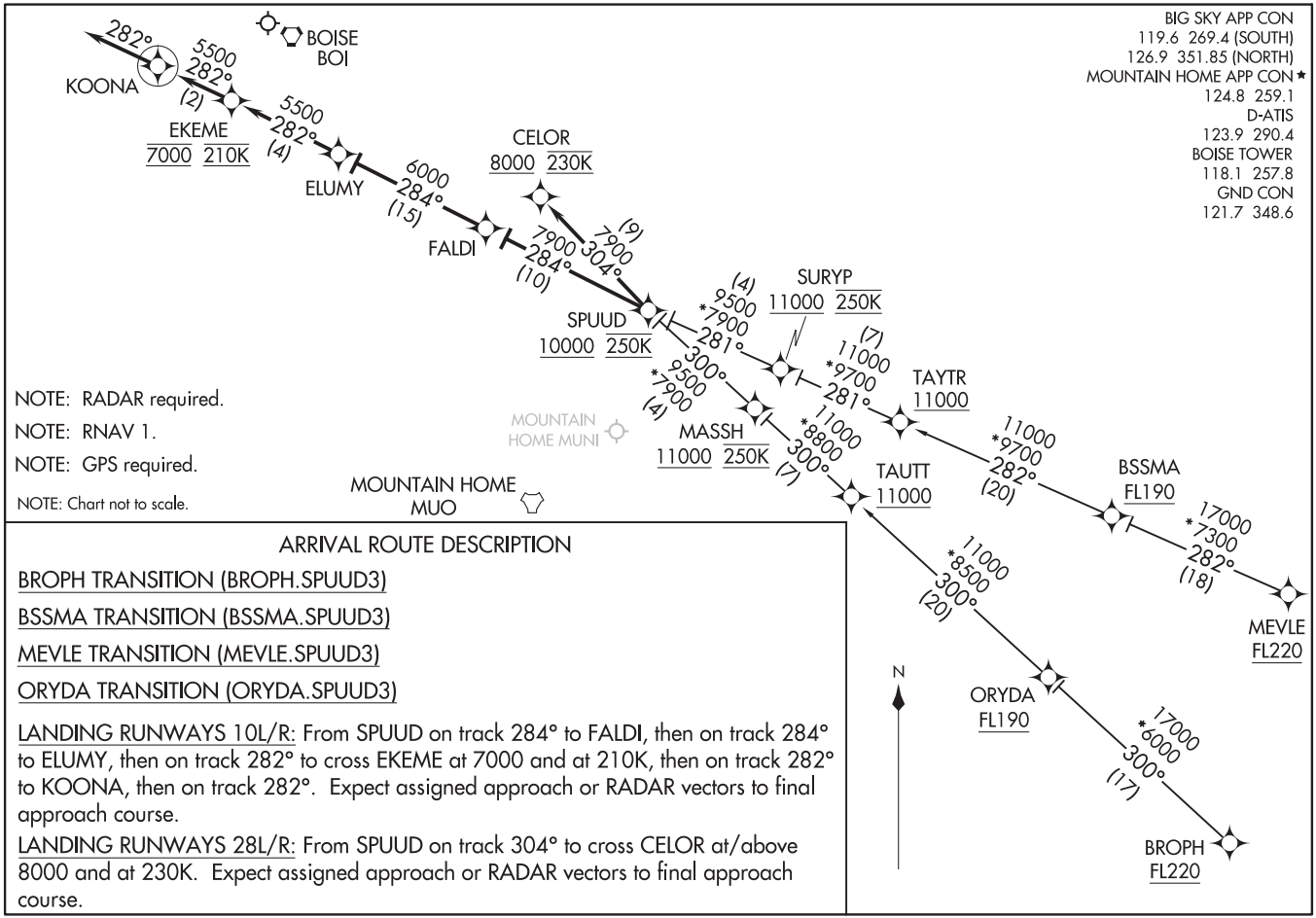
NW-1, 30 JAN 2020 to 26 MAR 2020

SPUUD THREE ARRIVAL (RNAV)

(SPUUD.SPUUD3) 07DEC17

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

BOISE, IDAHO



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.

(SPUUD.SPUUD3) 17341

SPUUD THREE ARRIVAL (RNAV)

AL-57 (FAA)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

BOISE, IDAHO

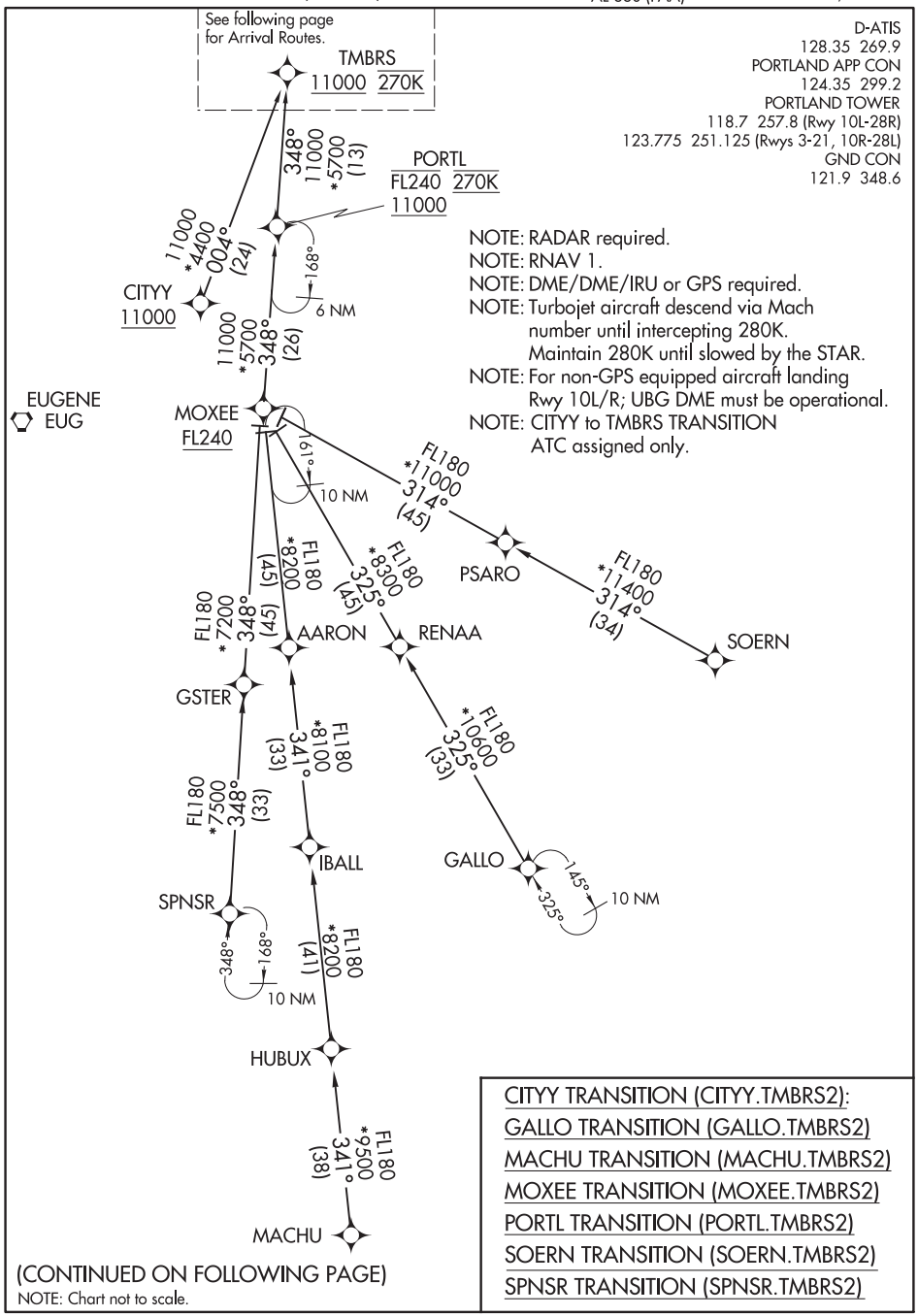
Z34

(TMBRS.TMBRS2) 17173

TMBRS TWO ARRIVAL (RNAV) Transition Routes

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



CITYY TRANSITION (CITYY.TMBRS2)
GALLO TRANSITION (GALLO.TMBRS2)
MACHU TRANSITION (MACHU.TMBRS2)
MOXEE TRANSITION (MOXEE.TMBRS2)
PORTL TRANSITION (PORTL.TMBRS2)
SOERN TRANSITION (SOERN.TMBRS2)
SPNSR TRANSITION (SPNSR.TMBRS2)

(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TMBRS TWO ARRIVAL (RNAV) Transition Routes

PORTLAND, OREGON
PORTLAND INTL (PDX)

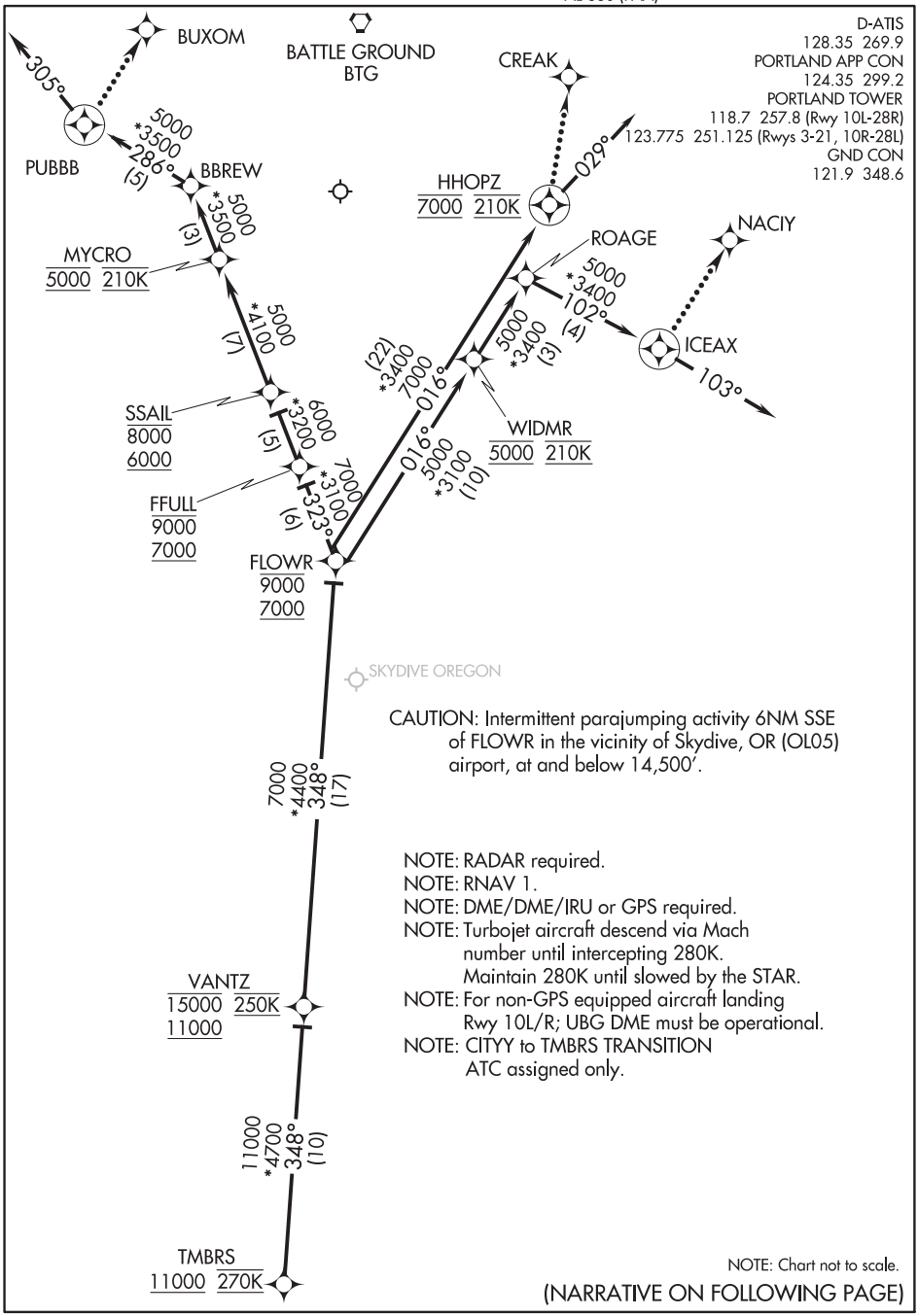
(TMBRS.TMBRS2) 25JUN15

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

TMBRS TWO ARRIVAL (RNAV) Arrival Routes

AL-330 (FAA)



(NARRATIVE ON FOLLOWING PAGE)

NW-1, 30 JAN 2020 to 26 MAR 2020

(TMBRS.TMBRS2) 17173

TMBRS TWO ARRIVAL (RNAV)

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

D-ATIS
270.1
SEATTLE APP CON
126.5 377.15

LOCALIZER 108.5
I-TCM

STEIL
N47°09.19'
W122°43.15'

10
R-257

4000
015°
(13)

R-095

6000
275°
(22)

OLYMPIA
113.4 OLM
Chan 81
N46°58.30'
W122°54.11'

SEATTLE
116.8 SEA
Chan 115

MC CHORD
109.6 TCM
Chan 33

LOCALIZER 109.9
I-MAR

R-168

ALDER
N46°49.29'
W122°24.85'

6200
(13)

35

WEBIM
N46°43.91'-W122°07.63'
TURBOJET NAVIGATIONAL
PLANNING INFORMATION
Expect 10000

10000
275°
(22)

57

WHYTE
N46°34.71'
W121°38.62'

15000
*10000
250°
(50)

YAKIMA
116.0 YKM
Chan 107
N46°34.21'-W120°26.68'
L-13, H-1

70

112

15000
*10300
282°
(125)

PENDLETON
114.7 PDT
Chan 94
N45°41.91'-W118°56.32'
L-13, H-1

N

NOTE: DME required.
NOTE: RADAR required.
NOTE: Chart not to scale.

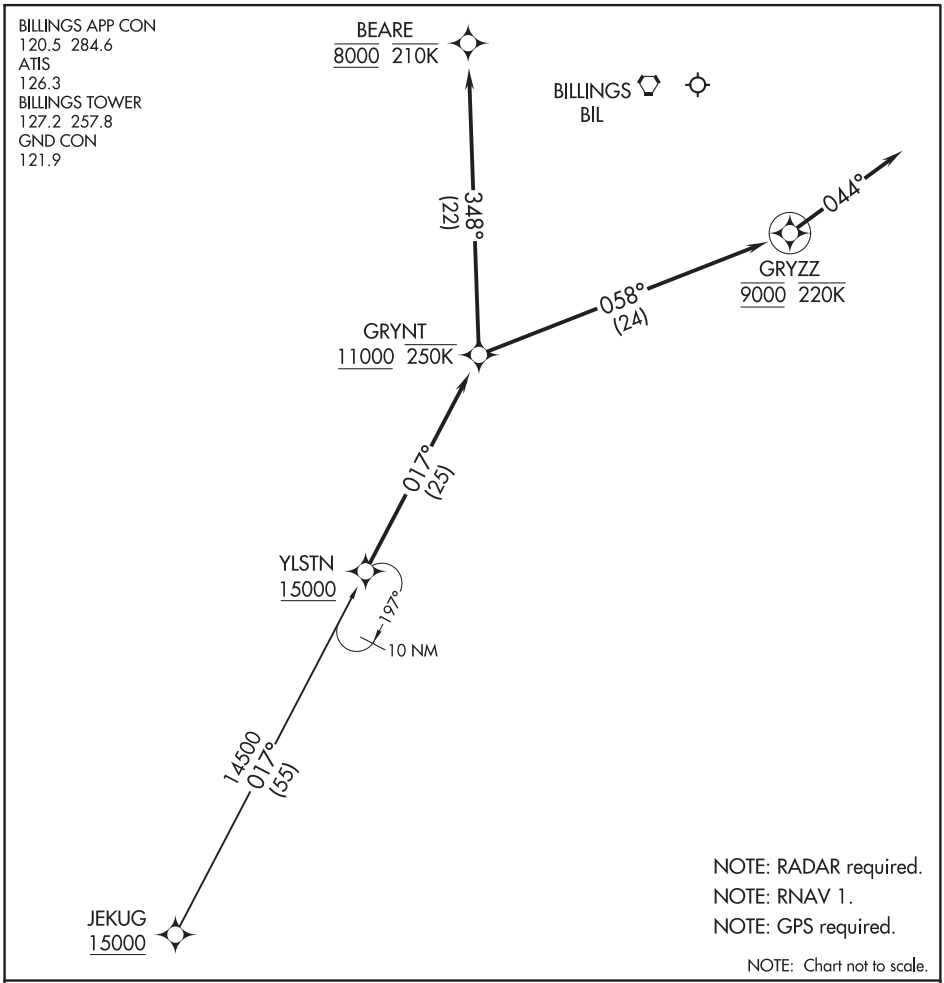
WHYTE SIX ARRIVAL
(WHYTE.WHYTE6) 05DEC19
MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
TACOMA, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020

(YLSTN.YLSTN3) 18256

YLSTN THREE ARRIVAL (RNAV)

BILLINGS LOGAN INTL (BIL)
BILLINGS, MONTANA
AL-48 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

ARRIVAL ROUTE DESCRIPTION

JEKUG TRANSITION (JEKUG.YLSTN3)

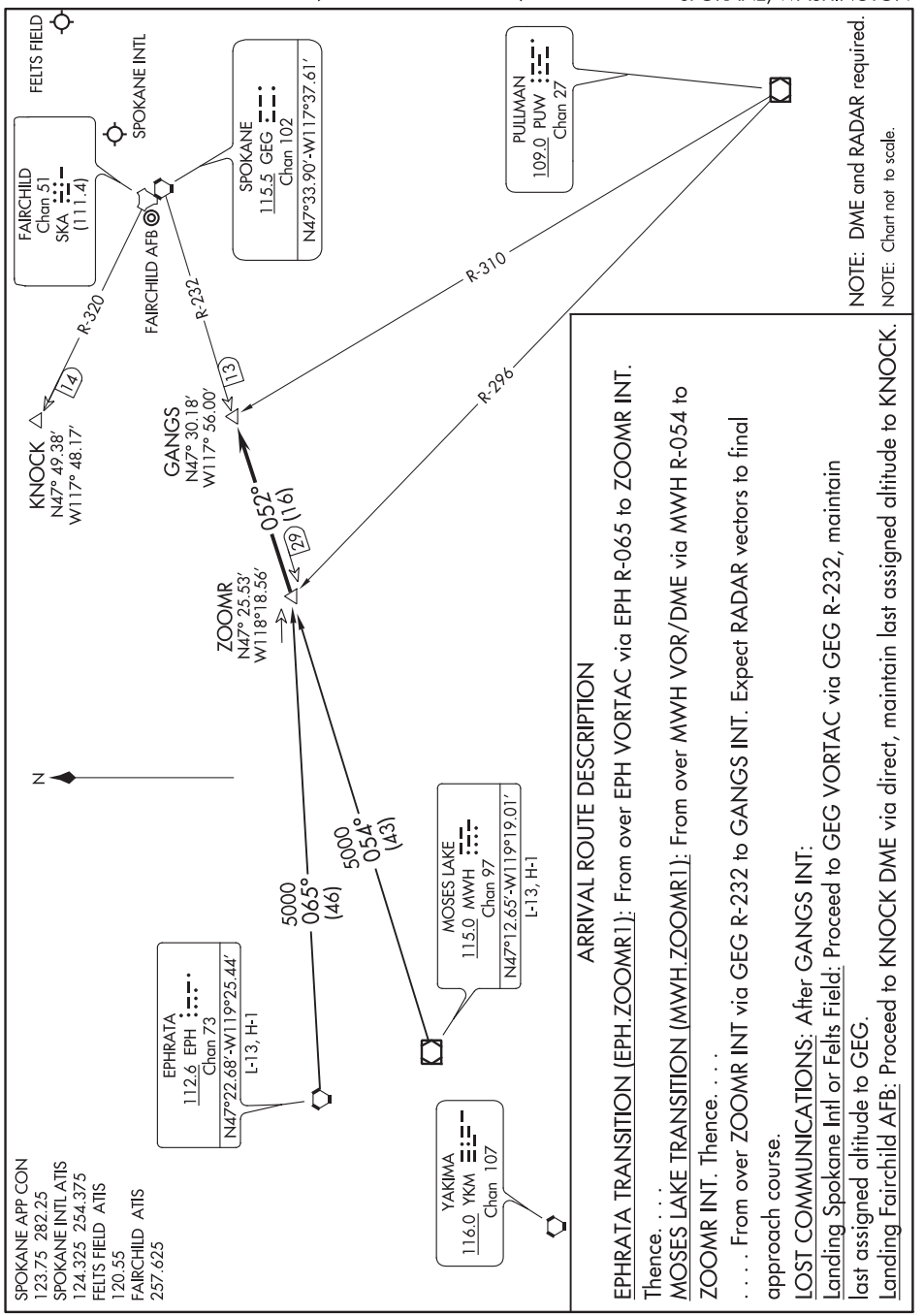
From YLSTN on track 017° to cross GRYNT at or above 11000 and at or below 250K.

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



NW-1, 30 JAN 2020 to 26 MAR 2020

ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON

22MAR01

INTENTIONALLY

LEFT

BLANK

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	7025
156°	TDZE	6188
	Apt Elev	6221

RNAV (GPS) RWY 16

AFTON MUNI (AFO)

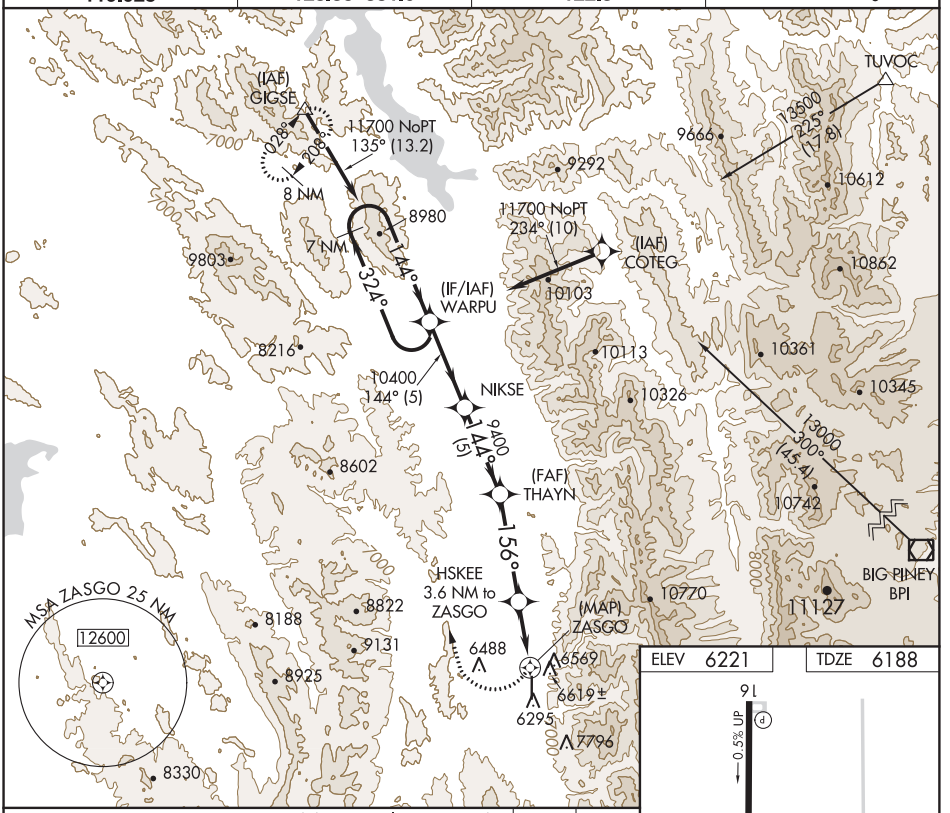
RNP APCH.

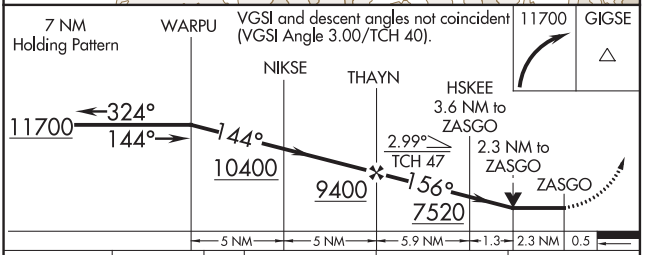
T
NA
-22°C

If local altimeter setting not received, procedure NA. Circling NA east of Rwy 16-34. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 11700 direct GIGSE and hold. When authorized by ATC, climb-in-hold to 15000.

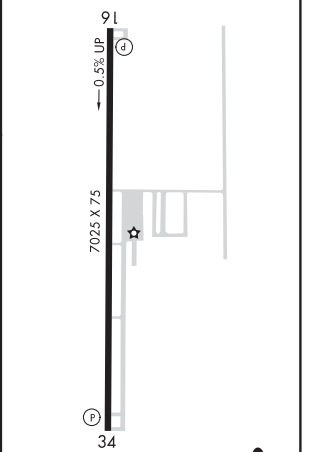
AWOS-3P	SALT LAKE CENTER	CASPER RADIO	UNICOM
119.025	128.35 381.6	122.3	122.8 (CTAF) L





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

ELEV	6221	TDZE	6188



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

AFTON, WYOMING | AL-9116 (FAA) | 17285

RNAV (GPS) RWY 34

AFTON MUNI (AFO)

APP CRS	Rwy Idg	TDZE	Apt Elev
346°	7025	6221	6221

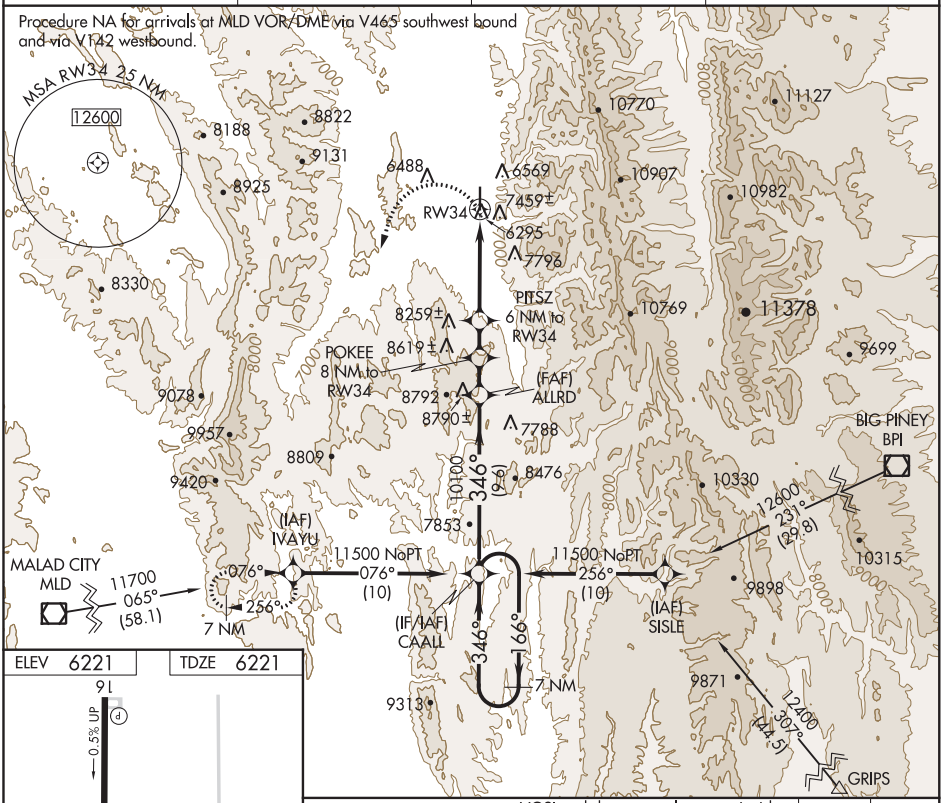
T NA -22°C

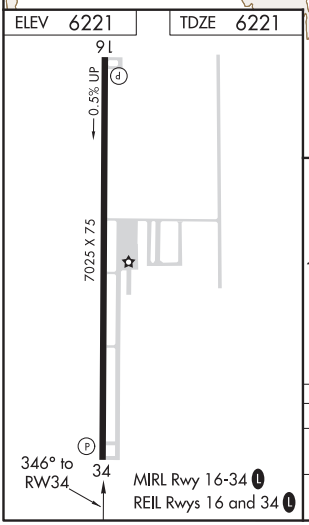
DME/DME RNP- 0.3 NA. Circling NA east of Rwy 16-34. Helicopter visibility reduction below ¾ SM NA. If local altimeter setting not received, procedure NA.

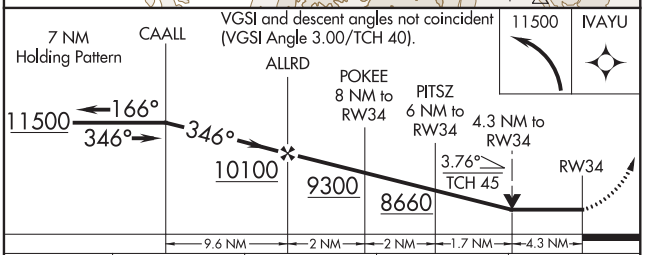
MISSED APPROACH: Climbing left turn to 11500 direct IVAYU and hold.

AWOS-3P	SALT LAKE CENTER	CASPER RADIO	UNICOM
119.025	128.35 381.6	122.3	122.8 (CTAF) L

Procedure NA for arrivals at MLD VOR/DME via V465 southwest bound and via V142 westbound.







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

AFTON, WYOMING
Amdt 2A 31MAR16

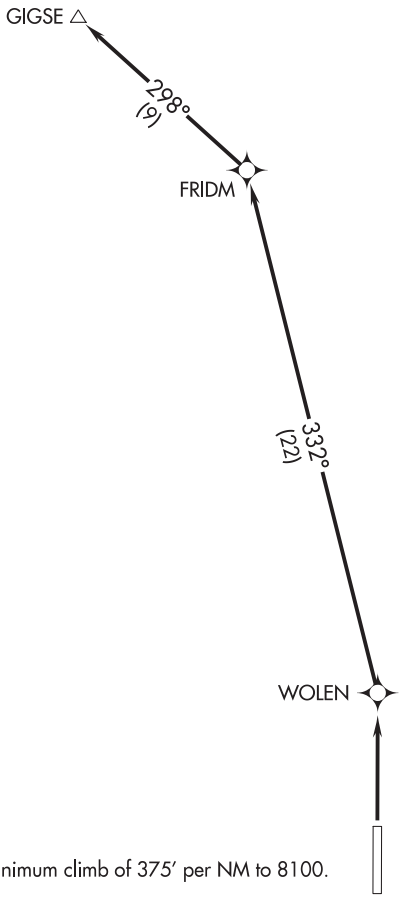
42°43'N-110°57'W

AFTON MUNI (AFO)

RNAV (GPS) RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020

SALT LAKE CENTER
128.35 381.6
CTAF
122.8



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 clearance to filed altitude five minutes after departure.

NW-1, 30 JAN 2020 to 26 MAR 2020

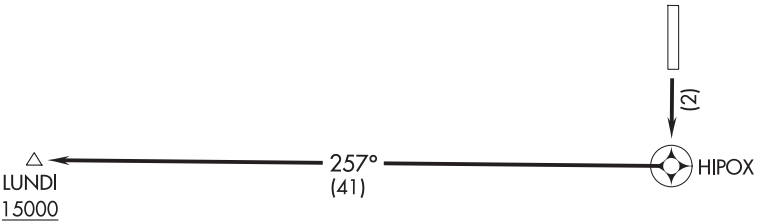
(LUNDI2.LUNDI) 16147

LUNDI TWO DEPARTURE (OBSTACLE) (RNAV)

SL-9116 (FAA)

AFTON MUNI (AFO)
AFTON, WYOMING

SALT LAKE CENTER
128.35 381.6
CASPER RADIO
122.3
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, 30 JAN 2020 to 26 MAR 2020

VOR/DME CVO	APP CRS	Rwy Idg	N/A
115.4	032°	TDZE	N/A
Chan 101		Apt Elev	223

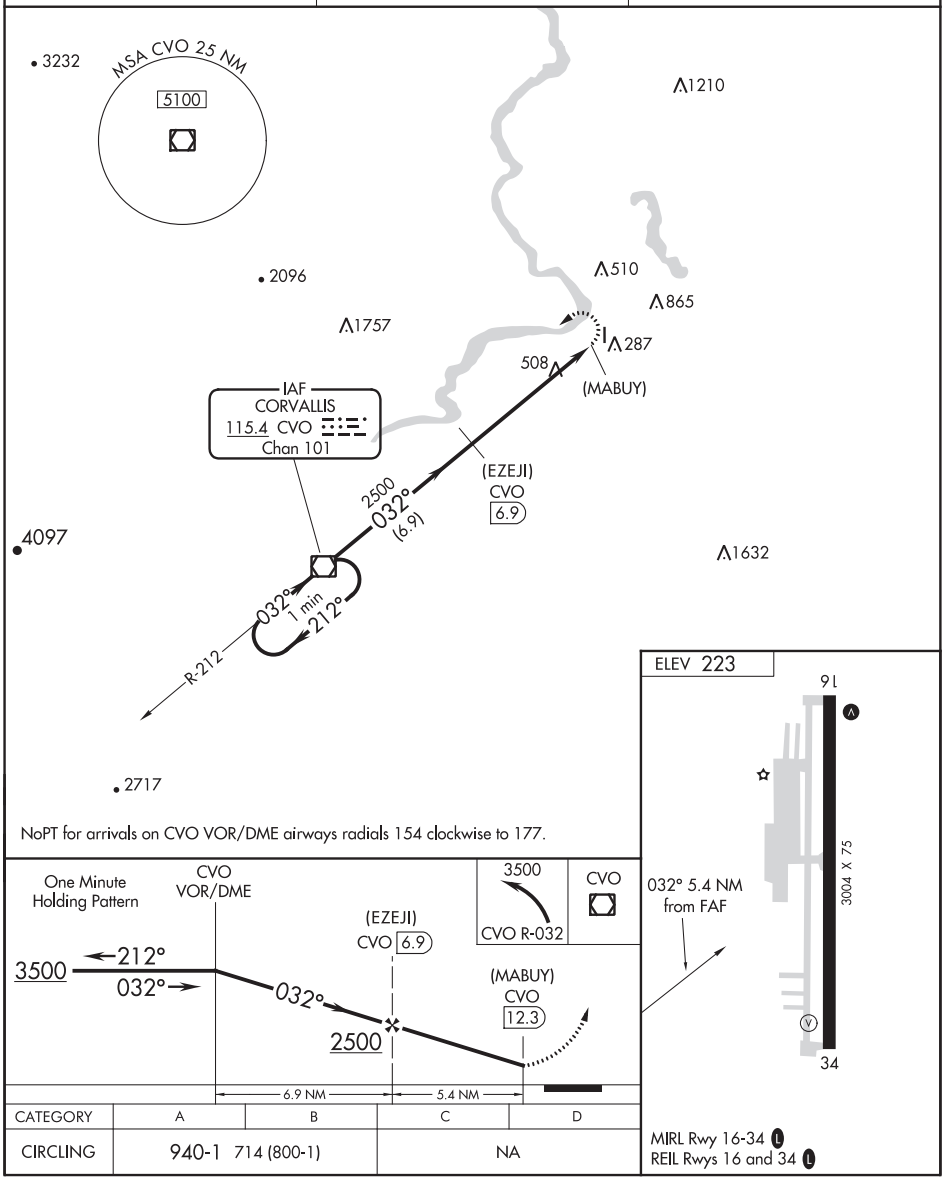
VOR/DME or GPS-A

ALBANY MUNI (S12)

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ANACONDA, MONTANA | AL-6986 (FAA) | 18256

VOR/DME CPN	APP CRS	Rwy Idg	N/A
111.6	307°	TDZE	N/A
Chan 53		Apt Elev	5030

VOR/DME or GPS-A

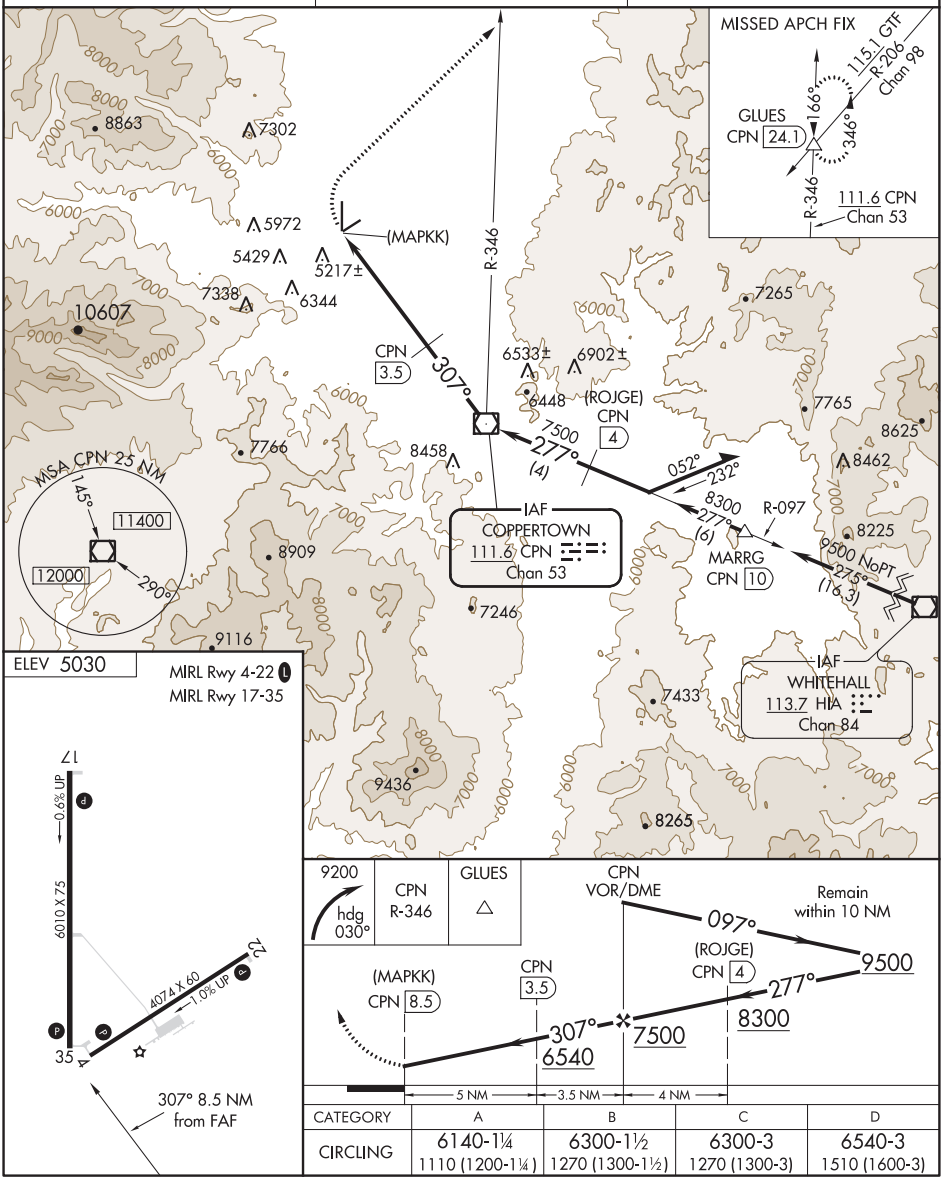
BOWMAN FIELD (3U3)

T
NA
-33°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)



CATEGORY	A	B	C	D
CIRCLING	6140-1¼ 1110 (1200-1¼)	6300-1½ 1270 (1300-1½)	6300-3 1270 (1300-3)	6540-3 1510 (1600-3)

ANACONDA, MONTANA
Amdt 1A 23OCT08

46°09'N-112°52'W

BOWMAN FIELD (3U3)

VOR/DME or GPS-A

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS)-A

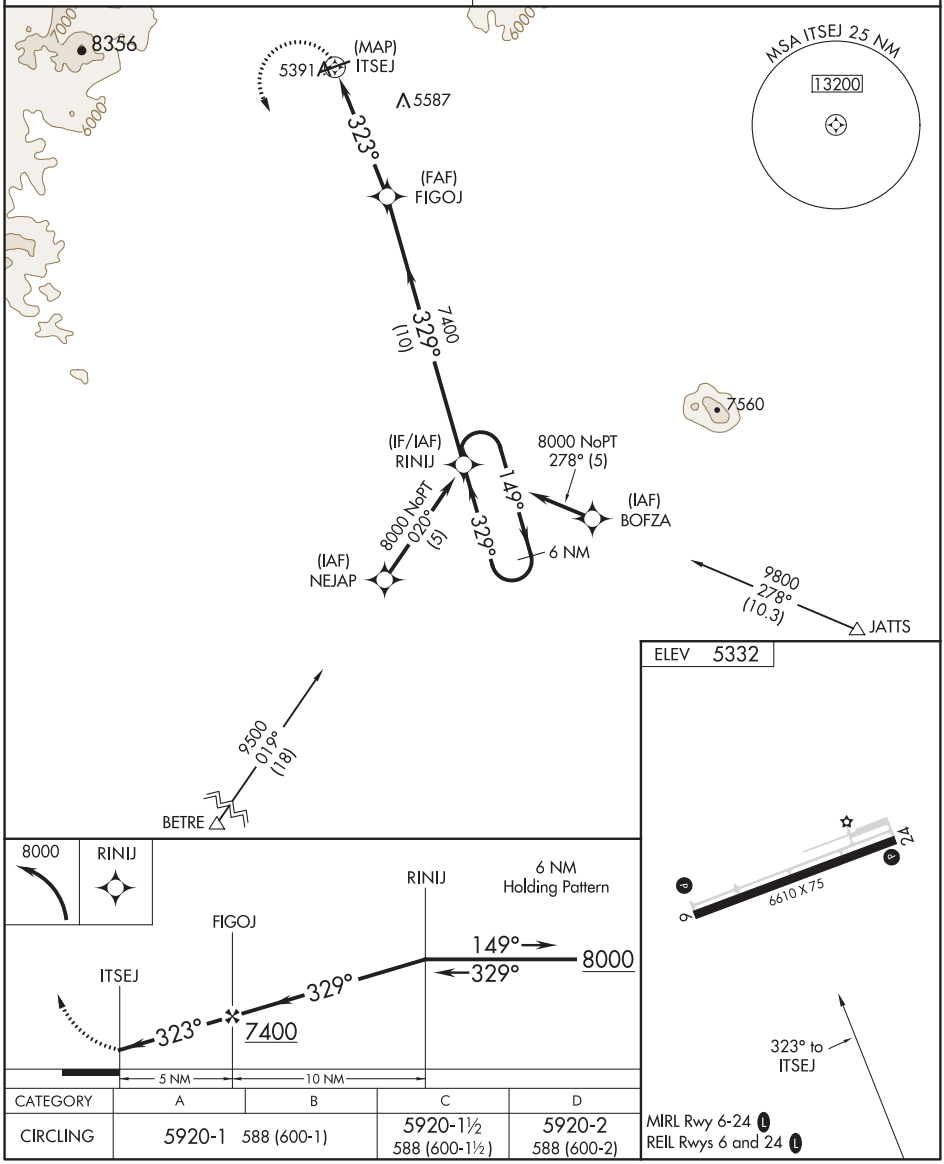
ARCO-BUTTE COUNTY (AOC)

APP CRS	Rwy Idg	N/A
323°	TDZE	N/A
	Apt Elev	5332

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)

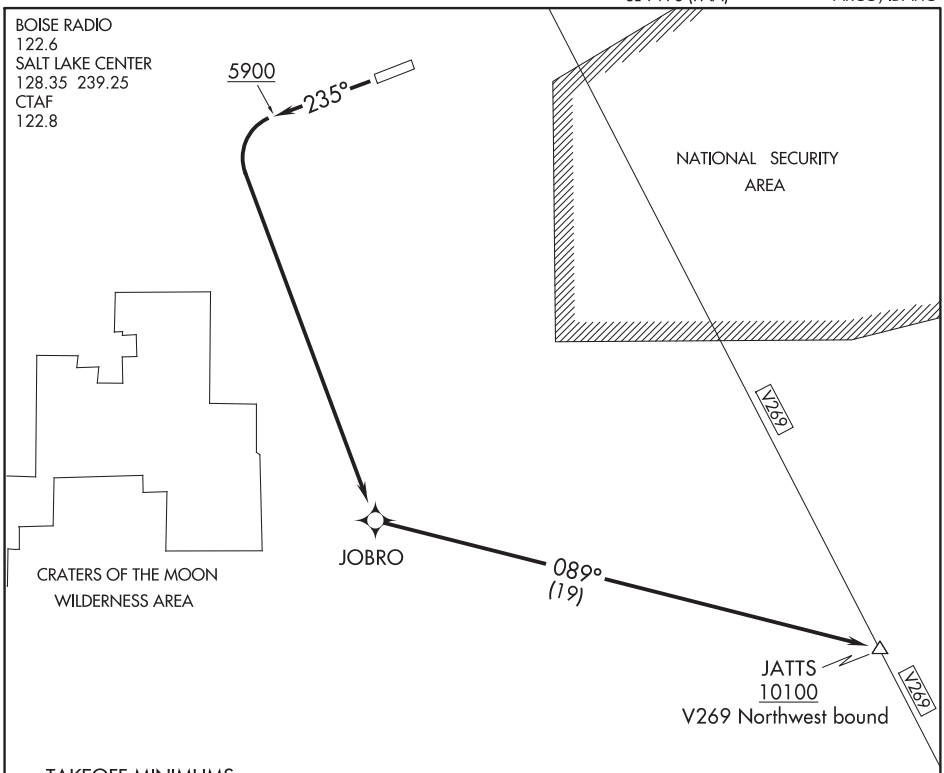
MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(JATTS1.JATTS) 16147

JATTS ONE DEPARTURE (OBSTACLE) (RNAV)

ARCO-BUTTE COUNTY (AOC)
SL-9198 (FAA) ARCO, IDAHO



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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.

JATTS ONE DEPARTURE (OBSTACLE) (RNAV)
(JATTS1.JATTS) 05JUN08

ARCO, IDAHO
ARCO-BUTTE COUNTY (AOC)

WAAS	APP CRS	Rwy Idg	5332
CH 90324	342°	TDZE	135
W34A		Apt Elev	137

RNAV (GPS) RWY 34

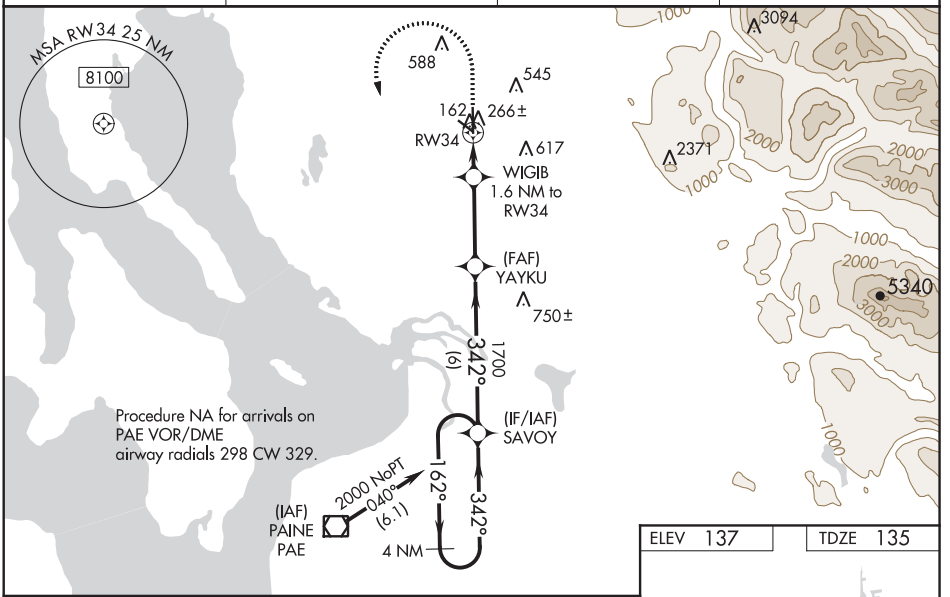
ARLINGTON MUNI (AWO)

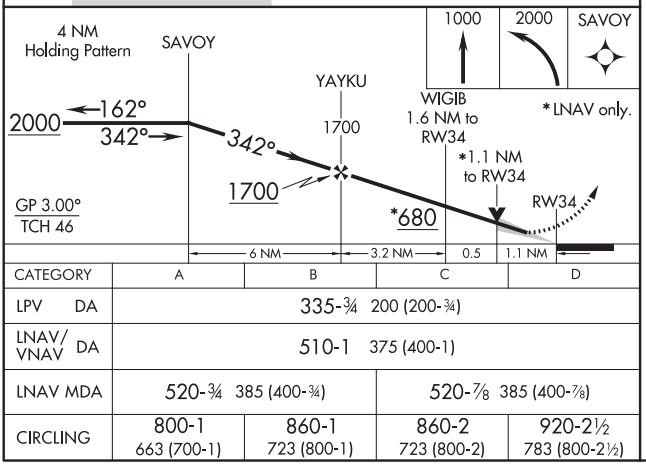
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Whidbey Island NAS (Ault Field) altimeter setting and increase all DA 66 feet and all MDA 80 feet and increase LNAV/VNAV all Cats, and LNAV and 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.

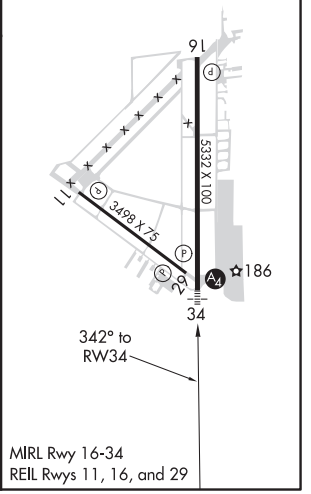
AWOS-3PT	SEATTLE APP CON	CLNC DEL	CTAF
135.625	128.5 306.9	121.725	122.725 (L)





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-AWO	APP CRS	Rwy Idg	5332
111.5	342°	TDZE	135
		Apt Elev	137

LOC RWY 34

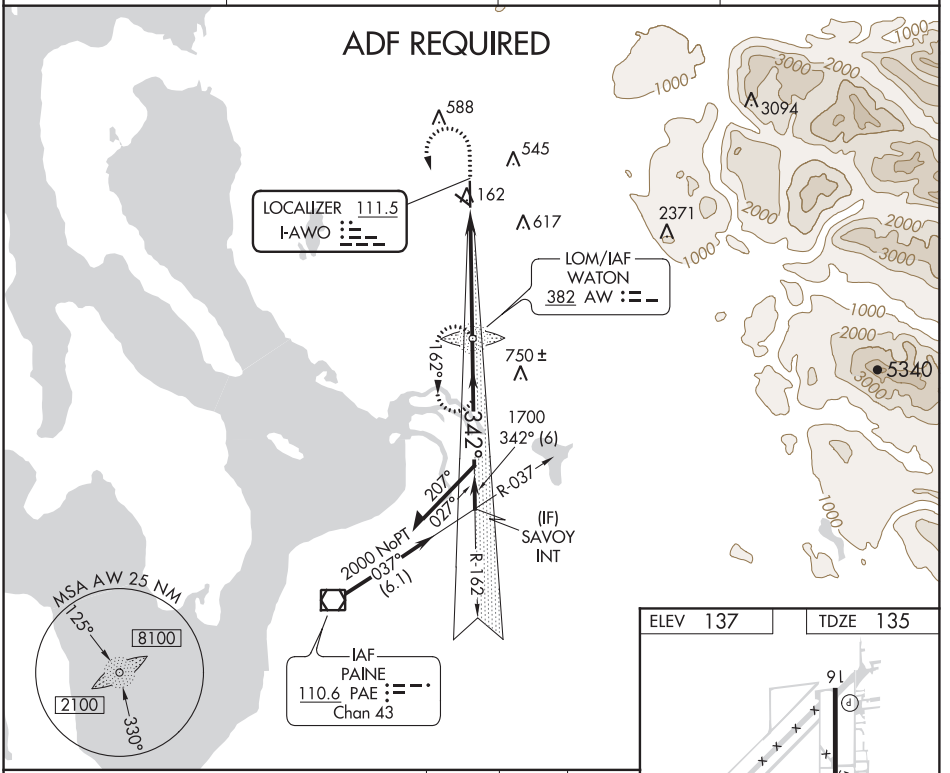
ARLINGTON MUNI (AWO)

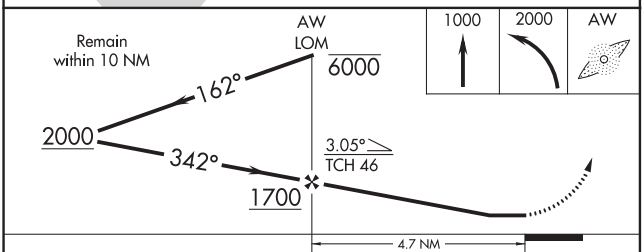
T
NA ADF required. When local altimeter setting not received use Whidbey Island NAS (Ault Field) altimeter setting and increase all MDA 80 feet and increase S-34 and Circling Cats C and D visibility ¼ mile. For inoperative MALS, increase S-34 Cats C and D visibility to 1⅜. For inoperative MALS when using Whidbey Island NAS (Ault Field) altimeter setting, increase S-34 Cat D visibility to 1½.

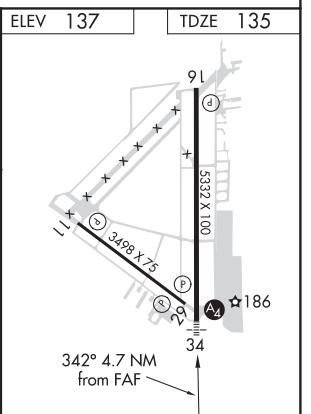
MALS

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LOM AW	APP CRS	Rwy Idg	5332
382	342°	TDZE	135
		Apt Elev	137

NDB RWY 34

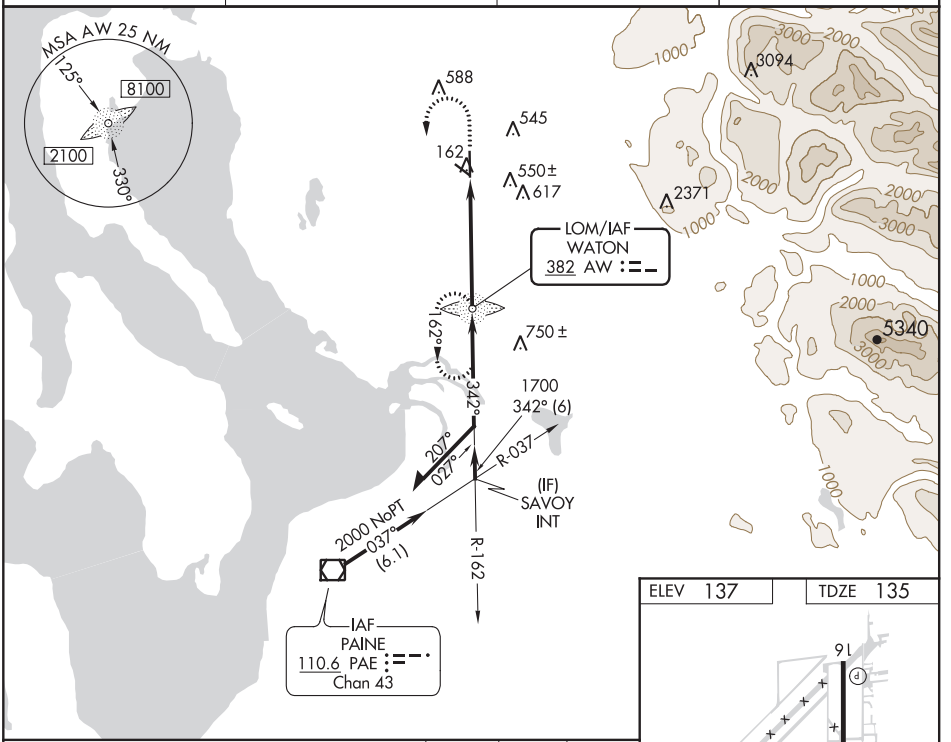
ARLINGTON MUNI (AWO)

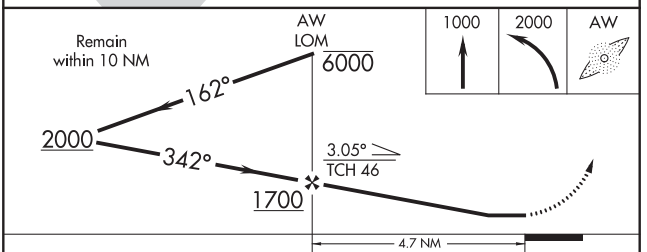
T A NA — When local altimeter setting not received, use Whidbey Island NAS (Ault Field) altimeter setting and increase all MDA 80 feet and increase S-34 Cats B, C, and D visibility ¼ mile and increase Circling Cat B and D visibility ¼ mile and Cat C visibility ½ mile. For inoperative MALS, increase S-34 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.

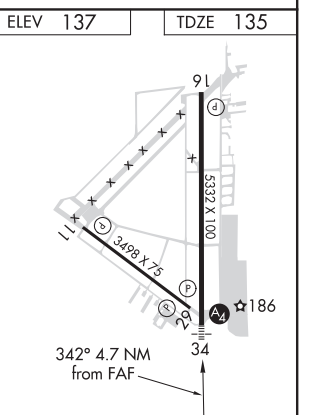
MALS

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







MIRL Rwy 16-34
REIL Rwys 11, 16, and 29

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, 30 JAN 2020 to 26 MAR 2020

18312

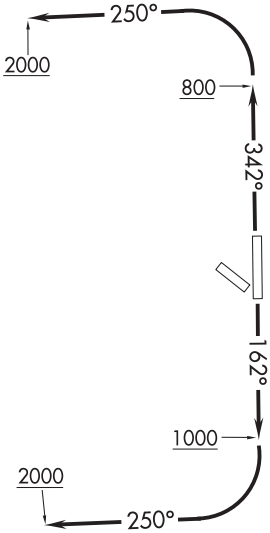
ARLINGTON TWO DEPARTURE

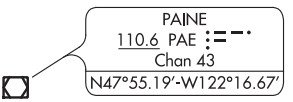
AL-795 (FAA)

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, 30 JAN 2020 to 26 MAR 2020

ILS RWY 26

ASTORIA RGNL (AST)

LOC I-AST	APP CRS	Rwy Idg	4780
109.5	261°	TDZE	14
		Apt Elev	14

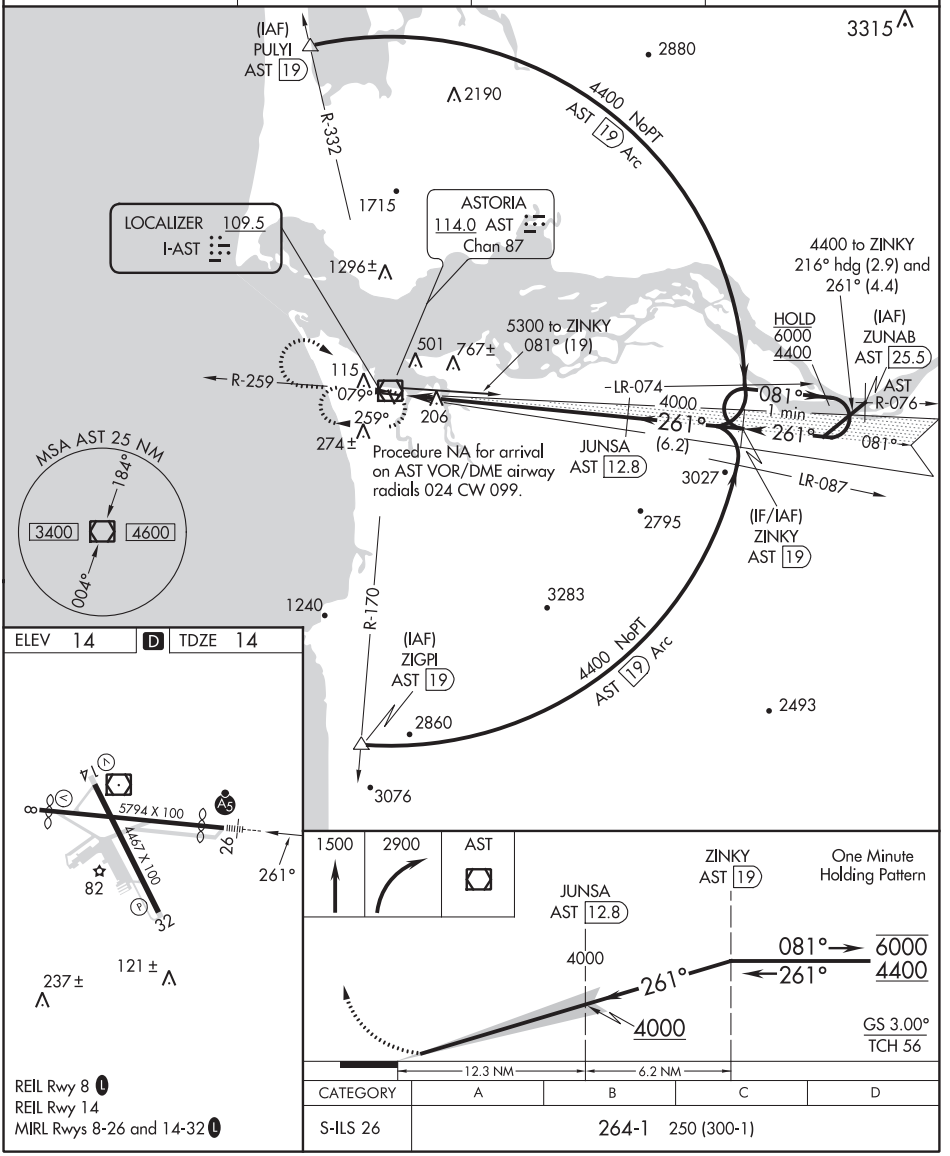
DME Required for Procedure Entry.

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	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-ILS 26	264-1 250 (300-1)			

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 8

ASTORIA RGNL (AST)

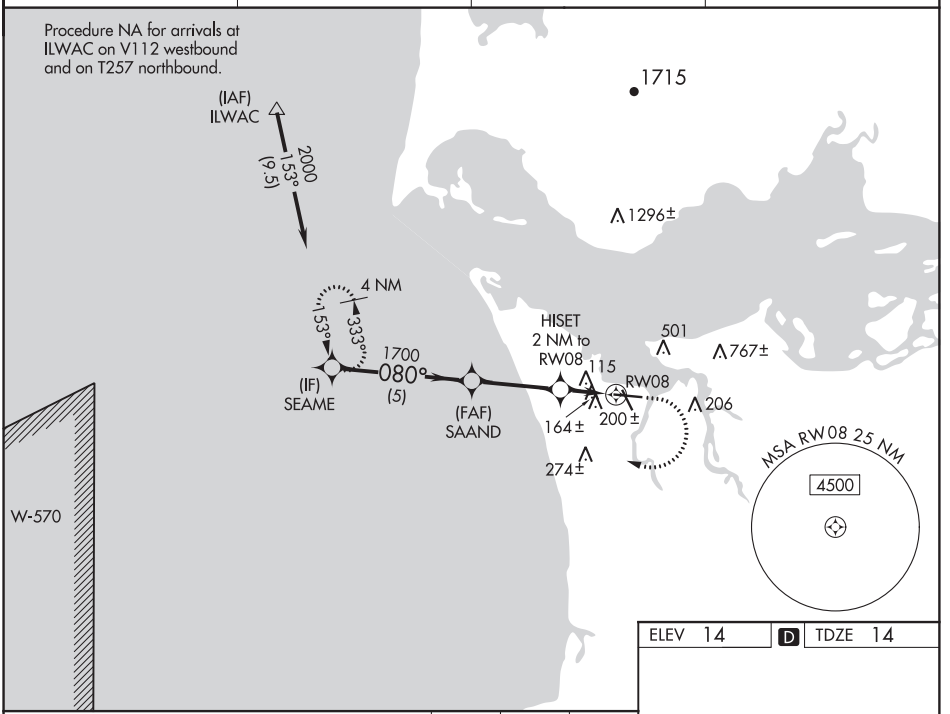
WAAS	APP CRS	Rwy Idg	4894
CH 40032	080°	TDZE	14
W08A		Apt Elev	14

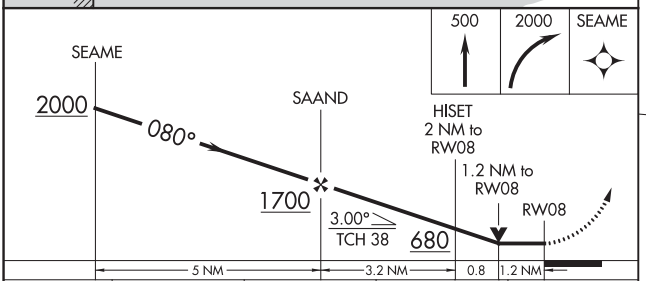
RNP APCH.

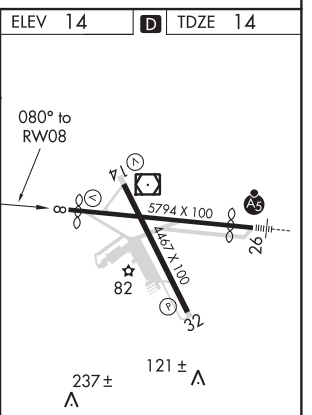
Rwy 8 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: (Do not exceed 225K until SEAME) Climb to 500, then climbing right turn to 2000 direct SEAME and hold.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	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)

REIL Rwy 8 L
REIL Rwy 14
MIRL Rwys 8-26 and 14-32 L

46°09'N-123°53'W

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	4780
CH 97711	261°	TDZE	14
W26A		Apt Elev	14

RNAV (GPS) RWY 26

ASTORIA RGNL (AST)

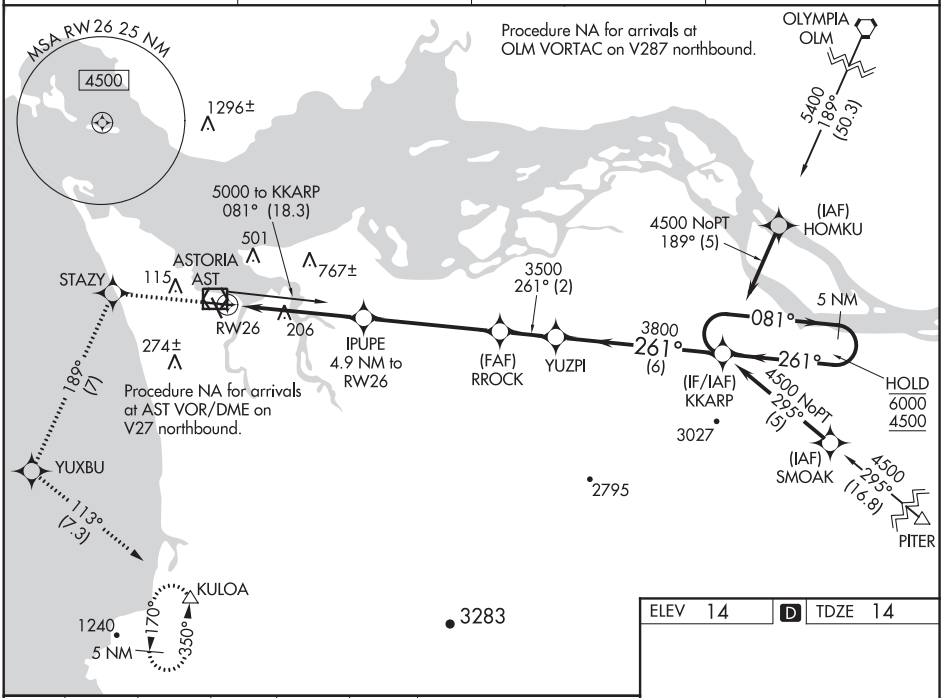
RNP APCH.

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.

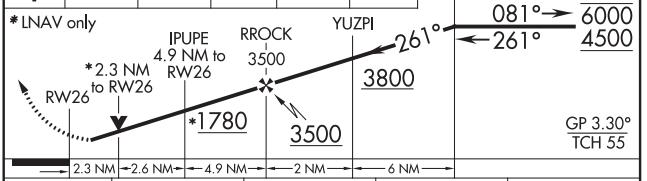
MALSR

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	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L

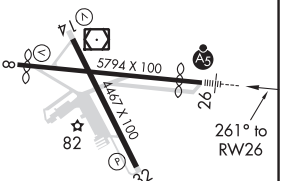


5000	STAZY	tr 189°	YUXBU	tr 113°	KULOA	KKARP	5 NM Holding Pattern



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)

ELEV 14 D TDZE 14



121 ±
237±

REIL Rwy 8 L
REIL Rwy 14
MIRL Rwys 8-26 and 14-32 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME AST	APP CRS	Rwy Idg	4894
114.0	070°	TDZE	14
Chan 87		Apt Elev	14

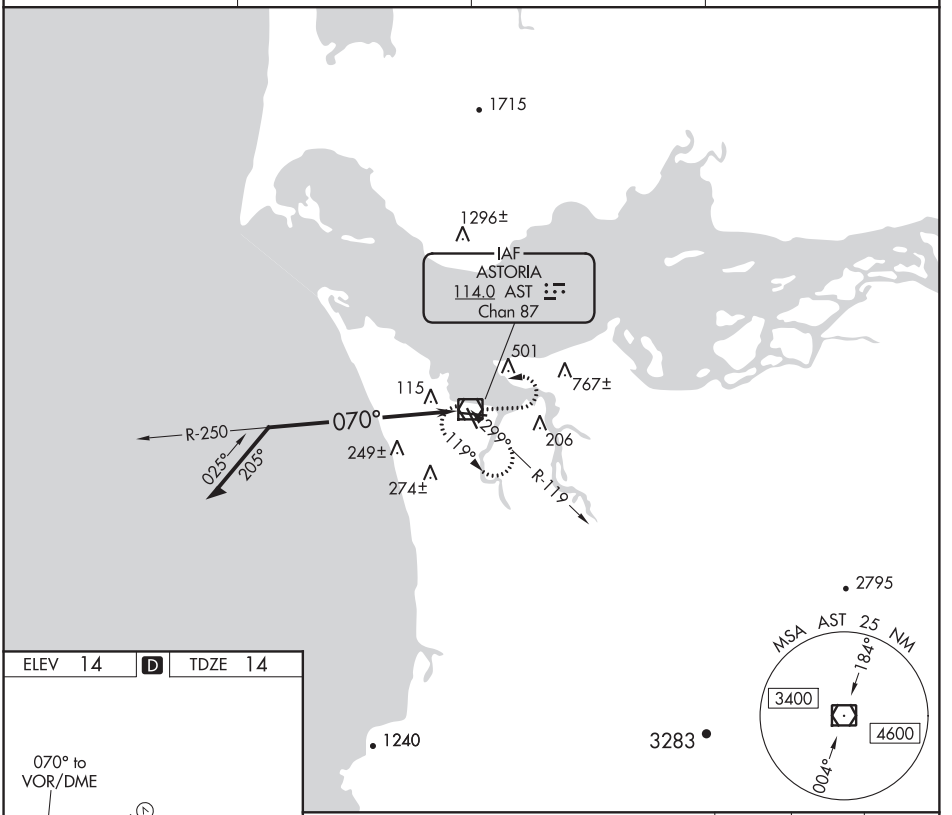
VOR RWY 8

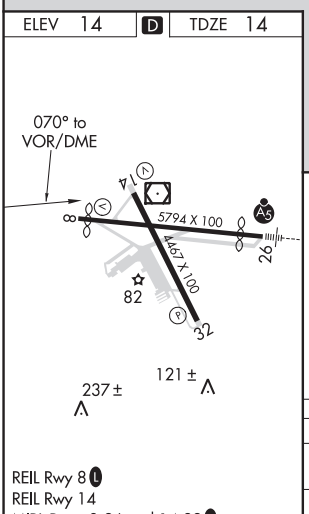
ASTORIA RGNL (AST)

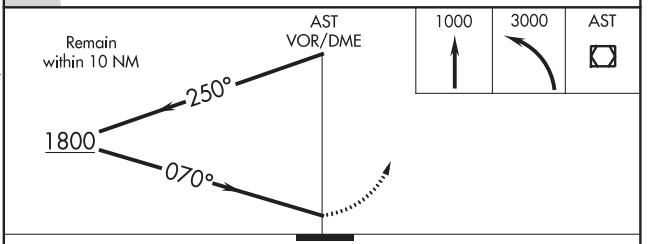
Rwy 8 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 in AST VOR/DME holding pattern.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	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)
CIRCLING	660-1 646 (700-1)	760-1¼ 746 (800-1¼)	800-2¼ 786 (800-2¼)	900-3 886 (900-3)

46°09′N-123°53′W

NW-1, 30 JAN 2020 to 26 MAR 2020

COPTER LOC RWY 26

ASTORIA RGNL (AST)

LOC I-AST	APP CRS	Rwy Idg	4780
109.5	261°	TDZE	14
		Elev	14

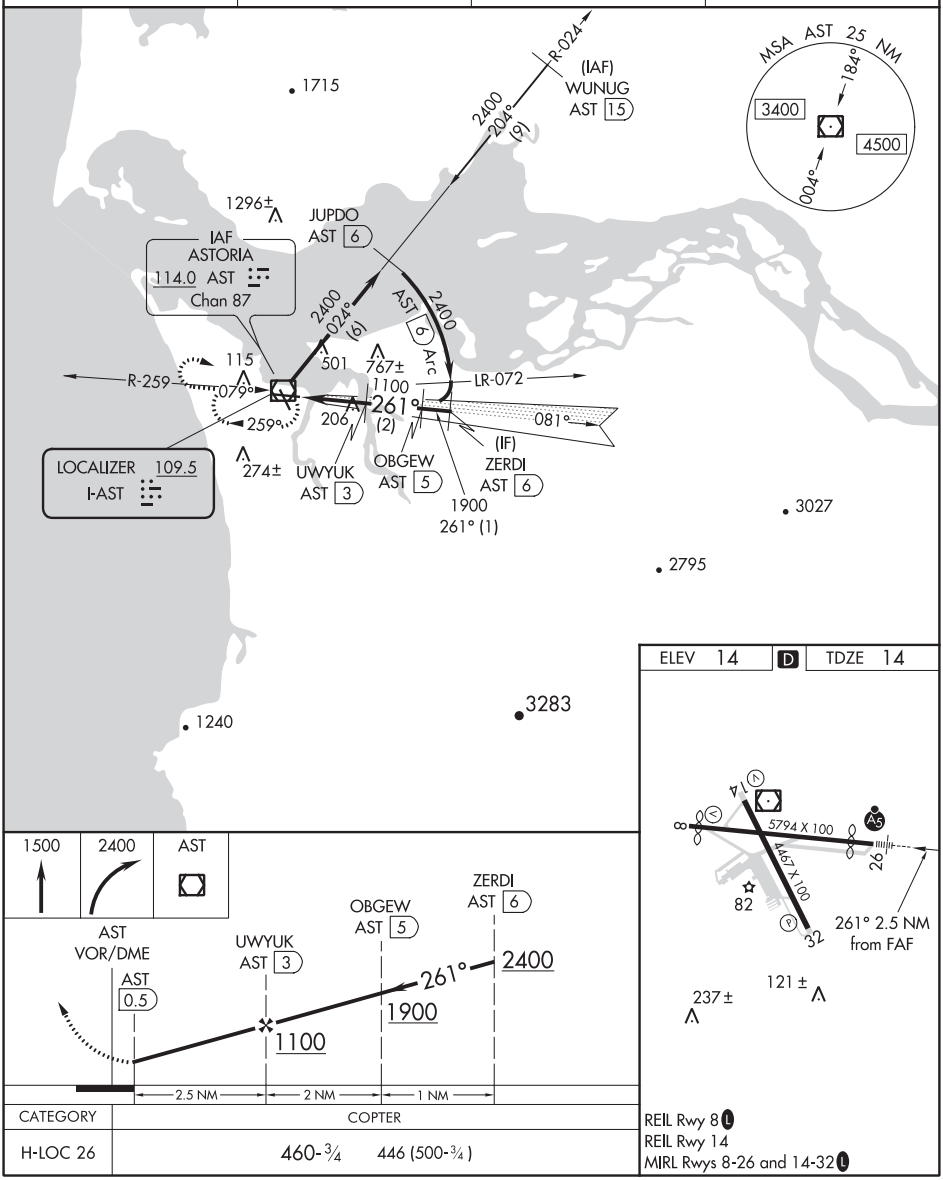
DME required.

T DME from AST VOR/DME. Simultaneous reception of I-AST and NA AST DME required. For inop ALS increase visibility to 1 SM.

MALSR

MISSED APPROACH: Climb to 1500 then climbing right turn to 2400 direct AST VOR/DME and hold.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ASTORIA, OREGON | AL-24 (FAA) | 18200

COPTER VOR RWY 8

ASTORIA RGNL (AST)

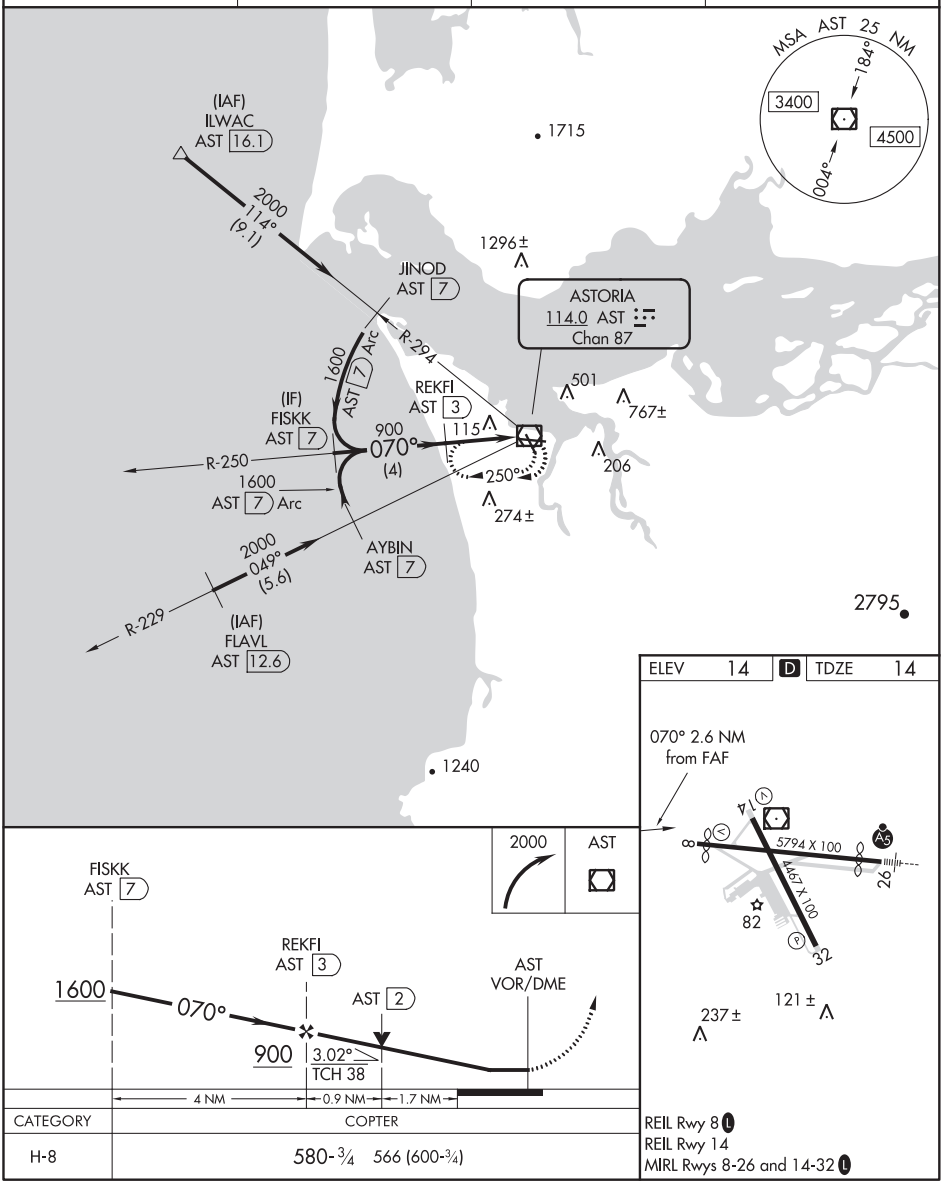
VOR/DME AST	APP CRS	Rwy Idg	4894
114.0	070°	TDZE	14
Chan 87		Apt Elev	14

DME Required.

NA

MISSED APPROACH: Climbing right turn to 2000 in AST VOR/DME holding pattern.

ASOS	SEATTLE CENTER	MC MINNVILLE RADIO	UNICOM
135.375	124.2 317.6	122.3	122.8 (CTAF) L



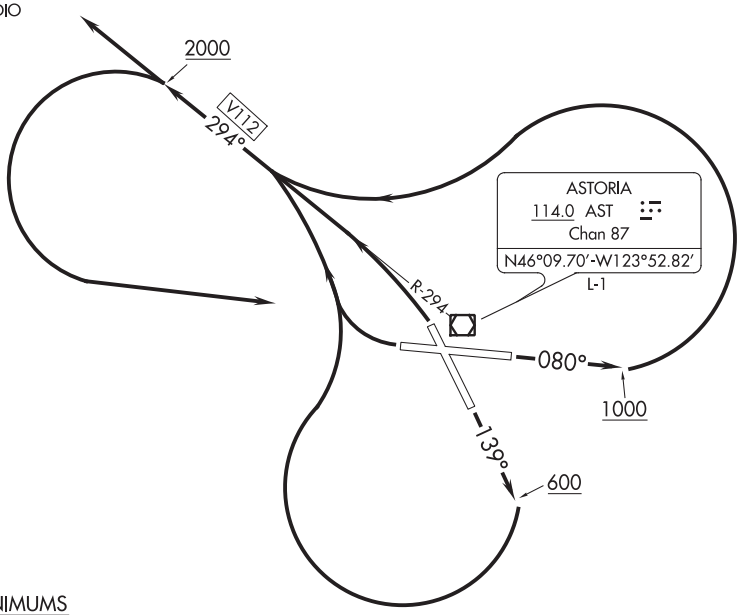
CATEGORY	COPTER
H-8	580-¾ 566 (600-¾)

REIL Rwy 8 L
REIL Rwy 14
MIRL Rwys 8-26 and 14-32 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ASTORIA THREE DEPARTURE (OBSTACLE)

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

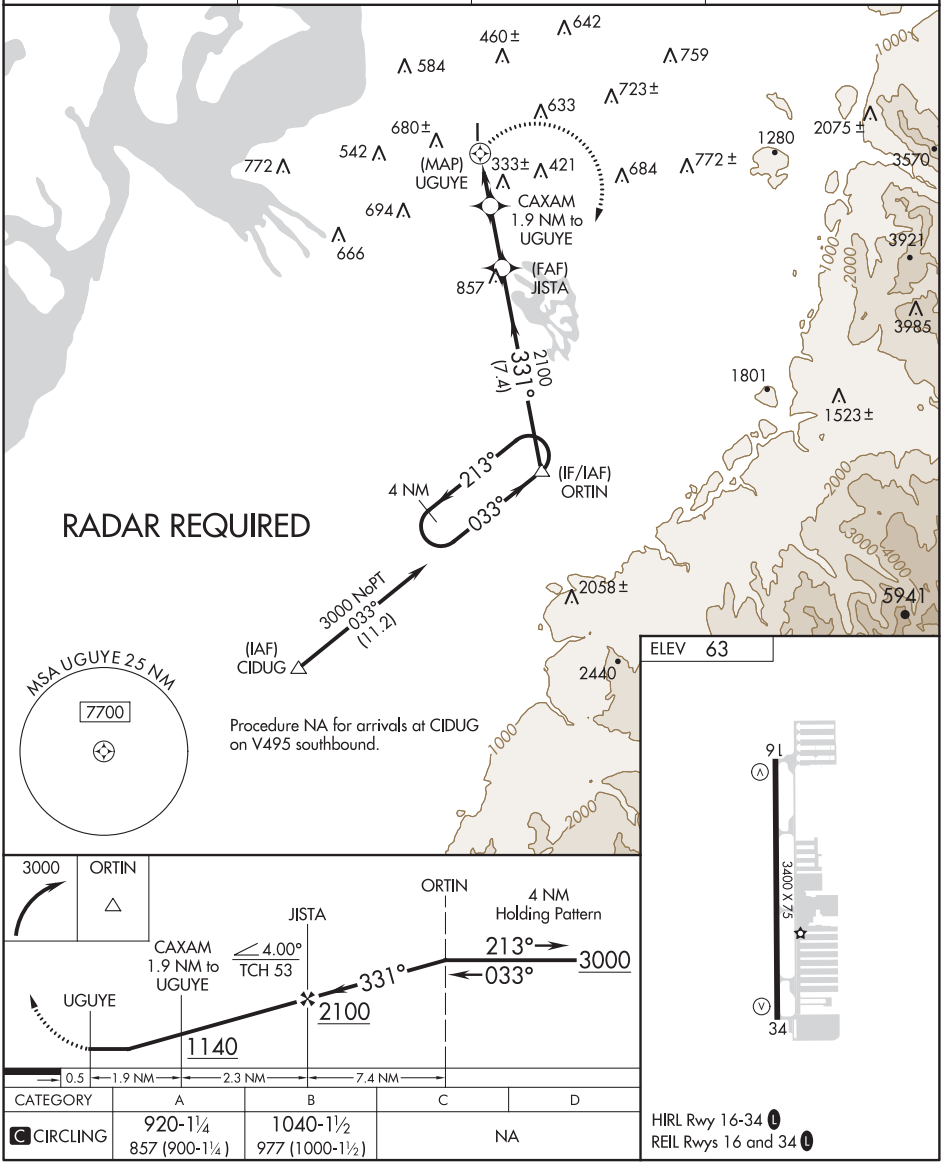
APP CRS	Rwy Idg	N/A
331°	TDZE	N/A
	Apt Elev	63

RNAV (GPS)-A
AUBURN MUNI (S50)

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

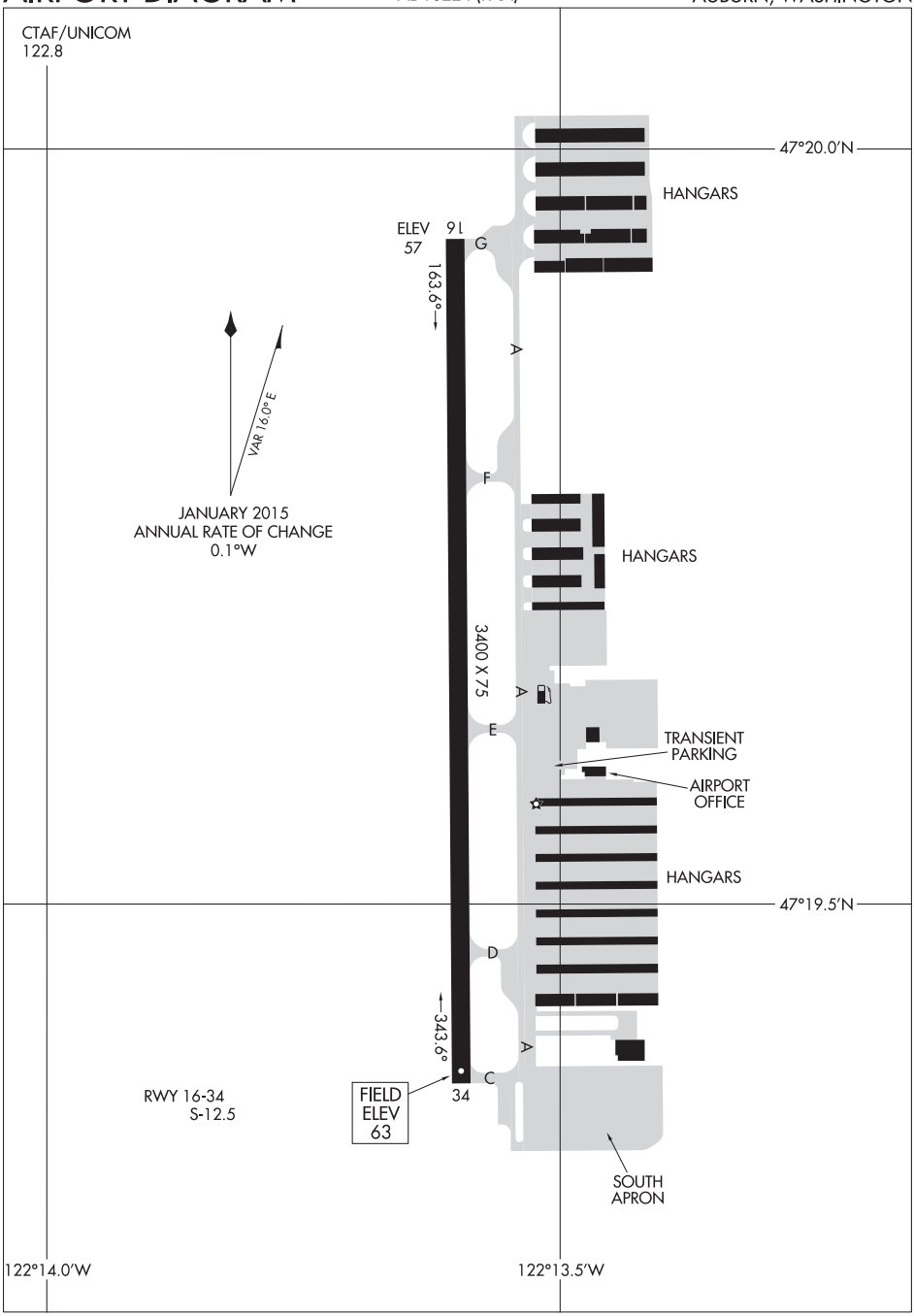


CATEGORY	A	B	C	D
C CIRCLING	920-1¼ 857 (900-1¼)	1040-1½ 977 (1000-1½)	NA	

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

19339
AIRPORT DIAGRAM
AL-10224 (FAA)
AUBURN MUNI (S50)
AUBURN, WASHINGTON



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

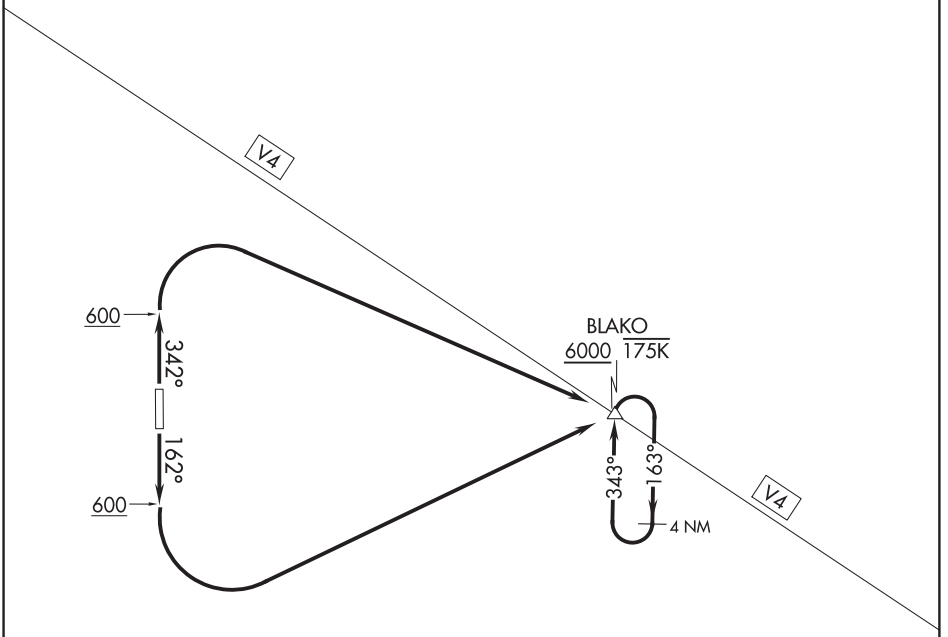
AIRPORT DIAGRAM
19339
AUBURN, WASHINGTON
AUBURN MUNI (S50)

BLAKO ONE DEPARTURE (OBSTACLE) (RNAV)

AL-10224 (FAA)

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

RNAV (GPS) RWY 17
AURORA STATE (UAO)

WAAS	APP CRS	Rwy Idg	5003
CH 70308	172°	TDZE	200
W17A		Apt Elev	200

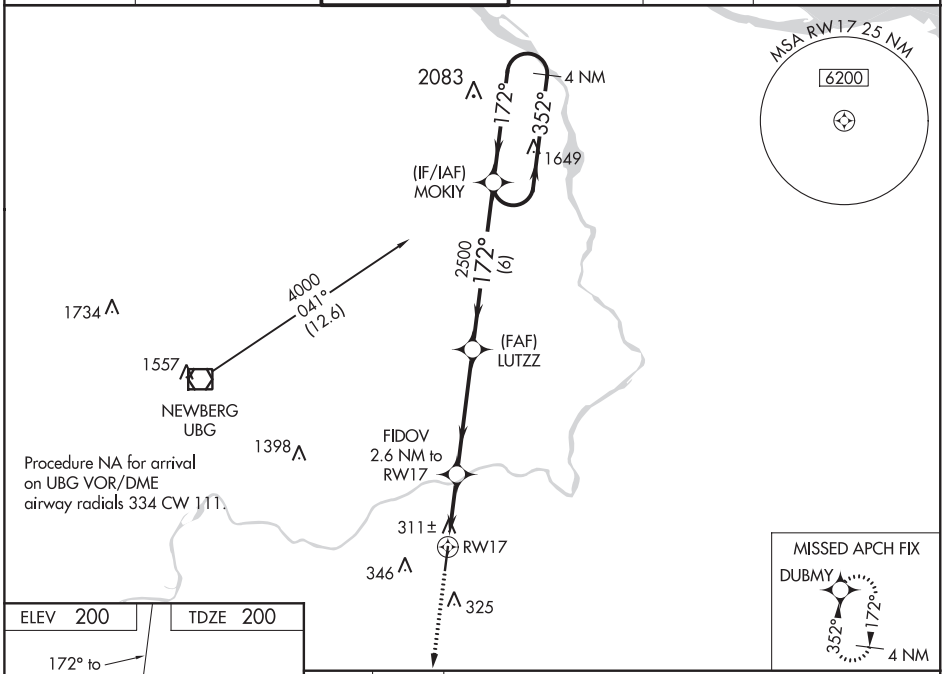
RNP APCH.

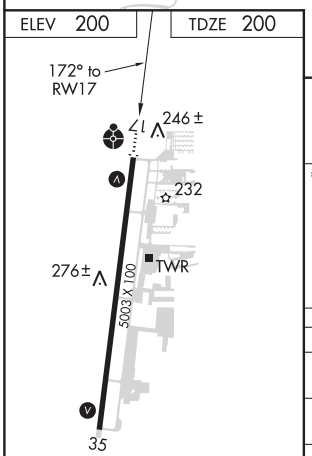
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C or above 54°C. Rwy 17 helicopter visibility reduction below ¾ SM NA. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV/VNAV and LNAV Cat C/D visibility to 1⅜ SM.

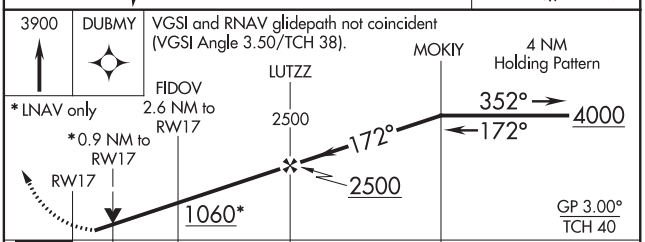
ODALS

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)







CATEGORY	A	B	C	D
LPV DA	511-⅞ 311 (400-⅞)			
LNAV/VNAV DA	642-1⅛ 442 (500-1⅛)			
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)

MIRL Rwy 17-35 L

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 35

AURORA STATE (UAO)

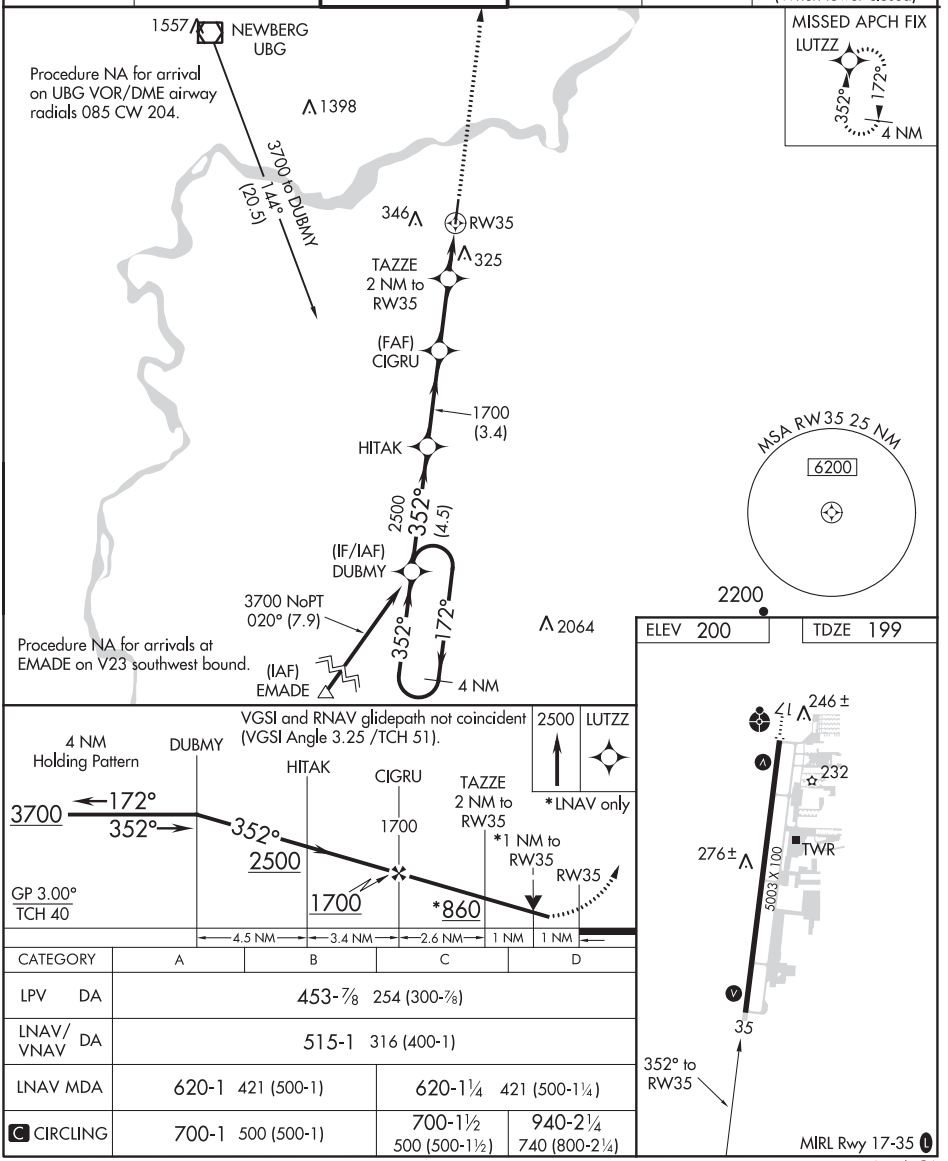
WAAS	APP CRS	Rwy Idg	5003
CH 77508	352°	TDZE	199
W35A		Apt Elev	200

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

AURORA, OREGON | AL-5722 (FAA) | 18284

LOC RWY 17
AURORA STATE (UAO)

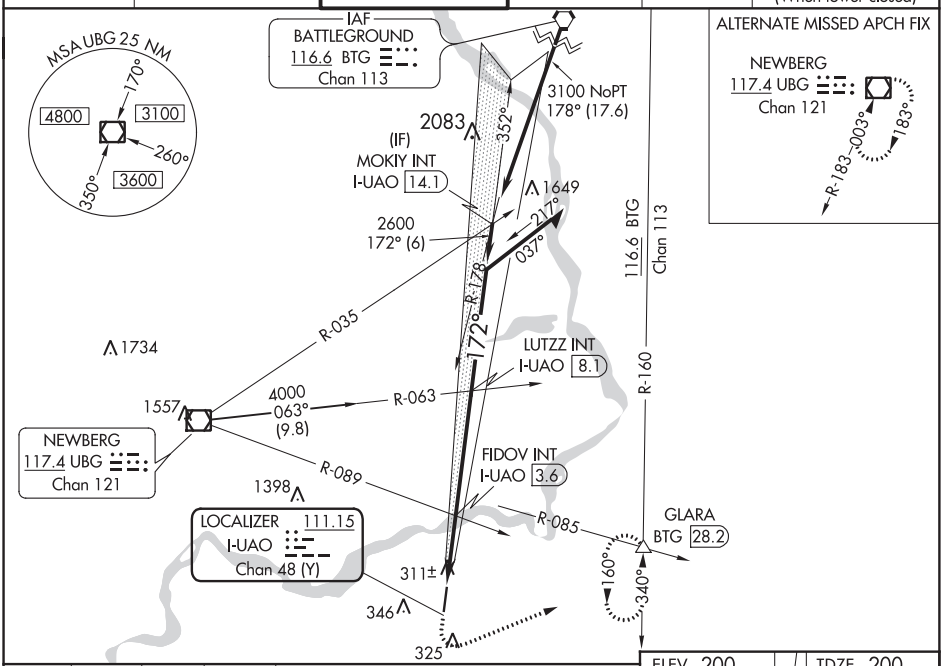
LOC/DME I-UAO	APP CRS	Rwy Idg	5003
111.15	172°	TDZE	200
Chan 48 (Y)		Apt Elev	200

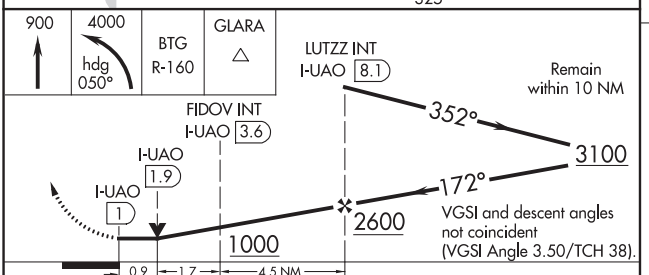
Rwy 17 helicopter visibility reduction below ¾ SM NA.
FIDOV fix minimums: Inop table does not apply to Cats C/D.
For inop ALS, increase S-17 Cats C/D visibility to 2½ SM.

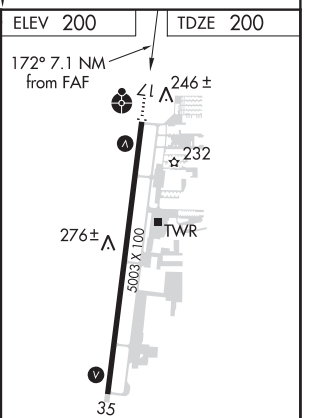
ODALS

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

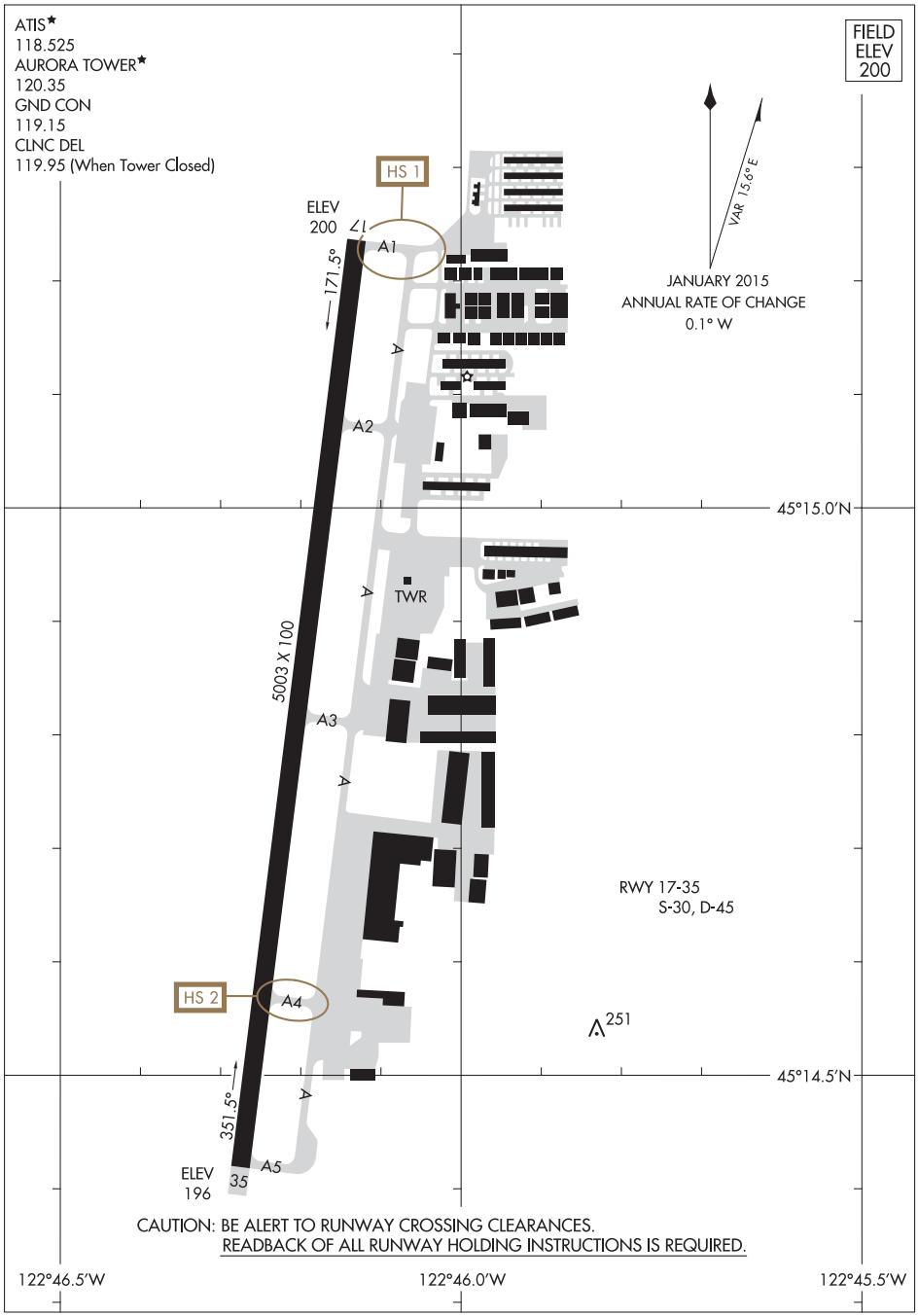
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AURORA, OREGON
Amdt 2A 11OCT18

45°15′N-122°46′W

AURORA STATE (UAO)
LOC RWY 17



NW-1, 30 JAN 2020 to 26 MAR 2020

(GLARA2.GLARA) 17285

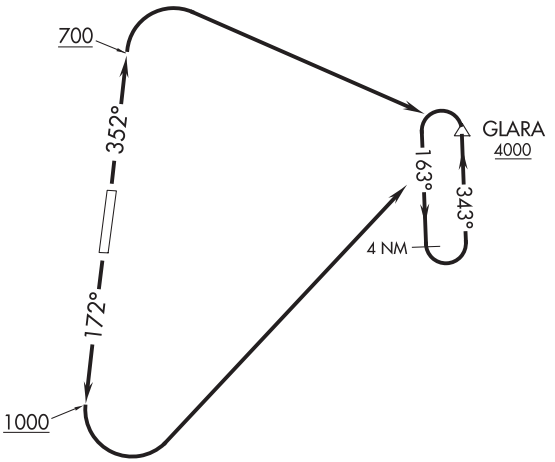
GLARA TWO DEPARTURE (RNAV)

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 . . . .

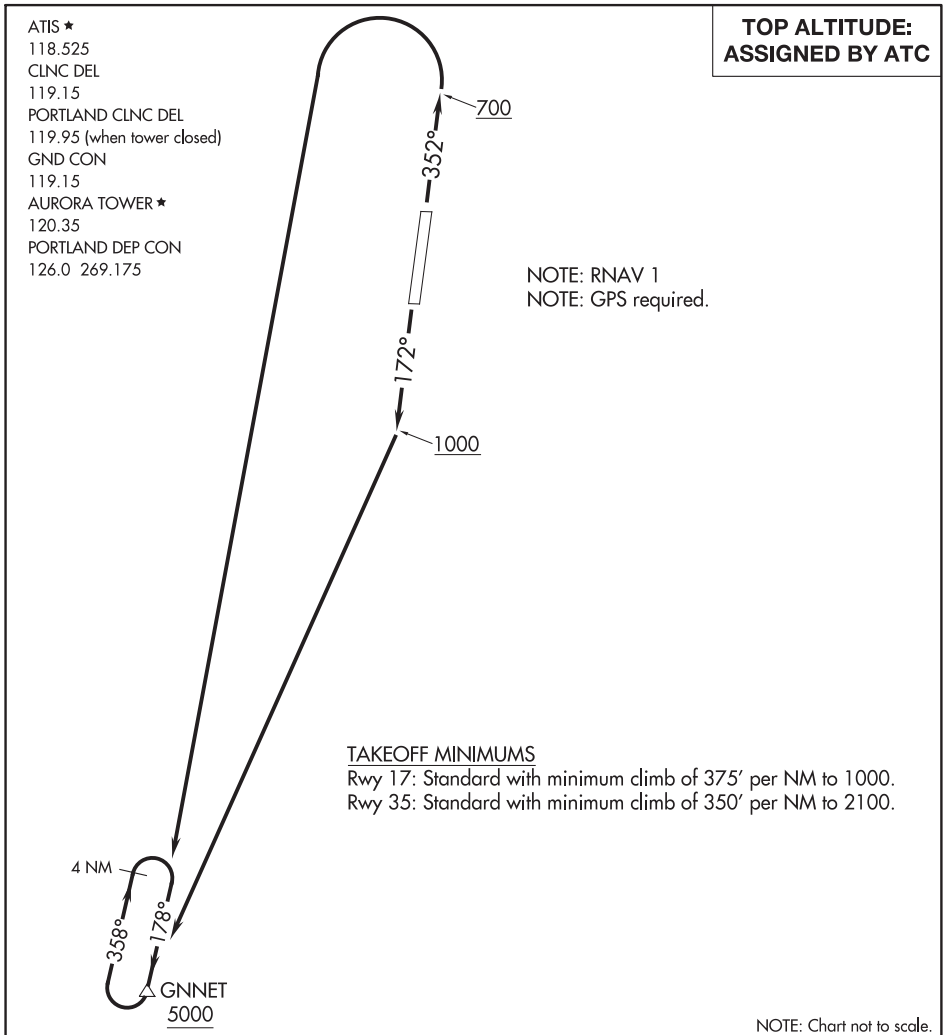
TAKEOFF RUNWAY 35: Climb heading 352° to 700, then climbing right turn direct GLARA. Thence . . . .

. . . . continue climb in GLARA holding pattern to cross GLARA at or above 4000 before proceeding on course.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GNNET TWO DEPARTURE (RNAV)

AL-5722 (FAA)



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(UBG2.UBG) 17285

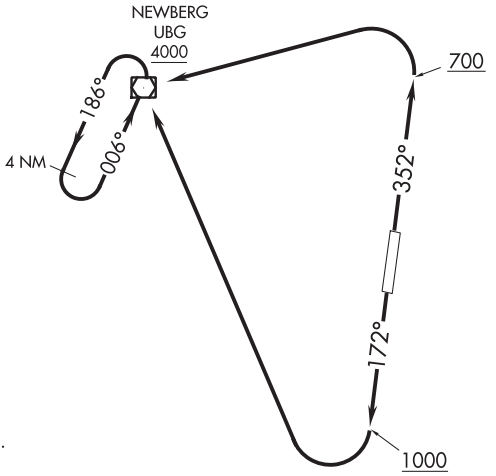
NEWBERG TWO DEPARTURE (RNAV)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 13

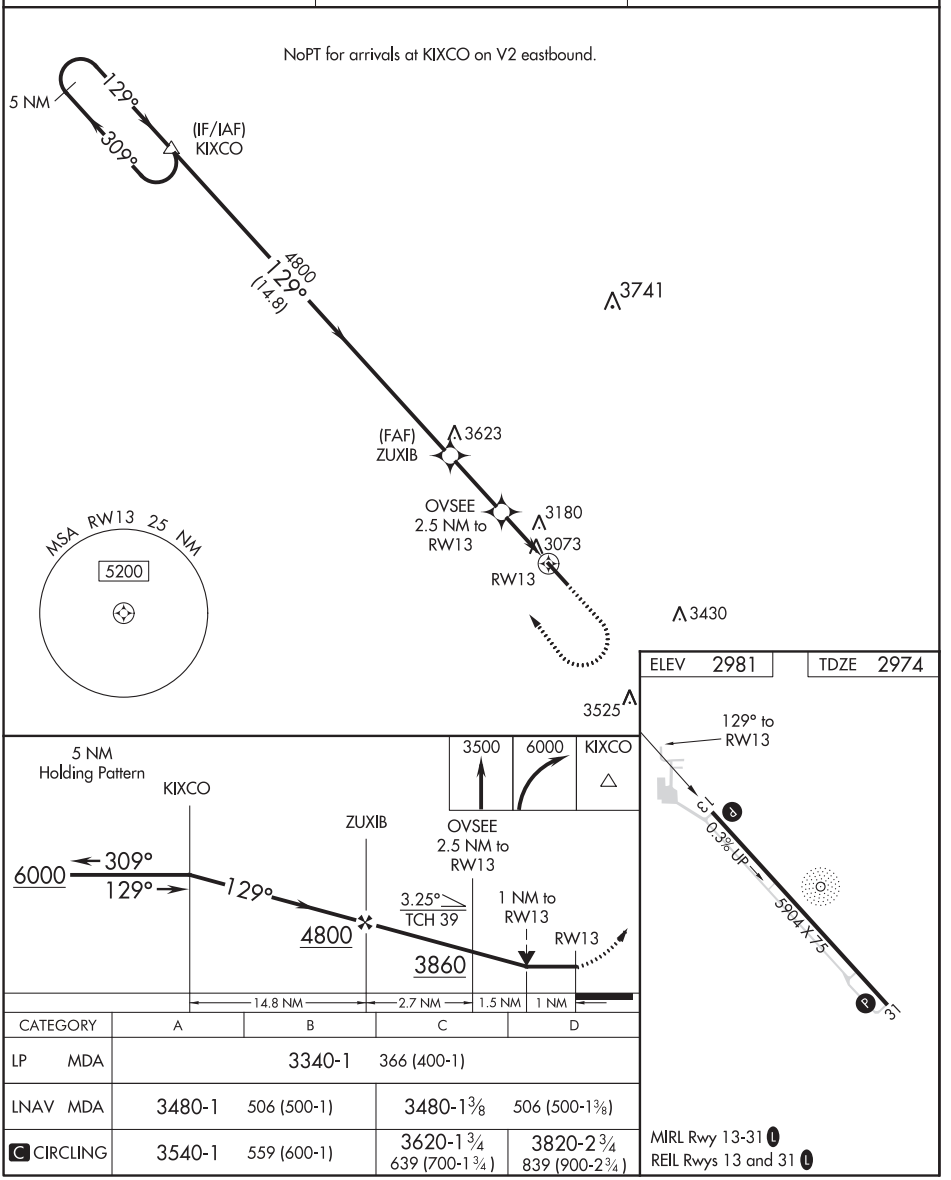
BAKER MUNI (BHK)

WAAS	APP CRS	Rwy Idg	5904
CH 86339	129°	TDZE	2974
W13A		Apt Elev	2981

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	132.425 317.45	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

NW-1, 30 JAN 2020 to 26 MAR 2020

BAKER, MONTANA

AL-6943 (FAA)

19171

RNAV (GPS) RWY 31

BAKER MUNI (BHK)

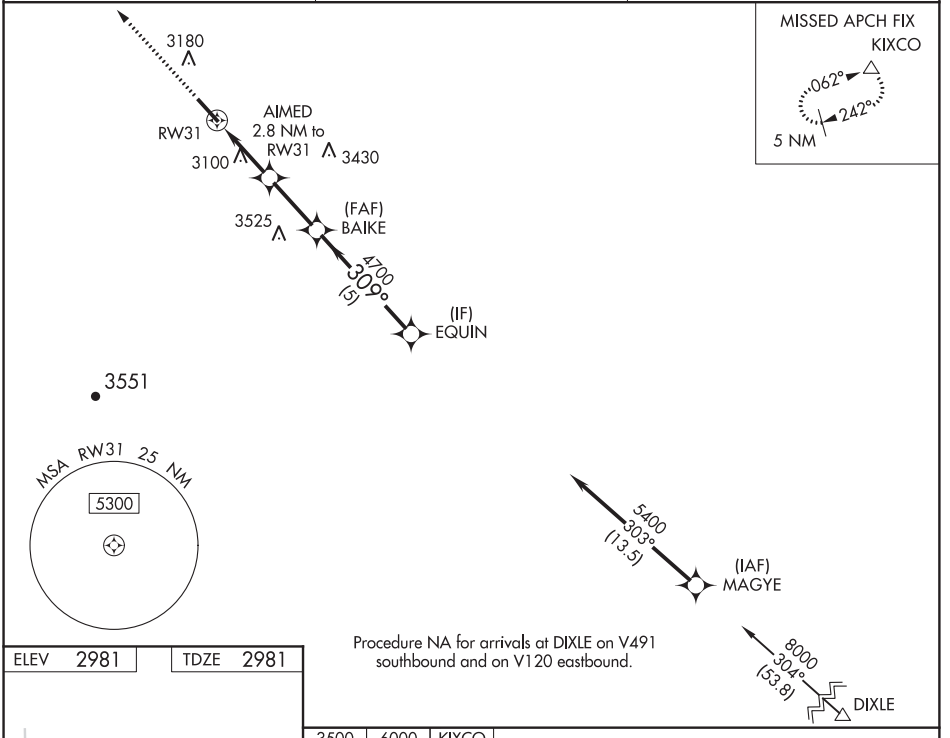
WAAS	APP CRS	Rwy Idg	5904
CH 50138	309°	TDZE	2981
W31A		Apt Elev	2981

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.

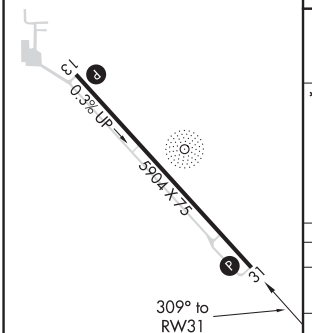
MISSED APPROACH: Climb to 3500 then climbing right turn 6000 direct KIXCO and hold.

ASOS	SALT LAKE CENTER	CTAF
135.475	132.425 317.45	122.9 (L)

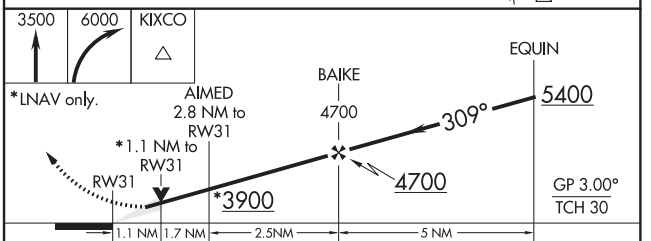


Procedure NA for arrivals at DIXLE on V491 southbound and on V120 eastbound.

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 13

BAKER CITY MUNI (BKE)

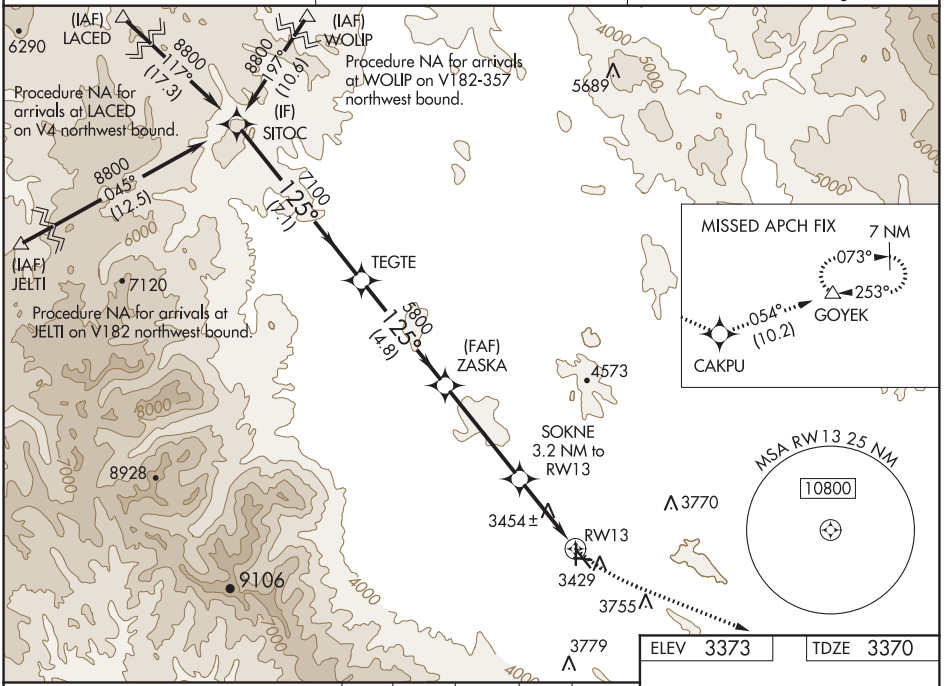
WAAS	APP CRS	Rwy Idg	5085
CH 90133	125°	TDZE	3370
W13A		Apt Elev	3373

T
A

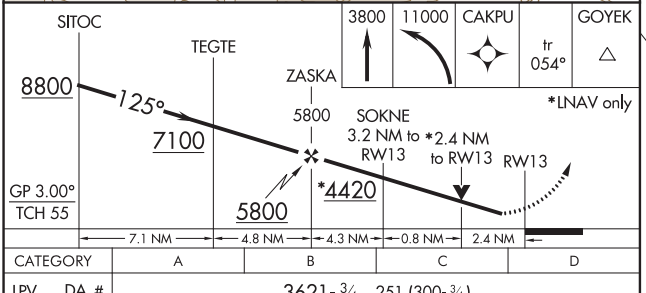
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 51°C (124°F). Rwy 13 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. Circling Rwy 8, 17, 26, and 35 NA at night.

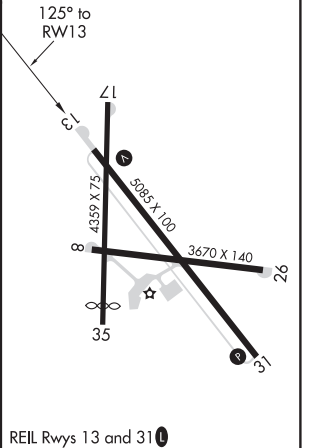
MISSED APPROACH: Climb to 3800 then climbing left turn to 11000 direct CAKPU and on track 054° to GOYEK and hold, continue climb-in-hold to 11000. # Missed approach requires minimum climb of 266 feet per NM to 4580.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME BKE	APP CRS	Rwy Idg 5085
115.3	118°	TDZE 3370
Chan 100		Apt Elev 3373

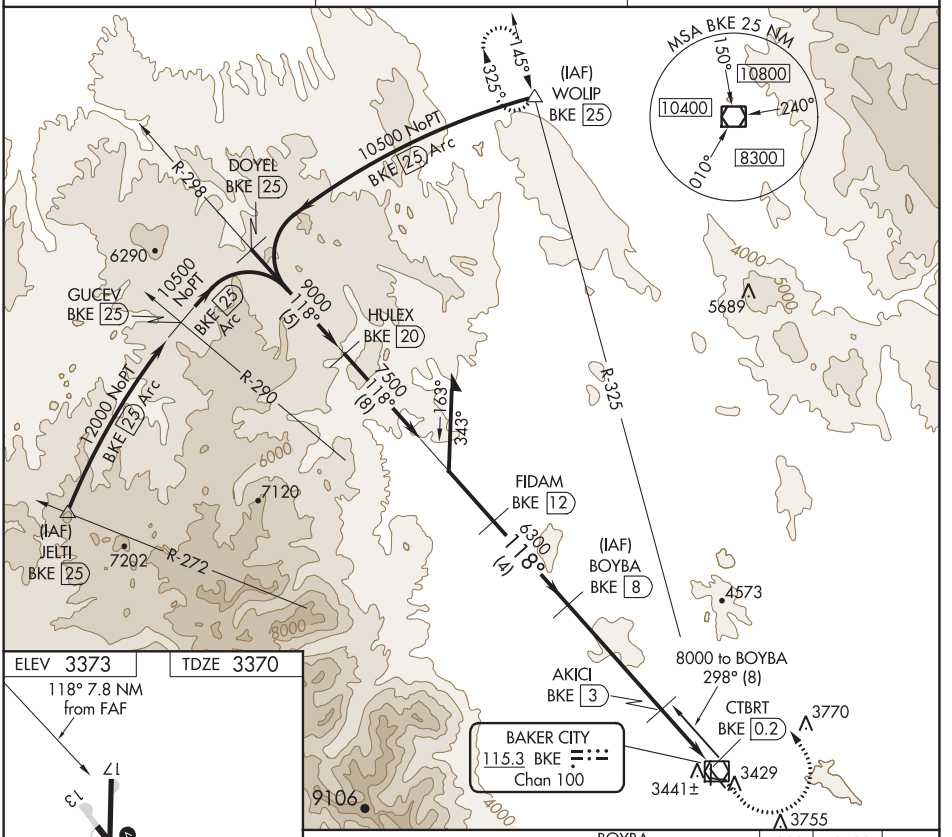
VOR/DME RWY 13

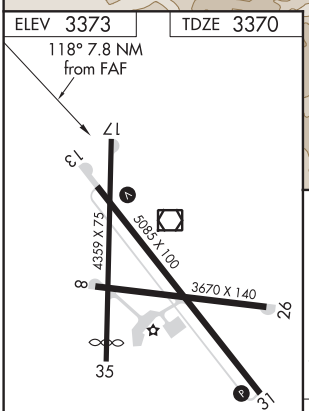
BAKER CITY MUNI (BKE)

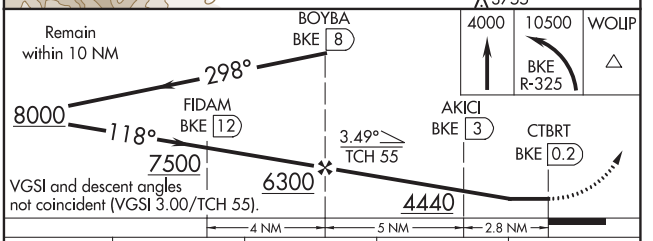
Circling to Rwy 8/17/26/35 NA at night.
Helicopter visibility reduction below 1 SM NA.

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







CATEGORY	A	B	C	D
S-13	4000-1	630 (700-1)	4000-1¾ 630 (700-1¾)	4000-2 630 (700-2)
C CIRCLING	4000-1	627 (700-1)	4560-3 1187 (1200-3)	4720-3 1347 (1400-3)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

44°50'N-117°49'W

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

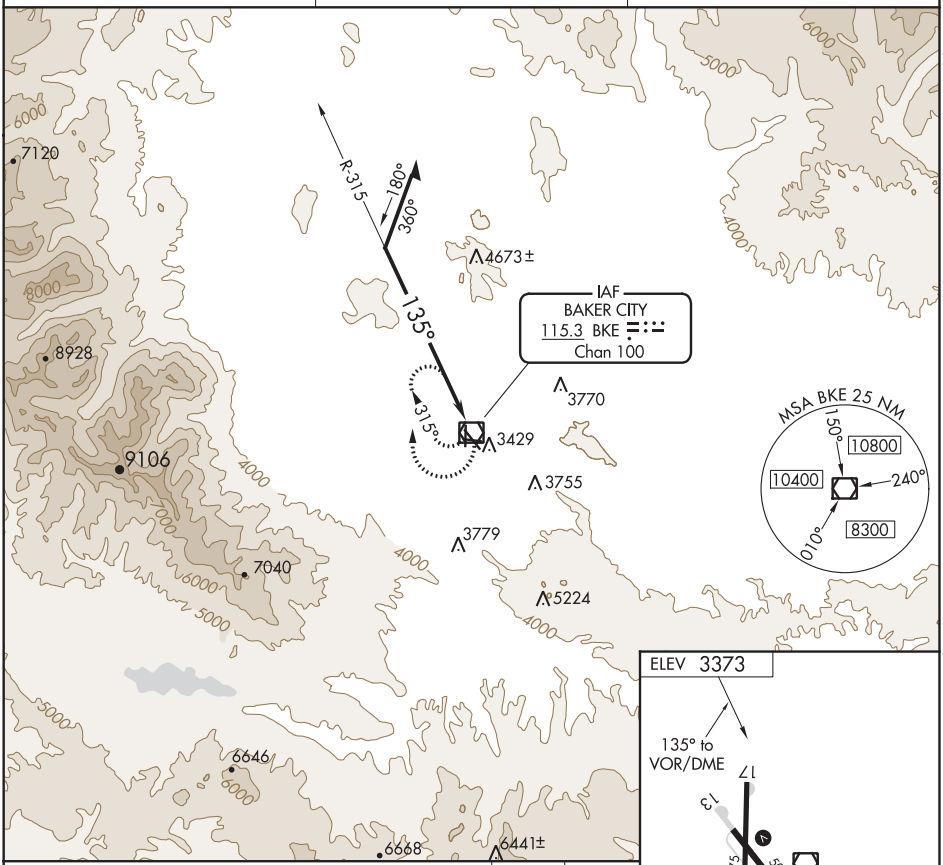
VOR/DME BKE	APP CRS	Rwy Idg	N/A
115.3	135°	TDZE	N/A
Chan 100		Apt Elev	3373

VOR-A
BAKER CITY MUNI (BKE)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BELLINGHAM, WASHINGTON AL-45 (FAA) 19227

ILS or LOC RWY 16

BELLINGHAM INTL (BLI)

LOC/DME I-BLI	APP CRS	Rwy Idg	6700
108.5	164°	TDZE	163
Chan 22		Apt Elev	171

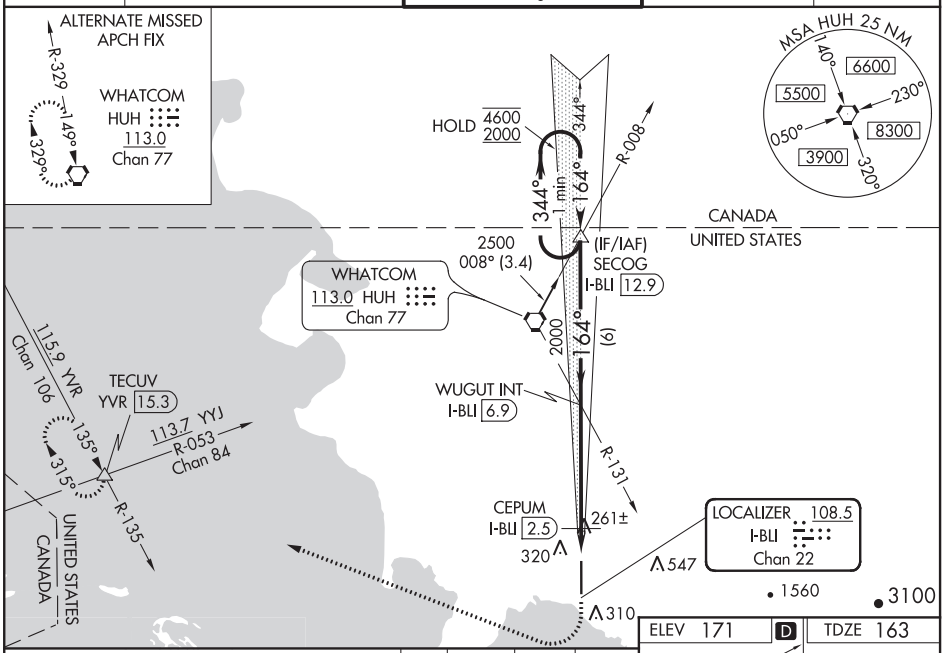
DME or RADAR required.

T A 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

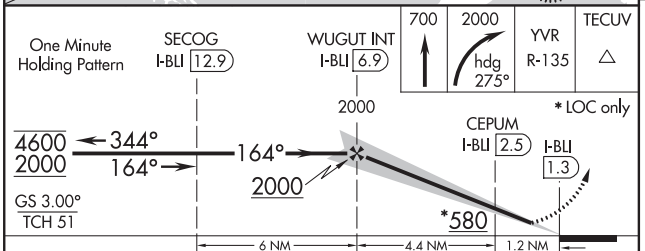
MISSED APPROACH: Climb to 700 then climbing right turn to 2000 on heading 275° and on YVR VOR/DME R-135 to TECUV INT/YVR 15.3 DME and hold.

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



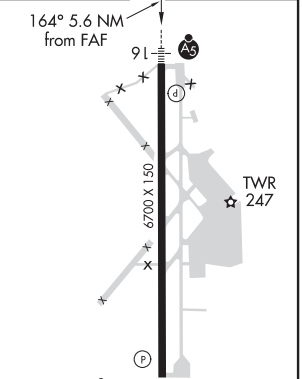
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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)

ELEV 171 D TDZE 163



FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

BELLINGHAM, WASHINGTON
Amdt 8A 15AUG19

48°48′N-122°32′W

BELLINGHAM INTL (BLI)

ILS or LOC RWY 16

ILS RWY 16 (SA CAT I)

BELLINGHAM INTL (BLI)

LOC/DME I-BLI	APP CRS	Rwy Idg	6700
108.5	164°	TDZE	163
Chan 22		Apt Elev	171

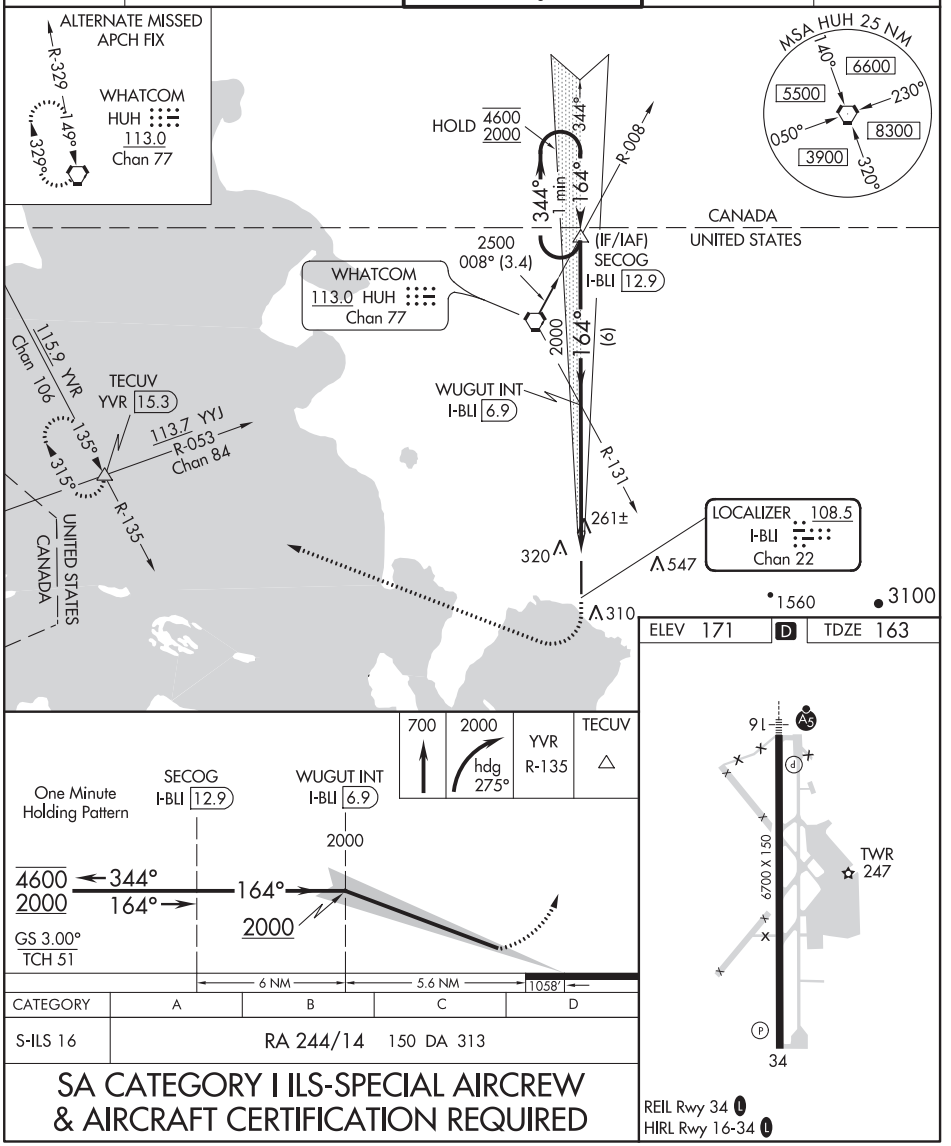
DME or RADAR required.

T A 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



CATEGORY	A	B	C	D
S-ILS 16	RA 244/14 150 DA 313			

SA CATEGORY I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BELLINGHAM, WASHINGTON | AL-45 (FAA) | 19227

RNAV (RNP) Z RWY 16

BELLINGHAM INTL (BLI)

APP CRS	Rwy Idg	6700
164°	TDZE	163
	Apt Elev	171

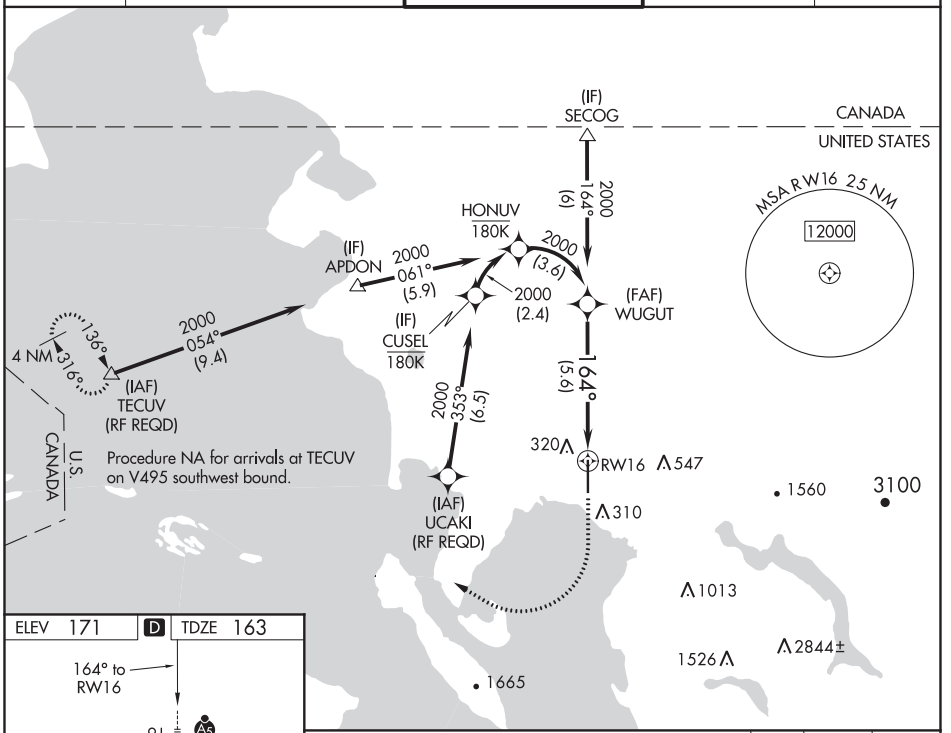
RNP AR APCH

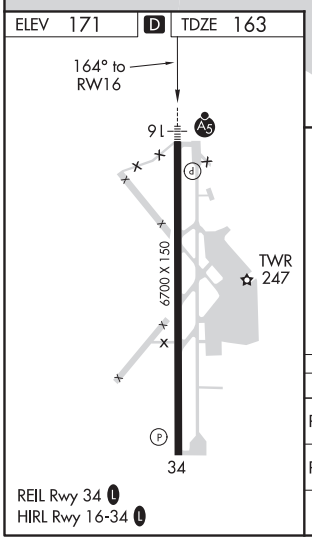
For uncompensated Baro-VNAV systems, procedure NA below -10°C or above 54°C. For inop ALS, increase RNP 0.27 all Cats visibility to RVR 4500, increase RNP 0.30 all Cats visibility to RVR 6000.

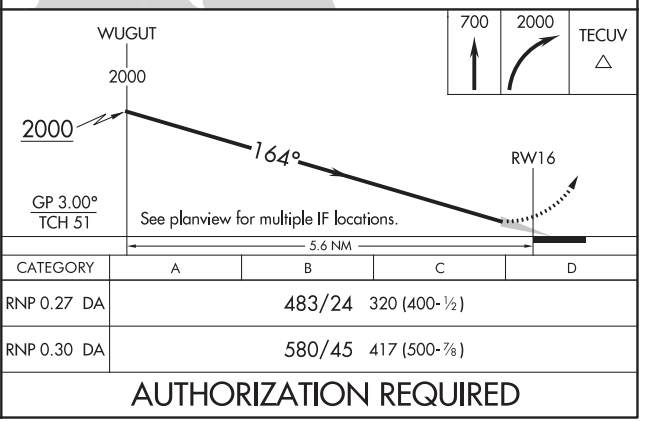
MALSR

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

BELLINGHAM, WASHINGTON
Amdt 1A 15AUG19

48°48'N-122°32'W

BELLINGHAM INTL (BLI)

RNAV (RNP) Z RWY 16

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 34

BELLINGHAM INTL (BLI)

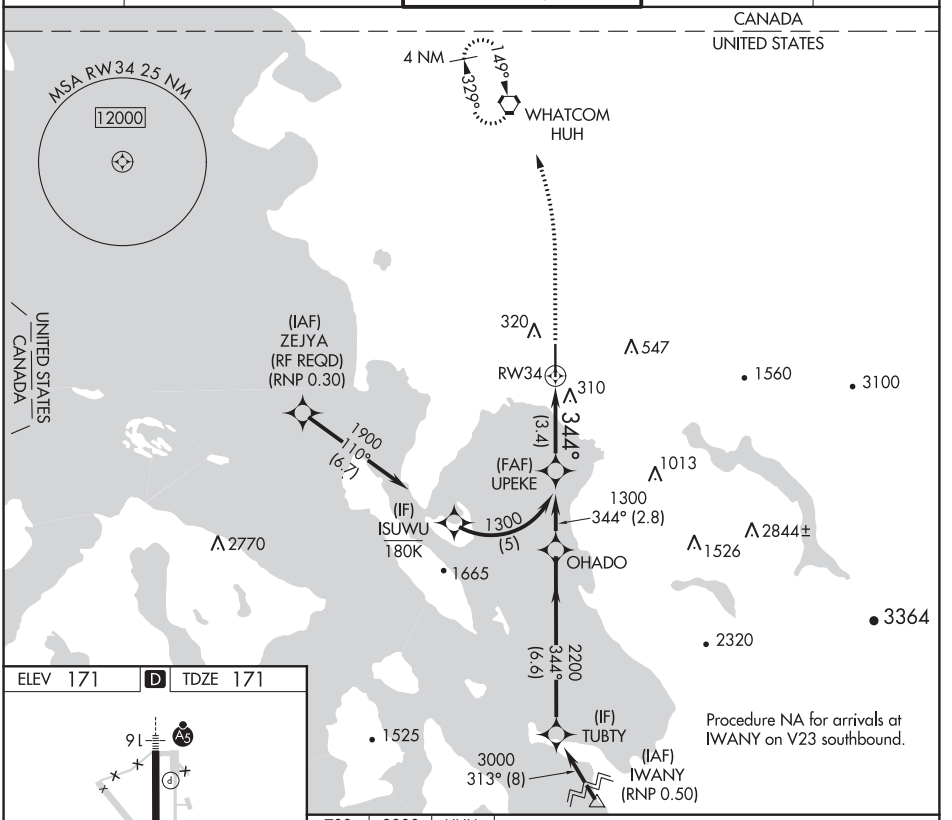
APP CRS	Rwy Idg	6700
344°	TDZE	171
	Apt Elev	171

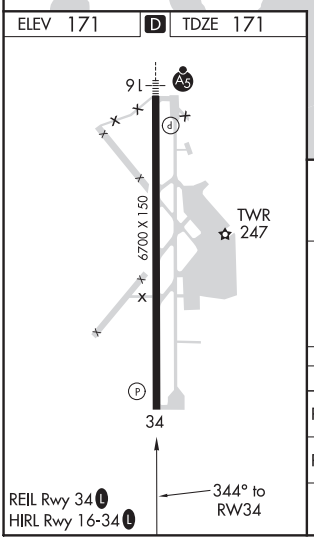
RNP AR APCH.

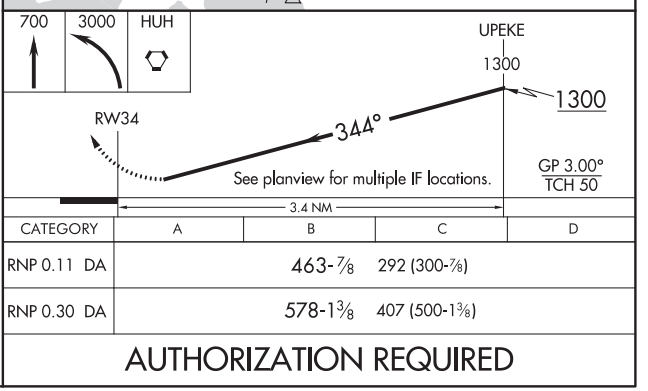
For uncompensated Baro-VNAV systems, procedure NA below -10°C or above 54°C.

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







CATEGORY	A	B	C	D
RNP 0.11 DA	463-7/8	292 (300-7/8)		
RNP 0.30 DA	578-1 3/8	407 (500-1 3/8)		

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BELLINGHAM, WASHINGTON | AL-45 (FAA) | 19227

RNAV (GPS) Y RWY 16

BELLINGHAM INTL (BLI)

WAAS CH 45999 W16A	APP CRS 164°	Rwy Idg 6700 TDZE 163 Apt Elev 171

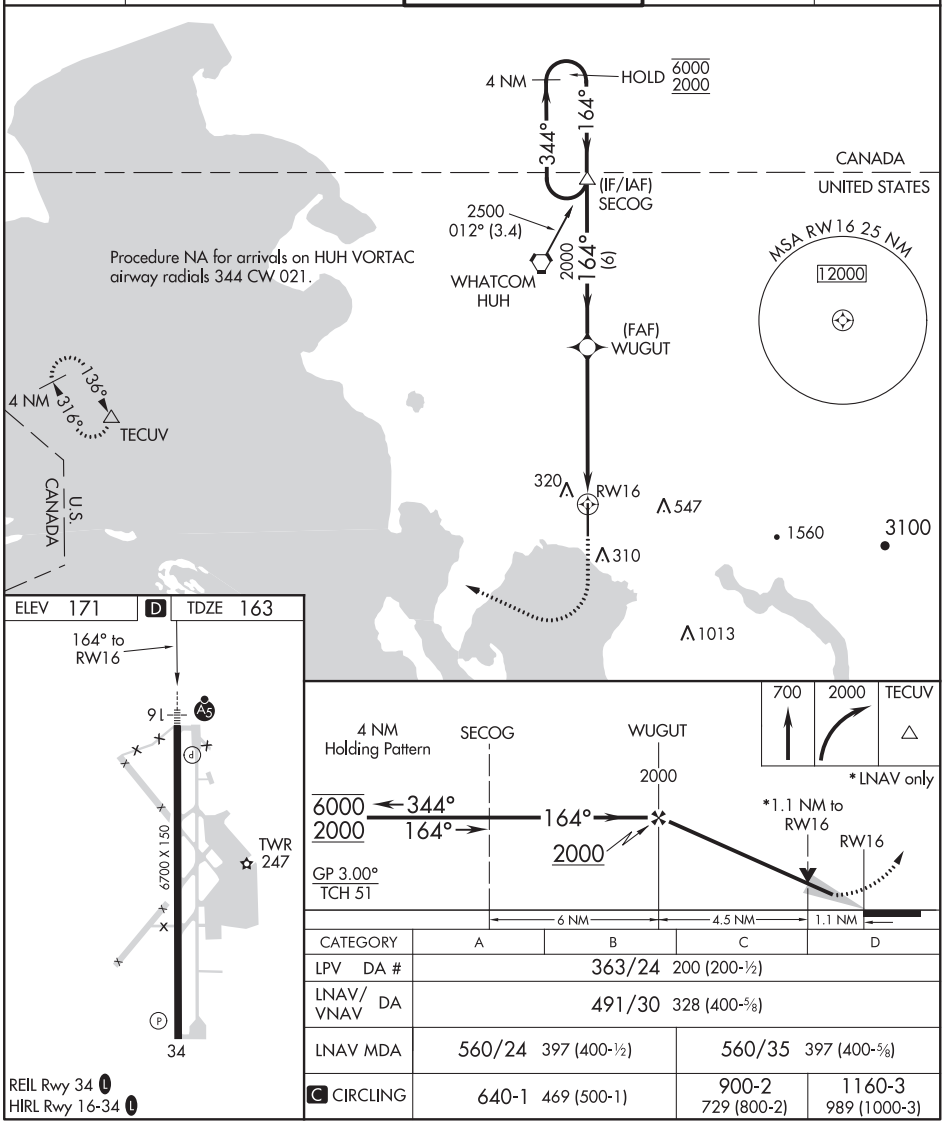
RNP APCH.

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)

BELLINGHAM, WASHINGTON
Amdt 3C 15AUG19

48°48'N-122°32'W

BELLINGHAM INTL (BLI)

RNAV (GPS) Y RWY 16

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 34

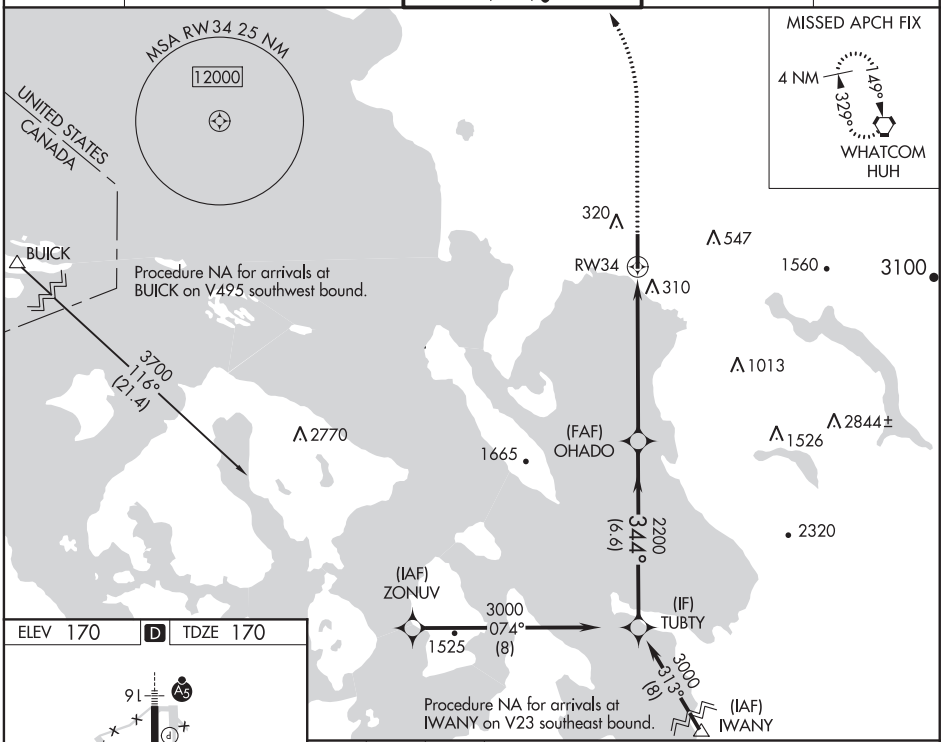
BELLINGHAM INTL (BLI)

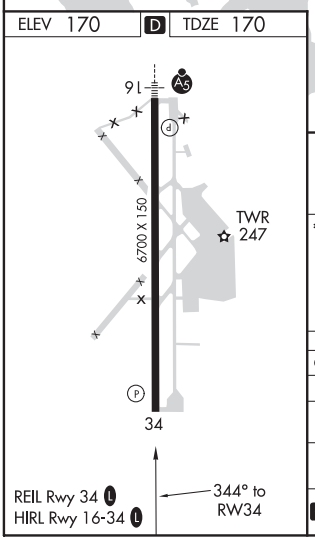
WAAS CH 86223 W34A	APP CRS 344°	Rwy Idg 6700 TDZE 170 Apt Elev 170

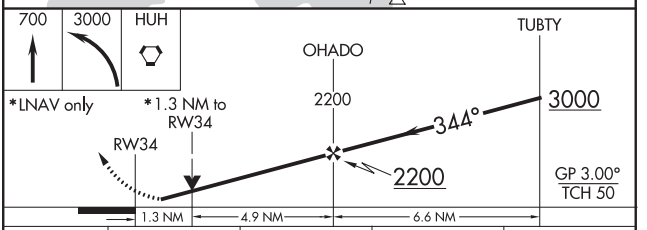
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C (14°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Friday Harbor altimeter setting. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all DAs 67 feet and all MDA 80 feet; 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







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)

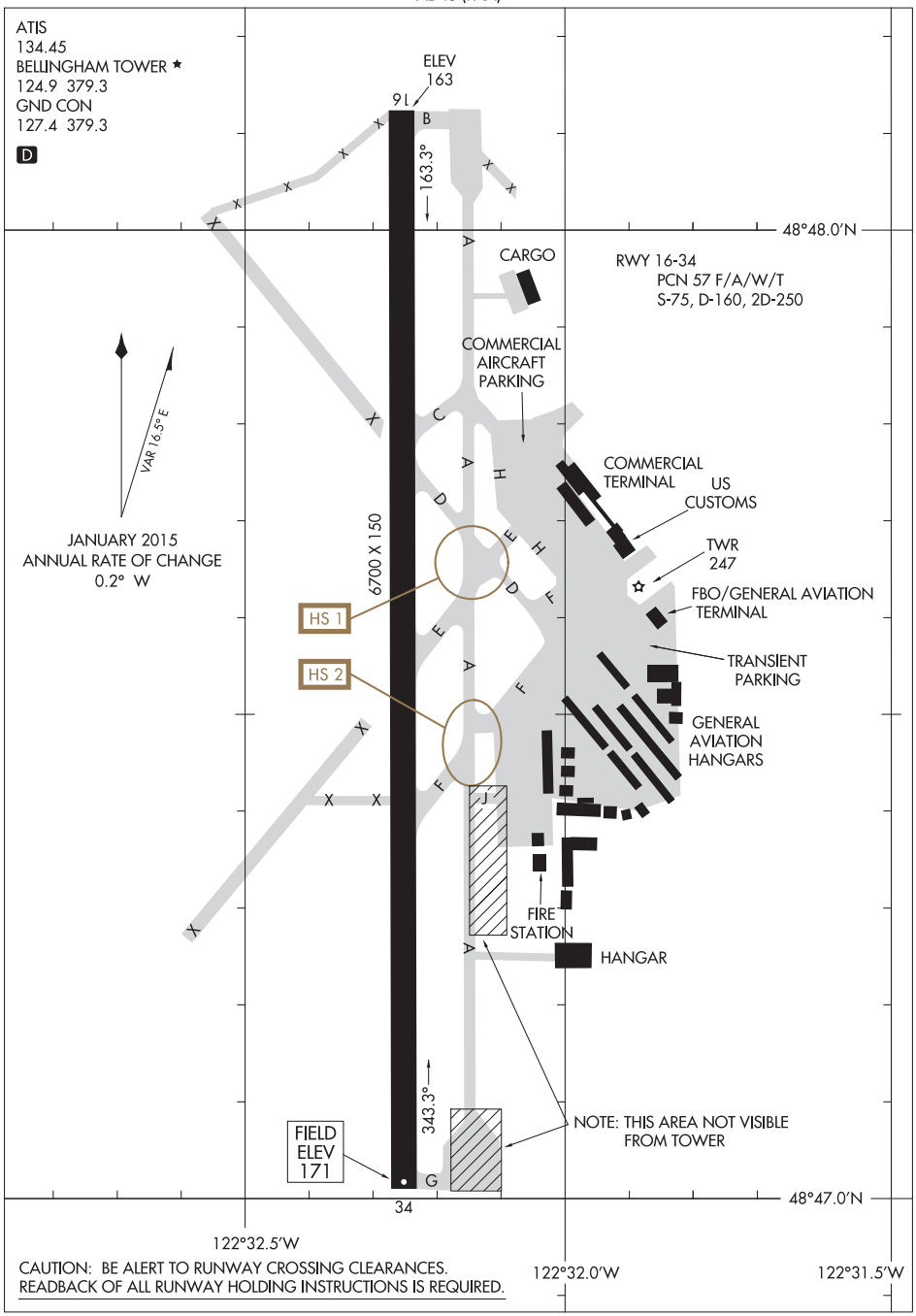
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18088

AIRPORT DIAGRAM

BELLINGHAM INTL (BLI)
BELLINGHAM, WASHINGTON

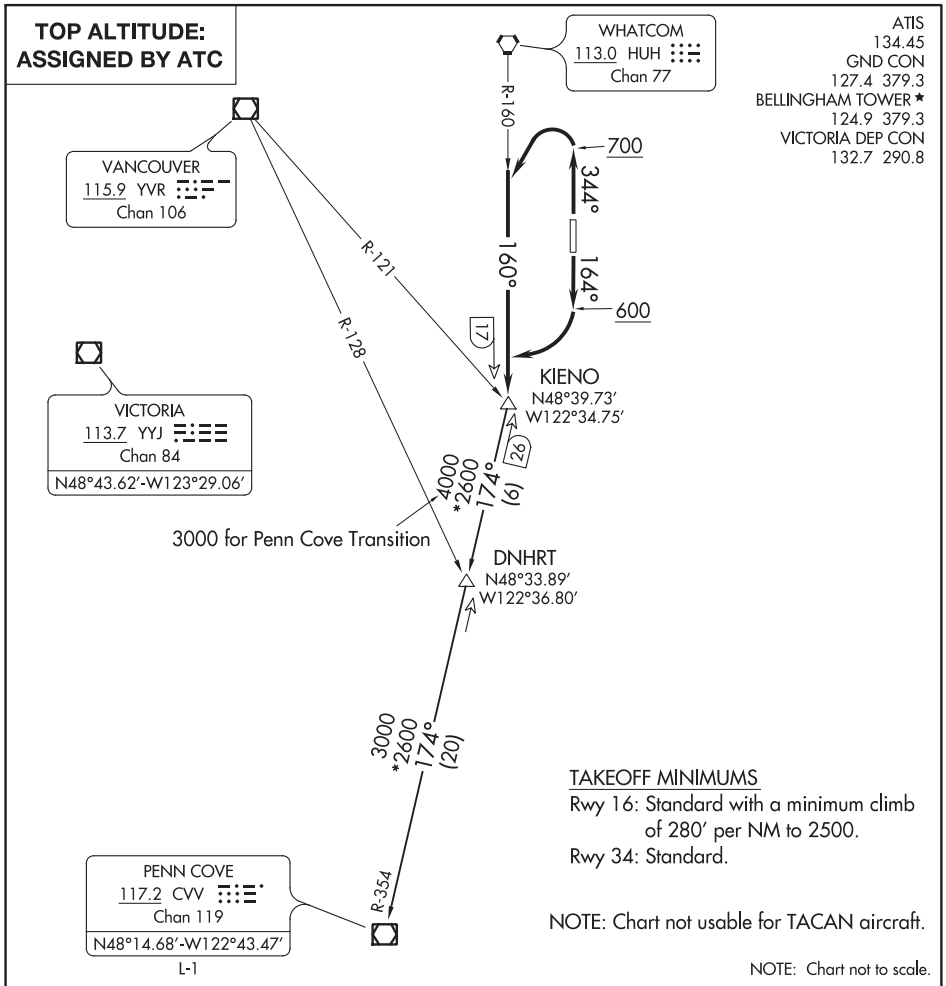
AL-45 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
18088
BELLINGHAM, WASHINGTON
BELLINGHAM INTL (BLI)



NW-1, 30 JAN 2020 to 26 MAR 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) 19227

RNAV (GPS) RWY 34

BEND MUNI (BDN)

APP CRS	Rwy Idg	5200
326°	TDZE	3460
	Apt Elev	3460

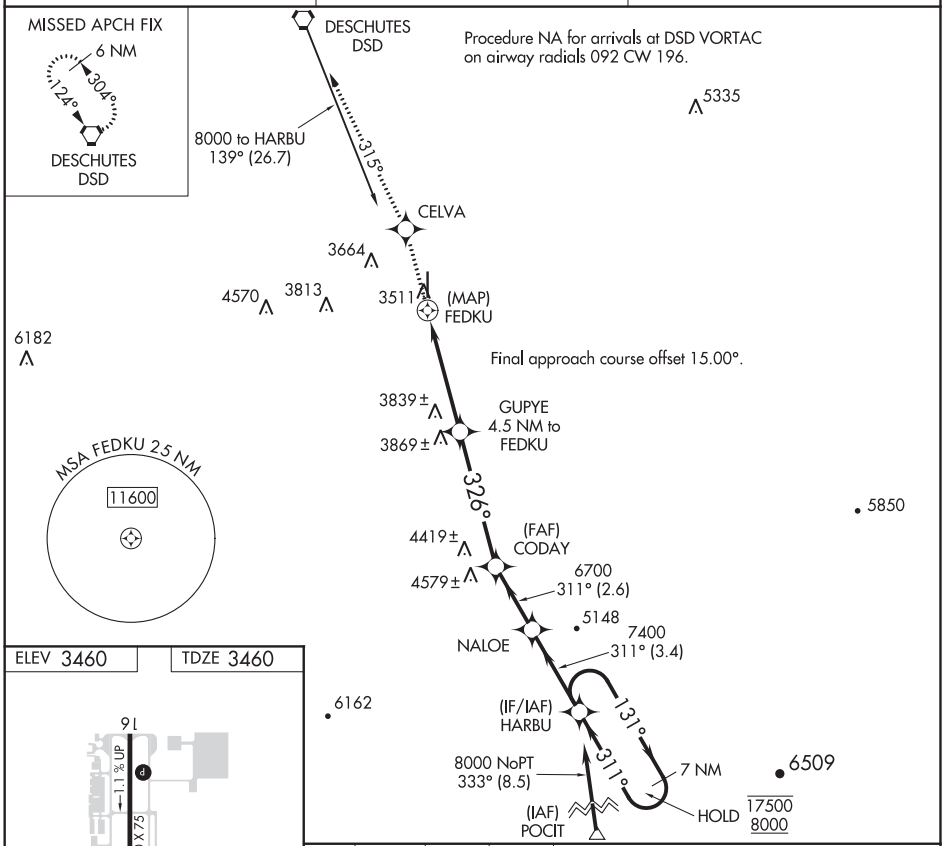
RNP APCH.

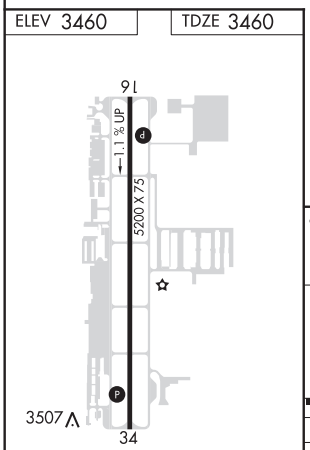
T NA

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.

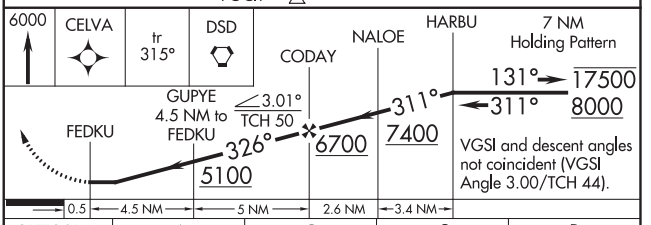
AWOS-3	SEATTLE CENTER	UNICOM
134.425	126.15 269.475	123.0 (CTAF) L





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5200
CH 90137	148°	TDZE	3432
W16B		Apt Elev	3460

RNAV (GPS) Y RWY 16

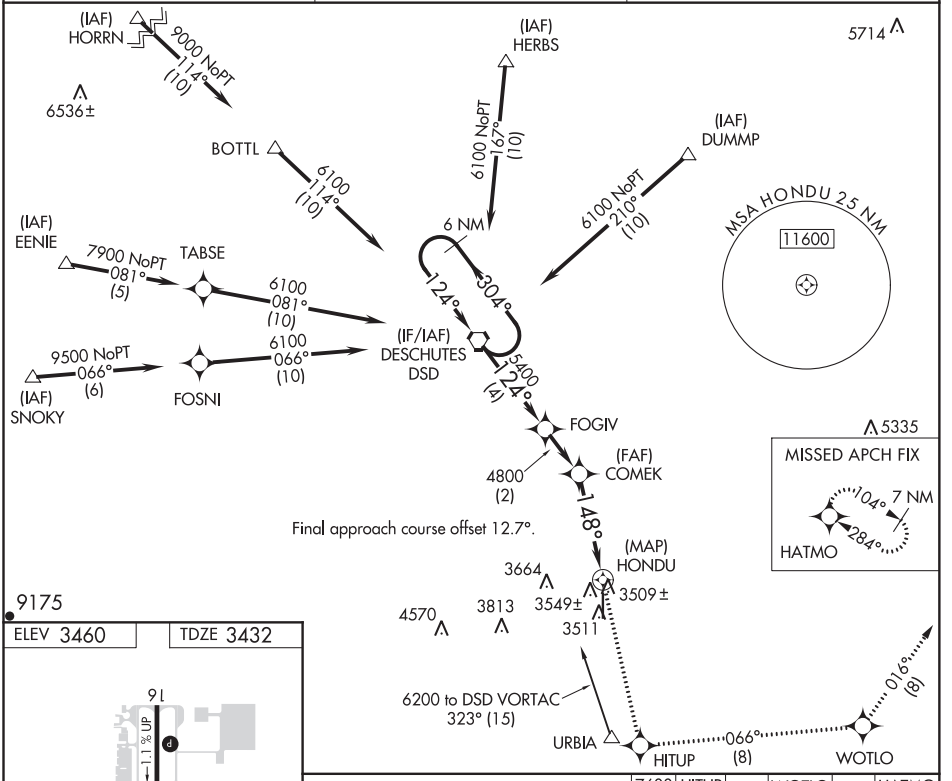
BEND MUNI (BDN)

T
A

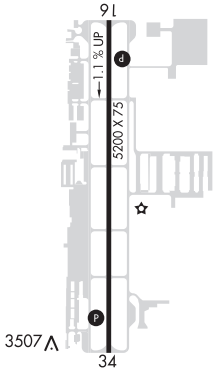
DME/DME RNP -0.3 NA. When local altimeter setting not received, use Redmond altimeter setting and increase all MDA 80 feet, and LP and LNAV Cats C/D visibility ¼ mile, and Circling Cat C visibility ½ mile. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 16 NA.

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.

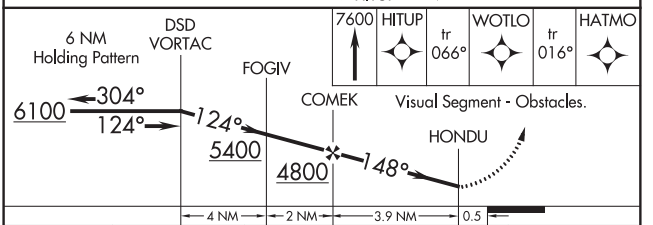
AWOS-3	SEATTLE CENTER	UNICOM
134.425	126.15 269.475	123.0 (CTAF) L



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BEND, OREGON AL-5579 (FAA) 19227

RNAV (GPS) Z RWY 16

BEND MUNI (BDN)

WAAS	APP CRS	Rwy Idg	5200
CH 81906	161°	TDZE	3432
W16A		Apt Elev	3460

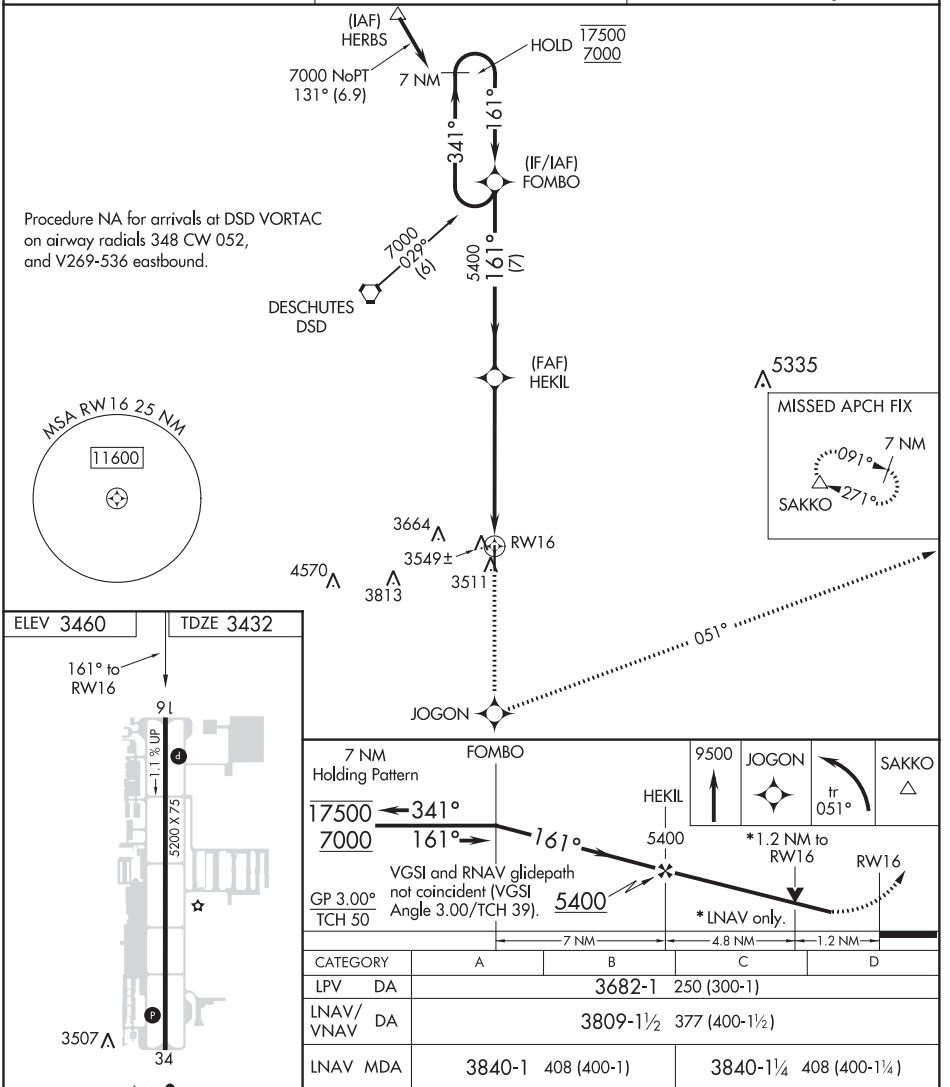
RNP APCH.

T 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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

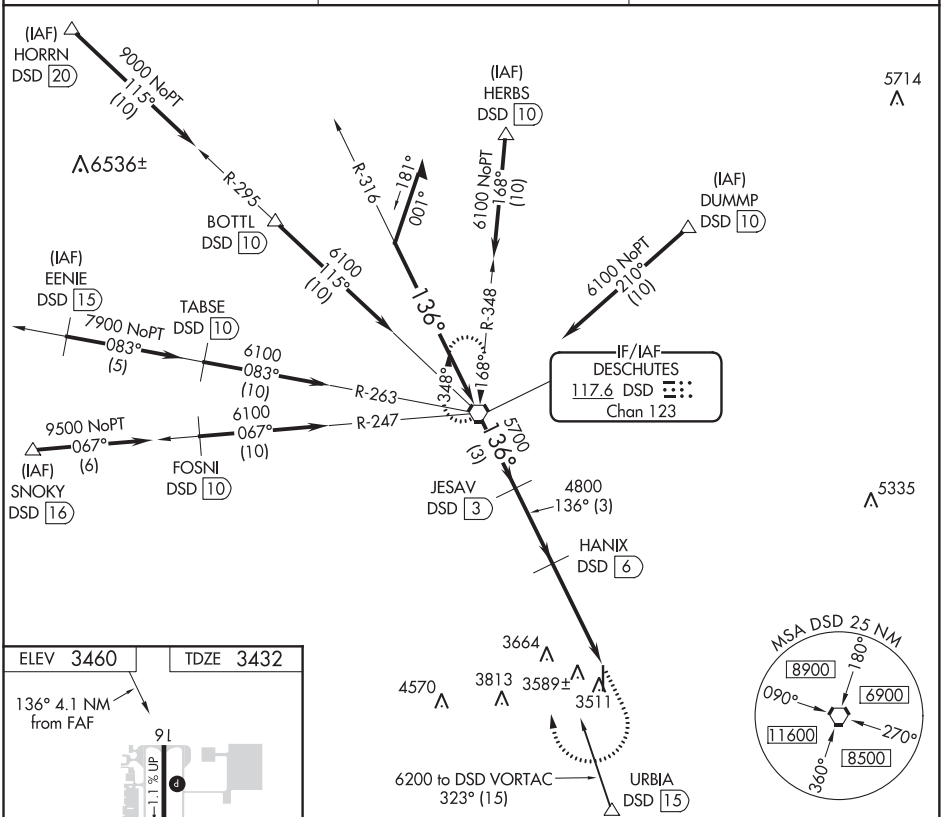
VORTAC DSD	APP CRS	Rwy Idg	5200
117.6	136°	TDZE	3432
Chan 123		Apt Elev	3460

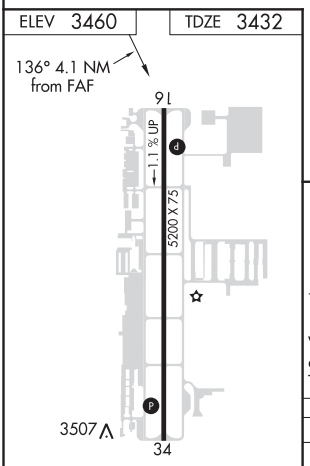
VOR/DME RWY 16
BEND MUNI (BDN)

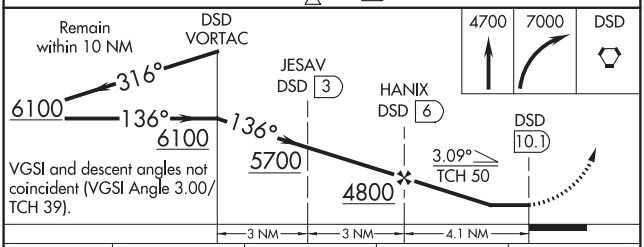
When local altimeter setting not received, use Redmond altimeter setting and increase all MDAs 80 feet, increase S-16 Cat C/D visibility ⅛ mile, and Circling Cat C visibility ¼ mile. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 16 NA.

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







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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(BDN1.BDN) 19171

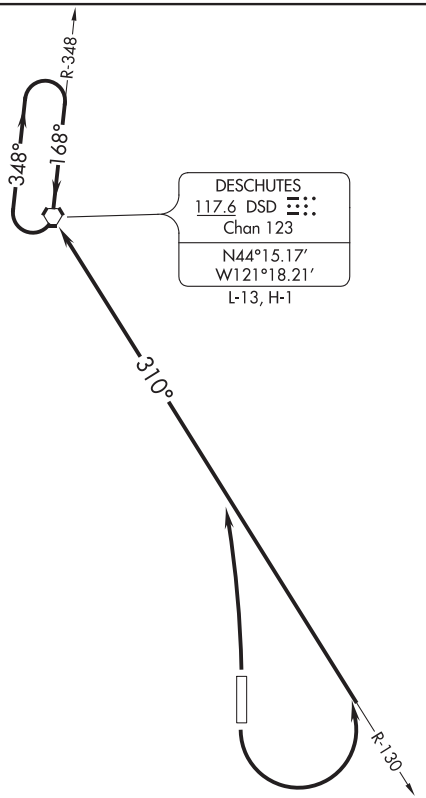
BEND ONE DEPARTURE (OBSTACLE)

AL-5579 (FAA)

BEND MUNI (BDN)
BEND, OREGON

NW-1, 30 JAN 2020 to 26 MAR 2020

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 . . . .

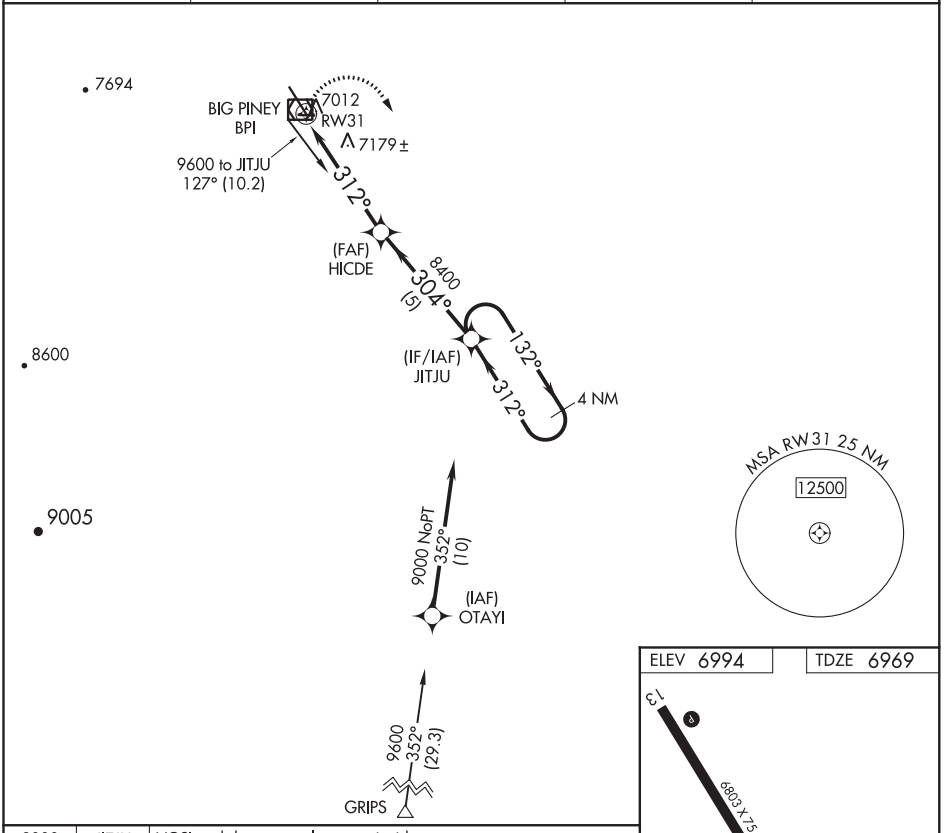
. . . . Climb in DSD VORTAC holding pattern to cross DSD VORTAC at or above the MEA/MCA for the route of flight.

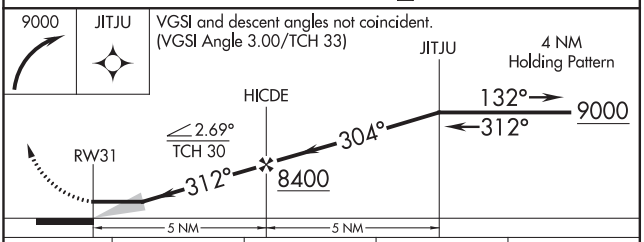
APP CRS	Rwy Idg	6803
312°	TDZE	6969
	Apt Elev	6994

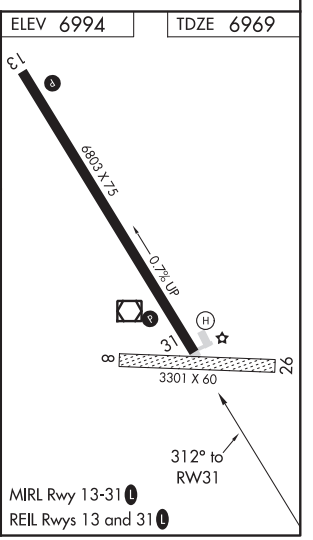
RNAV (GPS) RWY 31
MILEY MEMORIAL FIELD (BPI)

RNP APCH.	MISSED APPROACH: Climbing right turn to 9000 direct JITJU and hold.
Circling NA to Rwys 8 and 26.	

ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM	122.7 L
135.225	128.35 239.25	122.3	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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BIG PINEY, WYOMING | AL-5790 (FAA) | 19115

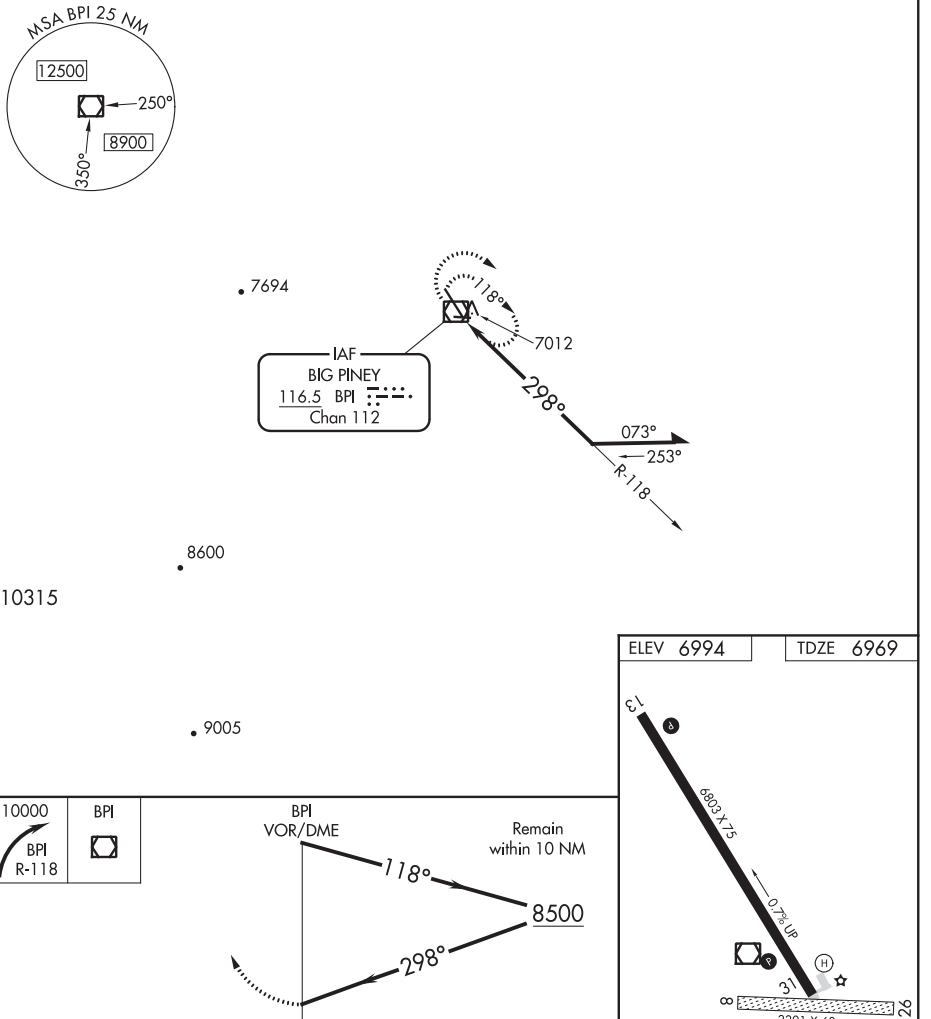
VOR/DME BPI	APP CRS	Rwy Idg	6803
116.5	298°	TDZE	6969
Chan 112		Apt Elev	6994

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	CASPER RADIO	UNICOM	
135.225	128.35 239.25	122.3	122.8 (CTAF)	122.7 L



CATEGORY	A	B	C	D
S-31	7680-1	711 (700-1)	7680-2 711 (700-2)	7680-2¼ 711 (700-2¼)
CIRCLING	7680-1	686 (700-1)	7680-2 686 (700-2)	7680-2¼ 686 (700-2¼)

BIG PINEY, WYOMING
Amdt 3E 28FEB19

42°35′N-110°07′W

MILEY MEMORIAL FIELD (BPI)
VOR RWY 31

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5285
CH 65642	063°	TDZE	4490
W06A		Apt Elev	4494

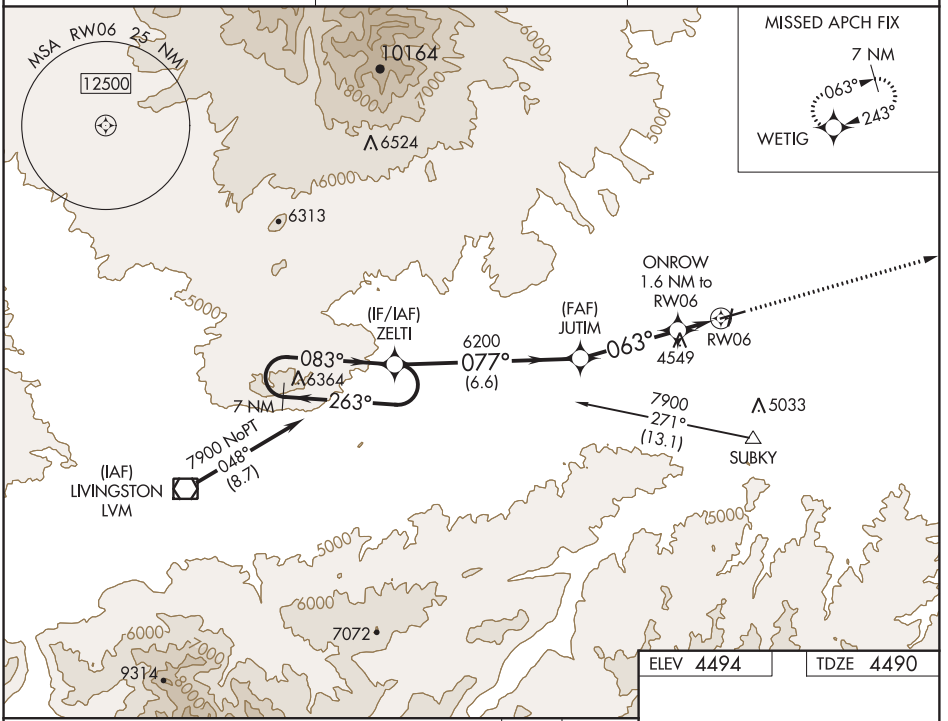
RNAV (GPS) RWY 6

BIG TIMBER (6SØ)

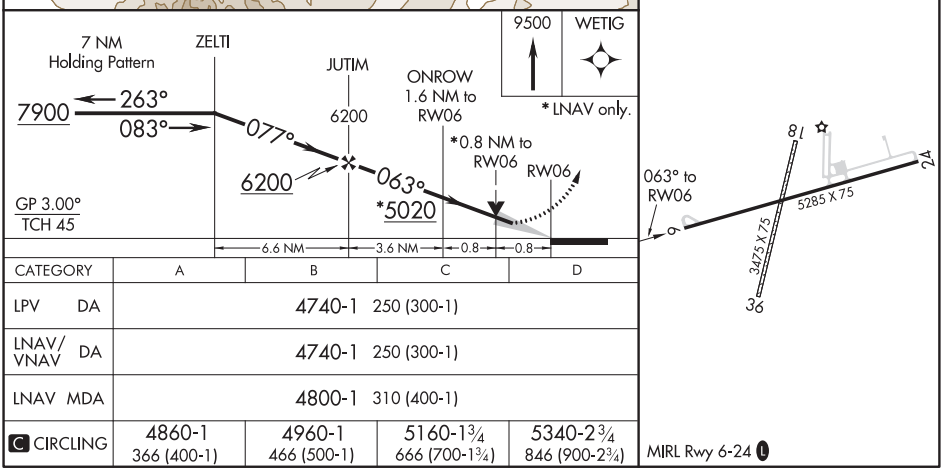
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 51°C (124°F). Circling Rwy 18, 36 NA at night. DME/DME RNP-0.3 NA.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BIG TIMBER, MONTANA | AL-10488 (FAA) | 17341

WAAS	APP CRS	Rwy Idg	5285
CH 70640	243°	TDZE	4477
W24A		Apt Elev	4494

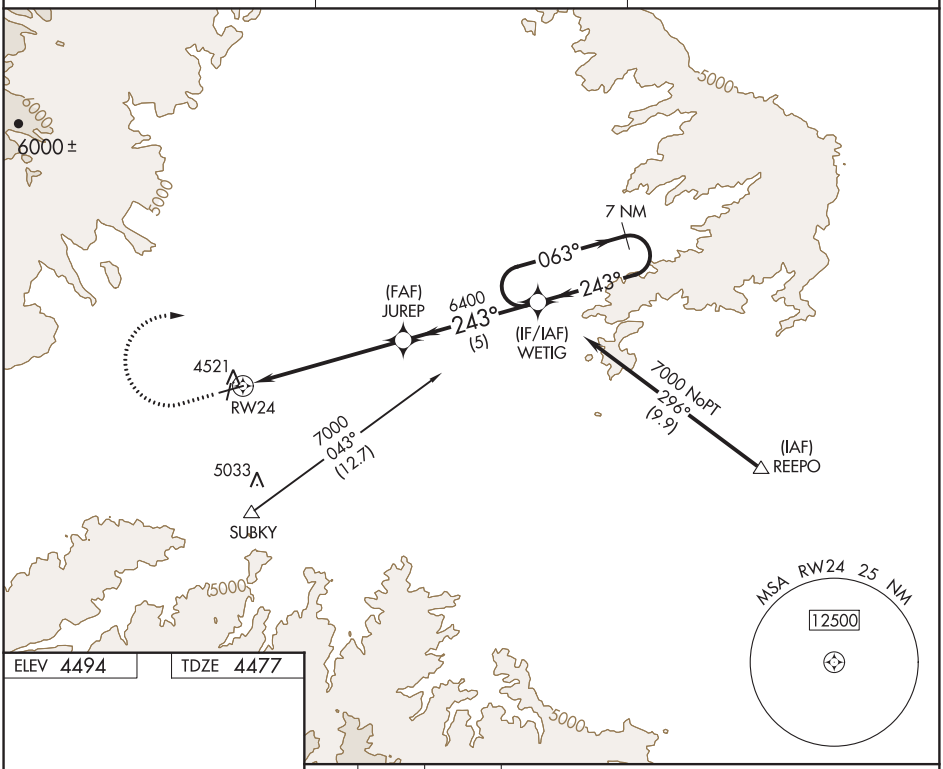
RNAV (GPS) RWY 24

BIG TIMBER (6SØ)

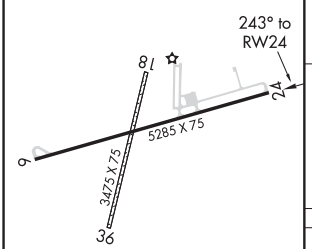
Circling Rwy 18, 36 NA at night.
DME/DME RNP- 0.3 NA.

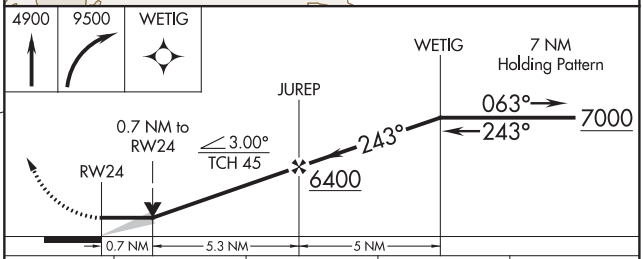
MISSED APPROACH: Climb to 4900 then climbing right turn to 9500 direct WETIG and hold, continue climb-in-hold to 9500.

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

BIG TIMBER, MONTANA
Orig 07DEC17

45°48′N-109°59′W

BIG TIMBER (6SØ)
RNAV (GPS) RWY 24

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 28R

BILLINGS LOGAN INTL (BIL)

LOC/DME I-BMO	APP CRS	Rwy Idg	10518
111.5	282°	TDZE	3517
Chan 52		Apt Elev	3652

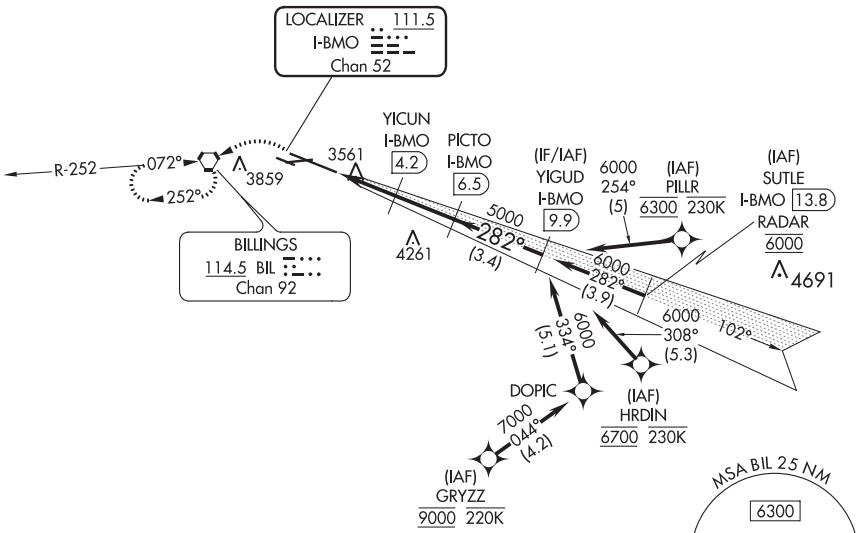
RNAV 1.

RNAV 1-GPS or RADAR required for procedure entry.
DME required.
From PILLR, GRYZZ, HRDIN: RNAV 1-GPS required.

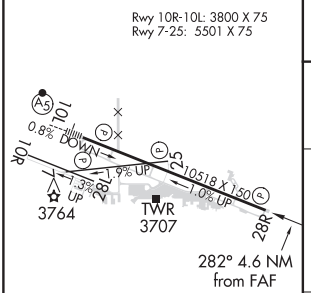
T A Rwy 28R helicopter visibility reduction below ¾ SM NA.

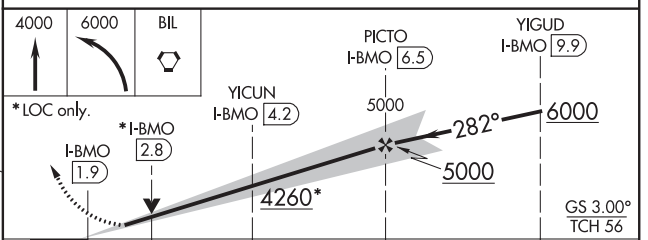
MISSED APPROACH: Climb to 4000 then climbing left turn to 6000 direct BIL VORTAC and hold, continue climb-in-hold to 6000.

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





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, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-BIL	APP CRS	Rwy Idg	10518
111.5	102°	TDZE	3585
Chan 52		Apt Elev	3662

ILS Y or LOC Y RWY 10L

BILLINGS LOGAN INTL (BIL)

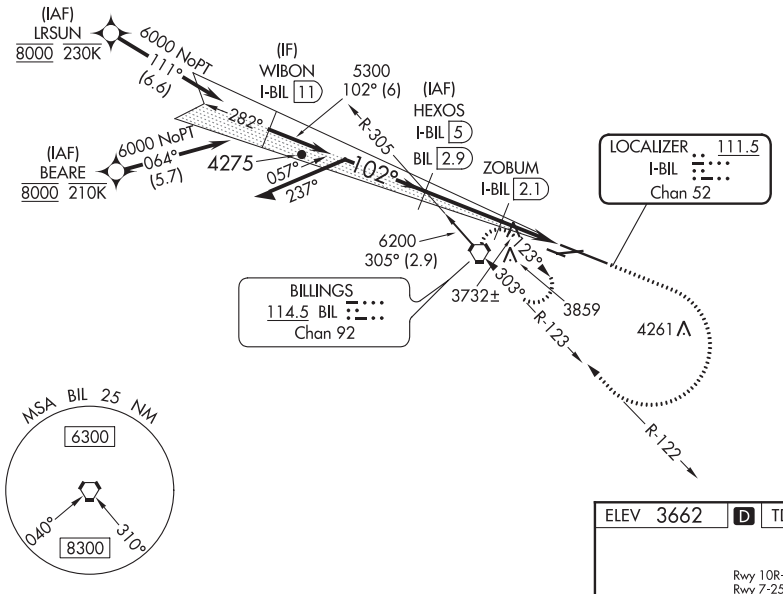
DME required.
From BEARE, LRSUN: RNAV 1-GPS required.

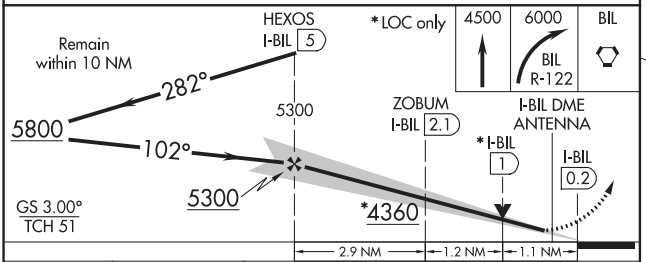
For inop ALS, increase S-LOC 10L Cat C/D visibility to RVR 6000.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

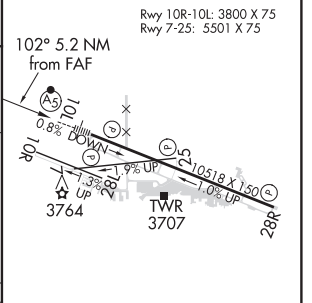
MISSED APPROACH: Climb to 4500 then climbing right turn to 6000 on BIL VORTAC R-122 to BIL VORTAC and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9





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)



REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

45°48'N-108°33'W

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 28R

BILLINGS LOGAN INTL (BIL)

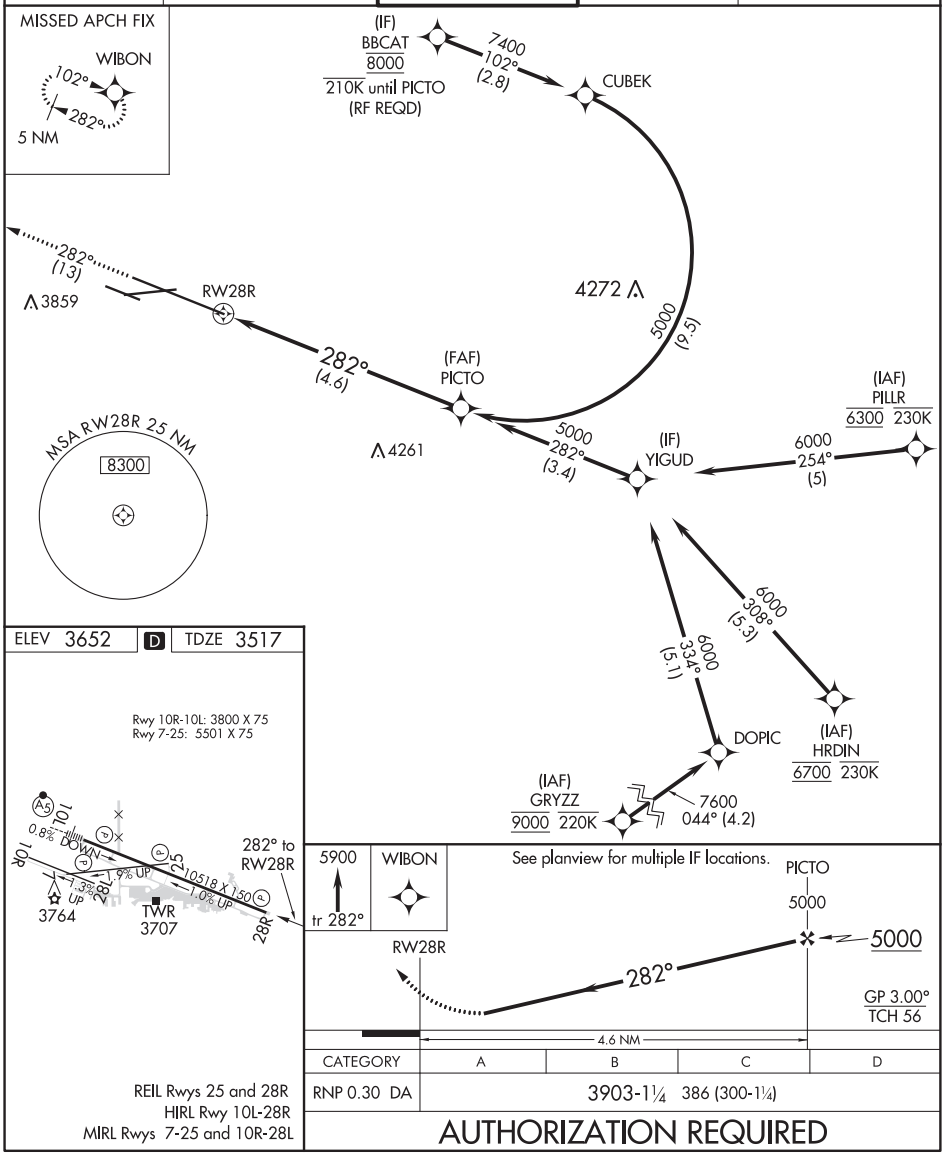
APP CRS	Rwy Idg	10518
282°	TDZE	3517
	Apt Elev	3652

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS		
CH **87127**	**074°**	Rwy Idg	**5501**
W07A		TDZE	**3636**
		Apt Elev	**3652**

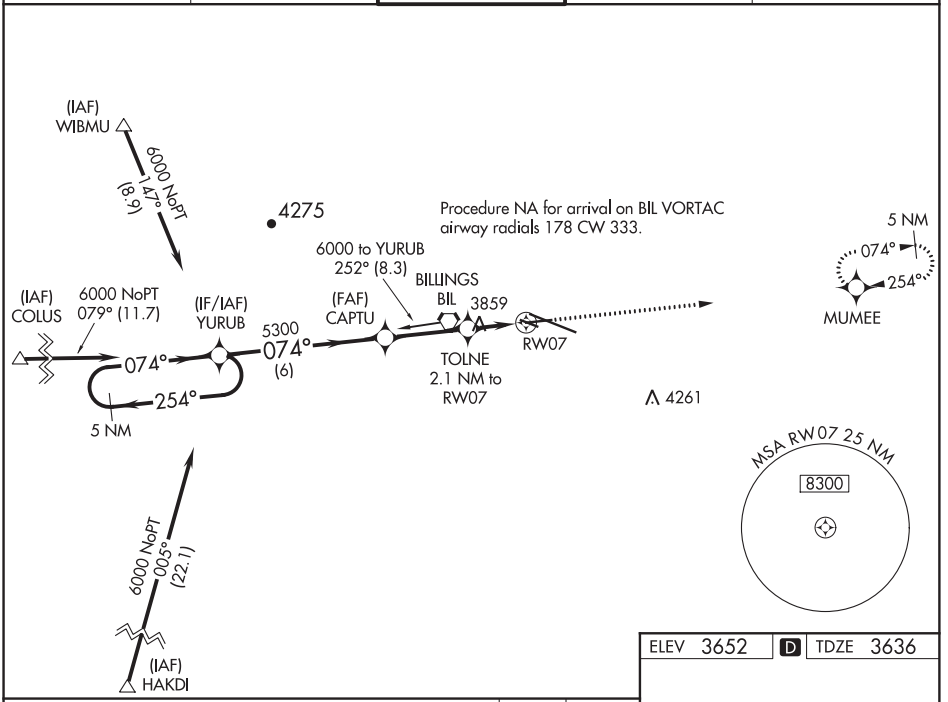
RNAV (GPS) RWY 7

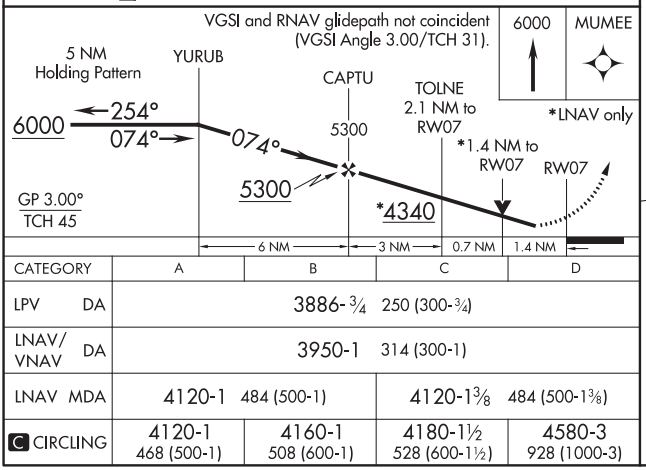
BILLINGS LOGAN INTL (BIL)

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.

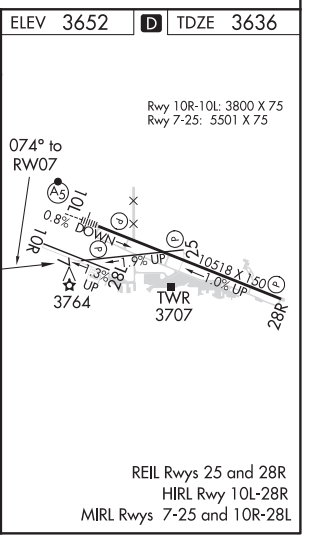
MISSED APPROACH: Climb to 6000 direct MUMEE and hold.

ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	**120.5 284.6**	**127.2 257.8**	**121.9**	**121.9**





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)



REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	10518
CH 50122	102°	TDZE	3585
W10A		Apt Elev	3652

RNAV (GPS) RWY 10L

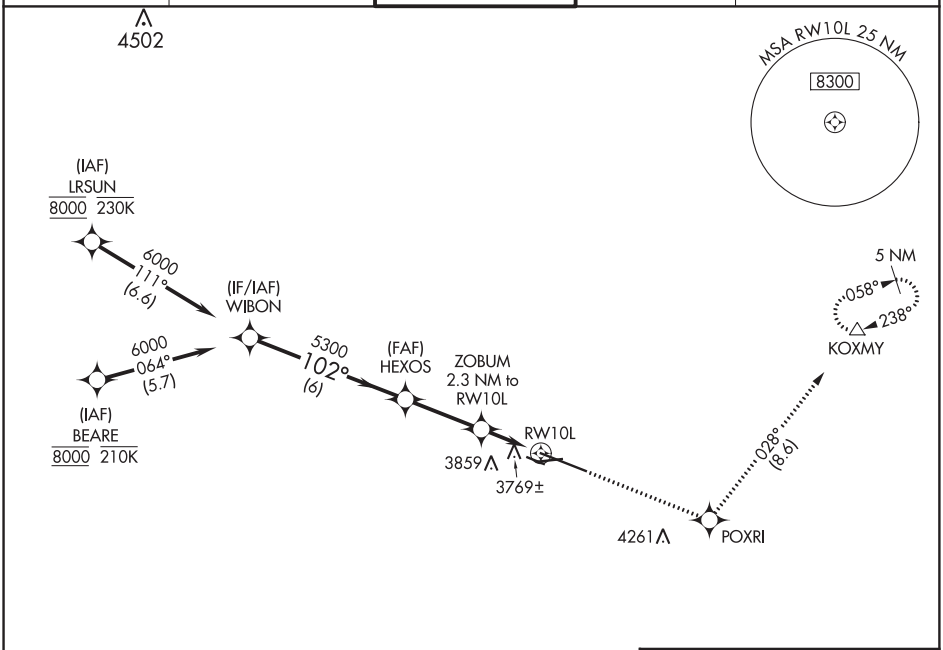
BILLINGS LOGAN INTL (BIL)

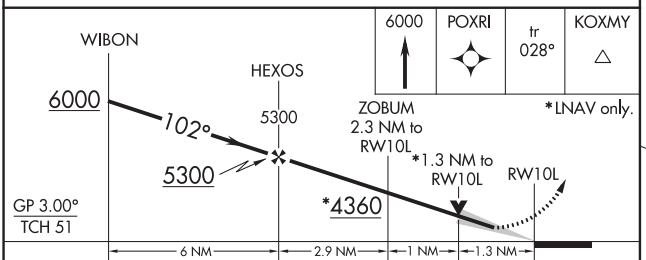
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 50°C (123°F). DME/DME RNP-0.3 NA.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

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

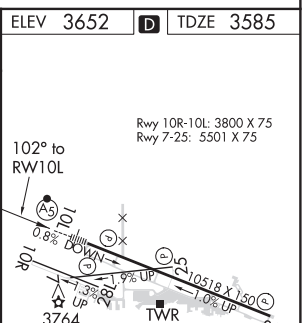




6000	POXRI	tr 028°	KOXMY
↑	✦		△

*LNAV only.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5501
CH 78028	254°	TDZE	3586
W25A		Apt Elev	3652

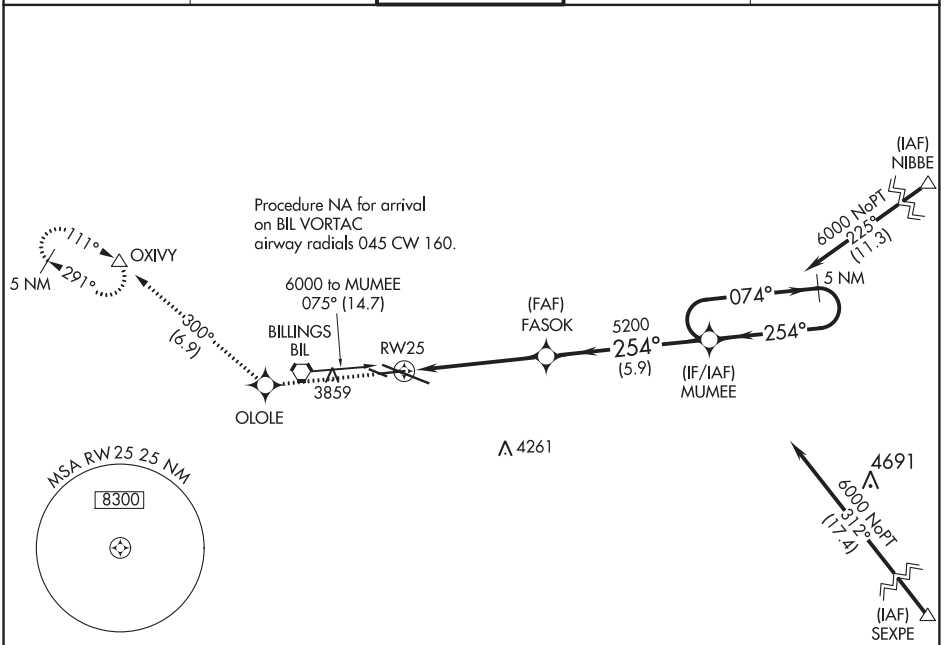
RNAV (GPS) RWY 25

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.

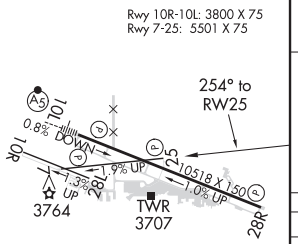
ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9

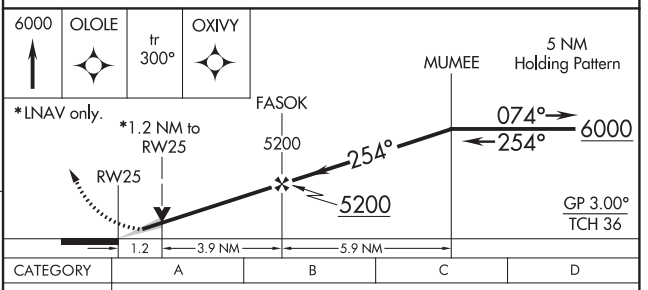


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 3652 D TDZE 3586





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)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

45°48'N-108°33'W

RNAV (GPS) Y RWY 28R

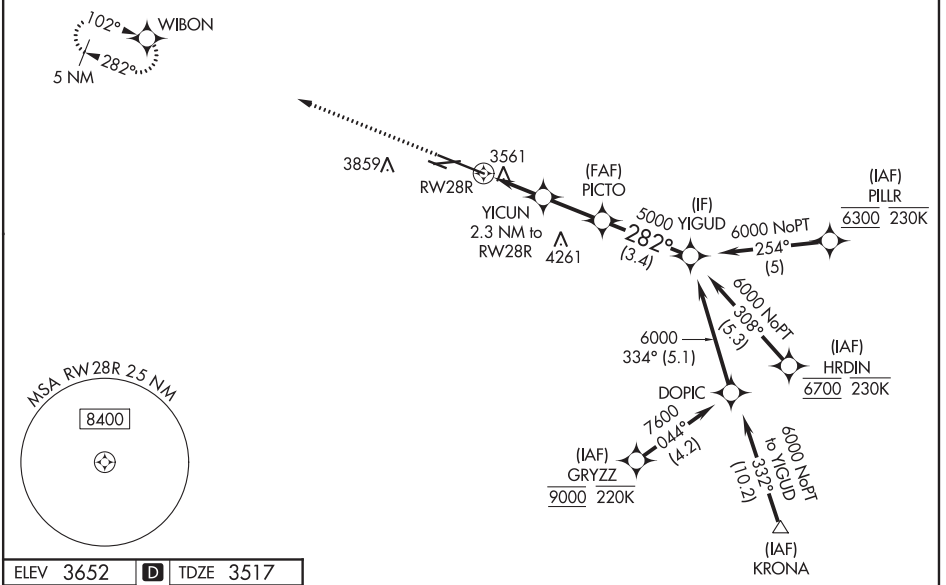
BILLINGS LOGAN INTL (BIL)

WAAS CH 56222 W28A	APP CRS 282°	Rwy Idg 10518 TDZE 3517 Apt Elev 3652

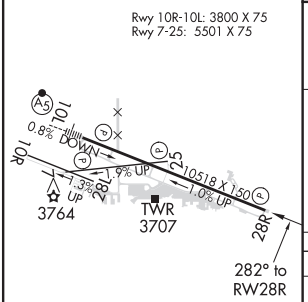
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 50°C (123°F). Rwy 28R helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

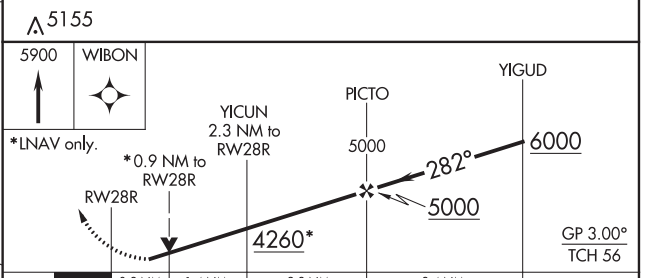
MISSED APPROACH: Climb to 5900 direct WIBON and hold.

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BILLINGS, MONTANA

AL-48 (FAA)

20002

VORTAC BIL 114.5 Chan 92	APP CRS 262°	Rwy Idg 10518 TDZE 3517 Apt Elev 3662

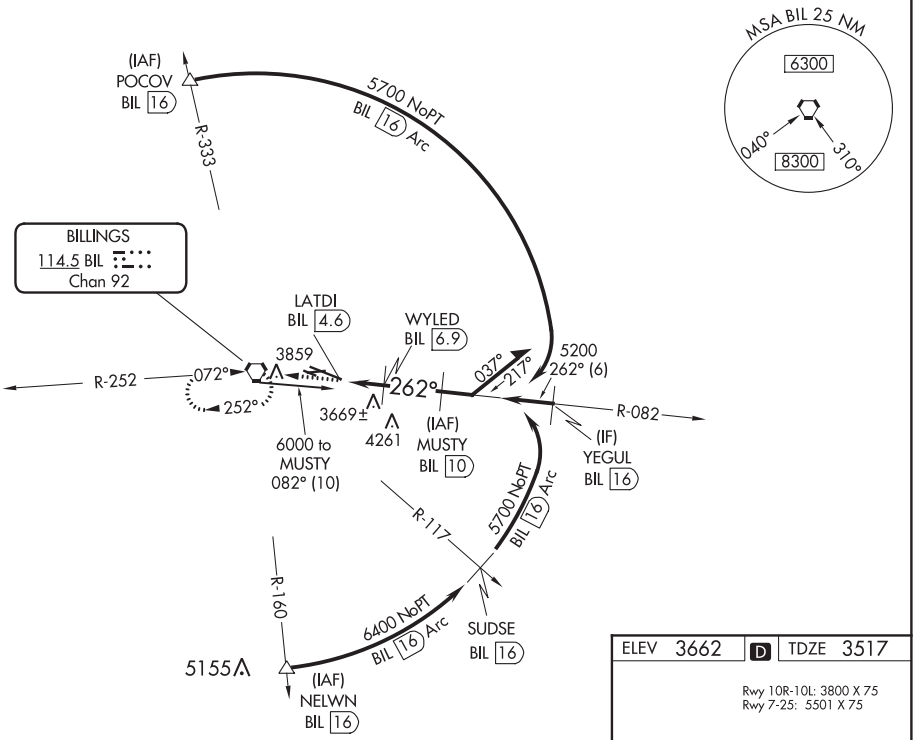
VOR/DME RWY 28R

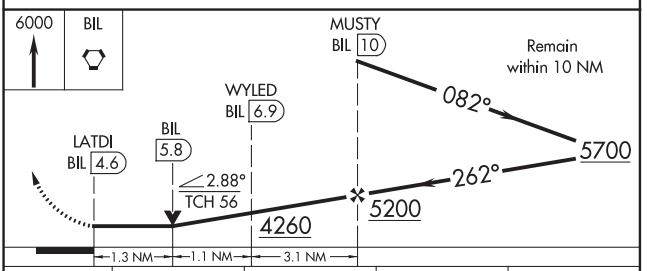
BILLINGS LOGAN INTL (BIL)

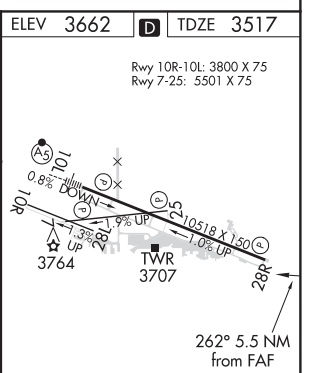
Helicopter visibility reduction below ¾ SM NA.

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)

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

BILLINGS, MONTANA
Amdt 14C 02JAN20

45°48′N-108°33′W

BILLINGS LOGAN INTL (BIL)

VOR/DME RWY 28R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

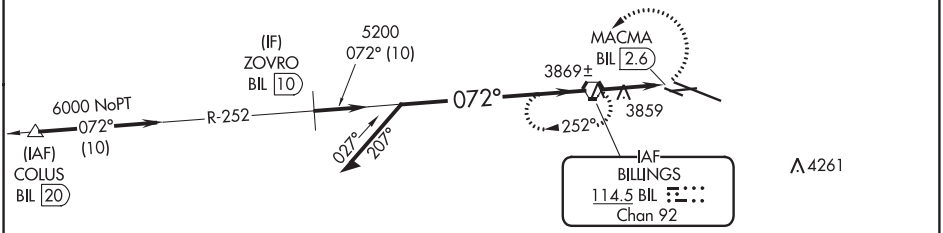
VORTAC BIL 114.5 Chan 92	APP CRS 072°	Rwy Idg N/A TDZE N/A Apt Elev 3662

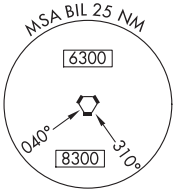
VOR-A

BILLINGS LOGAN INTL (BIL)

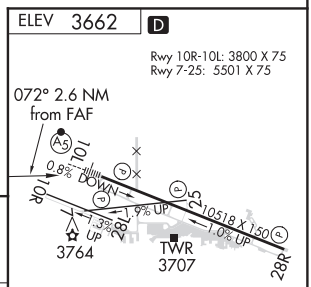
MISSED APPROACH: Climbing left turn to 6000 direct BIL VORTAC and hold, continue climb-in-hold to 6000.

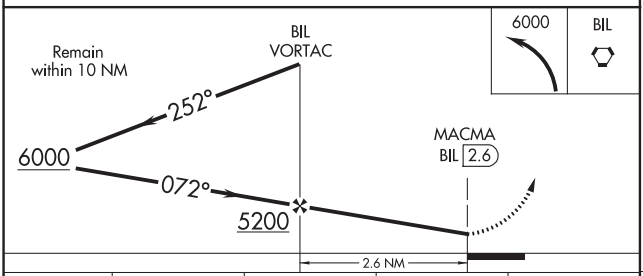
ATIS	BILLINGS APP CON	BILLINGS TOWER	GND CON	CLNC DEL
126.3	120.5 284.6	127.2 257.8	121.9	121.9





5155





REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

CATEGORY	A	B	C	D
C CIRCLING	4180-1 518 (600-1)		4180-1½ 518 (600-1½)	4580-3 918 (1000-3)

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18032

AIRPORT DIAGRAM

AL-48 (FAA)

BILLINGS LOGAN INTL (BIL)

BILLINGS, MONTANA

ATIS 126.3
BILLINGS TOWER 127.2 257.8
GND CON 121.9
CLNC DEL 121.9
D

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

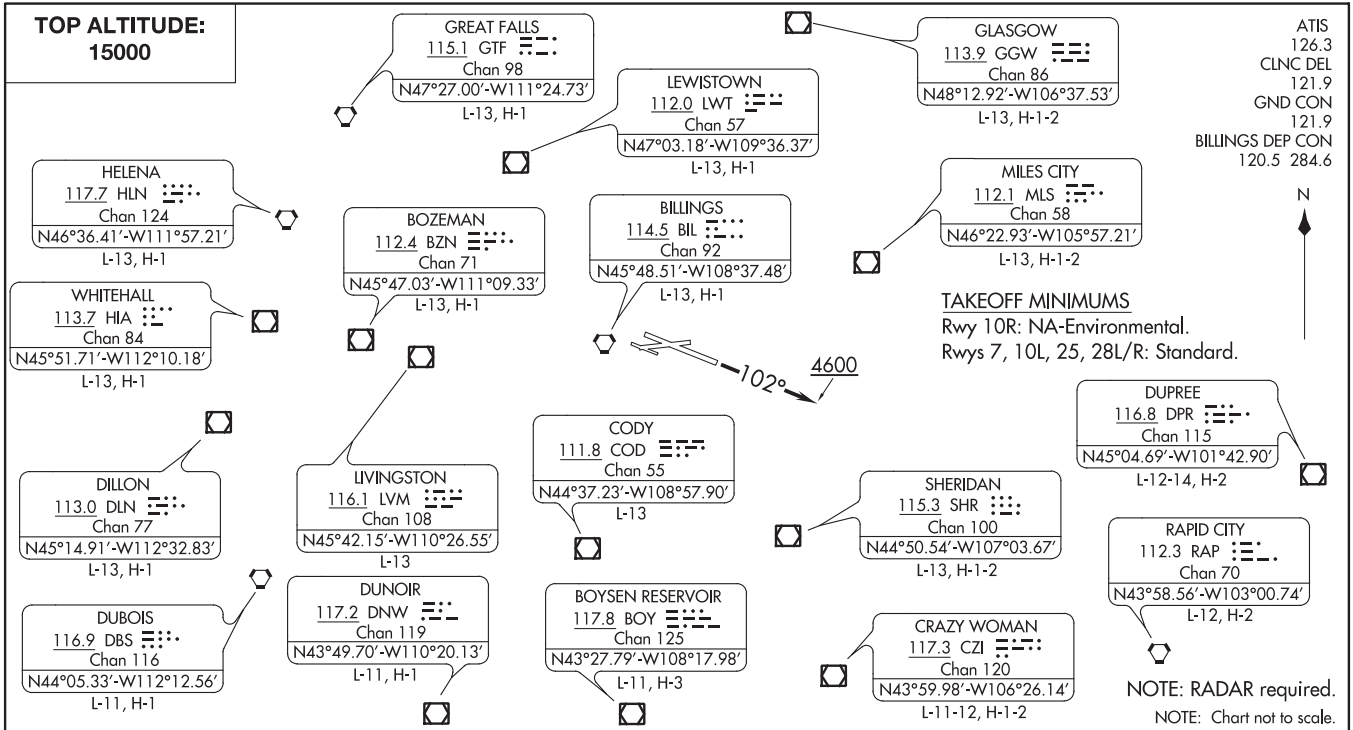
AIRPORT DIAGRAM
18032
BILLINGS, MONTANA
BILLINGS LOGAN INTL (BIL)

BILLINGS FIVE DEPARTURE

(BIL5.BIL) 01FEB18

BILLINGS LOGAN INTL (BIL)

BILLINGS, MONTANA



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 7, 25, 28L/R: Climb on assigned heading for vectors to assigned fix/route, thence. . . .

TAKEOFF RUNWAY 10L: Climb heading 102° to 4600, then on assigned heading for vectors to assigned fix/route, thence. . . .

. . . . maintain 15000 or assigned lower altitude. Expect clearance to filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for 1 minute after departure, fly last assigned heading until reaching 7000. Proceed direct BIL VORTAC, then on last routing cleared and climb to filed altitude.

BILLINGS FIVE DEPARTURE

(BIL5.BIL) 18032

AL-48 (FAA)

BILLINGS LOGAN INTL (BIL)

BILLINGS, MONTANA

BLACKFOOT, IDAHO | AL-9351 (FAA) | 19087

APP CRS	Rwy Idg	N/A
189°	TDZE	N/A
	Apt Elev	4492

RNAV (GPS)-A

MCCARLEY FIELD (UØ2)

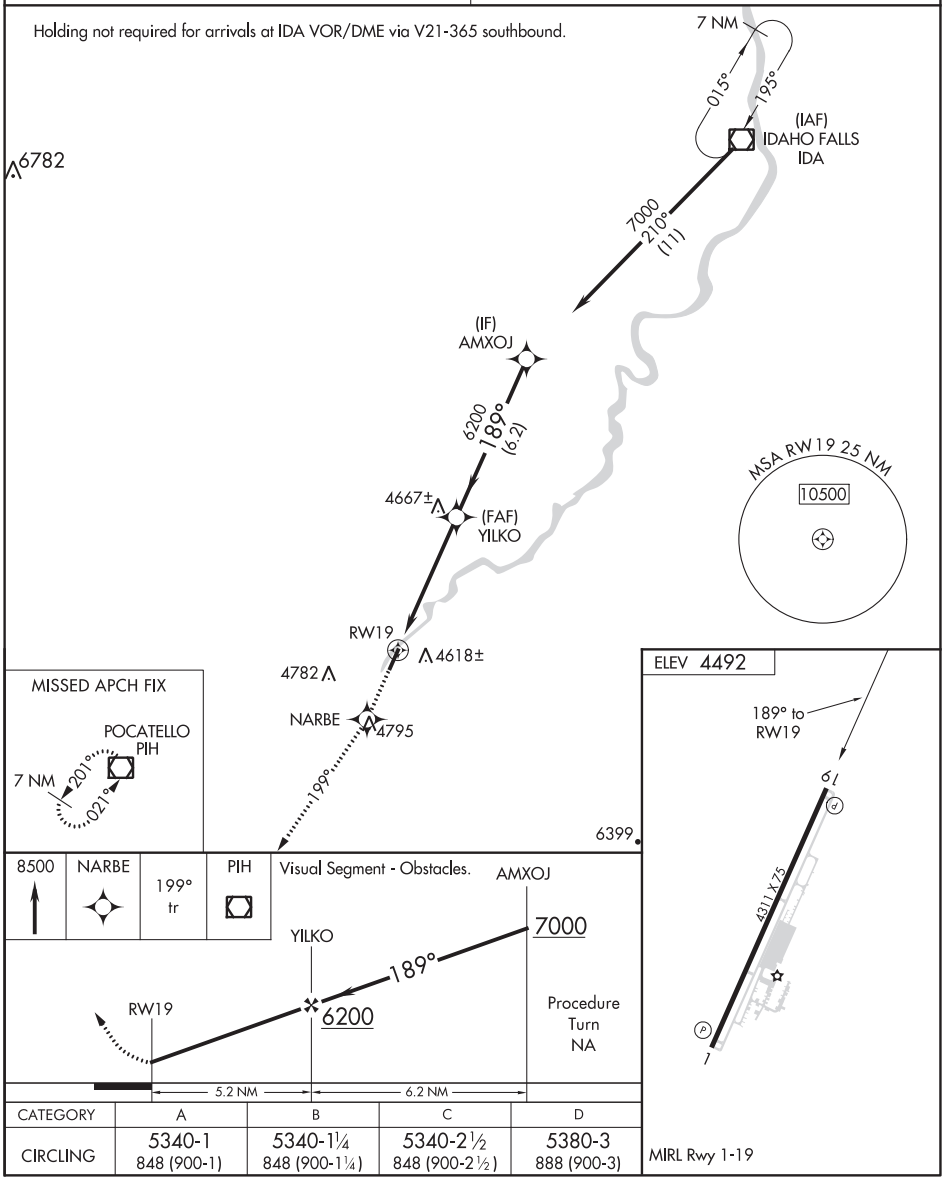
RNP APCH.

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)

Holding not required for arrivals at IDA VOR/DME via V21-365 southbound.



CATEGORY	A	B	C	D
CIRCLING	5340-1 848 (900-1)	5340-1¼ 848 (900-1¼)	5340-2½ 848 (900-2½)	5380-3 888 (900-3)

MIRL Rwy 1-19

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

BLACKFOOT, IDAHO | Orig-B 28MAR19 | 43°13'N-112°21'W | MCCARLEY FIELD (UØ2) | RNAV (GPS)-A

RNAV (GPS)-B

MCCARLEY FIELD (UØ2)

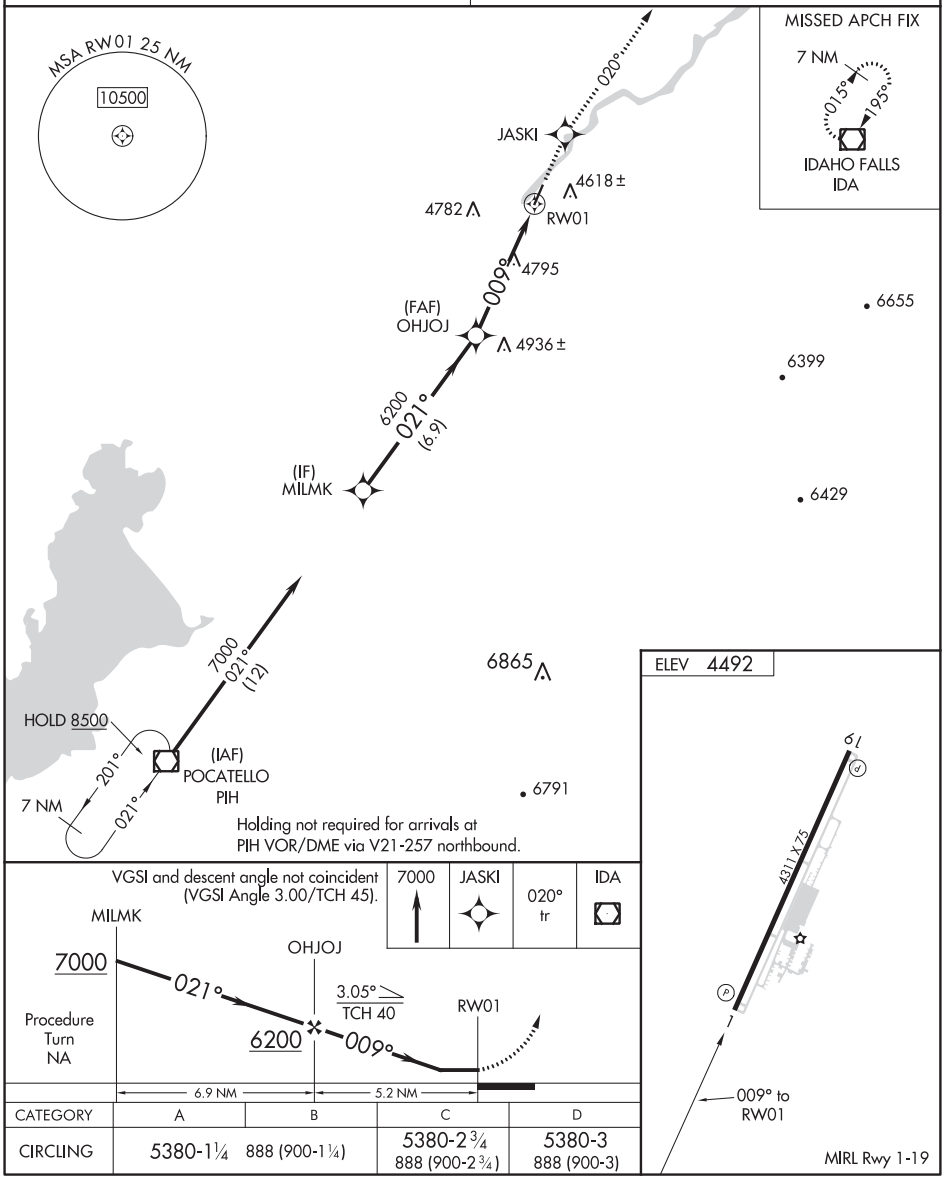
APP CRS	Rwy Idg	N/A
009°	TDZE	N/A
	Apt Elev	4492

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BLACKFOOT, IDAHO | AL-9351 (FAA) | 19087

VOR/DME PIH	APP CRS	Rwy Idg	N/A
112.6	016°	TDZE	N/A
Chan 73		Apt Elev	4492

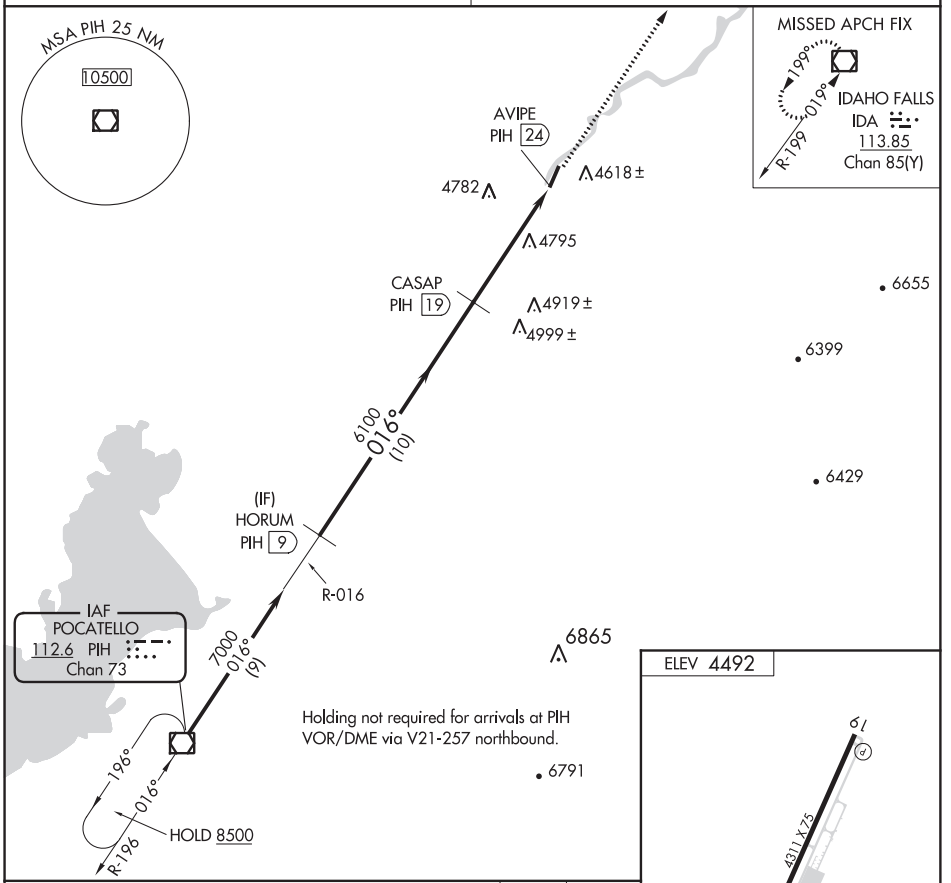
VOR/DME-C
MCCARLEY FIELD (UØ2)

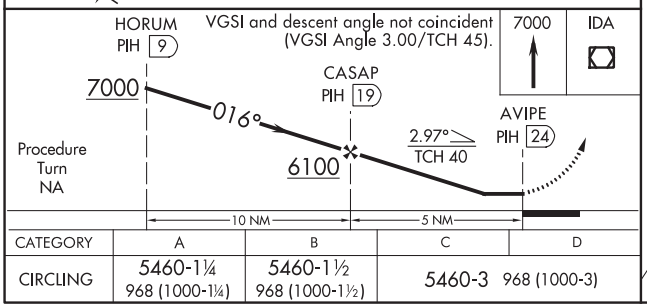
T NA — Use Pocatello altimeter setting, when not received use Idaho Falls altimeter setting. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 7000 direct IDA VOR/DME and hold.

SALT LAKE CITY CENTER
128.35 239.25

UNICOM
122.8 (CTAF)

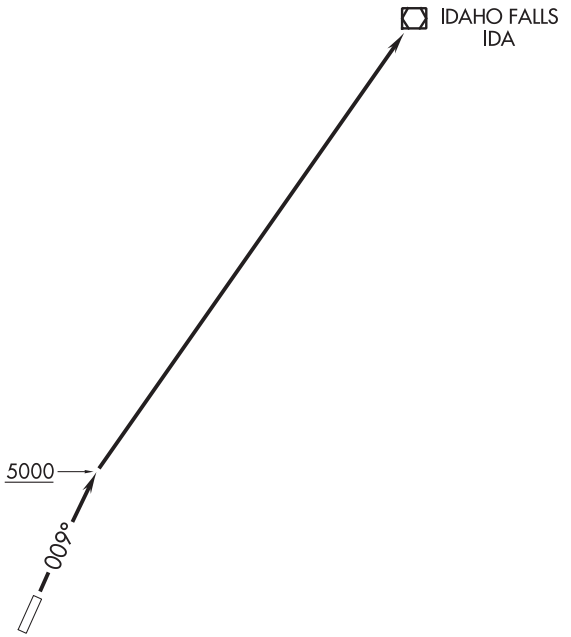




CATEGORY	A	B	C	D
CIRCLING	5460-1¼ 968 (1000-1¼)	5460-1½ 968 (1000-1½)	5460-3 968 (1000-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb heading 009° to 5000, continue climb to 7000 direct IDA VOR/DME.

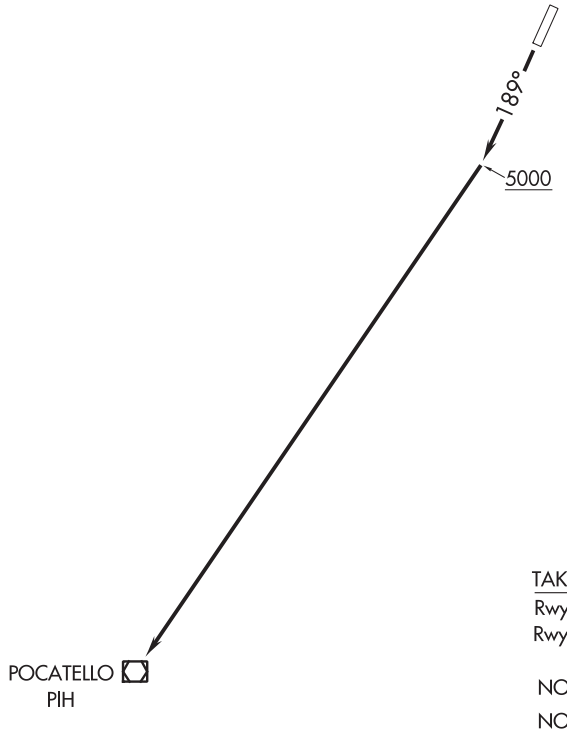
(PIH4.PIH) 18200

POCATELLO FOUR DEPARTURE (RNAV) AL-9351 (FAA)

MCCARLEY FIELD (UØ2)
BLACKFOOT, IDAHO

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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

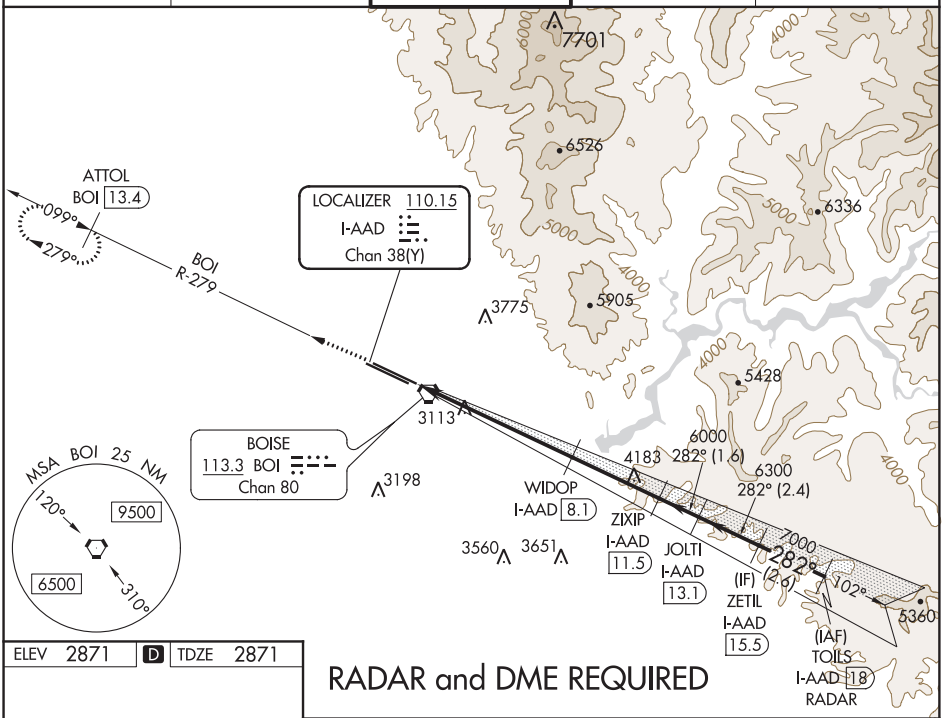
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

LOC/DME I-AAD	APP CRS	Rwy Idg	10000
110.15	282°	TDZE	2871
Chan 38 (Y)		Apt Elev	2871

Circling NA north of Rwy 10L-28R.
DME required.

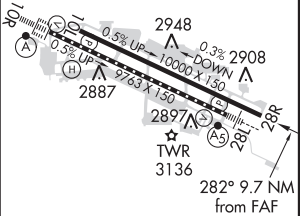
MISSED APPROACH: Climb to 6000 on BOI VORTAC R-279 to ATTOL/BOI 13.4 DME and hold.

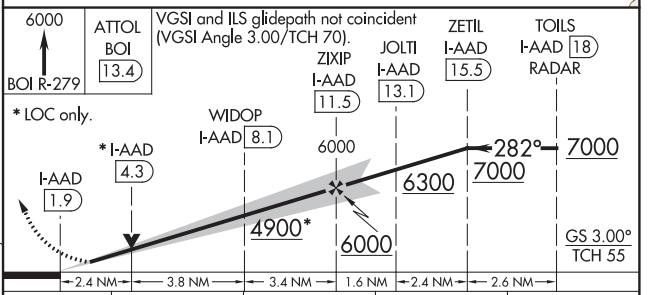
D-ATIS	BIG SKY APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



ELEV 2871 | D | TDZE 2871

RADAR and DME REQUIRED





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO | AL-57 (FAA) | 19003

LOC/DME I-BOI	APP CRS		10R	10L
111.1 Chan 48	102°	Rwy Idg	9763	10000
		TDZE	2836	2844
		Apt Elev	2871	2871

ILS Y or LOC Y RWY 10R

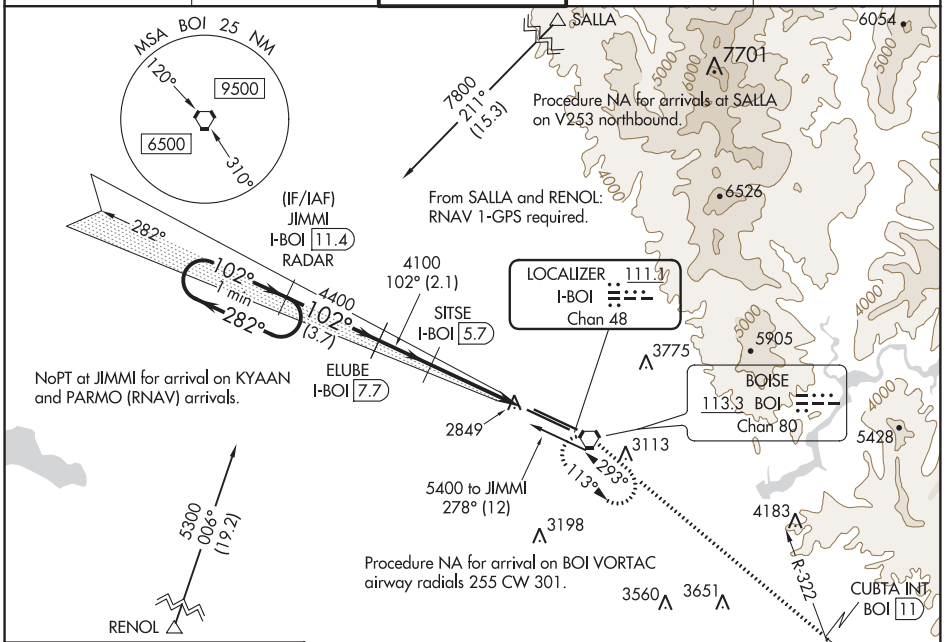
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

T A — 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

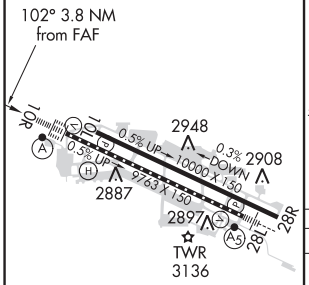
MISSED APPROACH: Climb to 6000 on BOI VORTAC R-113 to CUBTA INT/BOI VORTAC 11 DME and right turn direct BOI VORTAC and hold.

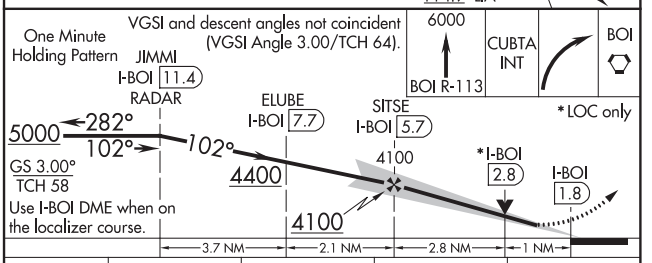
D-ATIS	BIG SKY APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



RADAR or DME REQUIRED

ELEV 2871 D	TDZE 10R 2836
	TDZE 10L 2844





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS Y RWY 10R (SA CAT I)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

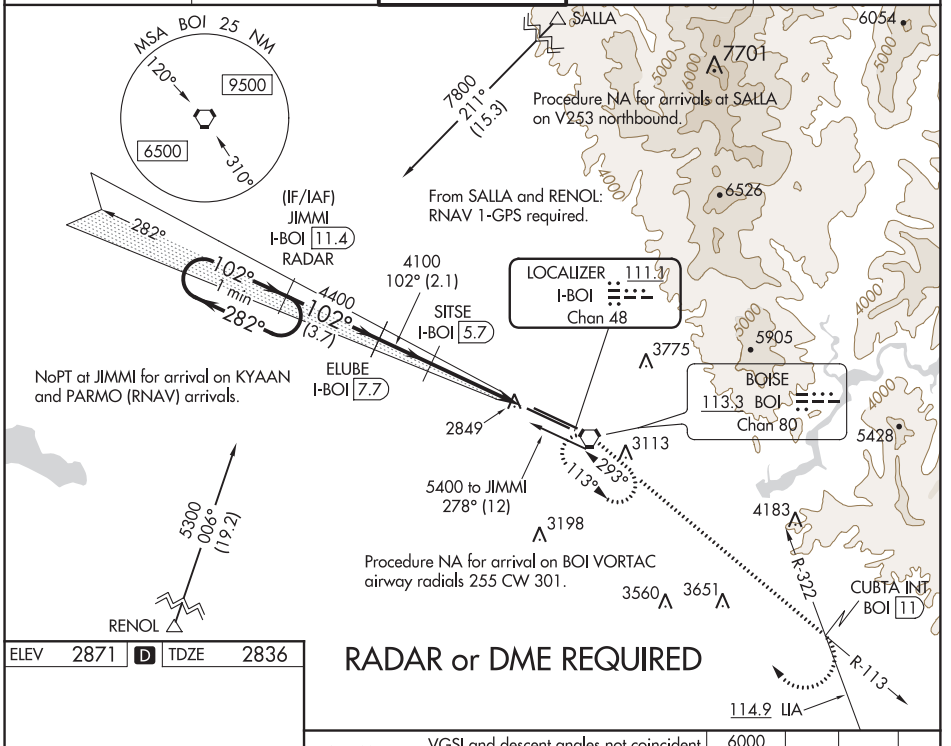
LOC/DME I-BOI	APP CRS	Rwy Idg	9763
111.1 Chan 48	102°	TDZE	2836
		Apt Elev	2871

T A DME required. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2 Rwy 10R

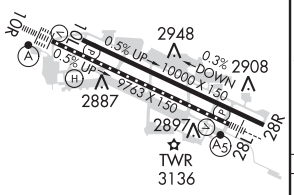
MISSED APPROACH: Climb to 6000 on BOI VORTAC R-113 to CUBTA INT/BOI VORTAC 11 DME and right turn direct BOI VORTAC and hold.

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



ELEV 2871 D TDZE 2836

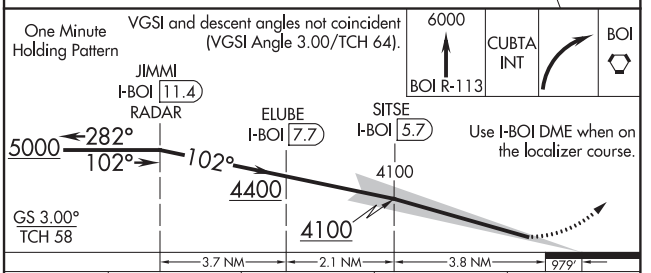
RADAR or DME REQUIRED



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

One Minute Holding Pattern

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 64).



CATEGORY	A	B	C	D
S-ILS 10R	RA 170/14 150 DA 2986			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO

ILS Y RWY 10R (CAT II & III)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

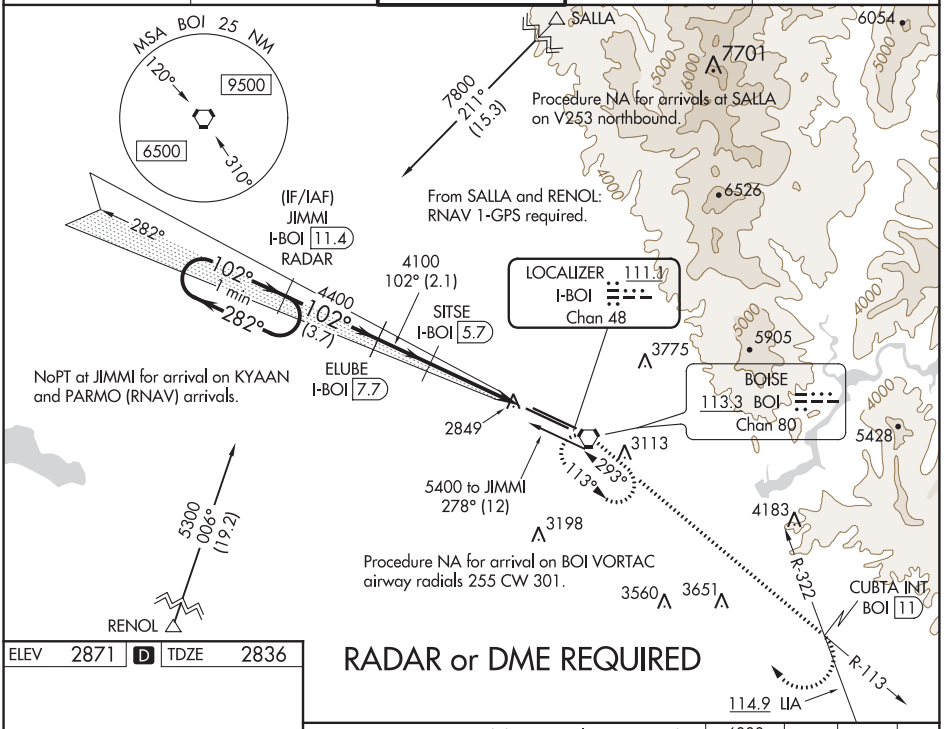
LOC/DME I-BOI	APP CRS	Rwy Idg	9763
111.1	102°	TDZE	2836
Chan 48		Apt Elev	2871

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

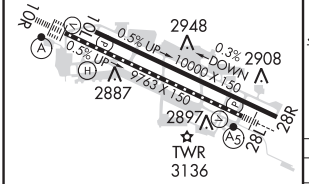
MISSED APPROACH: Climb to 6000 on BOI VORTAC R-113 to CUBTA INT/BOI VORTAC 11 DME and right turn direct BOI VORTAC and hold.

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

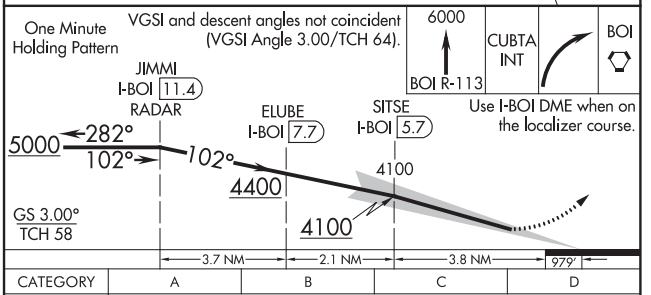


ELEV 2871 D TDZE 2836

RADAR or DME REQUIRED



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L



CATEGORY	A	B	C	D
S-ILS 10R	CAT II RA 102/12 100 DA 2936			
S-ILS 10R	CAT III RVR 03			

CATEGORY II and III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	9763
282°	TDZE	2858
	Apt Elev	2871

RNAV (RNP) X RWY 28L

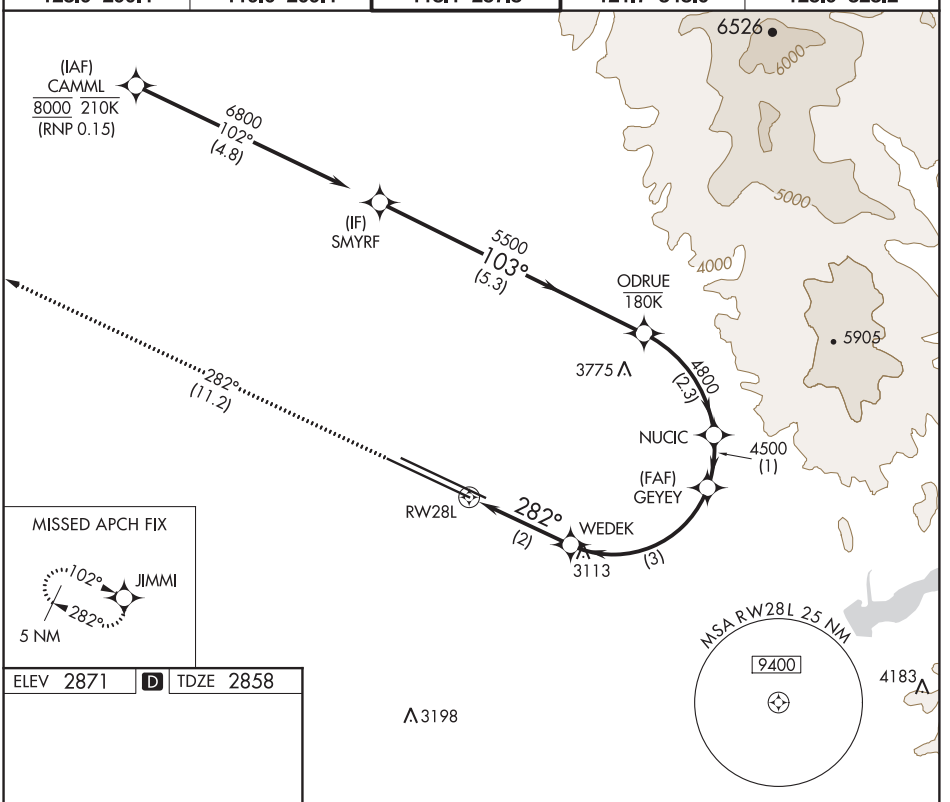
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

T NA — For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 53°C (128°F). RF required. GPS required.

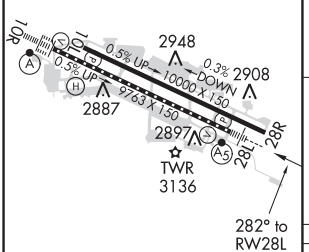
MALSR

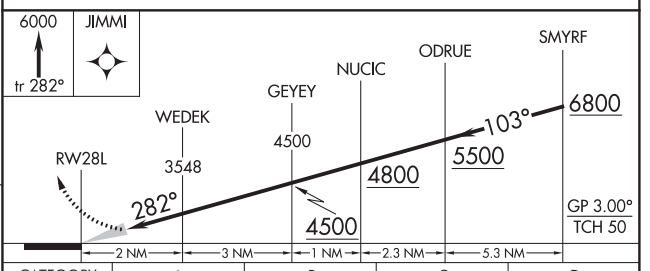
MISSED APPROACH: Climb to 6000 on track 282° to JIMMI and hold, continue climb-in-hold to 6000.

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO AL-57 (FAA) 19003

APP CRS	Rwy Idg	10000
282°	TDZE	2871
	Apt Elev	2871

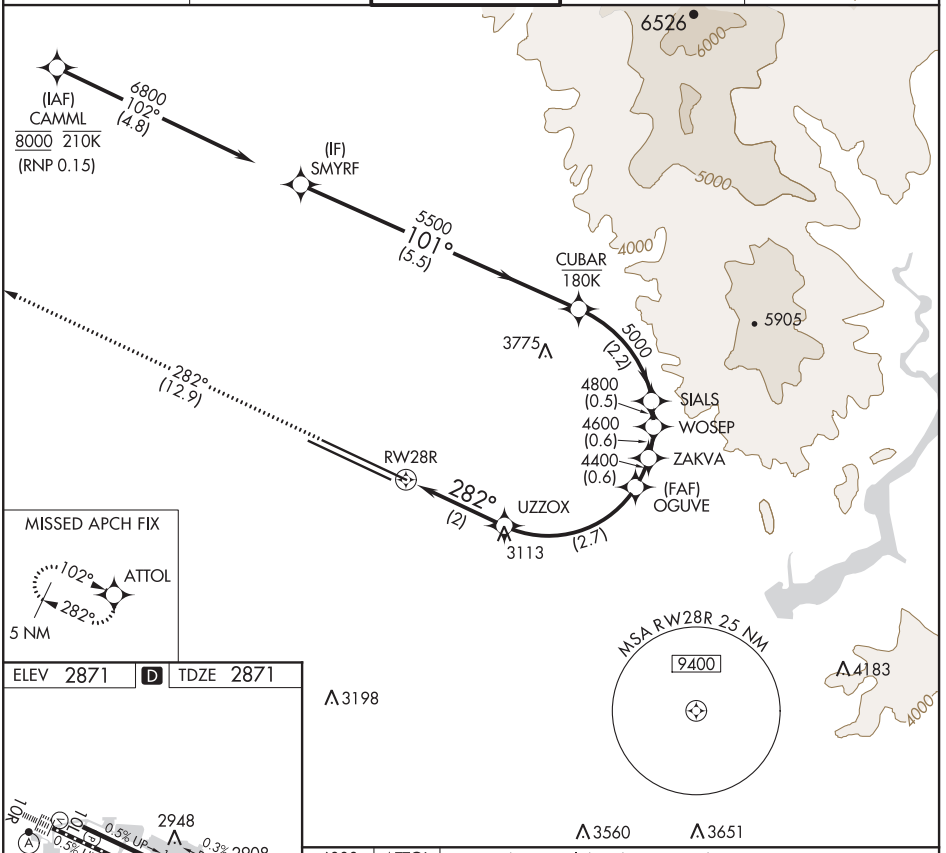
RNAV (RNP) X RWY 28R

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

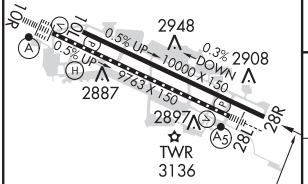
T NA — For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 52°C (126°F). RF required. GPS required.

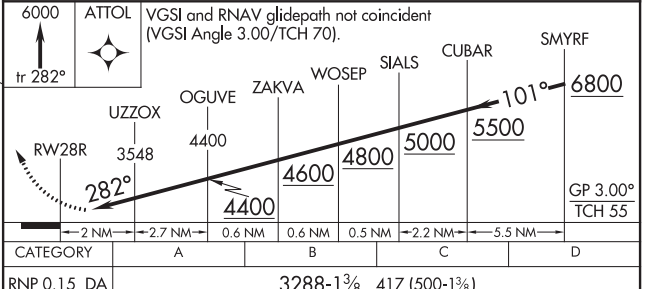
MISSED APPROACH: Climb to 6000 on track 282° to ATTOL and hold.

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)			

AUTHORIZATION REQUIRED

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

BOISE, IDAHO
Orig-A 07DEC17

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
43°34'N-116°13'W
RNAV (RNP) X RWY 28R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	10000
102°	TDZE	2844
	Apt Elev	2872

RNAV (RNP) Z RWY 10L

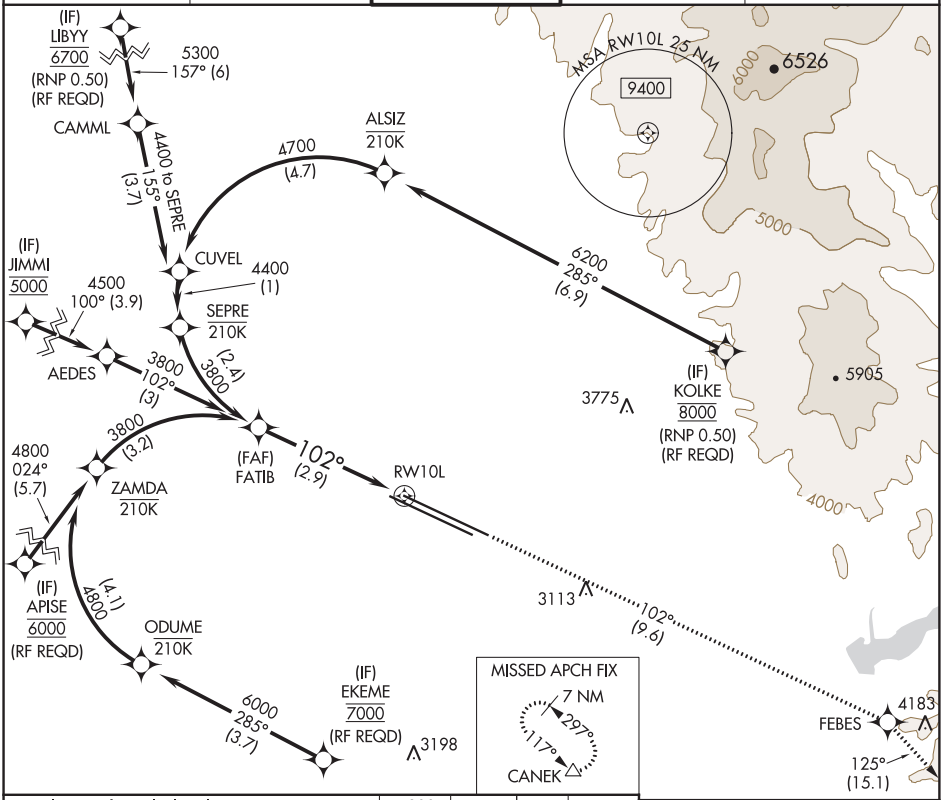
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

RNP AR APCH

For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C .

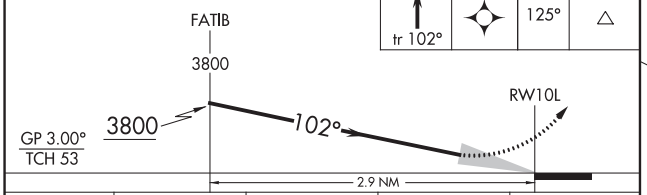
MISSED APPROACH: Climb to 7300 on track 102° to FEBES and on track 125° to CANEK and hold.

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.

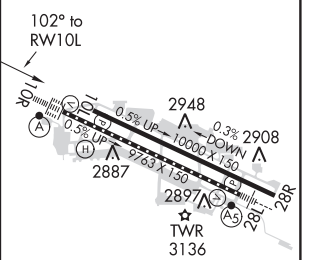
7300	FEBES	tr	CANEK
tr 102°		125°	



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO | AL-57 (FAA) | 19003

RNAV (RNP) Z RWY 10R

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

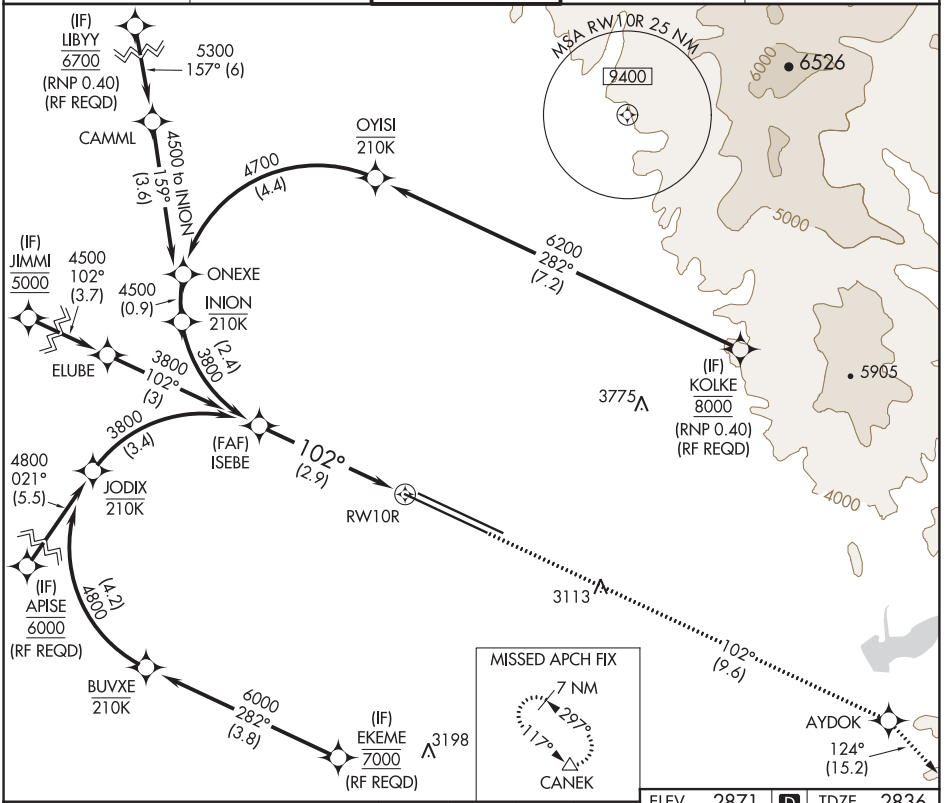
APP CRS	Rwy Idg	9763
102°	TDZE	2836
	Apt Elev	2871

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 51°C (124°F). GPS required.

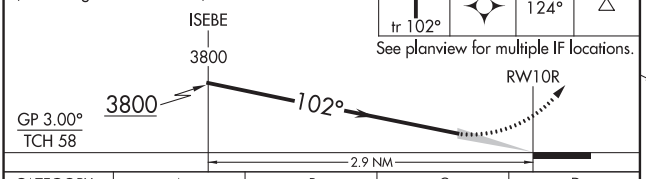
ALSF-2

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).



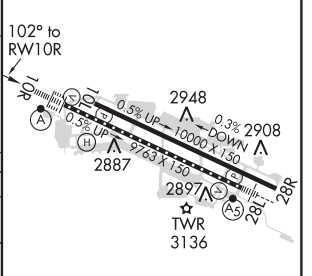
7300	AYDOK	tr	CANEK
tr 102°		124°	

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 | TDZ 2836



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

BOISE, IDAHO
Amdt 1A 07DEC17

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
43°34'N-116°13'W
RNAV (RNP) Z RWY 10R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS		
282°	Rwy Idg	9763
	TDZE	2858
	Apt Elev	2871

RNAV (RNP) Z RWY 28L

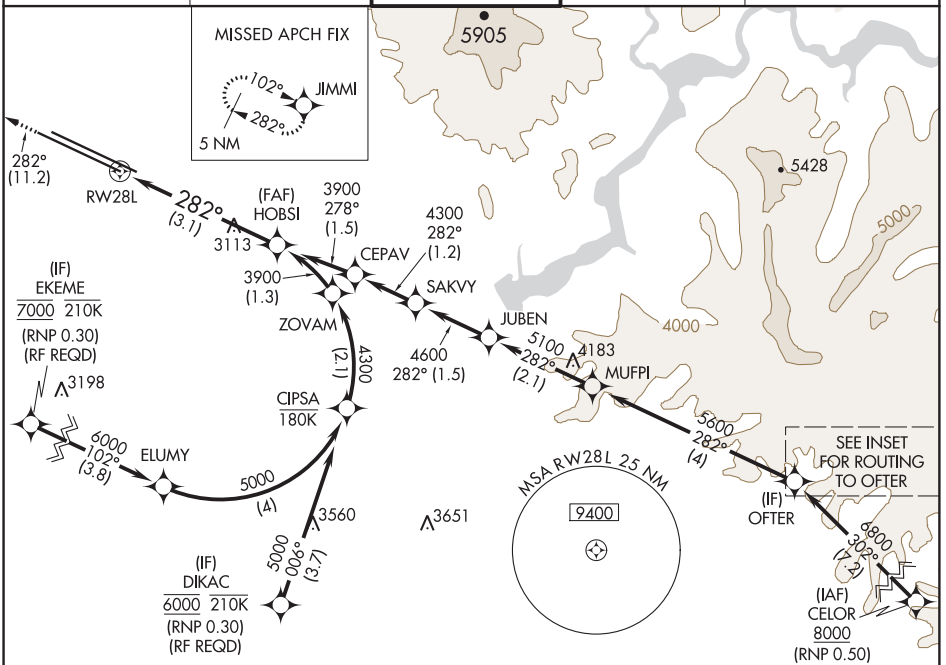
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 53°C (128°F). GPS required.

MALSR

MISSED APPROACH: Climb to 6000 on track 282° to JIMMI and hold, continue climb-in-hold to 6000.

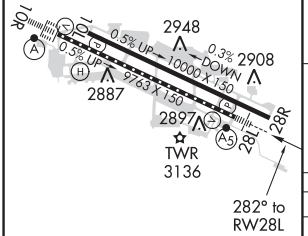
D-ATIS	BIG SKY APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



NW-1, 30 JAN 2020 to 26 MAR 2020

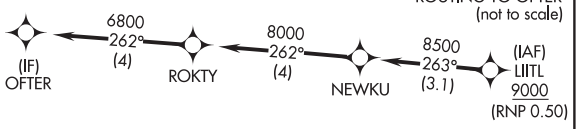
NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 2871 D TDZE 2858

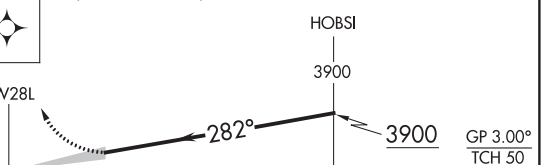


REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

ROUTING TO OFTER
(not to scale)



6000 tr 282° | JIMMI | See planview for multiple IF locations.



CATEGORY	A	B	C	D
RNP 0.15 DA	3276/47	418 (500-1)		
RNP 0.30 DA	3346/60	488 (500-1¼)		

AUTHORIZATION REQUIRED

BOISE, IDAHO | AL-57 (FAA) | 19003

APP CRS	Rwy Idg	10000
282°	TDZE	2871
	Apt Elev	2871

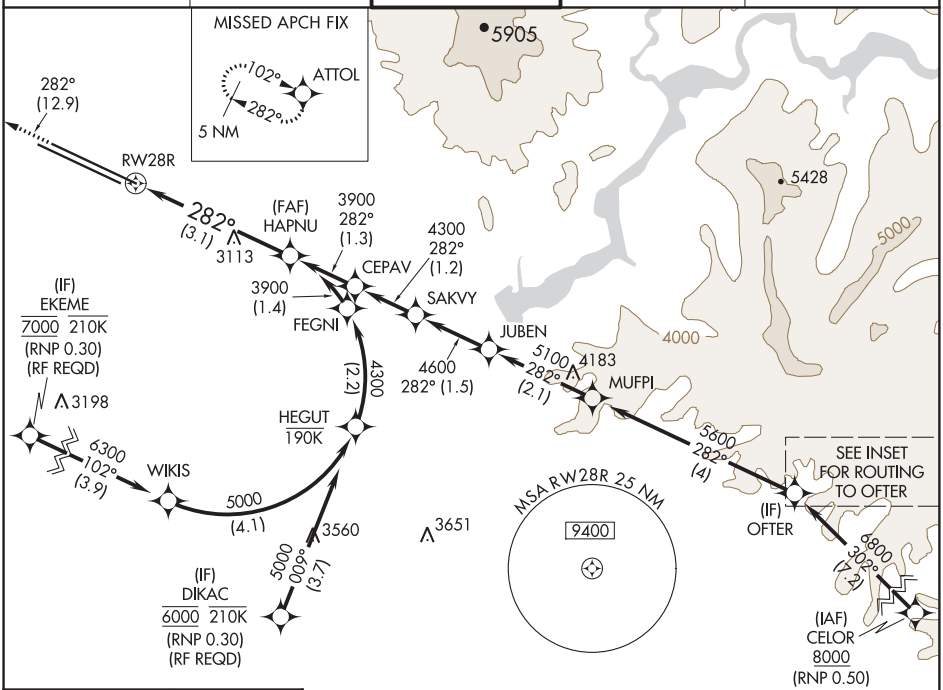
RNAV (RNP) Z RWY 28R

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 52°C (126°F). GPS required.

MISSED APPROACH: Climb to 6000 on track 282° to ATTOL and hold.

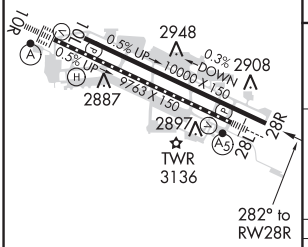
D-ATIS	BIG SKY APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



NW-1, 30 JAN 2020 to 26 MAR 2020

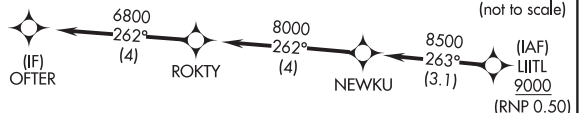
NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 2871 | D | TDZE 2871



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

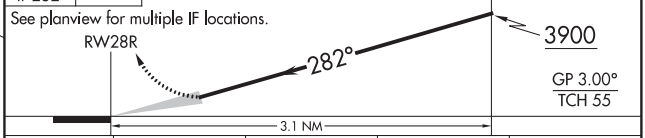
ROUTING TO OFTER (not to scale)



6000 tr 282° | ATTOL

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	3288-1⅜ 417 (500-1⅜)			
RNP 0.30 DA	3344-1⅝ 473 (500-1⅝)			

AUTHORIZATION REQUIRED

BOISE, IDAHO
Amdt 1A 07DEC17

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
43°34'N-116°13'W
RNAV (RNP) Z RWY 28R

WAAS	APP CRS	Rwy Idg	10000
CH 78102	102°	TDZE	2844
W10A		Apt Elev	2872

RNAV (GPS) Y RWY 10L

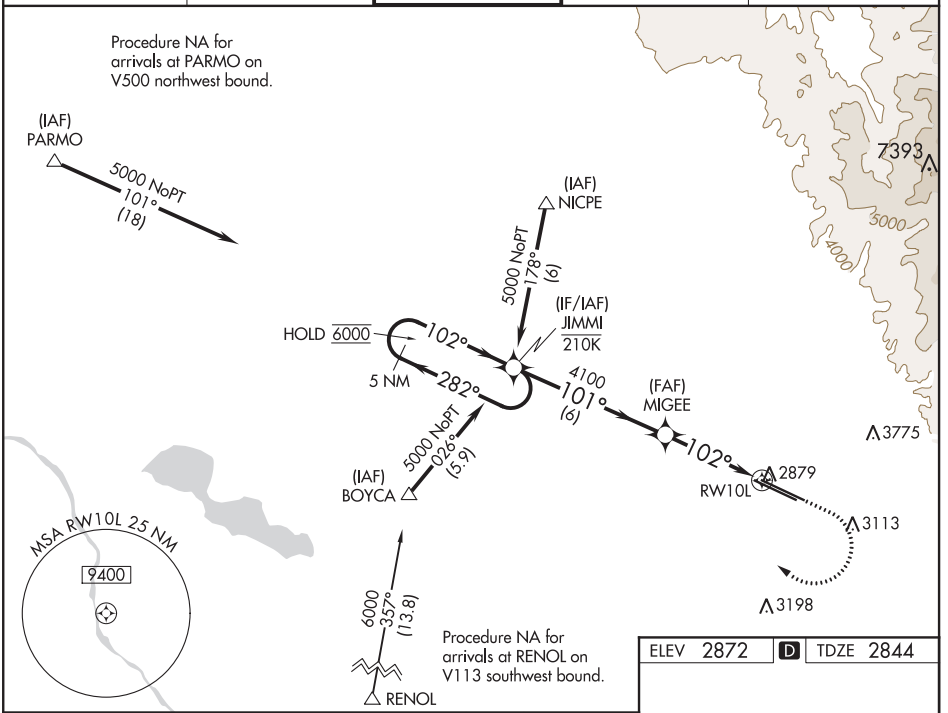
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

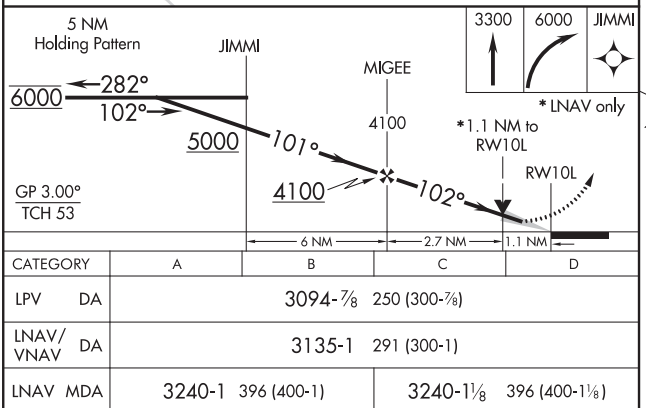
RNP APCH.

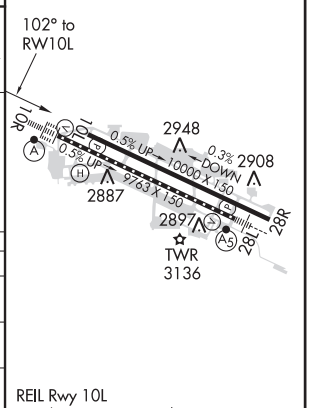
Circling NA north of Rwy 10L-28R.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C.

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)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO | AL-57 (FAA) | 19003

RNAV (GPS) Y RWY 10R

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

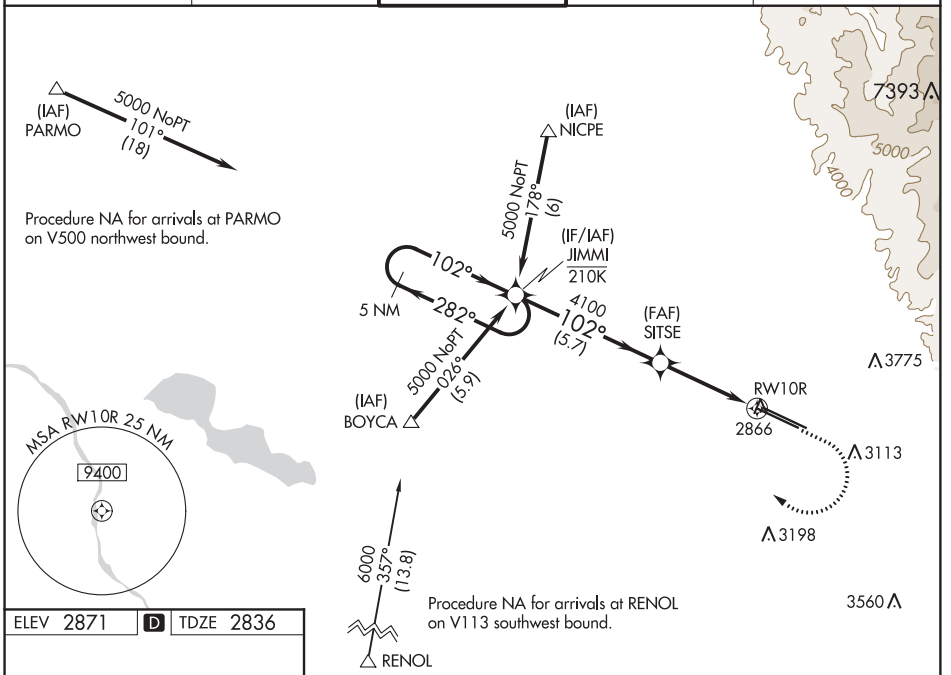
WAAS	APP CRS	Rwy Idg	9763
CH 40203	102°	TDZE	2836
W10B		Apt Elev	2871

T A 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.

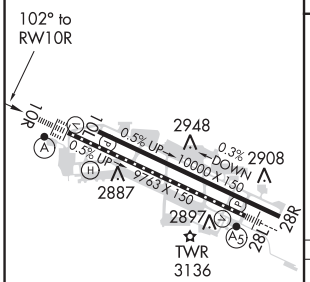
ALSF-2

MISSED APPROACH: Climb to 3300 then climbing right turn to 6000 direct JIMMI and hold, continue climb-in-hold to 6000.

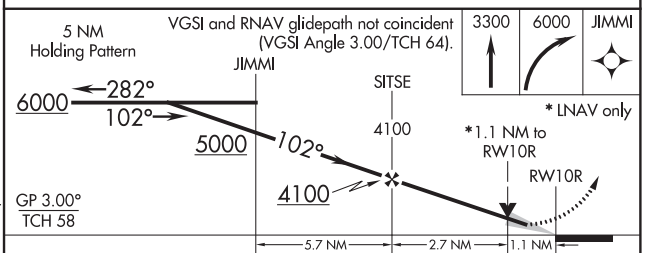
D-ATIS	BIG SKY APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



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)

BOISE, IDAHO
Amdt 2A 07DEC17

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
43°34'N-116°13'W
RNAV (GPS) Y RWY 10R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 28L

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

WAAS	APP CRS	Rwy Idg	9763
CH 77702	282°	TDZE	2858
W28A		Apt Elev	2871

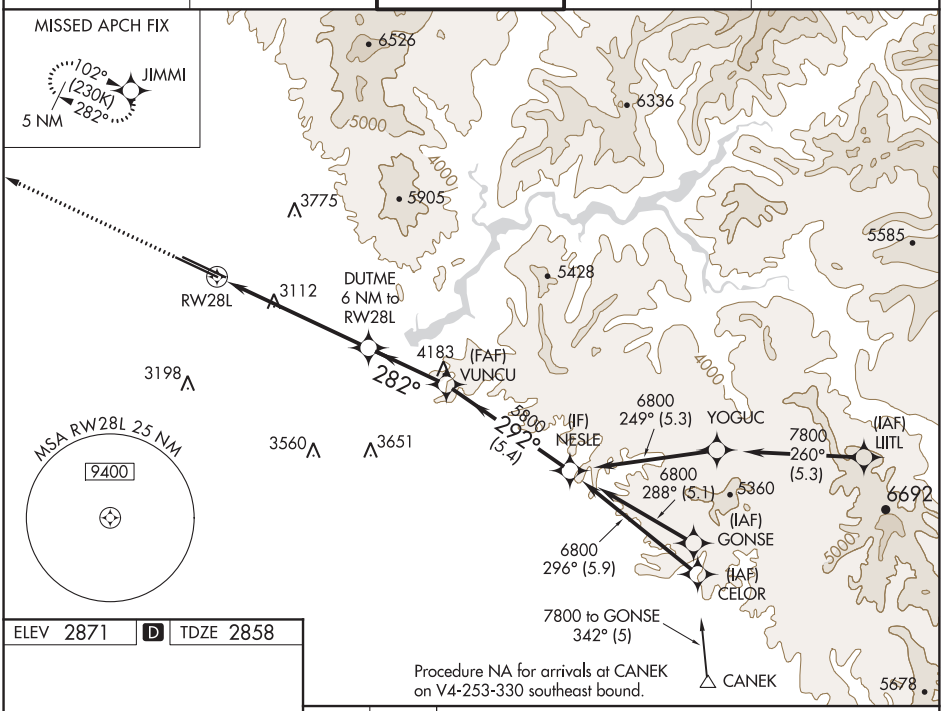
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 52°C (126°F). Circling NA north of Rwy 10L-28R. DME/DME RNP-0.3 NA. For inop ALS, increase LPV all Cats visibility to RVR 5000, LNAV/VNAV Cat E visibility to 1⅜ SM, and LNAV Cat C/D/E visibility to 1¾ SM.

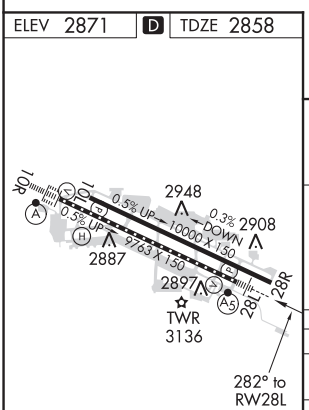
MALSR (A5)

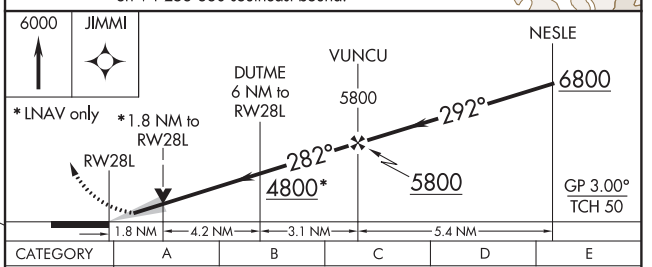
MISSED APPROACH: Climb to 6000 direct JIMMI and hold, continue climb-in-hold to 6000.

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

MISSED APCH FIX







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO | AL-57 (FAA) | 19003

RNAV (GPS) Y RWY 28R

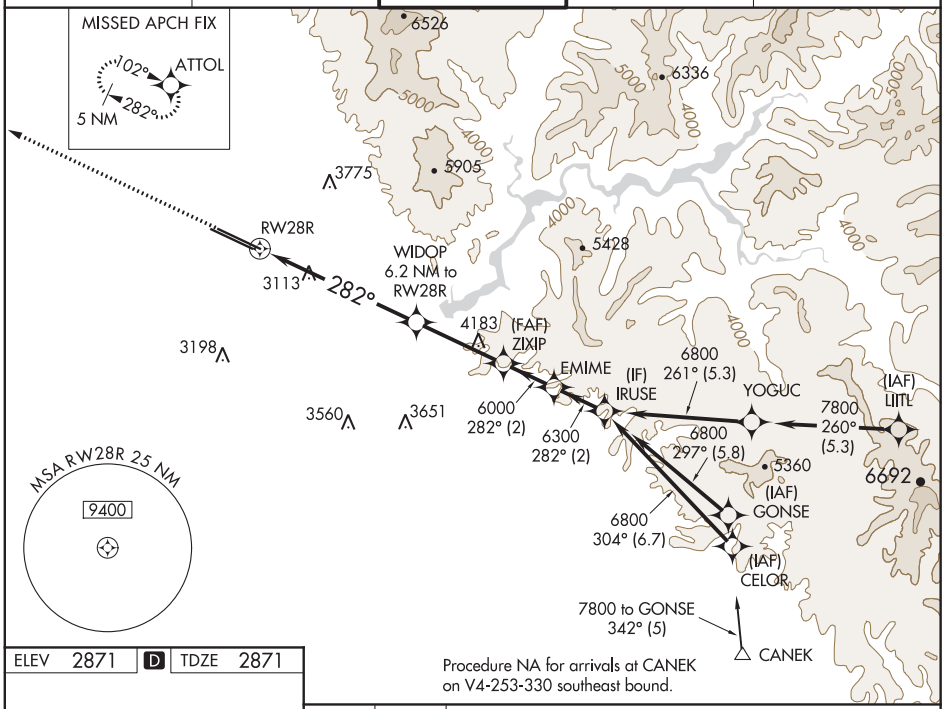
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

WAAS	APP CRS	Rwy Idg	10000
CH 65803	282°	TDZE	2871
W28B		Apt Elev	2871

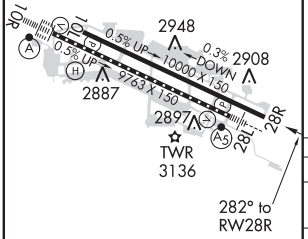
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 52°C (126°F).
Circling NA north of Rwy 10L-28R. DME/DME RNP-0.3 NA.

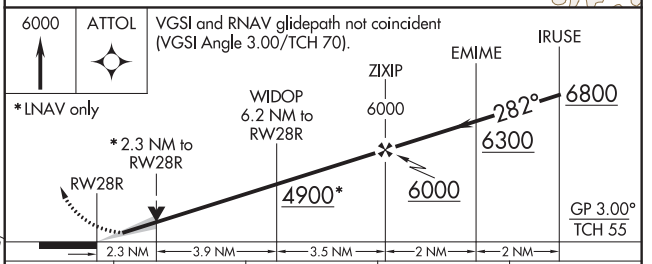
MISSED APPROACH: Climb to 6000 direct ATTOL and hold, continue climb-in-hold to 6000.

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





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)

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME or TACAN RWY 10L

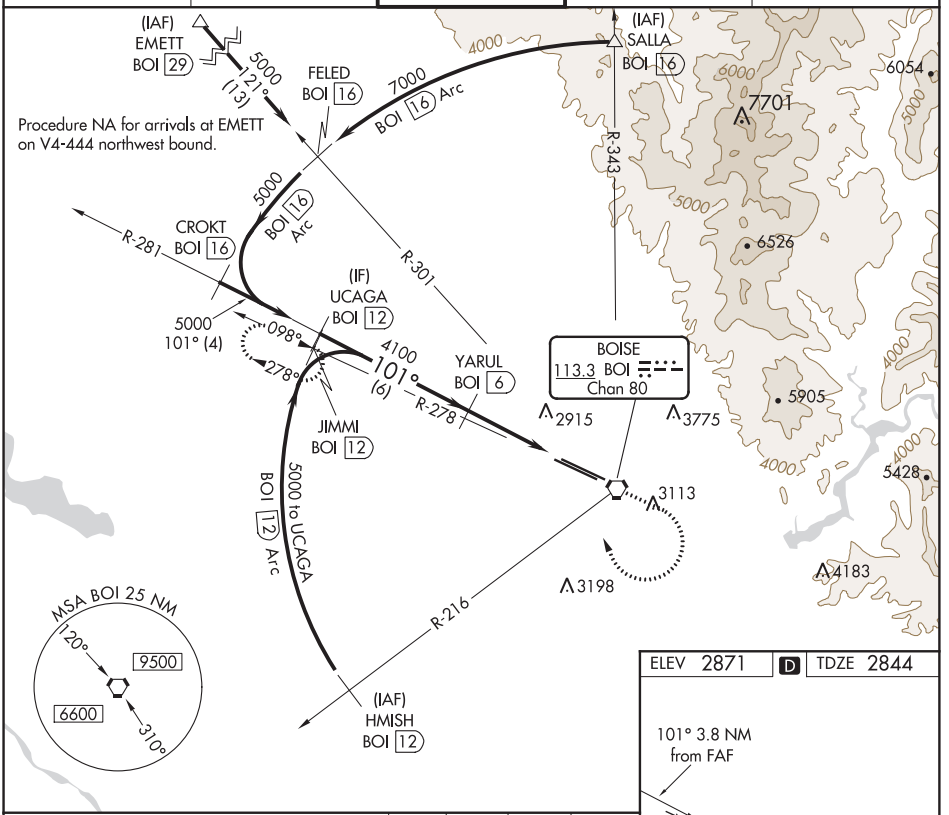
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

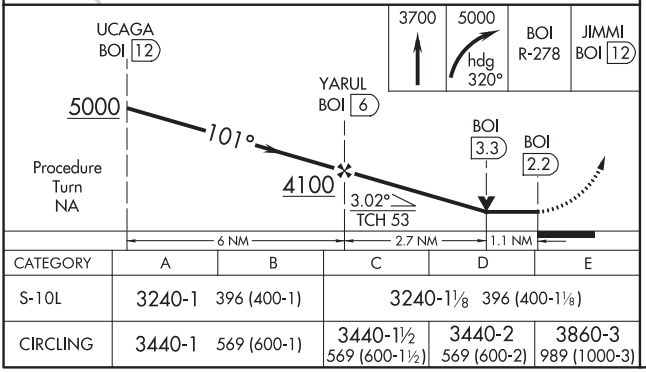
VORTAC BOI	APP CRS	Rwy Idg	10000
113.3	101°	TDZE	2844
Chan 80		Apt Elev	2871

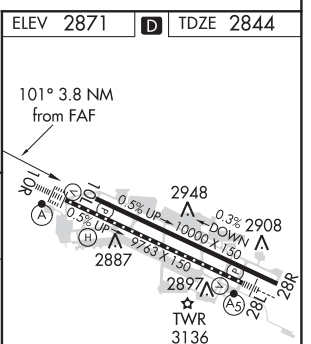
T A — Circling NA north of Rwy 10L-28R. Helicopter visibility reduction below ¾ SM NA.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOISE, IDAHO

AL-57 (FAA)

19003

VOR/DME or TACAN RWY 28L

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

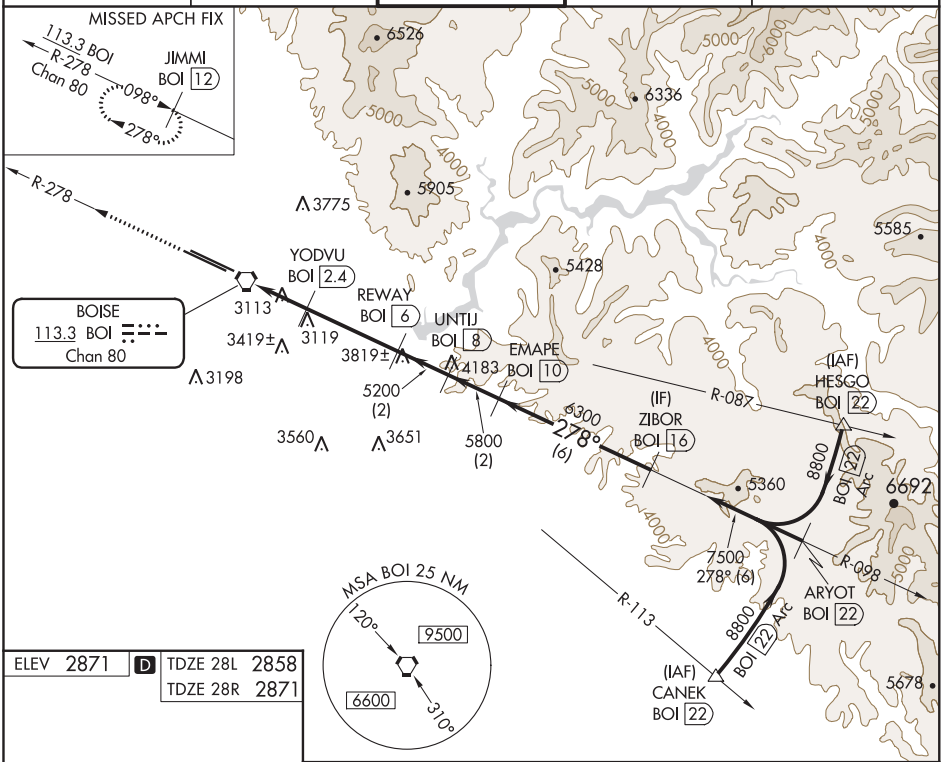
VORTAC BOI 113.3 Chan 80	APP CRS 278°		28L	28R
		Rwy Idg	9763	10000
		TDZE	2853	2871
		Apt Elev	2871	2871

T A — Circling NA north of Rwy 10L-28R. For inoperative MALSR increase S-28L Cat E visibility ½ mile.

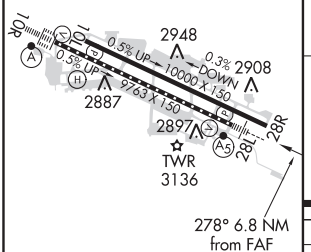
MALSR Rwy 28L (A5)

MISSED APPROACH: Climb to 4500 via BOI VORTAC R-278 to JIMMI/12 DME and hold.

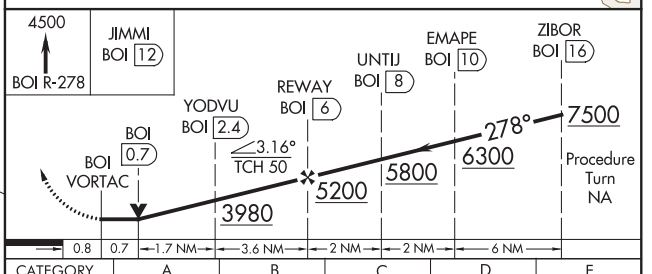
D-ATIS	BIG SKY APP CON	BOISE TOWER	GND CON	CLNC DEL
123.9 290.4	119.6 269.4	118.1 257.8	121.7 348.6	125.9 323.2



ELEV 2871	D	TDZE 28L 2858
		TDZE 28R 2871



REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L



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)

BOISE, IDAHO

Amdt 2 11FEB10

43°34′N-116°13′W

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

VOR/DME or TACAN RWY 28L

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

AL-57 (FAA)

BOISE, IDAHO

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

BOISE, IDAHO

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

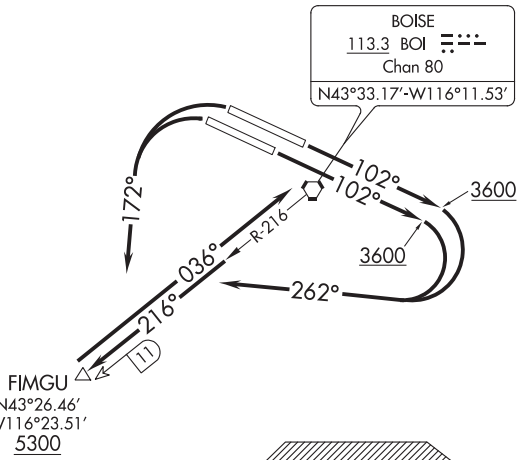
18144

(GOWEN4.BOI) 17341

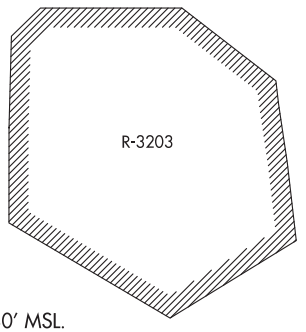
GOWEN FOUR DEPARTURE (OBSTACLE)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
AL-57 (FAA)
BOISE, IDAHO

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

DEPARTURE ROUTE DESCRIPTION

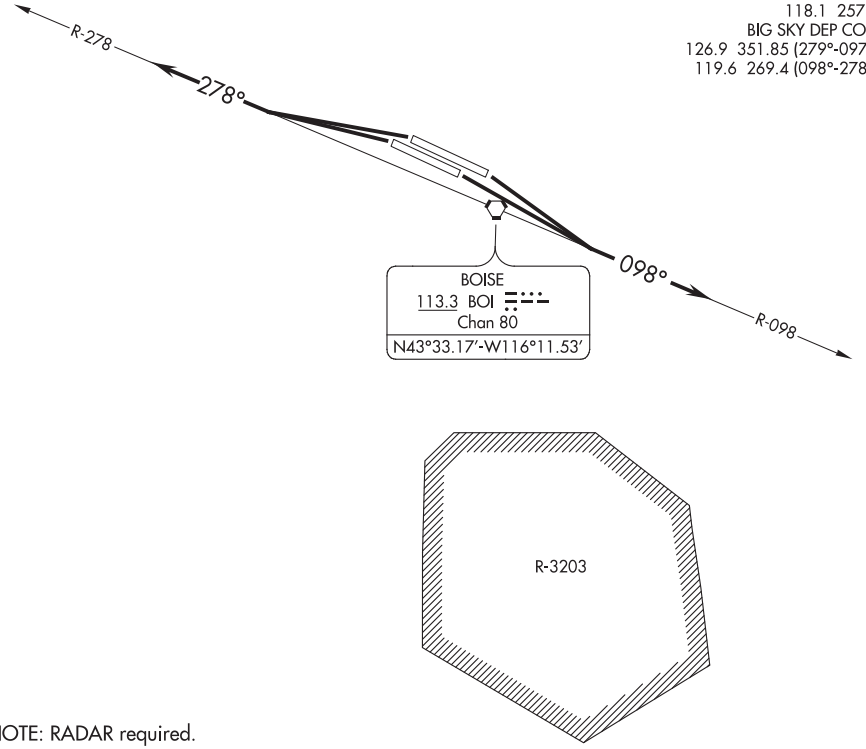
TAKEOFF RUNWAYS 10L/R: Climb heading 102° to 3600 then climbing right turn heading 262°, thence . . . .
TAKEOFF RUNWAYS 28L/R: Climbing left turn heading 172°, thence . . . .

. . . . 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.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BONNERS FERRY, IDAHO | AL-9976 (FAA) | 17173

RNAV (GPS) RWY 2

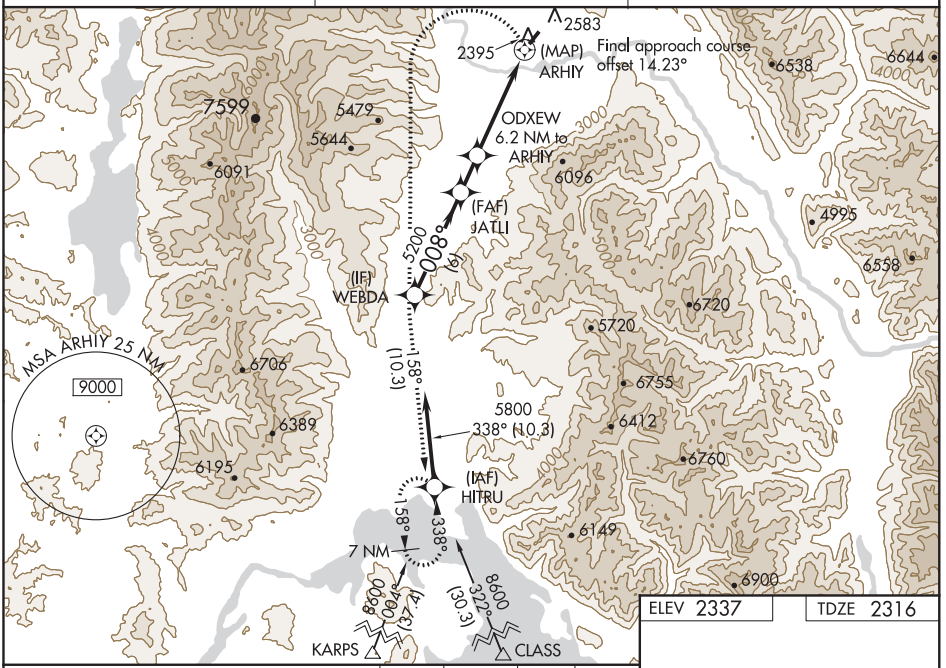
BOUNDARY COUNTY (65S)

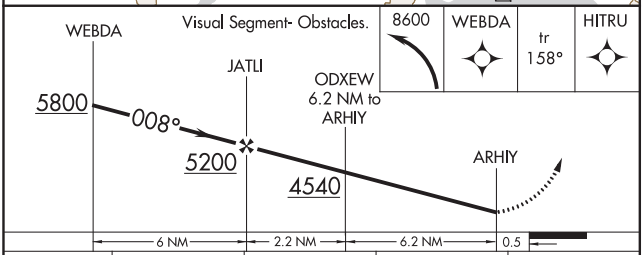
APP CRS		
008°	Rwy Idg	4002
	TDZE	2316
	Apt Elev	2337

T When local altimeter setting not received, procedure NA.
NA DME/DME RNP-0.3 NA.
-8°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.

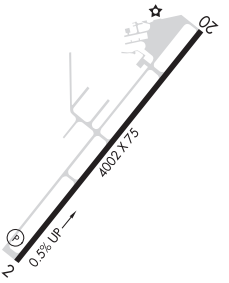
MISSED APPROACH: Climbing left turn to 8600 direct WEBDA and on track 158° to HITRU, continue climb-in-hold to 8600.

AWOS-3PT	SEATTLE CENTER	UNICOM
132.575	123.95 290.55	123.0 (CTAF) L





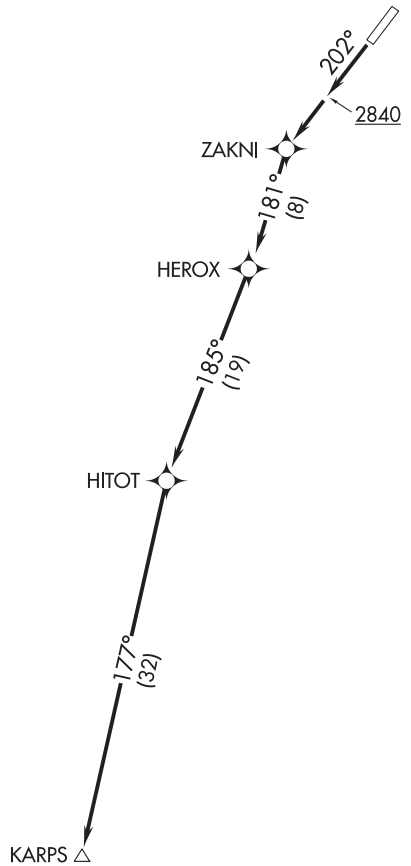
CATEGORY	A	B	C	D
LNAV MDA*	3260-1¼ 944 (1000-1¼)		3260-2¾ 944 (1000-2¾)	NA
LNAV MDA #	3880-1¼ 1564 (1600-1¼)	3880-1½ 1564 (1600-1½)	3880-3 1564 (1600-3)	NA
LNAV MDA	4480-1¼ 2164 (2200-1¼)	4480-1½ 2164 (2200-1½)	4480-3 2164 (2200-3)	NA
CIRCLING	4480-1¼ 2143 (2200-1¼)	4480-1½ 2143 (2200-1½)	4480-3 2143 (2200-3)	NA



MIRL Rwy 2-20 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOZEMAN, MONTANA | AL-59 (FAA) | 19283

ILS or LOC RWY 12

BOZEMAN YELLOWSTONE INTL (BZN)

LOC I-BZN	APP CRS	Rwy Idg	8994
109.3	123°	TDZE	4443
		Apt Elev	4473

RADAR required for procedure entry at BRIGR.

Circling NA to Rwys 3-21 and 11-29.

-33°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

ALTERNATE MISSED APCH FIX

123° 303° MANNI 266 BZ

ZOPKA BZN 15

8000 to FALIA BZN 15 Arc

8000 NoPT to FALIA 042° hdg (4.5) and 123° (2.7)

HOLD 14000 8000

9400 060° (19)

8300 060° (7.9)

HEBIV HIA 19

(IAF) THESE HIA 26.9

(IF/IAF) FALIA BZN 15

(IAF) KICDO BZN 15

8400 NoPT BZN 15 Arc

LOM MANNI 266 BZ BZN 7.6

LOCALIZER 109.3 I-BZN

8100 to FALIA 297° (15)

WHITEHALL 113.7 HIA Chan 84

BOZEMAN 112.4 BZN Chan 71

8000 NoPT BZN 15 Arc

MSA BZ 25 NM

9000 10900 10600 11400

5888

113.7 HIA Chan 84

(IAF) BRIGR INT BZN 15

5941

ELEV 4473 | D | TDZE 4443

123° 7.1 NM from FAF

Rwy 11G-29G: 8994 X 150

0.5% UP 0.4% UP 0.3% UP 0.3% DOWN 0.7% UP

8994 X 150 5050 X 75 2650 X 75

TWR

REIL Rwy 30 L

HIRL Rwy 12-30 L

MIRL Rwy 11-29 L

One Minute Holding Pattern

FALIA BZN 15

BZ MANNI LOM BZN 7.6

* BZN 1.7

BZN 0.5

14000 8000 303° 123°

123° 6800

GS 3.00° TCH 53

7.4 NM 5.9 NM 1.2

5200	8000 hdg 250°	BZN R-223	BRIGR INT

*LOC Only

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) RWY 30

BOZEMAN YELLOWSTONE INTL (BZN)

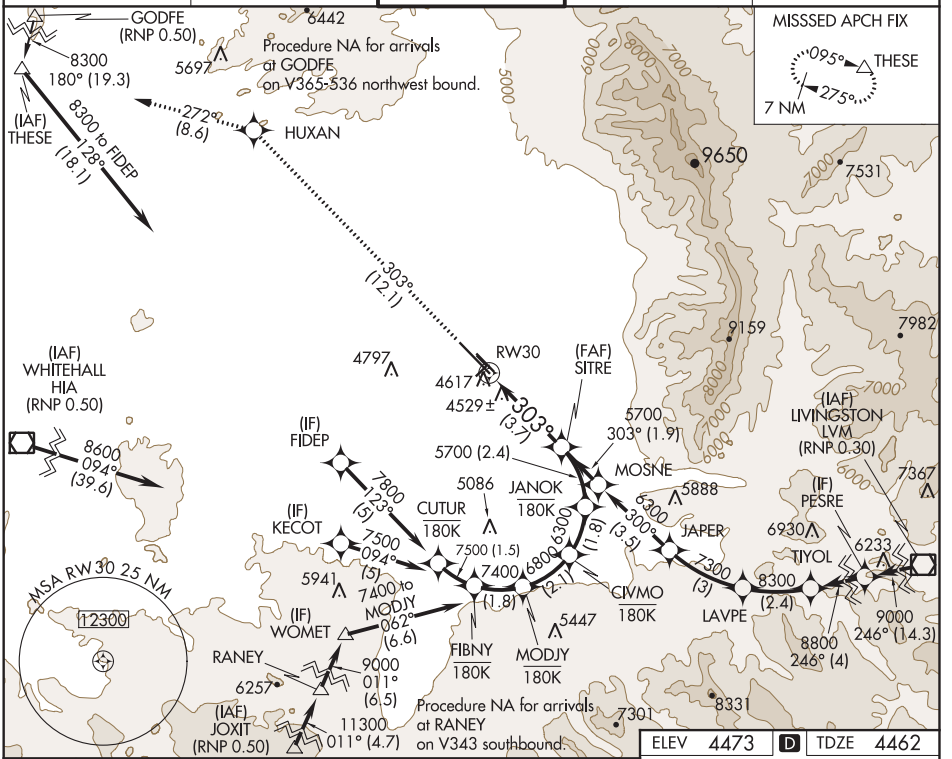
APP CRS		
303°	Rwy Idg	8994
	TDZE	4462
	Apt Elev	4473

T -33°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.

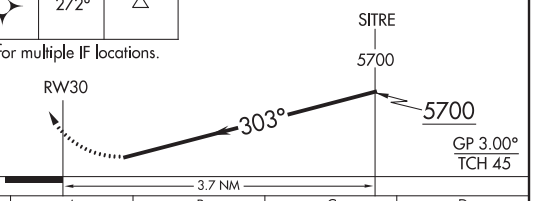
ATIS	BIG SKY APP CON *	BOZEMAN TOWER*	GND CON	UNICOM
135.425	118.975 226.675	118.2 (CTAF) L	121.8	122.95



ELEV 4473 D TDZ 4462

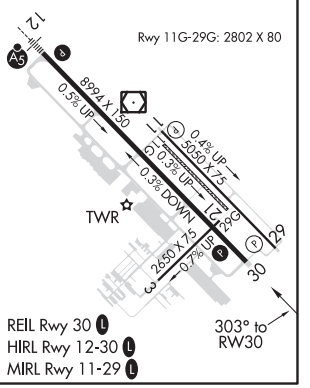
8300	HUXAN	tr	THESE
tr 303°		272°	

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOZEMAN, MONTANA | AL-59 (FAA) | 19283

RNAV (RNP) Z RWY 12

BOZEMAN YELLOWSTONE INTL (BZN)

APP CRS	Rwy Idg	8994
123°	TDZE	4443
	Apt Elev	4473

T -33°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

Procedure NA for arrivals at THESE on V343 northwest bound.

Procedure NA for arrivals at GODFE on V365-536 northwest bound.

MSA RW 12 25 NM 12300

(IAF) GODFE (RNP 0.50)

8100 157° (16.2)

ZIVTI

8300 065° (26.9)

095° 275° 7 NM

(IAF) THESE

7400 092° (8.6)

7400 157° (5)

6400 123° (4.5)

(IF) HUXAN

5600 123° (2.6)

WOSAG

(IAF) WHITEHALL HIA (RNP 0.50)

TETBY 180K

5600 (5.2)

(FAF) JURAL

123° (3.5)

RW12

123° (4.4)

RF REQUIRED

WINIX 180K

7200 (2.9)

8100 (1)

4797

4449±

4617

8300 310° (7.2)

HETSI 240K

KASRE 180K

320° (21.7)

(IF) GATEY

5086

9000 259° (10.1)

JAPER

8100 to WINIX 328° (10.4)

5941

HAXAG 240K

6257

(IF) WOMET

5447 (18.9)

Procedure NA for arrivals at GATEY, RANEY and WOMET on V343 southbound.

9600 011° (6.5)

RANEY

7245

11200 011° (4.7)

8060

(IAF) JOXIT (RNP 0.40)

8242

10154

8603

8483

7301

8331

8038

6233

5888

6930

7367

7725

9159

7982

(IAF) LIVINGSTON LVM (RNP 0.40)

9000 252° (23.1)

7615

7133

6442

8471

5697

7400 157° (5)

9650

7531

5600 123° (2.6)

ELEV 4473 D TDZE 4443

123° to RW12

12

Rwy 11G-29G: 2802 X 80

8994 X 150

0.5% UP

0.4% UP

5050 X 75

0.3% UP

0.3% DOWN

12

29G

TWR

2650 X 75

0.7% UP

30

29

8300	tr 123°	HETSI		HAXAG	tr 320°	THESE

See planview for multiple IF locations.

JURAL

5600

5600

123°

RW12

GP 3.00°

TCH 53

3.5 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	4791-1	348(400-1)		

AUTHORIZATION REQUIRED

REIL Rwy 30 L

HIRL Rwy 12-30 L

MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 12

BOZEMAN YELLOWSTONE INTL (BZN)

WAAS	APP CRS		
CH **72816**	**123°**	Rwy Idg	**8994**
W12A		TDZE	**4443**
		Apt Elev	**4473**

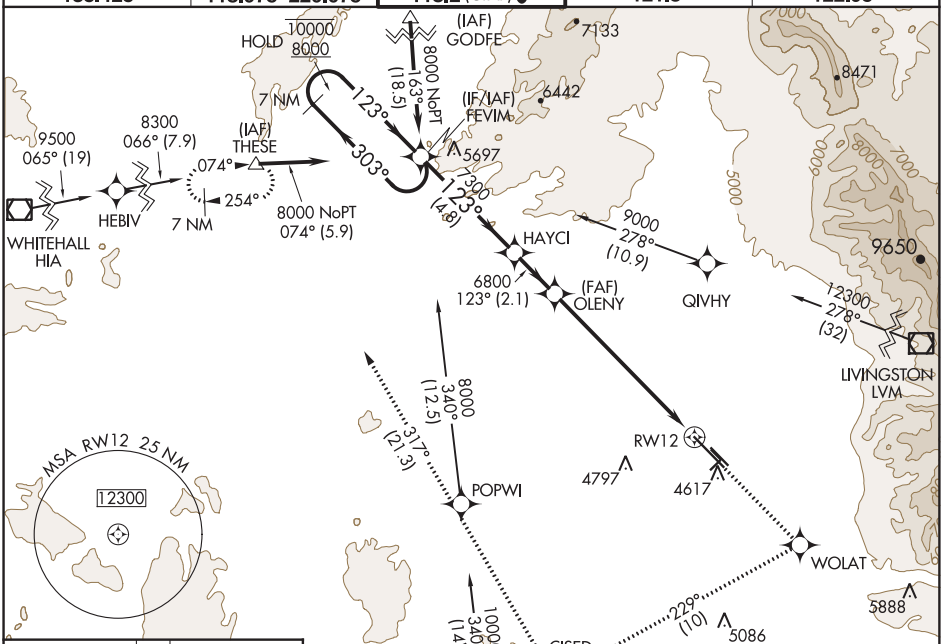
RNP APCH.

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 -33°C LNAV/VNAV visibility to 1⅞ SM and LNAV visibility Cats C and D to 1⅜ SM.

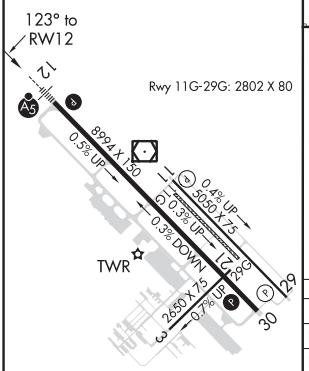
MALSR

MISSED APPROACH: Climb to 8300 direct WOLAT and right turn on track 229° to CISED and on track 317° to THESE and hold.

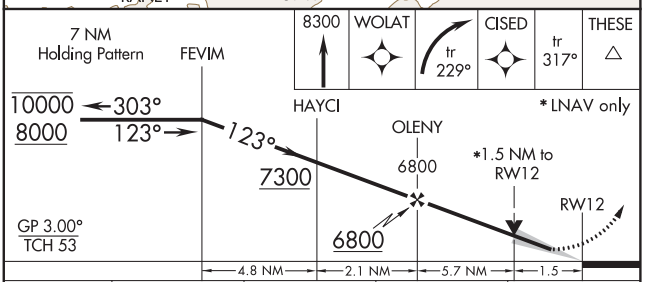
ATIS	BIG SKY APP CON ★	BOZEMAN TOWER ★	GND CON	UNICOM
135.425	**118.975 226.675**	**118.2** (CTAF) L	**121.8**	**122.95**



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BOZEMAN, MONTANA | AL-59 (FAA) | 19283

RNAV (GPS)-A

BOZEMAN YELLOWSTONE INTL (BZN)

APP CRS	Rwy Idg	N/A
303°	TDZE	N/A
	Apt Elev	4473

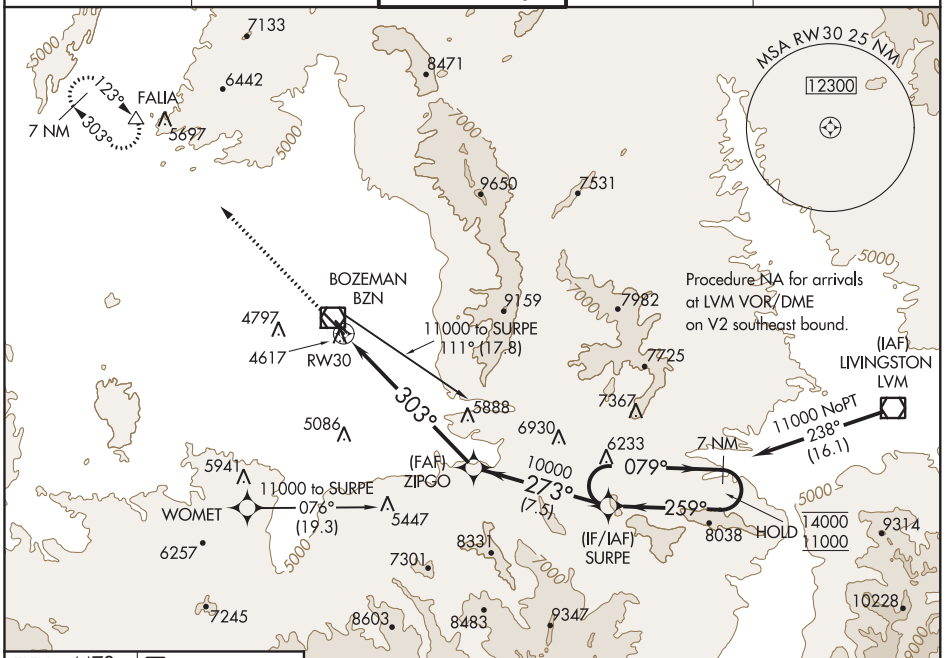
RNP APCH.

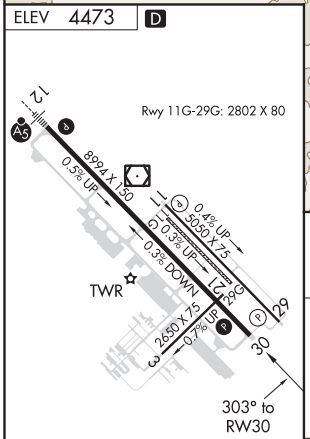
Circling NA to Rwys 3-21 and 11-29.

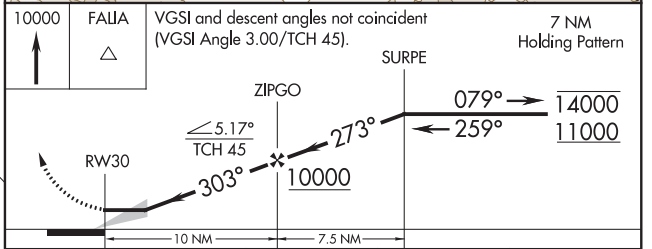
-33°C

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







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)

REIL Rwy 30 L
HIRL Rwy 12-30 L
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 12

BOZEMAN YELLOWSTONE INTL (BZN)

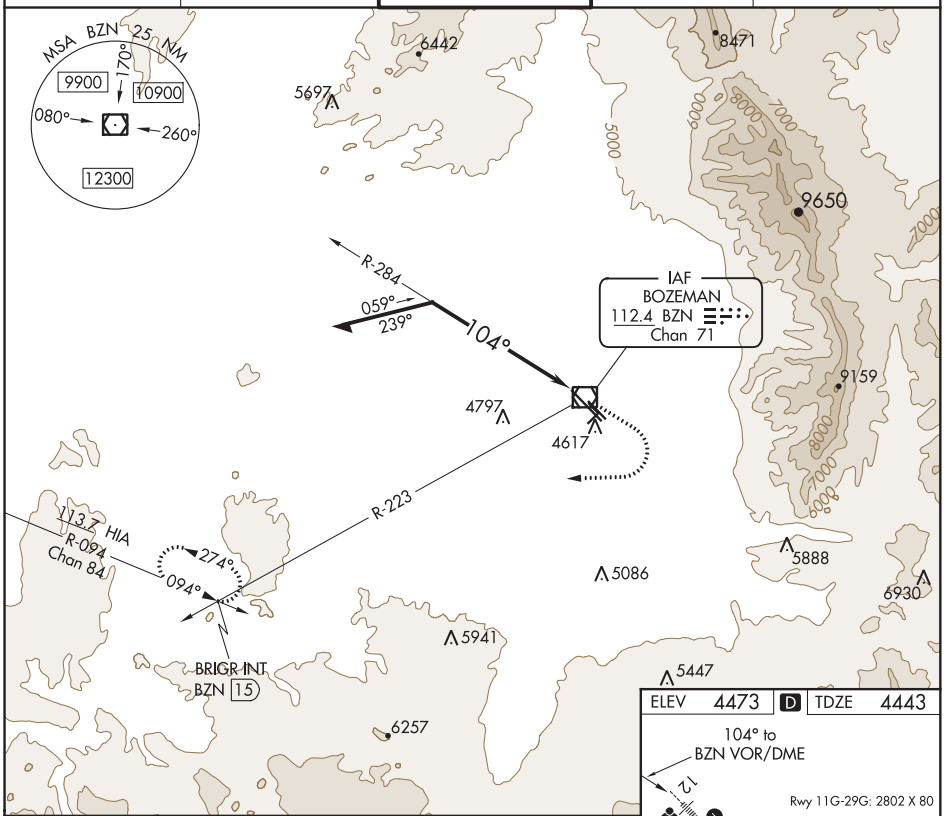
VOR/DME BZN	APP CRS	Rwy Idg	8994
112.4	104°	TDZE	4443
Chan 71		Apt Elev	4473

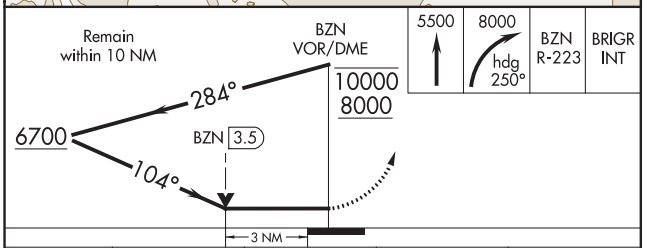
T A -33°C — Circling NA to Rwys 3-21 and 11-29. Inop table does not apply.

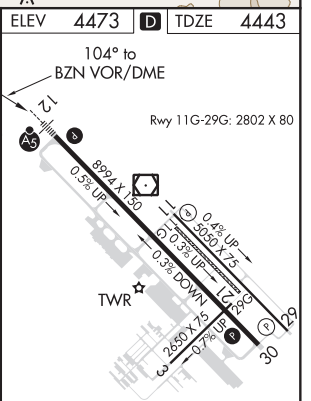
MALSR

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

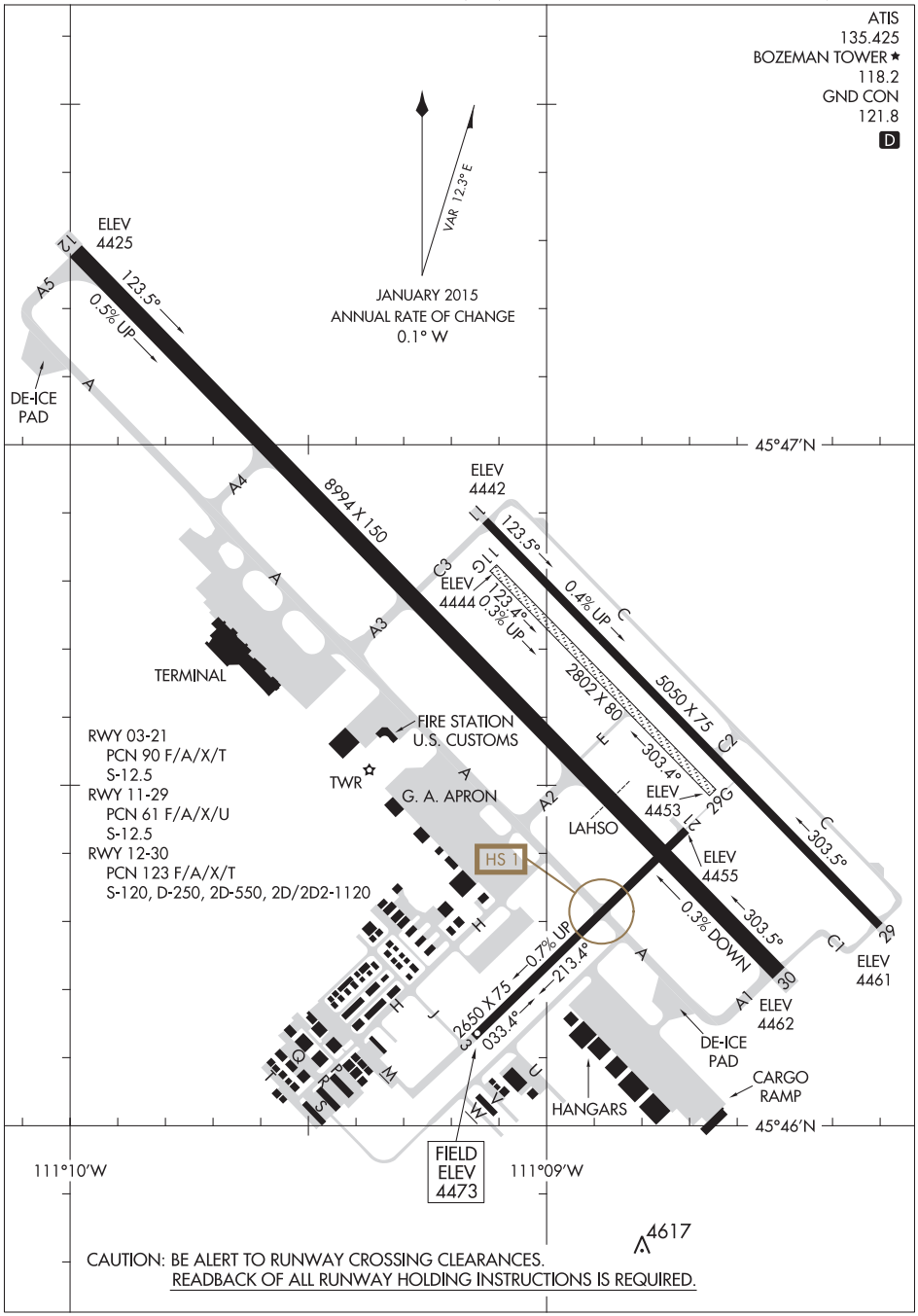
19283

AIRPORT DIAGRAM

AL-59 (FAA)

BOZEMAN YELLOWSTONE INTL (BZN)

BOZEMAN, MONTANA



AIRPORT DIAGRAM

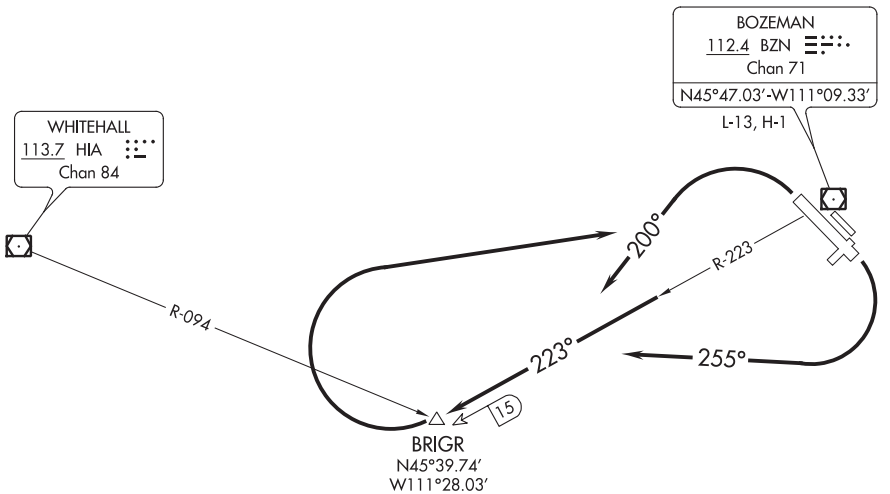
19283

BOZEMAN, MONTANA

BOZEMAN YELLOWSTONE INTL (BZN)

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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.

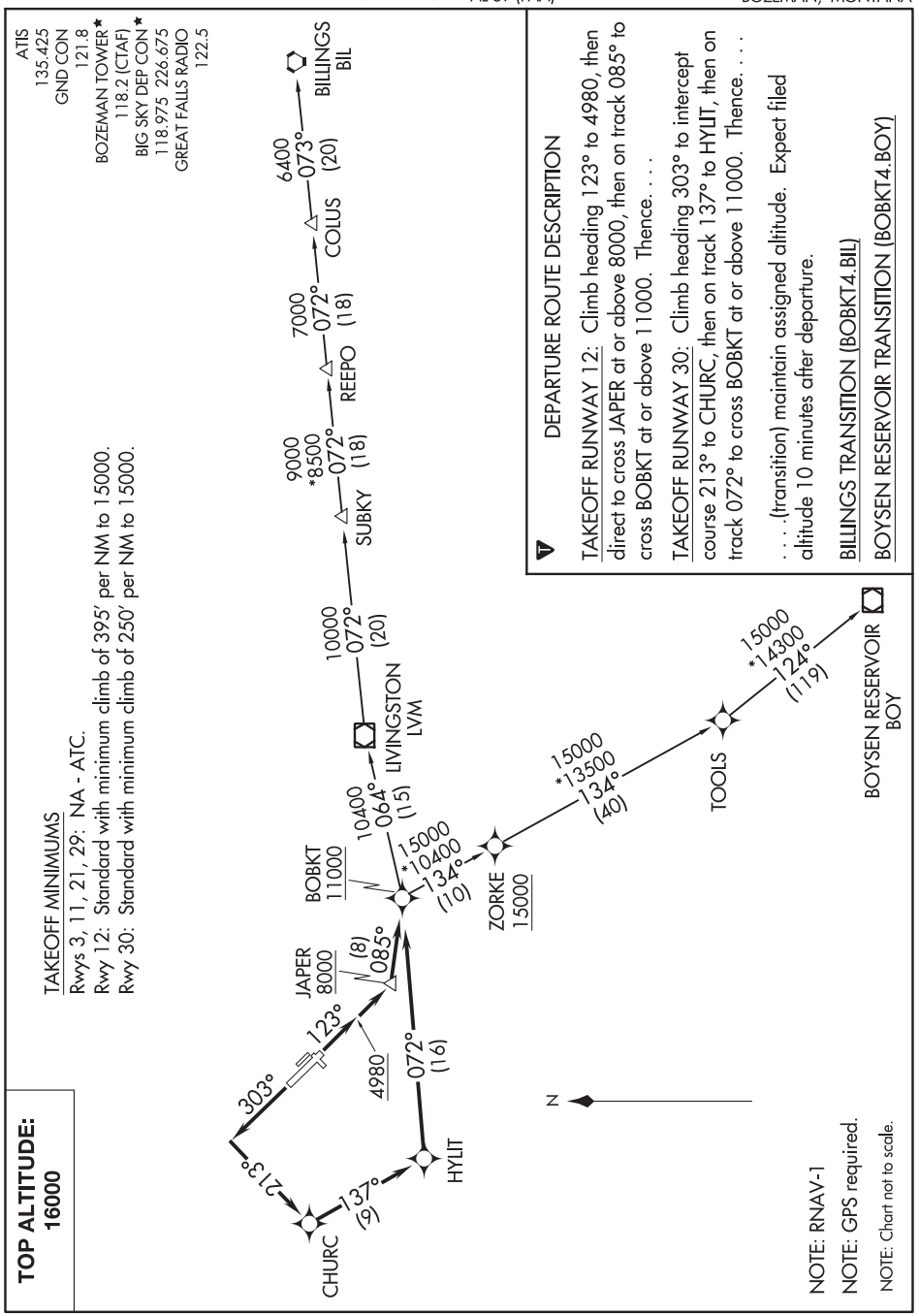
TAKEOFF RUNWAY 30: Climbing left turn heading 200° to intercept BZN R-223 to BRIGR, then continue climbing right turn direct BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

(BOBKT4.BOBKT) 18144

BOBKT FOUR DEPARTURE (RNAV)

AL-59 (FAA)

BOZEMAN YELLOWSTONE INTL (BZN)
BOZEMAN, MONTANA



BOBKT FOUR DEPARTURE (RNAV)

(BOBKT4.BOBKT) 24MAY18

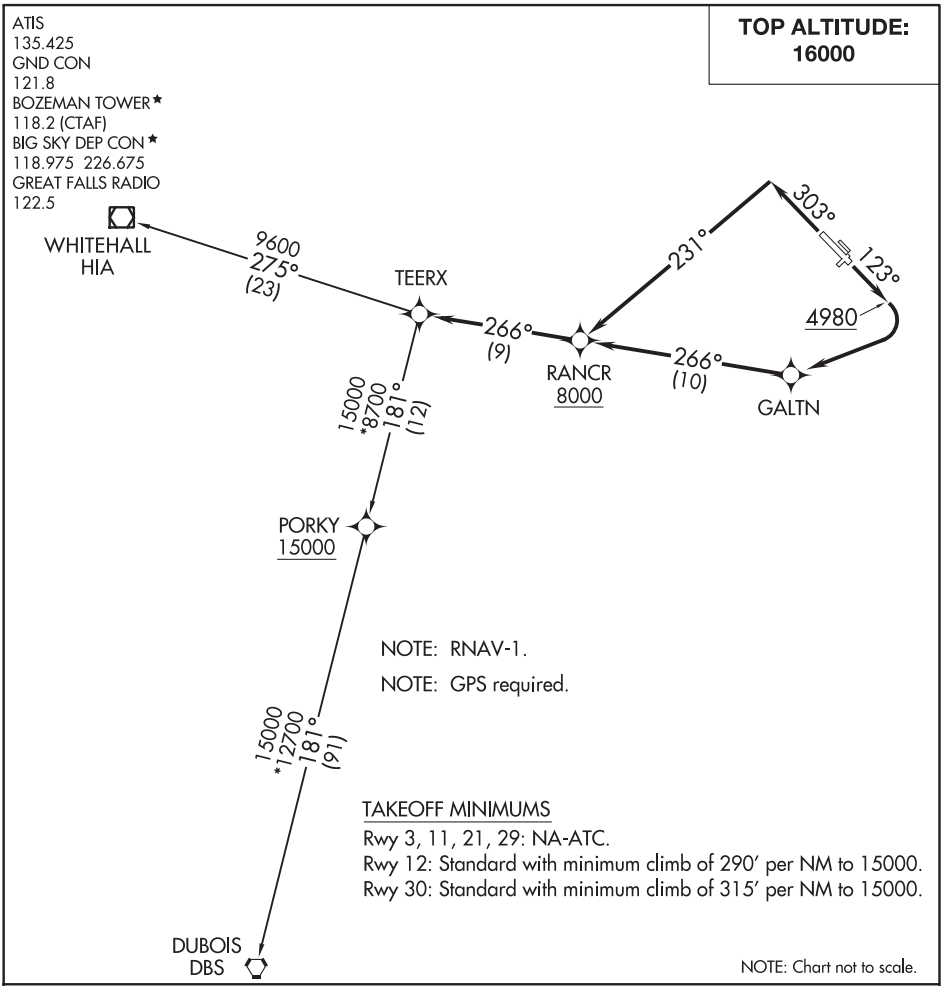
BOZEMAN, MONTANA
BOZEMAN YELLOWSTONE INTL (BZN)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

TEERX FOUR DEPARTURE (RNAV)

NW-1, 30 JAN 2020 to 26 MAR 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)

(HIA5.HIA) 18144

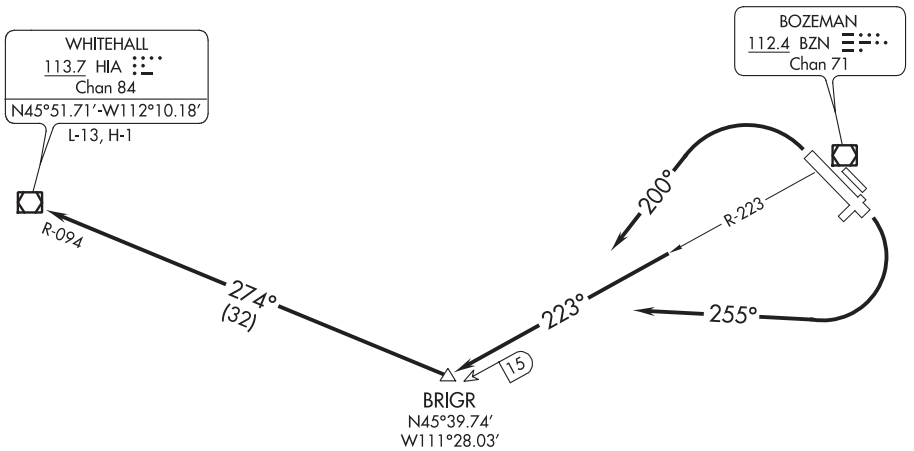
WHITEHALL FIVE DEPARTURE

BOZEMAN YELLOWSTONE INTL (BZN)
BOZEMAN, MONTANA

AL-59 (FAA)

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.

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.

WHITEHALL FIVE DEPARTURE

(HIA5.HIA) 24MAY18

BOZEMAN, MONTANA
BOZEMAN YELLOWSTONE INTL (BZN)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-PWT	APP CRS	Rwy Idg	6000
111.1	197°	TDZE	442
		Apt Elev	444

ILS or LOC RWY 20
BREMERTON NATIONAL (PWT)

T A 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

ALTERNATE MISSED APPROACH FIX
CARRO SEA 23.9
116.8 SEA R-230 Chan 115
050°
230°
113.4 OLM R-346 Chan 81

MSA SEA 25 NM
3400
070°
6400
2200
340°
090°

152°
332°
017°
X (CFFWM)
197°
(IAF)
WUMOX INT
1298
2399
1454
1000
931
574±
701±
R-355
R-282
Procedure NA for arrival on SEA VORTAC airway radials 230 CW 310.
SEATTLE 116.8 SEA Chan 115
3500
282°
(17.4)
LOCALIZER 111.1 I-PWT
Procedure NA for arrival on OLM VORTAC airway radials 012 CW 346.
3500
355°
(38)
R-230
113.4 OLM R-346 Chan 81
346°
166°
CARRO OLM 19.4
OLYMPIA 113.4 OLM Chan 81

ELEV 444 TDZE 442
197° 6.3 NM from FAF
6000 X 150
REIL Rwy 2 L
HIRL Rwy 2-20

4000
hdg 197°
OLM R-346
CARRO
WUMOX INT
3500
017°
2500
197°
3000
2500
GS 3.00°
TCH 49
Remain within 10 NM
6.3 NM

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

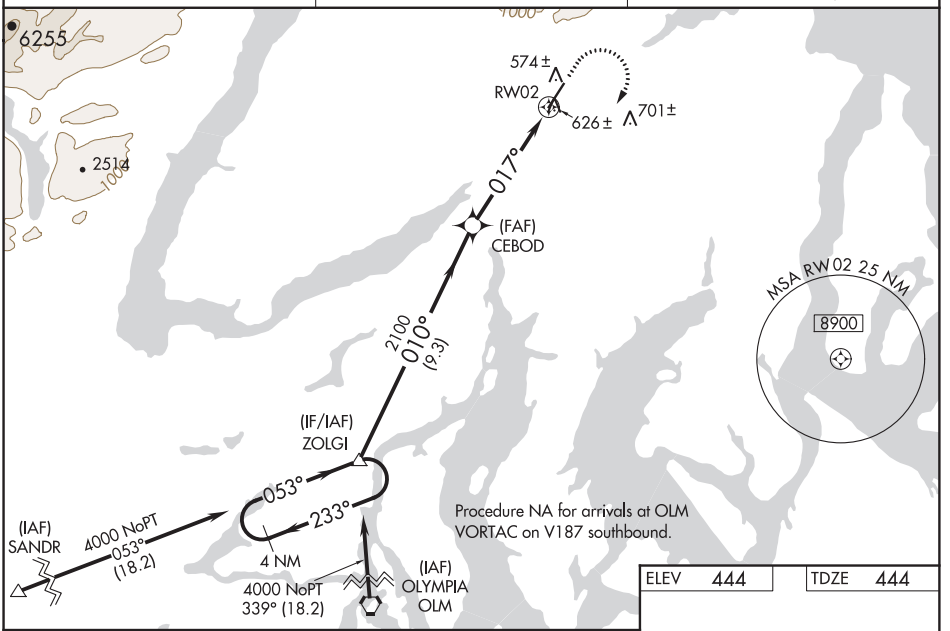
RNAV (GPS) RWY 2
BREMERTON NATIONAL (PWT)

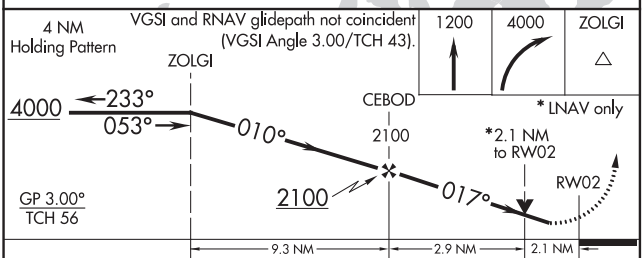
WAAS	APP CRS	Rwy Idg	6000
CH 49232	017°	TDZE	444
W02A		Apt Elev	444

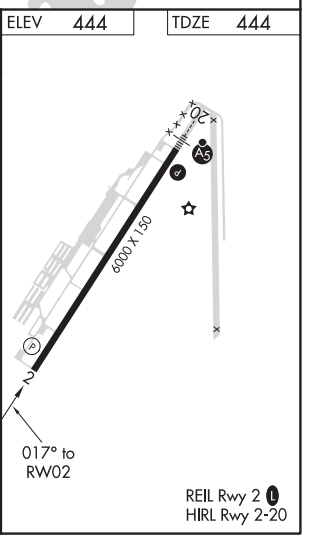
Circling NA for Cats C and D west of Rwy 2-20. DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Seattle-Tacoma Intl altimeter setting. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase LPV DA to 817 and all visibilities ¼ SM; increase all LNAV/VNAV DA 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 20

BREMERTON NATIONAL (PWT)

WAAS	APP CRS		
CH **61106**	**197°**	Rwy Idg	**6000**
W20A		TDZE	**442**
		Apt Elev	**444**

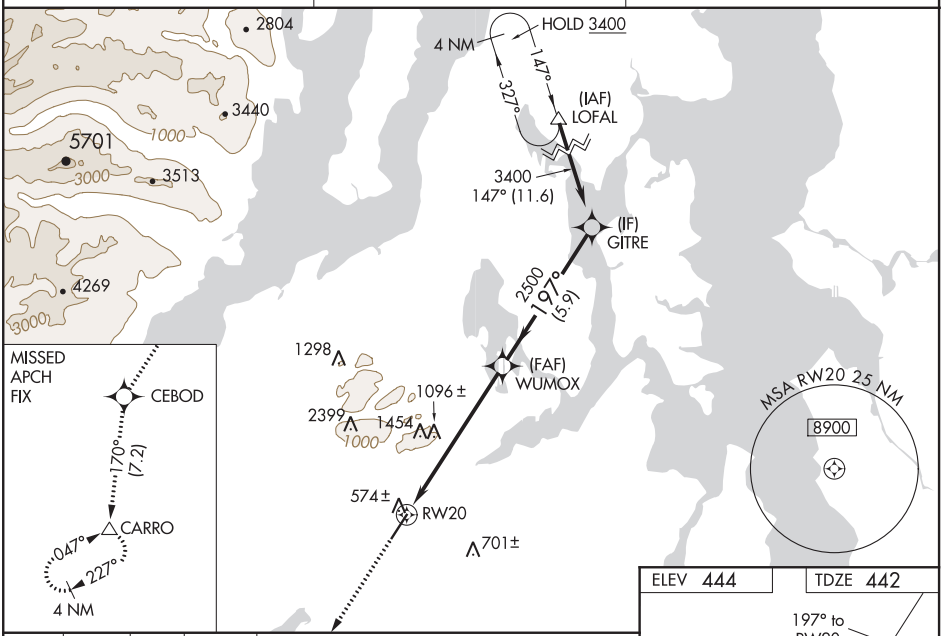
RNP APCH.

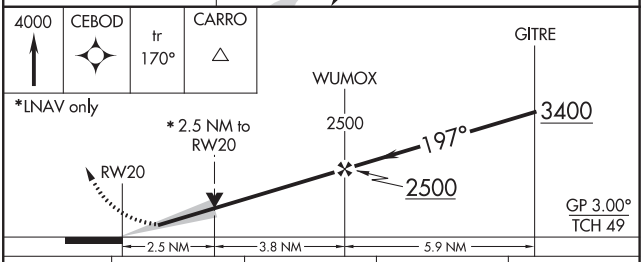
Circling NA for Cats C and D west of Rwy 2-20. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Baro-VNAV and VDP NA when using Seattle-Tacoma Intl altimeter setting. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase all DA 45 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

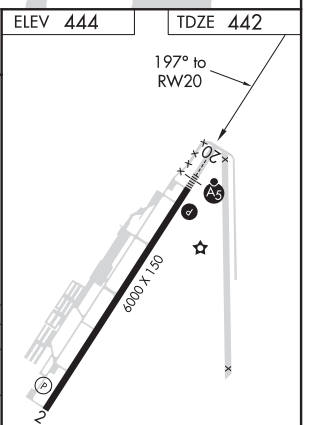
MISSED APPROACH: Climb to 4000 direct CEBOD and on track 170° to CARRO and hold, continue climb-in-hold to 4000.

AWOS-3PT	SEATTLE APP CON	UNICOM
121.2	**127.1 254.4 269.125**	**123.05** (CTAF) L





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)



REIL Rwy 2 L
HIRL Rwy 2-20

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BUFFALO, WYOMING | AL-5705 (FAA) | 19115

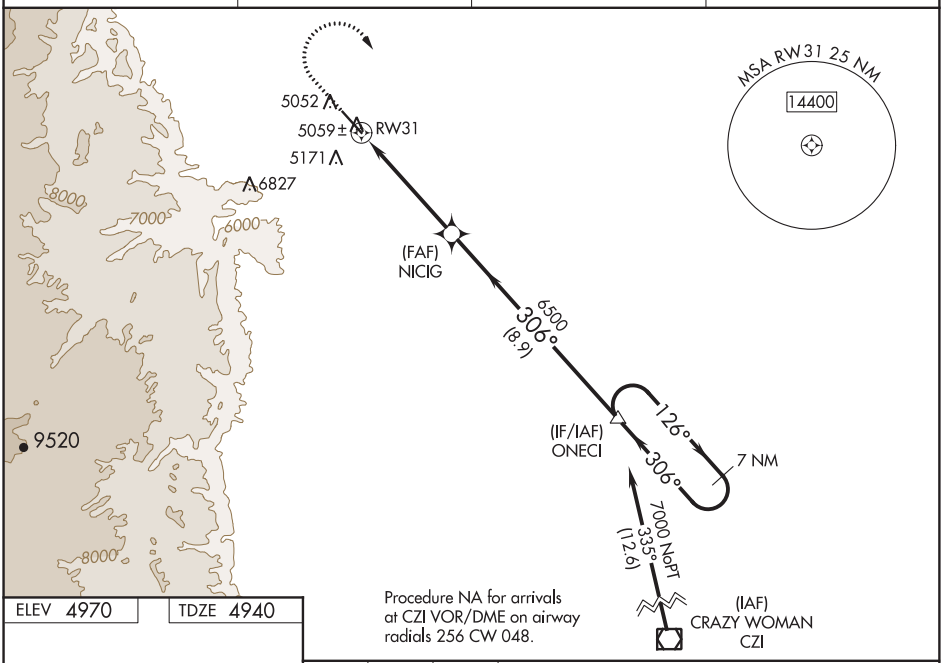
WAAS CH 48835 W31A	APP CRS 306°	Rwy Idg 6143	TDZE 4940	Apt Elev 4970

RNAV (GPS) RWY 31
JOHNSON COUNTY (BYG)

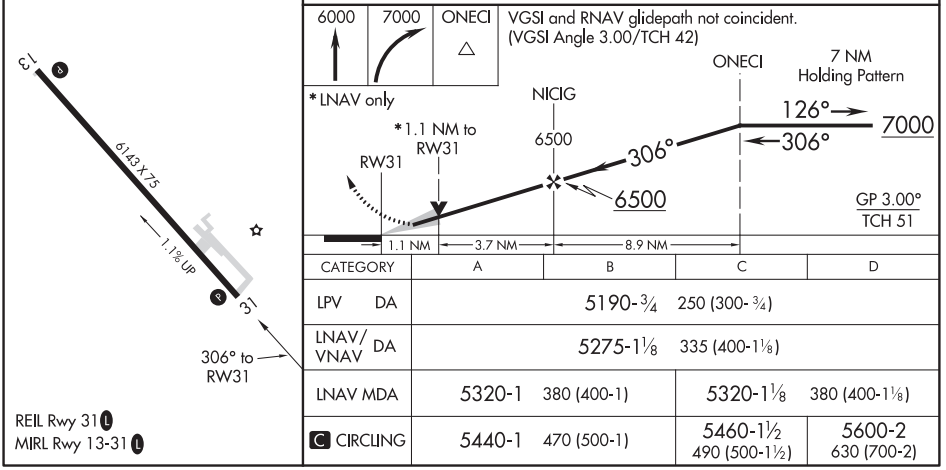
When Rwy 13 VGSI inop, Circling Rwy 13 NA at night. Baro-VNAV and VDP NA when using Sheridan altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 48°C (120°F). Circling NA southwest of Rwy 13-31. DME/DME RNP-0.3 NA. When local altimeter setting not received, 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	CASPER RADIO	UNICOM
135.425	127.75 351.9	122.2	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)

BUFFALO, WYOMING
Amdt 1A 24JUL14

44°23'N-106°43'W

JOHNSON COUNTY (BYG)
RNAV (GPS) RWY 31

NW-1, 30 JAN 2020 to 26 MAR 2020

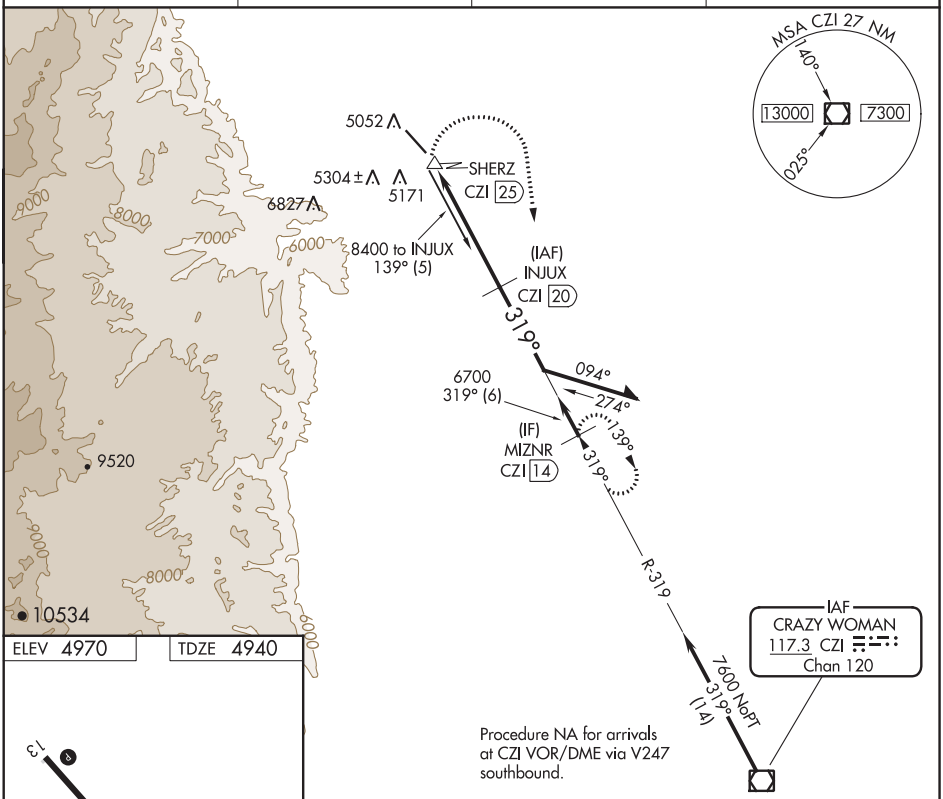
VOR/DME CZI	APP CRS	Rwy Idg	6143
117.3	319°	TDZE	4940
Chan 120		Apt Elev	4970

VOR/DME RWY 31
JOHNSON COUNTY (BYG)

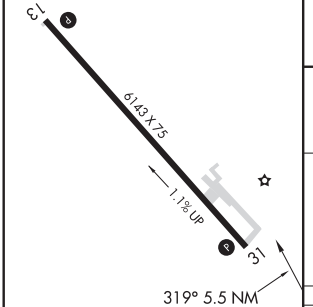
Visibility reduction by helicopters NA. If local altimeter setting not received, use Sheridan altimeter setting and increase all MDAs 600 feet. When VGSI inoperative, procedure NA at night. Circling NA southwest of Rwy 13-31.

MISSED APPROACH: Climbing right turn to 7600 via heading 160° and CZI VOR/DME R-319 to MIZNR/14 DME and hold.

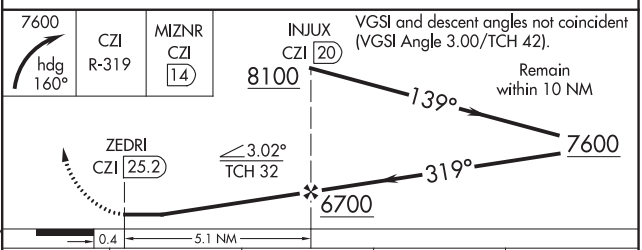
ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM
135.425	127.75 351.9	122.2	122.8 (CTAF) L



ELEV 4970 TDZE 4940



REIL Rwy 31 L
MIRL Rwy 13-31 L



VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 42).

CATEGORY	A	B	C	D
S-31	5680-1 740 (800-1)	5680-1¼ 740 (800-1¼)	5680-2¼ 740 (800-2¼)	5680-2½ 740 (800-2½)
C CIRCLING	5680-1 710 (800-1)	5680-1¼ 710 (800-1¼)	5680-2¼ 710 (800-2¼)	5680-2½ 710 (800-2½)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BURLEY, IDAHO

AL-68 (FAA)

20030

RNAV (GPS) RWY 20

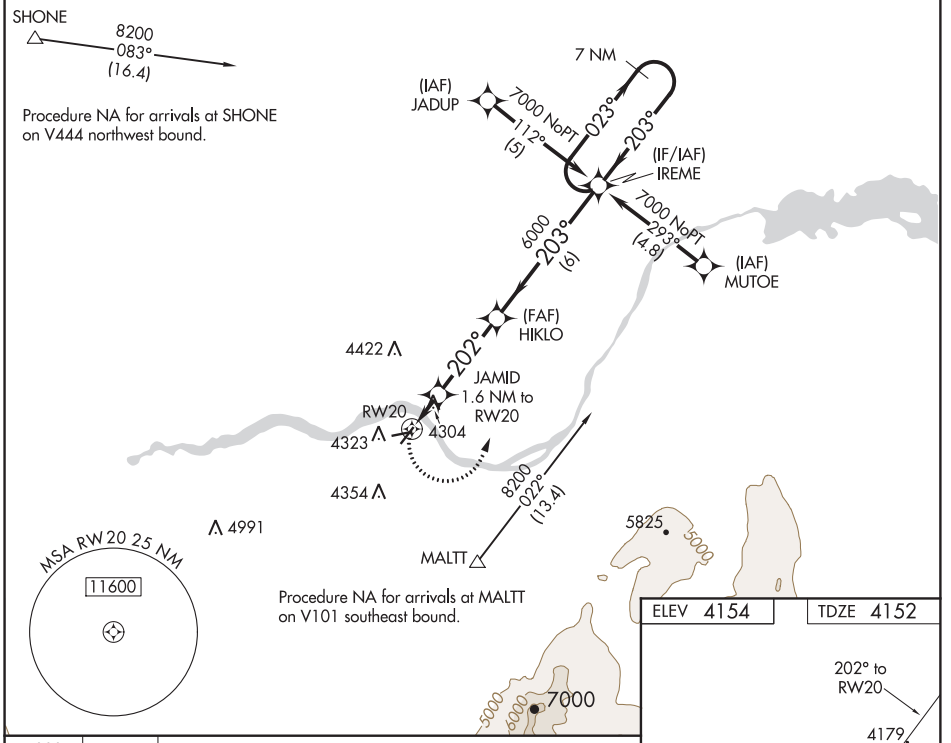
BURLEY MUNI (BYI)

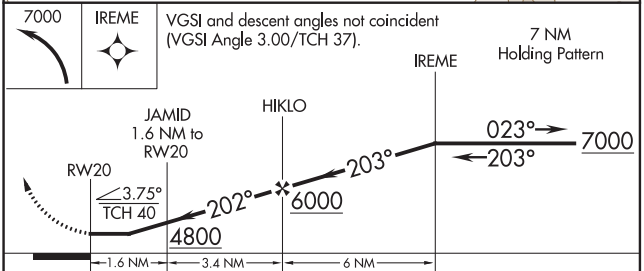
APP CRS	Rwy Idg	3787
202°	TDZE	4152
	Apt Elev	4154

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





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

REIL Rwy 20
MIRL Rwys 2-20 and 6-24 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME BYI	APP CRS	Rwy Idg N/A
114.1	100°	TDZE N/A
Chan 88		Apt Elev 4154

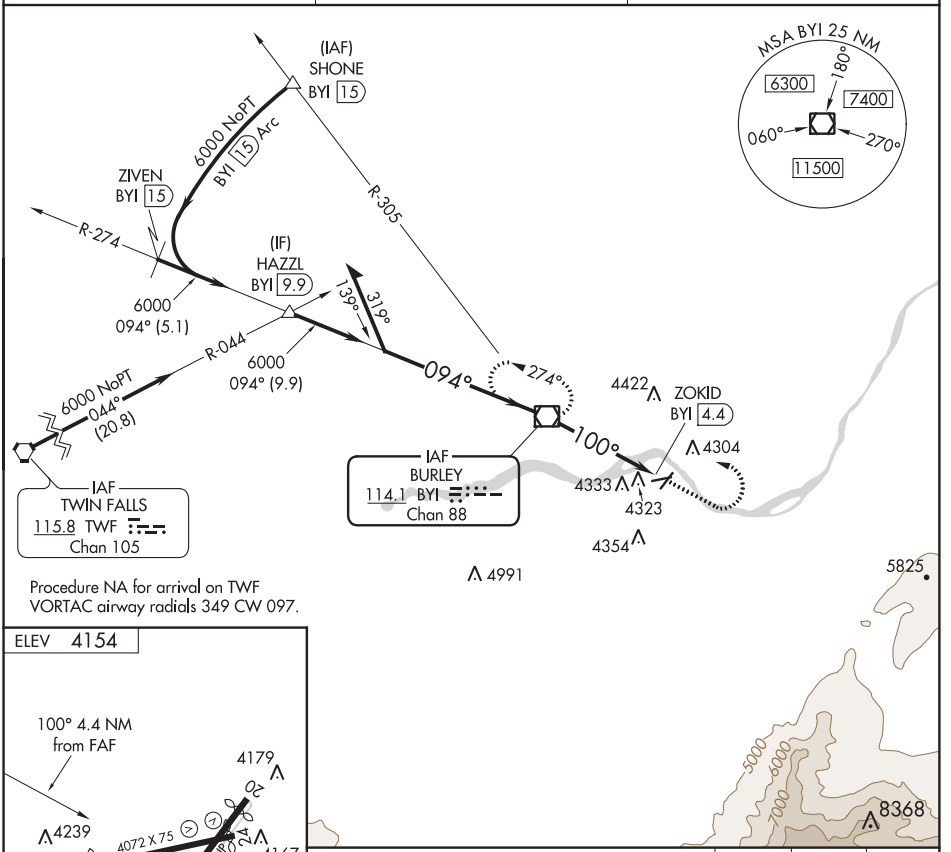
VOR-A

BURLEY MUNI (BYI)

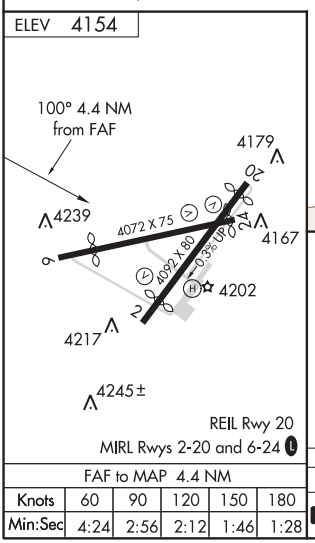
Circling Rwy 2, 20, 24 NA at night. Rwy 2, 20, 24 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Twin Falls altimeter setting and increase all MDAs 80 feet and visibility Cats C and D ¼ SM.

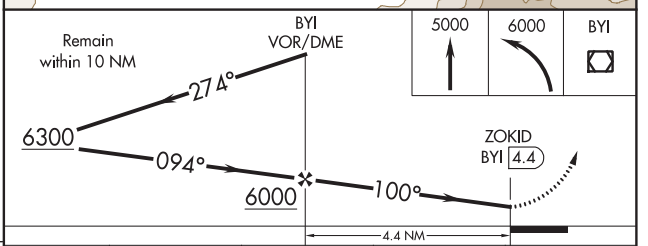
MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct BYI VOR/DME and hold.

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	4640-1 486 (500-1)	4660-1 506 (600-1)	4740-1½ 586 (600-1½)	4780-2 626 (700-2)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS		
CH **53500**	**110°**	Rwy Idg	**5478**
W11A		TDZE	**145**
		Apt Elev	**145**

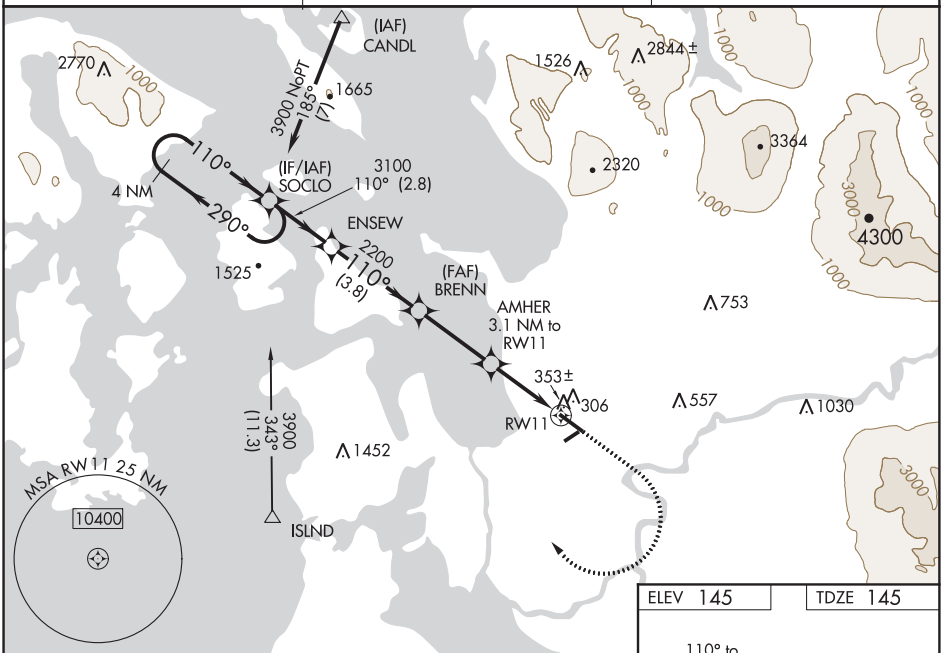
RNAV (GPS) RWY 11

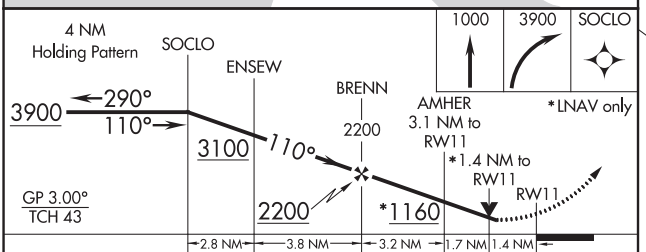
SKAGIT RGNL (BVS)

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.

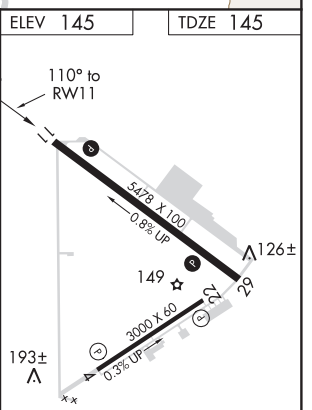
MISSED APPROACH: Climb to 1000 then climbing right turn to 3900 direct SOCLO and hold, continue climb-in-hold to 3900.

AWOS-3	WHIDBEY APP CON	UNICOM
121.125	**120.7 270.8**	**123.075** (CTAF) L





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)



LIRL Rwy 4-22 L
REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 29

SKAGIT RGNL (BVS)

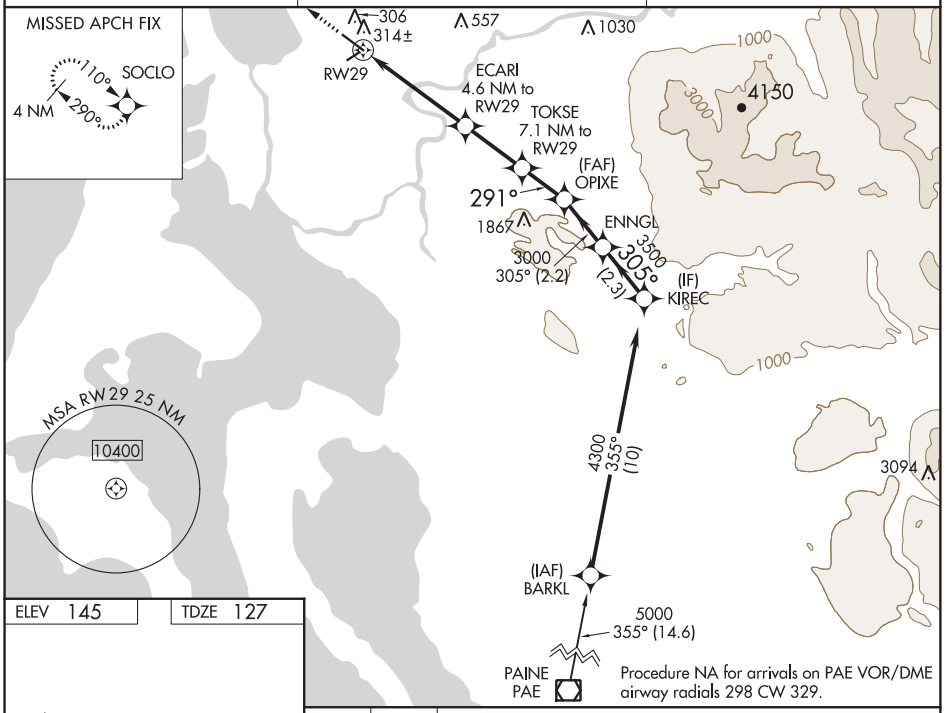
WAAS	APP CRS	Rwy Idg	5478
CH 70407	291°	TDZE	127
W29A		Apt Elev	145

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.

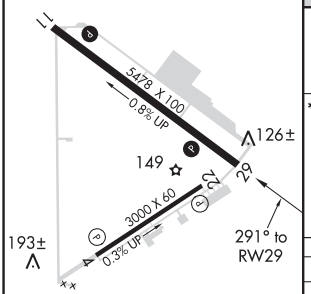
AWOS-3	WHIDBEY APP CON	UNICOM
121.125	120.7 270.8	123.075 (CTAF) L



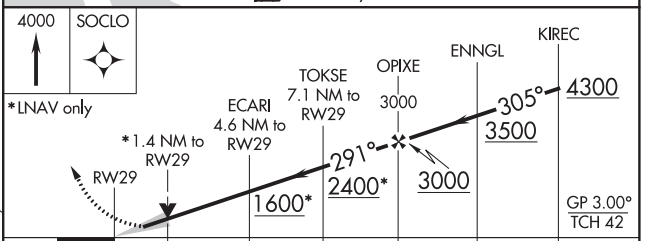
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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 AL-6147 (FAA)

19115

NDB RWY 11

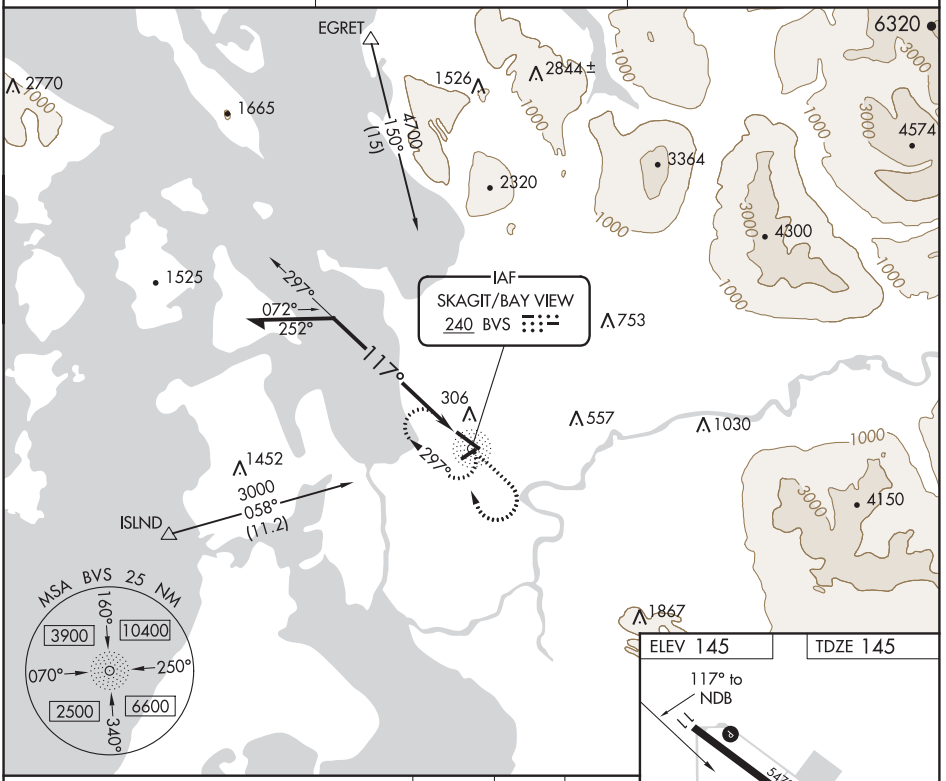
SKAGIT RGNL (BVS)

NDB BVS	APP CRS	Rwy Idg	5478
240	117°	TDZE	145
		Apt Elev	145

When local altimeter setting not received, use Friday Harbor altimeter setting.
Circling to Rwy 4 NA at night.
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2100 then climbing right turn to 3000 direct BVS NDB and hold.

AWOS-3	WHIDBEY APP CON	UNICOM
121.125	120.7 270.8	123.075 (CTAF) L



CATEGORY	A	B	C	D
S-11	1400-1¼ 1255 (1300-1¼)	1400-1½ 1255 (1300-1½)	1400-3	1255 (1300-3)
C CIRCLING	1400-1¼ 1255 (1300-1¼)	1400-1½ 1255 (1300-1½)	1400-3	1255 (1300-3)

LIRL Rwy 4-22 L
MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

BURLINGTON/MOUNT VERNON, WASHINGTON
Amdt 5A 04FEB16

48°28'N-122°25'W

SKAGIT RGNL (BVS)

NDB RWY 11

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	5100
297°	TDZE	4148
	Apt Elev	4159

RNAV (GPS) RWY 30

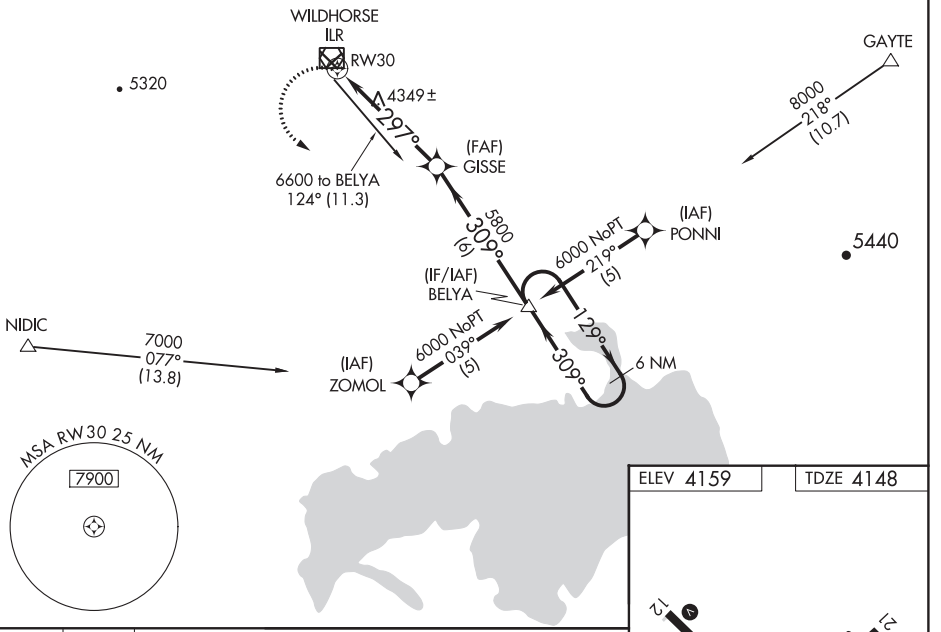
BURNS MUNI (BNO)

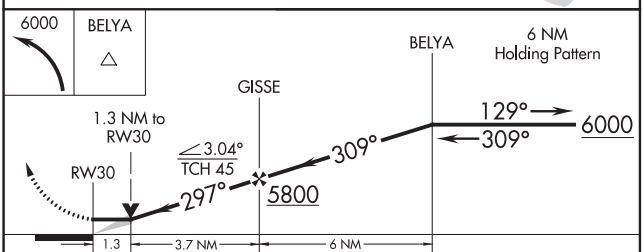
DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 6000 direct BELYA and hold.

ASOS	SALT LAKE CENTER	MC MINNVILLE RADIO	UNICOM
135.575	128.05 306.95	122.5	122.8 (CTAF) L

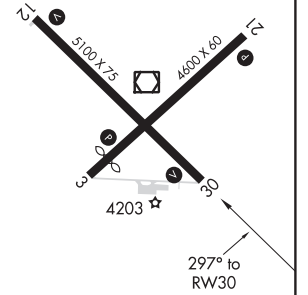
Procedure NA for arrivals on ILR VOR/DME airway radial 123.





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

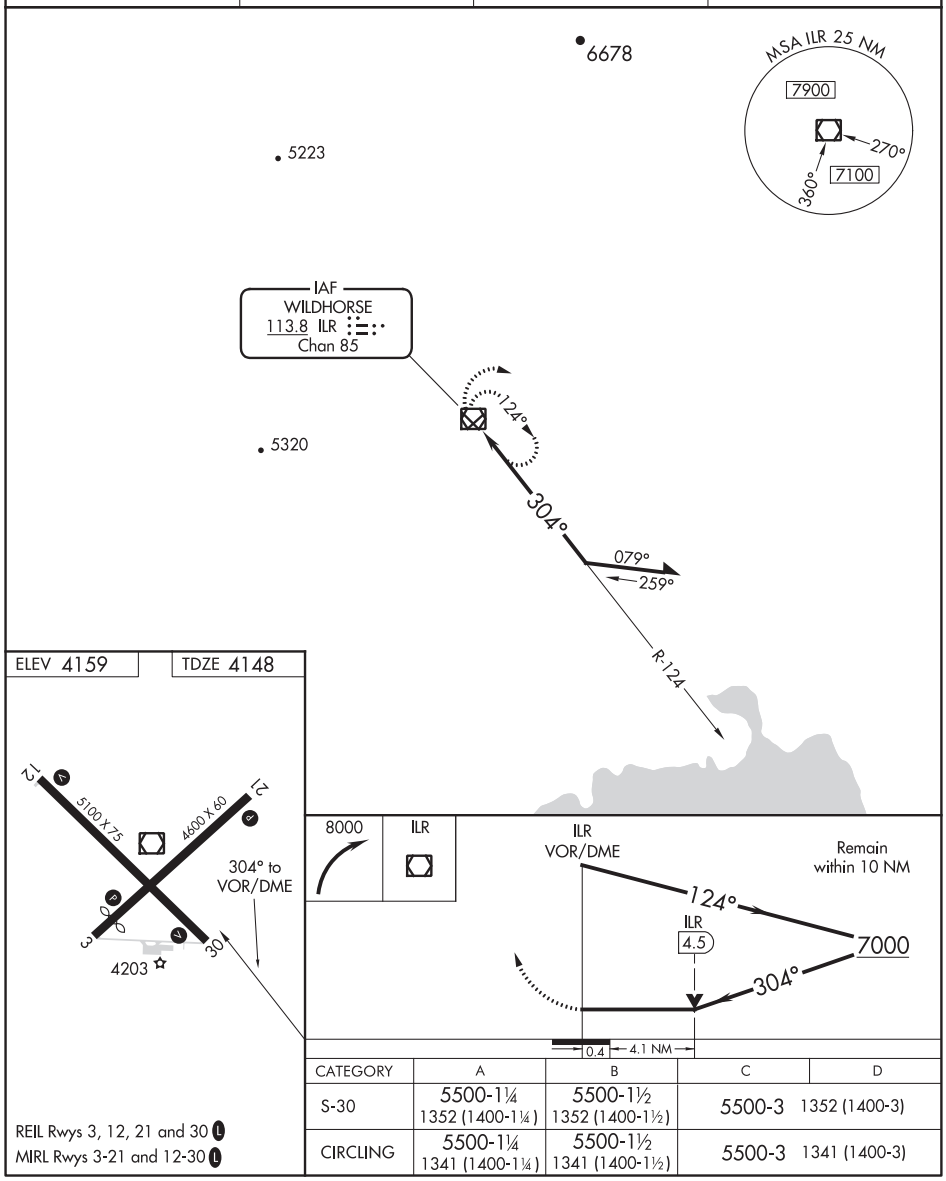
VOR RWY 30

BURNS MUNI (BNO)

VOR/DME ILR	APP CRS	Rwy Idg	5100
113.8	304°	TDZE	4148
Chan 85		Apt Elev	4159

MISSED APPROACH: Climbing right turn to 8000 in ILR VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	MC MINNVILLE RADIO	UNICOM
135.575	128.05 306.95	122.5	122.8 (CTAF) L



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

43°36′N-118°57′W

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 15

BERT MOONEY (BTM)

LOC/DME I-BEY	APP CRS	Rwy Idg	9000
110.9	155°	TDZE	5523
Chan 46		Apt Elev	5551

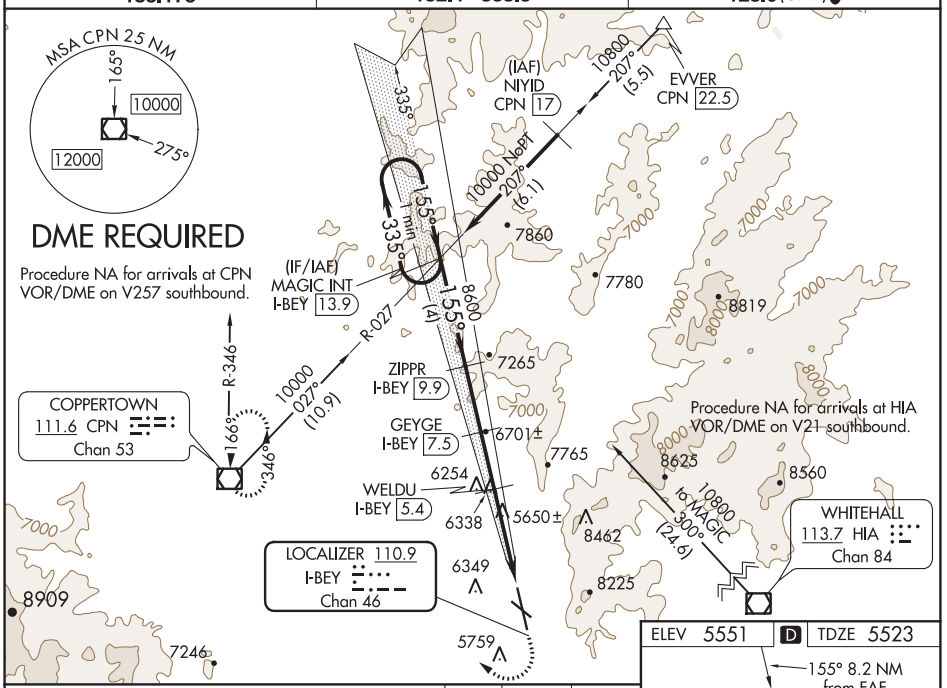
T
NA
-19°C

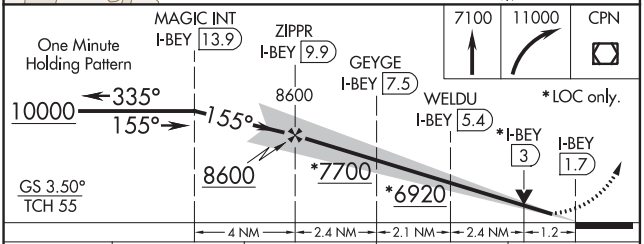
Circling NA northeast of Rwy 15-33. DME required.
S-ILS 15 for inop ALS, increase all Cats visibility to 2½ SM.
#S-ILS 15 for inop ALS, increase Cat C/D visibility to 1 SM.
#S-LOC 15 for inop ALS, increase Cat C/D visibility to 1⅜ SM.

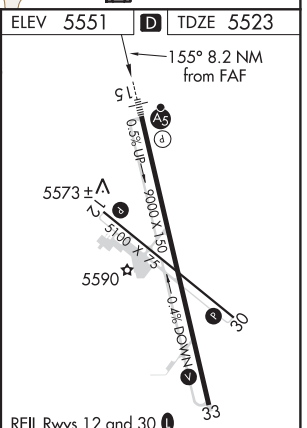
MALSR

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
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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BUTTE, MONTANA | AL-588 (FAA) | 18256

RNAV (GPS) RWY 15

BERT MOONEY (BTM)

WAAS	APP CRS	Rwy Idg	9000
CH 56341	155°	TDZE	5523
W15A		Apt Elev	5551

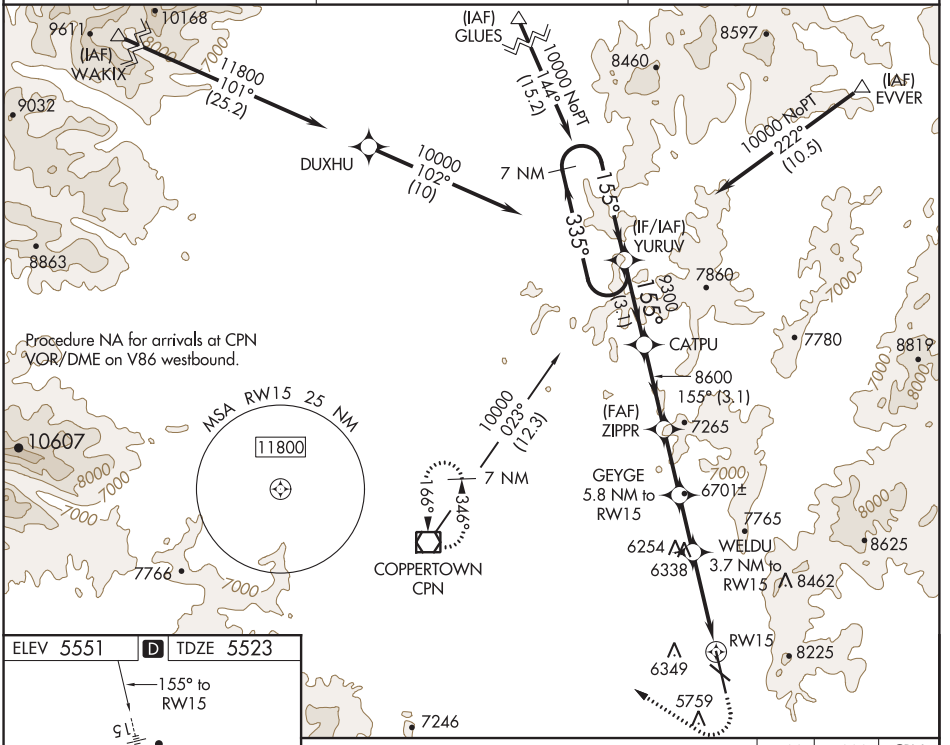
T A -19°C

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.

MALSR

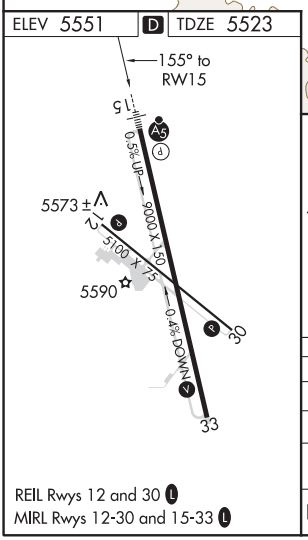
MISSED APPROACH: (Do not exceed 190K until 7100) Climb to 7100 then climbing right turn to 11000 direct CPN VOR/DME and hold, continue climb-in-hold to 11000. #Missed approach requires minimum climb of 365 feet per NM to 8700.

ASOS	SALT LAKE CENTER	UNICOM
135.175	132.4 338.3	123.0 (CTAF) L

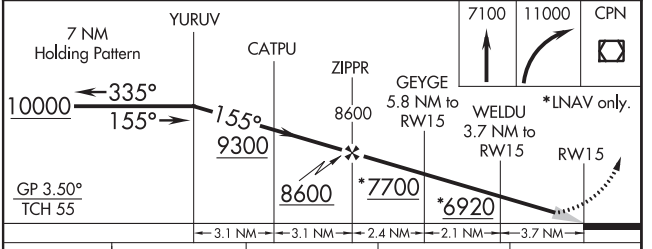


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



REIL Rwys 12 and 30 L
MIRL Rwys 12-30 and 15-33 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)

BUTTE, MONTANA
Orig 07DEC17

45°57'N-112°30'W

BERT MOONEY (BTM)
RNAV (GPS) RWY 15

VOR/DME CPN	APP CRS	Rwy Idg	N/A
111.6	098°	TDZE	N/A
Chan 53		Apt Elev	5551

VOR-A

BERT MOONEY (BTM)

T A -19°C

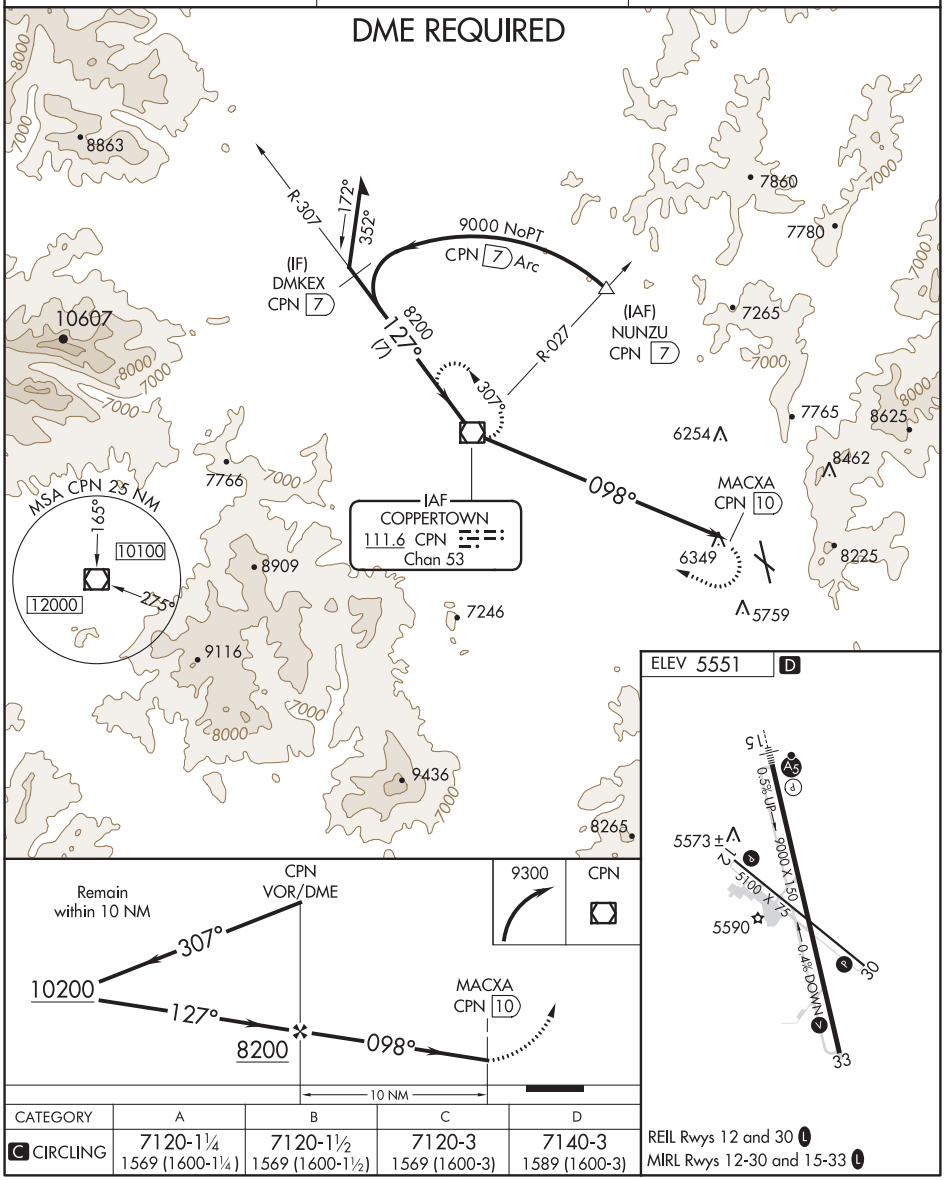
DME required.
Circling NA northeast of Rwy 15-33.

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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



CATEGORY	A	B	C	D
C CIRCLING	7120-1¼ 1569 (1600-1¼)	7120-1½ 1569 (1600-1½)	7120-3 1569 (1600-3)	7140-3 1589 (1600-3)

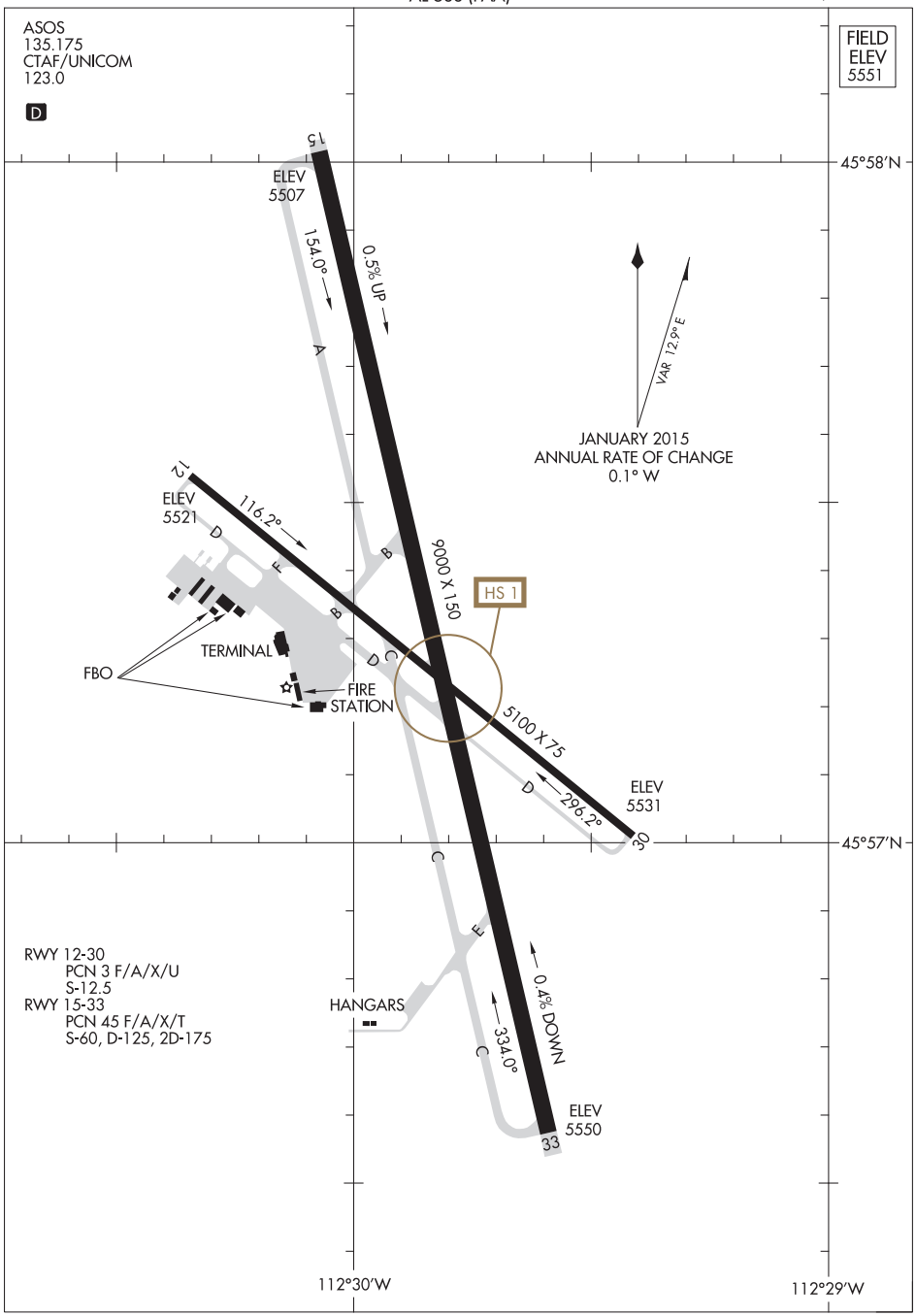
REIL Rwys 12 and 30 L
MIRL Rwys 12-30 and 15-33 L

17341

AIRPORT DIAGRAM

BERT MOONEY (BTM)
BUTTE, MONTANA

AL-588 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
17341
BUTTE, MONTANA
BERT MOONEY (BTM)

RNAV (GPS) RWY 12

CALDWELL INDUSTRIAL (EUL)

WAAS	APP CRS	Rwy Idg	5500
CH 97707	119°	TDZE	2431
W12A		Apt Elev	2432

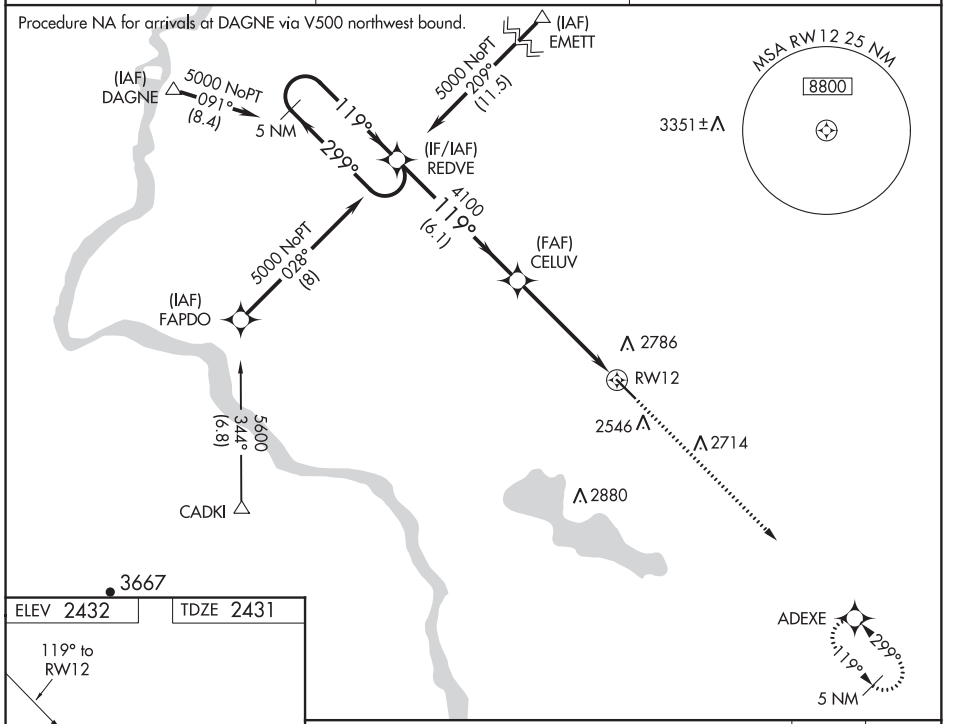
RNP APCH.

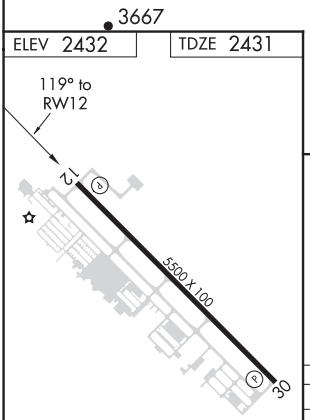
T A Rwy 12 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Boise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 44°C. When local altimeter setting not received, use Boise altimeter setting and increase all DA/MDA 120 feet and all visibilities ½ mile.

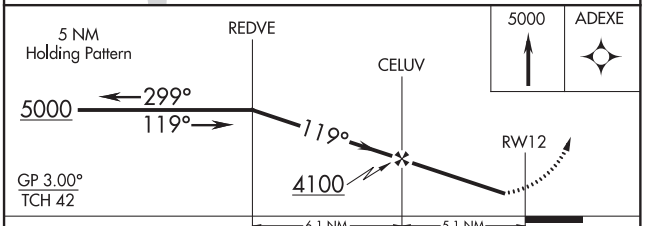
MISSED APPROACH: Climb to 5000 direct ADEXE and hold.

AWOS-3PT	BIG SKY APP CON	UNICOM
135.075	119.6 269.4	122.7 (CTAF) L

Procedure NA for arrivals at DAGNE via V500 northwest bound.







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)	

MIRL Rwy 12-30 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CALDWELL, IDAHO | AL-6806 (FAA) | 19199

WAAS	APP CRS	Rwy Idg	5500
CH 73007	299°	TDZE	2432
W30A		Apt Elev	2432

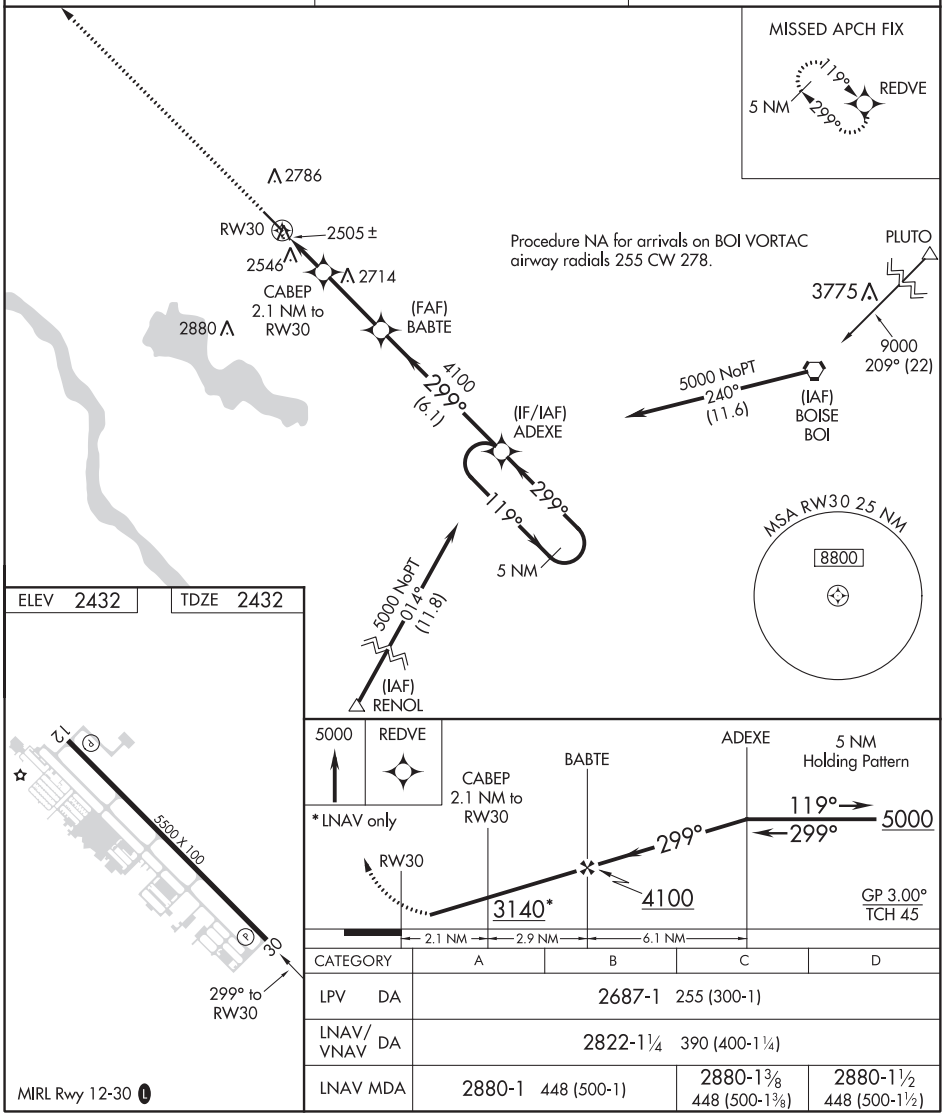
RNAV (GPS) RWY 30
CALDWELL INDUSTRIAL (EUL)

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



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)

CALDWELL, IDAHO
Amdt 1B 18JUL19

43°39'N-116°38'W

CALDWELL INDUSTRIAL (EUL)
RNAV (GPS) RWY 30

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-SYD	APP CRS	Rwy Idg	10165
111.3	032°	TDZE	5328
		Apt Elev	5344

ILS or LOC RWY 3

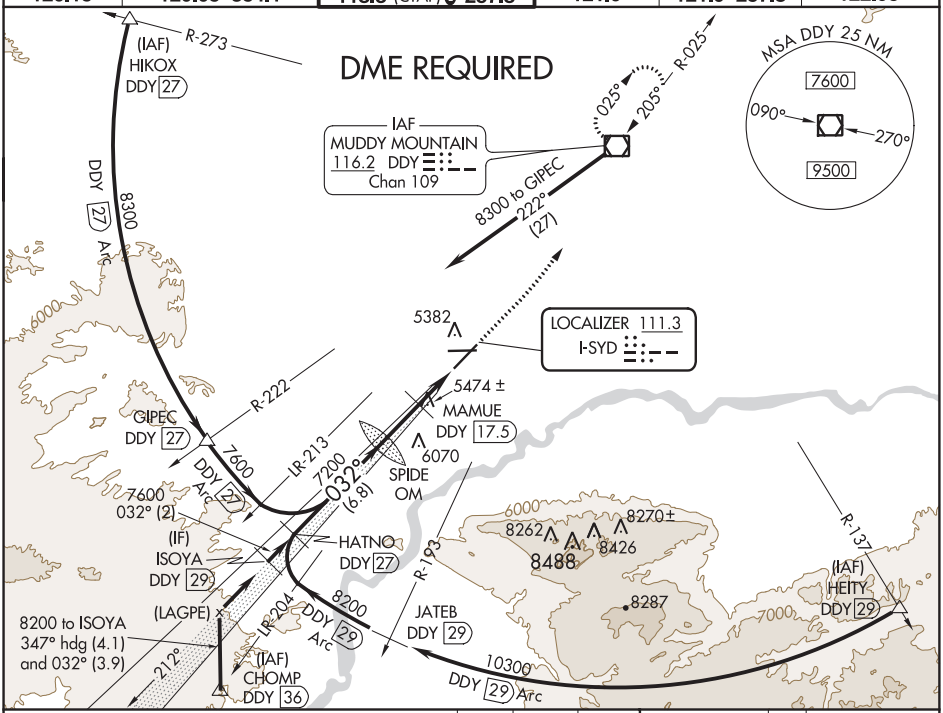
CASPER/NATRONA COUNTY INTL (CPR)

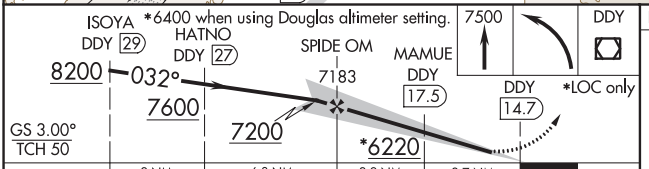
T A DME from DDY VOR/DME. Simultaneous reception of I-SYD and DDY DME required. When local altimeter setting not received, use Douglas altimeter setting; increase DA to 5697 feet and all MDAs 180 feet, increase S-ILS visibility all Cats ¼ mile and S-LOC visibility Cats B, C, and D ½ mile, increase Circling 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.

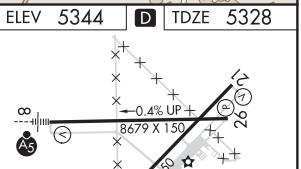
MALSR (A5)

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)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 73006 W03A	APP CRS 032°	Rwy Idg 10165 TDZE 5328 Apt Elev 5350

RNAV (GPS) RWY 3

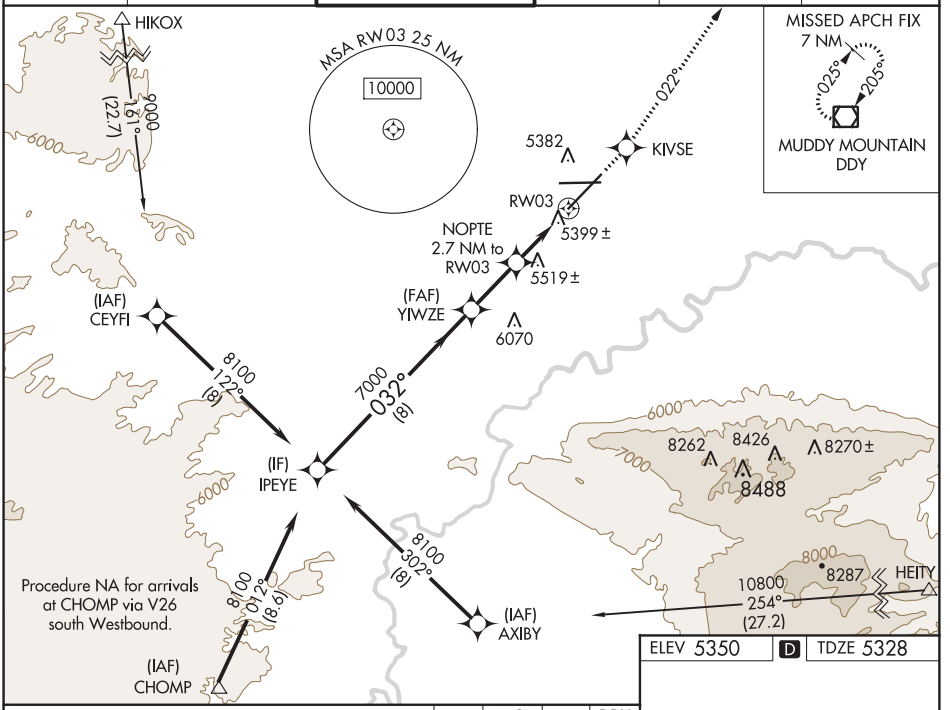
CASPER/NATRONA COUNTY INTL (CPR)

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

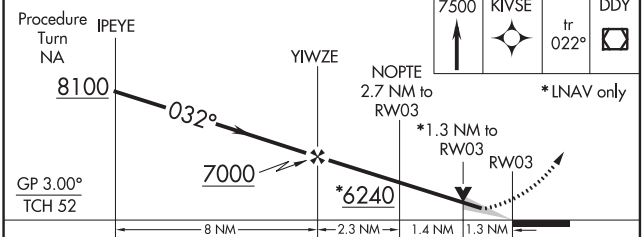
MISSED APPROACH: Climb to 7500 direct KIVSE and via track 022° to DDY VOR/DME and hold.

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



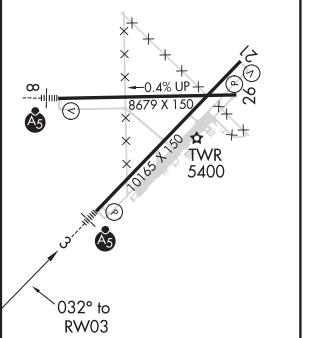
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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)

ELEV 5350 D TDZE 5328



REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

RNAV (GPS) RWY 8

CASPER/NATRONA COUNTY INTL (CPR)

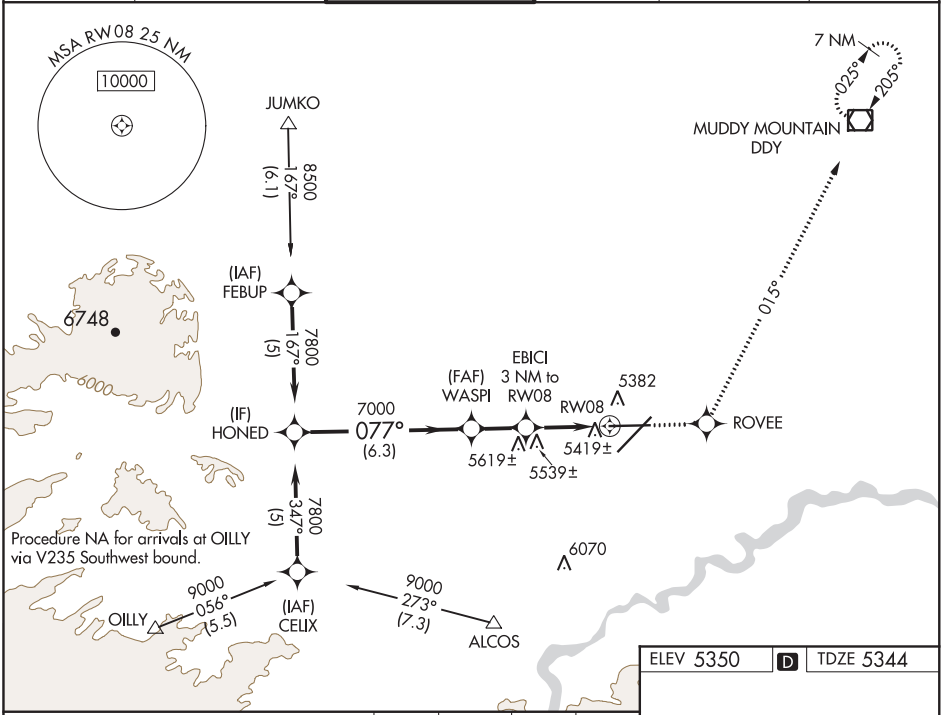
WAAS	APP CRS	Rwy Idg	8679
CH 86306	077°	TDZE	5344
W08A		Apt Elev	5350

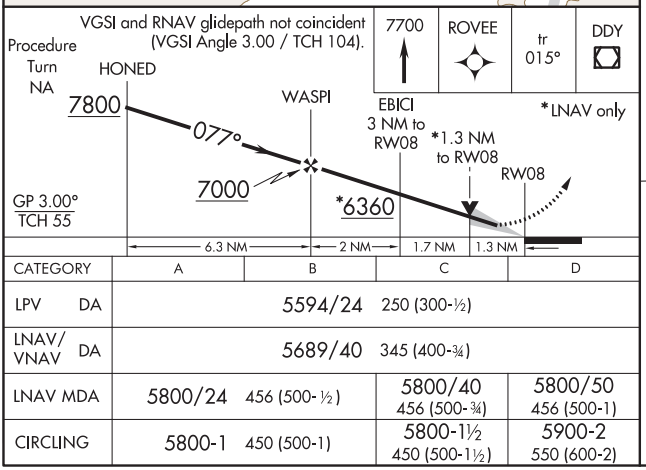
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MALSR

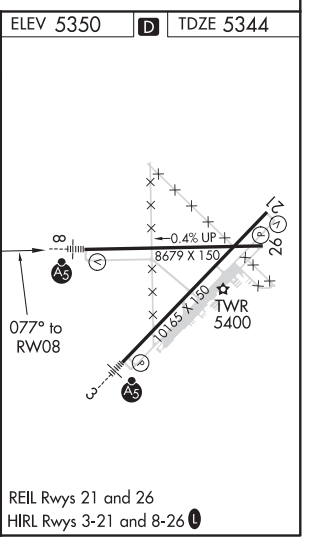
MISSED APPROACH: Climb to 7700 direct ROVEE and via track 015° to DDY VOR/DME and hold.

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





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)



NW-1, 30 JAN 2020 to 26 MAR 2020

CASPER, WYOMING | AL-72 (FAA) | 20030

WAAS CH 63012 W21A	APP CRS 212°	Rwy Idg 10165 TDZE 5330 Apt Elev 5350

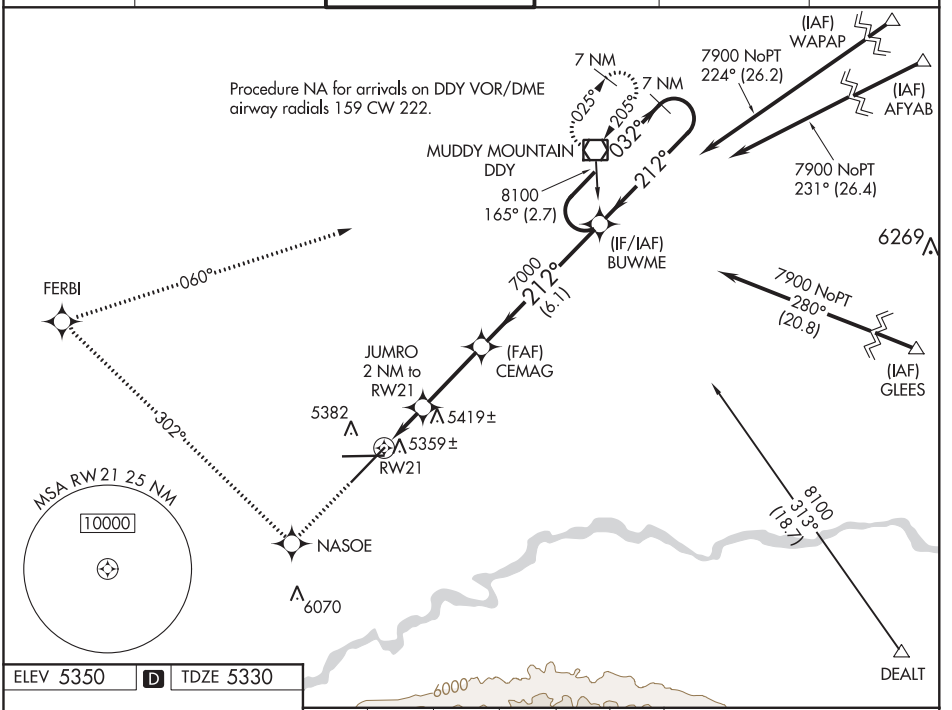
RNAV (GPS) RWY 21

CASPER/NATRONA COUNTY INTL (CPR)

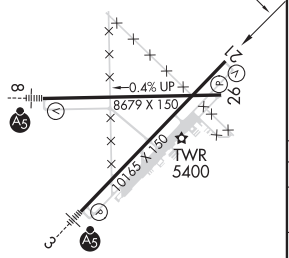
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

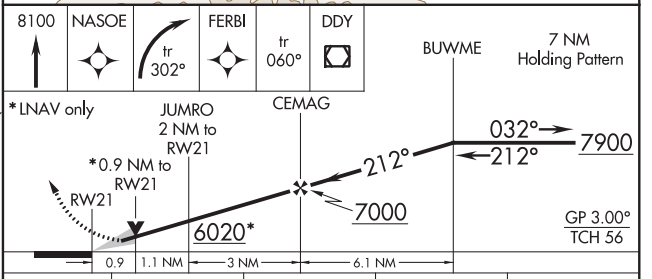
MISSED APPROACH: Climb to 8100 direct NASOE and right turn via track 302° to FERBI and via track 060° to DDY VOR/DME and hold.

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





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)

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	8679
CH 78112	257°	TDZE	5335
W26A		Apt Elev	5350

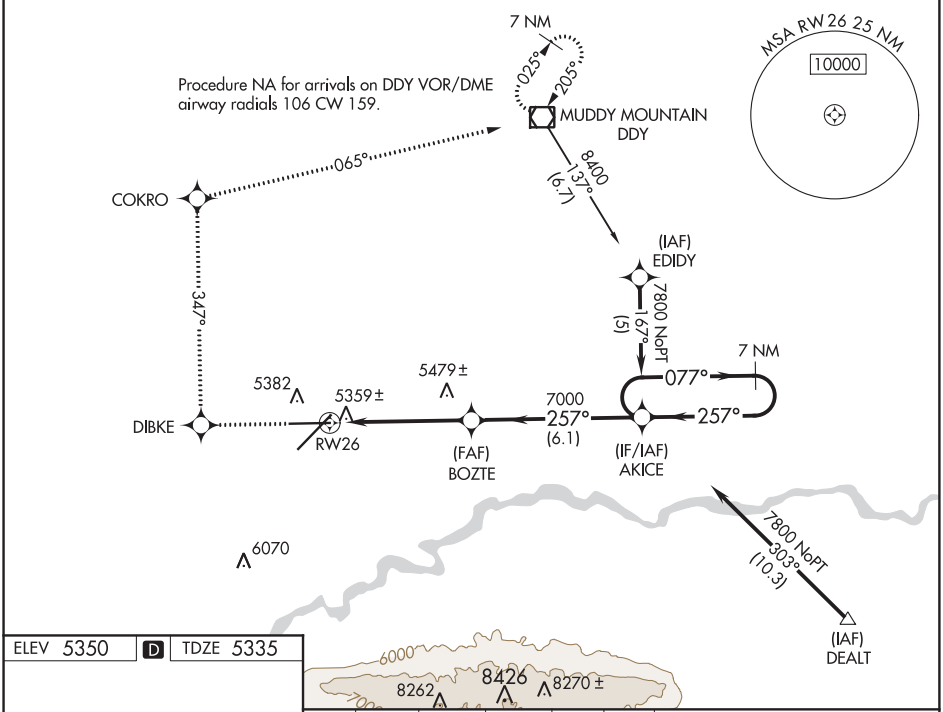
RNAV (GPS) RWY 26

CASPER/NATRONA COUNTY INTL (CPR)

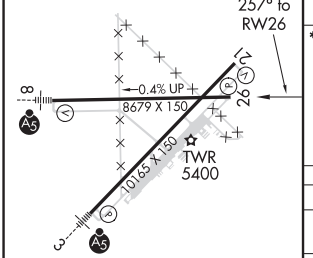
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

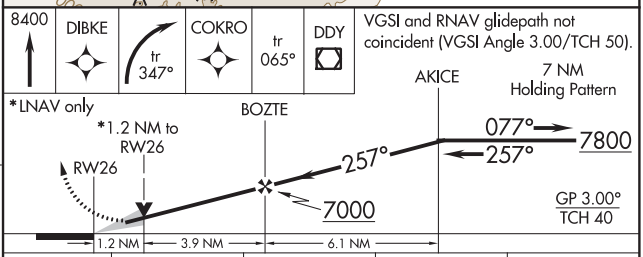
MISSED APPROACH: Climb to 8400 direct DIBKE and right turn via track 347° to COKRO and via track 065° to DDY VOR/DME and hold.

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CASPER, WYOMING | AL-72 (FAA) | 20030

VOR/DME DDY	APP CRS	Rwy Idg	10165
116.2	203°	TDZE	5330
Chan 109		Apt Elev	5344

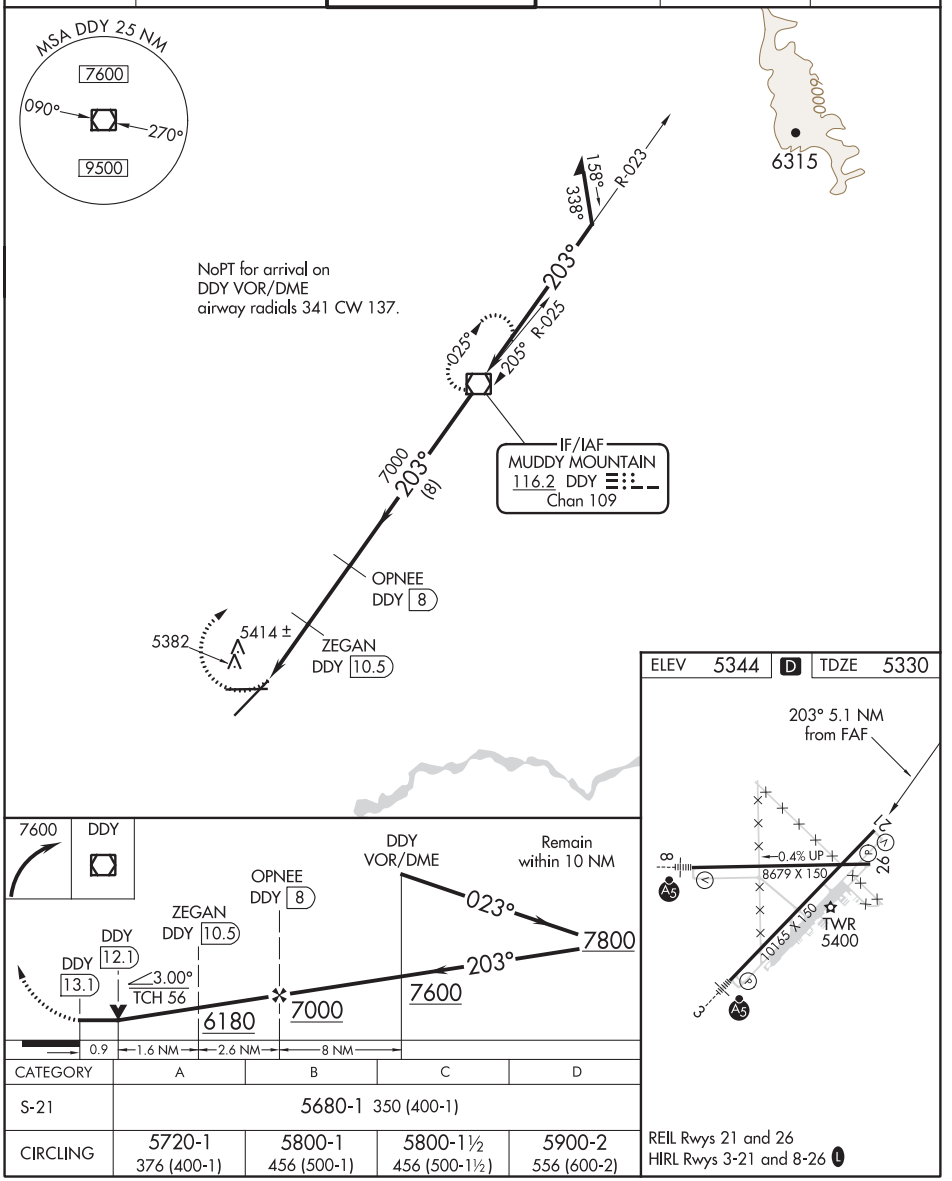
VOR/DME RWY 21

CASPER/NATRONA COUNTY INTL (CPR)

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

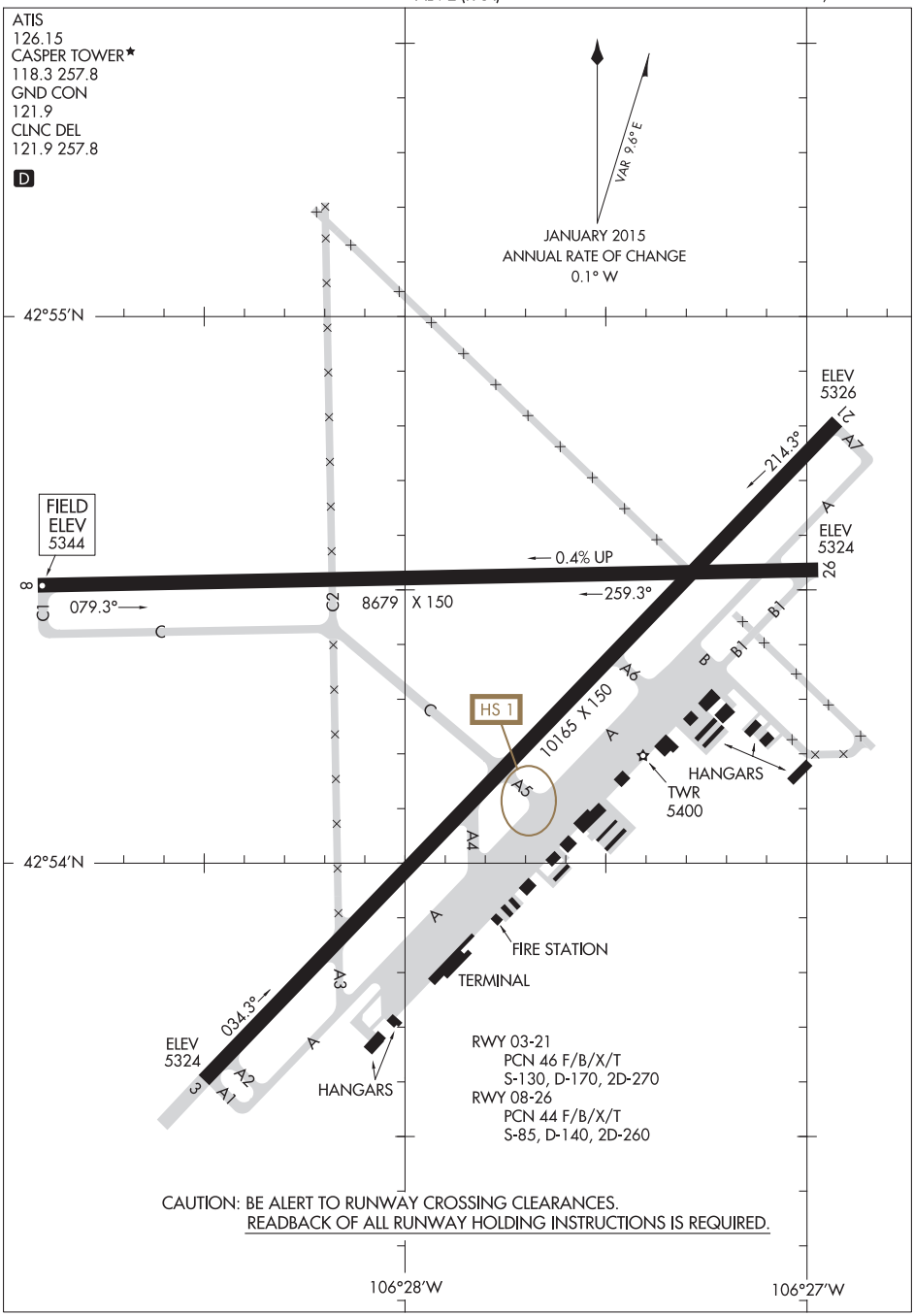


CATEGORY	A	B	C	D
S-21	5680-1 350 (400-1)			
CIRCLING	5720-1 376 (400-1)	5800-1 456 (500-1)	5800-1½ 456 (500-1½)	5900-2 556 (600-2)

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

(ALCOS6.ALCOS) 18032

ALCOS SIX DEPARTURE

CASPER/NATRONA COUNTY INTL (CPR)

SL-72 (FAA)

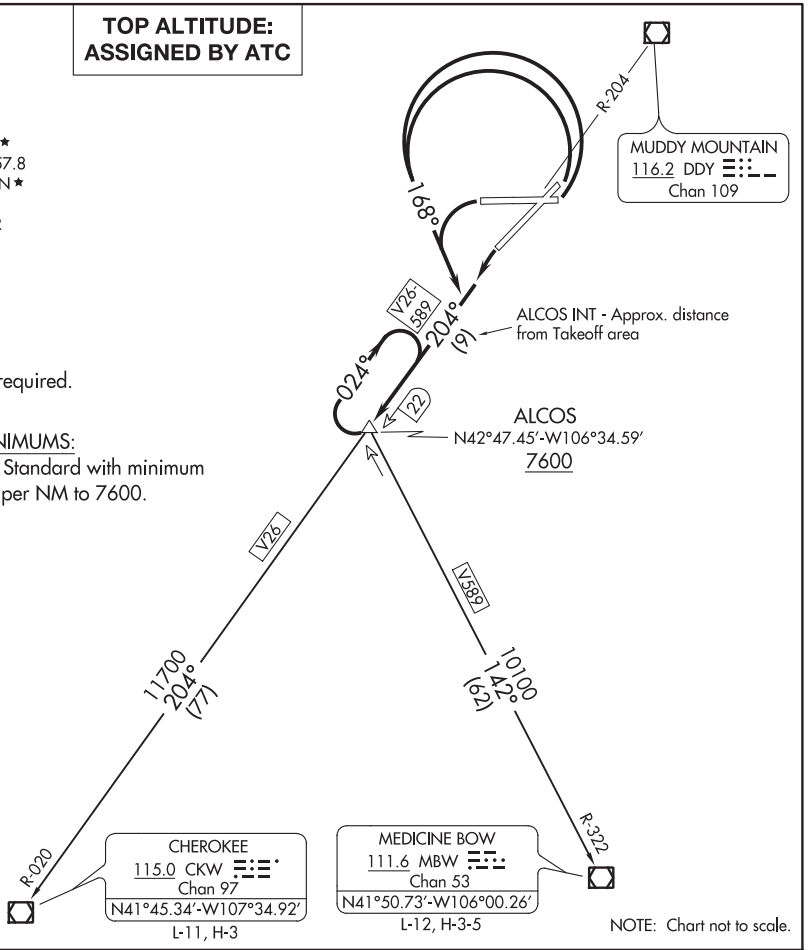
CASPER, WYOMING

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. . . .

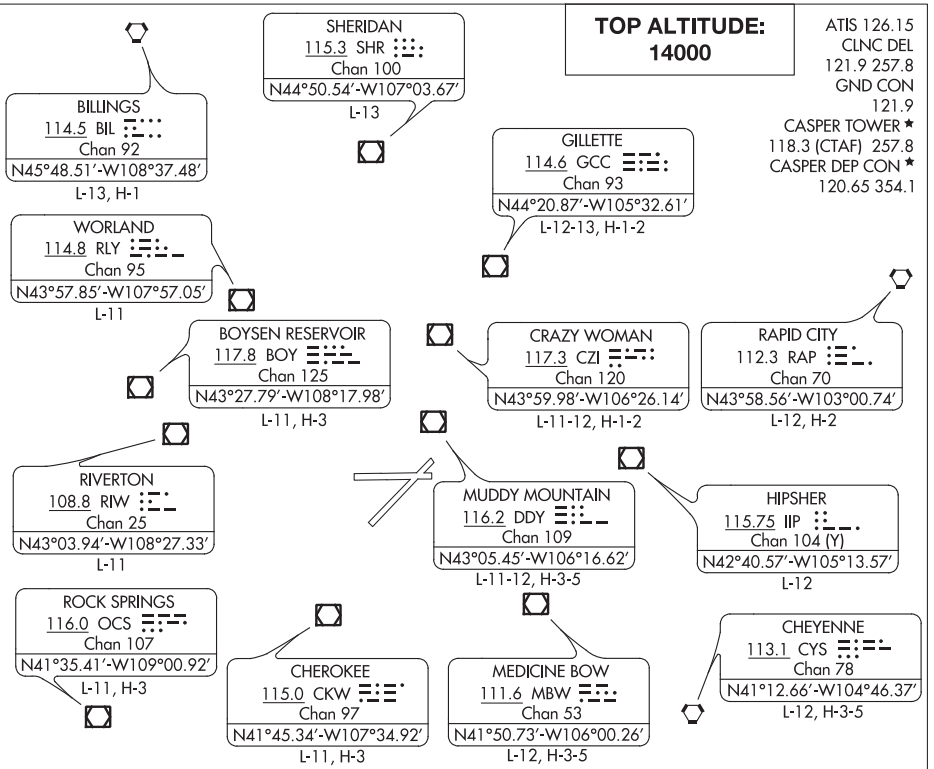
TAKEOFF RUNWAY 21: Turn left, thence. . . .

. . . .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.

NW-1, 30 JAN 2020 to 26 MAR 2020



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.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

CHEHALIS, WASHINGTON | AL-749 (FAA) | 18144

RNAV (GPS) RWY 16

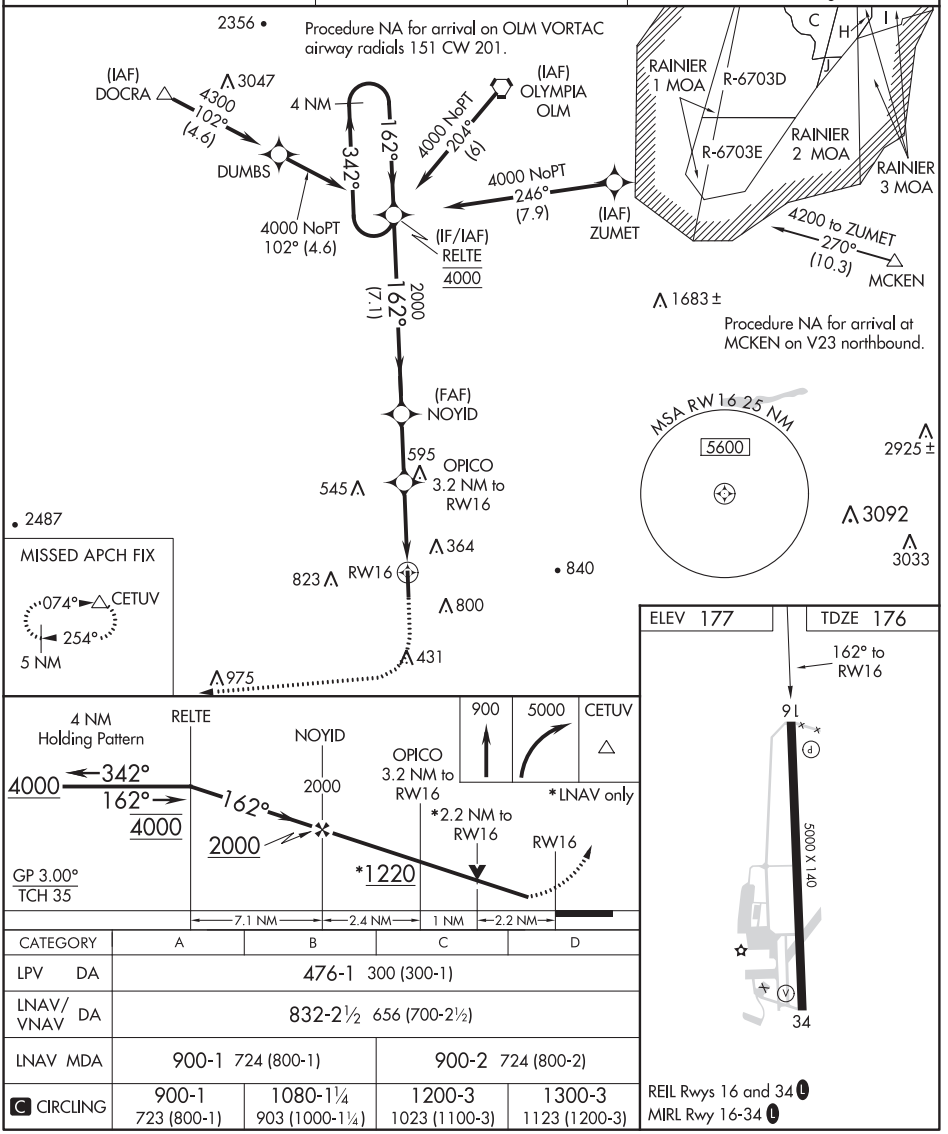
CHEHALIS-CENTRALIA (CLS)

WAAS	APP CRS	Rwy Idg	5000
CH 82129	162°	TDZE	176
W16A		Apt Elev	177

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)

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 27

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

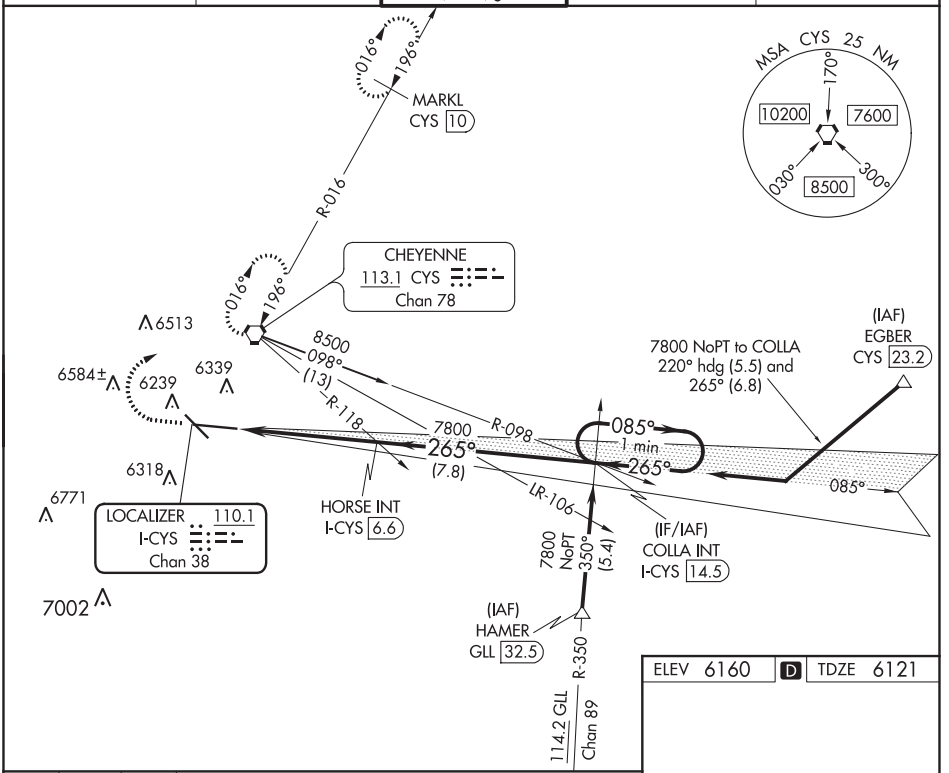
LOC/DME I-CYS	APP CRS	Rwy Idg	7985
110.1	265°	TDZE	6121
Chan 38		Apt Elev	6160

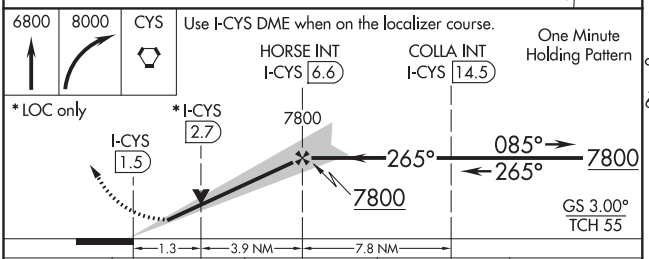
ASR/PAR — # RVR 1800 authorized with the use of FD or AP or HUD to DA.

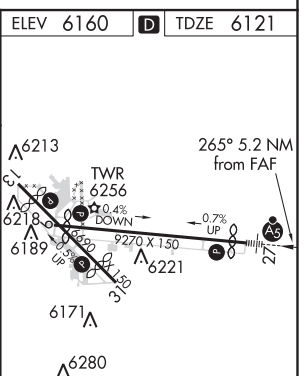
MALSR

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







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)

REIL Rwys 9, 13, and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	7985
CH 73009	085°	TDZE	6144
W09A		Apt Elev	6160

RNAV (GPS) RWY 9

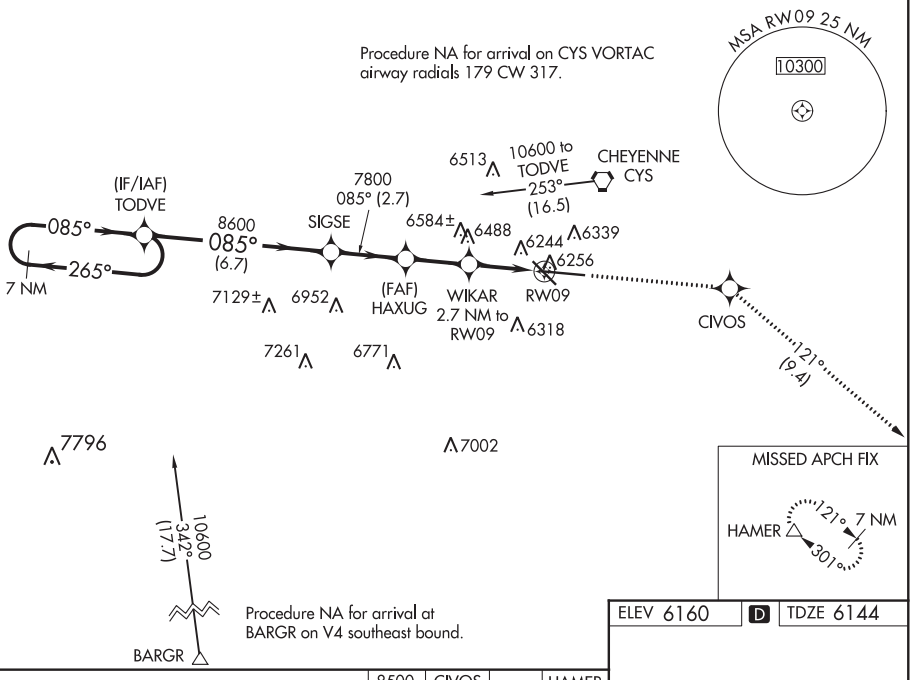
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

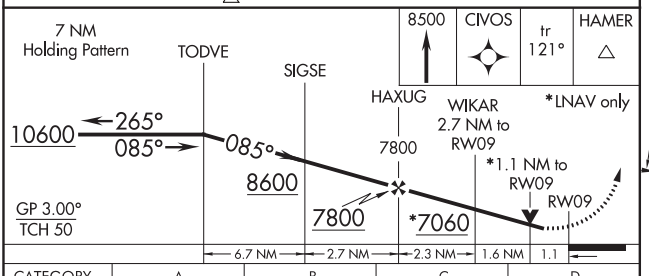
T A ASR/PAR

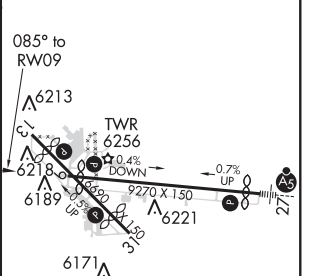
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 36°C (96°F). DME/DME RNP-0.3 NA. Rwy 9 helicopter visibility reduction below ¾ SM NA.

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







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, 30 JAN 2020 to 26 MAR 2020

WAAS CH 56609 W13A	APP CRS 125°	Rwy Idg 4830 TDZE 6155 Apt Elev 6160

RNAV (GPS) RWY 13

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

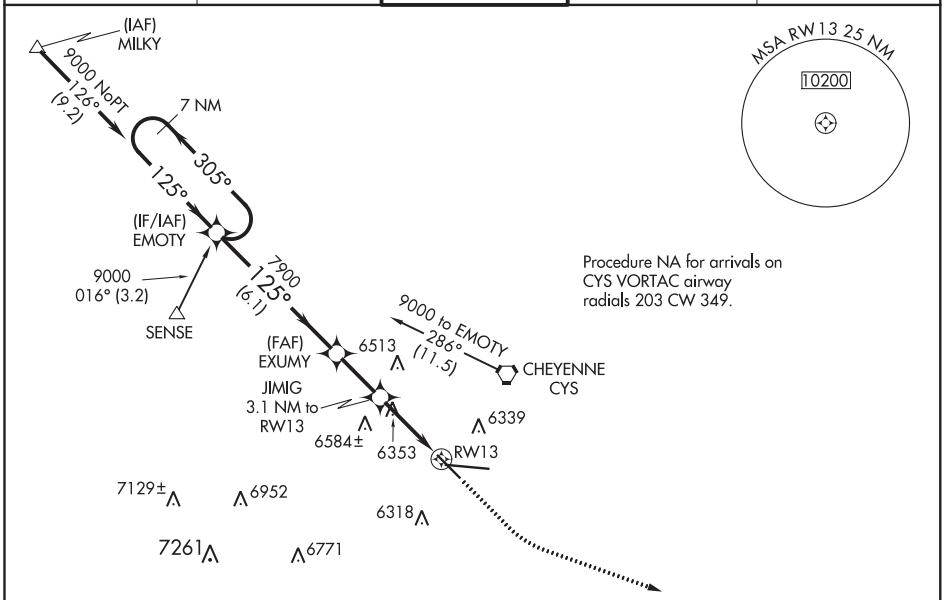
RNP APCH.

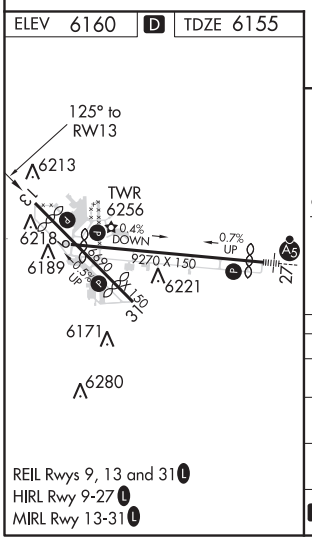
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 45°C. Rwy 13 helicopter visibility reduction below ¾ SM NA.

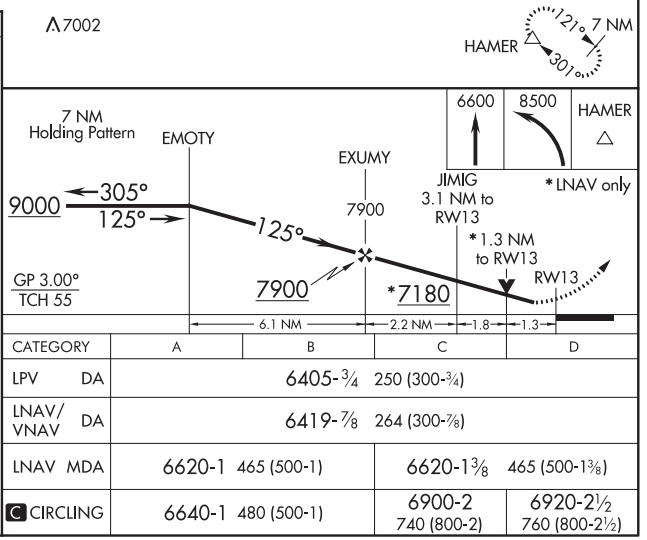
ASR/PAR

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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CHEYENNE, WYOMING | AL-80 (FAA) | 19059

WAAS	APP CRS	Rwy Idg	7985
CH 70307	265°	TDZE	6121
W27A		Apt Elev	6160

RNAV (GPS) RWY 27

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

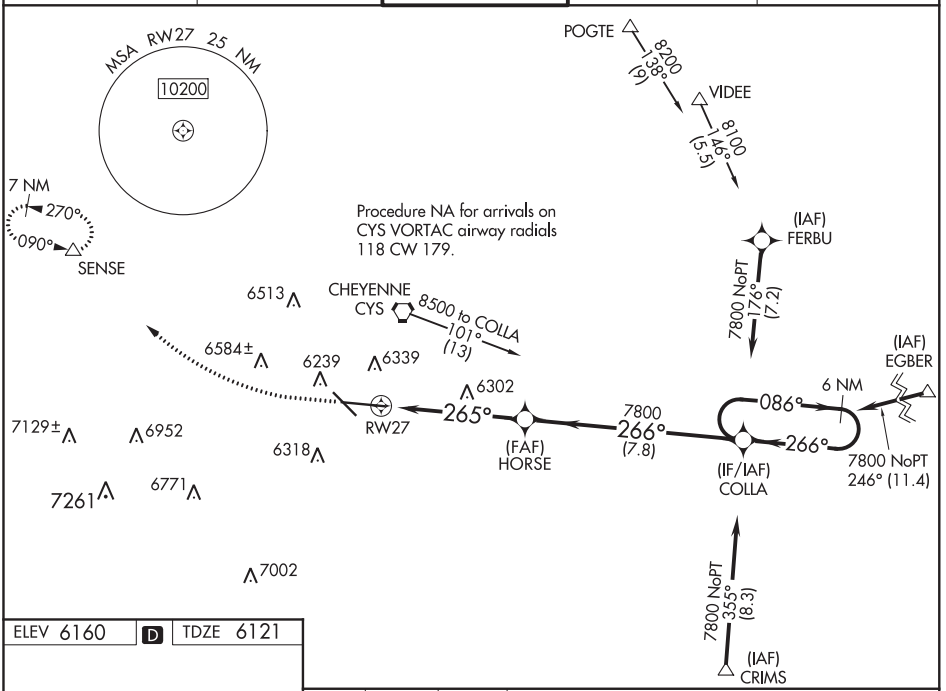
RNP APCH.

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.

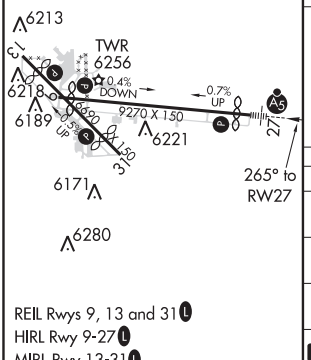
ATIS	CHEYENNE APP CON★	CHEYENNE TOWER★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95



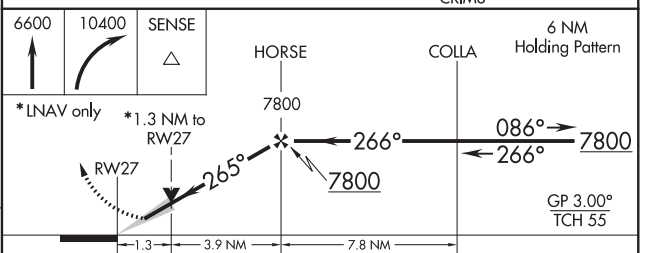
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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)

CHEYENNE, WYOMING
Amdt 1A 28FEB19

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)
41°09'N-104°49'W

RNAV (GPS) RWY 27

RNAV (GPS) RWY 31

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

WAAS	APP CRS	Rwy Idg	4880
CH 99609	305°	TDZE	6147
W31A		Apt Elev	6160

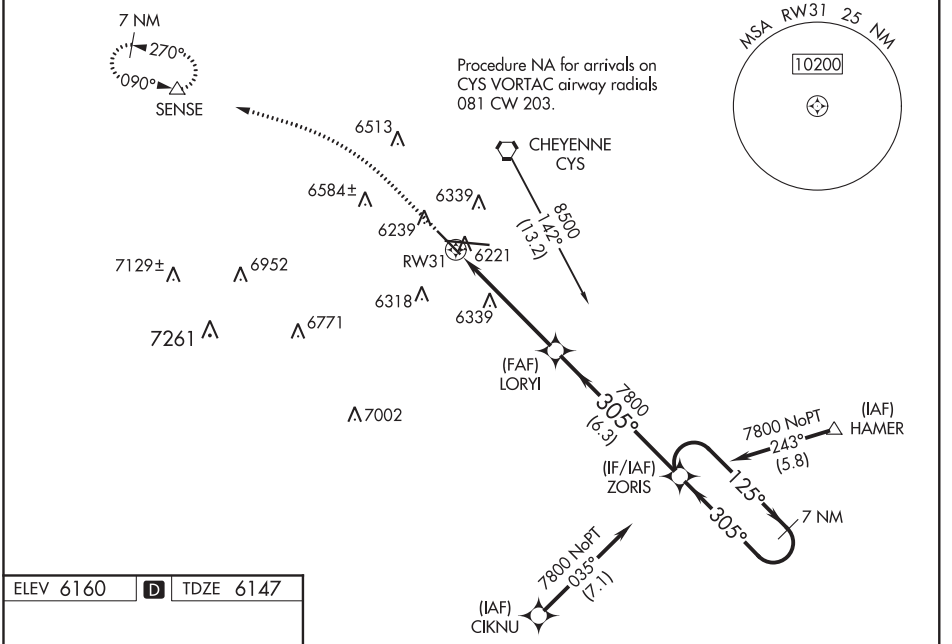
RNP APCH.

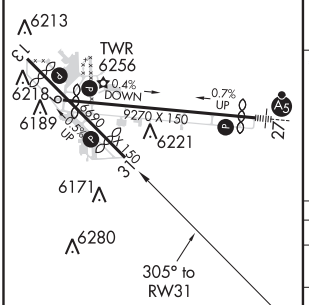
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 45°C.

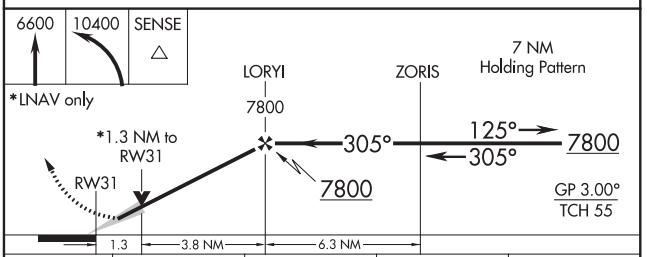
ASR/PAR

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







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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CHEYENNE, WYOMING | AL-80 (FAA) | 19059

VOR or TACAN-A

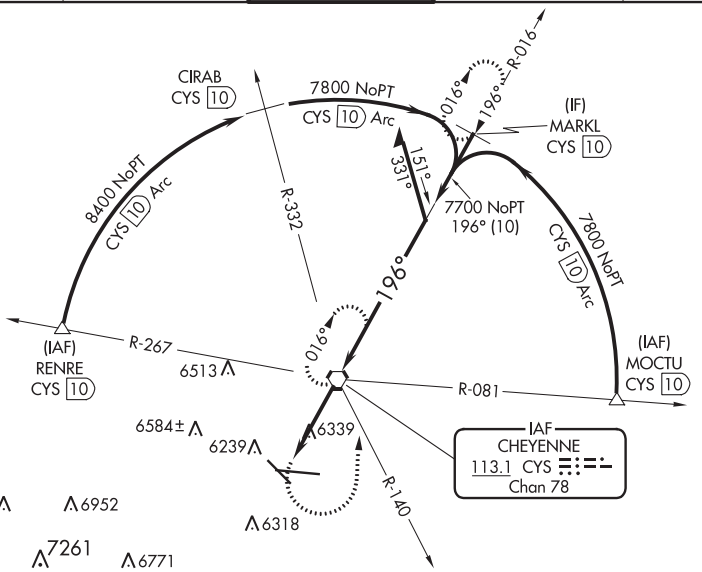
CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

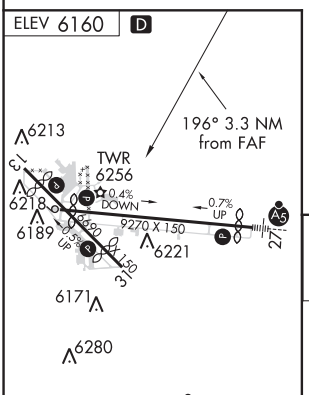
VORTAC CYS 113.1 Chan 78	APP CRS 196°	Rwy Idg N/A TDZE N/A Apt Elev 6160

ASR/PAR

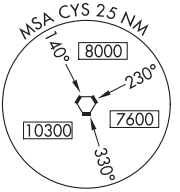
MISSED APPROACH: Climbing left turn to 8000 on heading 350° and on CYS VORTAC R-140 to CYS VORTAC and hold, continue climb-in-hold to 8000 (TACAN aircraft continue on CYS VORTAC R-016 to MARKL/10 DME and hold north, right turn, 196° inbound.)

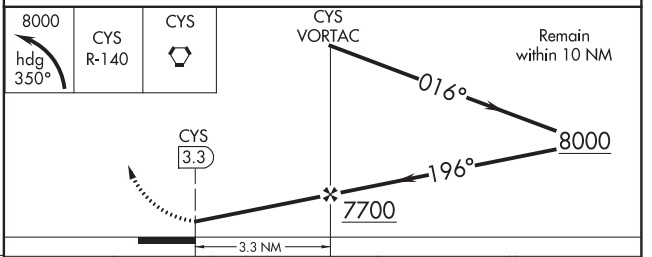
ATIS	CHEYENNE APP CON★	CHEYENNE TOWER★	GND CON	UNICOM
134.425 278.3	124.55 263.075	118.7 (CTAF) L 257.8	121.9 254.275	122.95





7002





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)

CHEYENNE, WYOMING
Amdt 10B 29MAR18

41°09′N-104°49′W

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

VOR or TACAN-A

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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
0.7% UP
266.7°
9270 X 150
0.4% DOWN
086.7°
6690 X 150
0.5% UP
306.7°
ELEV 6125
HANGAR
HANGARS
NEW TERMINAL
NG FACILITIES
TWR 6256
JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W
VAR 8.6°E
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
WYOMING ANG HANGARS
FIRE STATION
ELEV 6160
126.7°
ELEV 6146
HS 1
HANGAR
OLD TERMINAL
HANGAR
FBO
GENERAL AVIATION APRON
HANGARS
104°48'W
104°49'W
41°10'N
41°09'N
FIELD ELEV 6160

CHOTEAU, MONTANA AL-6814 (FAA) 20030

WAAS	APP CRS	Rwy Idg	5001
CH **70443**	**148°**	TDZE	**3943**
W15A		Apt Elev	**3947**

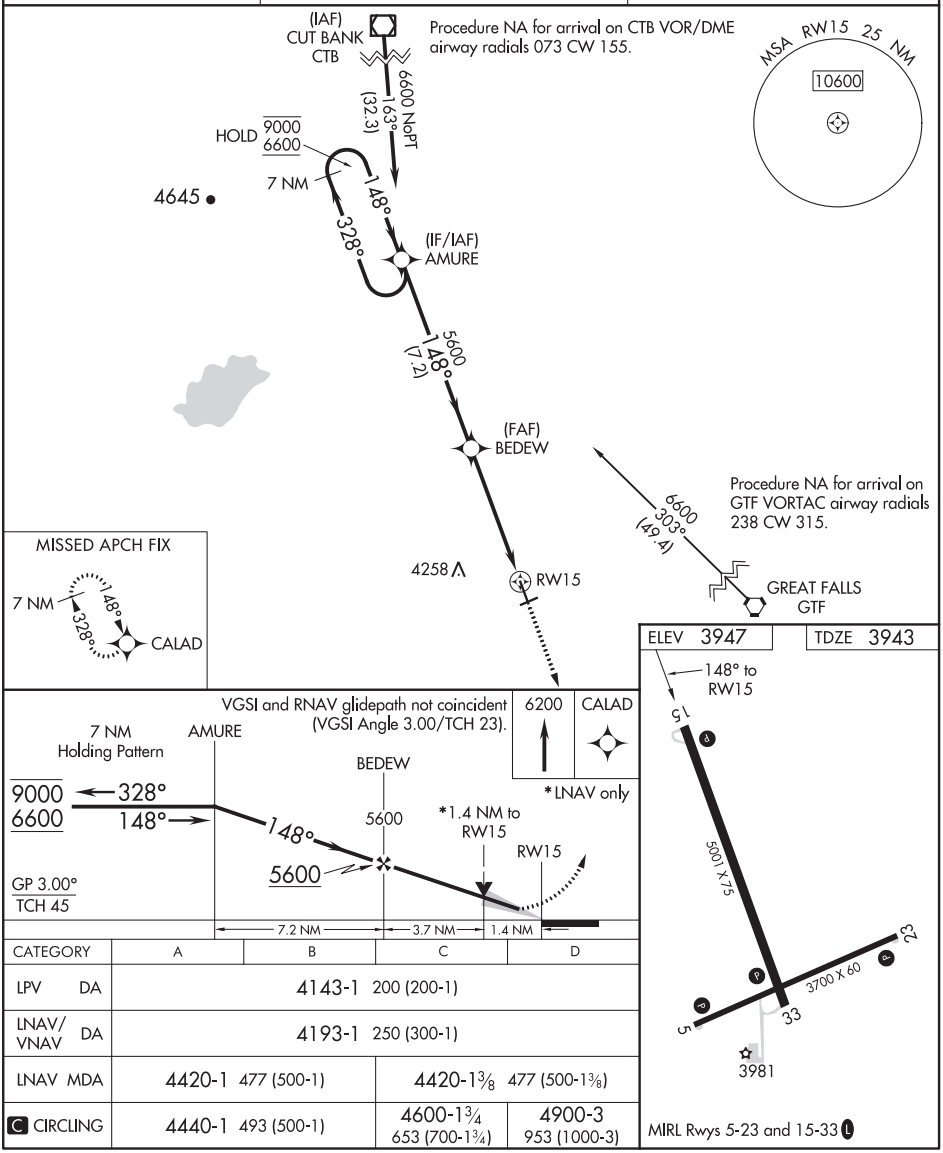
RNAV (GPS) RWY 15
CHOTEAU (CII)

RNP APCH.

T A 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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 33

CHOTEAU (CII)

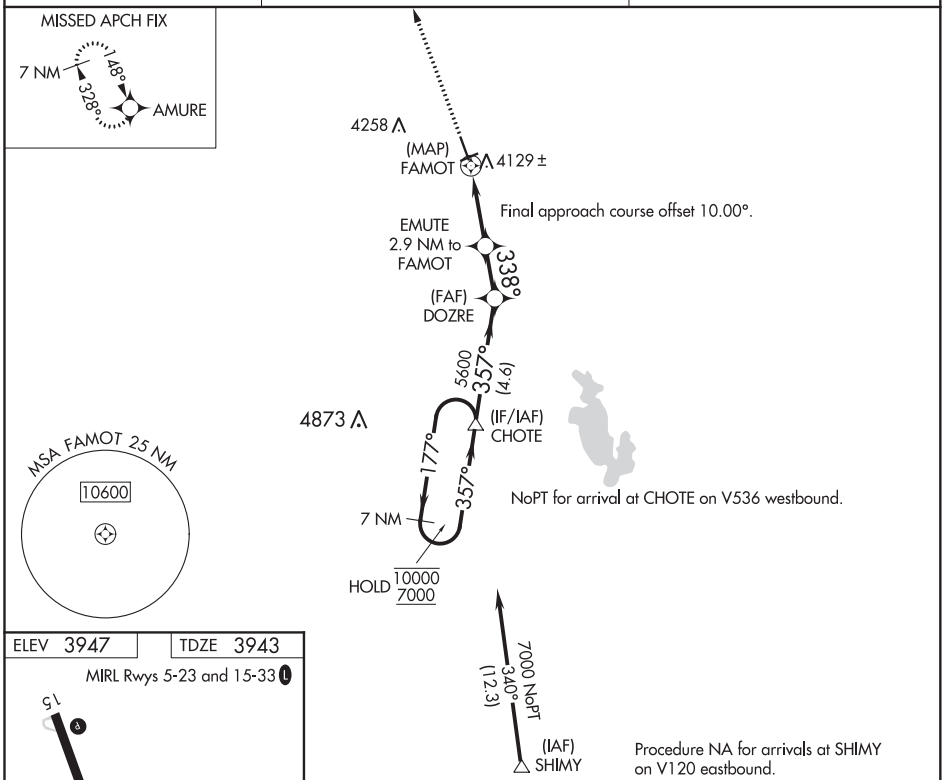
APP CRS	Rwy ldg	5001
338°	TDZE	3943
	Apt Elev	3947

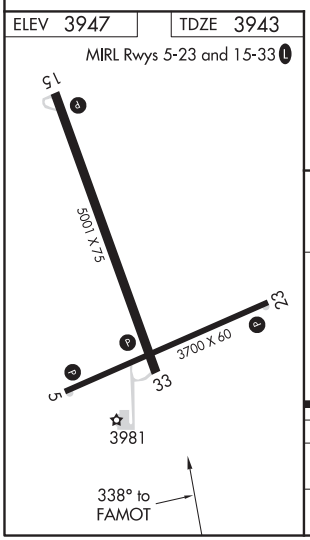
RNP APCH.

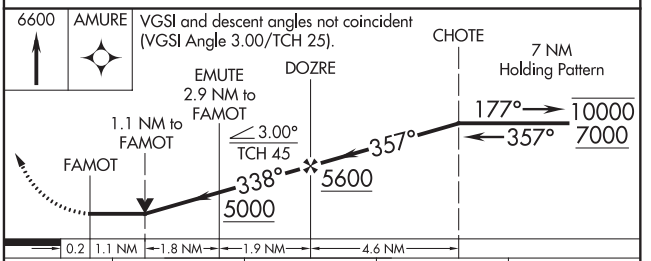
T A NA Rwy 33 helicopter visibility reduction below ¾ SM NA.

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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CIRCLE, MONTANA AL-10493 (FAA) 20030

WAAS	APP CRS	Rwy Idg	4100
CH 86930	131°	TDZE	2429
W12A		Apt Elev	2441

RNAV (GPS) RWY 12

CIRCLE TOWN COUNTY (4U6)

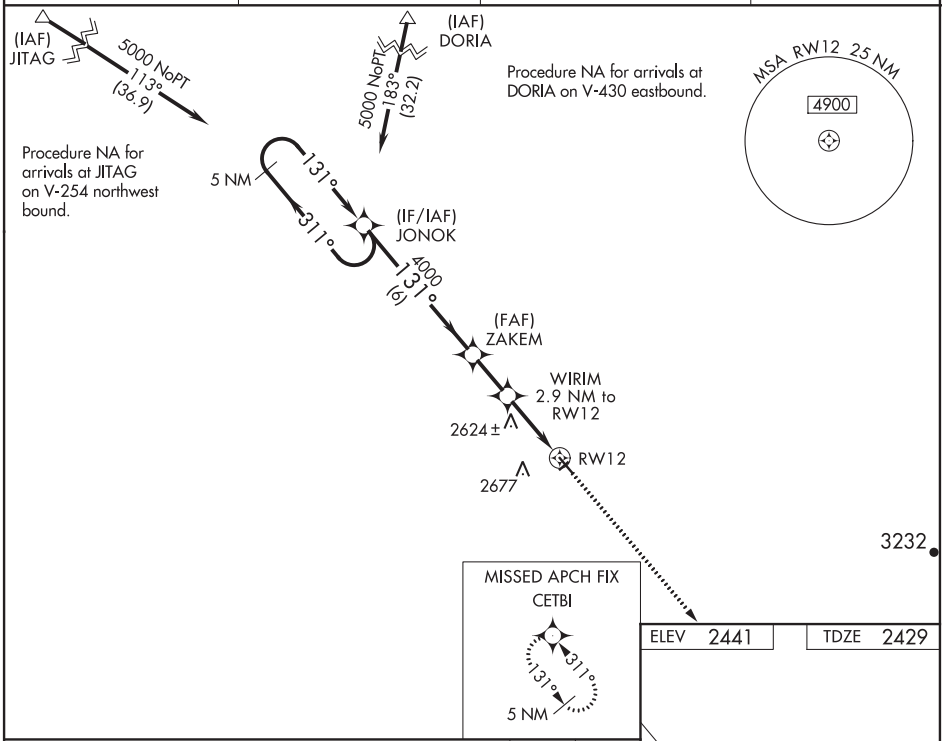
RNP APCH.

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.

NA

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)

MIRL Rwy 12-30 L

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	4100
CH 49030	311°	TDZE	2441
W30A		Apt Elev	2441

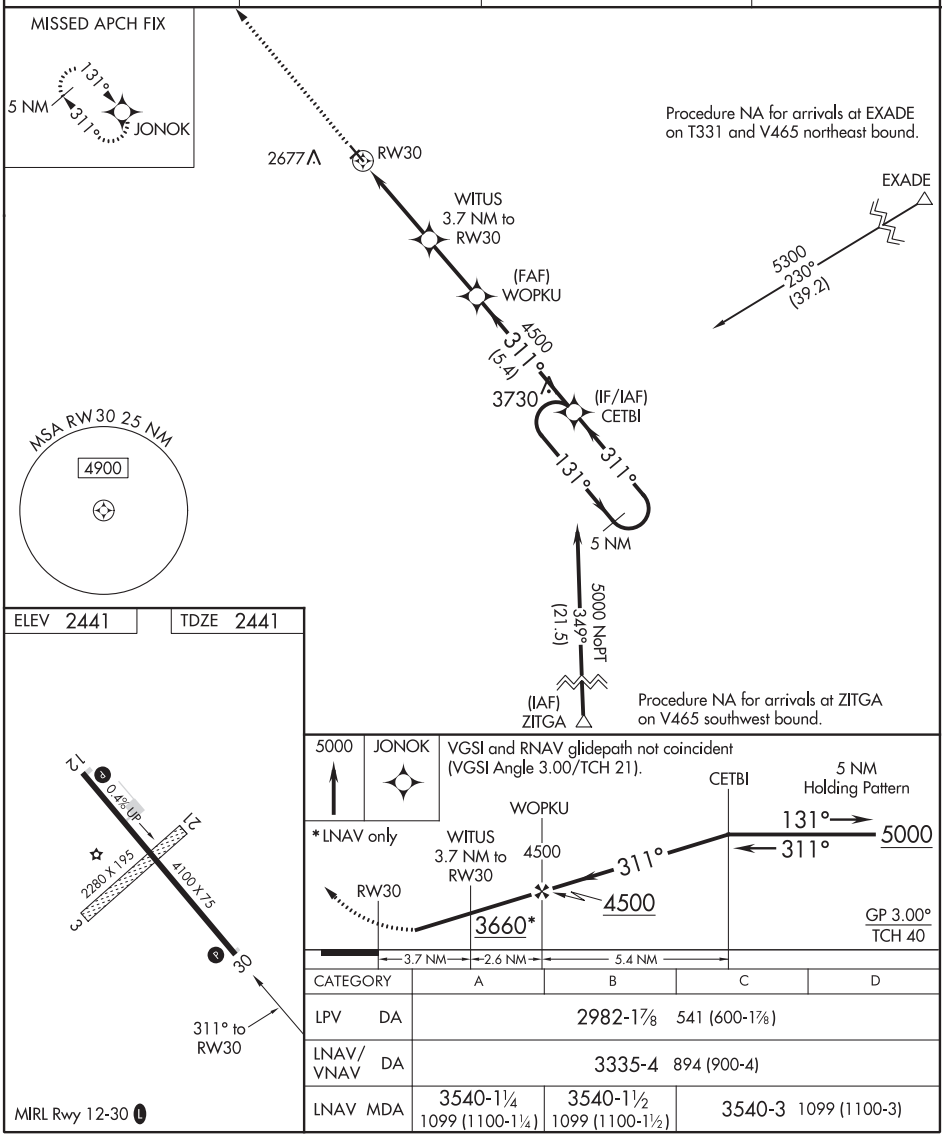
RNAV (GPS) RWY 30
CIRCLE TOWN COUNTY (4U6)

RNP APCH.

T 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



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)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CODY, WYOMING

AL-5243 (FAA)

17285

RNAV (GPS) RWY 22

YELLOWSTONE RGNL (COD)

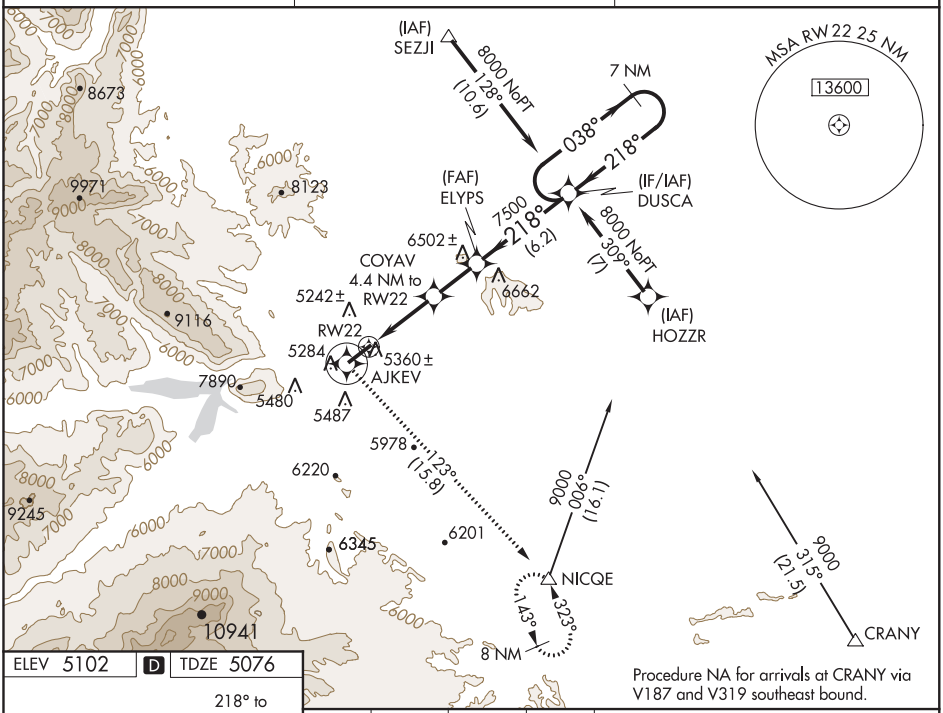
WAAS	APP CRS	Rwy Idg	7178
CH 93600	218°	TDZE	5076
W22A		Apt Elev	5102

TA -31°C

DME/DME RNP- 0.3 NA.

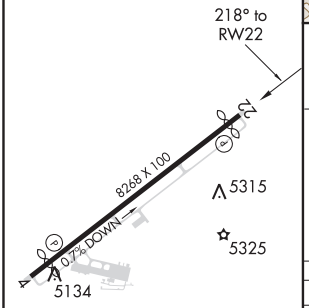
MISSED APPROACH: Climb to 9600 direct AJKEV and left turn via 123° track to NICQE and hold.

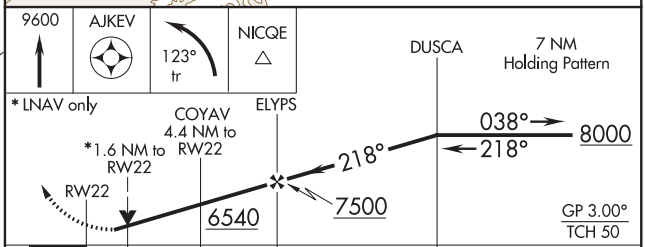
AWOS-3PT	SALT LAKE CENTER	UNICOM
135.075	127.75 351.9	122.8 (CTAF) L



Procedure NA for arrivals at CRANY via V187 and V319 southeast bound.

ELEV 5102 D TDZE 5076





CATEGORY	A	B	C	D
LPV DA	5457-1¼ 381 (400-1¼)			
LNAV/VNAV DA	NA			
LNAV MDA	5620-1 544 (600-1)		5620-1½ 544 (600-1½)	5620-1¾ 544 (600-1¾)
CIRCLING	5840-1¼ 738 (800-1¼)		5900-2¼ 798 (800-2¼)	5960-2¾ 858 (900-2¾)

REIL Rwys 4 and 22 L
HIRL Rwy 4-22 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

CODY, WYOMING
Amdt 1 13APR06

44°31′N-109°01′W

YELLOWSTONE RGNL (COD)
RNAV (GPS) RWY 22

RNAV (GPS)-B

YELLOWSTONE RGNL (COD)

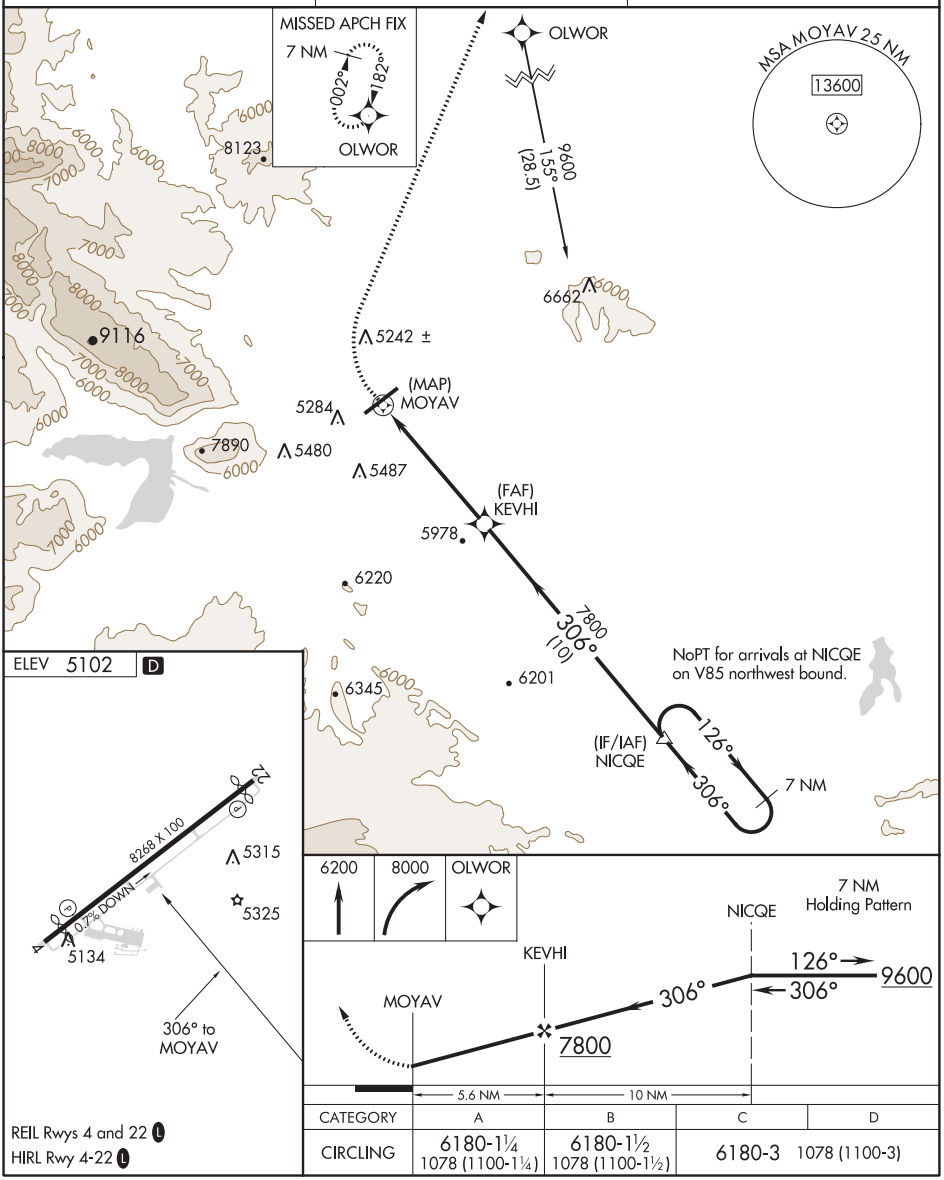
APP CRS	Rwy Idg	N/A
306°	TDZE	N/A
	Apt Elev	5102

T A -31°C

When local altimeter setting not received, procedure NA. DME/DME RNP-0.3 NA.

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
CIRCLING	6180-1¼ 1078 (1100-1¼)	6180-1½ 1078 (1100-1½)	6180-3 1078 (1100-3)	

REIL Rwys 4 and 22 L
HIRL Rwy 4-22 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CODY, WYOMING

AL-5243 (FAA)

17285

VOR-A

YELLOWSTONE RGNL (COD)

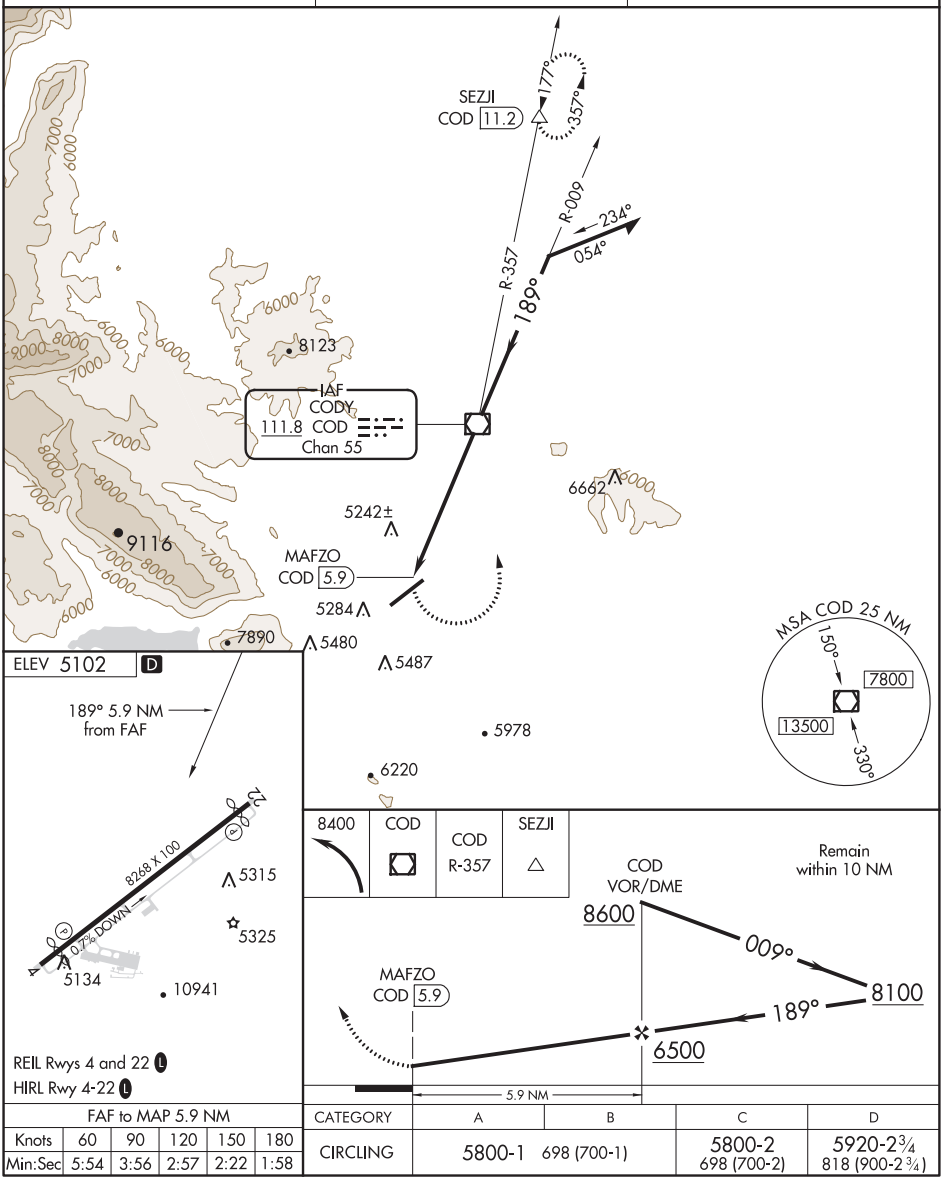
VOR/DME COD	APP CRS	Rwy Idg	N/A
111.8	189°	TDZE	N/A
Chan 55		Apt Elev	5102

TA -31°C

When local altimeter setting not received, procedure NA. DME required.

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



FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
CIRCLING	5800-1	698 (700-1)	5800-2 698 (700-2)	5920-2¾ 818 (900-2¾)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-COE	APP CRS	Rwy Idg	7400
110.7	051°	TDZE	2290
		Apt Elev	2320

ILS or LOC/DME RWY 6

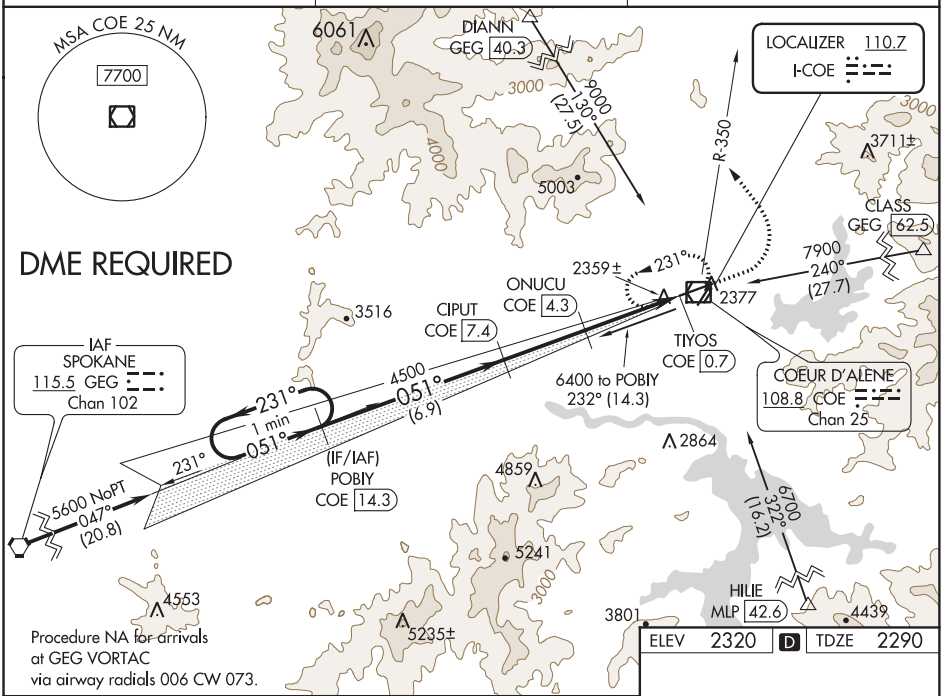
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

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.

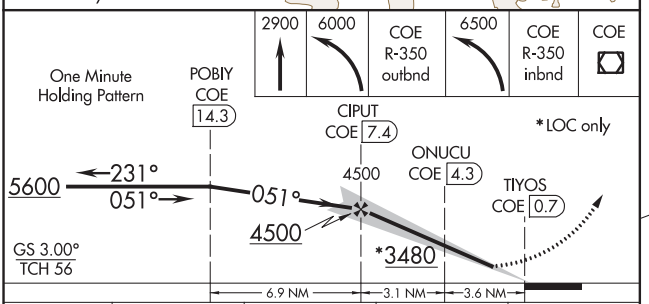
MALSR

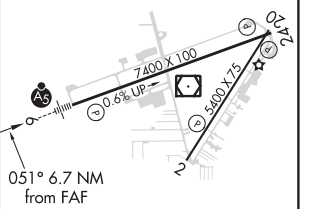
MISSED APPROACH: Climb to 2900 then climbing left turn to 6000 via COE R-350 outbound then climbing left turn to 6500 via COE R-350 inbound to COE VOR/DME and hold.

AWOS-3PT	SPOKANE APP CON	UNICOM
135.075	132.1 263.0	122.8 (CTAF) L



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 70608 W06A	APP CRS 051°	Rwy Idg 7400 TDZE 2291 Apt Elev 2320

RNAV (GPS) RWY 6

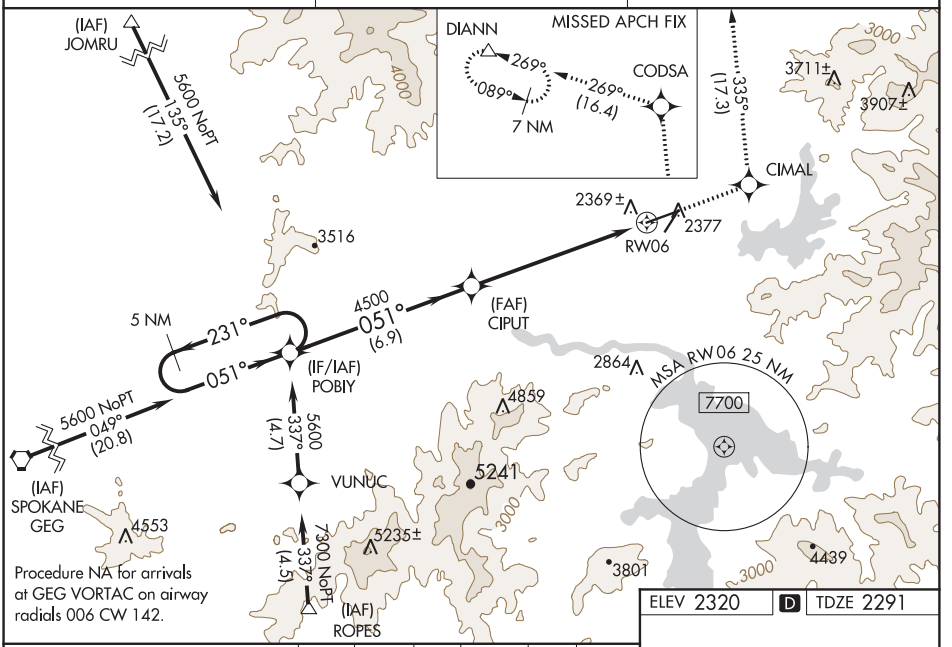
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

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.

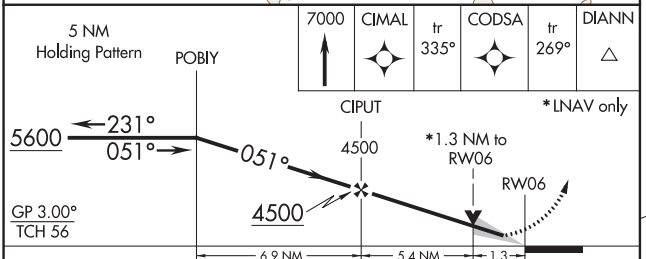
MALSR

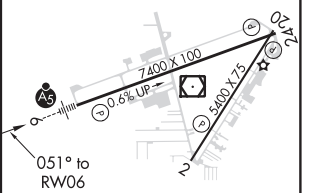
MISSED APPROACH: Climb to 7000 direct CIMAL and on track 335° to CODSA and on track 269° to DIANN and hold.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME COE	APP CRS	Rwy Idg	5400
108.8	344°	TDZE	2311
Chan 25		Apt Elev	2320

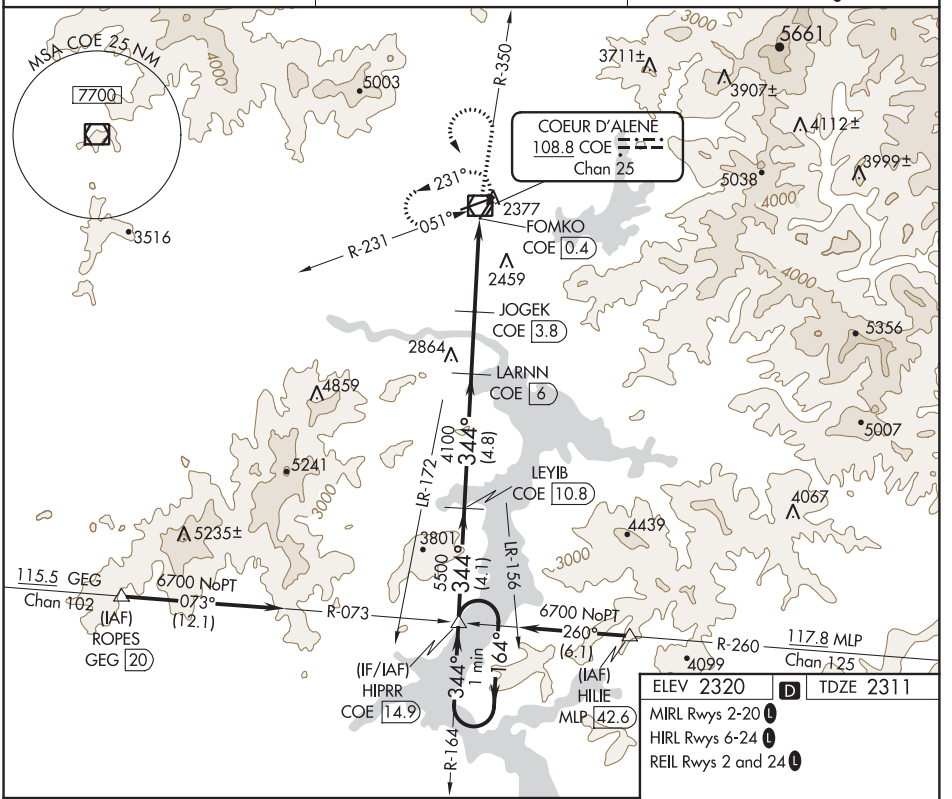
VOR/DME RWY 2

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

Helicopter visibility reduction below ¾ SM not authorized. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDA 80 feet and S-2 and Circling Cat C visibility ¼ mile. VDP NA with Spokane Intl altimeter setting. Night landing: Rwy 2 NA.

MISSED APPROACH: Climb to 6000 on COE R-350 outbound then climbing left turn to 6500 on 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

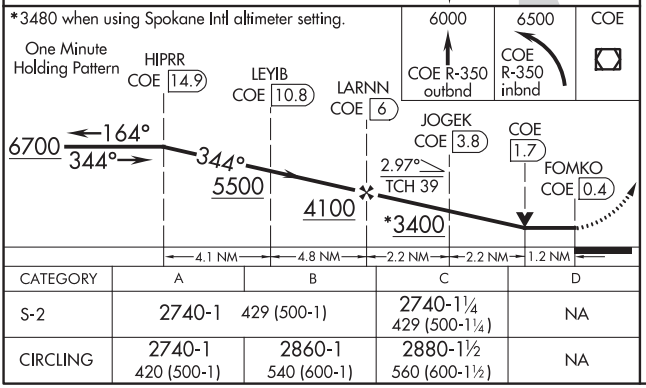


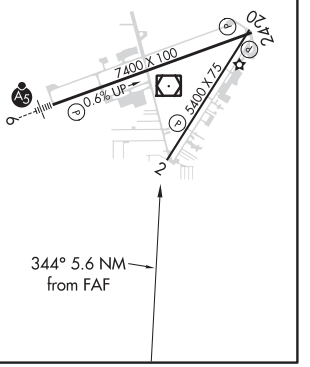
ELEV 2320 D TDZE 2311

MIRL Rwys 2-20 L

HIRL Rwys 6-24 L

REIL Rwys 2 and 24 L





CATEGORY	A	B	C	D
S-2	2740-1	429 (500-1)	2740-1¼ 429 (500-1¼)	NA
CIRCLING	2740-1 420 (500-1)	2860-1 540 (600-1)	2880-1½ 560 (600-1½)	NA

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

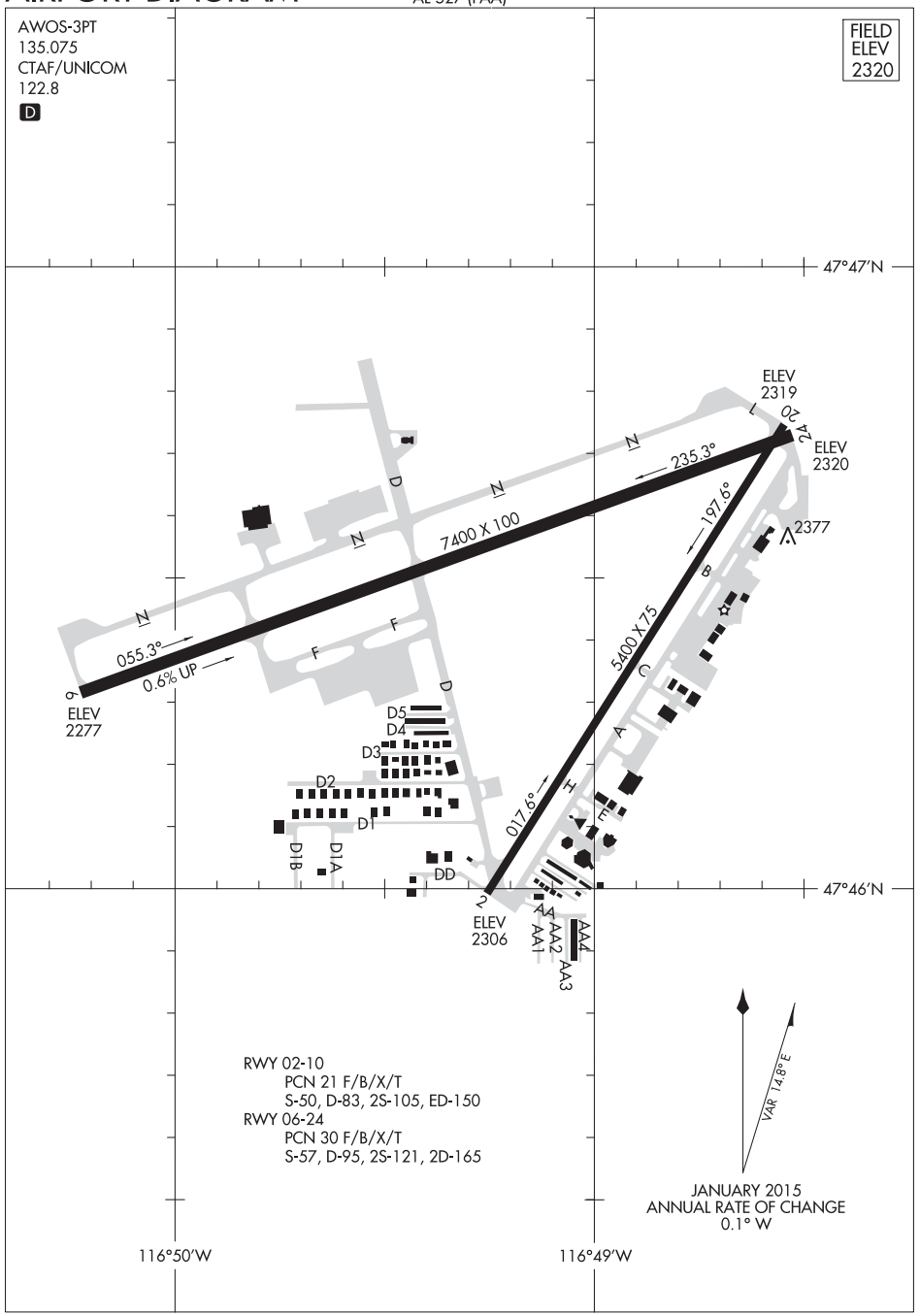
16315

AIRPORT DIAGRAM

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

AL-527 (FAA)

COEUR D'ALENE, IDAHO



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

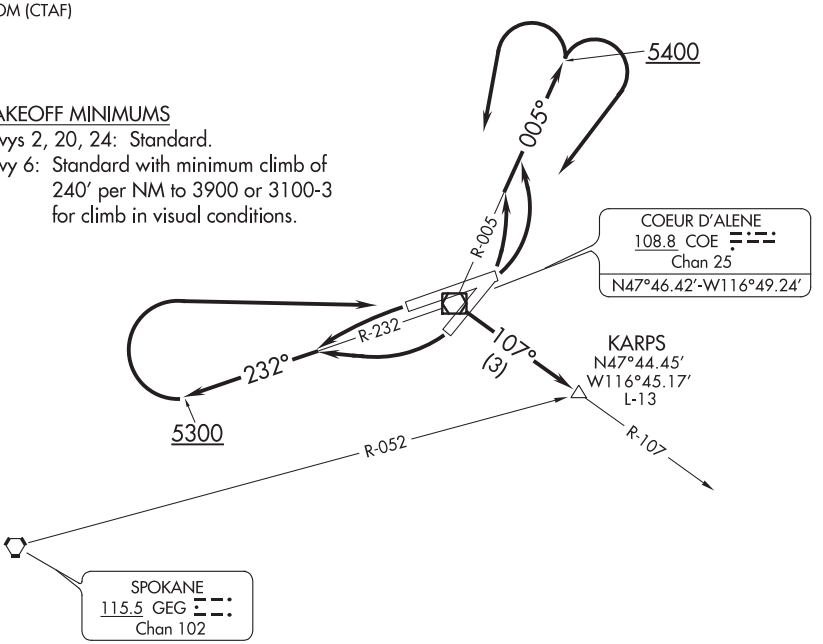
COEUR D'ALENE, IDAHO

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

16315

COEUR D'ALENE TWO DEPARTURE (OBSTACLE)

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

COLSTRIP, MONTANA | AL-9401 (FAA) | 17061

GPS RWY 6
COLSTRIP (M46)

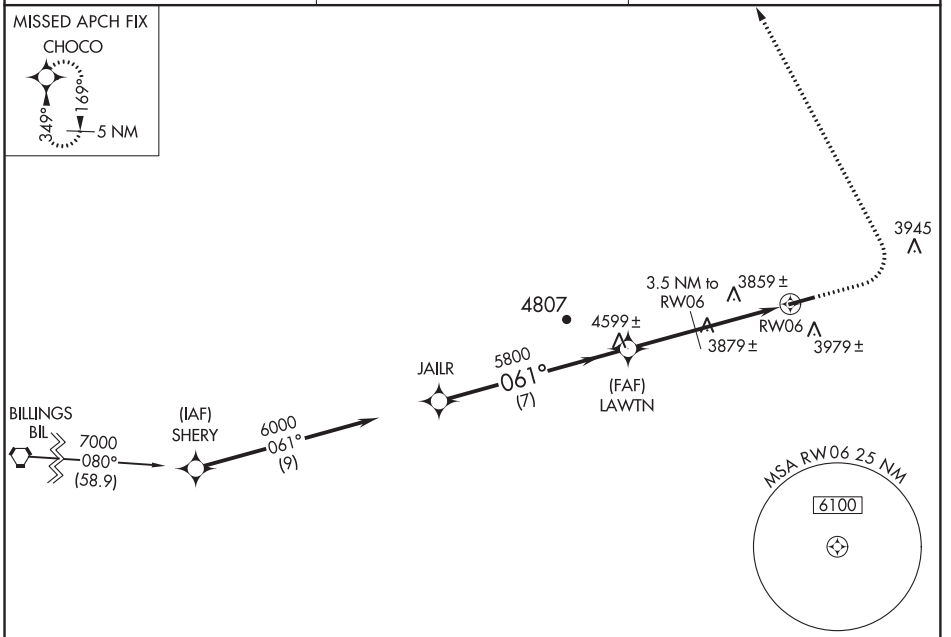
APP CRS	Rwy Idg	5100
061°	TDZE	3426
	Apt Elev	3426

T
NA
-32°C

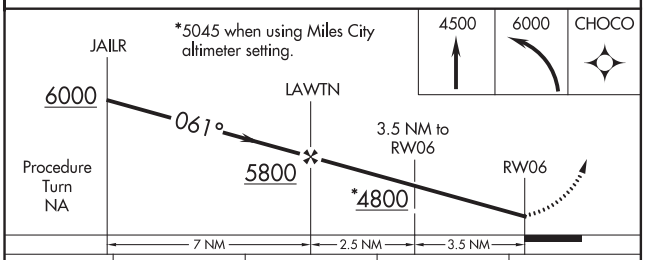
When local altimeter not received use Miles City altimeter setting. Helicopter visibility reduction below ¾ SM NA.

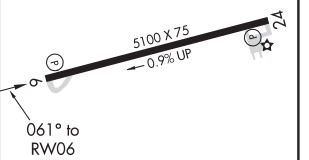
MISSED APPROACH: Climb to 4500 then climbing left turn to 6000 direct CHOCO WP and hold.

AWOS-AV	SALT LAKE CENTER	UNICOM
122.7	132.425 317.45	122.7 (CTAF) L



ELEV 3426 | TDZE 3426





CATEGORY	A	B	C	D
S-6	4220-1 794 (800-1)	4220-1¼ 794 (800-1¼)	4220-2¼ 794 (800-2¼)	NA
CIRCLING	4340-1¼ 914 (1000-1¼)		4340-2¾ 914 (1000-2¾)	NA
MILES CITY ALTIMETER SETTING				
S-6	NA			
CIRCLING	4580-1¼ 1154 (1200-1¼)	4580-1½ 1154 (1200-1½)	4580-3 1154 (1200-3)	NA

MIRL Rwy 6-24 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	5100
242°	TDZE	3411
	Apt Elev	3426

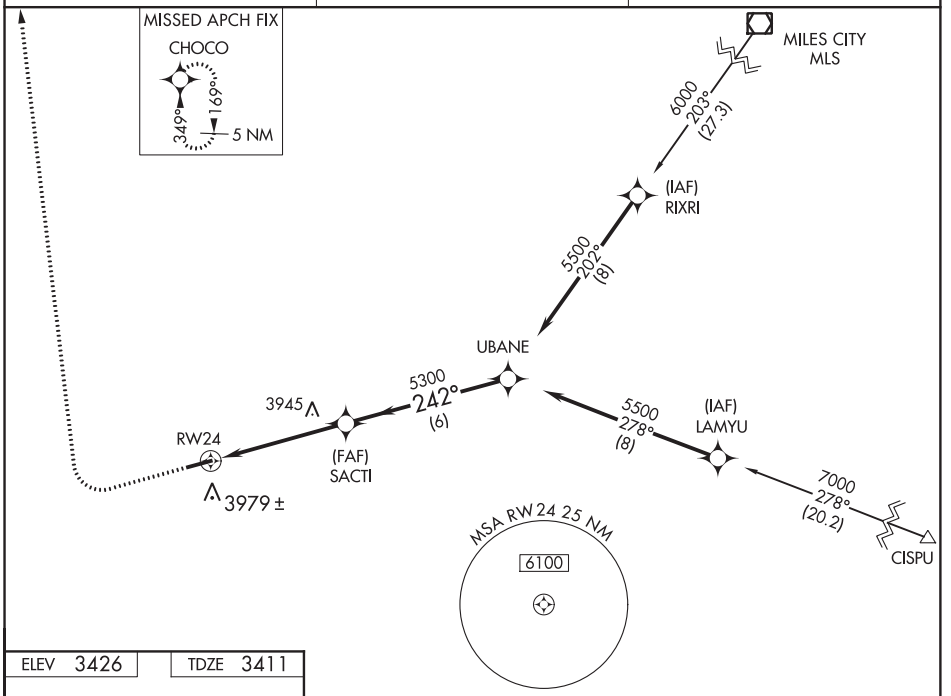
GPS RWY 24
COLSTRIP (M46)

NA
-32°C

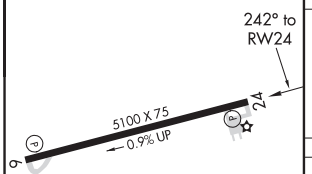
When local altimeter not received use Miles City altimeter setting. Helicopter visibility reduction below ¾ SM NA.

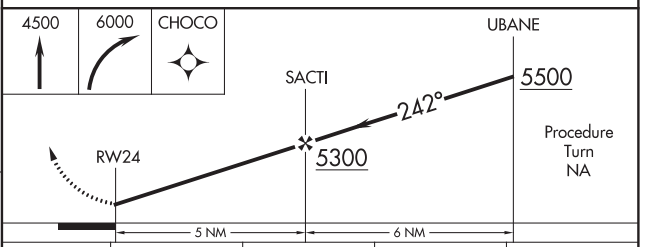
MISSED APPROACH: Climb to 4500 then climbing right turn to 6000 direct CHOCO WP and hold.

AWOS-AV	SALT LAKE CENTER	UNICOM
122.7	132.425 317.45	122.7 (CTAF) L



ELEV 3426 TDZE 3411





CATEGORY	A	B	C	D
S-24	4200-1 789 (800-1)	4200-1¼ 789 (800-1¼)	4200-2¼ 789 (800-2¼)	NA
CIRCLING	4340-1¼ 914 (1000-1¼)		4340-2¾ 914 (1000-2¾)	NA
MILES CITY ALTIMETER SETTING				
S-24	4440-1¼ 1029 (1100-1¼)	4440-1½ 1029 (1100-1½)	4440-2¾ 1029 (1100-2¾)	NA
CIRCLING	4580-1¼ 1154 (1200-1¼)	4580-1½ 1154 (1200-1½)	4580-3 1154 (1200-3)	NA

MIRL Rwy 6-24 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

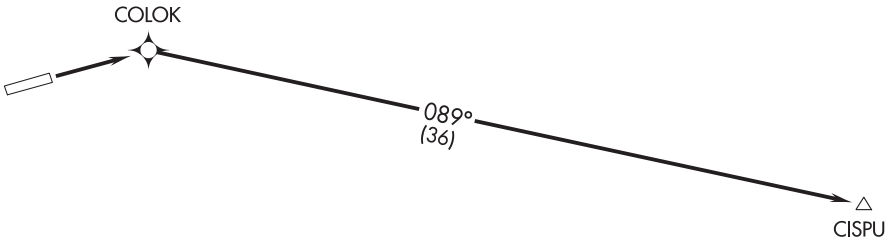
(CISPU1.CISPU) 17005

CISPU ONE DEPARTURE (OBSTACLE) (RNAV)

SL-9401 (FAA)

COLSTRIP (M46)
COLSTRIP, MONTANA

SALT LAKE CENTER
132.425 317.45



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

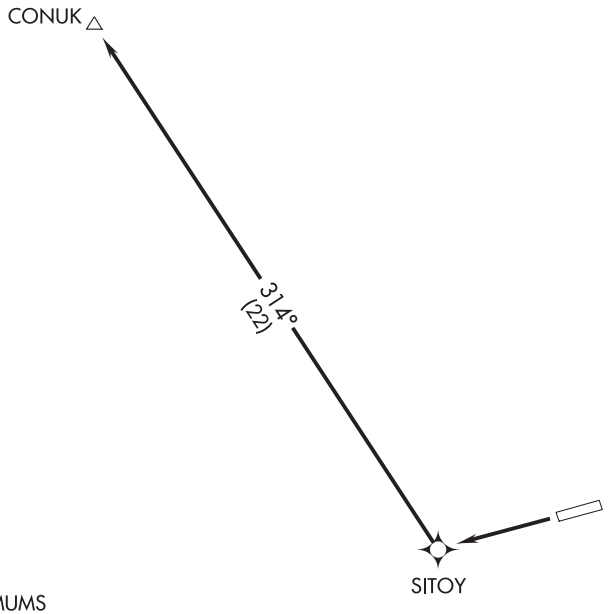
TAKEOFF RUNWAY 6: Climb direct COLOK then via 089° track to CISPU, thence. . . .

. . . .Maintain 9000, expect filed altitude 10 minutes after departure.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SALT LAKE CENTER
132.425 317.45



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CONRAD, MONTANA | AL-6090 (FAA) | 19059

WAAS CH 58342 W06A	APP CRS 058°	Rwy Idg 4602 TDZE 3548 Apt Elev 3548

RNAV (GPS) RWY 6

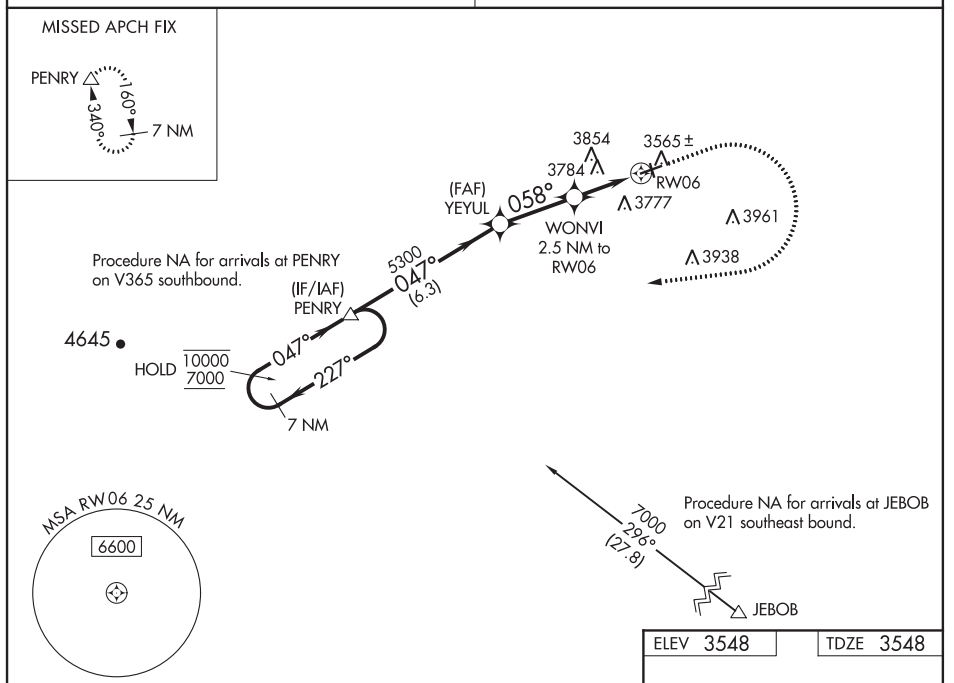
CONRAD (SØ1)

RNP APCH.

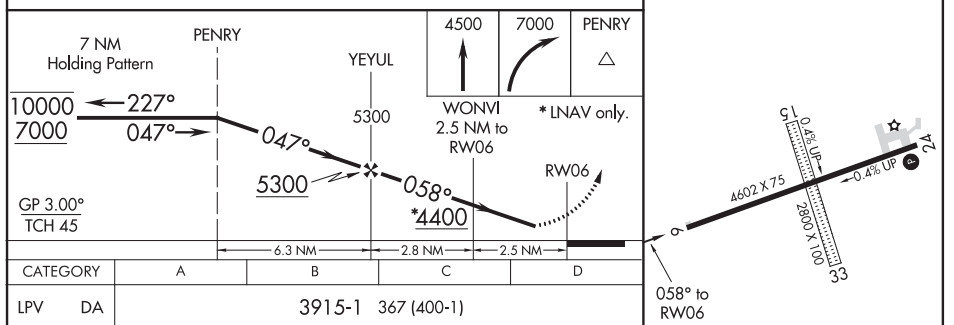
T A NA — Circling NA to Rwys 15 and 33. Rwy 6 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 53°C. Use Cut Bank altimeter setting.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 69642 W24A	APP CRS 238°	Rwy Idg 4602 / TDZE 3538 / Apt Elev 3548

RNAV (GPS) RWY 24

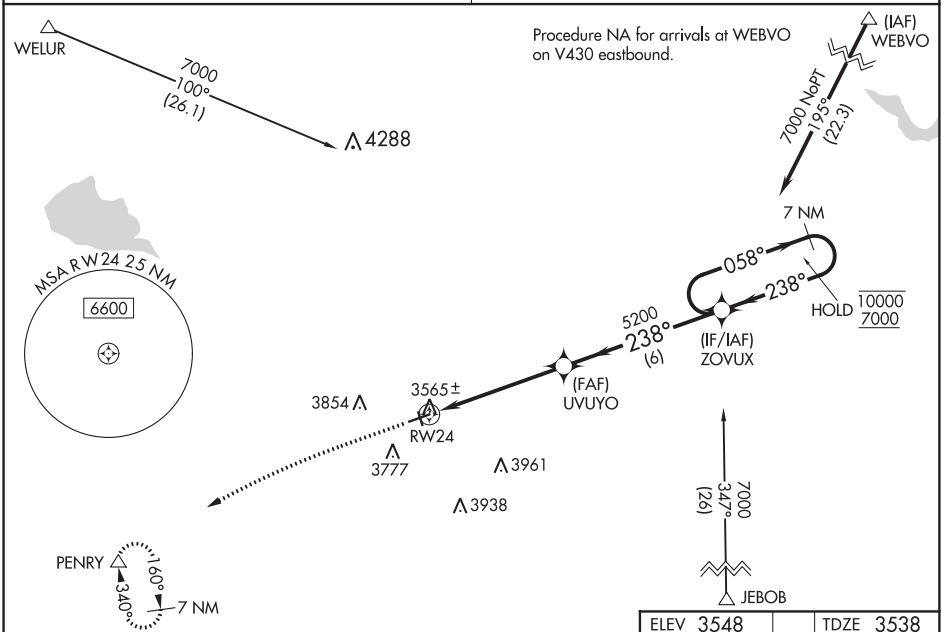
CONRAD (SØ1)

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.

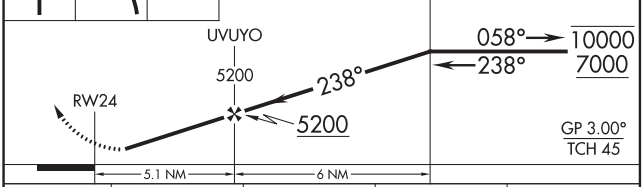
SALT LAKE CITY CENTER	AUNICOM
133.4 285.4	122.8 (CTAF) L

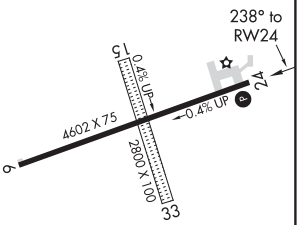


ELEV 3548	TDZE 3538

4120	7000	PENRY

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 27).





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CORVALLIS, OREGON | AL-782 (FAA) | 19339

ILS or LOC RWY 17
CORVALLIS MUNI (CVO)

LOC I-CVO	APP CRS	Rwy Idg	5900
111.9	172°	TDZE	248
		Apt Elev	250

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

ALTERNATE MISSED APCH FIX
LEWISBURG LWG 225
172° 352°

BREAF
UBG 20
4300 to NDB 181° (26.1)
4100 to NDB 207° (19.6)
TURNO 266 SL
EUG 45.1
CRAAF
UBG 39
4300 to NDB 144° (9.5)
352° 217° 037°
(CFFSK)
172°
2686
2096
MAGOT
EUG 34.4
3800 to NDB 237° (11.6)
1757
ZIKDO
CVO 8.1
IAF
LEWISBURG
225 LWG
CVO 6.9
1741
1316±
MSA LWG 25 NM
148° 3900
238° 5300
4900
328°
CORVALLIS
115.4 CVO
Chan 101
112.9 EUG
Chan 76
4000 to NDB
350° (6.9)
4097
LOCALIZER 111.9
I-CVO
388
360° 180°
R-081
SHEDD
EUG 22.1
1632
380
R-360

ELEV 250 | D | TDZE 248
172° 6.7 NM from FAF
3545 X 75
5900 X 150
9 27
18 36
REIL Rwy 35 L
MIRL Rwys 9-27 and 17-35 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

900	3000 hdg 050°	CVO R-081	SHEDD

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 45).

LWG NDB
CVO 6.9
Remain within 10 NM
352°
ZIKDO
CVO 8.1
3300
172°
2800
CVO 0.3
*CVO 2.5
2500*
2800
GS 3.00°
TCH 45
*LOC only.
2.2 NM | 4.5 NM | 1.2 NM

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)

CORVALLIS, OREGON
Amdt 5 13SEP18

44°30'N-123°17'W

CORVALLIS MUNI (CVO)
ILS or LOC RWY 17

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 78311 W17A	APP CRS 172°	Rwy Idg 5900 TDZE 248 Apt Elev 250

RNAV (GPS) RWY 17

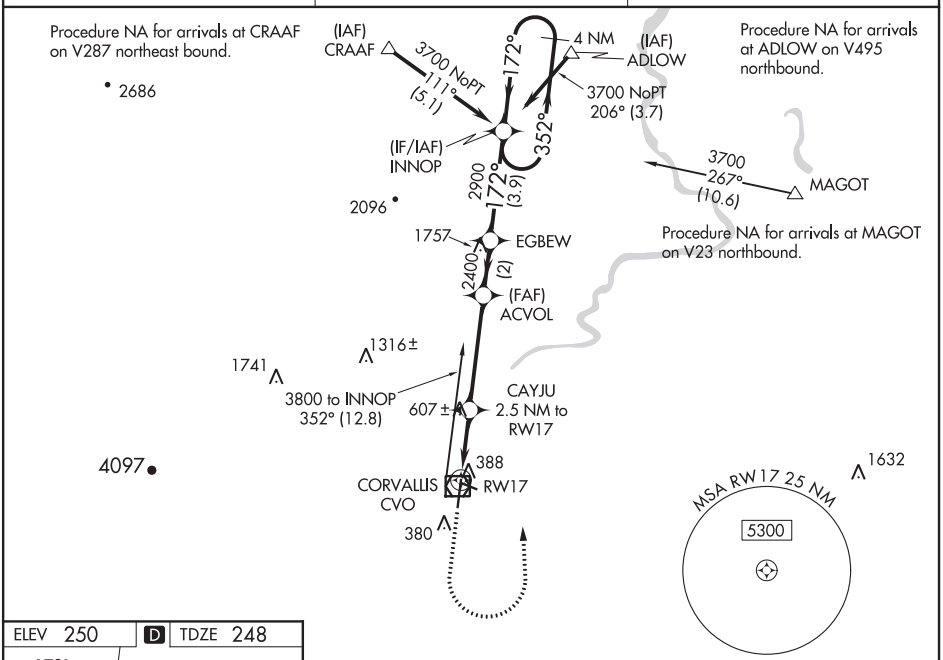
CORVALLIS MUNI (CVO)

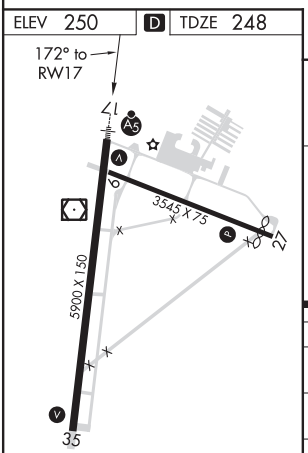
NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cats visibility to 1 SM and increase LNAV Cat C/D visibility to 1¾ mile.

MALSR

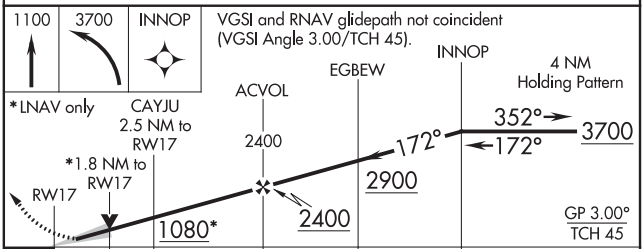
MISSED APPROACH: Climb to 1100 then climbing left turn to 3700 direct INNOP and hold, continue climb-in-hold to 3700.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CORVALLIS, OREGON | AL-782 (FAA) | 19339

RNAV (GPS) RWY 35

CORVALLIS MUNI (CVO)

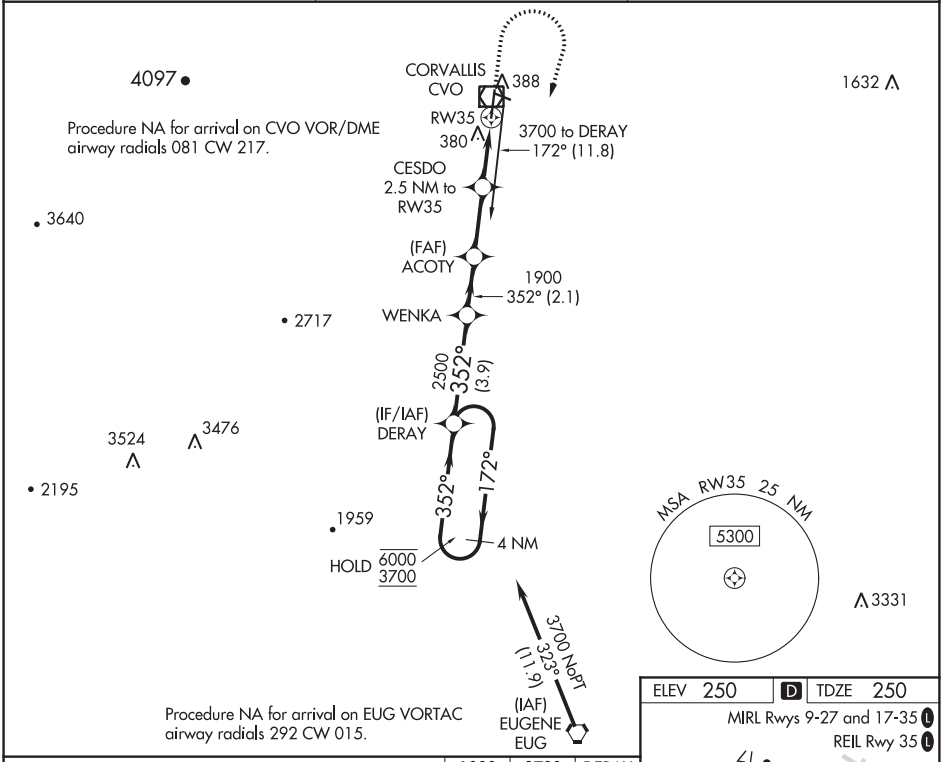
WAAS	APP CRS	Rwy Idg	5900
CH 69517	352°	TDZE	250
W35A		Apt Elev	250

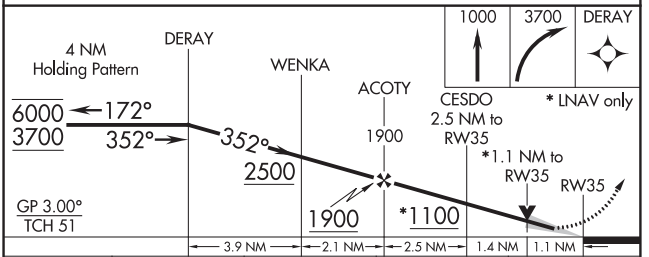
RNP APCH.

T A 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



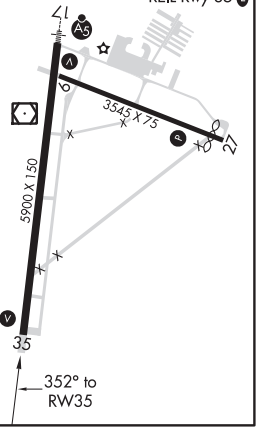


CATEGORY	A	B	C	D
LPV DA	500-¾ 250 (300-¾)			
LNAV/VNAV DA	551-⅞ 301 (400-⅞)			
LNAV MDA	640-1 390 (400-1)		640-1⅛ 390 (400-1⅛)	
C CIRCLING	720-1 470 (500-1)		920-1¾ 670 (700-1¾)	1080-2¾ 830 (900-2¾)

ELEV 250 | D | TDZE 250

MIRL Rwys 9-27 and 17-35 L

REIL Rwy 35 L



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 17

CORVALLIS MUNI (CVO)

VOR/DME CVO	APP CRS	Rwy Idg	5900
115.4	177°	TDZE	248
Chan 101		Apt Elev	250

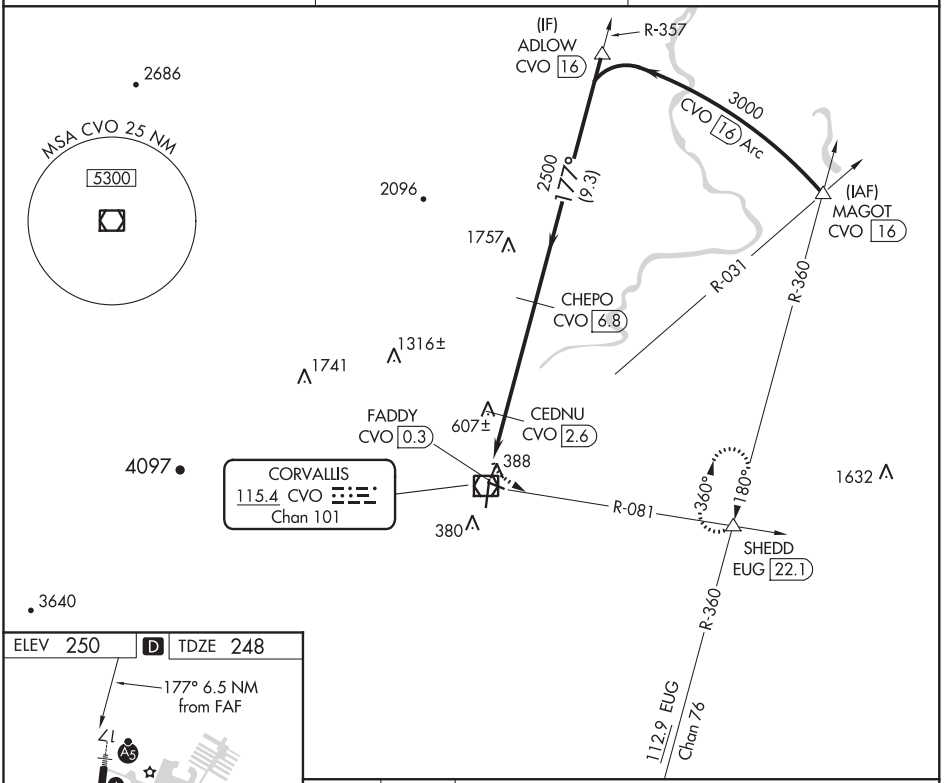
DME required

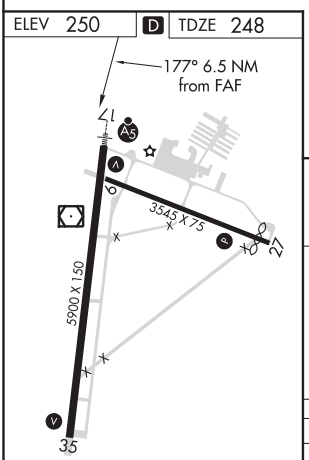
When local altimeter setting not received, procedure NA. For inop ALS, increase Cat C/D visibility to 1¾ SM.

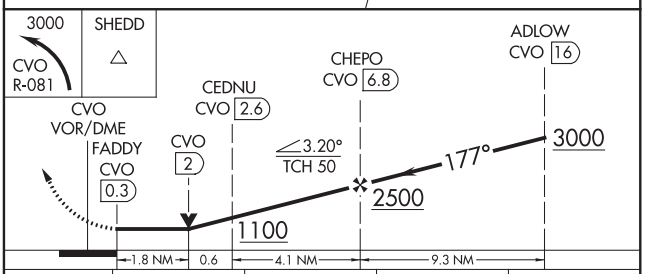
MALSR

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)

REIL Rwy 35 L

MIRL Rwys 9-27 and 17-35 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 35
CORVALLIS MUNI (CVO)

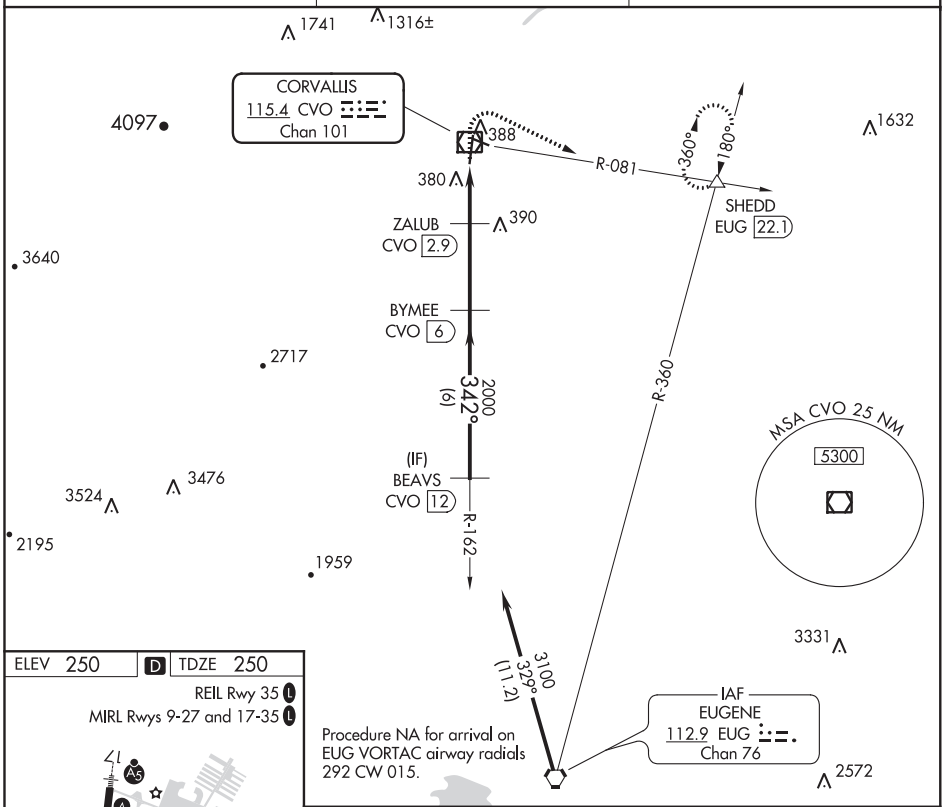
VOR/DME CVO	APP CRS	Rwy Idg	5900
115.4	342°	TDZE	250
Chan 101		Apt Elev	250

DME required.

When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 700 then climbing right turn to 3000 on CVO VOR/DME R-081 to SHEDD INT/EUG 22.1 DME and hold, continue climb-in-hold to 3000.

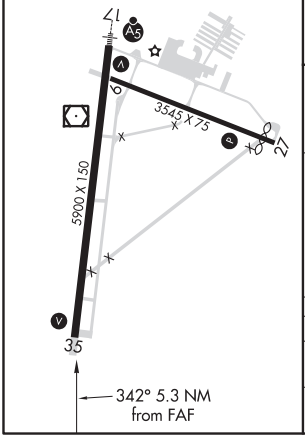
AWOS-3PT	CASCADE APP CON ★	UNICOM
135.775	127.5 348.7	123.075 (CTAF) L

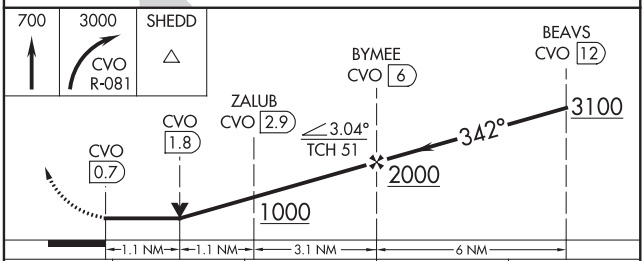


ELEV 250 D TDZE 250

REIL Rwy 35 L

MIRL Rwys 9-27 and 17-35 L





CATEGORY	A	B	C	D
S-35	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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME CVO	APP CRS	Rwy Idg	N/A
115.4	252°	TDZE	N/A
Chan 101		Apt Elev	250

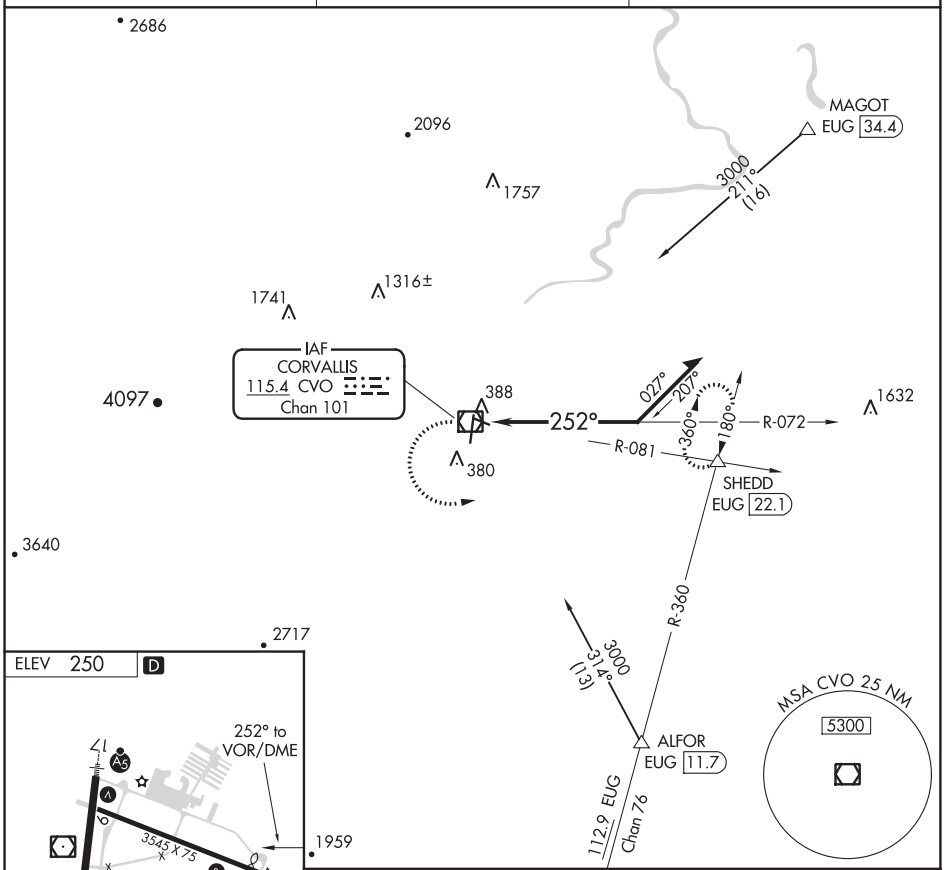
VOR-A

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 1150 (1200-1¼)	1400-1½ 1150 (1200-1½)	1400-3 1150 (1200-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(CVO2.CVO) 18032

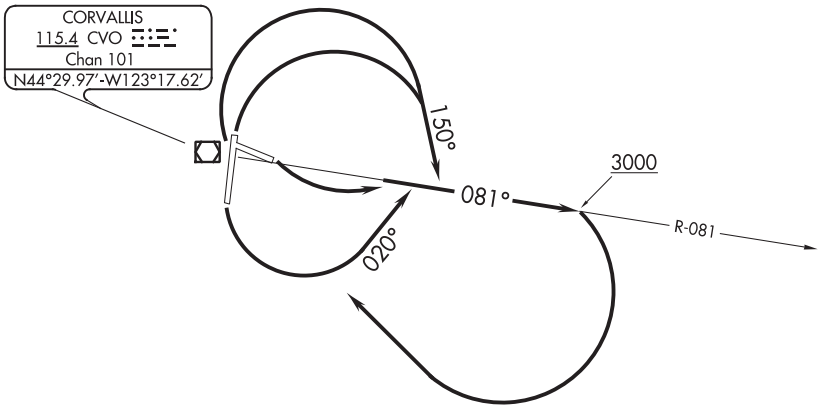
CORVALLIS TWO DEPARTURE

AL-782 (FAA)

CORVALLIS MUNI (CVO)
CORVALLIS, OREGON

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.

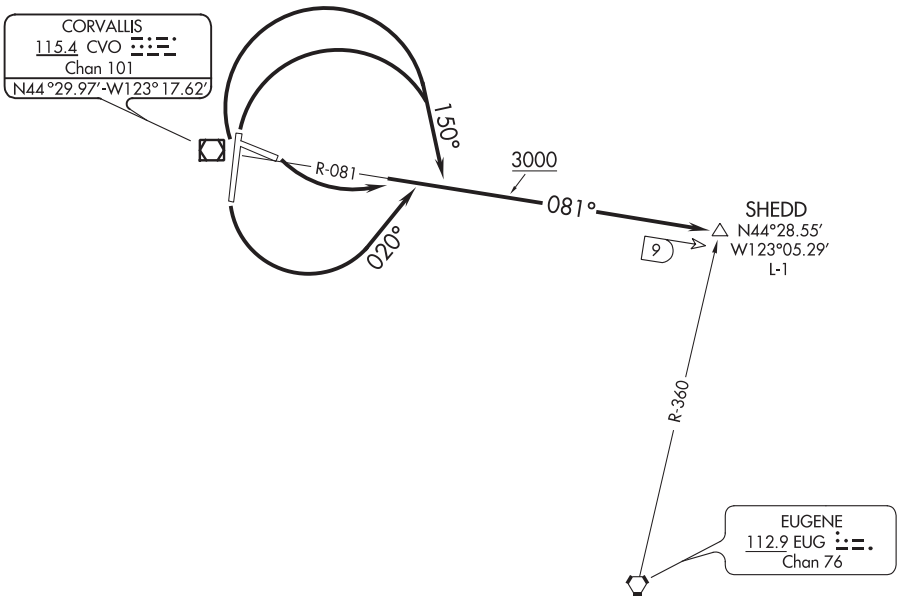
LOST COMMUNICATIONS:

If not in contact with ATC upon reaching 3000', continue climb to assigned altitude direct CVO VOR/DME. Thence on assigned route of flight.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

COWLEY/LOVELL/BYRON, WYOMING AL-6856 (FAA) 19115

WAAS	APP CRS	Rwy Idg	5200
CH 86333	095°	TDZE	4086
W09A		Apt Elev	4094

RNAV (GPS) RWY 9

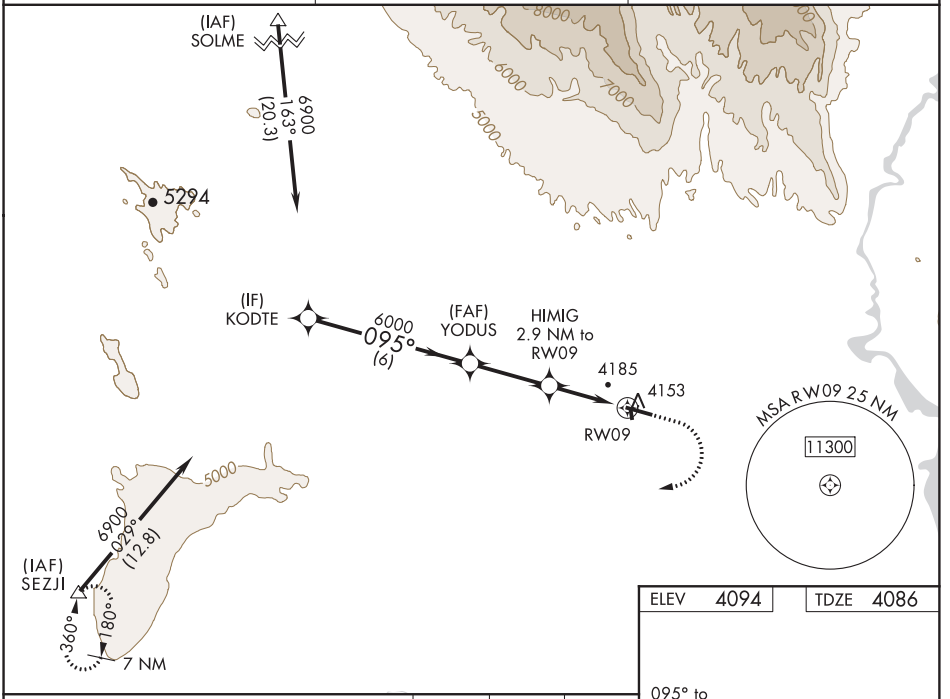
NORTH BIG HORN COUNTY (U68)

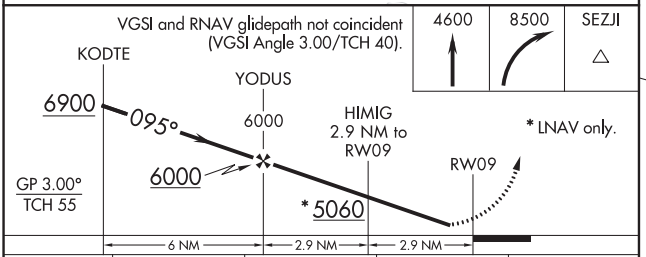
Baro-VNAV NA when using Greybull altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 49°C (121°F). DME/DME RNP-0.3 NA. When Rwy 9 VGSI inop, Straight-in and Circling minimums NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter 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

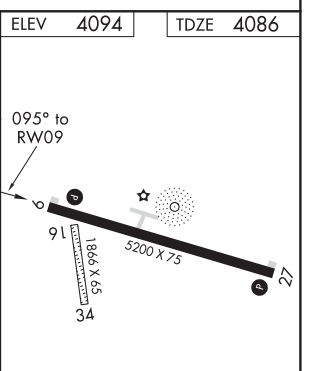
MISSED APPROACH: Climb to 4600 then climbing right turn to 8500 direct SEZJI and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
119.925	133.25 285.6	122.8 (CTAF) L





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	4520-1 426 (500-1)	4680-1 586 (600-1)	4940-2½ 846 (900-2½)	5260-3 1166 (1200-3)



REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NDB HCY	APP CRS	Rwy Idg	5200
257	080°	TDZE	4086
		Apt Elev	4094

NDB RWY 9

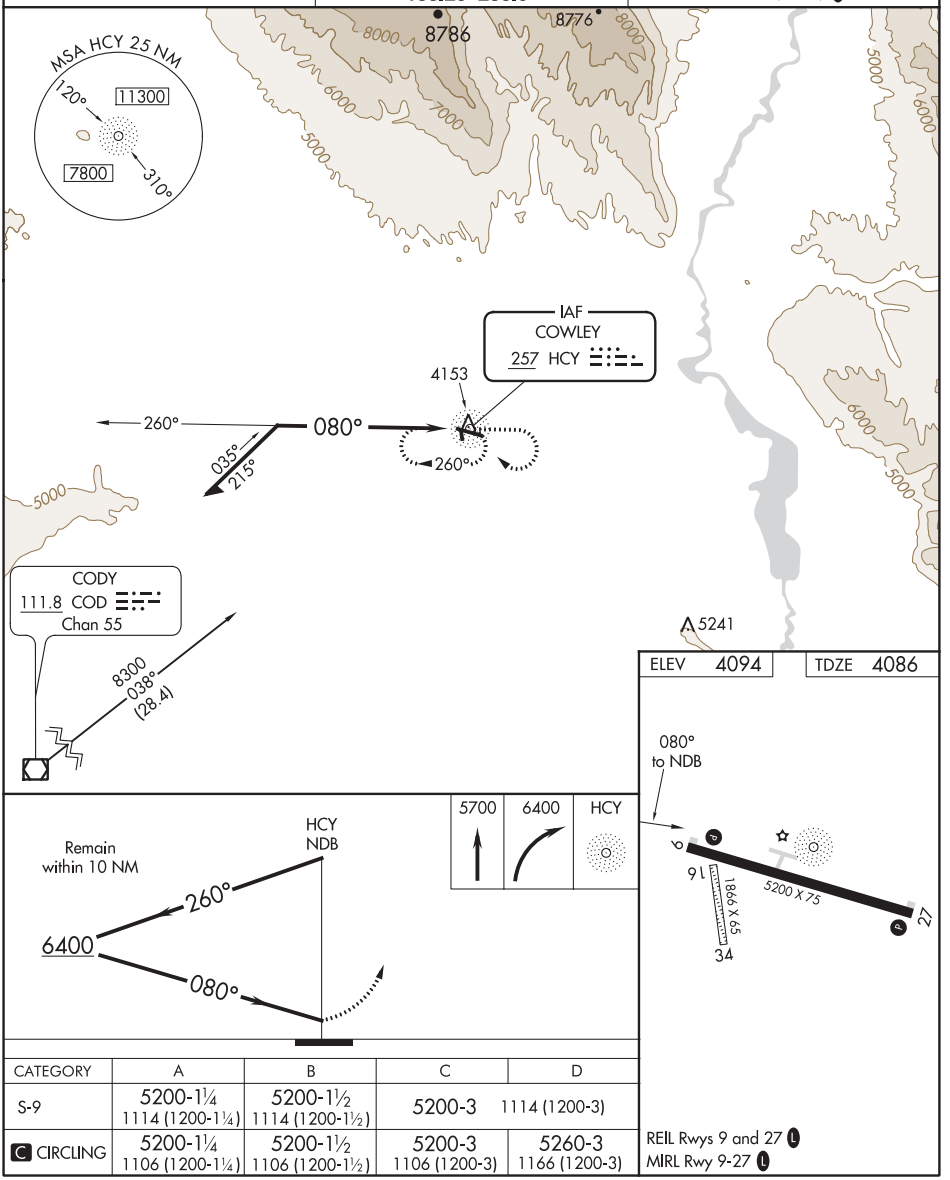
NORTH BIG HORN COUNTY (U68)

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CRESWELL, OREGON | AL-10215 (FAA) | 18312

WAAS	APP CRS	Rwy Idg	3102
CH 78341	159°	TDZE	541
W16A		Apt Elev	541

RNAV (GPS) RWY 16

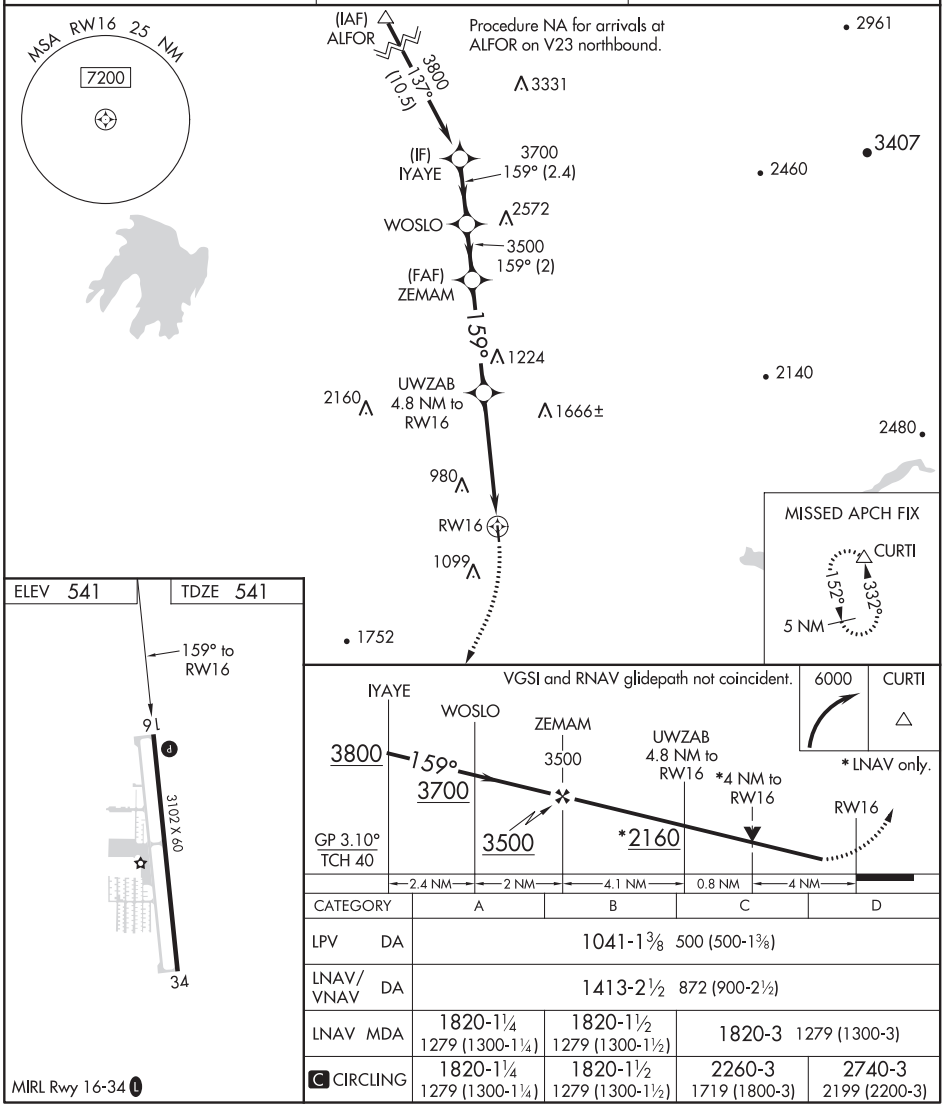
HOBBY FIELD (77S)

RNP APCH.

T NA 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) L



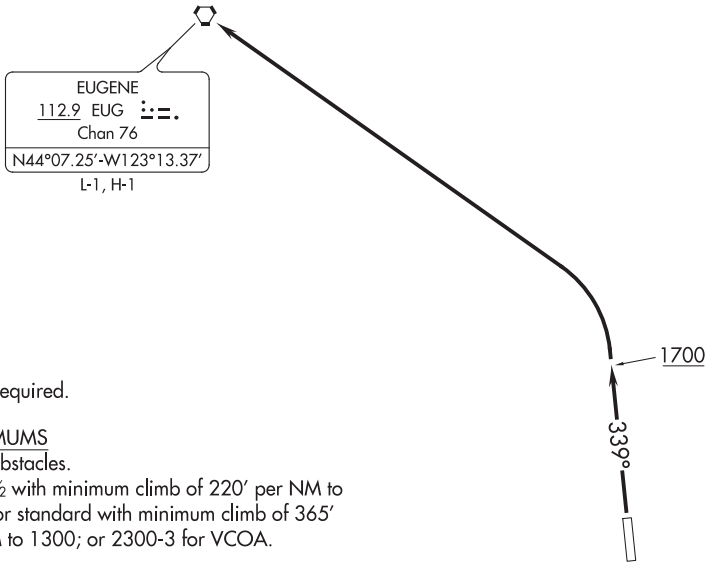
CATEGORY	A	B	C	D
LPV DA	1041-1⅜ 500 (500-1⅜)			
LNAV/VNAV DA	1413-2½ 872 (900-2½)			
LNAV MDA	1820-1¼ 1279 (1300-1¼)	1820-1½ 1279 (1300-1½)	1820-3 1279 (1300-3)	
C CIRCLING	1820-1¼ 1279 (1300-1¼)	1820-1½ 1279 (1300-1½)	2260-3 1719 (1800-3)	2740-3 2199 (2200-3)

MIRL Rwy 16-34 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

CUT BANK, MONTANA

AL-484 (FAA)

17341

RNAV (GPS) RWY 5

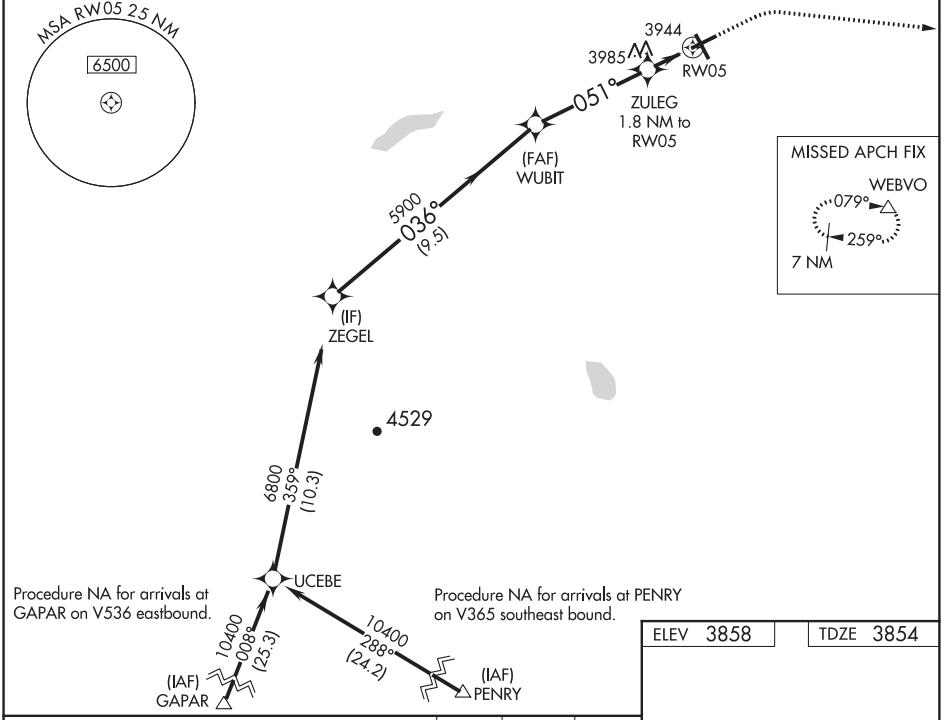
CUT BANK INTL (CTB)

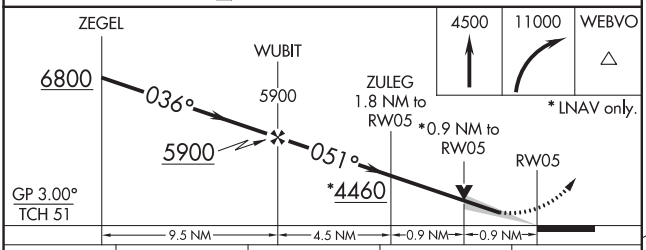
WAAS	APP CRS	Rwy Idg	5300
CH 86737	051°	TDZE	3854
W05A		Apt Elev	3858

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.

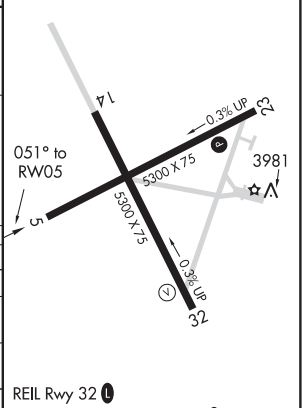
MISSED APPROACH: Climb to 4500 then climbing right turn to 11000 direct WEBVO and hold.

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)



NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 14

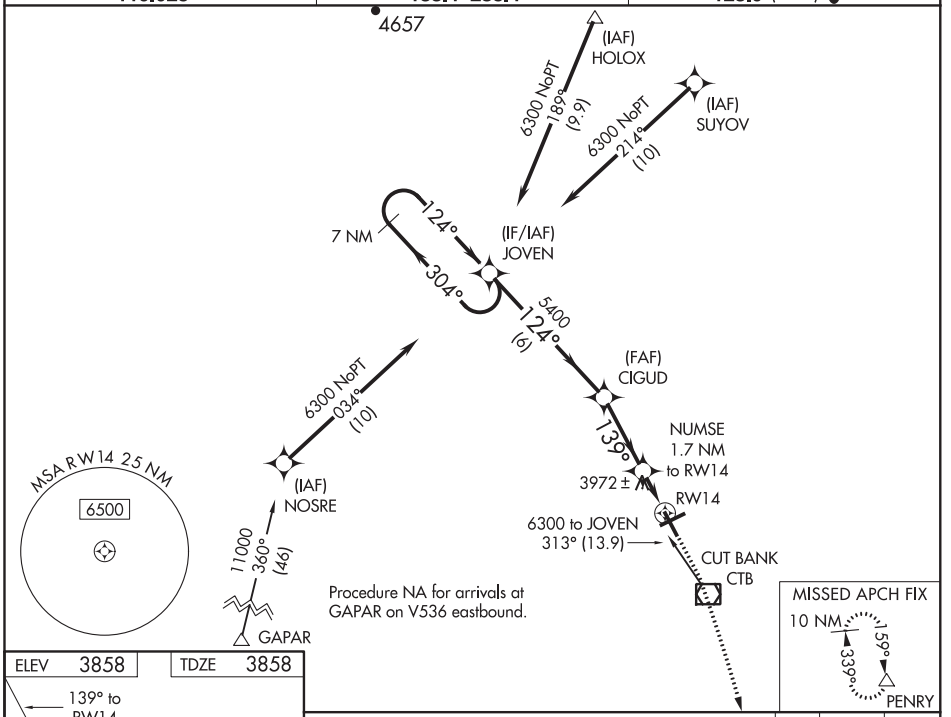
CUT BANK INTL (CTB)

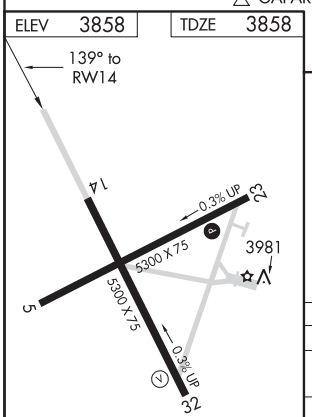
WAAS	APP CRS	Rwy Idg	5300
CH 93537	139°	TDZE	3858
W14A		Apt Elev	3858

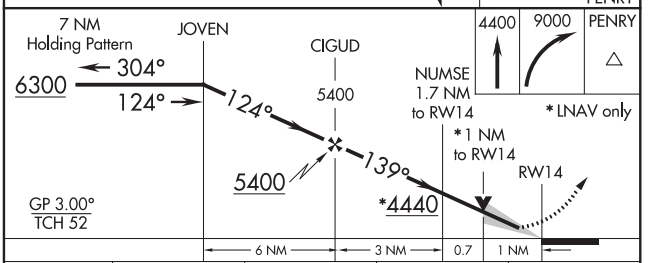
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F). DME/DME RNP-0.3 NA.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

CUT BANK, MONTANA AL-484 (FAA) 17341

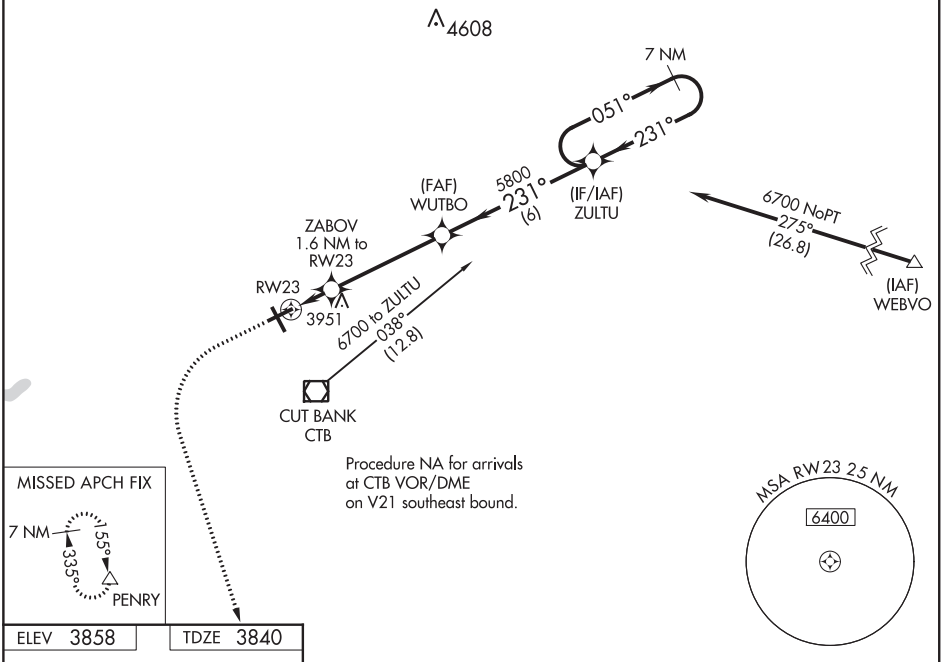
WAAS	APP CRS	Rwy Idg	5300
CH 53337	231°	TDZE	3840
W23A		Apt Elev	3858

RNAV (GPS) RWY 23
CUT BANK INTL (CTB)

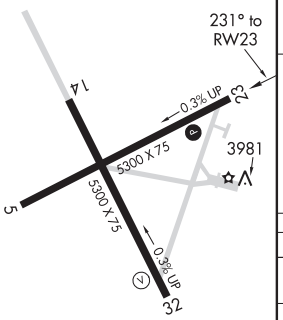
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4400 then climbing left turn to 9000 direct PENRY and hold.

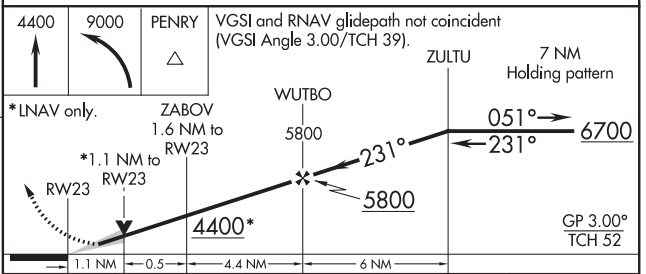
ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	123.0 (CTAF) L



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 32

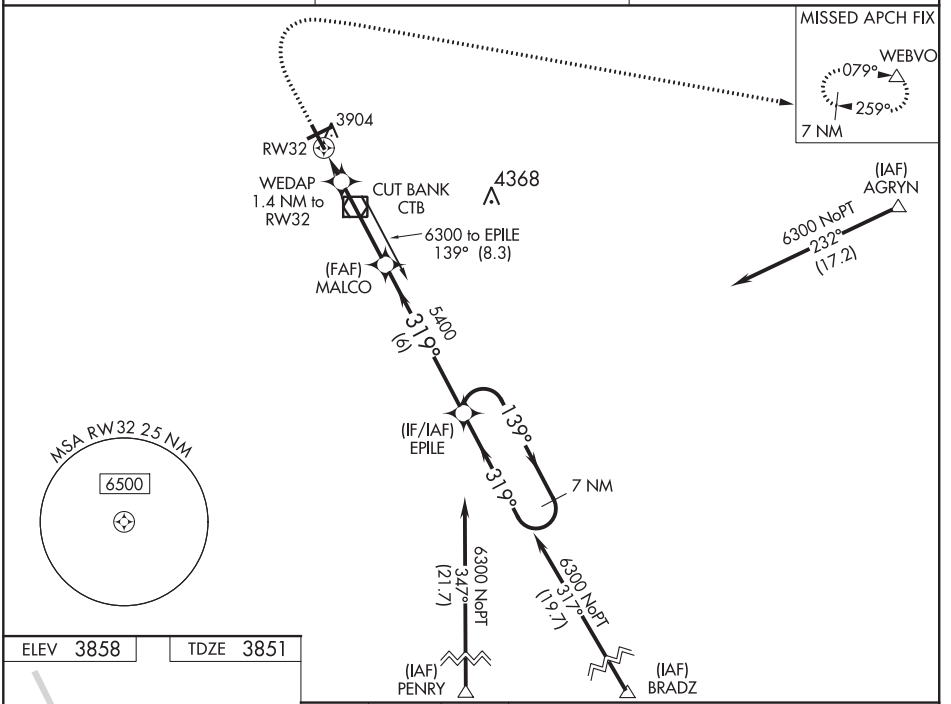
CUT BANK INTL (CTB)

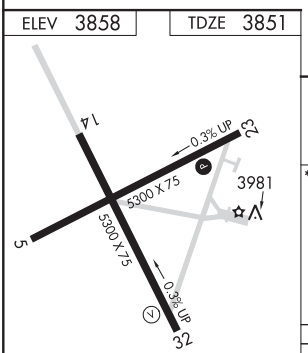
WAAS	APP CRS	Rwy Idg	5300
CH 99337	319°	TDZE	3851
W32A		Apt Elev	3858

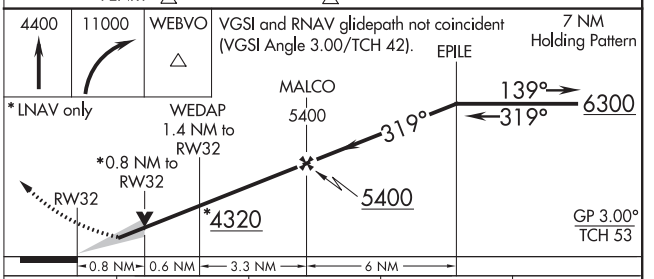
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4400 then climbing right turn to 11000 direct WEBVO and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	123.0 (CTAF)







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)

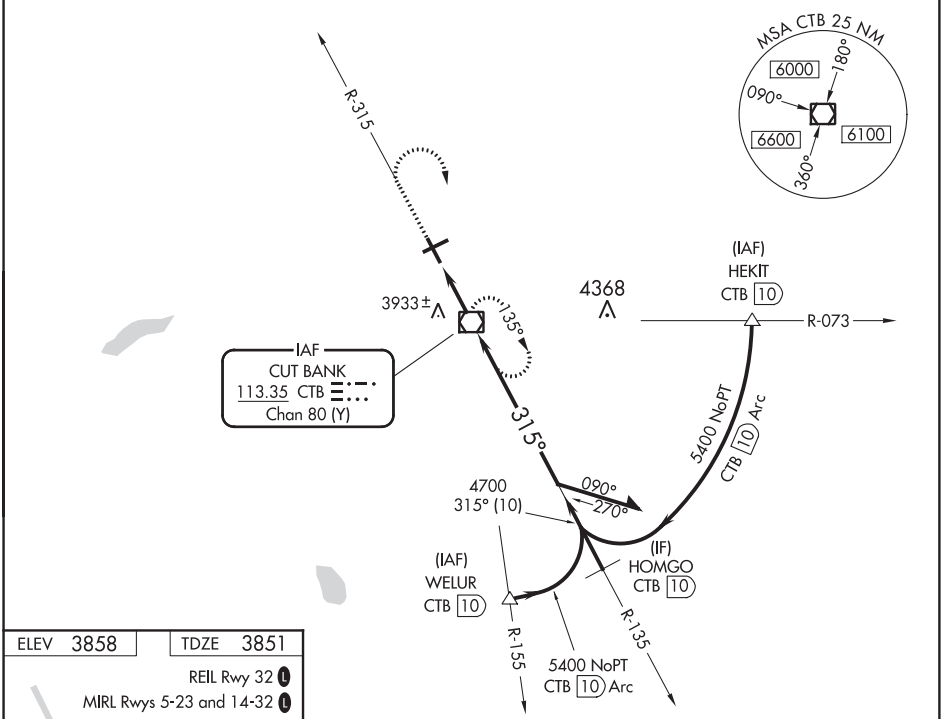
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

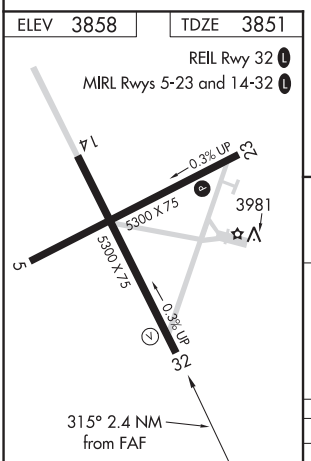
VOR/DME CTB	APP CRS	Rwy Idg	5300
113.35	315°	TDZE	3851
Chan 80 (Y)		Apt Elev	3858

VOR RWY 32
CUT BANK INTL (CTB)

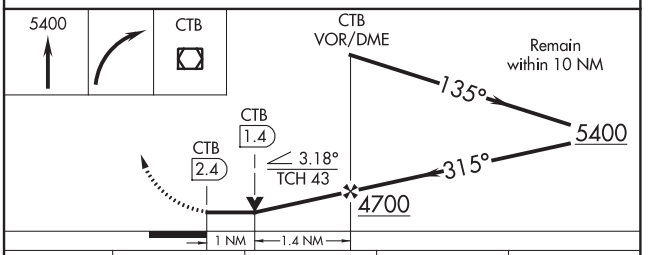
MISSED APPROACH: Climb to 5400 then right turn direct CTB VOR/DME and hold.

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



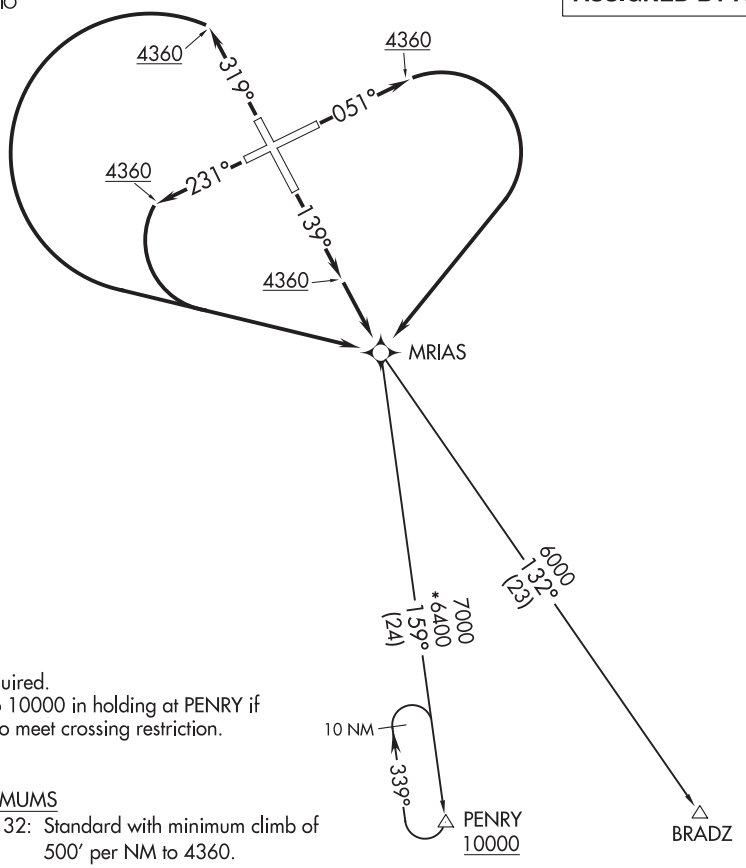
CATEGORY	A	B	C	D
S-32	4200-1 349 (400-1)			
C CIRCLING	4280-1 422 (500-1)	4320-1 462 (500-1)	4400-1½ 542 (600-1½)	4620-2½ 762 (800-2½)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.2
CTAF
123.0

TOP ALTITUDE: ASSIGNED BY ATC



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)

DEER LODGE, MONTANA | AL-10421 (FAA) | 19171

RNAV (GPS)-A

DEER LODGE-CITY-COUNTY (38S)

APP CRS	Rwy Idg	N/A
347°	TDZE	N/A
	Apt Elev	4693

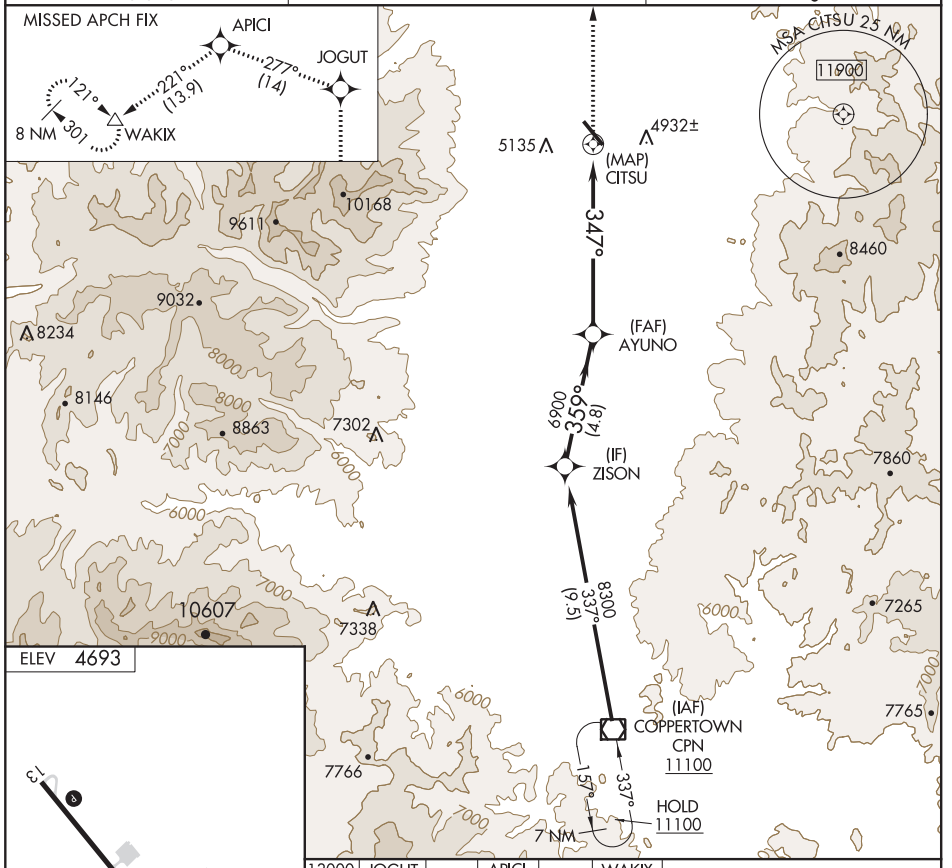
Circling Rwy 13 NA at night. DME/DME RNP-0.3 NA. Rwy 13 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received use Anaconda altimeter setting and increase all MDA 100 feet; increase Cat B visibility ¼ SM.

NA

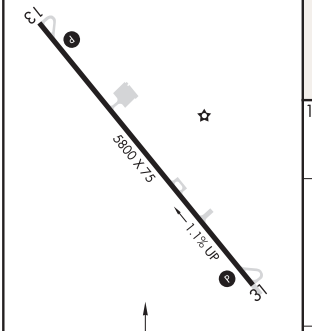
MISSED APPROACH: Climb to 13000 direct JOGUT and on track 277° to APICI and on track 221° to WAKIX and hold, continue climb-in-hold to 13000.

AWOS-AV	SALT LAKE CENTER	CTAF
120.025	133.4 285.4	122.9 L

MISSED APCH FIX



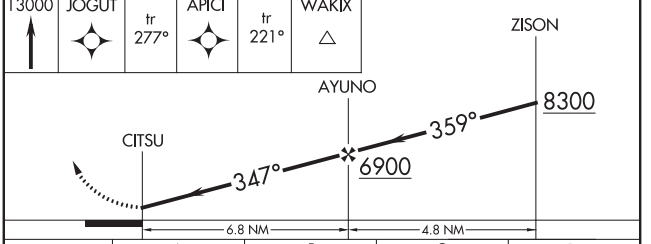
ELEV 4693



347° to CITSU

MIRL Rwy 13-31 L

13000	JOGUT	tr 277°	APICI	tr 221°	WAKIX



CATEGORY	A	B	C	D
C CIRCLING	5440-1 747 (800-1)	5460-1 767 (800-1)	5720-3 1027 (1100-3)	6300-3 1607 (1700-3)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

DEER LODGE, MONTANA
Amdt 1 15SEP16

46°23'N-112°46'W

DEER LODGE-CITY-COUNTY (38S)
RNAV (GPS)-A

APP CRS	Rwy Idg	6100
183°	TDZE	2211
	Apt Elev	2211

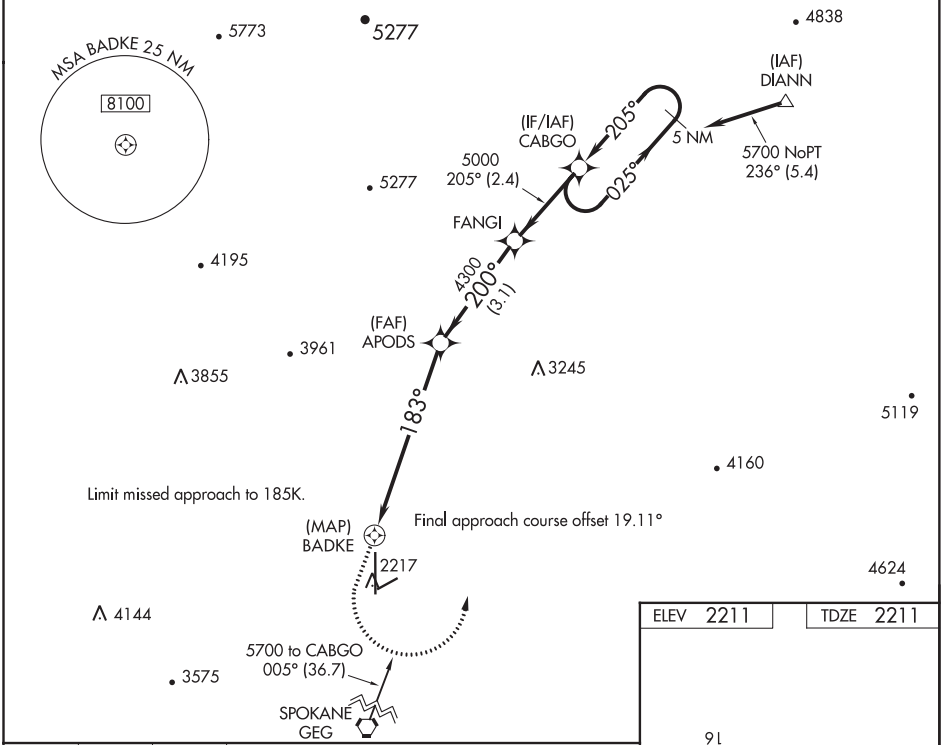
RNAV (GPS) RWY 16

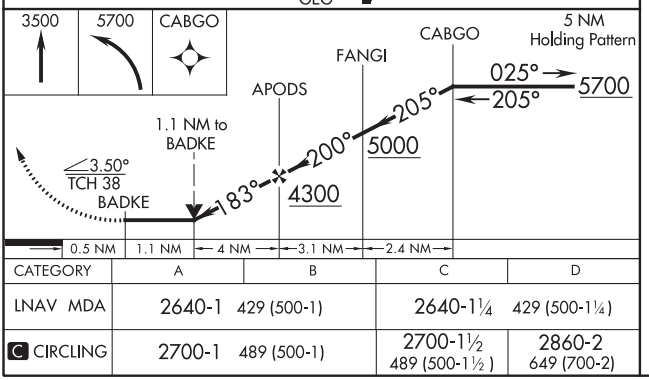
DEER PARK (DEW)

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.

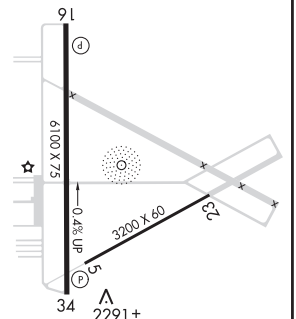
ASOS	SPOKANE APP CON	UNICOM
135.175	123.75 282.25	123.0 (CTAF) L





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS		
CH **61306**	**344°**	Rwy Idg	**6100**
W34A		TDZE	**2201**
		Apt Elev	**2211**

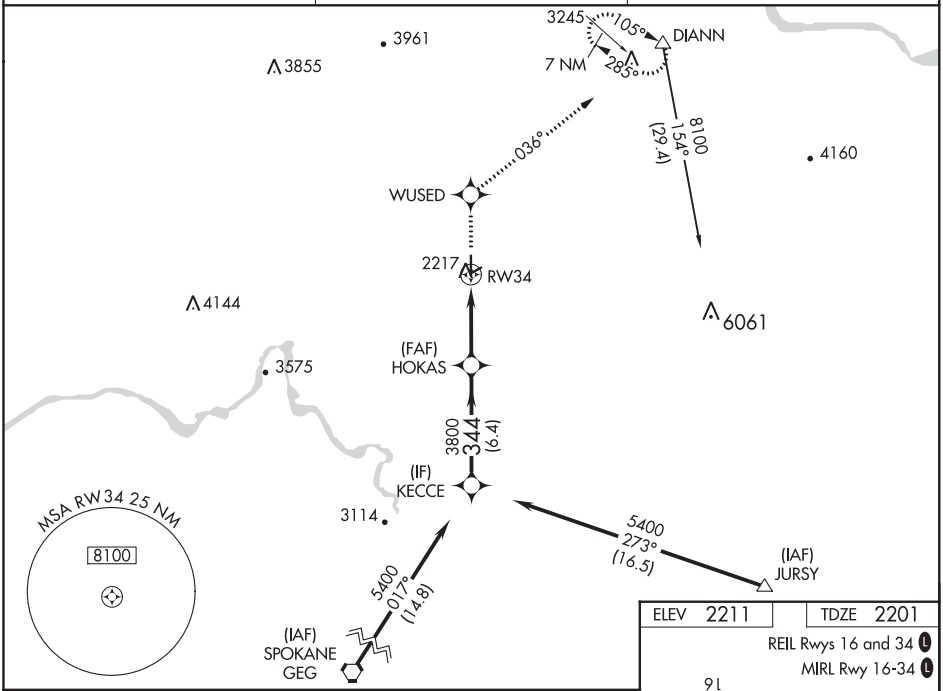
RNAV (GPS) RWY 34
DEER PARK (DEW)

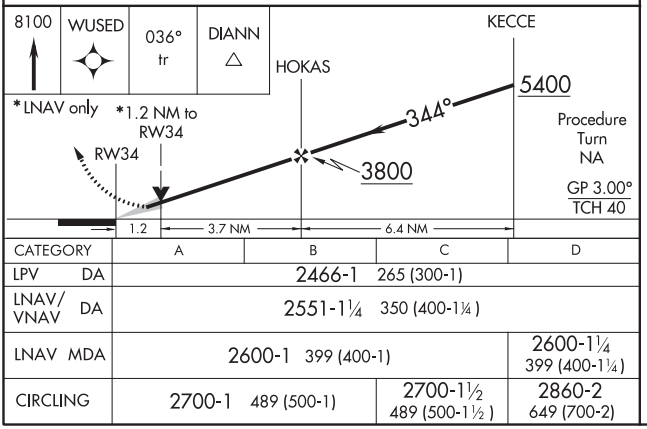
T
A

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/MDAs 80 feet and all visibilities ¼ mile. Circling NA west of Rwy 16-34. DME/DME RNP- 0.3 NA. VDP and Baro-VNAV NA when using Spokane Intl altimeter setting.

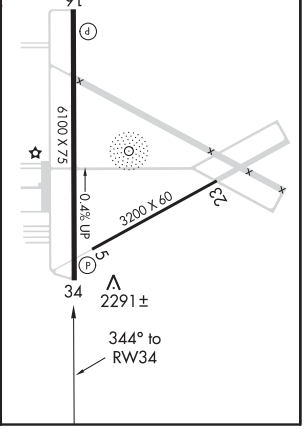
MISSED APPROACH: Climb to 8100 direct WUSED and via 036° track to DIANN and hold, continue climb-in-hold to 8100.

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)
CIRCLING	2700-1 489 (500-1)		2700-1½ 489 (500-1½)	2860-2 649 (700-2)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NDB DPY 365	APP CRS 323°	Rwy Idg N/A TDZE N/A Apt Elev 2211

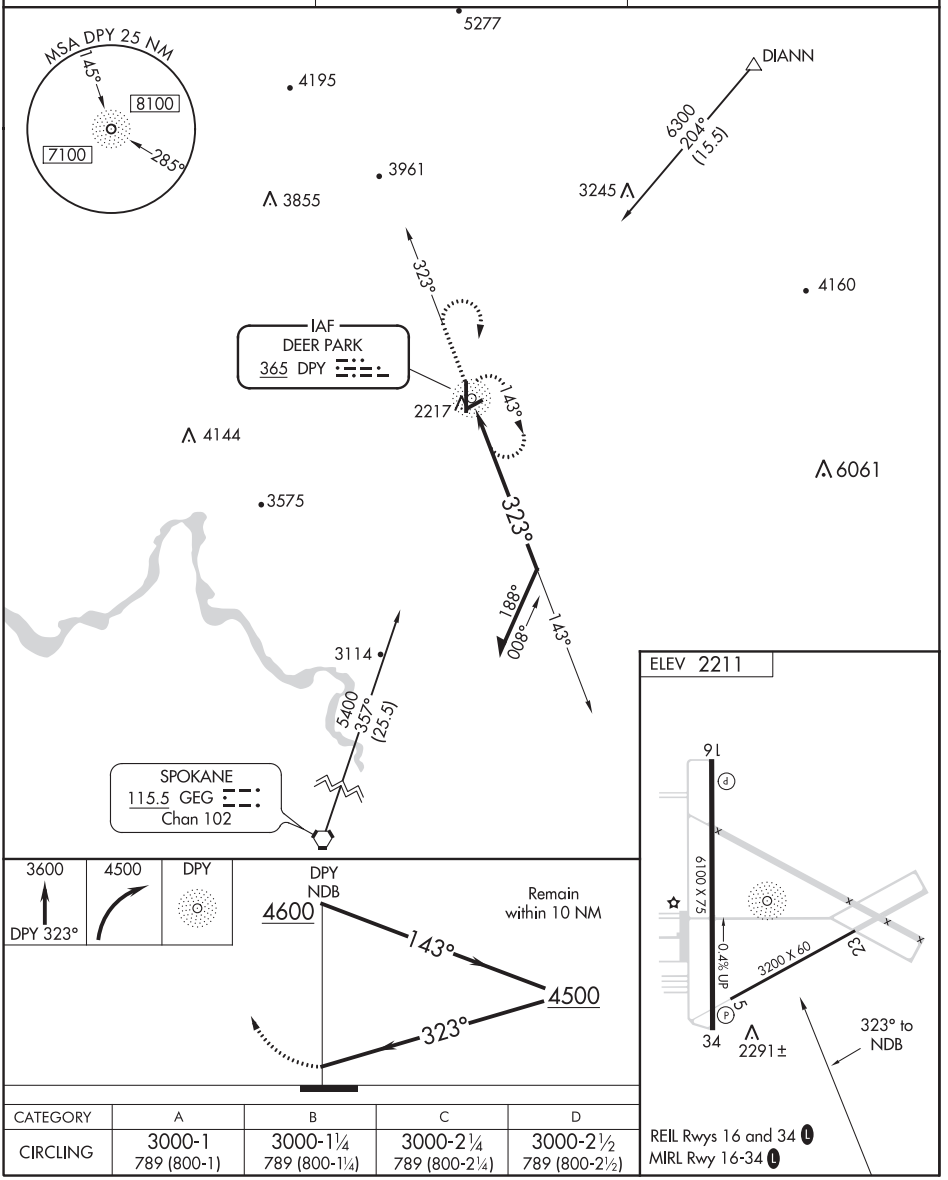
NDB-A
DEER PARK (DEW)

NA

Circling NA west of Rwy 16-34. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDAs 80 feet and all visibilities ¼ mile.

MISSED APPROACH: Climb to 3600 via 323° bearing from DPY NDB then climbing right turn to 4500 direct DPY NDB and hold.

ASOS	SPOKANE APP CON	UNICOM
135.175	123.75 282.25	123.0 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	3000-1 789 (800-1)	3000-1¼ 789 (800-1¼)	3000-2¼ 789 (800-2¼)	3000-2½ 789 (800-2½)

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

DILLON, MONTANA | AL-121 (FAA) | 17341

RNAV (GPS) RWY 17

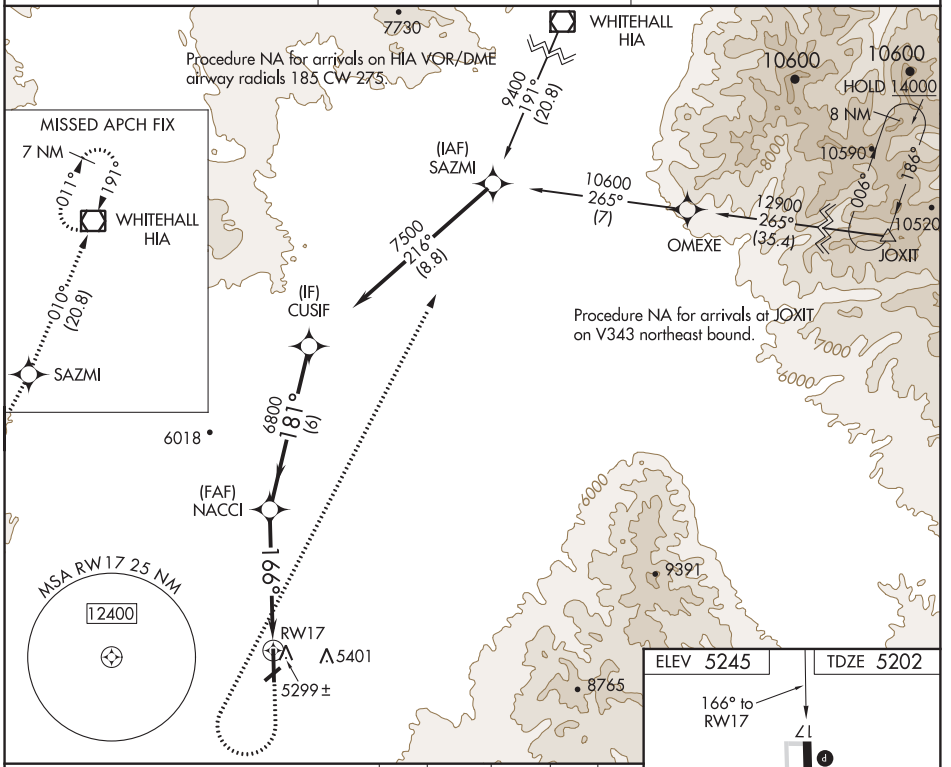
DILLON (DLN)

WAAS	APP CRS		
CH **93927**	**166°**	Rwy Idg	**6501**
W17A		TDZE	**5202**
		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.

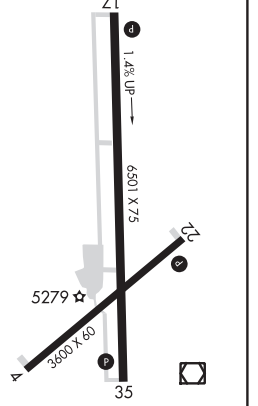
MISSED APPROACH: Climb to 5800 then climbing right turn to 10600 direct SAZMI and on track 010° to HIA VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.225	**132.4 338.3**	**122.8** (CTAF) L

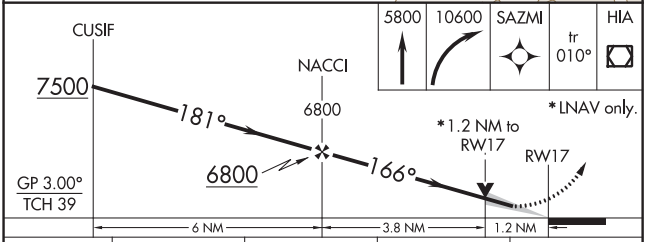


ELEV 5245	TDZE 5202

166° to RW17



MIRL Rwys 17-35 and 4-22 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 35

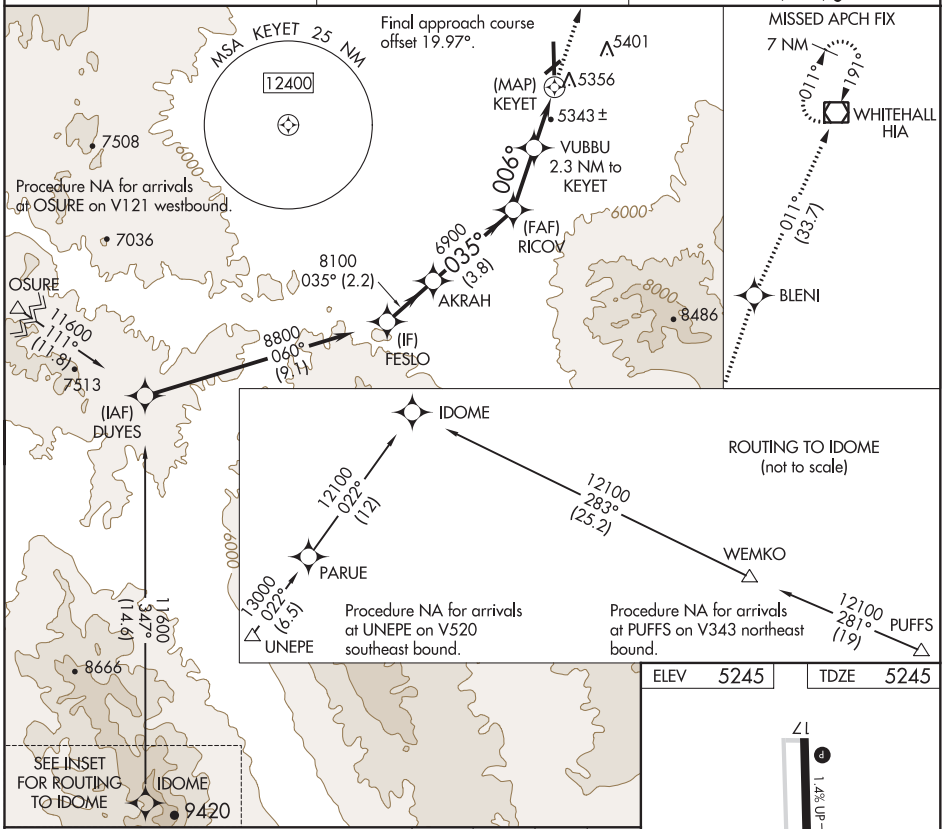
DILLON (DLN)

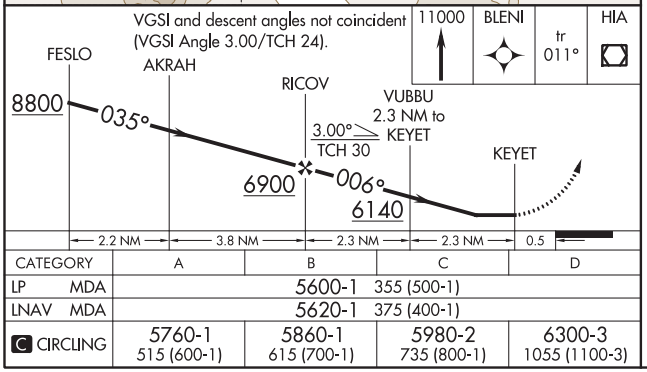
WAAS	APP CRS	Rwy Idg	6501
CH 49227	006°	TDZE	5245
W35A		Apt Elev	5245

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)





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

DILLON, MONTANA

AL-121 (FAA)

17341

VOR/DME-B

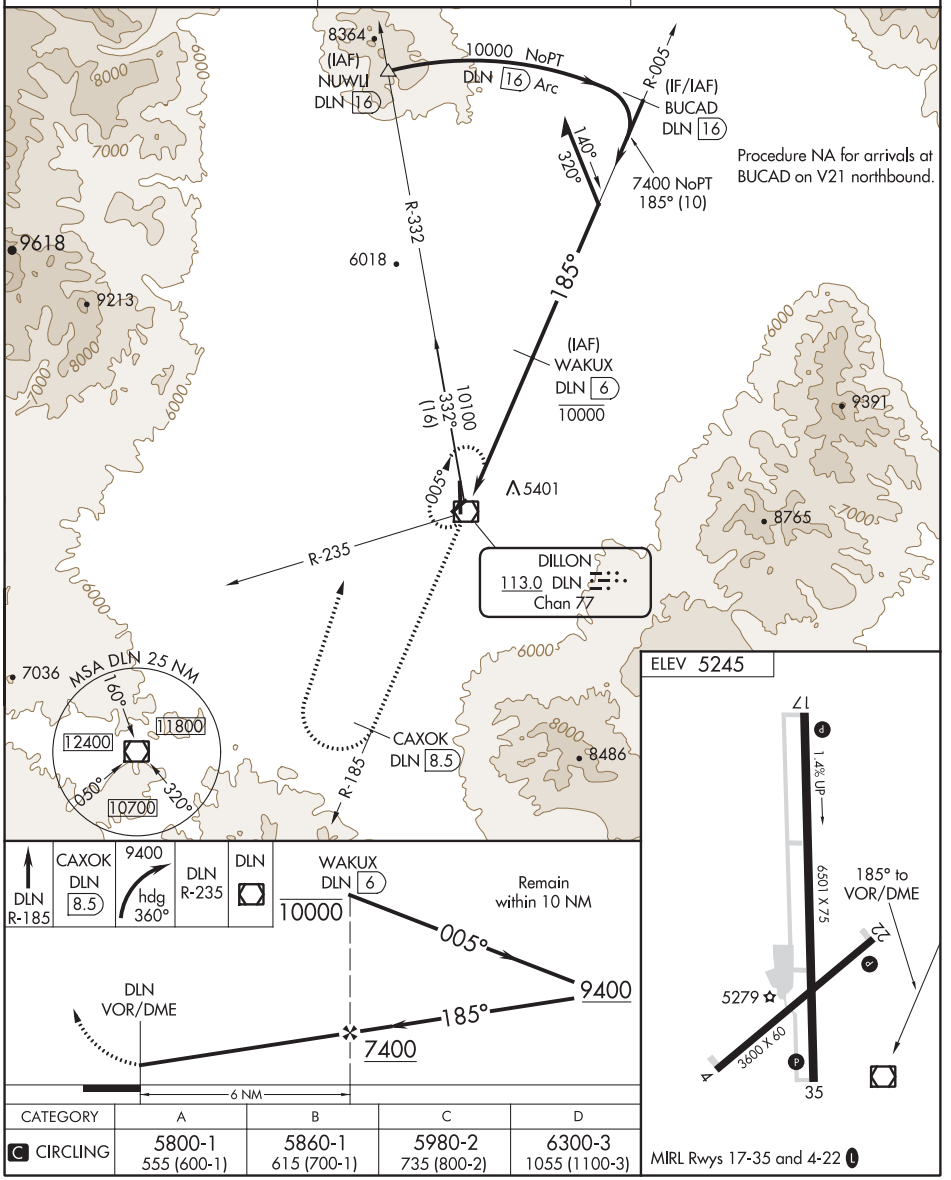
DILLON (DLN)

VOR/DME DLN	APP CRS	Rwy Idg	N/A
113.0	185°	TDZE	N/A
Chan 77		Apt Elev	5245

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	5800-1 555 (600-1)	5860-1 615 (700-1)	5980-2 735 (800-2)	6300-3 1055 (1100-3)

MIRL Rwys 17-35 and 4-22 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

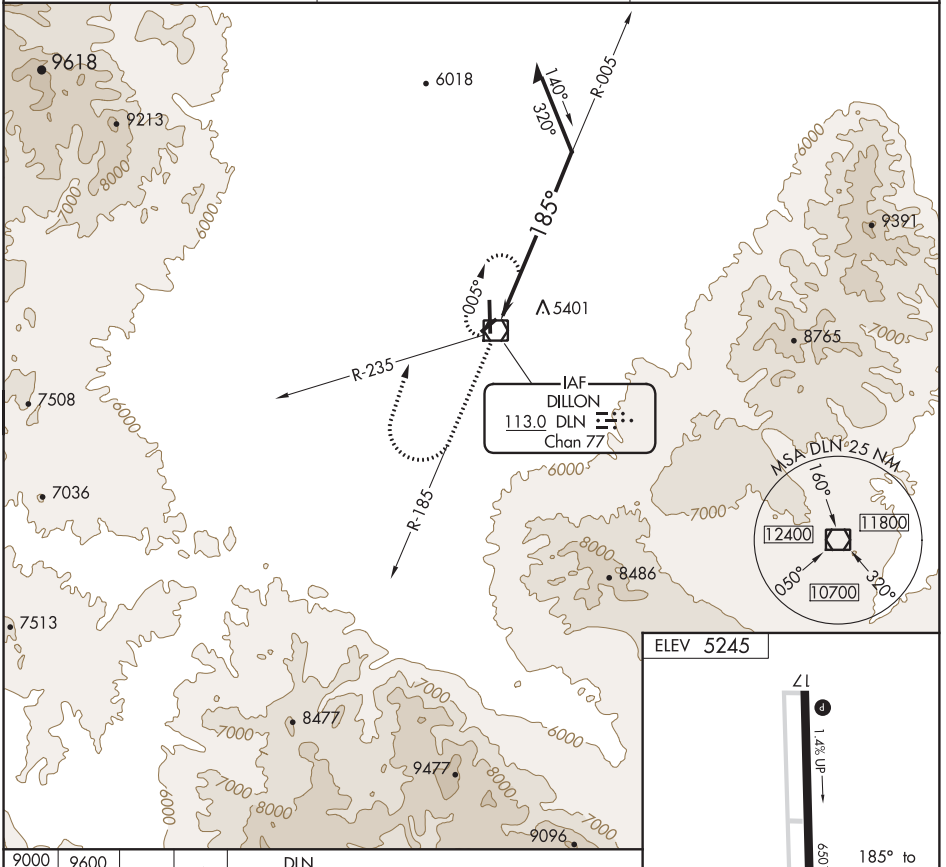
VOR/DME DLN	APP CRS	Rwy Idg	N/A
113.0	185°	TDZE	N/A
Chan 77		Apt Elev	5245

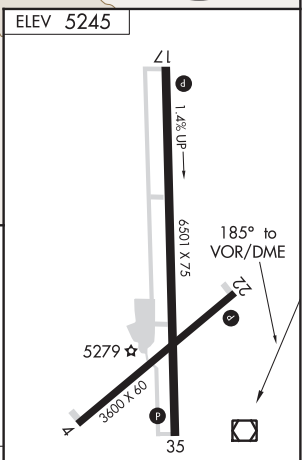
VOR-A
DILLON (DLN)

T A When local altimeter setting not received, procedure NA. Night Landing: Rwy 4, 22, 35 NA. Helicopter visibility reduction below 1 SM not authorized.

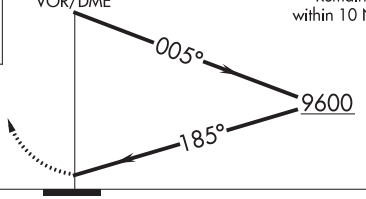
MISSED APPROACH: Climb to 9000 on DLN VOR/DME R-185 then climbing right turn to 9600 on heading 360° and DLN VOR/DME R-235 to DLN VOR/DME and hold.

ASOS	SALT LAKE CENTER	UNICOM
135.225	132.4 338.3	122.8 (CTAF) L





9000 DLN R-185	9600 hdg 360°	DLN R-235	DLN



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

DIXON, WYOMING

AL-11441 (FAA)

19171

RNAV (GPS) RWY 24

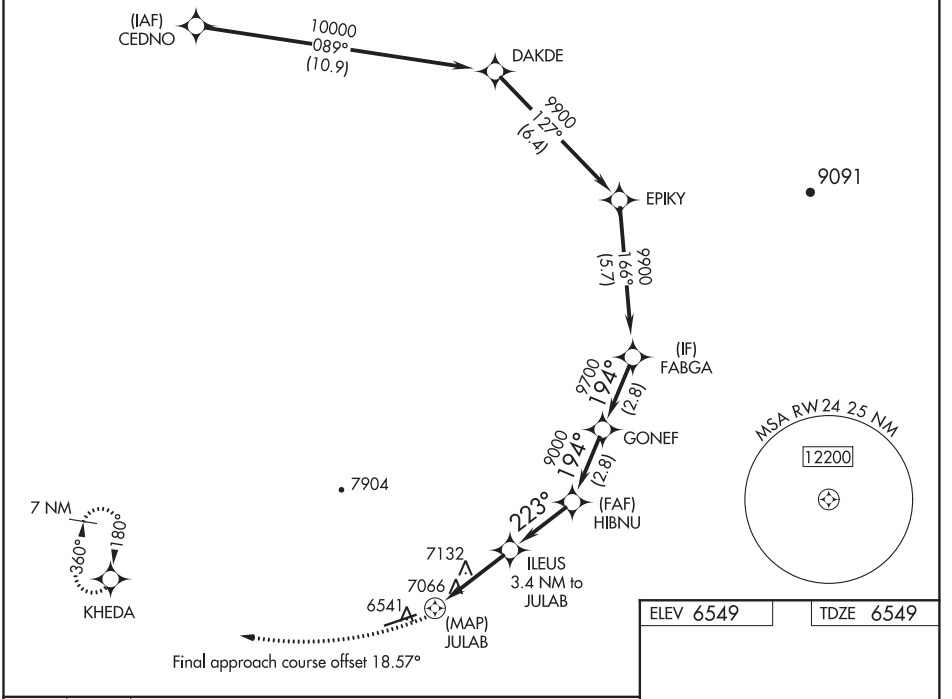
DIXON (DWX)

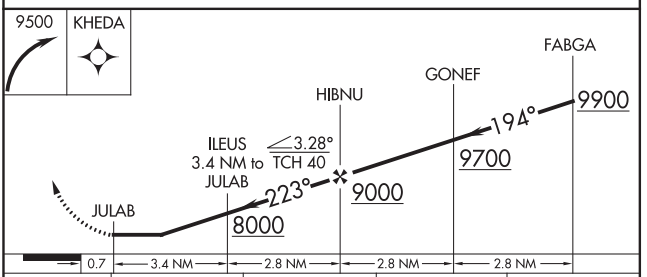
WAAS	APP CRS	Rwy Idg	7000
CH 60942	223°	TDZE	6549
W24A		Apt Elev	6549

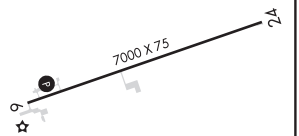
Rwy 24 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Straight-in Rwy 24 NA at night, Circling Rwy 24 NA at night. -38°C

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







ELEV 6549 TDZE 6549

CATEGORY	A	B	C	D
LP MDA	7400-1 851 (900-1)	7400-1¼ 851 (900-1¼)	7400-2½ 851 (900-2½)	
LNAV MDA	7420-1 871 (900-1)	7420-1¼ 871 (900-1¼)	7420-2½ 871 (900-2½)	
C CIRCLING	7420-1¼ 871 (900-1¼)		7440-2¾ 891 (900-2¾)	7900-3 1351 (1400-3)

MIRL Rwy 6-24 L

REIL Rwys 6 and 24 L

DIXON, WYOMING

Orig 12OCT17

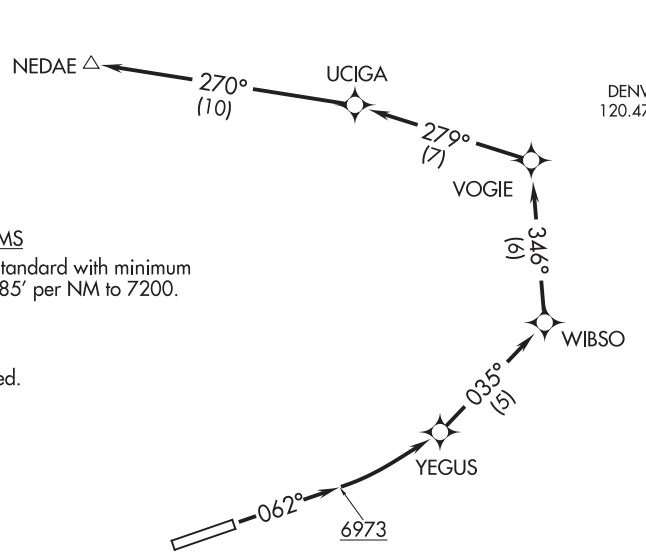
41°02'N-107°30'W

DIXON (DWX)

RNAV (GPS) RWY 24

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 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.

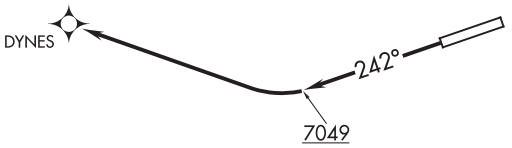
(DIXON1.DYNES) 17285

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 11
CONVERSE COUNTY (DGW)

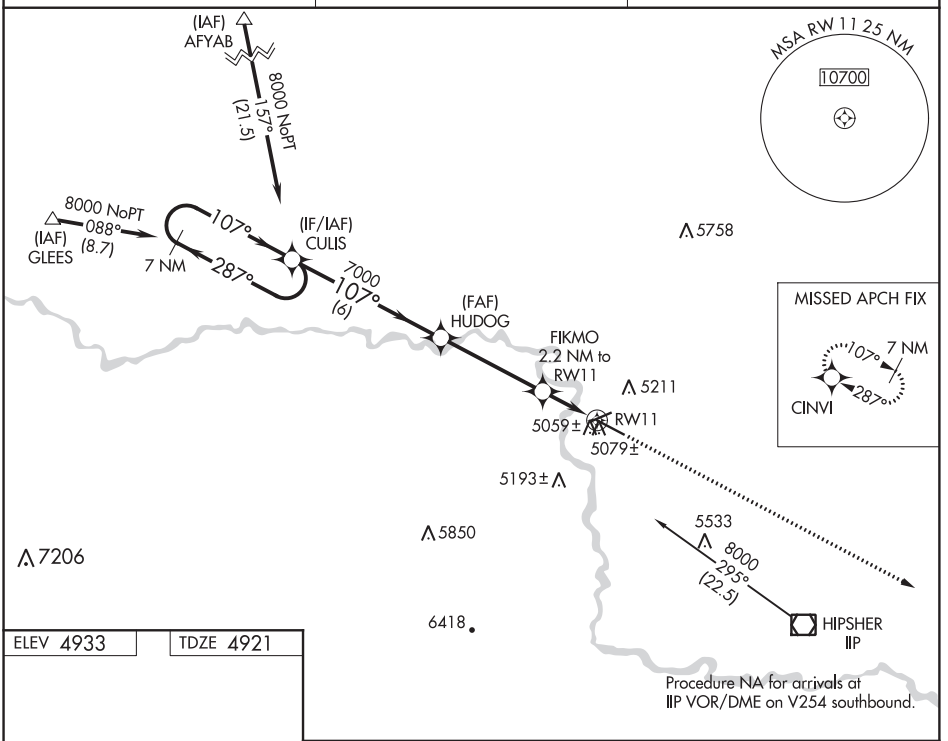
WAAS CH 58018 W11A	APP CRS 107°	Rwy Idg 6534 / TDZE 4921 / Apt Elev 4933

RNP APCH.

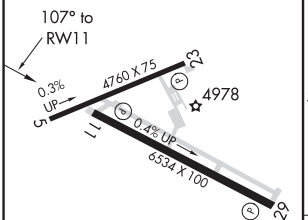
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F).

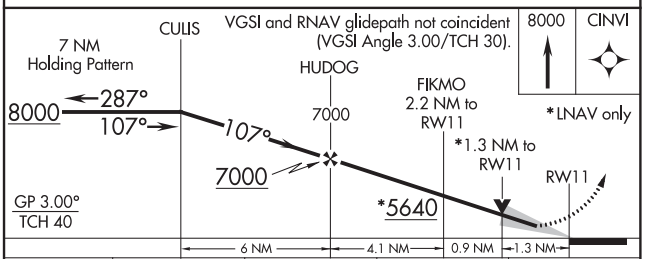
MISSED APPROACH: Climb to 8000 direct CINVI and hold.

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 29 L
MIRL Rwys 11-29 and 5-23 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

DOUGLAS, WYOMING

AL-6870 (FAA)

18032

RNAV (GPS) RWY 29

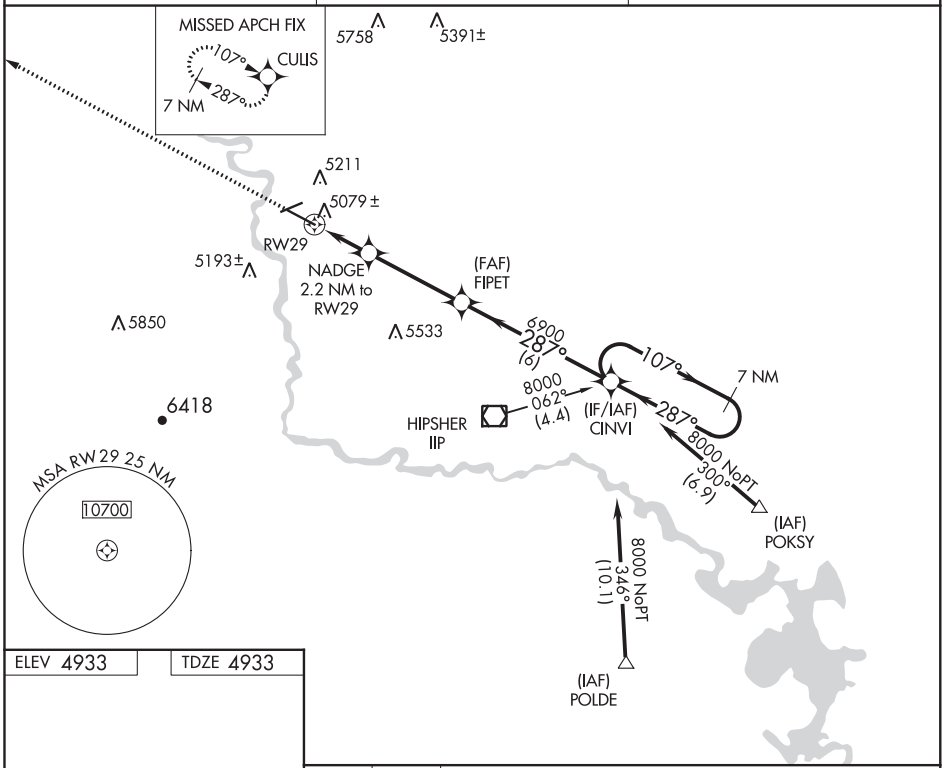
CONVERSE COUNTY (DGW)

WAAS	APP CRS	Rwy Idg	6534
CH 61018	287°	TDZE	4933
W29A		Apt Elev	4933

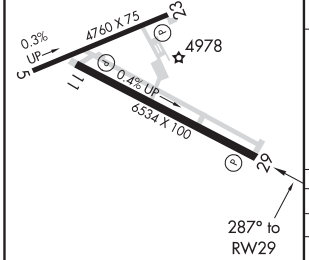
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 8000 direct CULIS and hold.

ASOS	DENVER CENTER	UNICOM
135.225	135.6 363.025	122.8 (CTAF) L

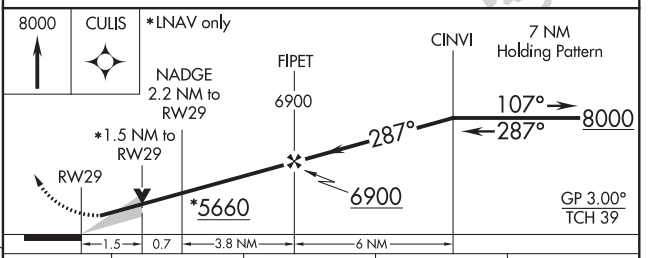


ELEV 4933	TDZE 4933



REIL Rwy 29 L

MIRL Rwys 11-29 and 5-23 L



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)

DOUGLAS, WYOMING

Amdt 1 29JUL10

42°48'N-105°23'W

CONVERSE COUNTY (DGW)

RNAV (GPS) RWY 29

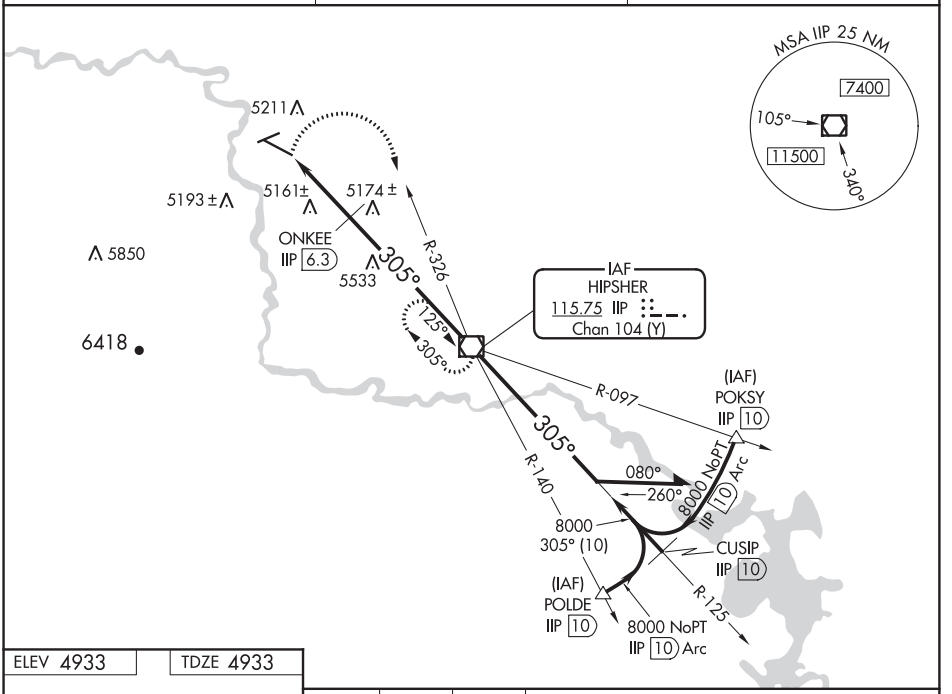
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME IIP	APP CRS	Rwy Idg	6534
108.6	305°	TDZE	4933
Chan 23		Apt Elev	4933

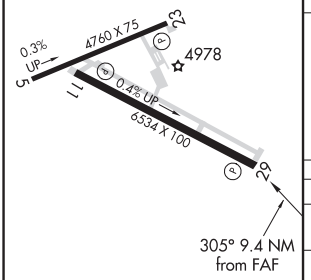
VOR RWY 29
CONVERSE COUNTY (DGW)

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

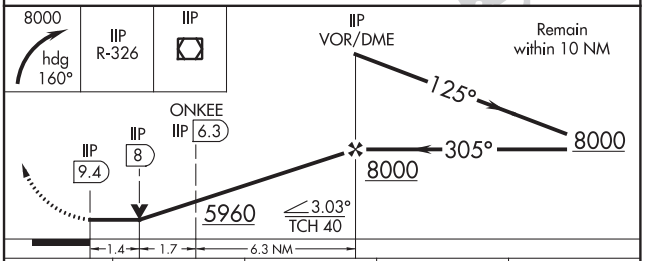


ELEV 4933 TDZE 4933



REIL Rwy 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

DRIGGS, IDAHO

AL-9117 (FAA)

19227

RNAV (GPS) RWY 4

DRIGGS-REED MEMORIAL (DIJ)

WAAS	APP CRS	Rwy Idg	7300
CH 48827	016°	TDZE	6179
W04A		Apt Elev	6231

RNP APCH.

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

Procedure NA for arrivals at LAMON on V298 eastbound.

088° 268° 7 NM LAMON

MSA DIVVE 25 NM 15000

11100 to EYITA 208° (25.5)

Final approach course offset 19.81°.

6419 6239± (MAP) DIVVE 6262 6240

JUSIR 1.5 NM to DIVVE

016°

EYITA

11100 123° (16.9)

(FAF) FIXOD

VICUP

9000 019° (2.9)

9800 019° (10.7)

(IAF) IDAHO FALLS IDA

11100 NoPT 087° (31.4)

Procedure NA for arrival on IDA VOR/DME airway radials 015 CW 069.

199° 019° 7 NM

(IF/IAF) RUDTO

11100 NoPT 345° (18.1)

Procedure NA for arrivals at OLNUE on V465 southwest bound.

HOLD 14000 11100

(IAF) OLNUE

8242 7941 9019 8620 8191 9835 10025 8952 9482 9004 10352 10927 10966 9240 11938 13770 12605 11355 A8735±

ELEV 6231 TDZE 6179

7 NM Holding Pattern

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 40).

7000	10300	LAMON
↑	↰	△

RUDTO VICUP FIXOD JUSIR 1.5 NM to DIVVE DIVVE

14000 11100 199° 019° 019° 9800 3.50° TCH 40 9000 016° 7020

10.7 NM 2.9 NM 5.3 NM 1.5 NM 0.8

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)

22 7300 X 100 1.1% UP

MIRL Rwy 4-22 L

REIL Rwy 22 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	N/A
168°	TDZE	N/A
	Apt Elev	6231

RNAV (GPS)-A

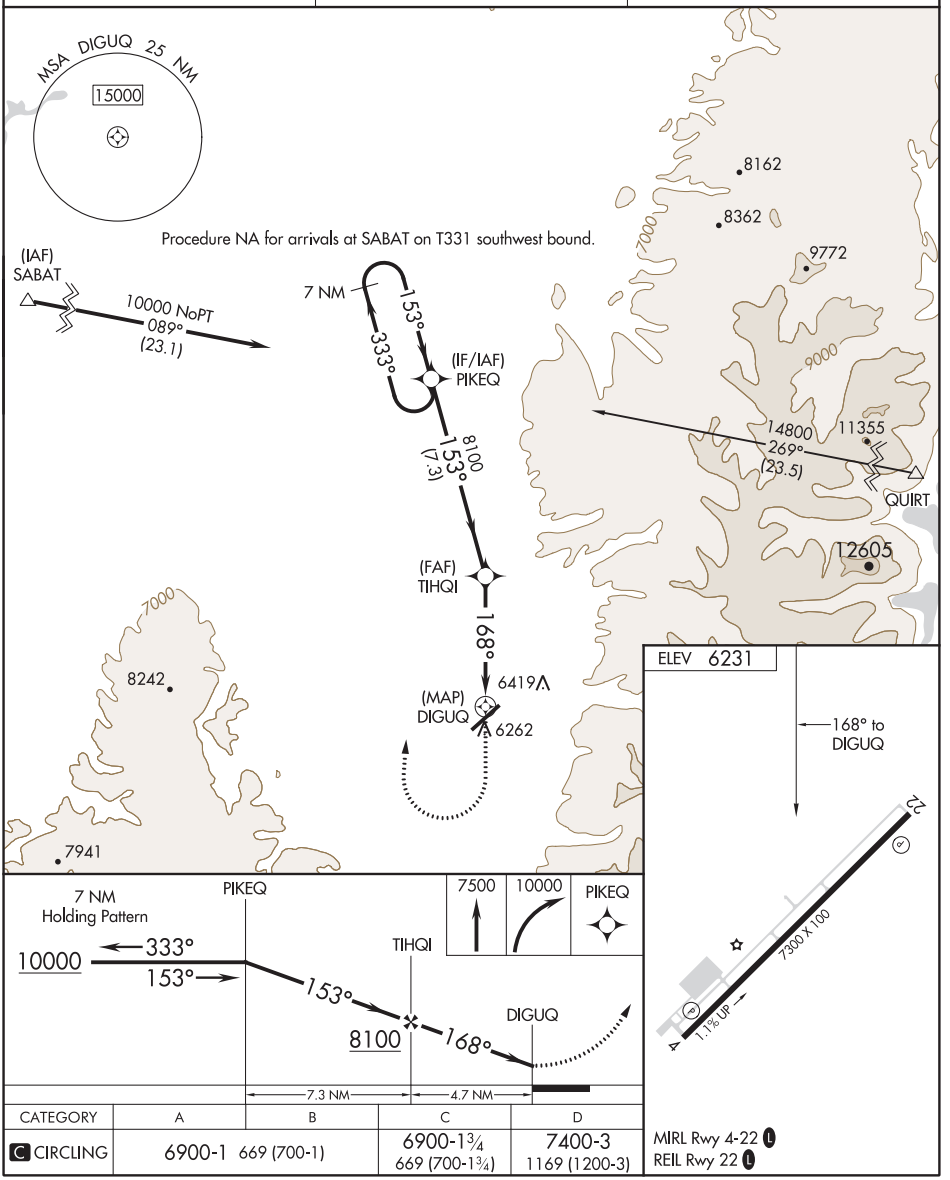
DRIGGS-REED MEMORIAL (DIJ)

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

NW-1, 30 JAN 2020 to 26 MAR 2020



CATEGORY	A	B	C	D
C CIRCLING	6900-1 669 (700-1)		6900-1¾ 669 (700-1¾)	7400-3 1169 (1200-3)

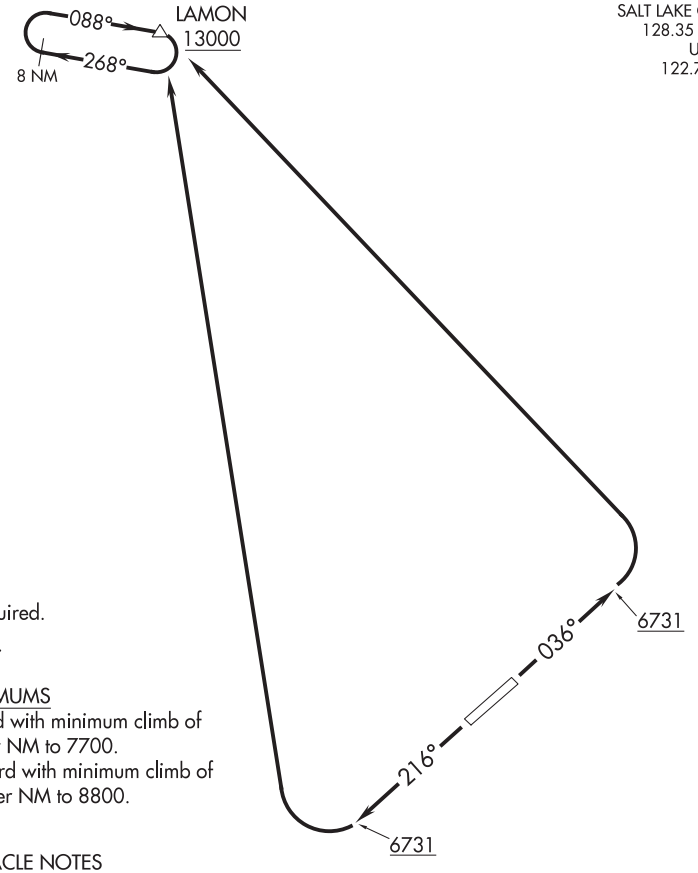
MIRL Rwy 4-22 L
REIL Rwy 22 L

(LAMON2.LAMON) 16315 SL-9117 (FAA)

LAMON TWO DEPARTURE (OBSTACLE) (RNAV)

DRIGGS-REED MEMORIAL (DIJ)
DRIGGS, IDAHO

NW-1, 30 JAN 2020 to 26 MAR 2020



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.

WAAS CH **40038** **W16A**	APP CRS **193°**	Rwy Idg **2901** TDZE **35** Apt Elev **35**

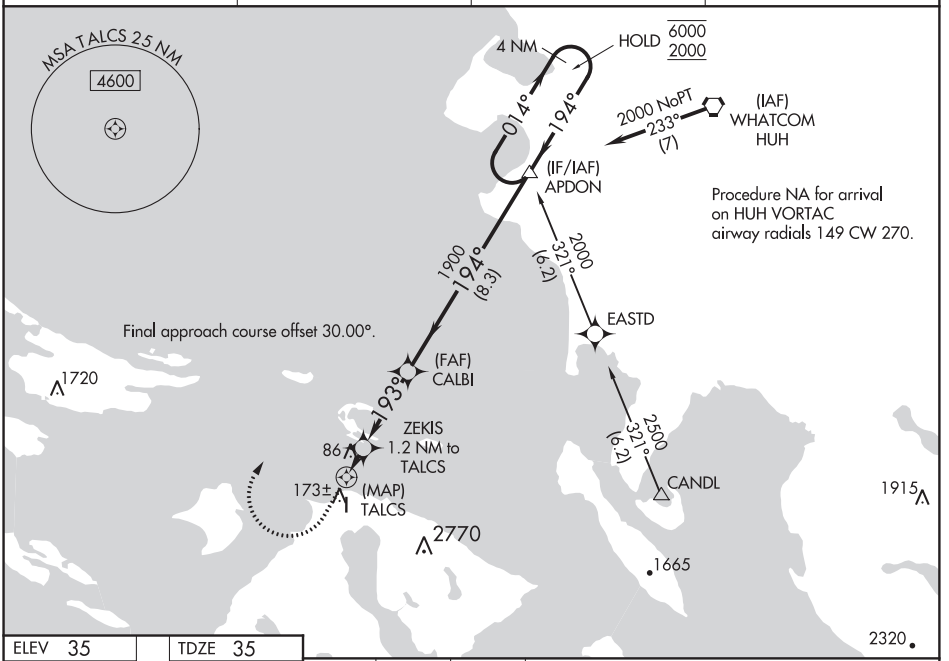
RNAV (GPS) RWY 16
ORCAS ISLAND (ORS)

RNP APCH.

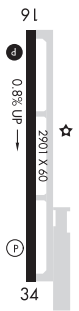
Circling to Rwy 34 NA at night. Rwy 16 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDA 40 feet.

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.

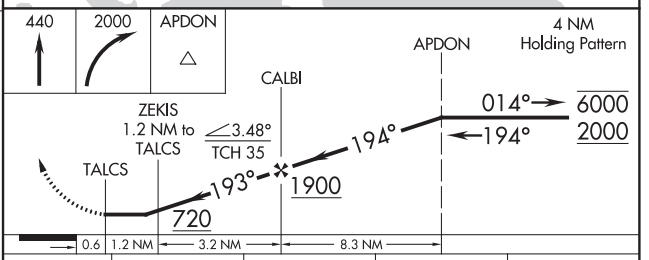
AWOS-3	WHIDBEY APP CON	VICTORIA APP CON	CTAF
135.425	**118.2 285.65** (SOUTH)	**132.7 290.8** (NORTH)	**128.25** (L)



ELEV 35	TDZE 35



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



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 1085 (1100-1¼)	1820-1½ 1785 (1800-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EASTSOUND, WASHINGTON

AL-10384 (FAA)

17285

RNAV (GPS) RWY 34

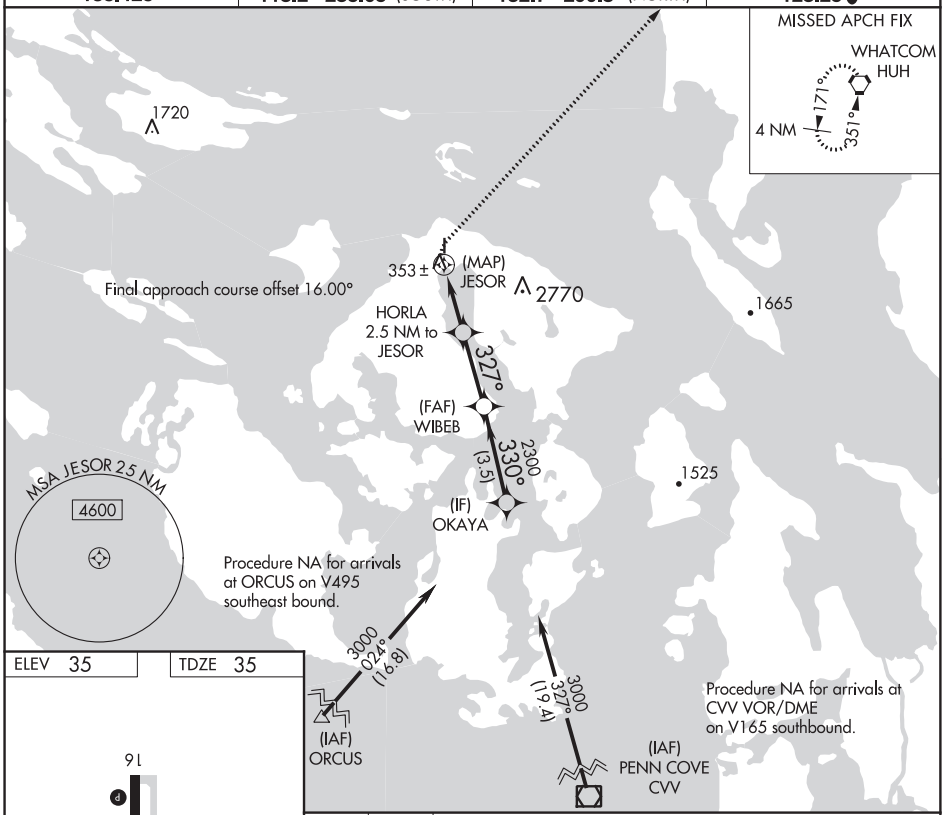
ORCAS ISLAND (ORS)

WAAS	APP CRS	Rwy Idg	2901
CH 99538	327°	TDZE	35
W34A		Apt Elev	35

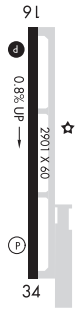
DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. WAAS required, if unable see RNAV GPS-A. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDA 40 feet and LP Cat B visibility ¼ mile. Night landing: Rwy 34 NA.

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

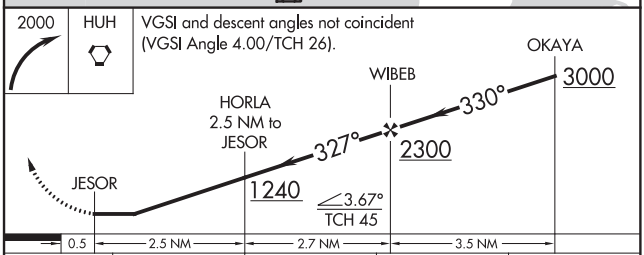


ELEV 35	TDZE 35



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 1085 (1100-1¼)	1820-1½ 1785 (1800-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

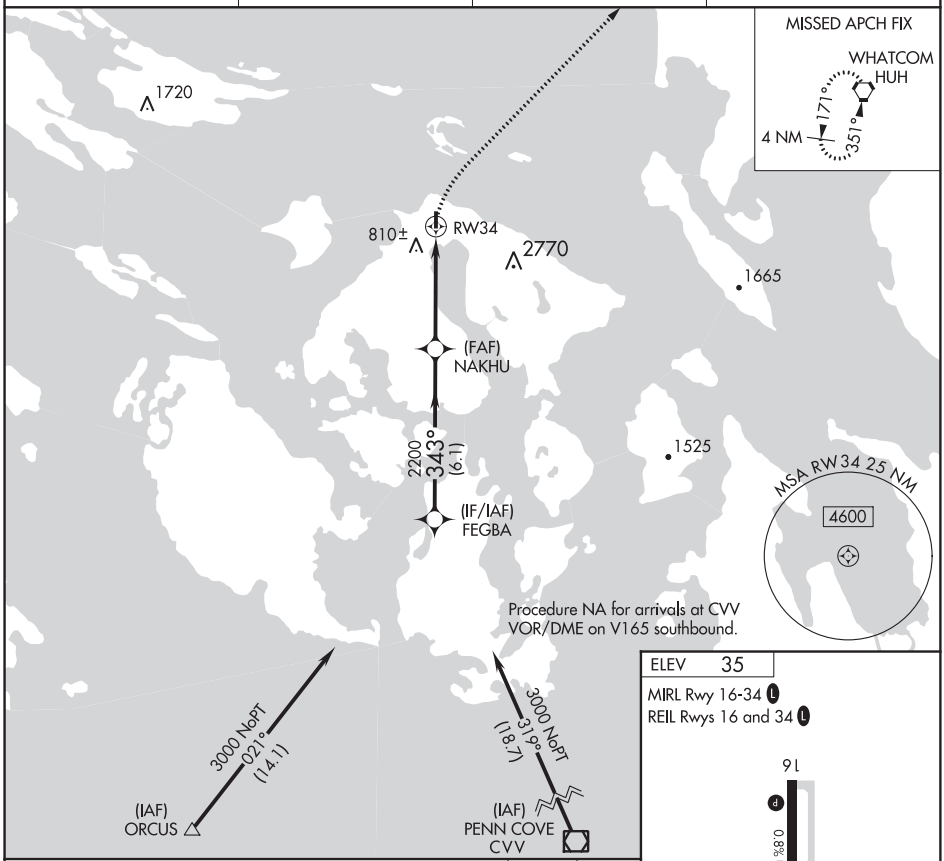
APP CRS	Rwy Idg	N/A
343°	TDZE	N/A
	Apt Elev	35

RNAV (GPS)-A
ORCAS ISLAND (ORS)

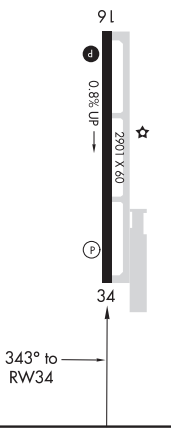
T DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.
A When local altimeter setting not received, use Friday Harbor altimeter setting and increase MDA 40 feet. Night landing: Rwy 34 NA.

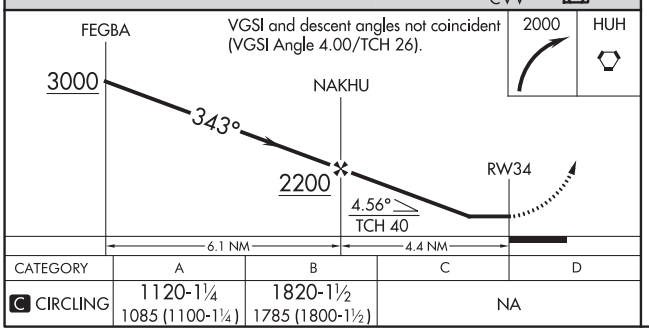
MISSED APPROACH: Climbing right turn to 2000 direct HUH VORTAC and hold.

AWOS-3	WHIDBEY APP CON	VICTORIA APP CON	CTAF
135.425	118.2 285.65 (SOUTH)	132.7 290.8 (NORTH)	128.25 L



ELEV 35
MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L





CATEGORY	A	B	C	D
C CIRCLING	1120-1¼ 1085 (1100-1¼)	1820-1½ 1785 (1800-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(FEGBA2.FEGBA) 17341

FEGBA TWO DEPARTURE (RNAV)

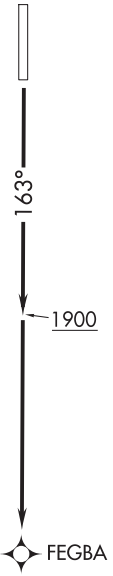
AL-10384 (FAA)

ORCAS ISLAND (ORS)
EASTSOUND, WASHINGTON

AWOS-3
135.425
WHIDBEY DEP CON
118.2 285.65 (SOUTH)
VICTORIA DEP CON
132.7 290.8 (NORTH)
CTAF
128.25

TOP ALTITUDE: 3000

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, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	4300
297°	TDZE	1759
	Apt Elev	1764

RNAV (GPS) RWY 29

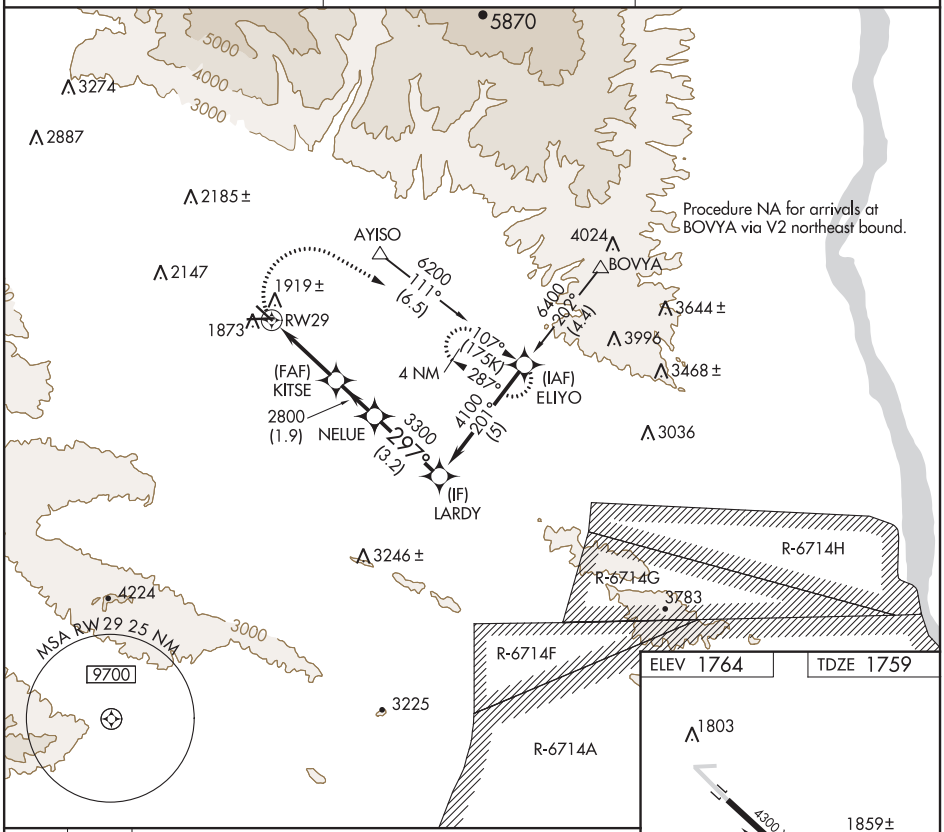
BOWERS FIELD (ELN)

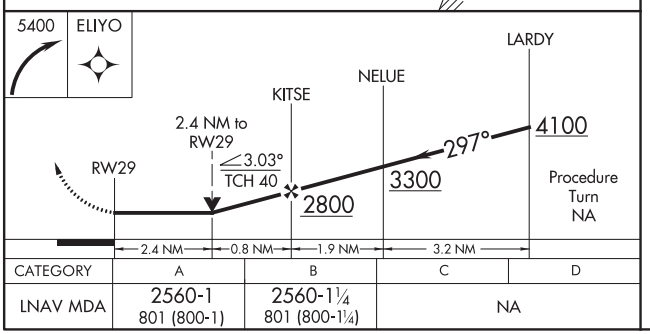
RNP APCH.

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	2560-1 801 (800-1)	2560-1¼ 801 (800-1¼)	NA	

REIL Rwy 29
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ELLENSBURG, WASHINGTON | AL-130 (FAA) | 18312

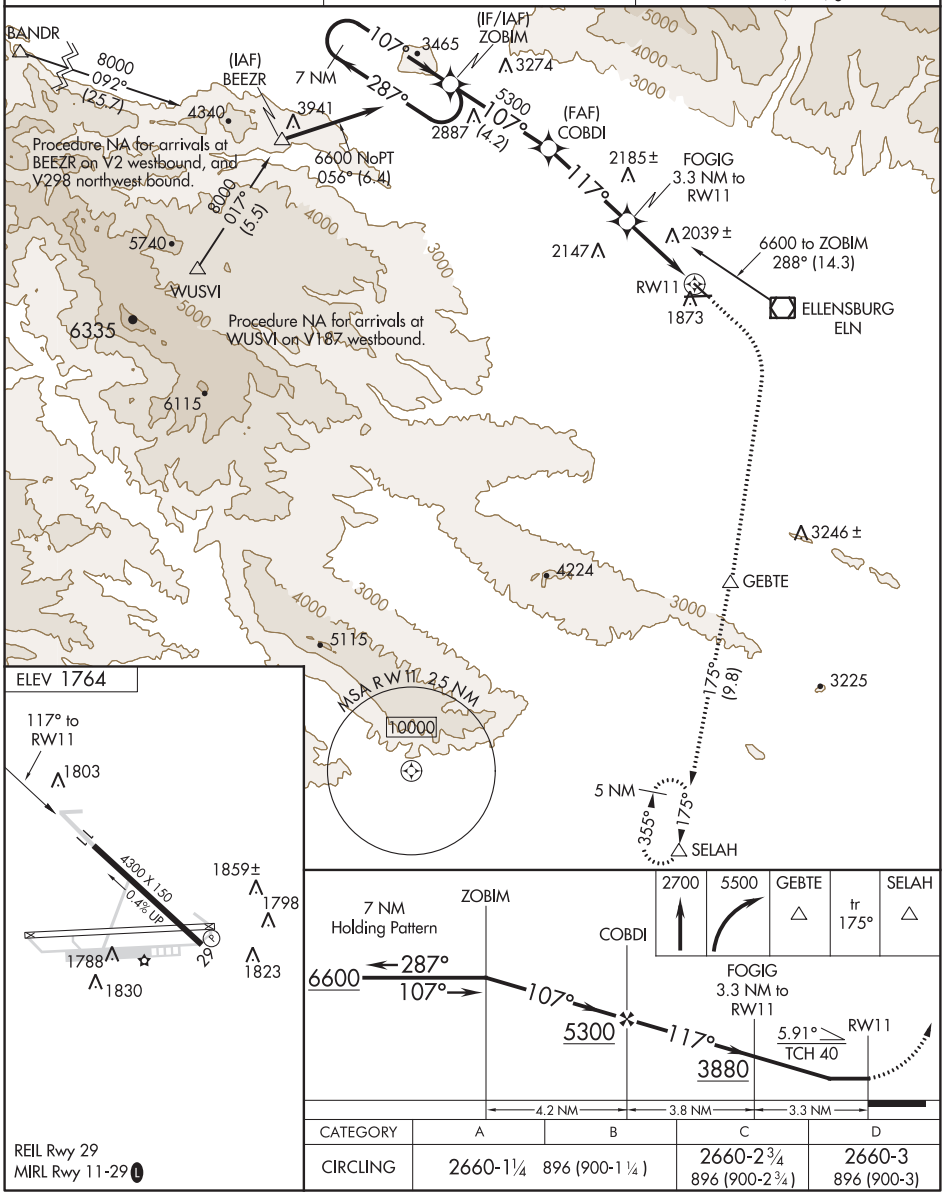
APP CRS	Rwy Idg	N/A
117°	TDZE	N/A
	Apt Elev	1764

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



CATEGORY	A	B	C	D
CIRCLING	2660-1¼ 896 (900-1¼)		2660-2¾ 896 (900-2¾)	2660-3 896 (900-3)

REIL Rwy 29
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

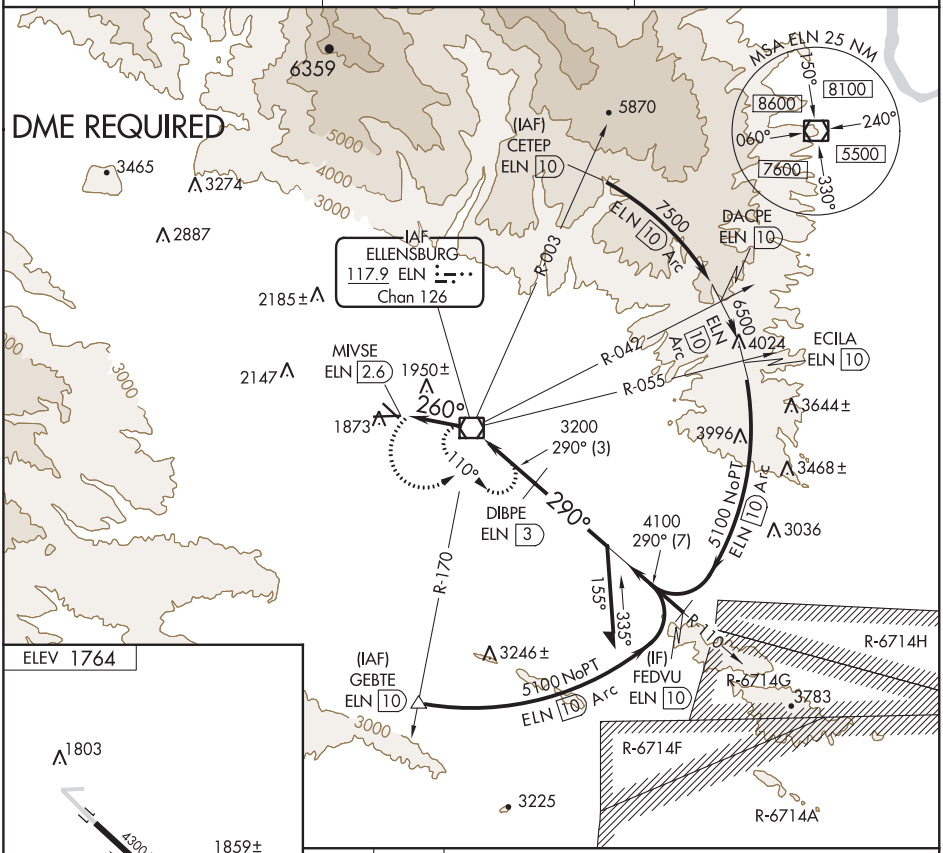
VOR/DME ELN	APP CRS	Rwy Idg	N/A
117.9	260°	TDZE	N/A
Chan 126		Apt Elev	1764

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	2280-1 516 (600-1)	2340-1 576 (600-1)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ELLENSBURG, WASHINGTON | AL-130 (FAA) | 18312

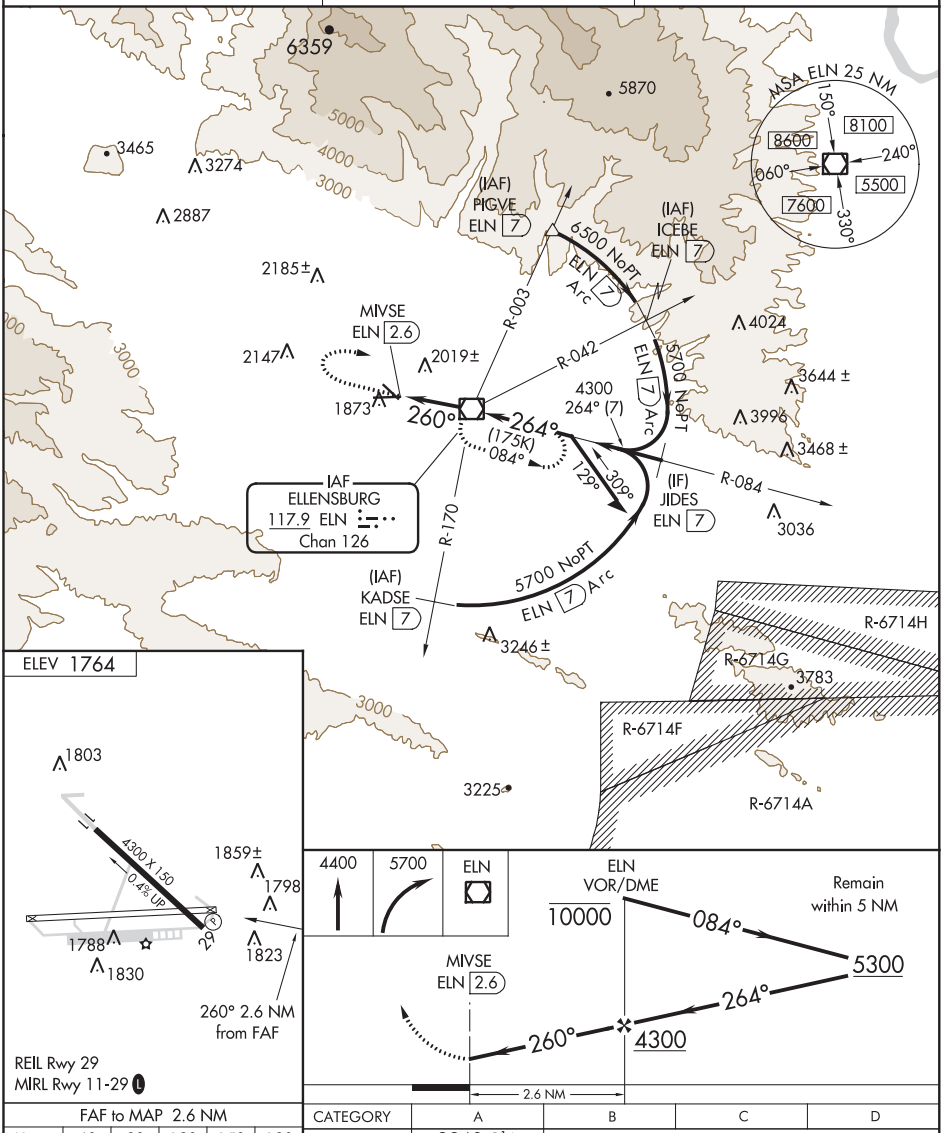
VOR/DME ELN	APP CRS	Rwy Idg	N/A
117.9	260°	TDZE	N/A
Chan 126		Apt Elev	1764

VOR-B
BOWERS FIELD (ELN)

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. When authorized by ATC, climb-in-hold to MEA for direction of flight.

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	3260-1¼ 1496 (1500-1¼)	NA		

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS		
CH **65735**	**165°**	Rwy Idg	**6601**
W16A		TDZE	**5423**
		Apt Elev	**5423**

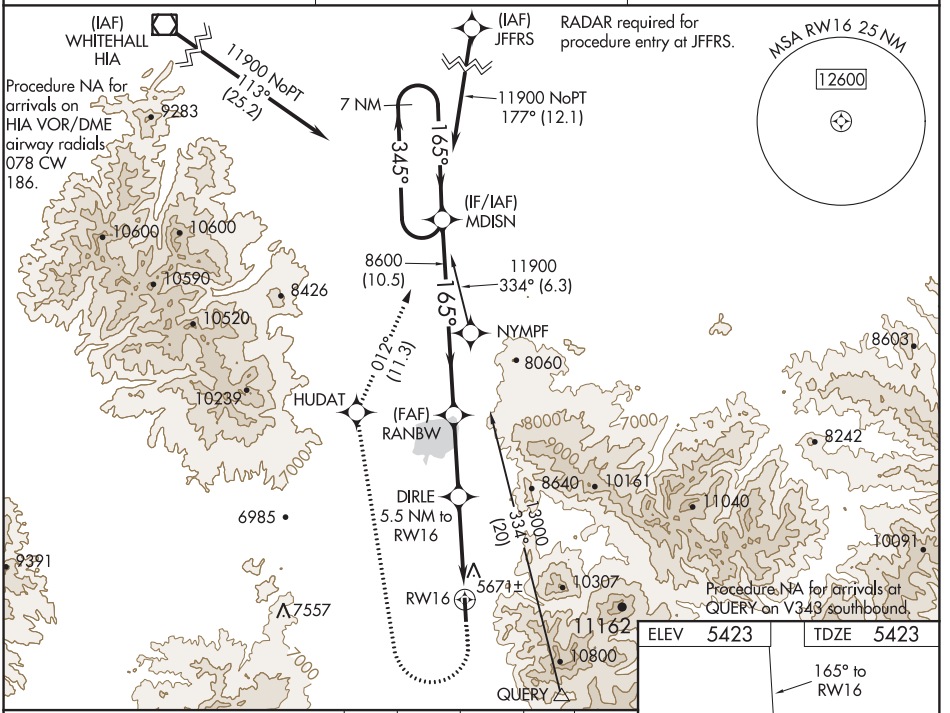
RNAV (GPS) RWY 16

ENNIS-BIG SKY (EKS)

T A — 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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ENNIS, MONTANA

AL-9491 (FAA)

19227

RNAV (GPS) RWY 34

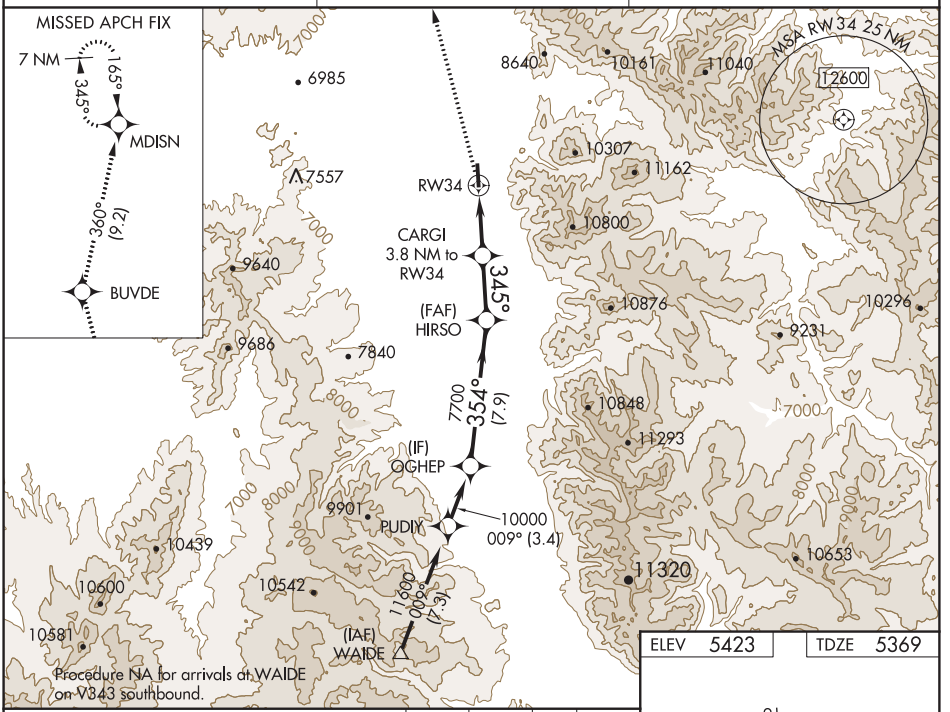
ENNIS-BIG SKY (EKS)

WAAS	APP CRS		
CH **45539**	**345°**	Rwy Idg	**6601**
W34A		TDZE	**5369**
		Apt Elev	**5423**

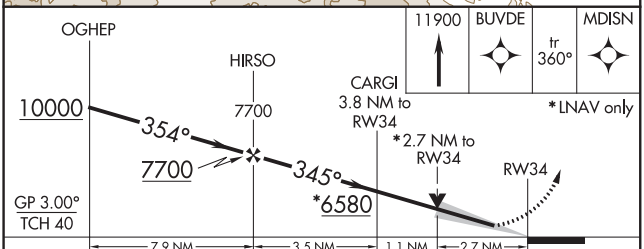
T A — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 54°C (130°F). Circling NA east of Rwy 16-34. DME/DME RNP-0.3 NA.

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

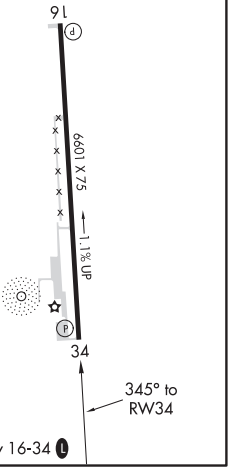


ELEV 5423	TDZE 5369



11900	BUVDE	tr 360°	MDISN

*LNAV only



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)

ENNIS, MONTANA

Orig 15SEP16

45°16'N-111°39'W

ENNIS-BIG SKY (EKS)

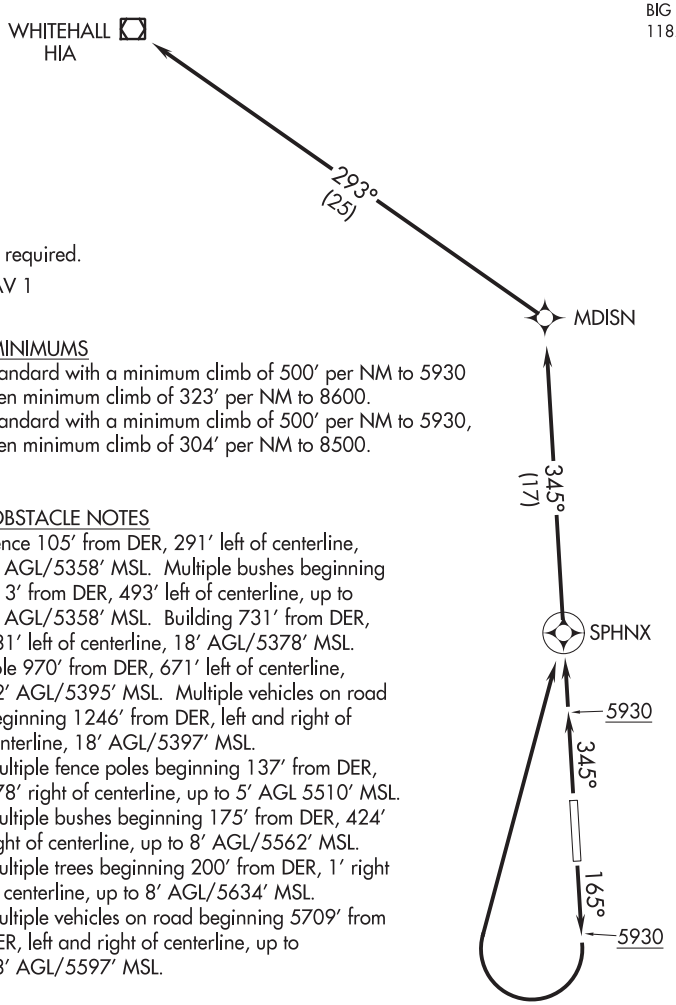
RNAV (GPS) RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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.

EPHRATA, WASHINGTON AL-138 (FAA) 19199

RNAV (GPS) RWY 3

EPHRATA MUNI (EPH)

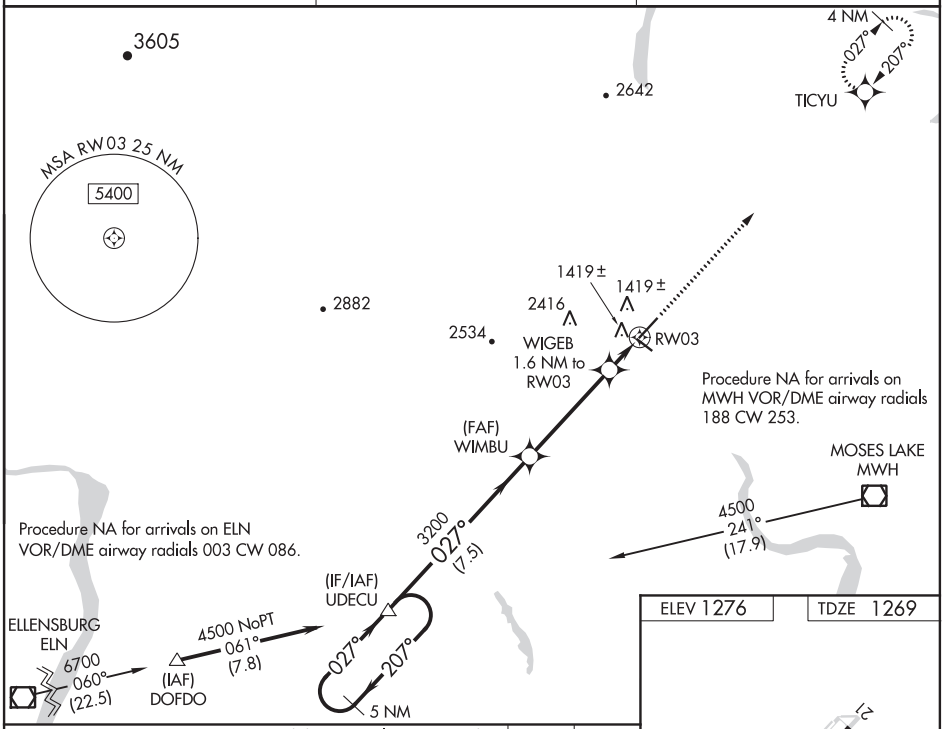
WAAS CH 50208 W03A	APP CRS 027°	Rwy Idg 5500 TDZE 1269 Apt Elev 1276

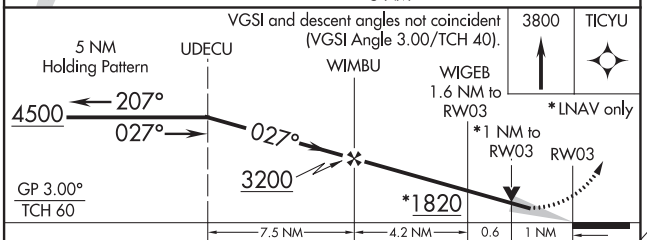
RNP APCH.

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.

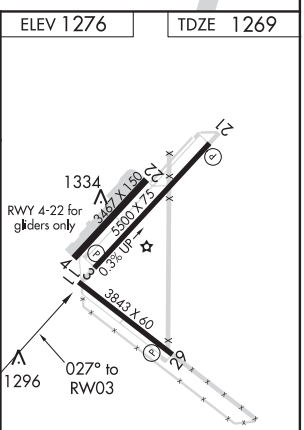
MISSED APPROACH: Climb to 3800 direct TICYU and hold.

ASOS	GRANT COUNTY APP CON ★	UNICOM
135.775	126.4 379.95	122.8 (CTAF) L





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)	



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS		
CH **82308**	**207°**	Rwy Idg	**5500**
W21A		TDZE	**1276**
		Apt Elev	**1276**

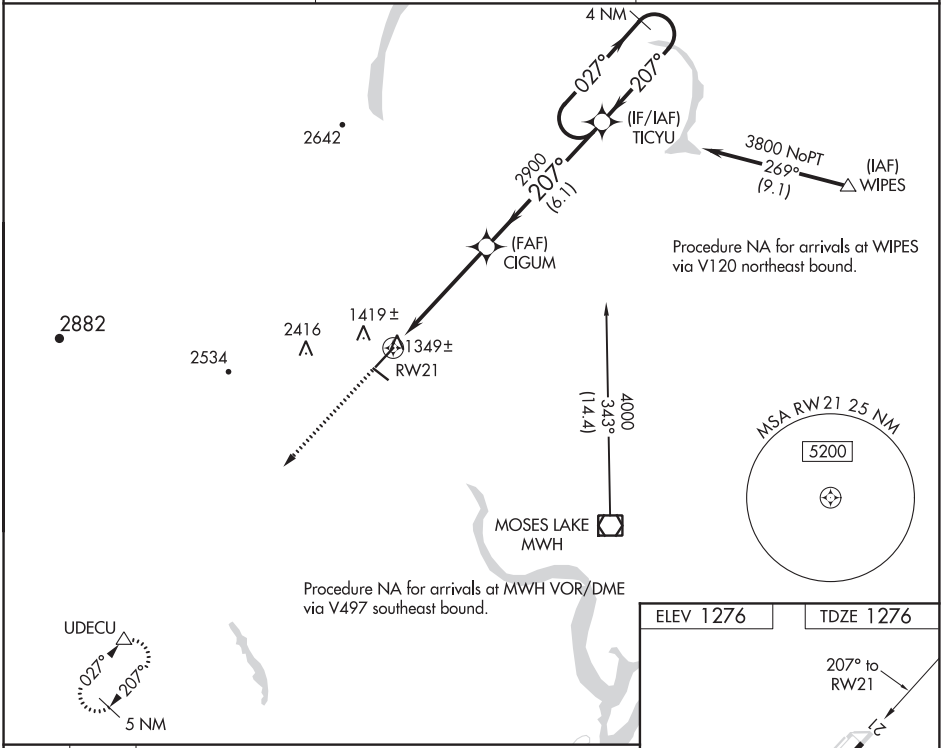
RNAV (GPS) RWY 21
EPHRATA MUNI (EPH)

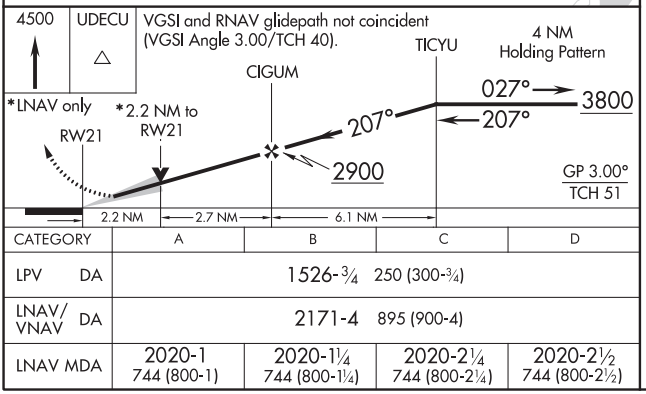
RNP APCH.

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.

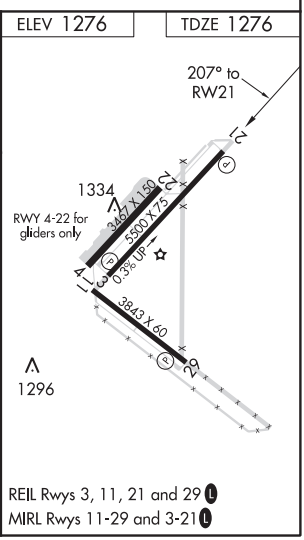
MISSED APPROACH: Climb to 4500 direct UDECU and hold.

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)



REIL Rwys 3, 11, 21 and 29 L
MIRL Rwys 11-29 and 3-21 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EPHRATA, WASHINGTON

AL-138 (FAA)

18144

VOR/DME RWY 3

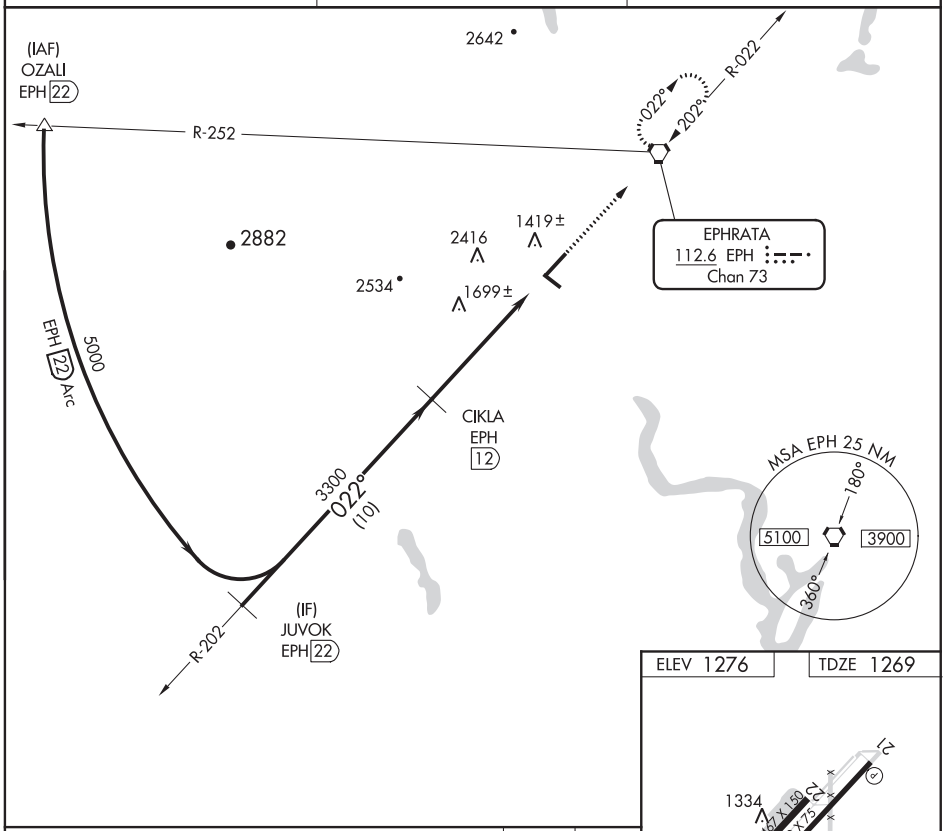
EPHRATA MUNI (EPH)

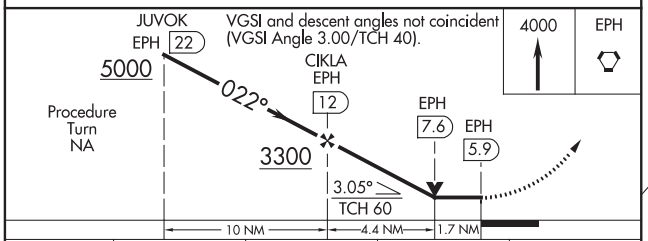
VORTAC EPH	APP CRS	Rwy Idg	5500
112.6	022°	TDZE	1269
Chan 73		Apt Elev	1276

When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all MDA 40 feet.
VDP NA when using Moses Lake/Grant County Intl altimeter setting.

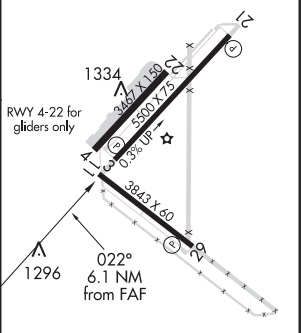
MISSED APPROACH: Climb to 4000 direct EPH VORTAC and hold, continue climb-in-hold to 4000.

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
S-3	1960-1	691 (700-1)	1960-2 691 (700-2)	1960-2¼ 691 (700-2¼)
CIRCLING	1960-1	684 (700-1)	1960-2 684 (700-2)	2500-3 1224 (1300-3)

REIL Rwys 3, 11, 21 and 29 L
MIRL Rwys 11-29 and 3-21 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 21

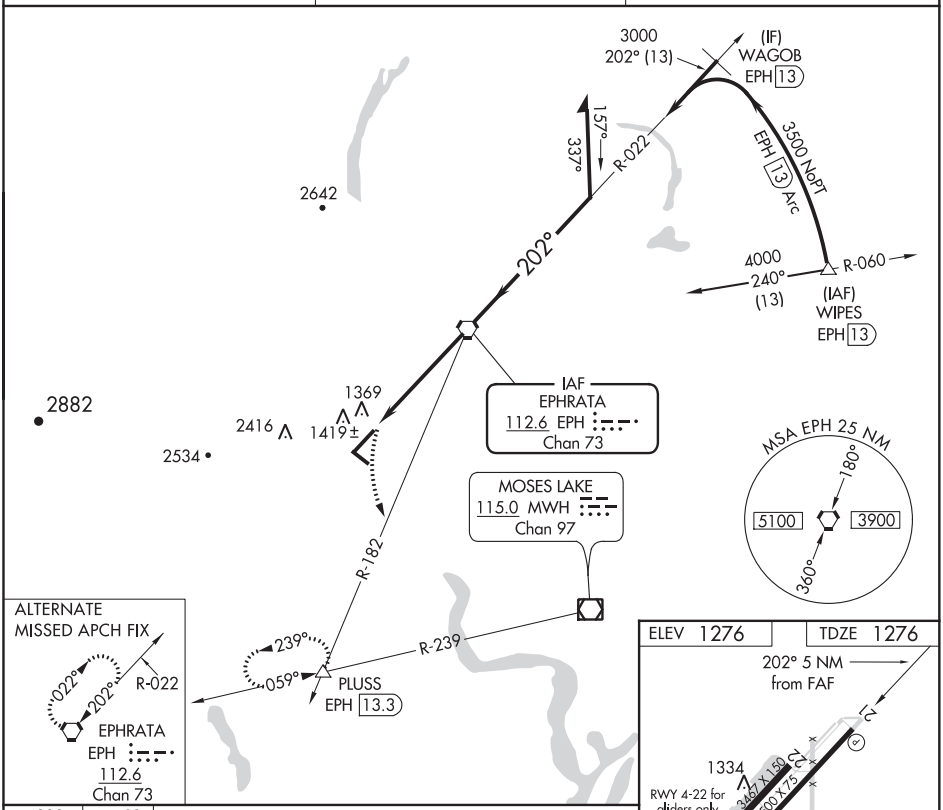
EPHRATA MUNI (EPH)

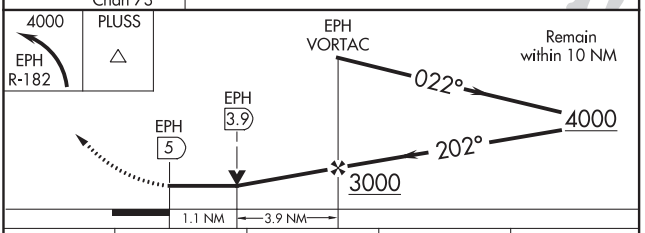
VORTAC EPH	APP CRS	Rwy Idg	5500
112.6	202°	TDZE	1276
Chan 73		Apt Elev	1276

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.

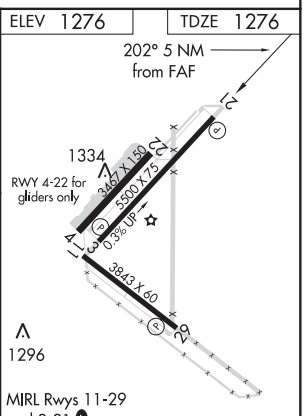
MISSED APPROACH: Climbing left turn to 4000 via EPH R-182 to PLUSS INT/EPH 13.3 DME and hold. Continue climb-in-hold to 4000.

ASOS	GRANT COUNTY APP CON★	UNICOM
135.775	126.4 379.95	122.8 (CTAF) L





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)



MIRL Rwys 11-29 and 3-21 L

REIL Rwys 3, 11, 21 and 29 L

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

ILS or LOC RWY 16L

MAHLON SWEET FIELD (EUG)

LOC/DME I-ADE	APP CRS	Rwy Idg	6000
111.75	164°	TDZE	369
Chan 54 (Y)		Apt Elev	374

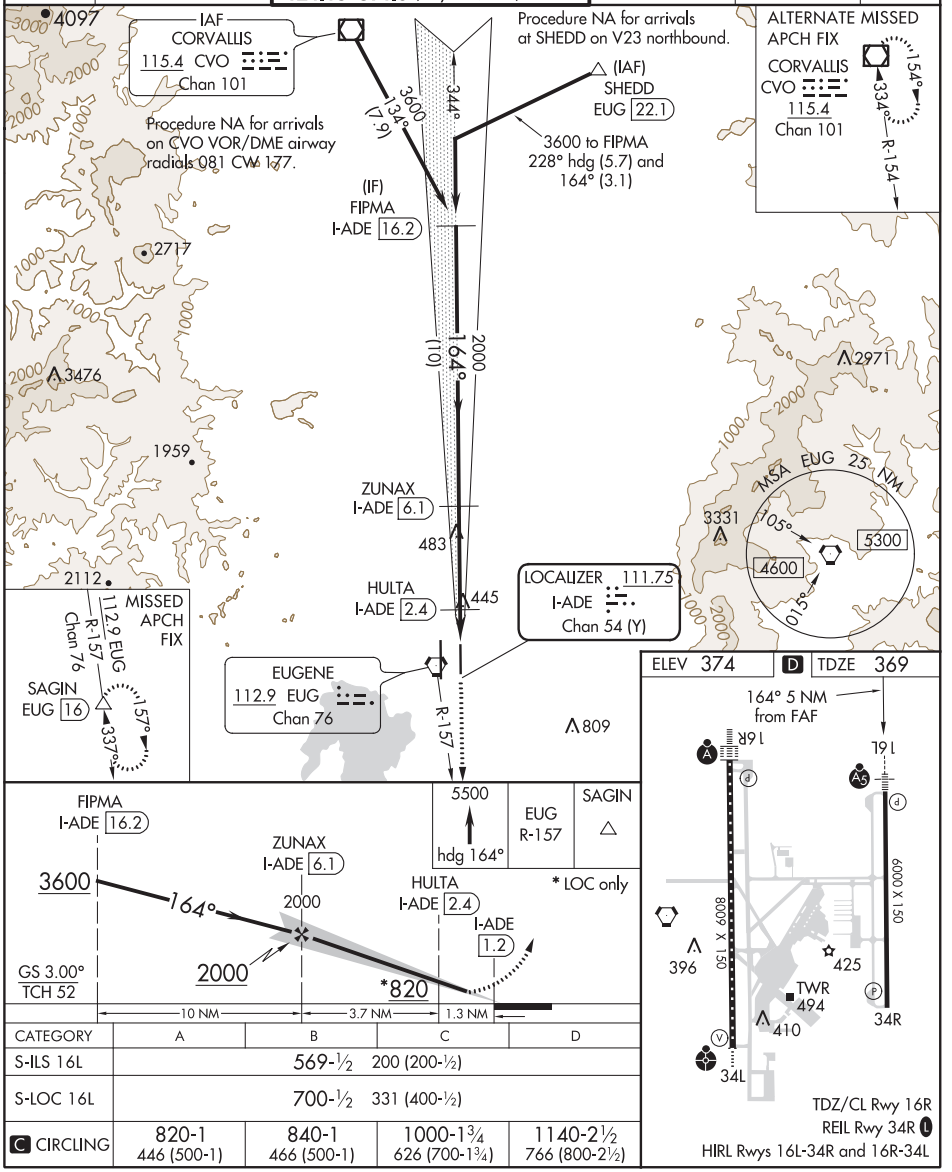
DME required.

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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 16R

MAHLON SWEET FIELD (EUG)

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	164°	TDZE	364
Chan 38		Apt Elev	374

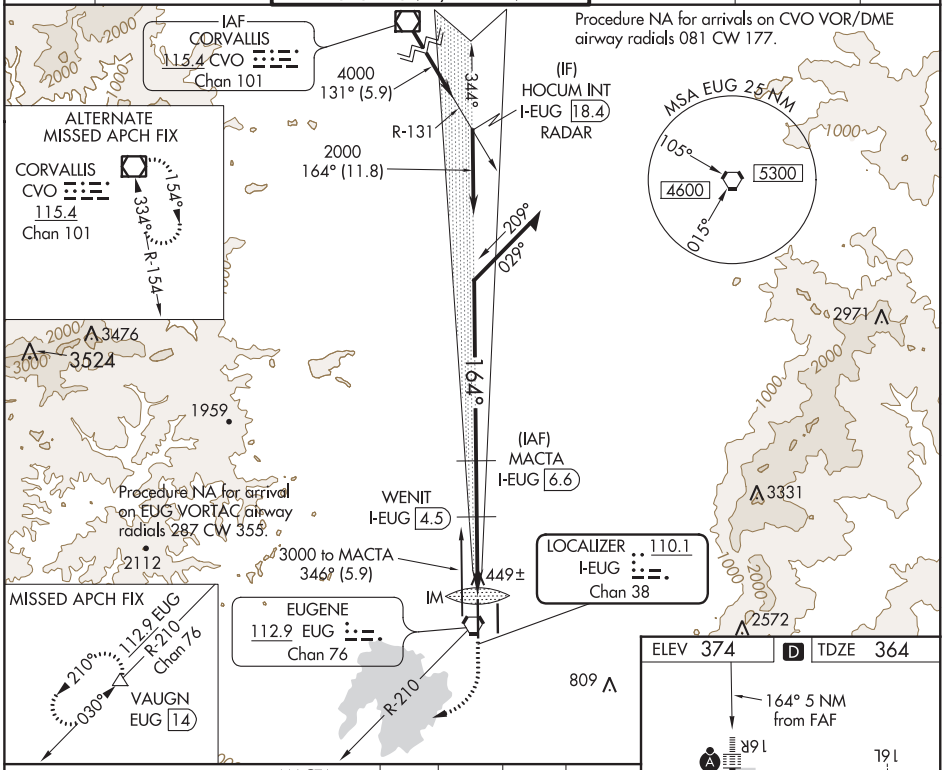
DME required.

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) 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 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

ILS RWY 16R (SA CAT I)

MAHLON SWEET FIELD (EUG)

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	164°	TDZE	364
Chan 38		Apt Elev	374

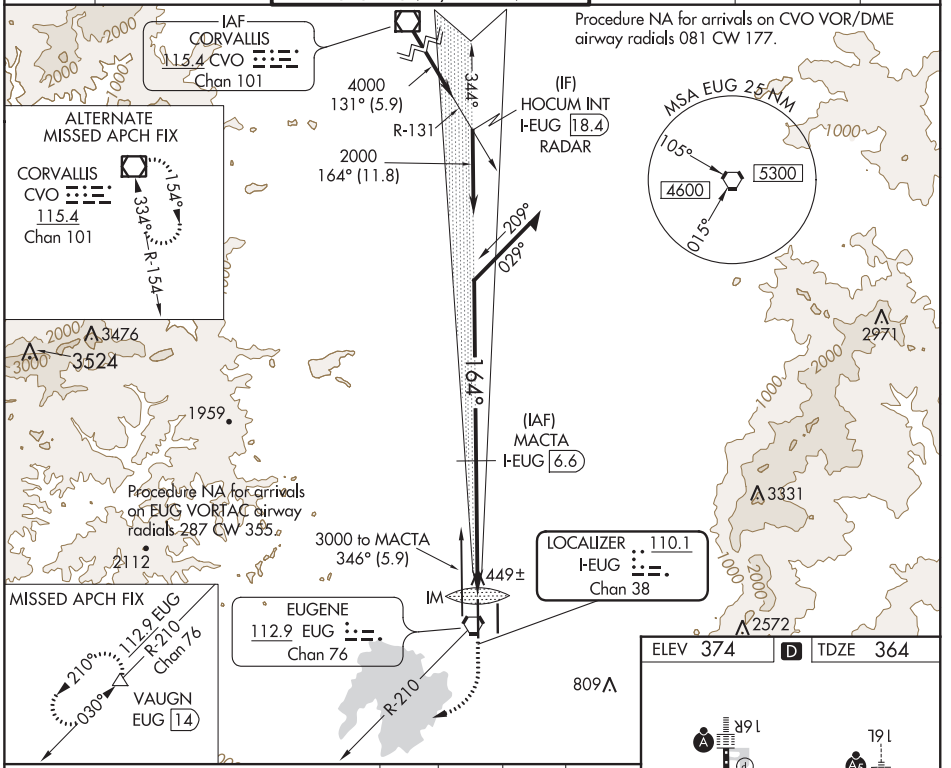
DME required.

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



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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 16R (CAT II & III)

MAHLON SWEET FIELD (EUG)

LOC/DME I-EUG	APP CRS	Rwy Idg	8009
110.1	164°	TDZE	364
Chan 38		Apt Elev	374

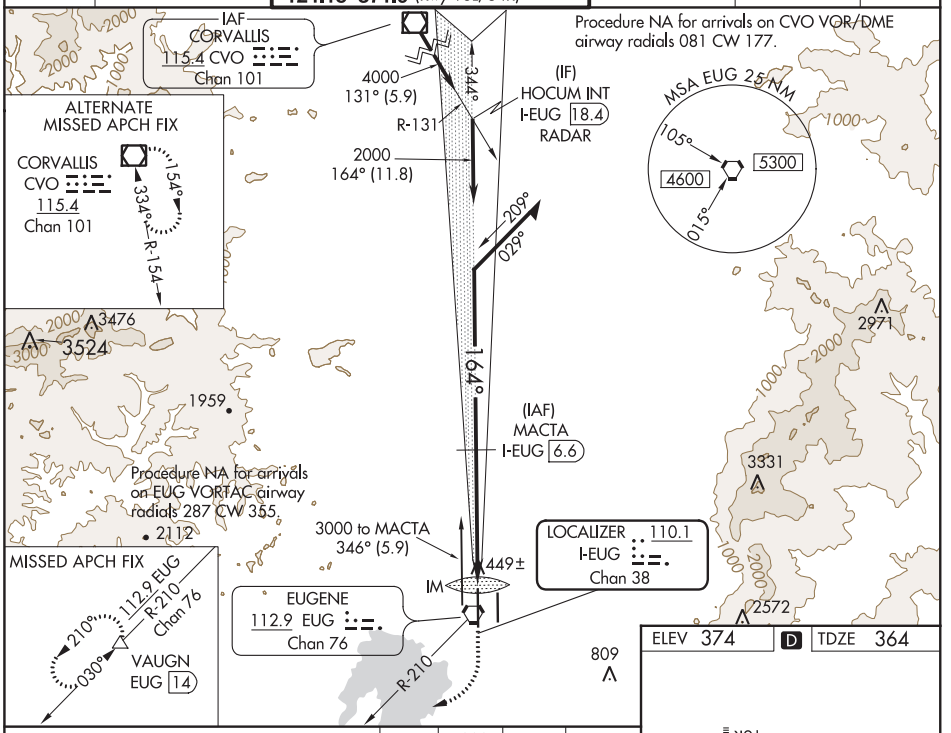
DME required.

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

RNAV (RNP) Z RWY 16L

MAHLON SWEET FIELD (EUG)

APP CRS	Rwy Idg	6000
164°	TDZE	369
	Apt Elev	374

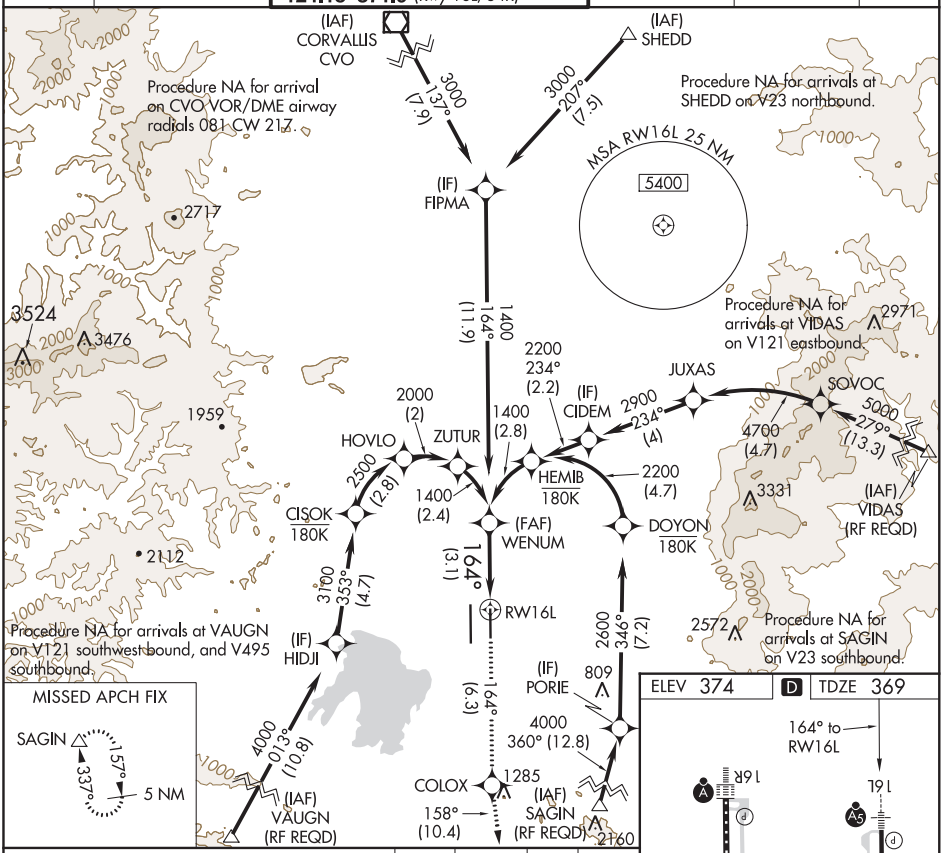
RNP AR APCH.

T 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

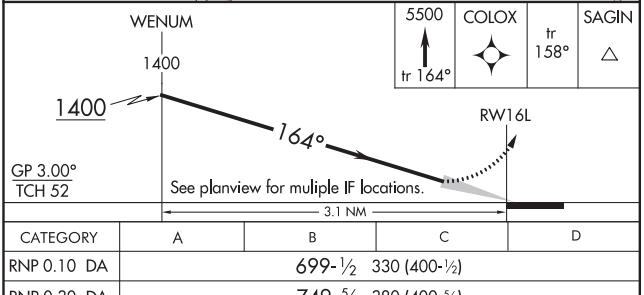
MISSED APPROACH: Climb to 5500 on track 164° to COLOX and on track 158° to SAGIN and hold, continue climb-in-hold to 5500.

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



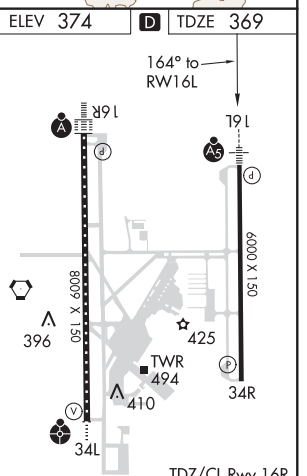
MISSED APCH FIX

SAGIN 157° 337° 5 NM



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



TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and Rwy 16R-34L

EUGENE, OREGON
Amdt 1A 11OCT18

44°07'N-123°13'W

MAHLON SWEET FIELD (EUG)

RNAV (RNP) Z RWY 16L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	8009
164°	TDZE	364
	Apt Elev	374

RNAV (RNP) Z RWY 16R

MAHLON SWEET FIELD (EUG)

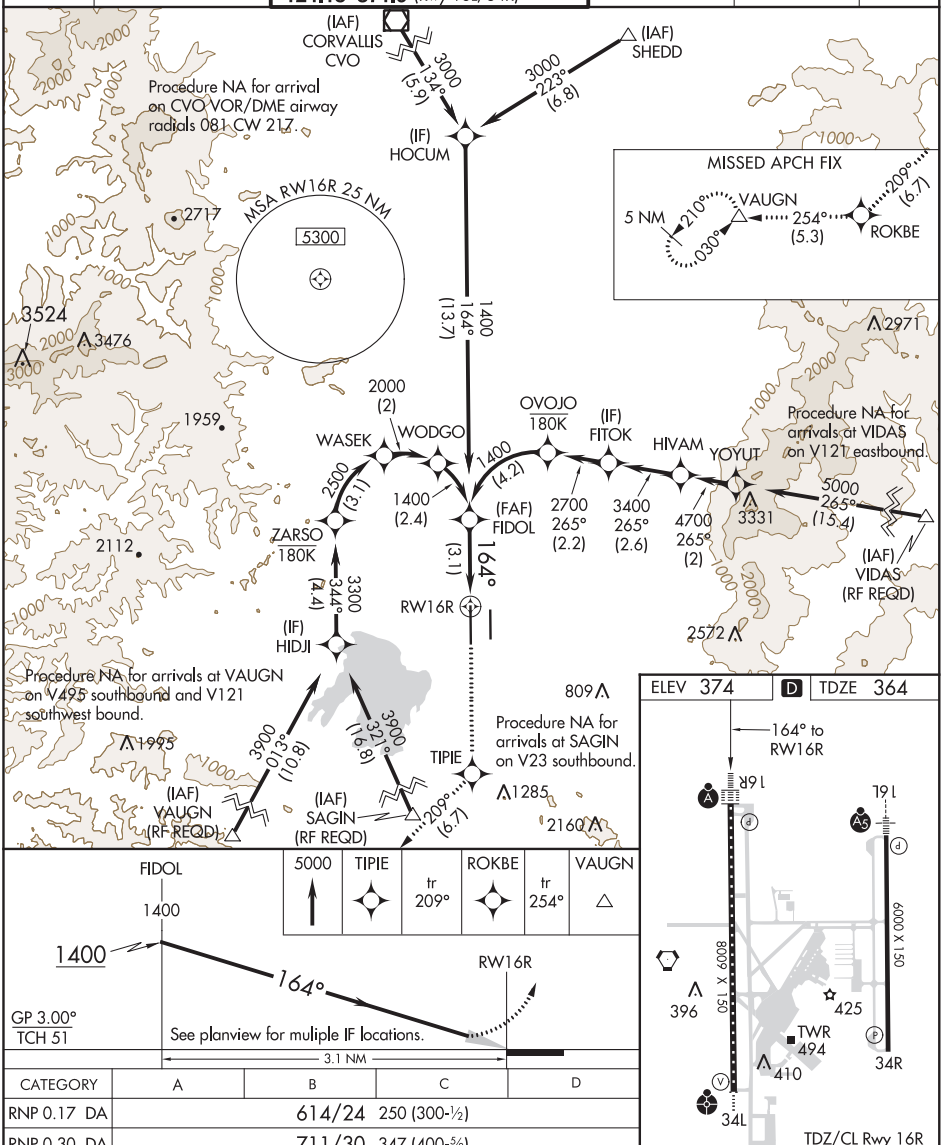
RNP AR APCH.

T 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) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

RNAV (RNP) Z RWY 34L

MAHLON SWEET FIELD (EUG)

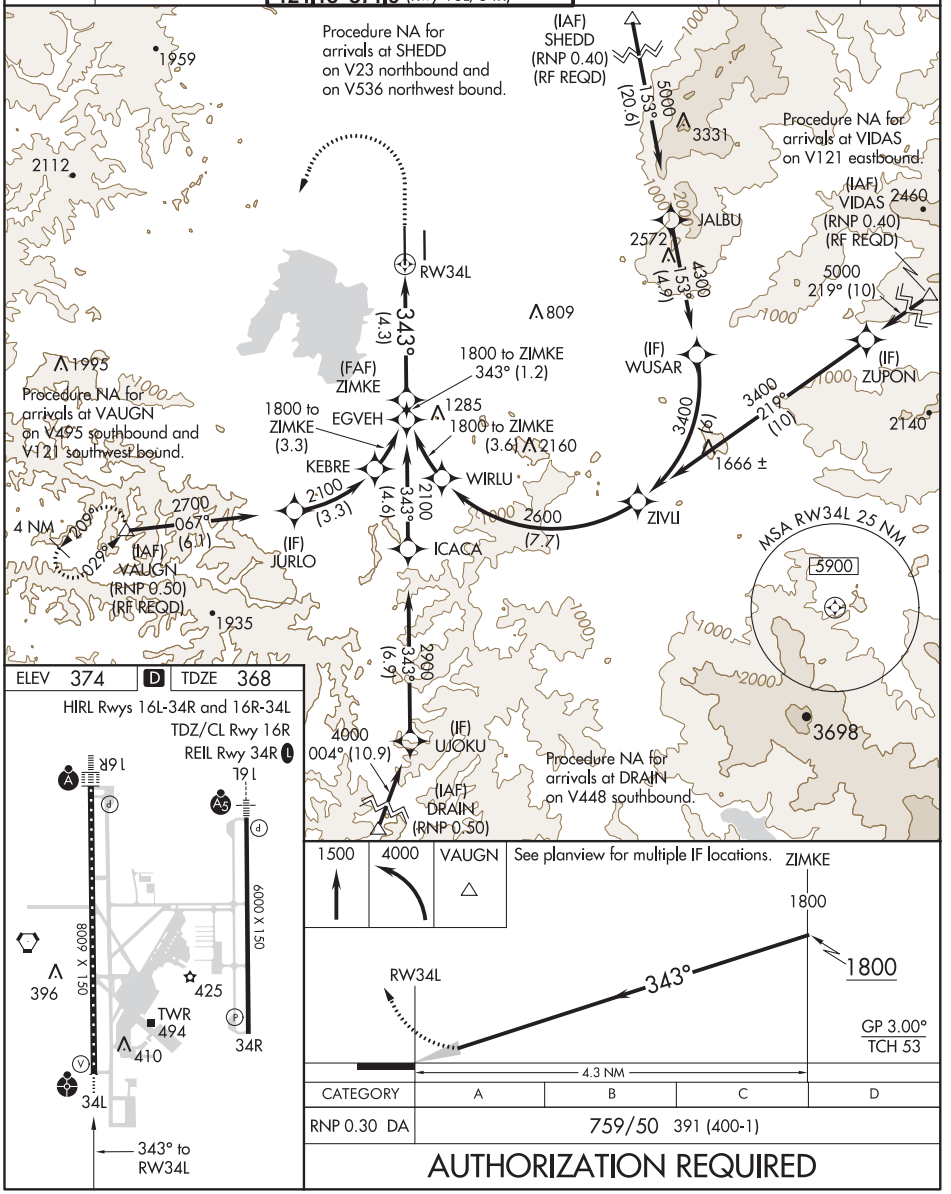
APP CRS	Rwy Idg	8009
343°	TDZE	368
	Apt Elev	374

For uncompensated Baro-VNAV systems, procedure NA below -9°C (16°F) or above 54°C (130°F). Simultaneous approach authorized. GPS required.

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 L

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

EUGENE, OREGON
Amdt 1 07DEC17

44°07'N-123°13'W

MAHLON SWEET FIELD (EUG)

RNAV (RNP) Z RWY 34L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 34R

MAHLON SWEET FIELD (EUG)

APP CRS	Rwy Idg	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

MISSED APCH FIX

ALFOR 179° 359° 4 NM

(IAF) SHEDD (RNP 0.40) (RF REQD)

Procedure NA for arrivals at SHEDD on V536 westbound and on V23 northbound.

Procedure NA for arrivals at VIDAS on V121 eastbound.

(IF) YIRSU

(IAF) VIDAS (RNP 0.40) (RF REQD)

KIBKE

RW34R

343° (4.6)

Procedure NA for arrivals at VAUGN on V495 southbound and V121 southwest bound.

(FAF) ICAVA

ZUBOL

ZASUK

5000 217° (9.7)

1900 (3.1)

1900 (3.2)

HABGI

WOLRI

(IAF) VAUGN (RNP 0.50) (RF REQD)

(IF) WOLKU

2800 (3.1)

3500 067° (7)

1900 343° (5.6)

(IF) SEYOK

2600 (8.4)

(IF) RORBY

MSA RW34R 25 NM 5900

2700 331° (2.8)

ZUMAG

3100 331° (2.8)

(IAF) SAGIN (RNP 0.30)

Procedure NA for arrivals at SAGIN on V23 southbound.

ELEV 374 D TDZ 374

HIRL Rwys 16L-34R and 16R-34L

TDZ/CL Rwy 16R

REIL Rwy 34R L

16R 16L

A5

6009 X 150

6000 X 150

396 425 TWR 494 410

34R 34L

343° to RW34R

3000	KIBKE	tr 006°	ALFOR

See planview for multiple IF locations.

ICAVA 1900

RW34R 343° 1900

GP 3.00° TCH 50

4.6 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	748-1 374 (400-1)			

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

RNAV (GPS) Y RWY 16L

MAHLON SWEET FIELD (EUG)

WAAS CH 81827 W16A	APP CRS 164°	Rwy Idg 6000 TDZE 369 Apt Elev 374

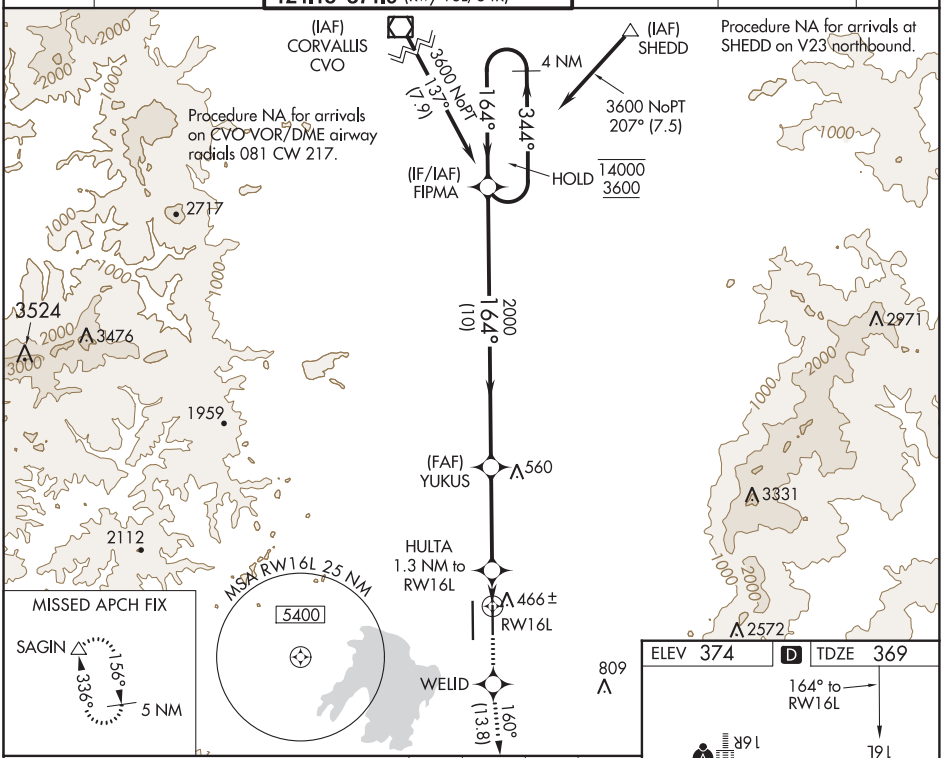
RNP APCH.

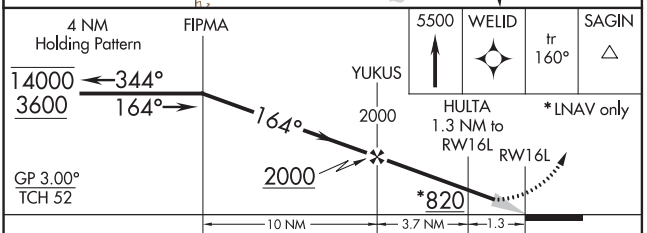
T A Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C. For Inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM, increase LNAV Cat C/D visibility to 1 SM.

MALSR A5

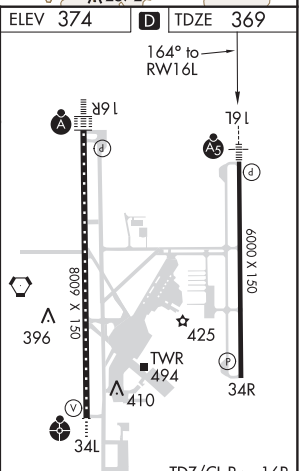
MISSED APPROACH: Climb to 5500 direct WELID and on track 160° to SAGIN and hold, continue climb-in-hold to 5500.

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) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95





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)



TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and Rwy 16R-34L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 16R

MAHLON SWEET FIELD (EUG)

WAAS	APP CRS	Rwy Idg	8009
CH 86518	164°	TDZE	364
W16B		Apt Elev	374

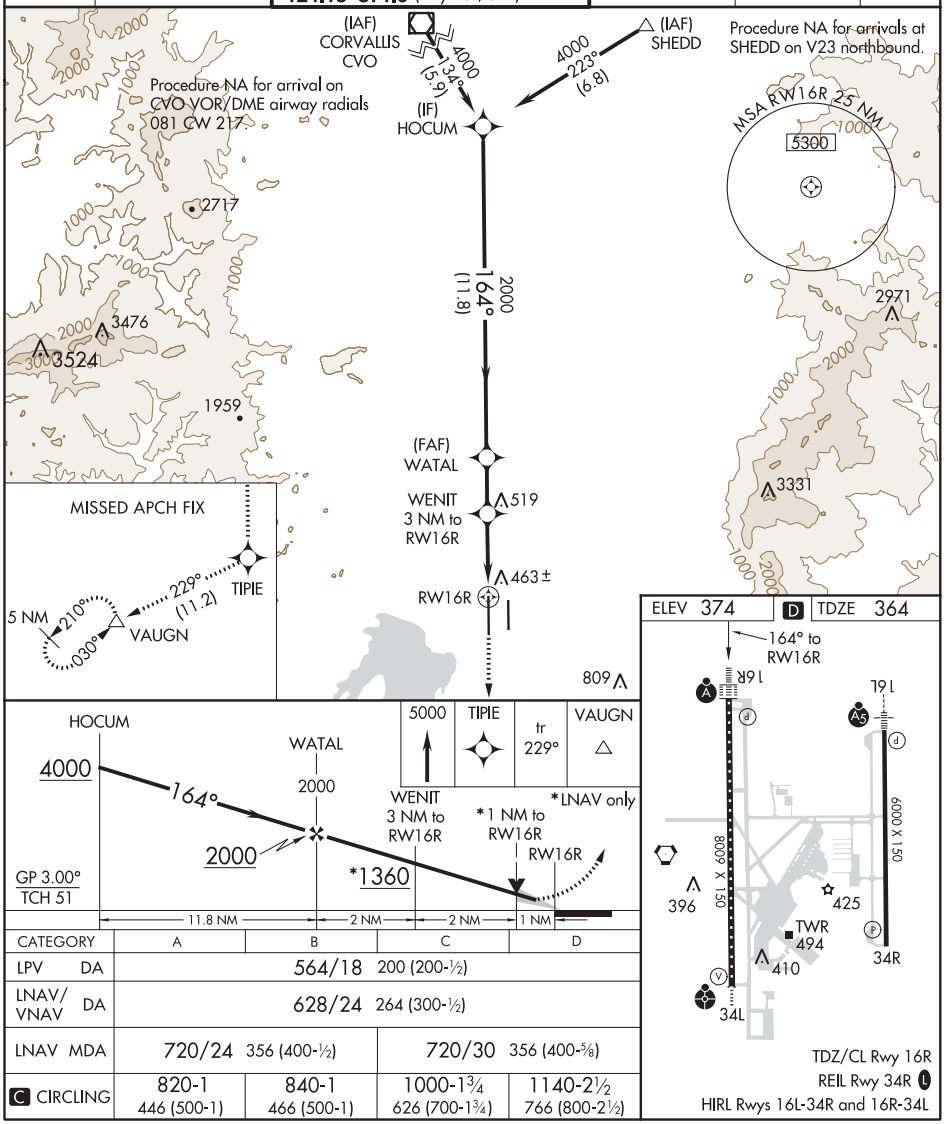
RNP APCH.

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) 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)

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and 16R-34L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON AL-140 (FAA) 19339

WAAS	APP CRS	Rwy Idg	8009
CH 45600	344°	TDZE	368
W34A		Apt Elev	374

RNAV (GPS) Y RWY 34L

MAHLON SWEET FIELD (EUG)

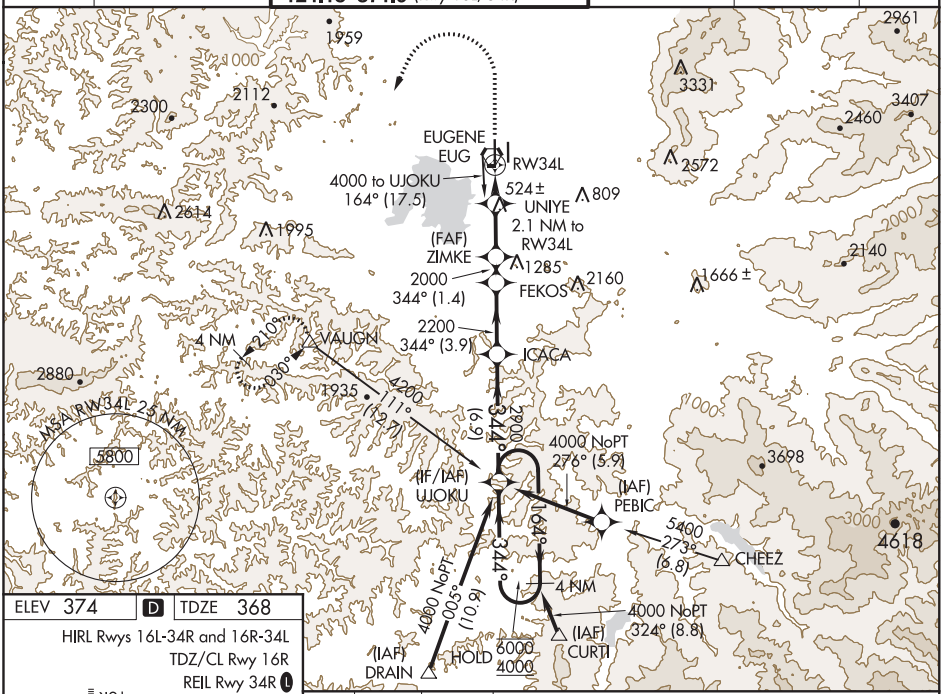
RNP APCH.

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) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95



NW-1, 30 JAN 2020 to 26 MAR 2020

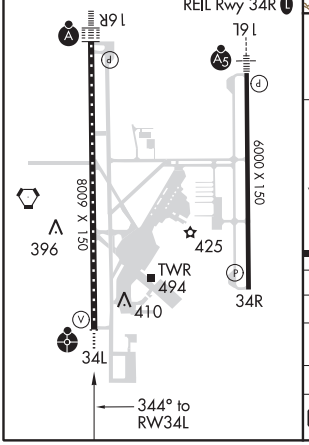
NW-1, 30 JAN 2020 to 26 MAR 2020

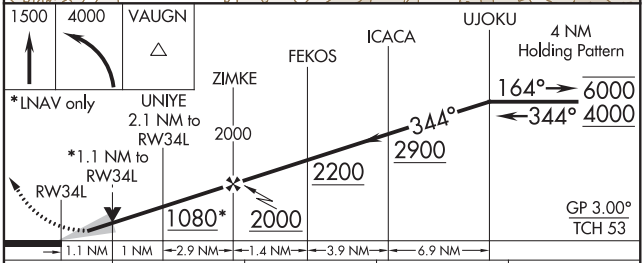
ELEV 374 D TDZ 368

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)

WAAS CH 81900 W34B	APP CRS 344°	Rwy Idg 6000 TDZE 374 Apt Elev 374

RNAV (GPS) Y RWY 34R

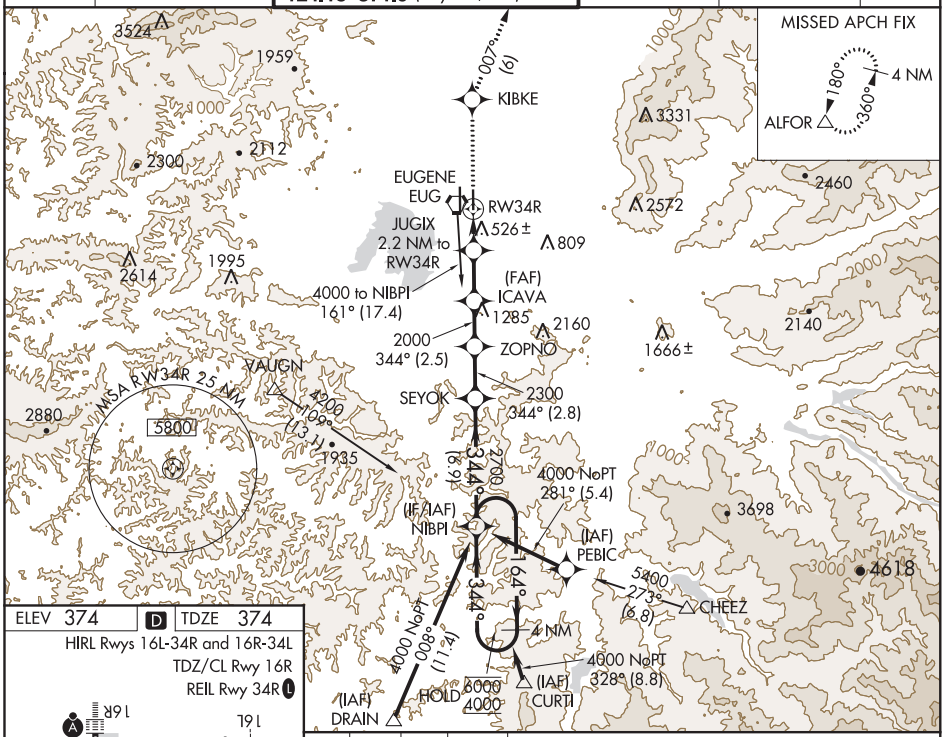
MAHLON SWEET FIELD (EUG)

RNP APCH.

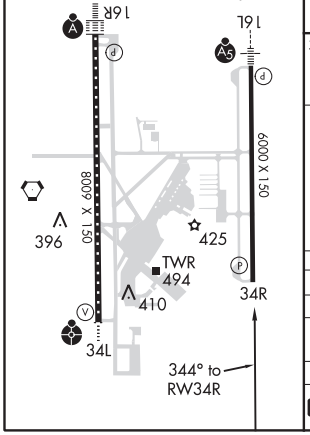
Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Rwy 34R helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C.

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) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95



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)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

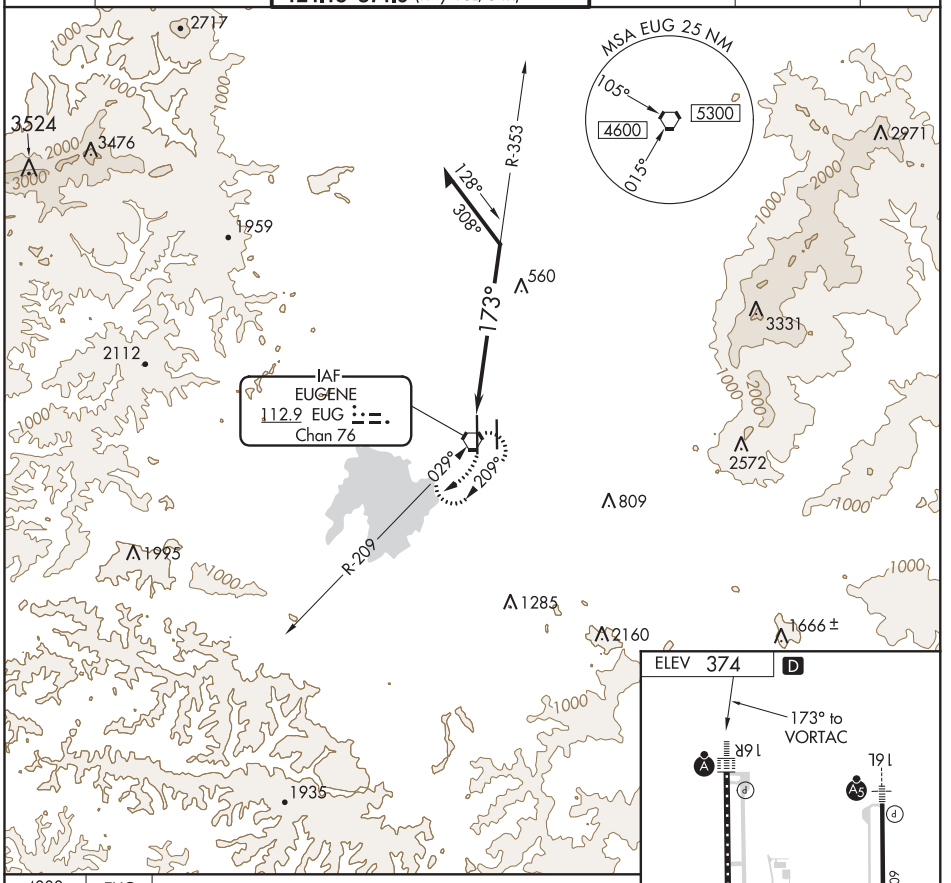
VORTAC EUG 112.9 Chan 76	APP CRS 173°	Rwy Idg N/A TDZE N/A Apt Elev 374

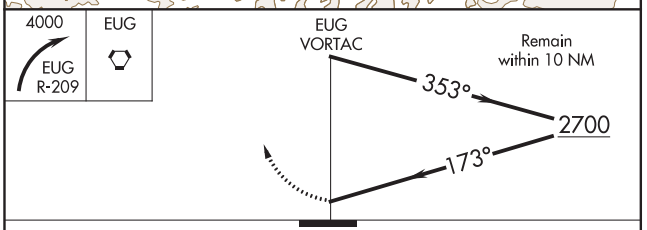
VOR-A

MAHLON SWEET FIELD (EUG)

MISSED APPROACH: Climbing right turn to 4000 on EUG R-209 then direct EUG VORTAC 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





CATEGORY	A	B	C	D
C CIRCLING	1200-1¼	826 (900-1¼)	1200-2½ 826 (900-2½)	1200-2¾ 826 (900-2¾)

TDZ/CL Rwy 16R
REIL Rwy 34R Ⓛ
HIRL Rwys 16L-34R and Rwy 16R-34L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC EUG	APP CRS	Rwy Idg	8009
112.9	173°	TDZE	364
Chan 76		Apt Elev	374

VOR or TACAN RWY 16R

MAHLON SWEET FIELD (EUG)

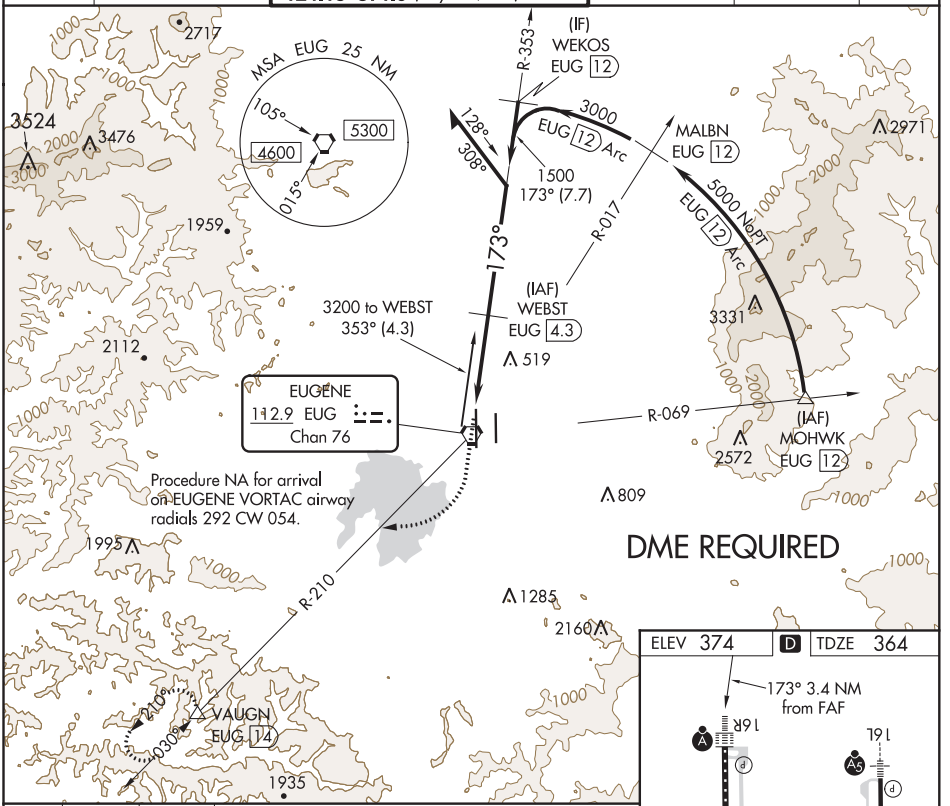
DME required for procedure entry. DME required.

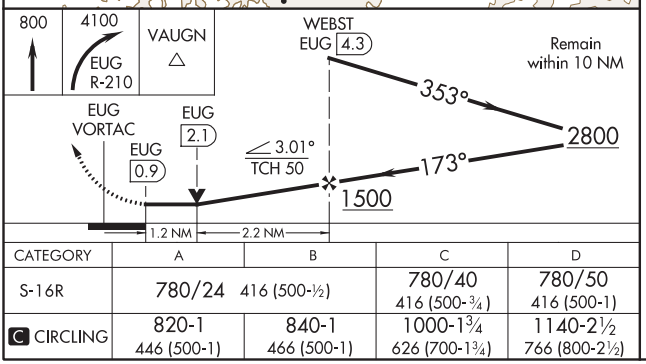
For inop ALS, increase S-16R Cat C, D visibility to RVR 6000.

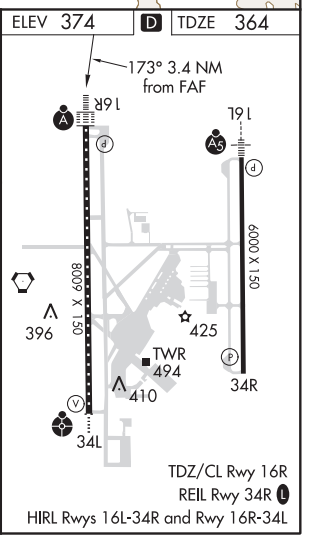
ALSF-2

MISSED APPROACH: Climb to 800 then climbing right 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) 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-16R	780/24 416 (500-½)		780/40 416 (500-¾)	780/50 416 (500-1)
C CIRCLING	820-1 446 (500-1)	840-1 466 (500-1)	1000-1¾ 626 (700-1¾)	1140-2½ 766 (800-2½)

TDZ/CL Rwy 16R
REIL Rwy 34R
HIRL Rwys 16L-34R and Rwy 16R-34L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EUGENE, OREGON | AL-140 (FAA) | 19339

VOR or TACAN RWY 34L

MAHLON SWEET FIELD (EUG)

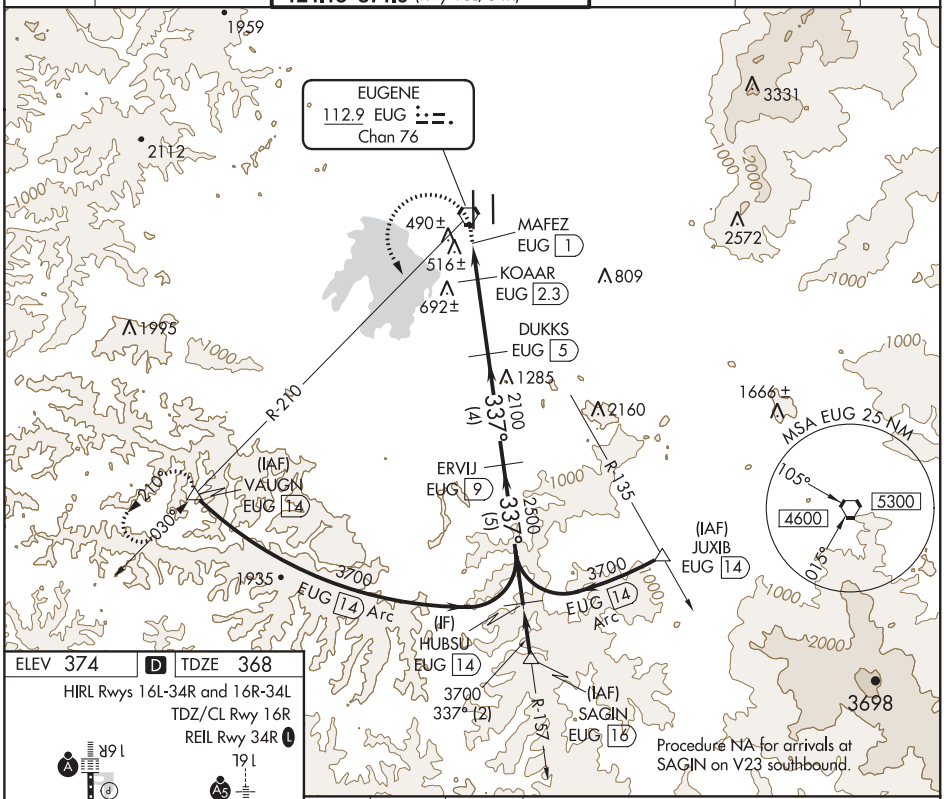
VORTAC EUG 112.9 Chan 76	APP CRS 337°	Rwy Idg 8009 TDZE 368 Apt Elev 374

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) 124.15 371.9 (Rwy 16L/34R)	121.7 269.5	121.7 269.5	122.95



NW-1, 30 JAN 2020 to 26 MAR 2020

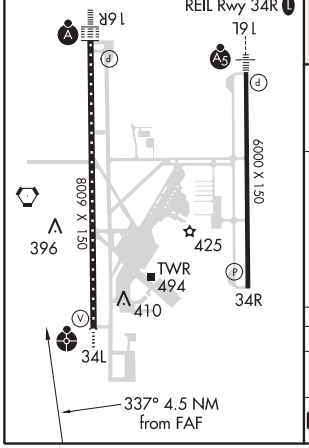
NW-1, 30 JAN 2020 to 26 MAR 2020

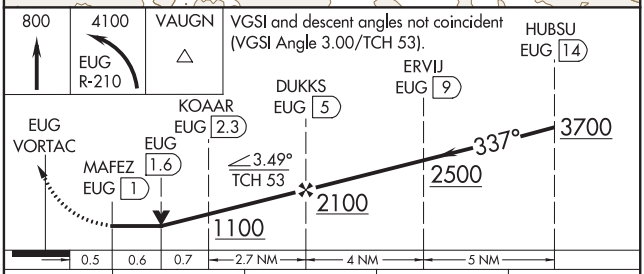
ELEV 374 | D | TDZE 368

HIRL Rwys 16L-34R and 16R-34L

TDZ/CL Rwy 16R

REIL Rwy 34R L





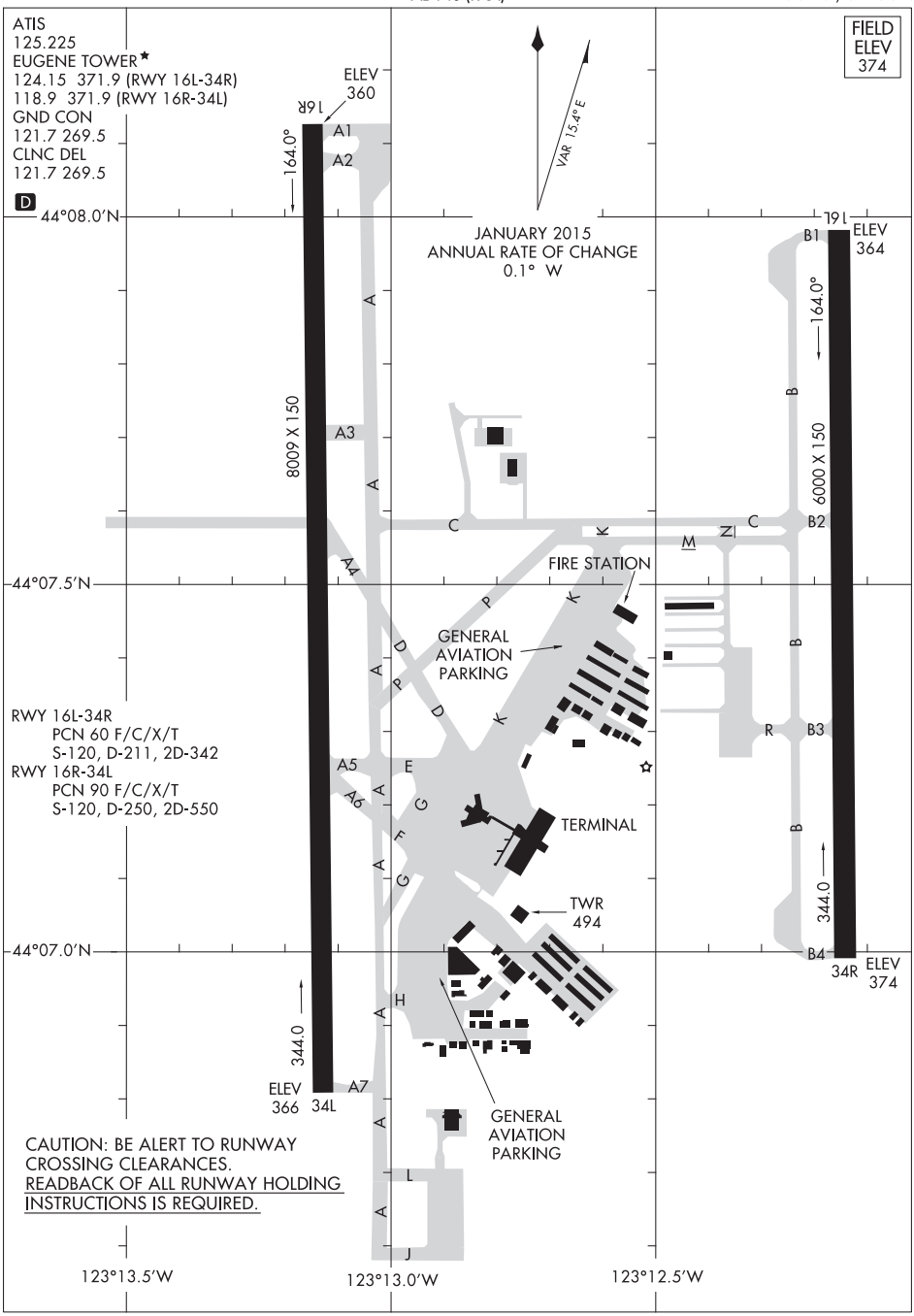
CATEGORY	A	B	C	D
S-34L	780/40 412 (500-¾)		780/55 412 (500-1)	
C CIRCLING	820-1 446 (500-1)	840-1 466 (500-1)	1000-1¾ 626 (700-1¾)	1140-2½ 766 (800-2½)

EUGENE, OREGON
Amdt 6 13SEP18

44°07′N-123°13′W

MAHLON SWEET FIELD (EUG)

VOR or TACAN RWY 34L



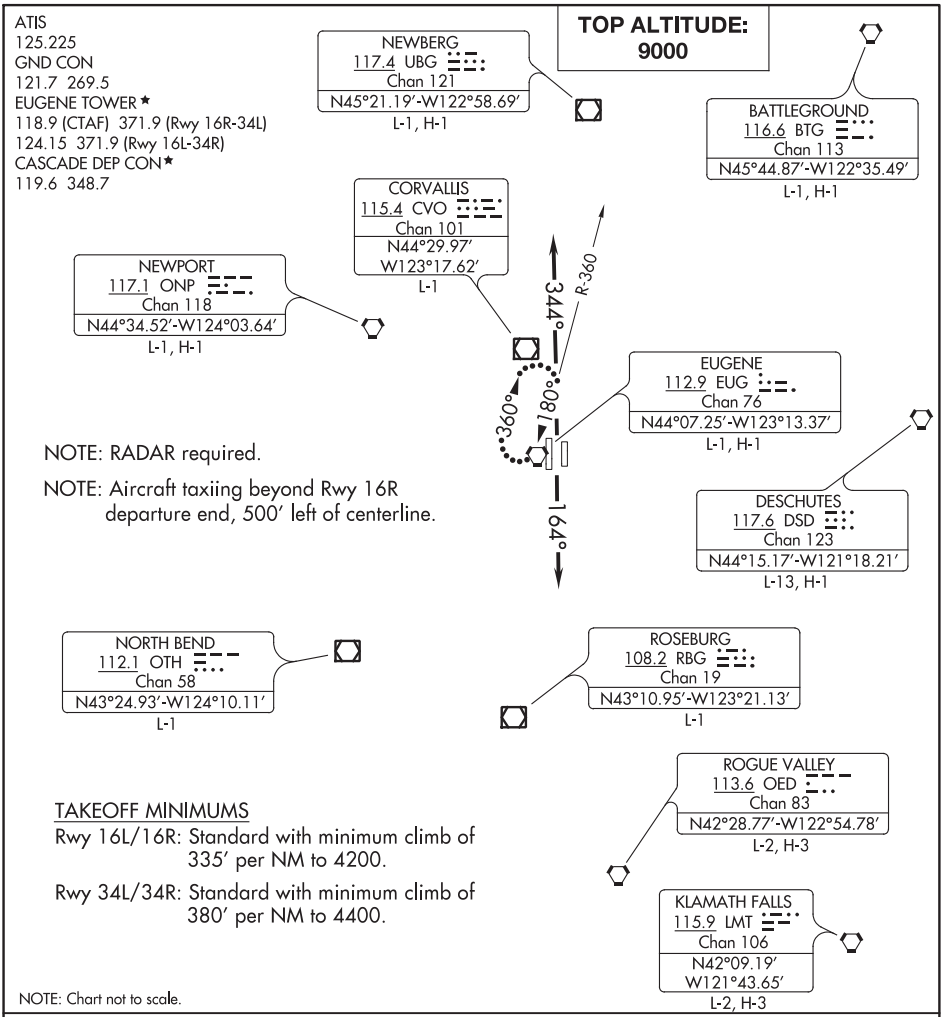
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18256

EUGENE ONE DEPARTURE

AL-140 (FAA)

MAHLON SWEET FIELD (EUG)
EUGENE, OREGON



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, 30 JAN 2020 to 26 MAR 2020

ILS or LOC/DME RWY 23

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

LOC/DME I-EVW	APP CRS	Rwy Idg	7300
108.9	234°	TDZE	7143
Chan 26		Apt Elev	7143

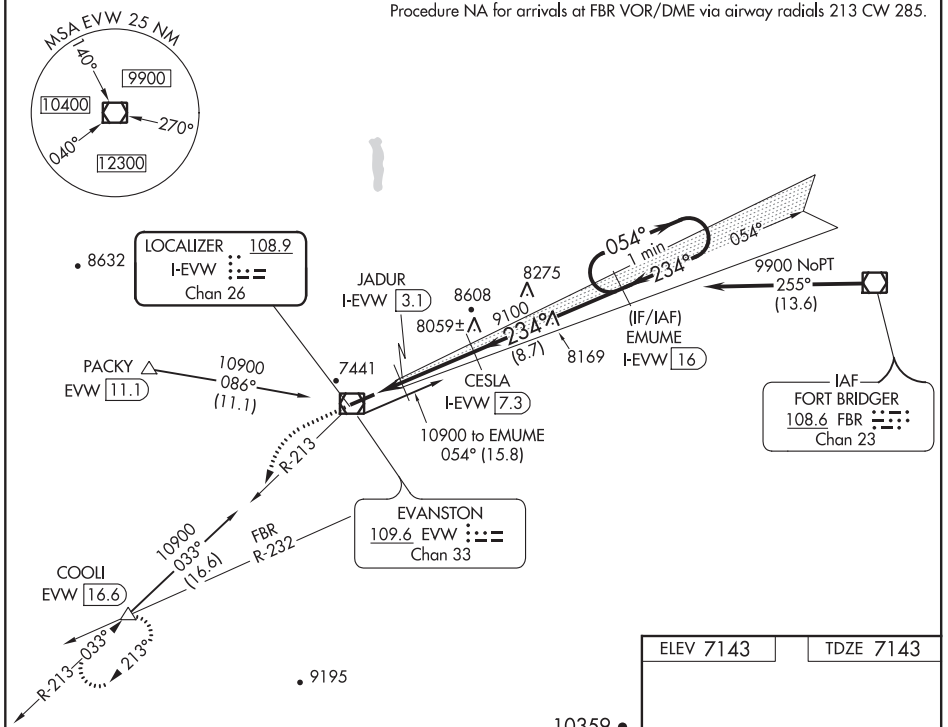
T A For inoperative MALSR, increase S-LOC 23 Cat D visibility to 1 mile. When local altimeter setting not received, procedure NA.

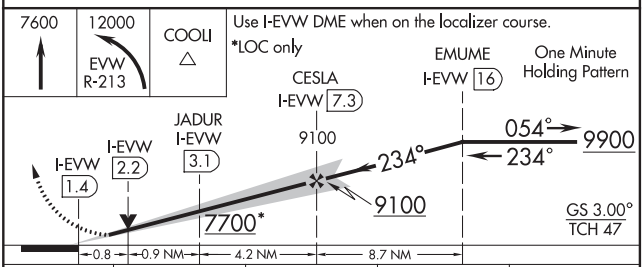
MALSR

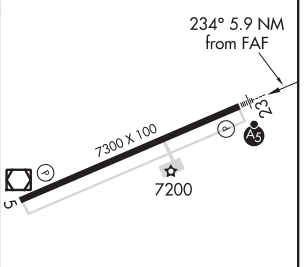
MISSED APPROACH: Climb to 7600 then climbing left turn to 12000 via EVW VOR/DME R-213 to COOLI/EVW VOR/DME 16.6 DME and hold, continue climb-in-hold to 12000.

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EVANSTON, WYOMING AL-6858 (FAA) 19311

WAAS	APP CRS	Rwy Idg	7300
CH 78302	054°	TDZE	7141
W05A		Apt Elev	7143

RNAV (GPS) RWY 5

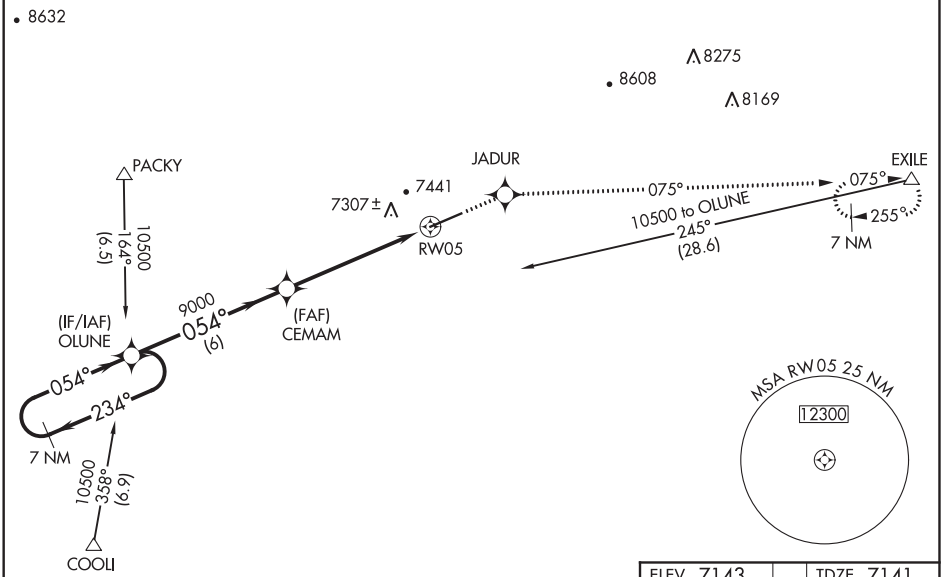
EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

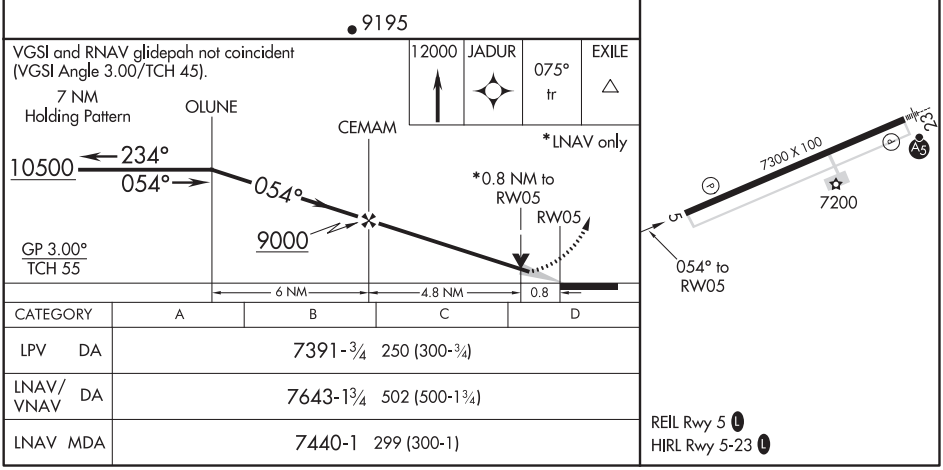
RNP APCH.

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





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

EVANSTON, WYOMING
Amdt 2A 07NOV19

41°16′N-111°02′W

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

RNAV (GPS) RWY 5

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 77905 W23A	APP CRS 234°	Rwy Idg 7300 TDZE 7143 Apt Elev 7143

RNAV (GPS) RWY 23

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

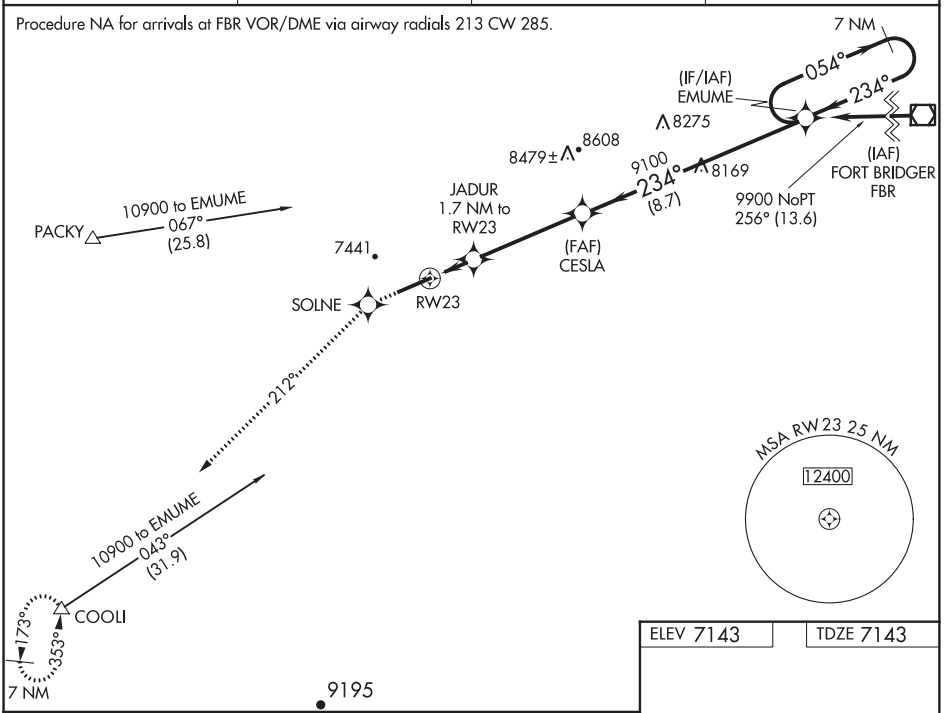
For inoperative MALSR, increase LPV all Cats visibility to 1, LNAV/VNAV Cat D to 1 and LNAV Cat D to 1¼. When local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (93°F). DME/DME RNP- 0.3 NA.

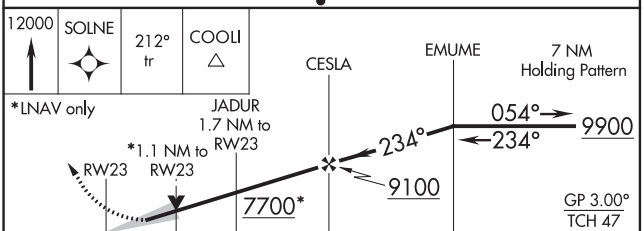
MALSR

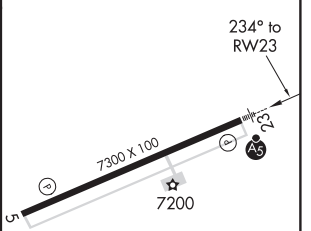
MISSED APPROACH: Climb to 12000 direct SOLNE and via 212° track to COOLI and hold, continue climb-in-hold to 12000.

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)

REIL Rwy 5 L
HIRL Rwy 5-23 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EVANSTON, WYOMING AL-6858 (FAA) 19115

VOR/DME EVW	APP CRS	Rwy Idg	7300
109.6	044°	TDZE	7141
Chan 33		Apt Elev	7143

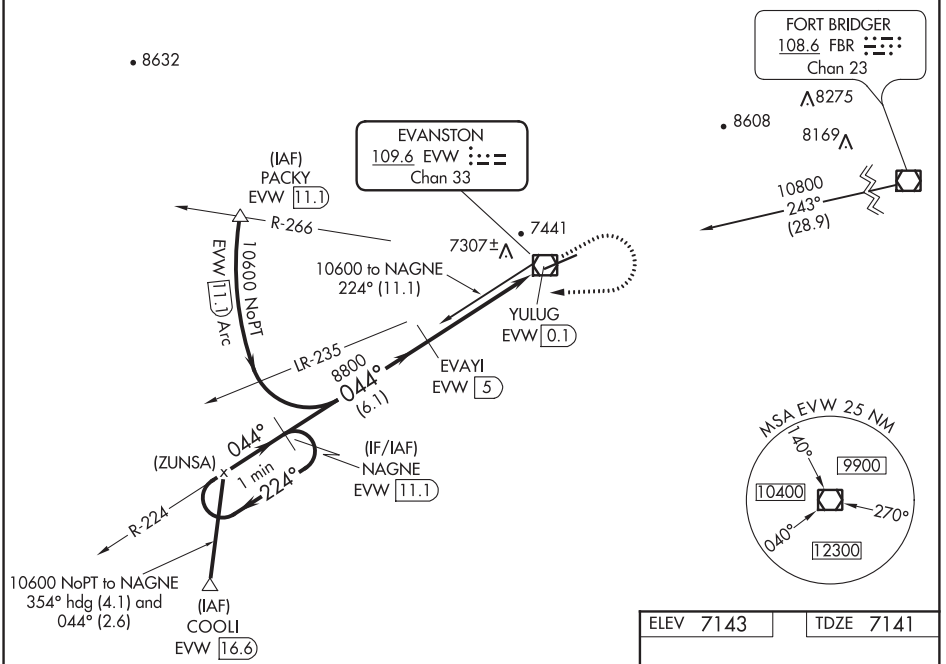
VOR/DME RWY 5

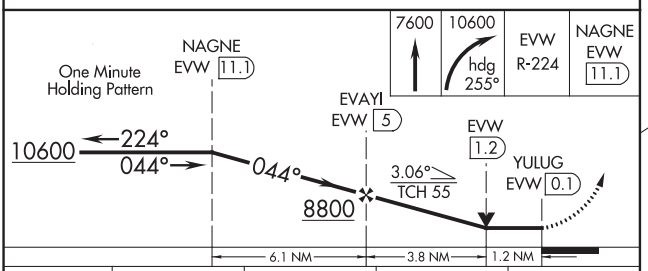
EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

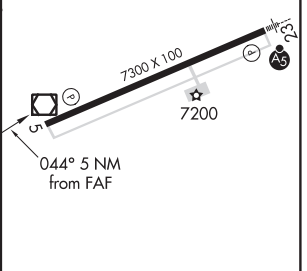
If local altimeter setting not received, procedure NA.

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)







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)

EVANSTON, WYOMING
Orig 23NOV06

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)
41°16′N-111°02′W

VOR/DME RWY 5

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS Y or LOC Y RWY 16R

SNOHOMISH COUNTY (PAINE FIELD) (PAE)

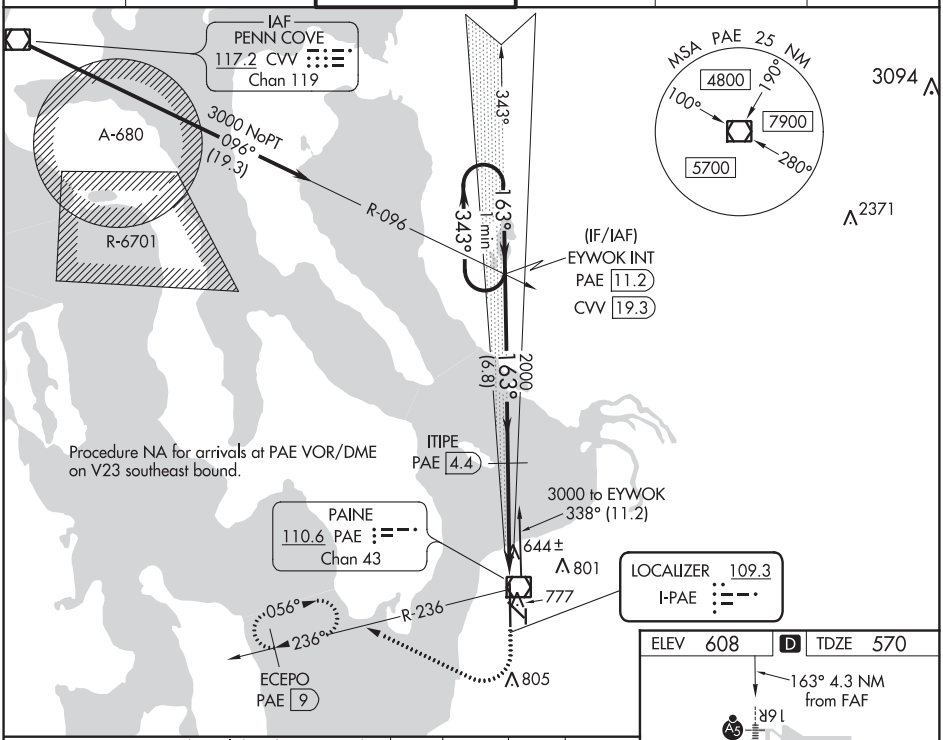
LOC I-PAE	APP CRS	Rwy Idg	9010
109.3	163°	TDZE	570
		Apt Elev	608

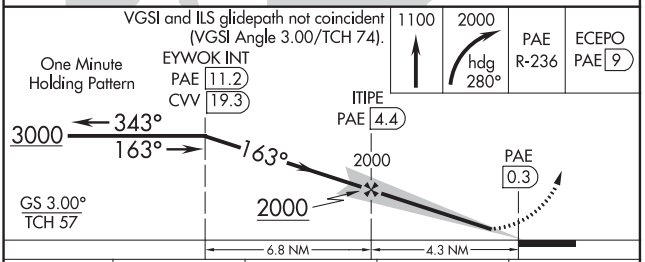
T A — Circling Rwy 34R NA at night. DME required. DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required.

MALSR A5

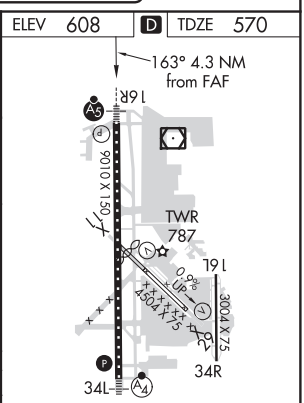
MISSED APPROACH: Climb to 1100 then climbing right turn to 2000 on heading 280° and PAE VOR/DME R-236 to ECEPO/PAE 9 DME and hold.

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	



TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

EVERETT, WASHINGTON | AL-142 (FAA) | 19339

LOC I-PAE	APP CRS	Rwy Idg	9010
109.3	163°	TDZE	570
		Apt Elev	608

ILS Z or LOC Z RWY 16R

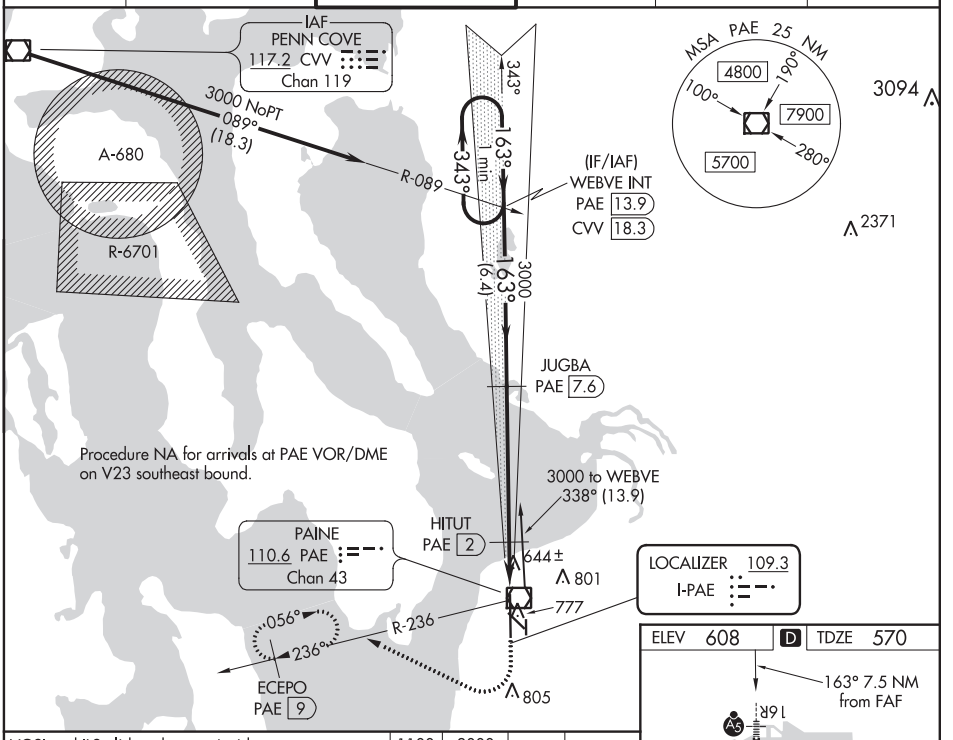
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

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.

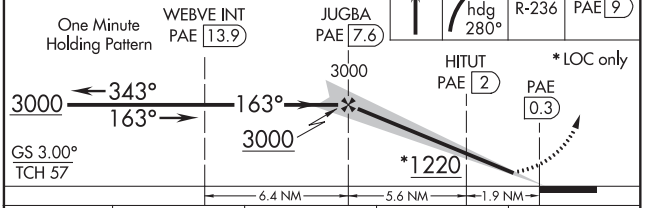
MALSR

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



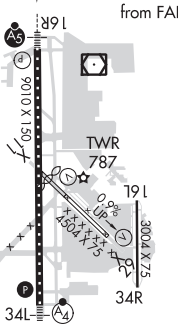
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 74).



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)

ELEV 608 | D | TDZE 570

163° 7.5 NM from FAF



TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-PAE	APP CRS	Rwy Idg	9010
109.3	163°	TDZE	570
		Apt Elev	608

ILS Z RWY 16R (SA CAT II)

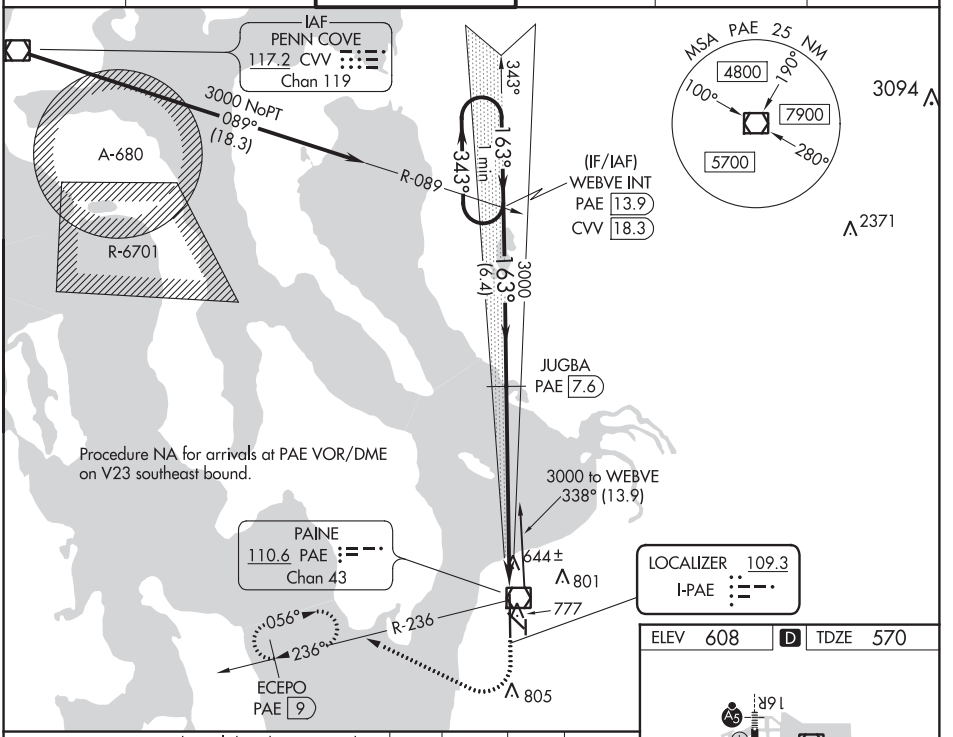
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

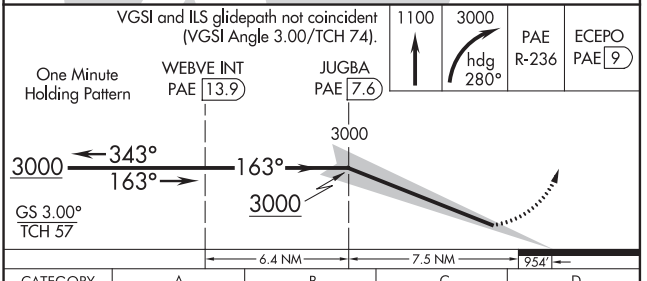
T DME required. Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required. Procedure NA when control tower closed.

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

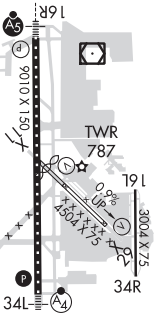




CATEGORY	A	B	C	D
S-ILS 16R	RA 116/12 100 DA 670			

SA CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	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

MISSED APCH FIX

4 NM 163° 343° EYWOK

Procedure NA for arrivals at PAE VOR/DME on V287 northeast bound.

PAINE PAE A801

777

RW34L

3000 to RARYO 165° (10.4)

761±

805

ZEREN 1.7 NM to RW34L

(FAF) USDAW

2000

343° (4.7)

(IF/IAF) RARYO 3000

NoPT at RARYO on DEVYN ARRIVAL.

163° 343° 4 NM

3000 NoPT 347° (18.8)

(IAF) SEATTLE SEA

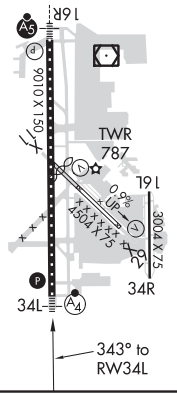
Procedure NA for arrival on SEA VORTAC airway radials 310 CW 072.

A1745

MSA RW34L 25 NM 7600

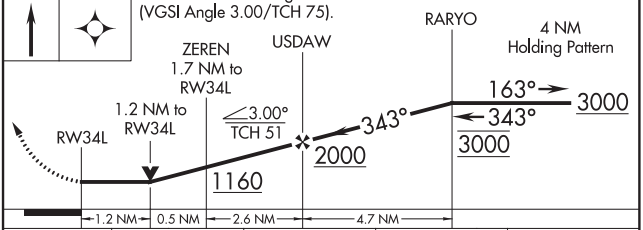
ELEV 608 D TDZE 584

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)

47°54′N-122°17′W

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	9010
CH 60911	163°	TDZE	570
W16B		Apt Elev	608

RNAV (GPS) Y RWY 16R

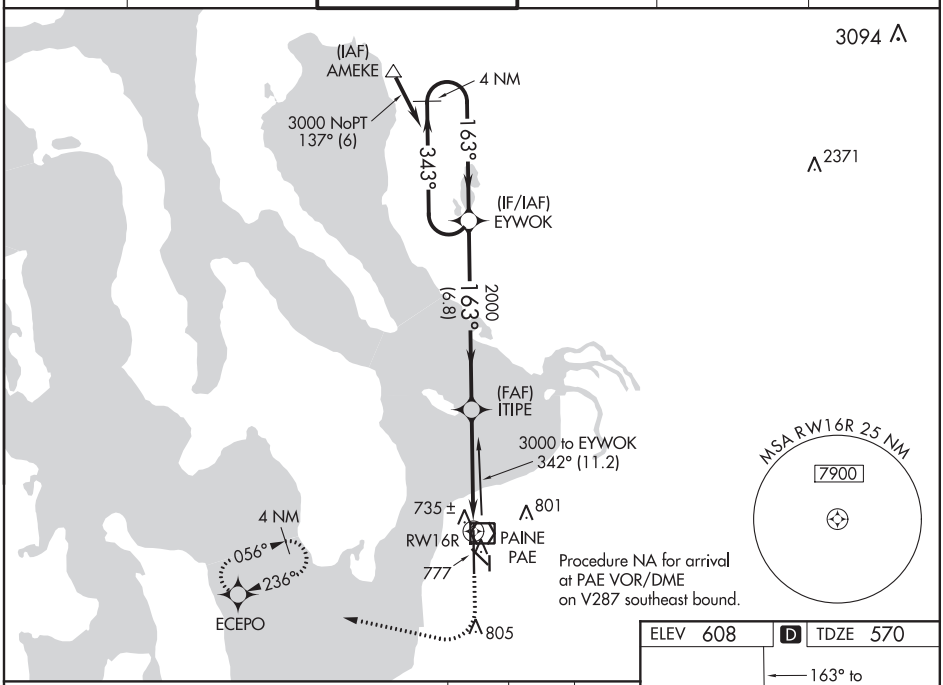
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

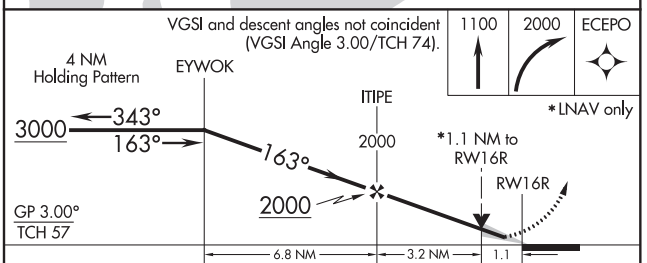
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). Circling Rwy 34R NA at night. DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV Cats A/B visibility to RVR 5000.

MALSR

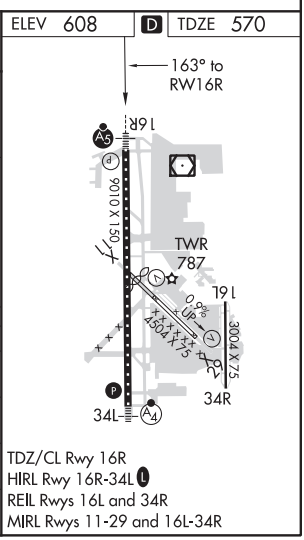
MISSED APPROACH: Climb to 1100 then climbing right turn to 2000 direct ECEPO and hold.

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	



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	9010
CH 61129	163°	TDZE	570
W16A		Apt Elev	608

RNAV (GPS) Z RWY 16R

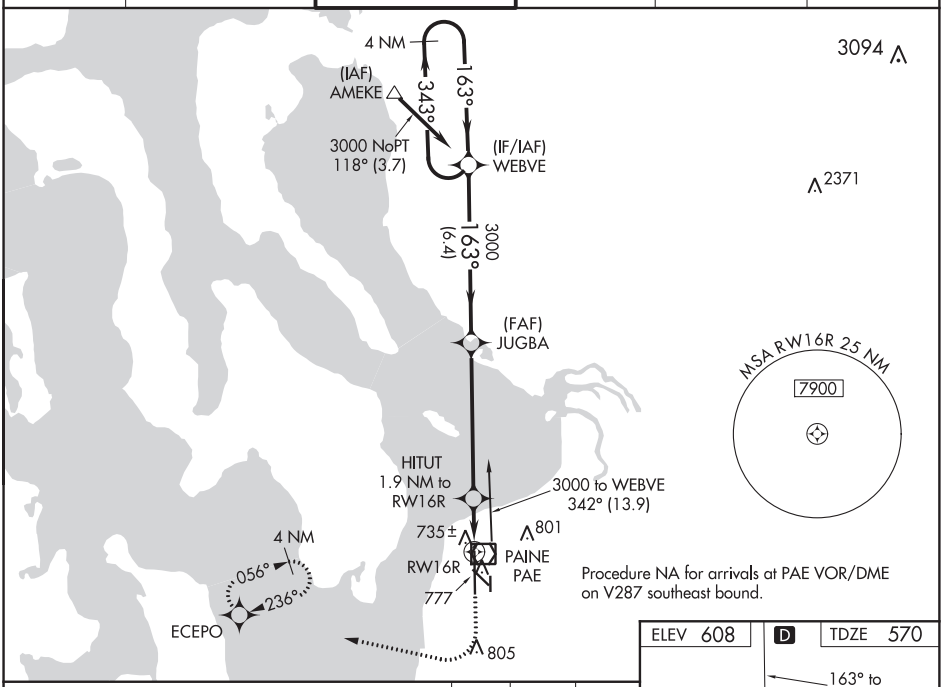
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

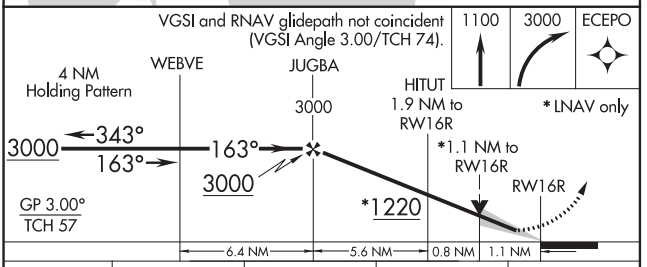
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). Circling Rwy 34R NA at night. DME/DME RNP-0.3 NA.

MALSR

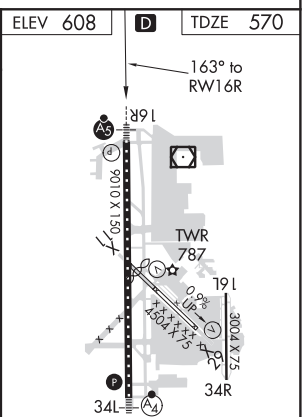
MISSED APPROACH: (Do not exceed 240K until ECEPO) Climb to 1100 then climbing right turn to 3000 direct ECEPO and hold, continue climb-in-hold to 3000.

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





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)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME PAE	APP CRS	Rwy Idg	N/A
110.6	160°	TDZE	N/A
Chan 43		Apt Elev	608

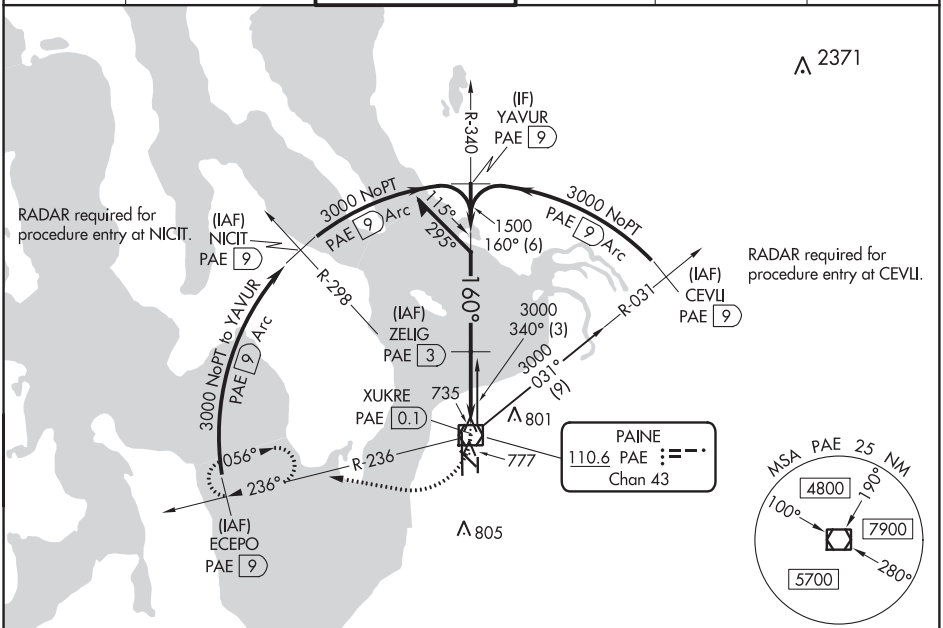
VOR-A

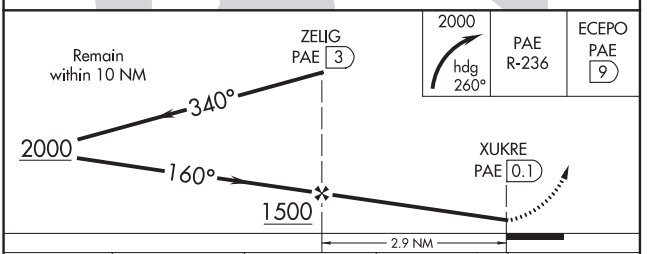
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

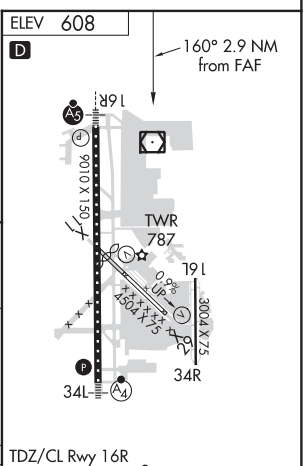
Circling Rwy 34R NA at night. DME required.

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 A3149
MIRL Rwys 11-29 and 16L-34R

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

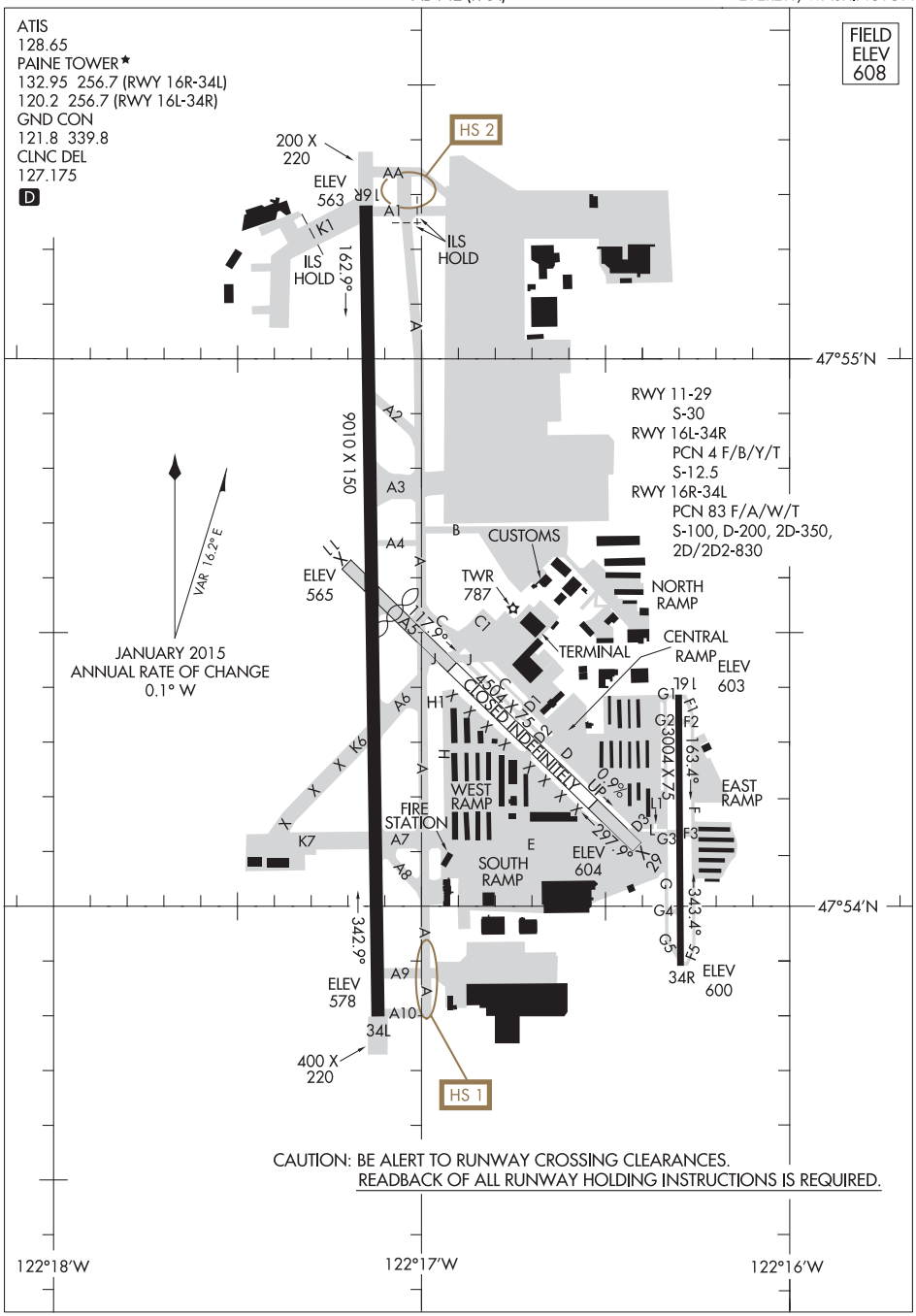
19339

AIRPORT DIAGRAM

SNOHOMISH COUNTY (PAINE FIELD) (PAE)

AL-142 (FAA)

EVERETT, WASHINGTON

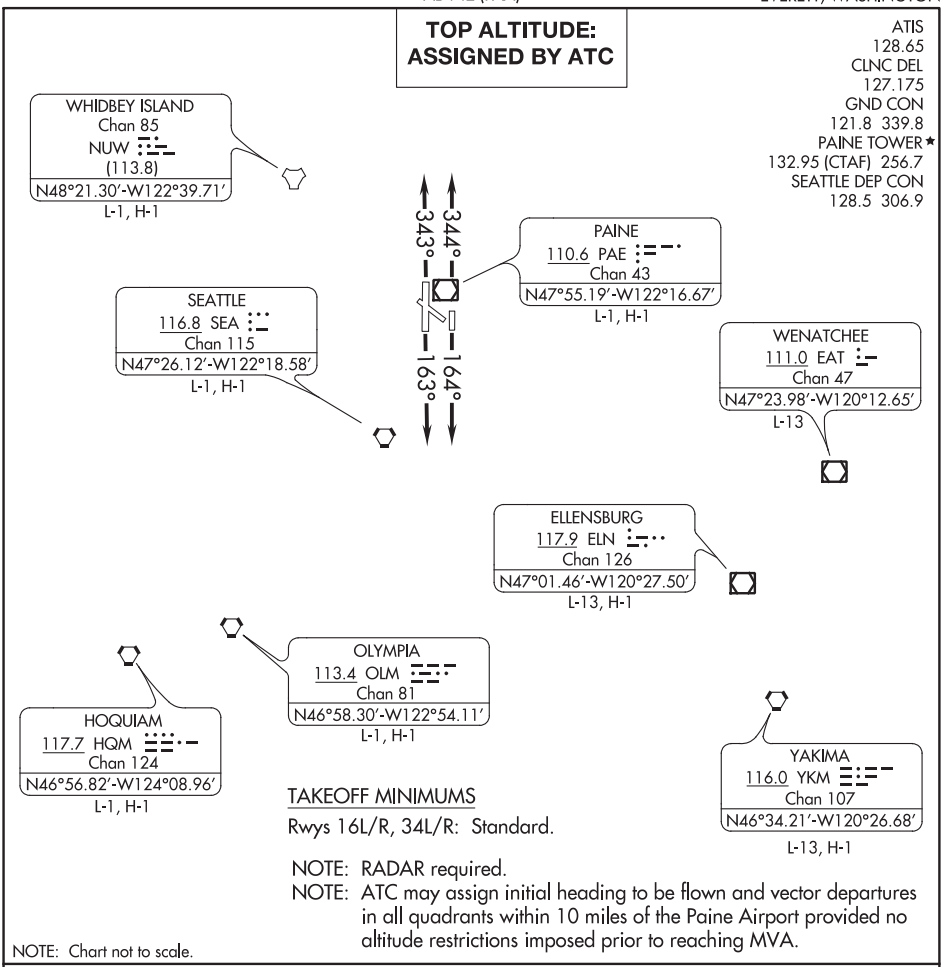


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
19339

EVERETT, WASHINGTON
SNOHOMISH COUNTY (PAINE FIELD) (PAE)



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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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

LOC I-FRC	APCH CRS	Rwy Idg 13,899 TDZE 2462 Arpt Elev 2462
110.3	051°	

AL-553 [USAF]

FAIRCHILD AFB (KSKA)

▼ * When ALS inop, increase RVR to 40, vis to ¾ mile. When TDZL/CL lights inop, increase CAT ABCDE RVR to 24.

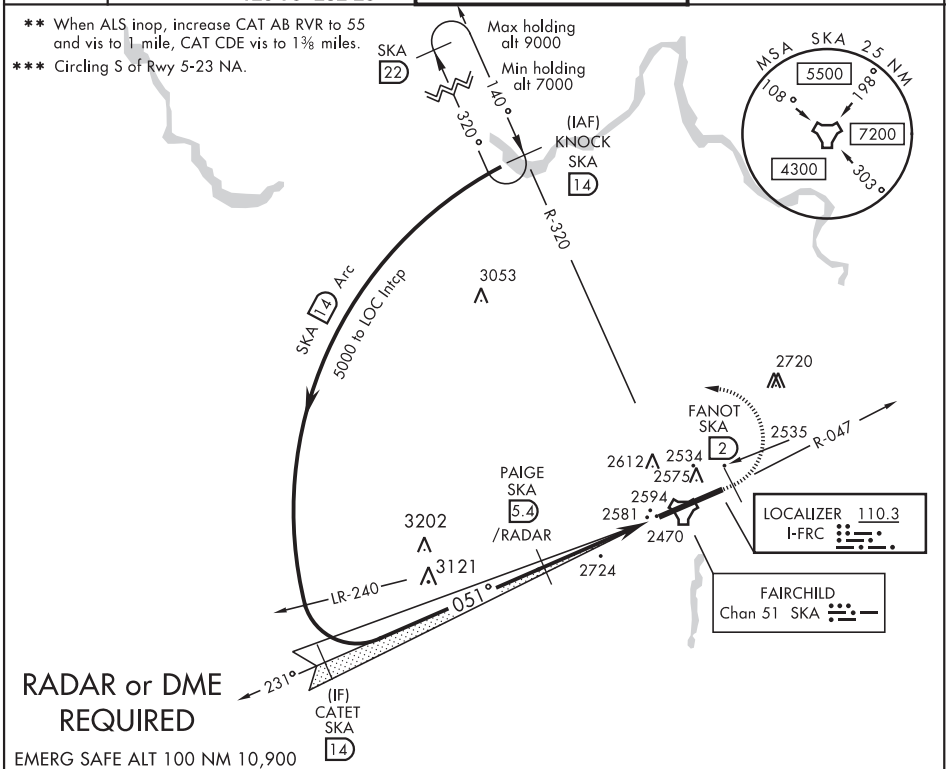
ALSF-2

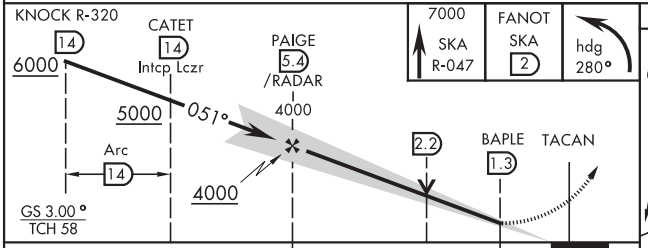
MISSED APPROACH: Climb to 7000 via SKA TACAN R-047. At SKA 2 DME turn left hdg 280° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

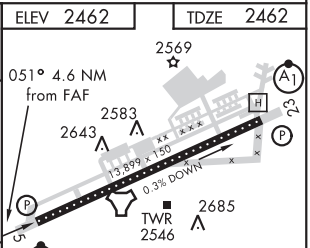
ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	029°- 207° 133.35 263.0 208°- 028° 123.75 282.25	120.35 233.7	123.6 275.8

** 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.







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, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON

ILS or LOC RWY 23

LOC I-SKA	APCH CRS	Rwy ldg 13,899
110.3	231°	TDZE 2423
		Arpt Elev 2462

AL-553 [USAF]

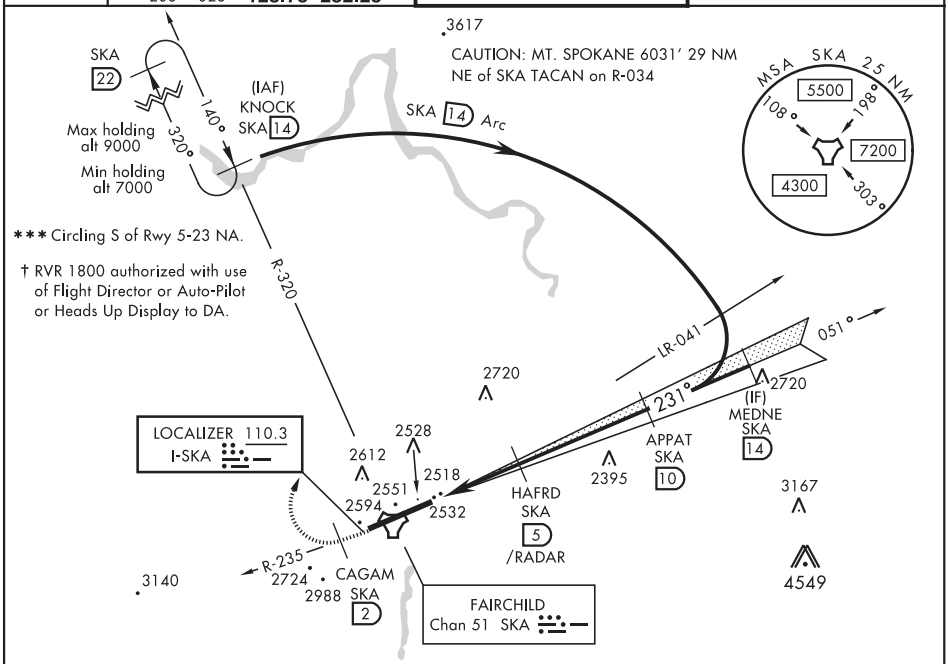
FAIRCHILD AFB (KSKA)

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

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.

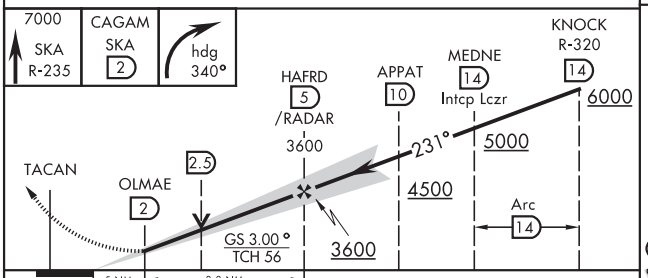
ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	029°- 207° 133.35 263.0 208°- 028° 123.75 282.25	120.35 233.7	123.6 275.8



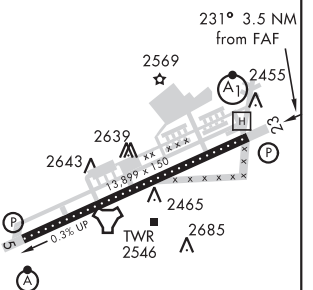
RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 10,900

7000	CAGAM	
SKA R-235	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, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON

ILS RWY 5 (CAT II)

LOC I-FRC	APCH CRS	Rwy ldg 13,899
110.3	051°	TDZE 2462
		Arpt Elev 2462

AL-553 [USAF]

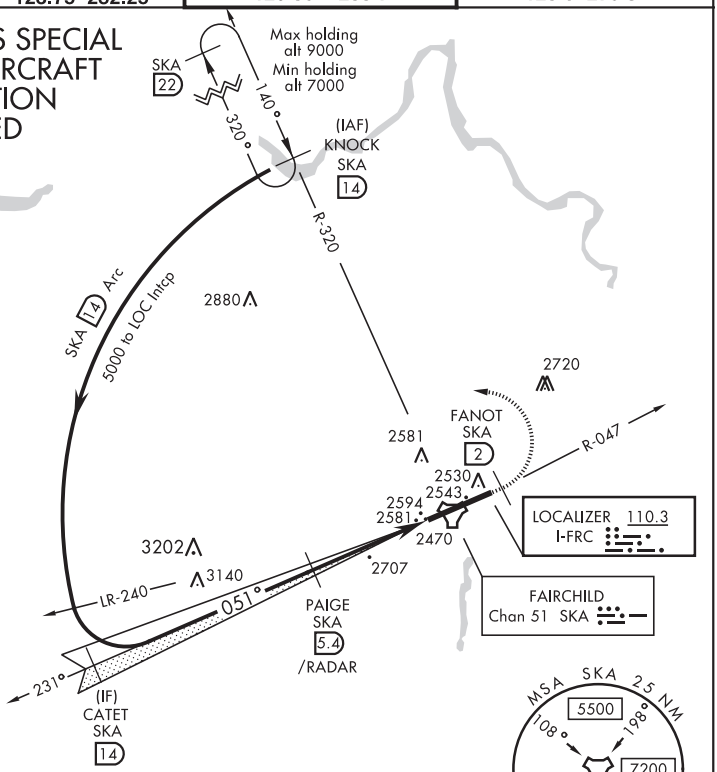
FAIRCHILD AFB (KSKA)

ALSF-2

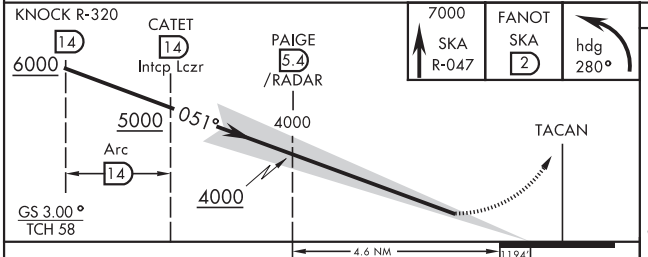
MISSED APPROACH: Climb to 7000 via SKA TACAN R-047. At SKA 2 DME turn left hdg 280° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

ATIS	SPOKANE APP CON	FAIRCHILD TOWER	GND CON
257.625	029°- 207° 133.35 263.0 208°- 028° 123.75 282.25	120.35 233.7	123.6 275.8

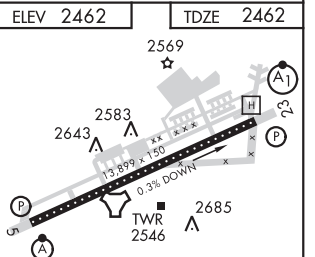
CATEGORY II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



EMERG SAFE ALT 100 NM 10,900



CATEGORY	A	B	C	D	E
S-ILS 5	RA 107/12	108	DA 2570		



SPOKANE, WASHINGTON

47°37'N-117°39'W

FAIRCHILD AFB (KSKA)

Amdt 1 24MAY18

ILS RWY 5 (CAT II)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON

RNAV (GPS) RWY 5

APCH CRS	Rwy ldg	13,899
051°	TDZE	2462
	Arpt Elev	2462

AL-553 (USAF)

FAIRCHILD AFB (KSKA)

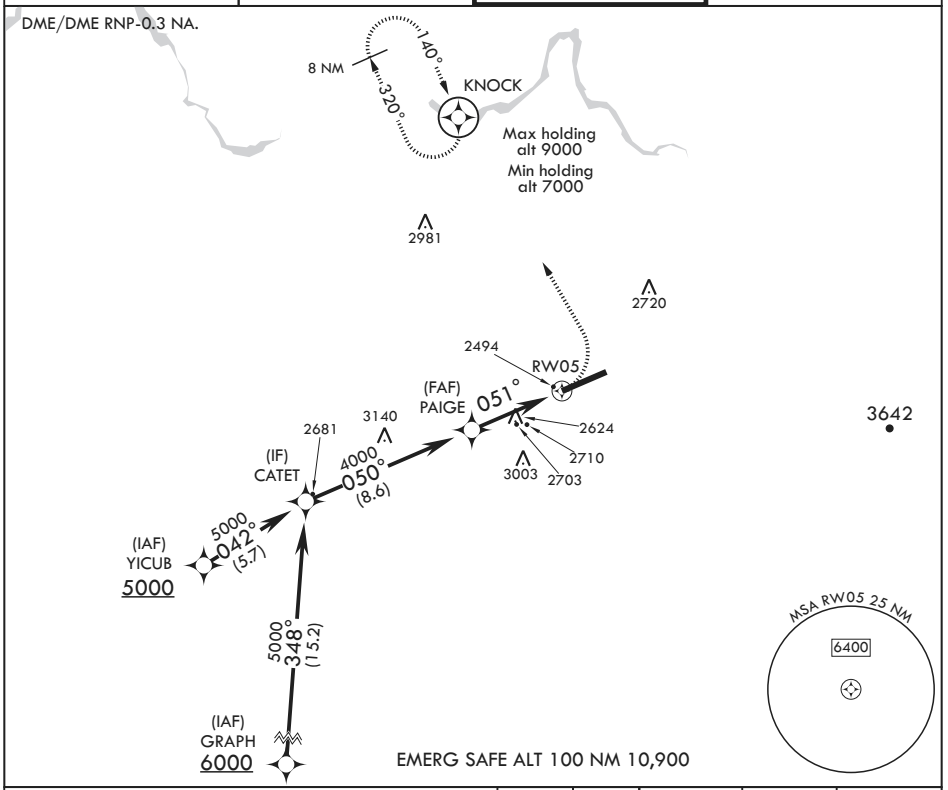
* When ALS inop, increase CAT A RVR to 55, vis to 1 mile, CAT B RVR to 60, vis to 1 1/4 miles, and CAT CDE vis to 2 1/2 miles.
** Circling not authorized S of Rwy 5-23.

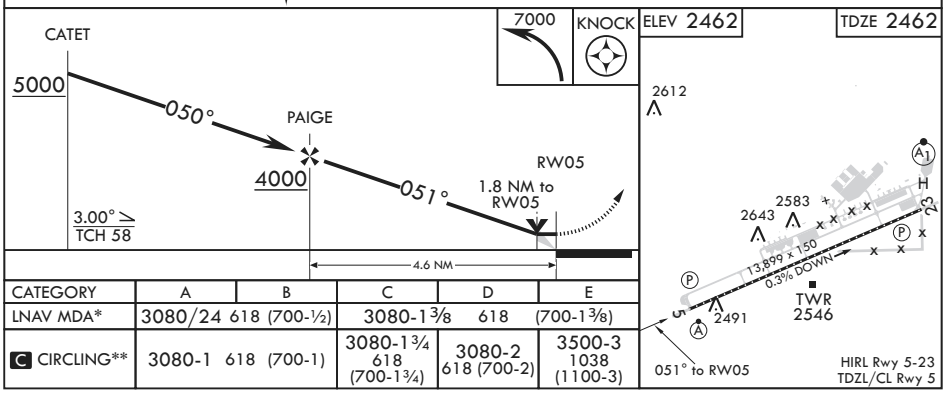
ALSF-2

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° 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)

SPOKANE, WASHINGTON

47°37'N - 117°39'W

FAIRCHILD AFB (KSKA)

Amdt 1 24MAY18

RNAV (GPS) RWY 5

NW-1, 30 JAN 2020 to 26 MAR 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.

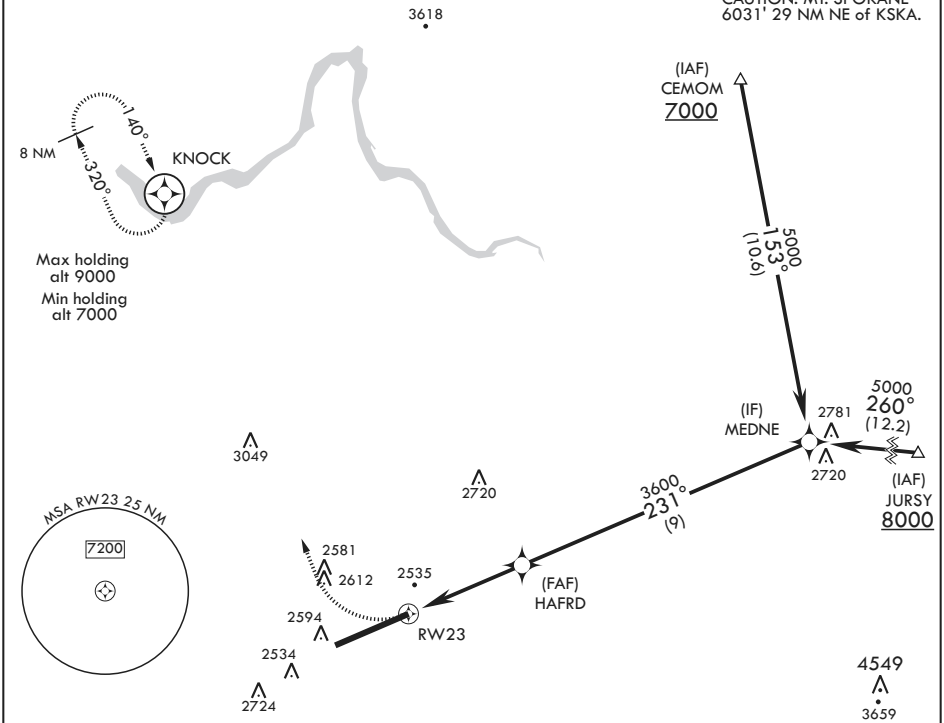
ALSF-1

MISSED APPROACH: Climb to 7000 via right turn direct to KNOCK and hold, continue climb in hold to 7000.

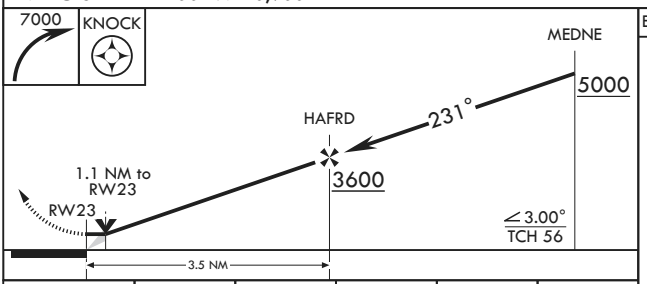
ATIS	SPOKANE APP CON	TOWER	GND CON
257.625	123.75 282.25 208°-028° 133.35 263.0 029°-207°	120.35 233.7	123.6 275.8

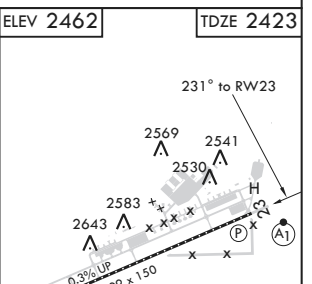
DME/DME RNP-0.3 NA.

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, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON

TACAN RWY 5

FAIRCHILD AFB (KSKA)

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
SKA Chan 51	060°	13,899	2462	2462

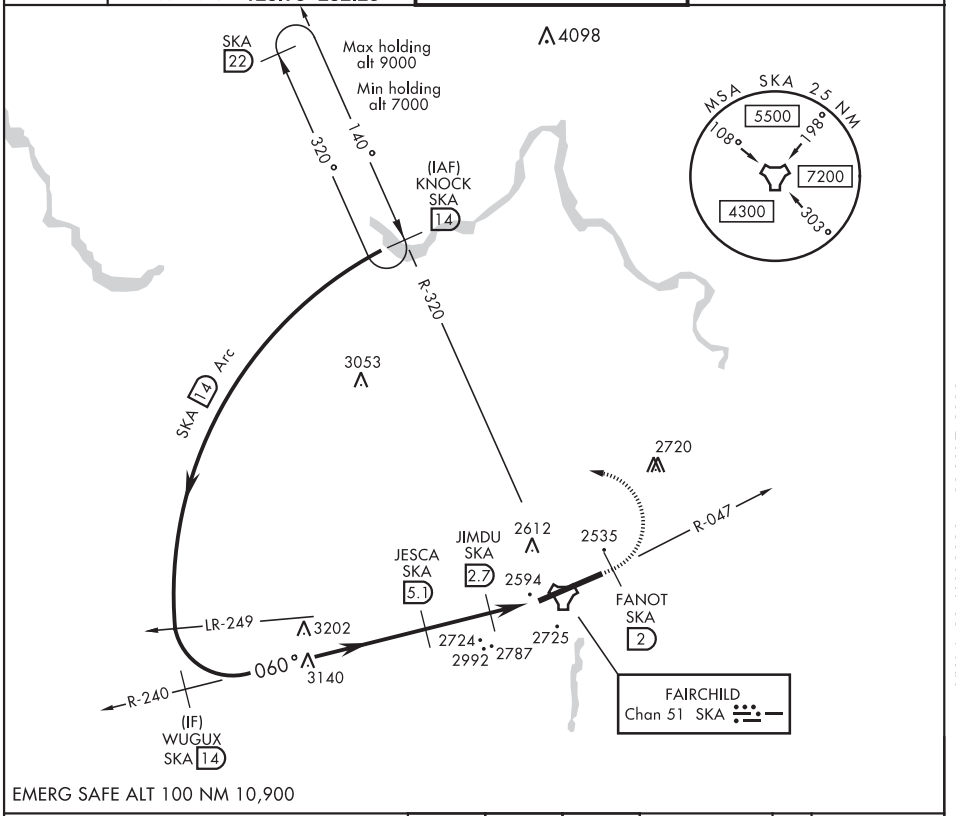
AL-553 [USAF]

* 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.

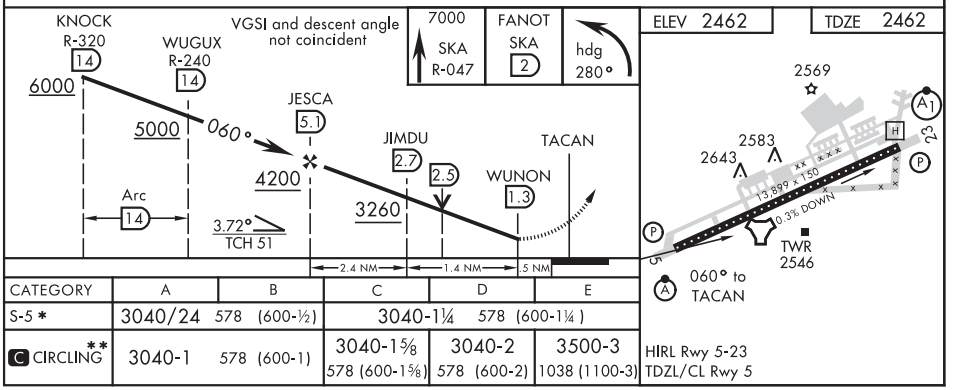
ALSF-2

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° 133.35 263.0 208°- 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, 30 JAN 2020 to 26 MAR 2020

19339

SPOKANE, WASHINGTON

TACAN RWY 23

TACAN	APCH CRS	Rwy ldg	13,899
SKA Chan 51	228°	TDZE	2423
		Arpt Elev	2462

AL-553 [USAF]

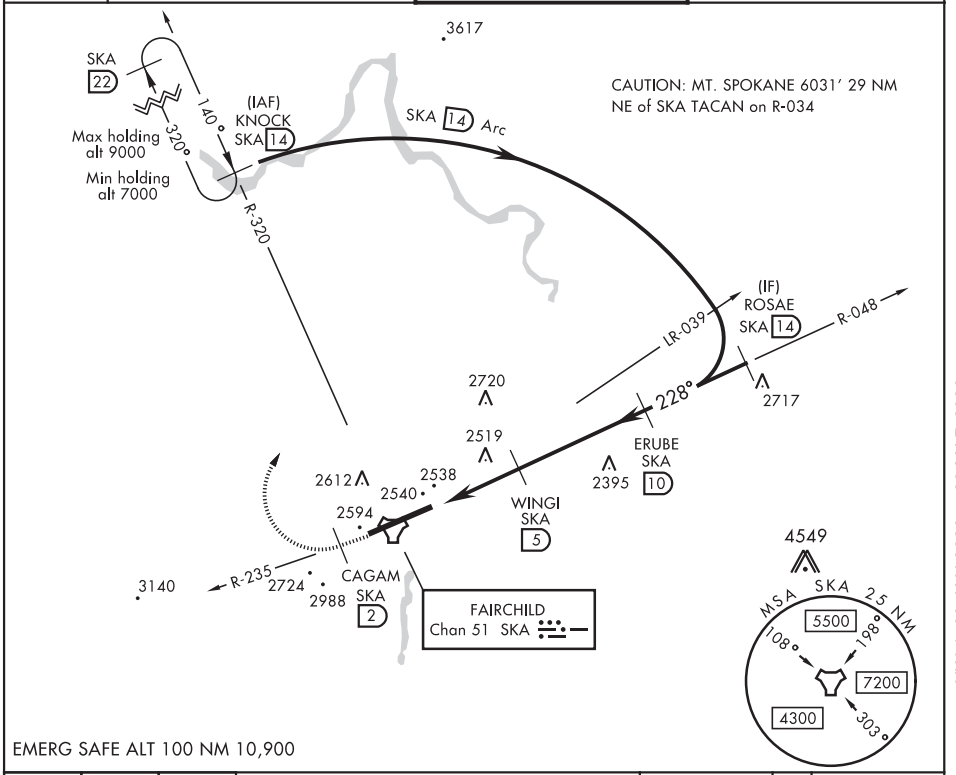
FAIRCHILD AFB (KSKA)

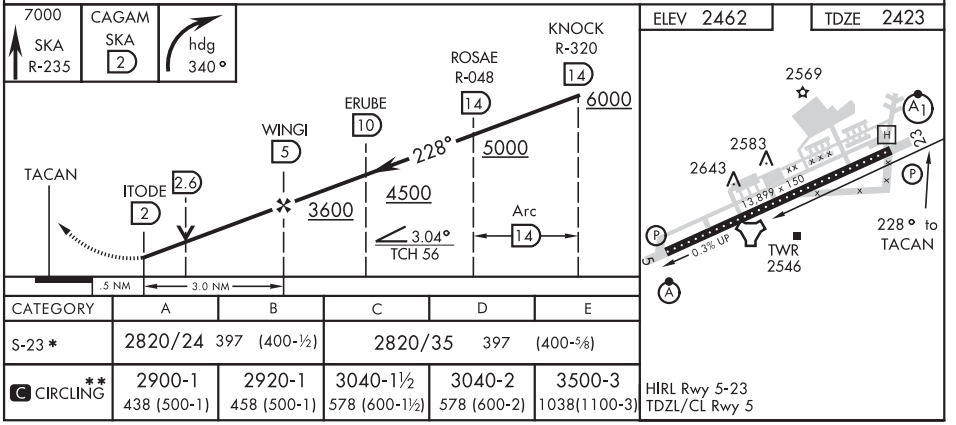
▼T * When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE RVR to 60, vis to 1⅛ miles.
** Circling S of Rwy 5-23 NA.

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° 133.35 263.0 208°- 028° 123.75 282.25	120.35 233.7	123.6 275.8





CATEGORY	A	B	C	D	E
S-23 *	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)

HIRL Rwy 5-23
TDZL/CL Rwy 5

SPOKANE, WASHINGTON

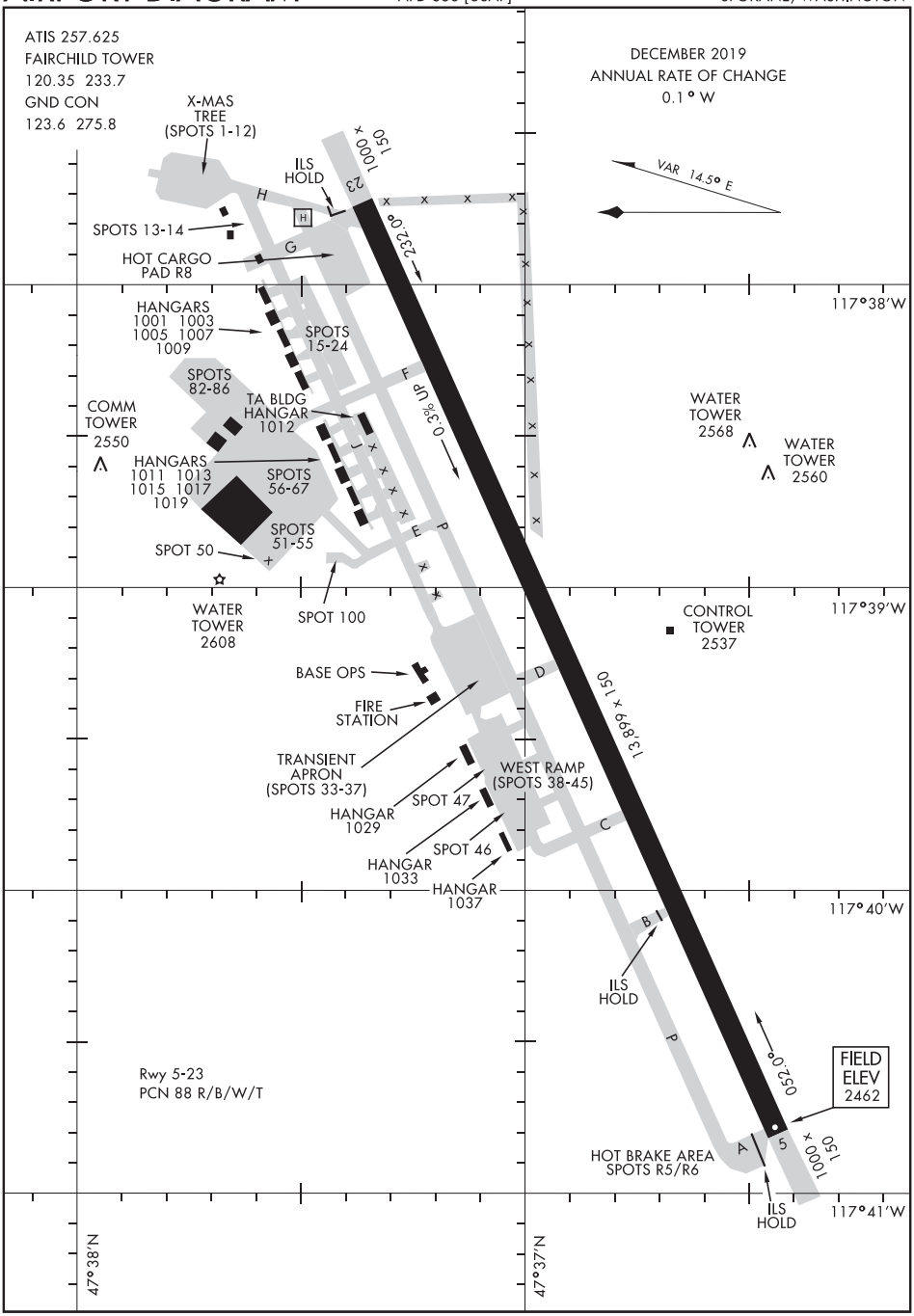
47°37'N-117°39'W

FAIRCHILD AFB (KSKA)

Amdt 3 24MAY18

TACAN RWY 23

NW-1, 30 JAN 2020 to 26 MAR 2020



AIRPORT DIAGRAM
SPOKANE, WASHINGTON
FAIRCHILD AFB (KSKA)

WAAS	APP CRS	Rwy Idg	4799
CH 78125	268°	TDZE	2728
W27A		Apt Elev	2729

RNAV (GPS) RWY 27

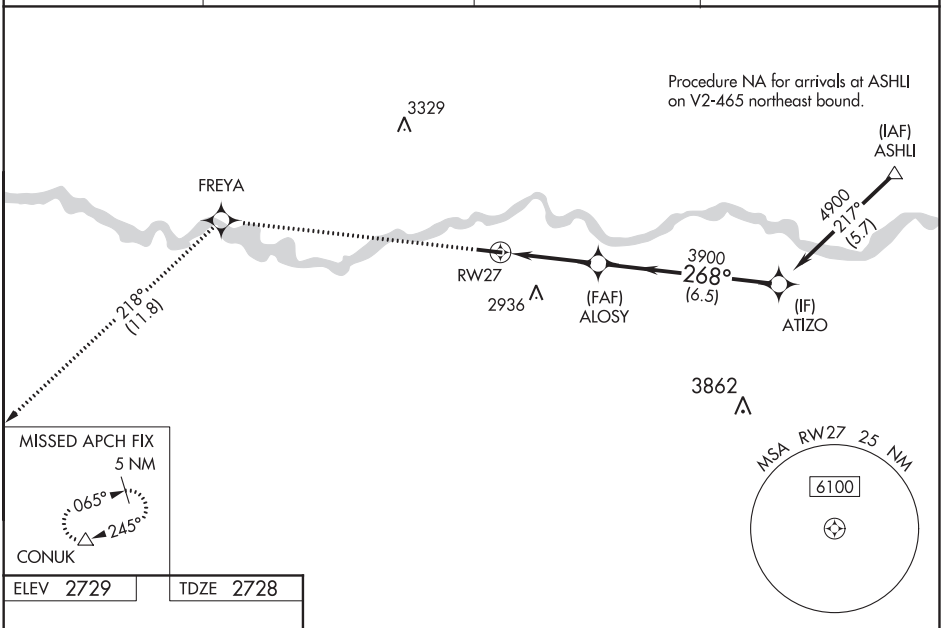
TILLITT FIELD (1S3)

T
A NA

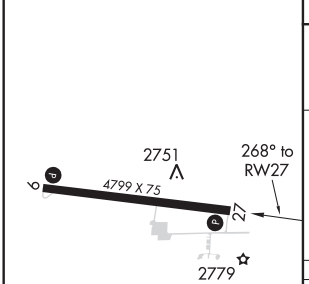
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 53°C (128°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Miles City altimeter setting: increase LPV and LNAV/VNAV DA to 3066 and all visibilities ⅛ mile. 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.

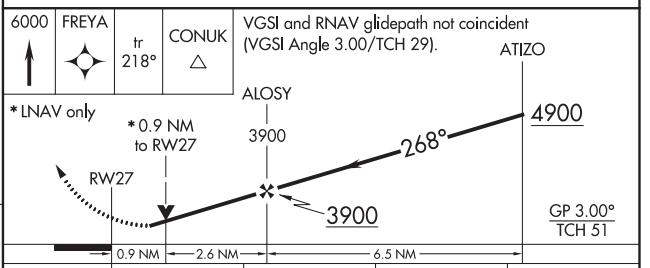
MISSED APPROACH: Climb to 6000 direct FREYA and on track 218° to CONUK and hold.

AWOS-AV	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
122.8	132.425 317.45	122.2 255.4	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 23

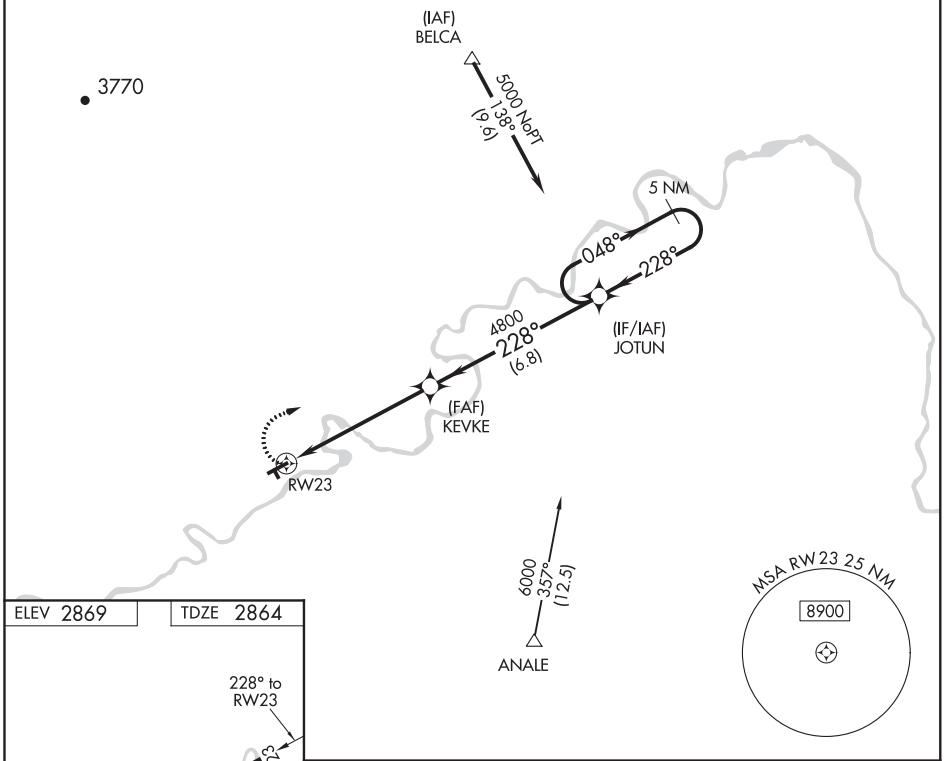
FORT BENTON (79S)

APP CRS	Rwy Idg	4300
228°	TDZE	2864
	Apt Elev	2869

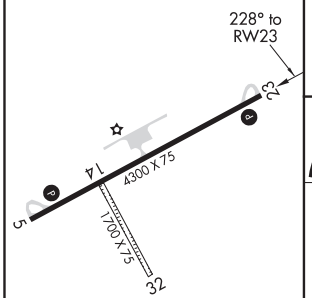
DME/DME RNP-0.3 NA. Procedure NA at night.
When local altimeter setting not received, use Great Falls altimeter setting and increase all MDA 280 feet and all Cat B and C visibilities 1 mile.

MISSED APPROACH: Climbing right turn to 5000 direct JOTUN and hold.

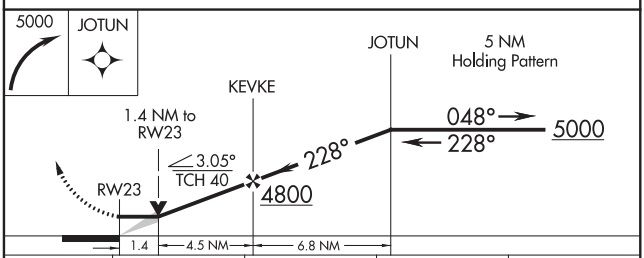
AWOS-A	SALT LAKE CENTER	UNICOM
122.8	133.4 285.4	122.8 (CTAF)



ELEV 2869 TDZE 2864



MIRL Rwy 5-23 (L)



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

FORT BRIDGER, WYOMING | AL-148 (FAA) | 19283

WAAS	APP CRS	Rwy Idg	6404
CH 78234	224°	TDZE	7023
W22A		Apt Elev	7038

RNAV (GPS) RWY 22

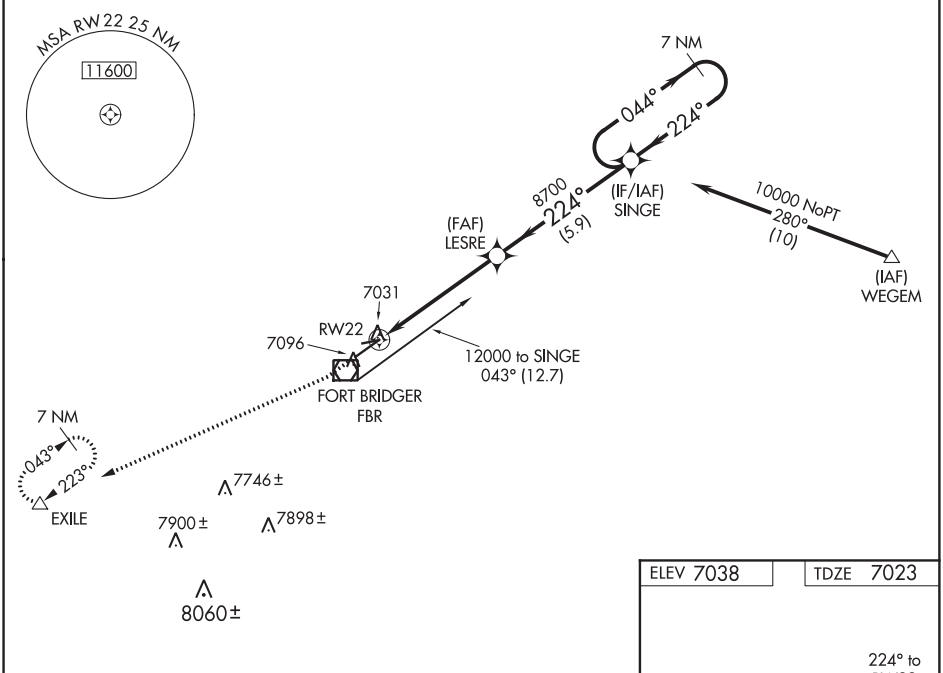
FORT BRIDGER (FBR)

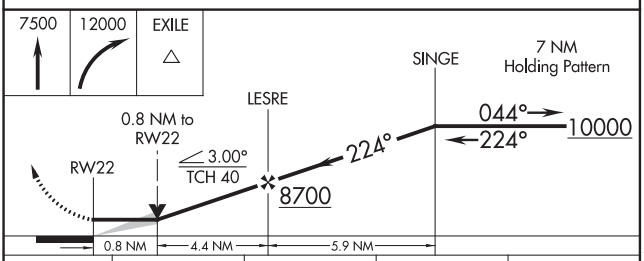
RNP APCH.

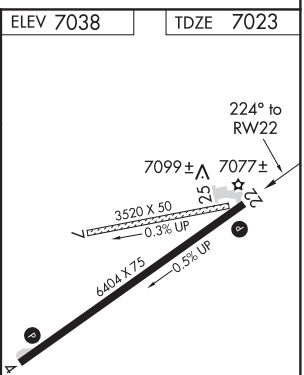
Circling NA to Rwys 7 and 25. When local altimeter setting not received, use Evanston altimeter setting and increase all MDAs 100 feet, increase LNAV Cats C and D visibility ⅛ SM, Circling Cat C visibility ¼ SM and Cat D visibility ½ SM.

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	CASPER RADIO	UNICOM
118.8	124.35 353.5	122.3	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)

REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

FORT BRIDGER, WYOMING
Amdt 1B 10OCT19

41°24′N-110°24′W

FORT BRIDGER (FBR)

RNAV (GPS) RWY 22

NW-1, 30 JAN 2020 to 26 MAR 2020

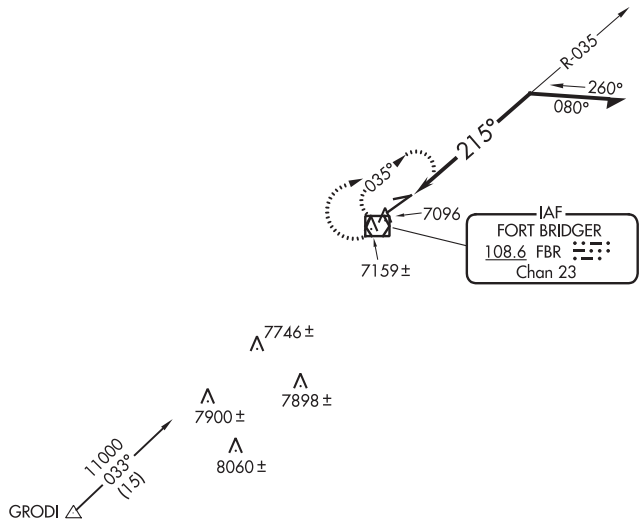
VOR/DME FBR	APP CRS	Rwy Idg	6404
108.6	215°	TDZE	7018
Chan 23		Apt Elev	7038

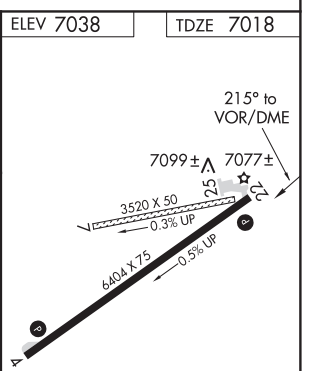
VOR RWY 22
FORT BRIDGER (FBR)

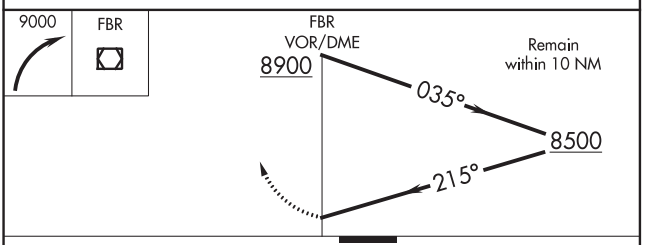
NA Circling NA to Rwys 7 and 25. When local altimeter setting not received, use Evanston altimeter setting and increase all MDAs 100 feet, increase S-22 Cats C and D and Circling Cat C visibility ¼ SM, and Circling Cat D visibility ½ SM.

MISSED APPROACH: Climbing right turn to 9000 in FBR VOR/DME holding pattern.

AWOS-3PT	SALT LAKE CENTER	CASPER RADIO	UNICOM
118.8	124.35 353.5	122.3	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

FRIDAY HARBOR, WASHINGTON AL-6598 (FAA) 20030

WAAS CH **40024** **W34A**	APP CRS **341°**	Rwy Idg **3402** TDZE **108** Apt Elev **113**

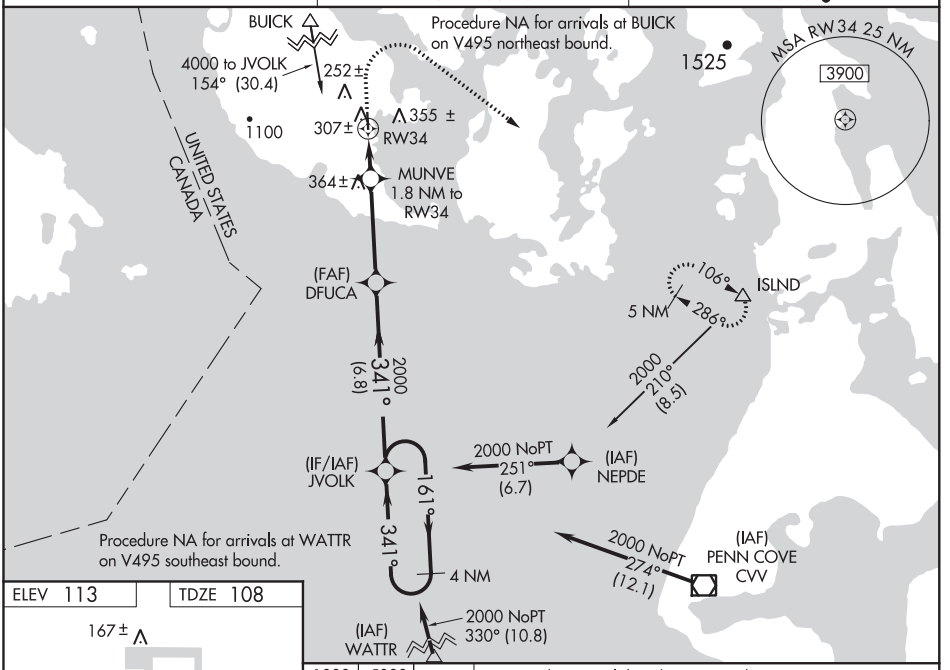
RNAV (GPS) RWY 34

FRIDAY HARBOR (FHR)

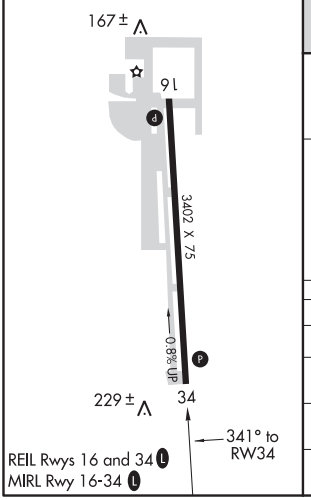
When VGSI inop, Circling Rwy 16 NA at night. Baro-VNAV NA when using Burlington/Mount Vernon altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). When VGSI inop, Straight-in/Circling Rwy 34 procedure NA at night. Circling NA west of Rwy 16-34. 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.

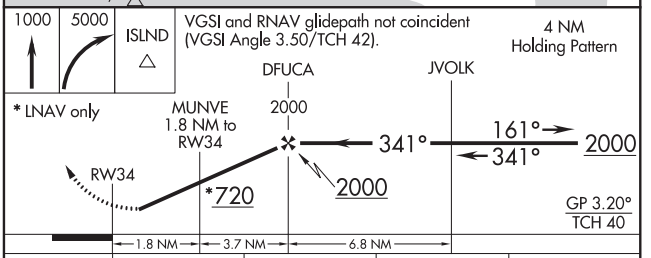
MISSED APPROACH: Climb to 1000, then climbing right turn to 5000 direct ISLND and hold, continue climb-in-hold to 5000.

ASOS	WHIDBEY APP CON	CTAF
135.675	**118.2 285.65**	**128.25** L



ELEV 113 TDZE 108





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NDB FHR	APP CRS	Rwy Idg	3402
284	339°	TDZE	108
		Apt Elev	113

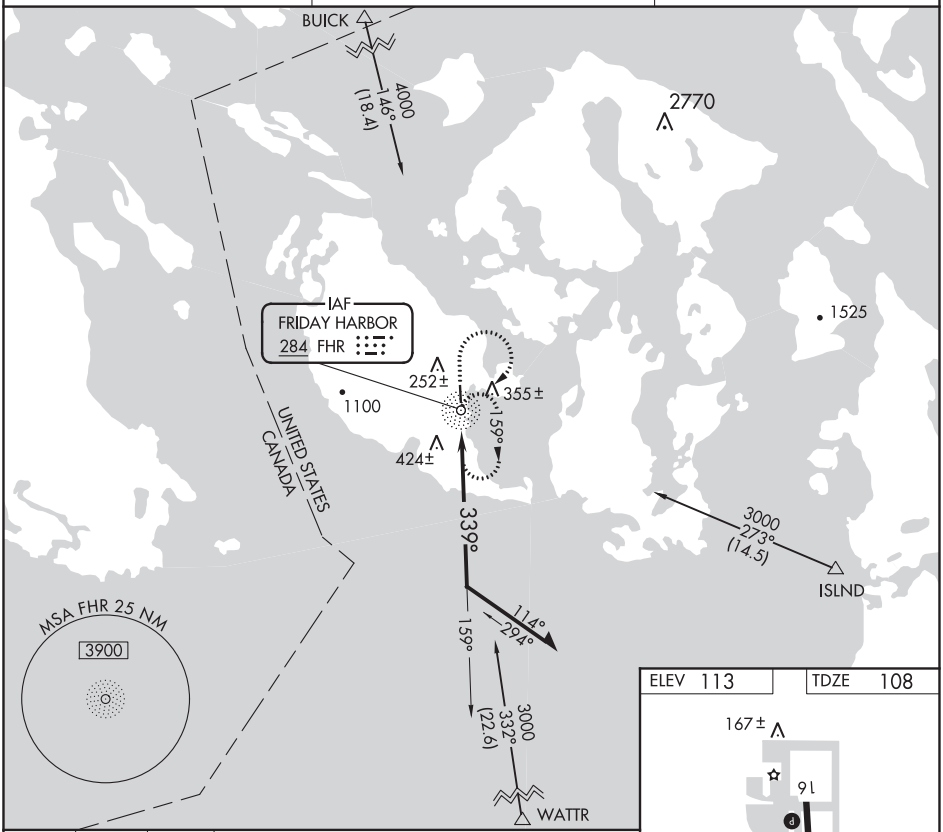
NDB RWY 34

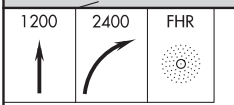
FRIDAY HARBOR (FHR)

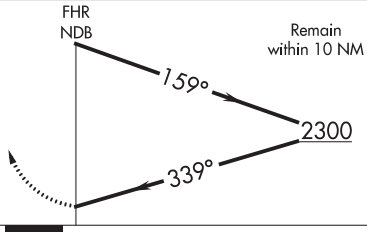
Circling NA west of Rwy 16-34.
Visibility reduction by helicopters NA.

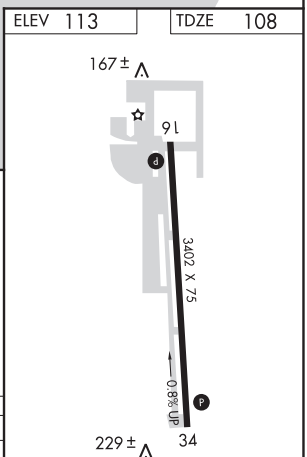
MISSED APPROACH: Climb to 1200 then climbing right turn to 2400 direct FHR NDB and hold, continue climb-in-hold to 2400.

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)	800-2 692 (700-2)	NA
CIRCLING	800-1	687 (700-1)	820-2 707 (800-2)	NA

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GILLETTE, WYOMING | AL-5728 (FAA) | 19227

ILS or LOC RWY 34
GILLETTE-CAMPBELL COUNTY (GCC)

LOC/DME I-LLT	APP CRS	Rwy Idg	7500
110.1	341°	TDZE	4364
Chan 38		Apt Elev	4364

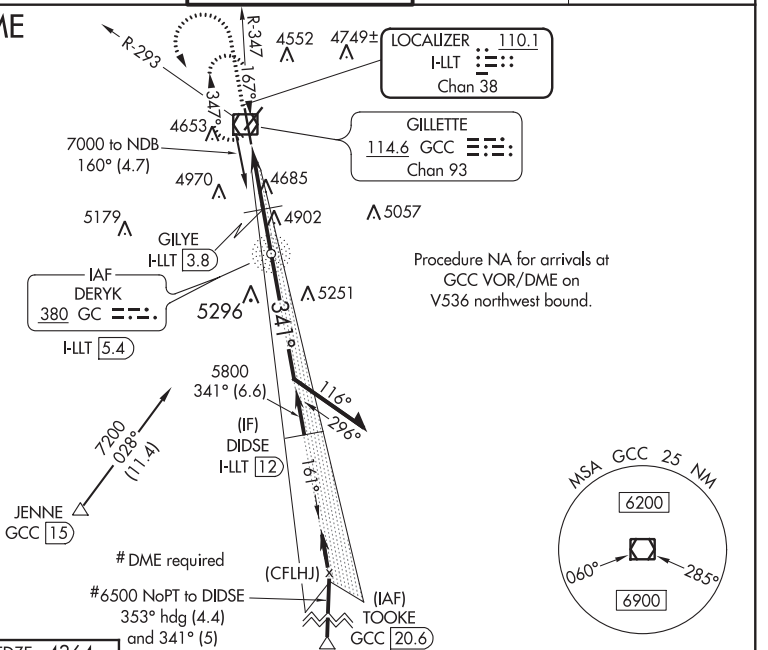
Circling to Rwy 3 NA at night. ADF or DME required. For inop ALS, increase S-LOC Cat A visibility to 1 SM.

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	GILLETTE TOWER★	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95

ADF or DME REQUIRED

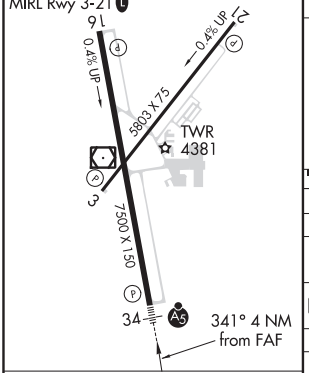


ELEV 4364 D TDZE 4364

HIRL Rwy 16-34 L

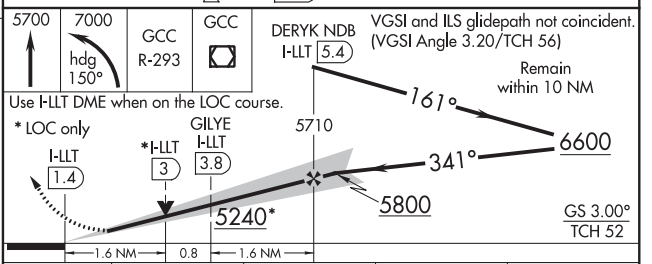
REIL Rwys 3, 16, and 21

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 16

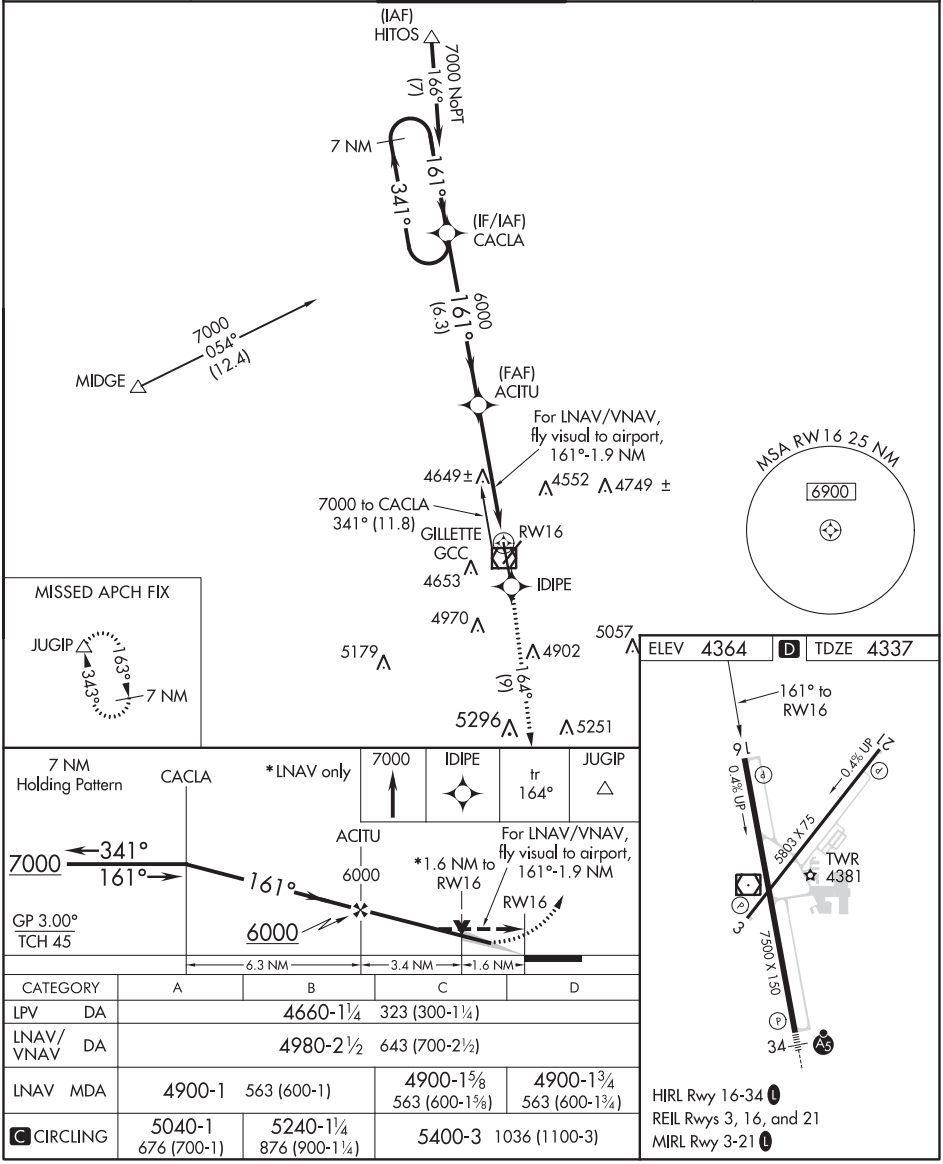
GILLETTE-CAMPBELL COUNTY (GCC)

WAAS	APP CRS	Rwy Idg	7500
CH 86221	161°	TDZE	4337
W16A		Apt Elev	4364

T A 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	GILLETTE TOWER *	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GILLETTE, WYOMING | AL-5728 (FAA) | 19227

RNAV (GPS) RWY 34

GILLETTE-CAMPBELL COUNTY (GCC)

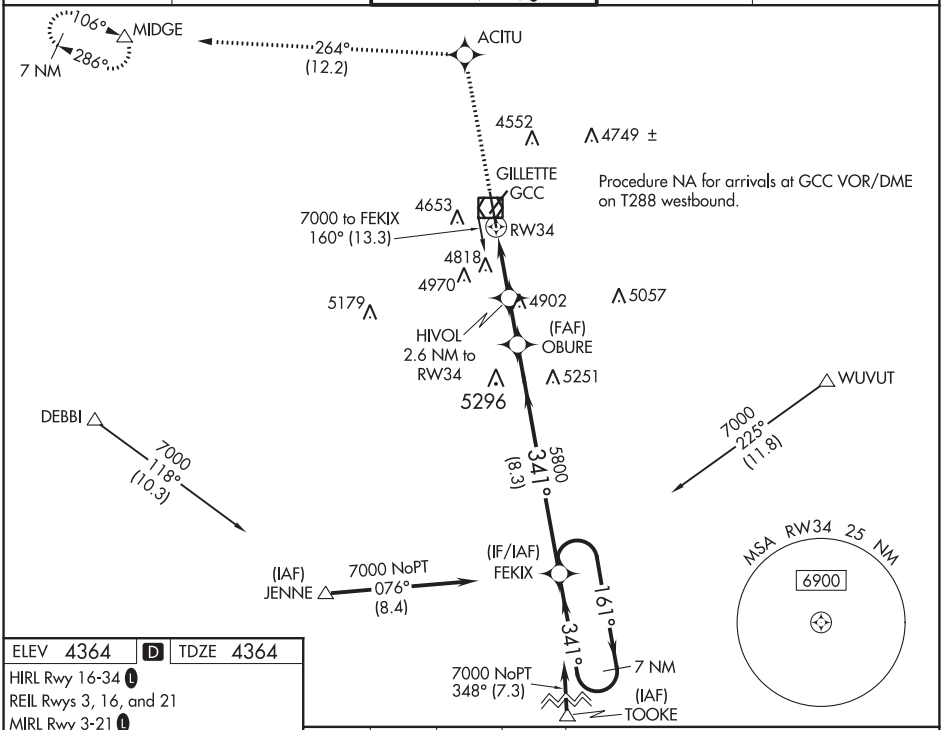
WAAS	APP CRS		
CH **86204**	**341°**	Rwy Idg	**7500**
W34A		TDZE	**4364**
		Apt Elev	**4364**

T A — 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

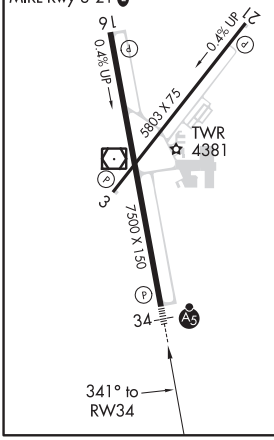
MISSED APPROACH: Climb to 7000 direct ACITU and on track 264° to MIDGE and hold.

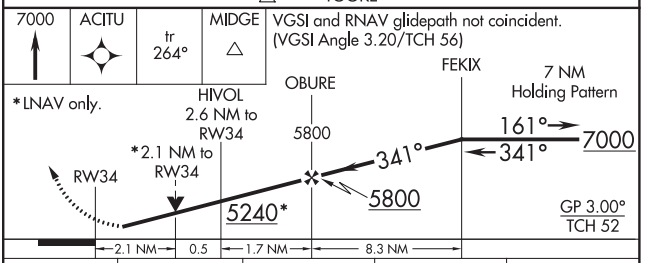
ASOS	DENVER CENTER	GILLETTE TOWER★	GND CON	UNICOM
124.175	**135.6 363.025**	**118.5** (CTAF) L	**121.7**	**122.95**



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, 30 JAN 2020 to 26 MAR 2020

VOR/DME GCC	APP CRS	Rwy Idg	7500
114.6	161°	TDZE	4337
Chan 93		Apt Elev	4364

VOR RWY 16

GILLETTE-CAMPBELL COUNTY (GCC)

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	GILLETTE TOWER ★	GND CON	UNICOM
124.175	135.6 363.025	118.5 (CTAF) L	121.7	122.95

DME REQUIRED

(IAF) HITOS GCC 18.8
R-341
(CFCFQ)
7000 NoPT to ODECA 206° hdg (1) and 161° (3.7)
161° 341° 1 min
(IF/IAF) ODECA GCC 14.5
7000 NoPT GCC 14.5 Arc
LR-333
161° (8.5)
6200
(IAF) MIDGE GCC 14.5
R-286
7000 to ODECA 341° (14.5)
ETUCI GCC 6
4552
4749 ±
4669±
SOSCO GCC 0.6
GILLETTE 114.6 GCC Chan 93
4653
4970
5057
4902
5179
5296
5251

MSA GCC 25 NM
6200
060°
285°
6900

ELEV 4364 D TDZE 4337
161° 5.5 NM from FAF
16
21
0.4% UP
0.4% UP
5803 X 75
TWR 4381
3
7500 X 150
34 A6

ODECA GCC 14.5
One Minute Holding Pattern
7000
341°
161°
ETUCI GCC 6
161°
3.12°
TCH 61
6200
GCC 2.1
GCC VOR/DME SOSCO GCC 0.6
7000 hdg 311°
GCC R-341
ODECA GCC 14.5
VGSI and descent angles not coincident (VGSI Angle 3.17/TCH 43).
8.5 NM 3.9 NM 1.6 NM

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

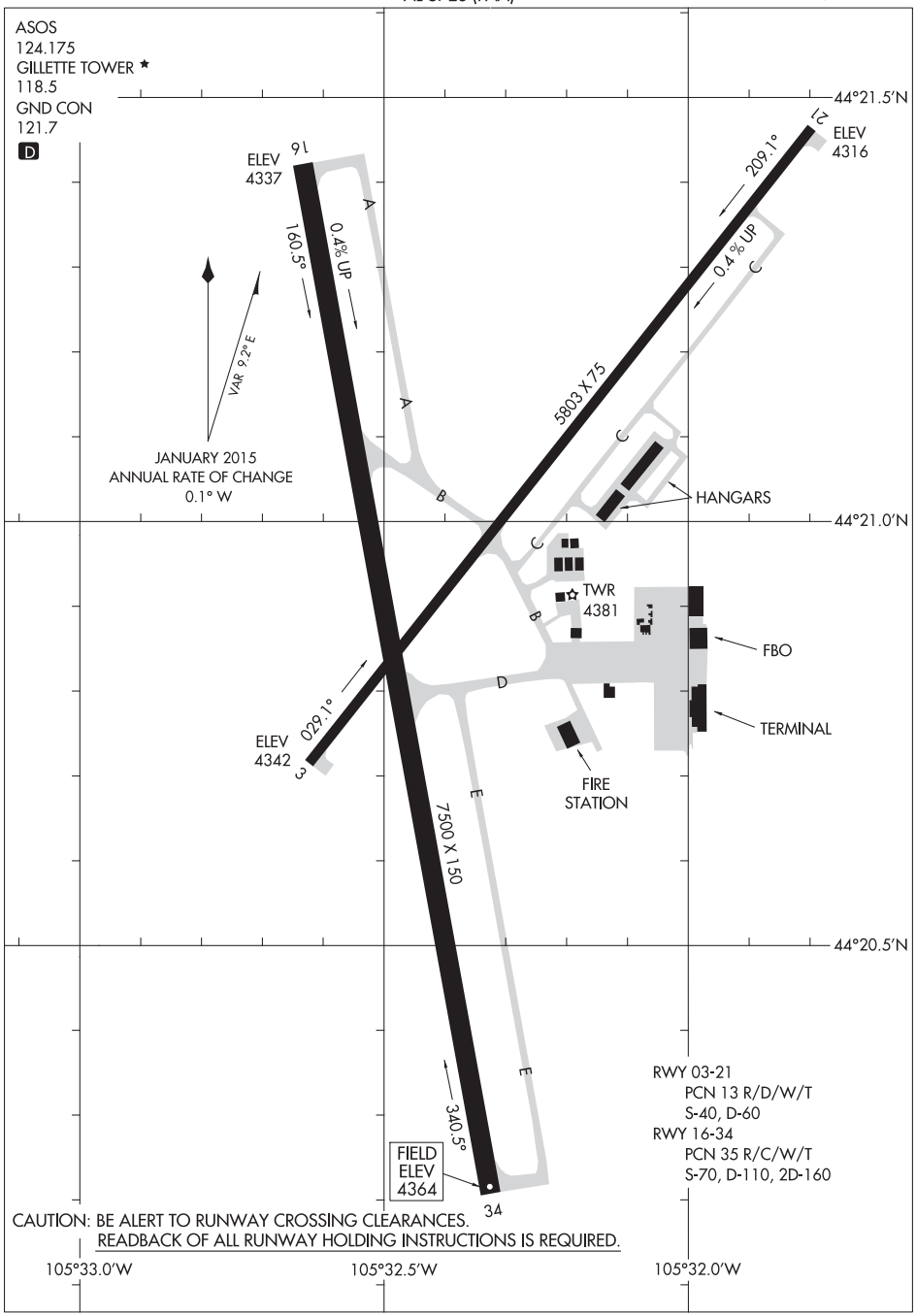
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18256

AIRPORT DIAGRAM

GILLETTE-CAMPBELL COUNTY (GCC)
GILLETTE, WYOMING

AL-5728 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
18256
GILLETTE, WYOMING
GILLETTE-CAMPBELL COUNTY (GCC)

WAAS CH 93620 W12A	APP CRS 123°	Rwy Idg 5001 TDZE 2294 Apt Elev 2296

RNAV (GPS) RWY 12

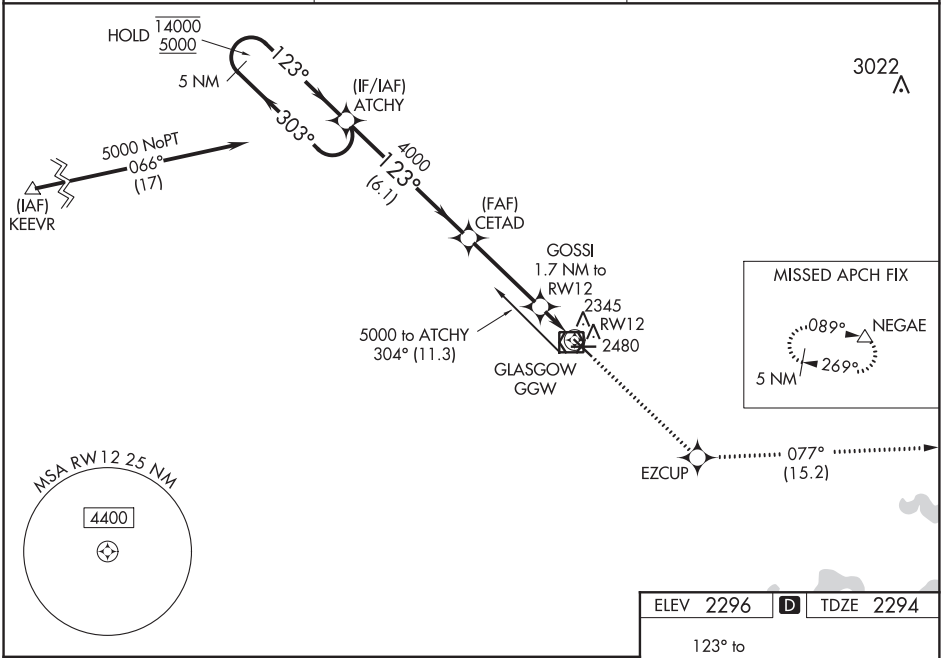
WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

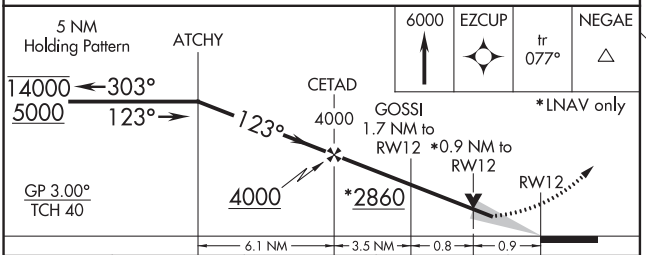
RNP APCH.

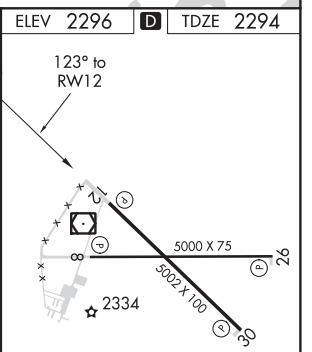
V A For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -14°C or above 54°C. When local altimeter setting not received, use Wolf Point altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV visibility all Cats ½ SM, LNAV/VNAV visibility all Cats ½ SM, LNAV visibility 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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

GLASGOW, MONTANA AL-5382 (FAA) 19227

WAAS	APP CRS	Rwy Idg	5001
CH 99620	303°	TDZE	2294
W30A		Apt Elev	2296

RNAV (GPS) RWY 30

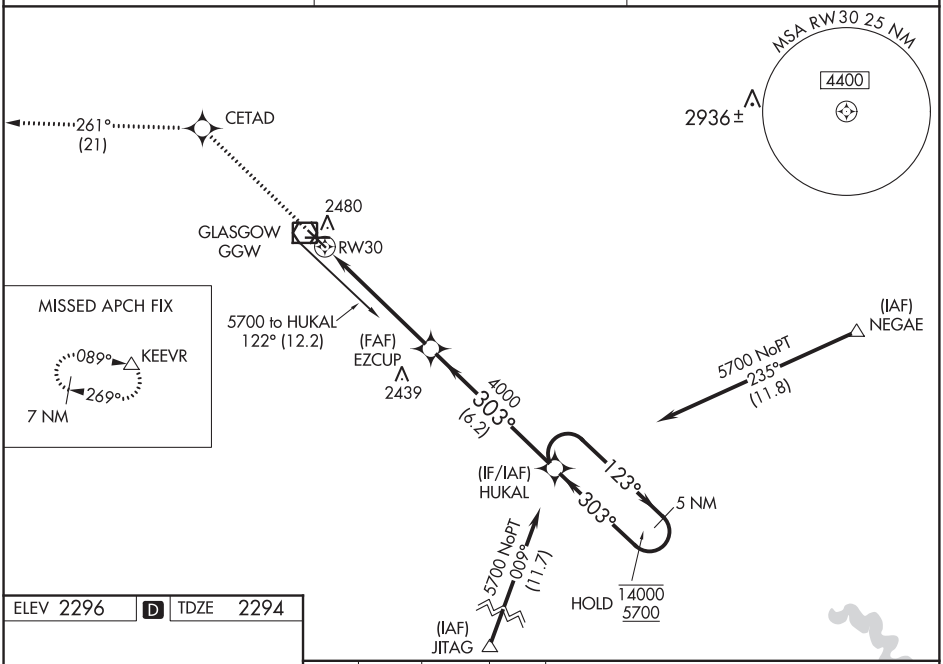
WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

RNP APCH.

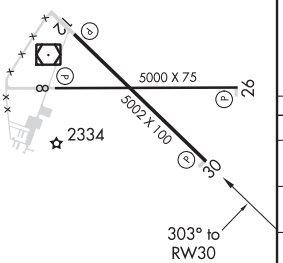
V A For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -14°C or above 54°C. When local altimeter setting not received, use Wolf Point altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV visibility all Cats ⅜ SM, LNAV/VNAV visibility all Cats ½ SM, LNAV visibility 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.

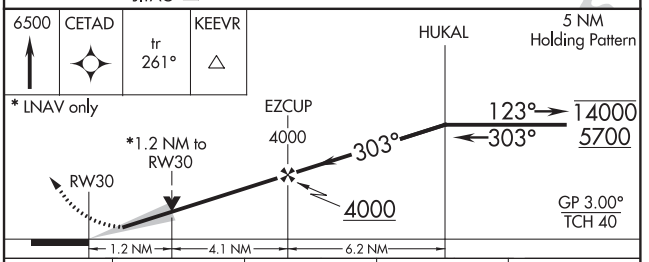
ASOS	SALT LAKE CENTER	UNICOM
135.175	126.85 305.2	122.8 (CTAF) L



ELEV 2296 D TDZ 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME GGW	APP CRS	Rwy Idg	5001
113.9	133°	TDZE	2294
Chan 86		Apt Elev	2296

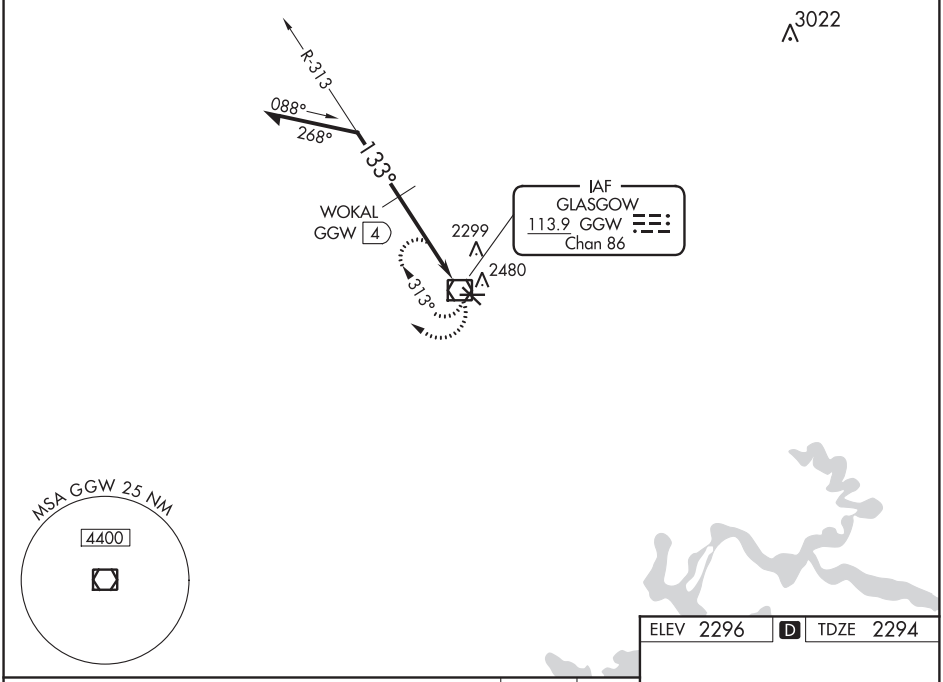
VOR RWY 12

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	3140-1 846 (900-1)	3140-1¼ 846 (900-1¼)	3140-2½ 846 (900-2½)	3140-2¾ 846 (900-2¾)
CIRCLING	3140-1 844 (900-1)	3140-1¼ 844 (900-1¼)	3140-2½ 844 (900-2½)	3140-2¾ 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 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GLASGOW, MONTANA AL-5382 (FAA) 19227

VOR/DME GGW	APP CRS	Rwy Idg	5001
113.9	293°	TDZE	2294
Chan 86		Apt Elev	2296

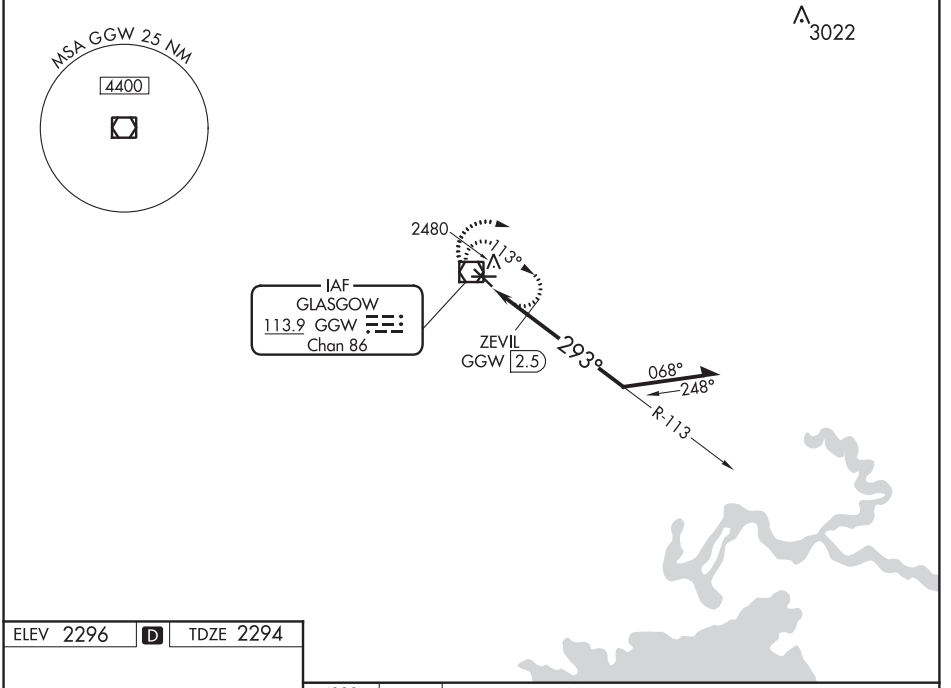
VOR RWY 30

WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

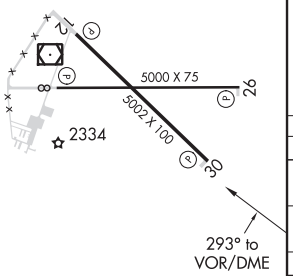
ZEVIL fix Straight-in minimums NA when using Wolf Point altimeter setting. When local altimeter setting not received, use Wolf Point altimeter setting and increase all MDA 160 feet and increase visibilities all Cats ½ SM.

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



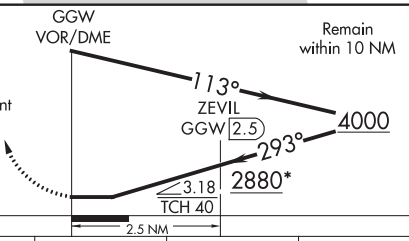
ELEV 2296 D TDZE 2294



REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

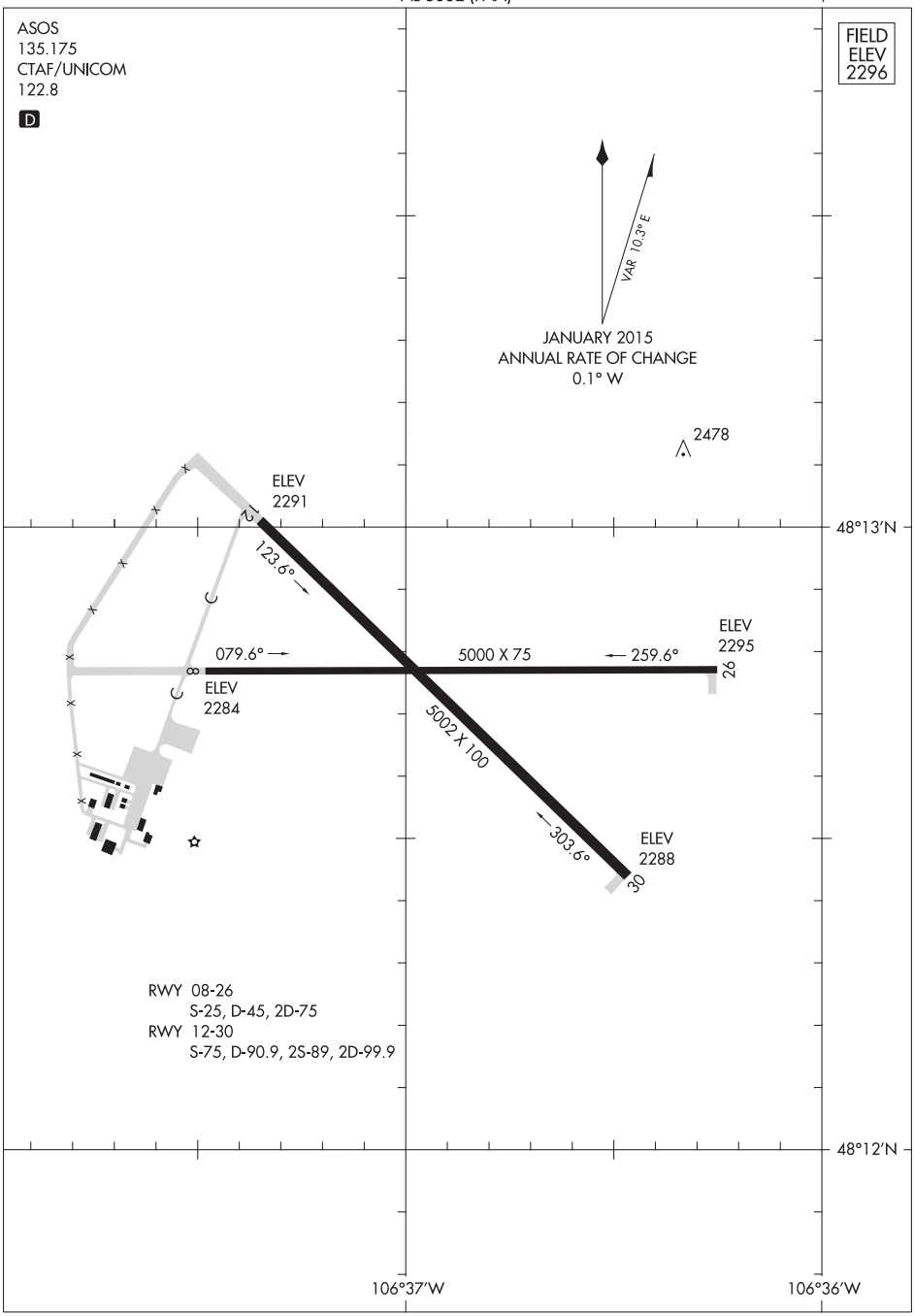
4000 GGW

* 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 584 (600-1¾)	2880-2 584 (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 484 (500-1½)	2860-2 564 (600-2)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

GLENDIVE, MONTANA | AL-6078 (FAA) | 19227

RNAV (GPS) RWY 12
DAWSON COMMUNITY (GDV)

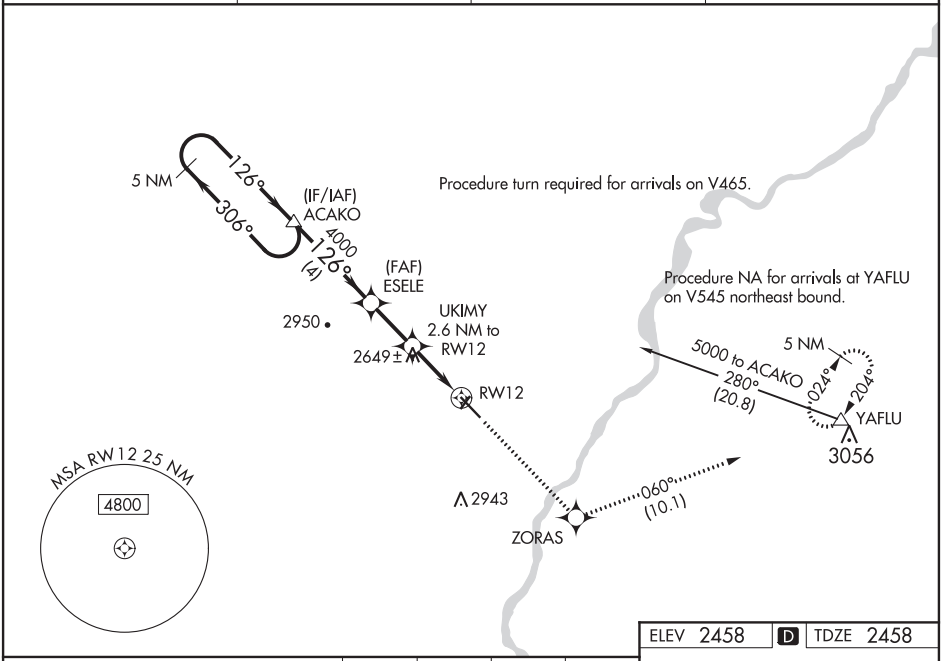
WAAS	APP CRS	Rwy Idg	5704
CH 40423	126°	TDZE	2458
W12A		Apt Elev	2458

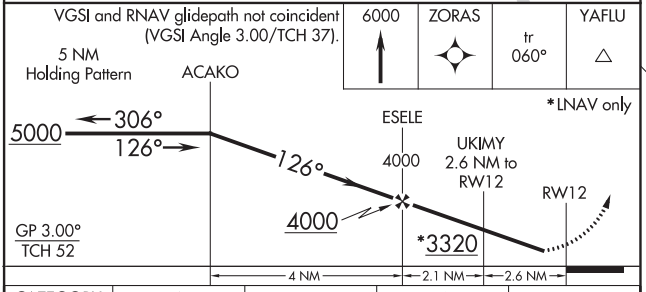
RNP APCH.

T 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.

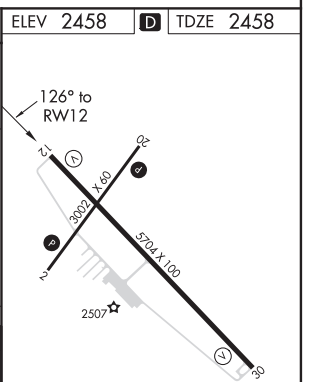
MISSED APPROACH: Climb to 6000 direct ZORAS and on track 060° to YAFLU and hold, continue climb-in-hold to 6000.

AWOS-3PT	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.075	126.85 305.2	122.55	122.8 (CTAF) L


5 NM
126°
306°
(IF/IAF)
ACAKO
4000
(4)
126°
(FAF)
ESELE
Procedure turn required for arrivals on V465.
2950
UKIMY
2.6 NM to
RW12
2649±
RW12
Procedure NA for arrivals at YAFLU
on V545 northeast bound.
5000 to ACAKO
280°
(20.8)
5 NM
024°
204°
YAFLU
3056
MSA RW12 25 NM
4800
2943
ZORAS
060°
(10.1)



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

GLENDIVE, MONTANA
Orig-B 06DEC18

47°08′N-104°48′W

DAWSON COMMUNITY (GDV)
RNAV (GPS) RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5704
CH 86623	306°	TDZE	2456
W30A		Apt Elev	2458

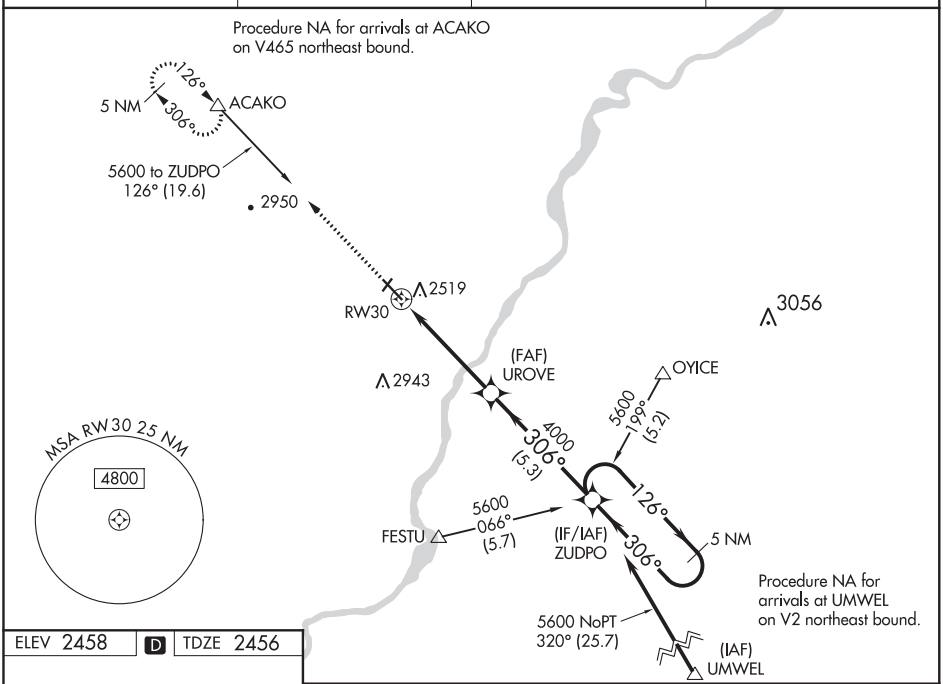
RNAV (GPS) RWY 30
DAWSON COMMUNITY (GDV)

RNP APCH.

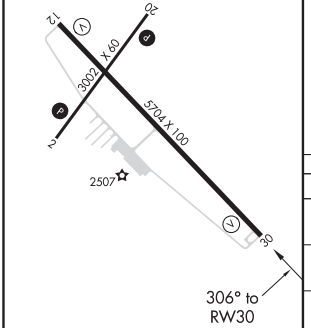
T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 28°C. When local altimeter setting not received, procedure NA. Rwy 30 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 6000 direct ACAKO and hold, continue climb-in-hold to 6000.

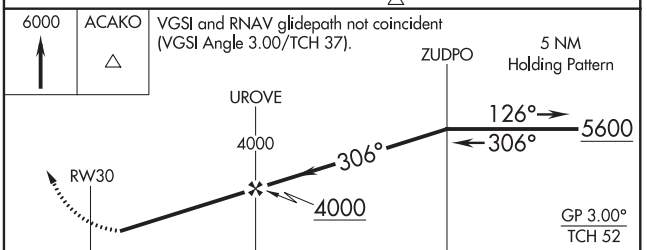
AWOS-3PT	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.075	126.85 305.2	122.55	122.8 (CTAF) L



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)

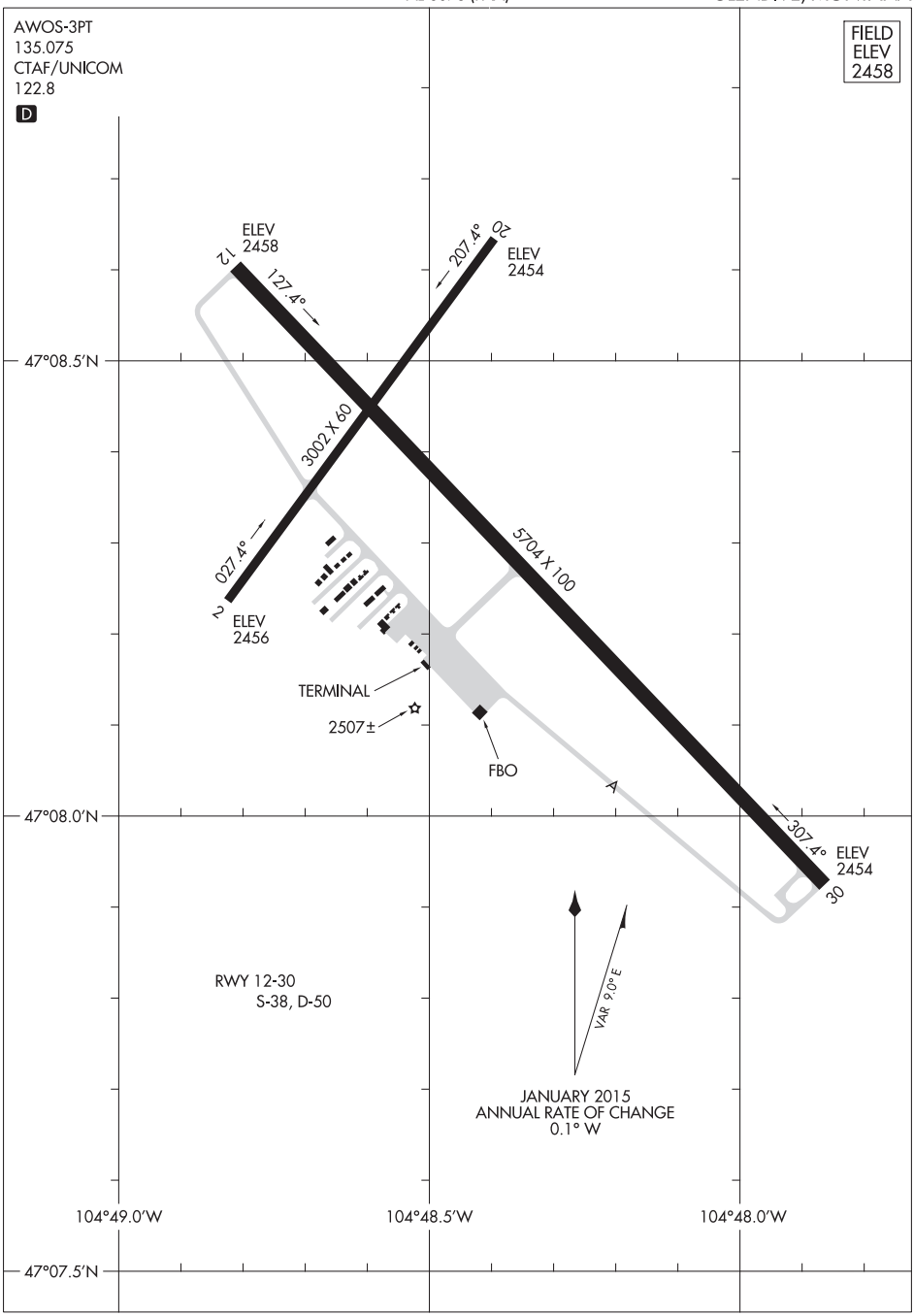
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

17005

AIRPORT DIAGRAM

DAWSON COMMUNITY (GDV)
GLENDIVE, MONTANA

AL-6078 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
17005
GLENDIVE, MONTANA
DAWSON COMMUNITY (GDV)

RNAV (GPS) RWY 7

GOODING MUNI (GNG)

WAAS CH 53709 W07A	APP CRS 068°	Rwy Idg 4745 TDZE 3710 Apt Elev 3732

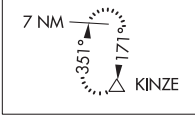
RNP APCH.

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.

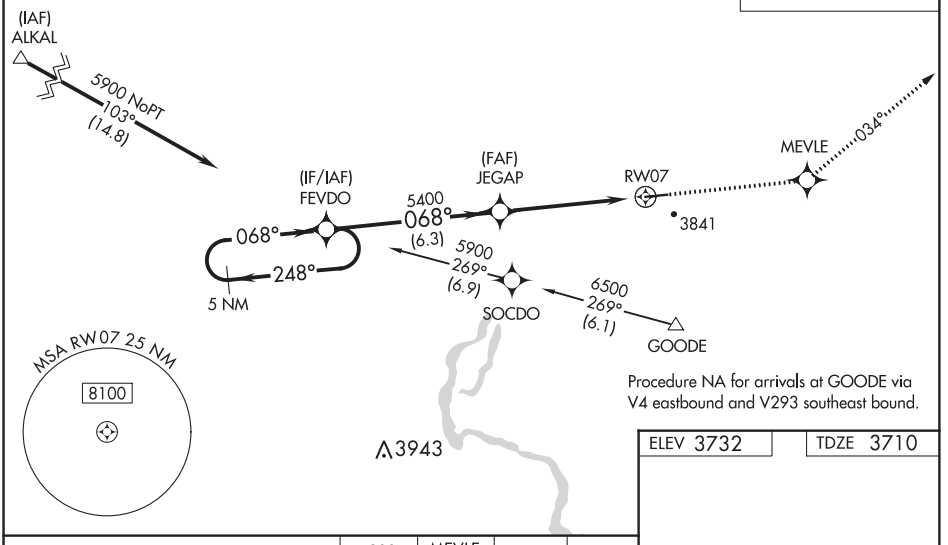
MISSED APPROACH: Climb to 7200 direct MEVLE and left turn via 034° track to KINZE and hold.

AWOS-3PT	SALT LAKE CENTER	UNICOM
124.175	118.05 363.0	122.8 (CTAF)

MISSED APCH FIX

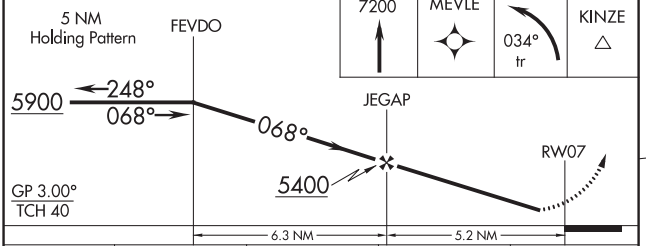


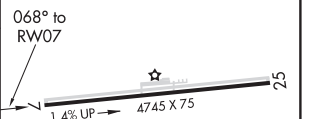
Procedure NA for arrivals at ALKAL via V253 northwest bound.
Procedure NA for arrivals at ALKAL via V330 southwest bound.



Procedure NA for arrivals at GOODE via V4 eastbound and V293 southeast bound.

ELEV 3732 TDZE 3710





3779±

3819±

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)	

MIRL Rwy 7-25

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GOODING, IDAHO | AL-657 (FAA) | 19199

RNAV (GPS) RWY 25

GOODING MUNI (GNG)

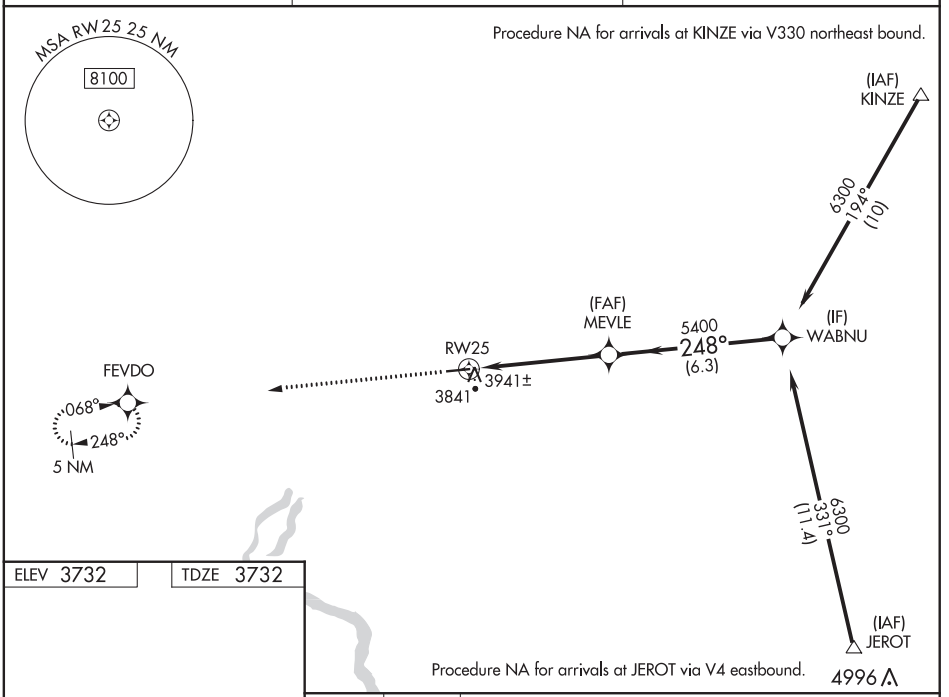
WAAS	APP CRS	Rwy Idg	4745
CH 45909	248°	TDZE	3732
W25A		Apt Elev	3732

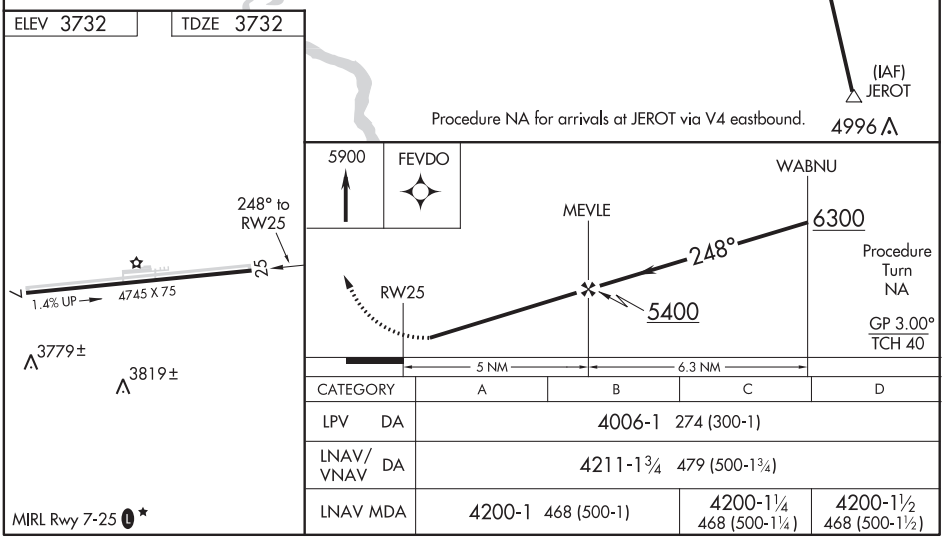
RNP APCH.

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★





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 8

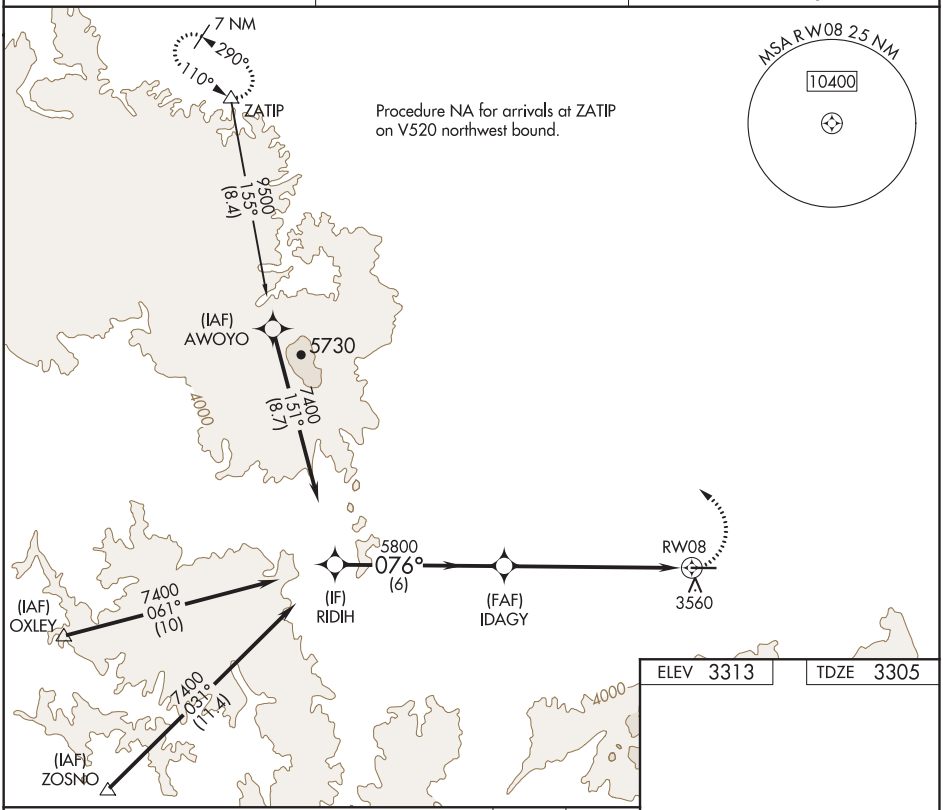
IDAHO COUNTY (GIC)

APP CRS	Rwy Idg	5101
076°	TDZE	3305
	Apt Elev	3313

T A 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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GRANGEVILLE, IDAHO

AL-9060 (FAA)

18088

RNAV (GPS) RWY 26

IDAHO COUNTY (GIC)

APP CRS	Rwy Idg	5101
241°	TDZE	3313
	Apt Elev	3313

T A 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

Procedure NA for arrivals at FERDI on V520 northwest bound.

MSA UYINA 25 NM 10400

7 NM 290° 110°

FERDI

8500 068° (15.4)

(IAF) ZILRA

6200 123° (110.9)

(IF) RAIRE

6200 211° (6.3)

5730

338° (8.4)

GEGYE

Final approach course offset 15.51°

299° (7.7)

(MAP) UYINA

241°

3494±

3560

(FAF) VEZAM

5968

WEDMU

7135

6123

4000 5000 6000

ELEV 3313 TDZ 3313

5101 X 75

0.5% UP

8 26

7300	WEDMU	tr 299°	GEGYE	tr 338°	FERDI

VEZAM RAIRE

1.9 NM to UYINA

UYINA

241° 211° 6200 6200

3.44° TCH 50

0.7 1.9 NM 5.2 NM 6.3 NM

CATEGORY	A	B	C	D
LNAV MDA	4060-1 747 (800-1)	4060-1¼ 747 (800-1¼)	4060-2	747 (800-2)
C CIRCLING	4060-1 747 (800-1)	4060-1¼ 747 (800-1¼)	4060-2¼ 747 (800-2¼)	4060-2½ 747 (800-2½)

MIRL Rwy 8-26
REIL Rwy 8 L

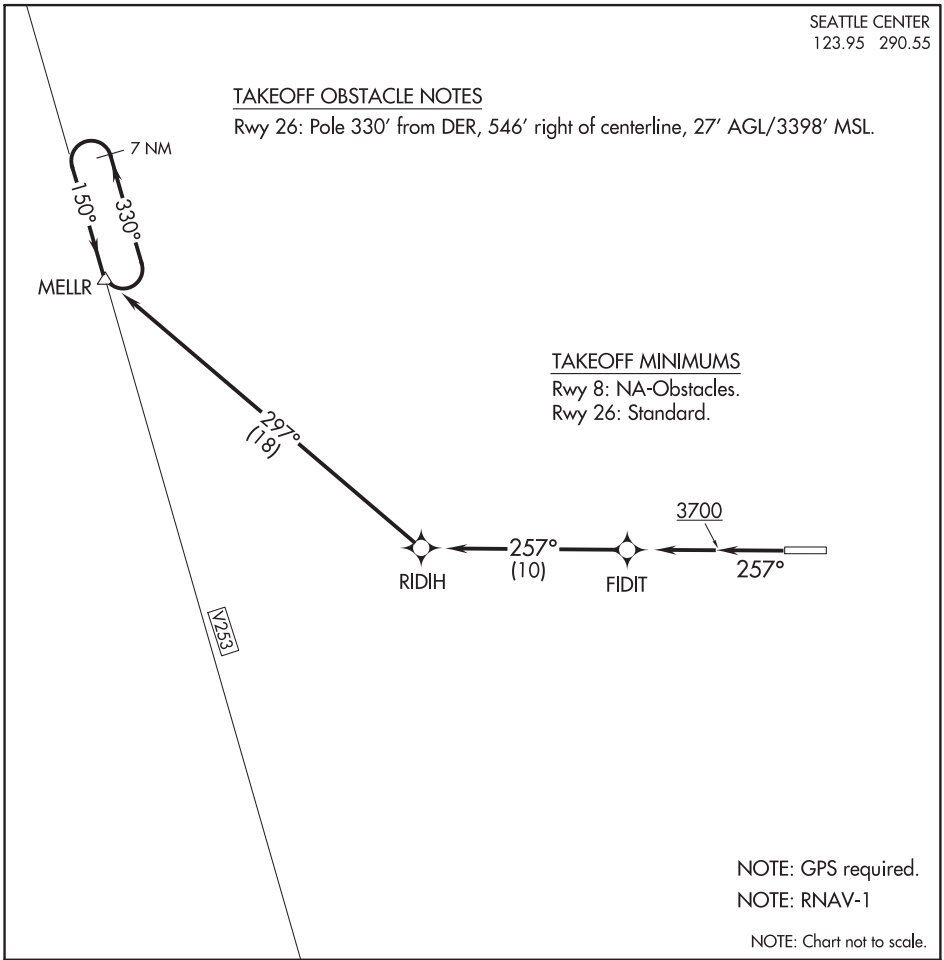
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

GRANGEVILLE, IDAHO
ORIG 10NOV16

45°57'N-116°07'W

IDAHO COUNTY (GIC)
RNAV (GPS) RWY 26



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GRANTS PASS, OREGON

AL-9081 (FAA)

18256

RNAV (GPS) RWY 13

GRANTS PASS (3S8)

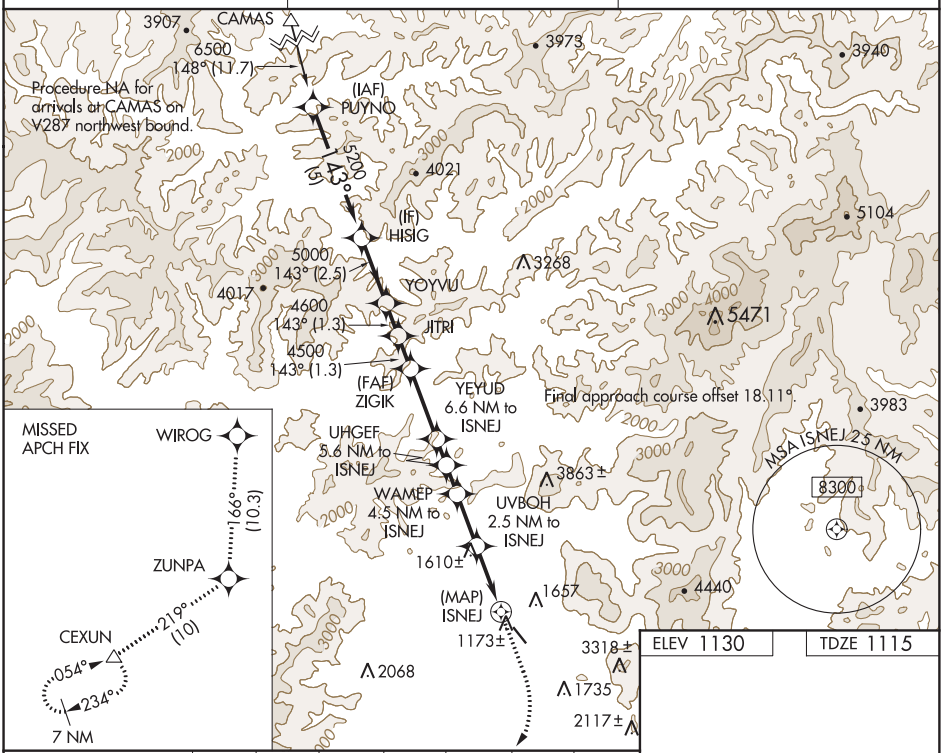
WAAS	APP CRS	Rwy Idg	4001
CH 56242	143°	TDZE	1115
W13A		Apt Elev	1130

T A

Circling NA northeast of Rwy 13-31. Rwy 13 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Straight-in Rwy 13 NA at night, Circling Rwy 13 NA at night.

MISSED APPROACH: Climb to 2300 then climbing right turn to 8000 direct WIROG and on track 166° to ZUNPA and on track 219° to CEXUN and hold.

AWOS-3PT	CASCADE APP CON ★	UNICOM
120.0	124.3 379.9	122.8 (CTAF) L



CATEGORY	A	B	C	D
LP MDA	1680-1 565 (600-1)		1680-1¾ 565 (600-1¾)	
C CIRCLING	1840-1 710 (800-1)	2020-1¼ 890 (900-1¼)	2180-3 1050 (1100-3)	2340-3 1210 (1300-3)

REIL Rwys 13 and 31 L

MIRL Rwy 13-31 L

NW-1, 30 JAN 2020 to 26 MAR 2020

GRANTS PASS, OREGON

Orig 01FEB18

42°31′N-123°23′W

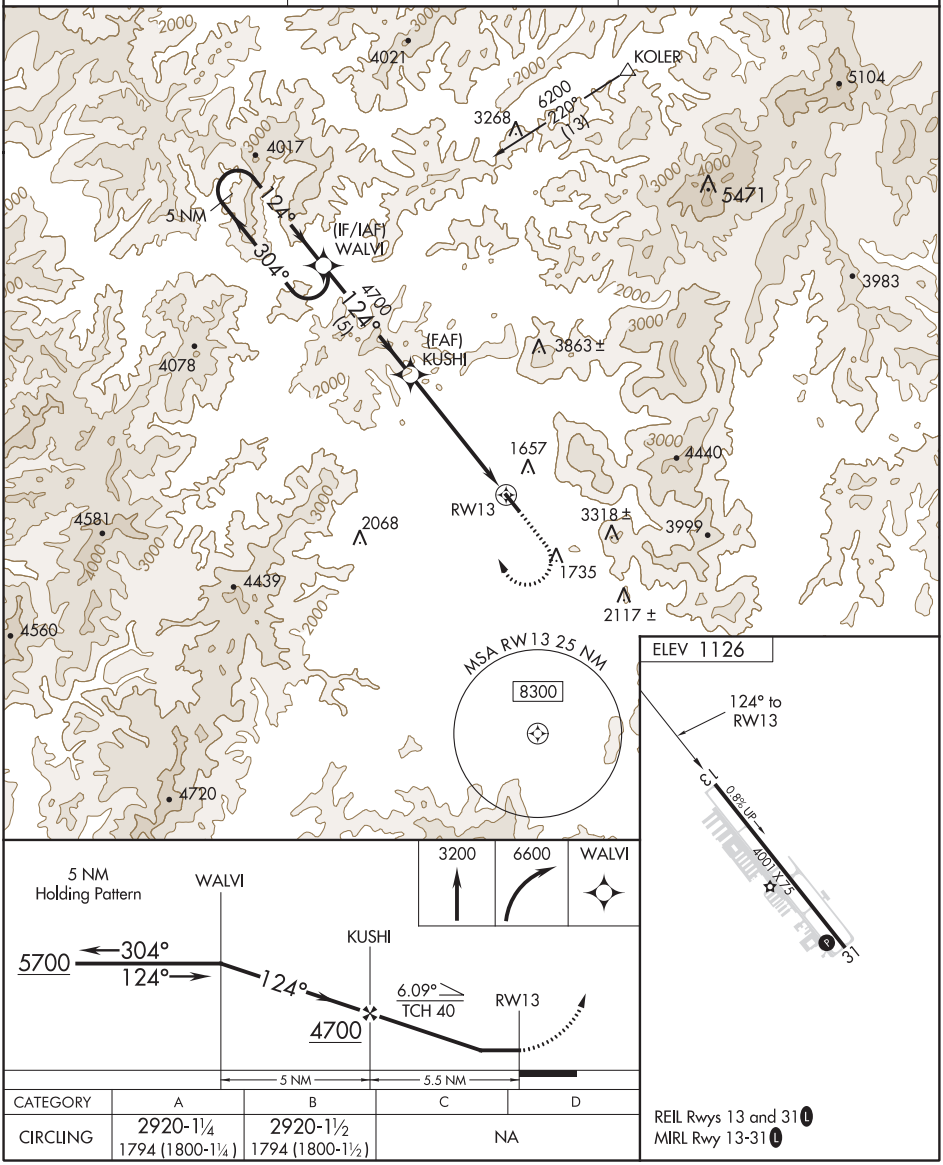
RNAV (GPS)-A
GRANTS PASS (3S8)

APP CRS	Rwy Idg	N/A
124°	TDZE	N/A
	Apt Elev	1126

Circling NA northeast of Rwy 13-31. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Medford altimeter setting and increase all MDA 580 feet.

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
CIRCLING	2920-1¼ 1794 (1800-1¼)	2920-1½ 1794 (1800-1½)	NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JOINT BASE LEWIS MCCHORD, WASHINGTON

ILS or LOC RWY 15

LOC I-GRF	APCH CRS	Rwy ldg	6124
108.3	151°	TDZE	300
Chan 20		Arpt Elev	301

AL-413 [USA]

GRAY AAF (KGRF)

T *When ALS inop when using McChord AFB altimeter setting, increase LOC CAT C/D vis to RVR 55.

A **Circling not authorized W of Rwy 15-33.

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	

When local altimeter setting not received, use McChord AFB altimeter setting.

Procedure NA for arrival on OLM VORTAC airway radials 346 CW 012 and arrival on SEA VORTAC airway radials 168 CW 230

Procedure NA for arrival at OLM VORTAC for TACAN-only equipped aircraft.

DME REQUIRED
(For civil use)

RNAV1 - GPS or RADAR REQUIRED
(For procedure entry at SEA VORTAC.)

OLYMPIA 113.4 OLM Chan 81

I-GRF 16.1

(IAF/IF) CIKRI I-GRF 11.1

Max holding alt 4000
Min holding alt 2000

EMOFO I-GRF 5.1

LOCALIZER 108.3 I-GRF Chan 20

NoPT 2000 211° (17.5)

IAF SEATTLE 116.8 SEA Chan 115

953

R6703A

RAINIER 1 MOA

RAINIER 2 MOA

MSA OLM 25 NM
200°
4500
5400
020°

VGSI and descent angles not coincident.

CIKRI I-GRF 11.1

EMOFO I-GRF 5.1

ZAPEB I-GRF 3.3

I-GRF 1.2

† LOC only

4000 2000 151°

331°

151°

1600

†1020

GS 3.00°
TCH 55

1.8 NM 2.1 NM

1000 3000 4000
hdg 270°
OLM R-014

ELEV 301 TDZE 300

151° 4 NM from FAF

TWR 376

474

431

6124 x 150

HIRL Rwy 15-33

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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

FORT LEWIS, WASHINGTON

RNAV (GPS) RWY 15

APCH CRS	Rwy ldg	6124
151°	TDZE	300
	Arpt Elev	301

AL-413 (USA)

GRAY AAF (KGRF)

* Circling not authorized W of Rwy 15-33.

SSALR

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

2000 NoPT 214° (17.5)

(IAF) CARRO 2000

2000 NoPT 091° (9.4)

5 NM

151°

331°

723

953

417

368

(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

RAINIER 1 MOA

RW15

R6703A

2000 017° (19.9)

OLYMPIA OLM

MSA RW15 25 NM

6700

955

† VDP NA with McChord Fld altimeter setting.

2000

CIKRI

VGSI and descent angles not coincident.

CIKRI

331°

2000

151°

151°

EMOFO

1600

ZAPEB

†1.4 NM to RW15

RW15

1020

3.00°

TCH 55

1.8 NM

2.2 NM

ELEV 301

TDZ 300

151° to RW15

15

33

TWR 376

BCN

6124 × 150

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

19283

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 A * Circling not authorized W of Rwy 15-33.

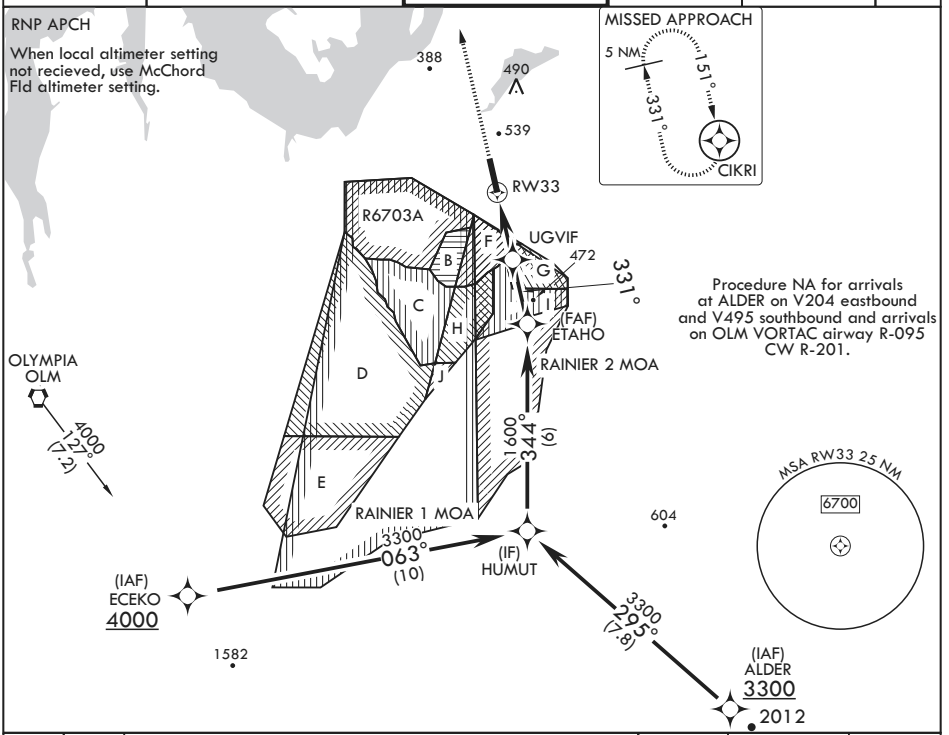
SSALR (A3)

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	

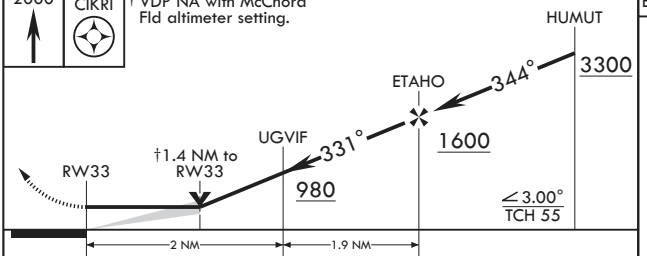
RNP APCH

When local altimeter setting not recieved, use McChord Fld altimeter setting.

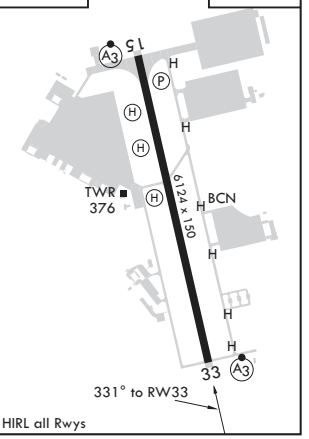


2000 CIKRI

† VDP NA with McChord Fld altimeter setting.

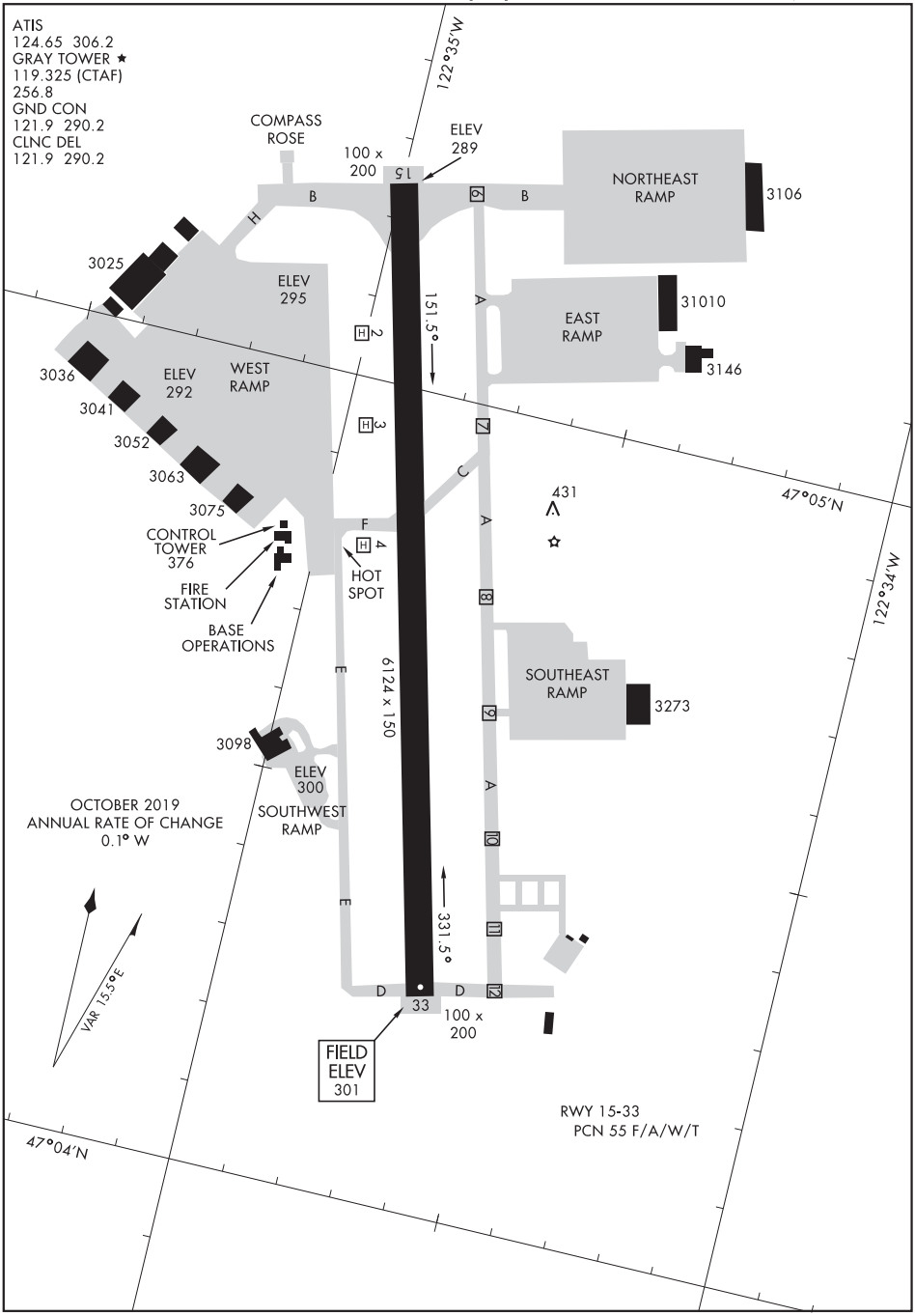


ELEV 301 TDZE 301



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

20030

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

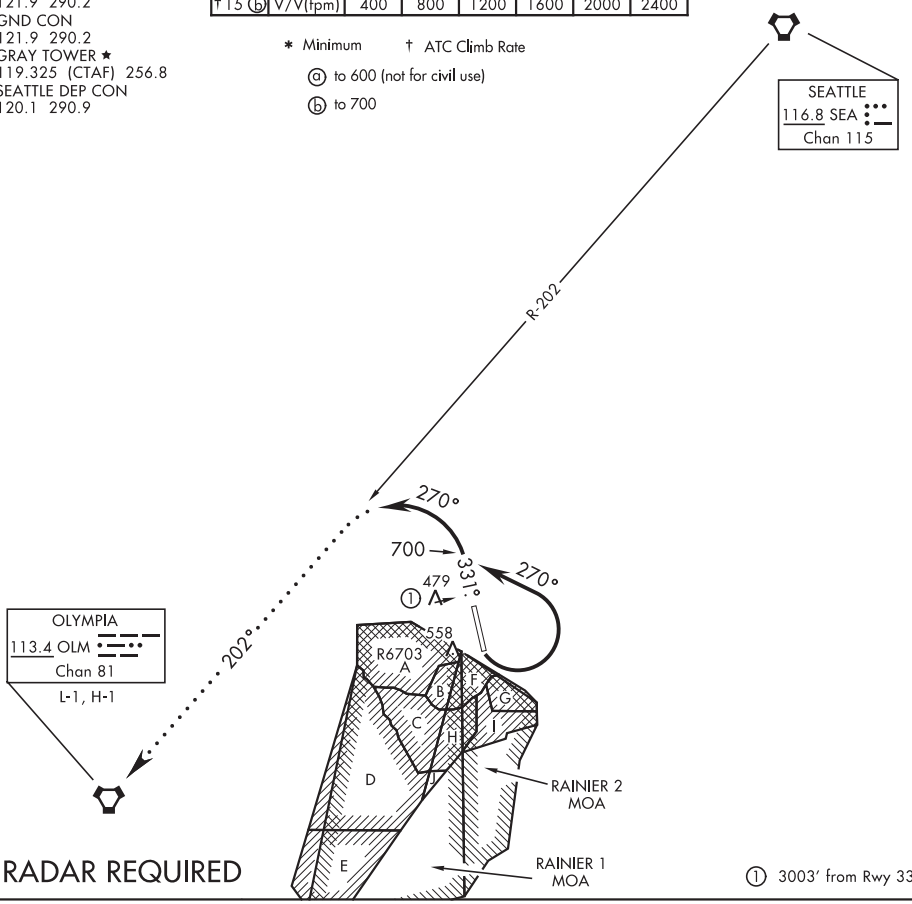
Rwy	Knots	60	120	180	240	300	360
*33 ⓐ	V/V(fpm)	469	938	1407	1876	2345	2814
†15 ⓑ	V/V(fpm)	400	800	1200	1600	2000	2400

SL-413 [USA]

* Minimum † ATC Climb Rate

ⓐ to 600 (not for civil use)

ⓑ to 700



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 15: Turn left as soon as practical (departing 400), 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-SMR	APP CRS	Rwy Idg	10502
111.3	032°	TDZE	3680
Chan 50		Apt Elev	3680

ILS or LOC RWY 3

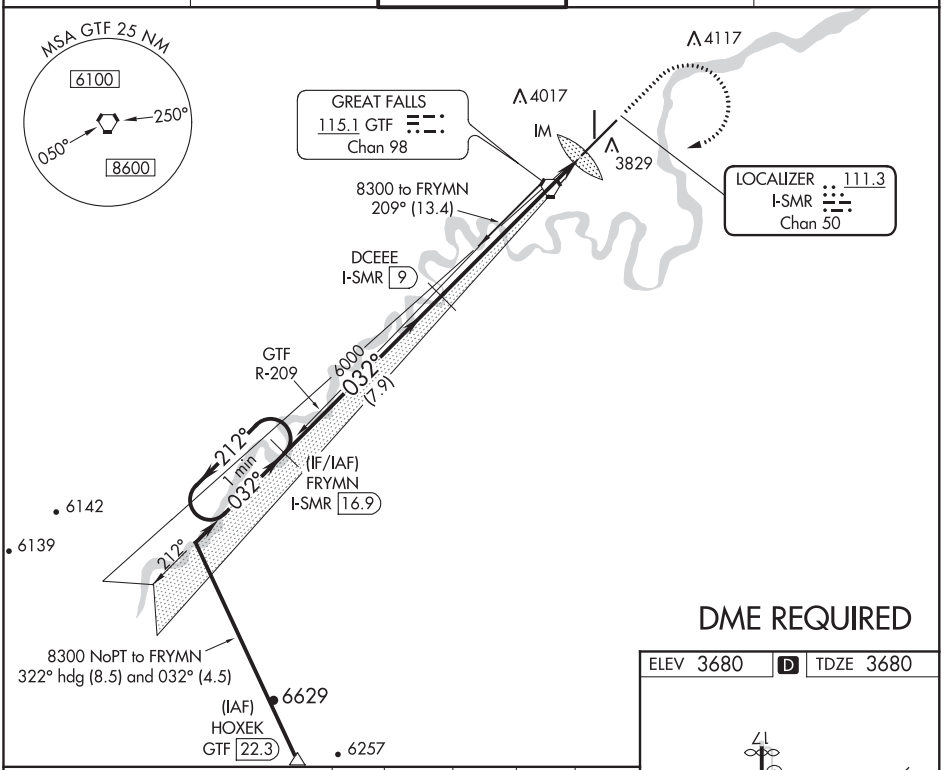
GREAT FALLS INTL (GTF)

T A -33°C — DME required.

ALSF-2

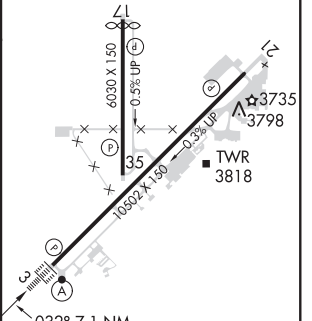
MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then on GTF VORTAC R-209 to FRYMN/I-SMR 16.9 DME and hold.

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

ELEV 3680 | D | TDZ 3680



TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 70).

5000	8300	GTF	GTF R-209	FRYMN I-SMR 16.9

FRYMN I-SMR 16.9

One Minute Holding Pattern

DCEEE I-SMR 9

Use I-SMR DME when on the localizer course.

8300 ←212° 032°→ 032° 6000 *I-SMR 3.2 I-SMR 1.9 IM

GS 3.00°
TCH 54

6000

*LOC only

7.9 NM | 5.9 NM | 1.1 | 0.1

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, 30 JAN 2020 to 26 MAR 2020

GREAT FALLS, MONTANA | AL-177 (FAA) | 19115

LOC/DME I-SMR	APP CRS	Rwy Idg	10502
111.3	032°	TDZE	3680
Chan 50		Apt Elev	3680

ILS RWY 3 (SA CAT I)

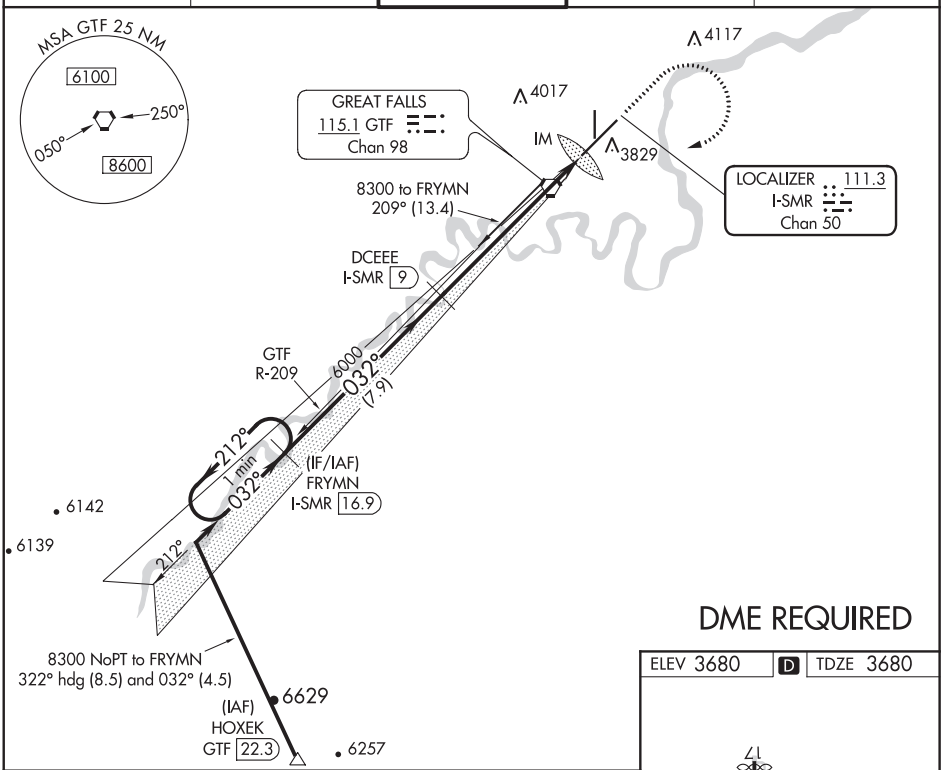
GREAT FALLS INTL (GTF)

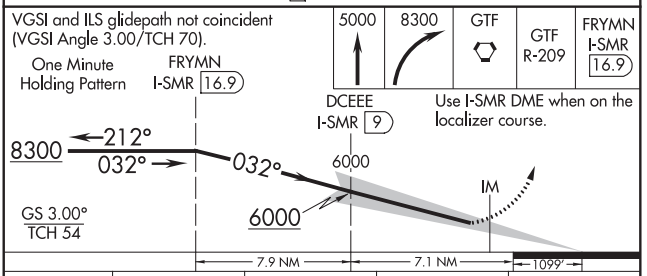
T A -33°C — Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. DME required.

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

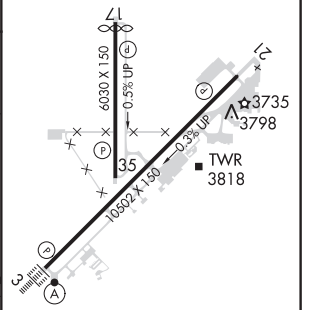




CATEGORY	A	B	C	D
S-ILS 3	RA 140/14 150 DA 3830			

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

GREAT FALLS, MONTANA
Amdt 5C 17AUG17

47°29'N-111°22'W

GREAT FALLS INTL (GTF)
ILS RWY 3 (SA CAT I)

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-SMR	APP CRS	Rwy Idg	10502
111.3	032°	TDZE	3680
Chan 50		Apt Elev	3680

ILS RWY 3 (CAT II & III)

GREAT FALLS INTL (GTF)

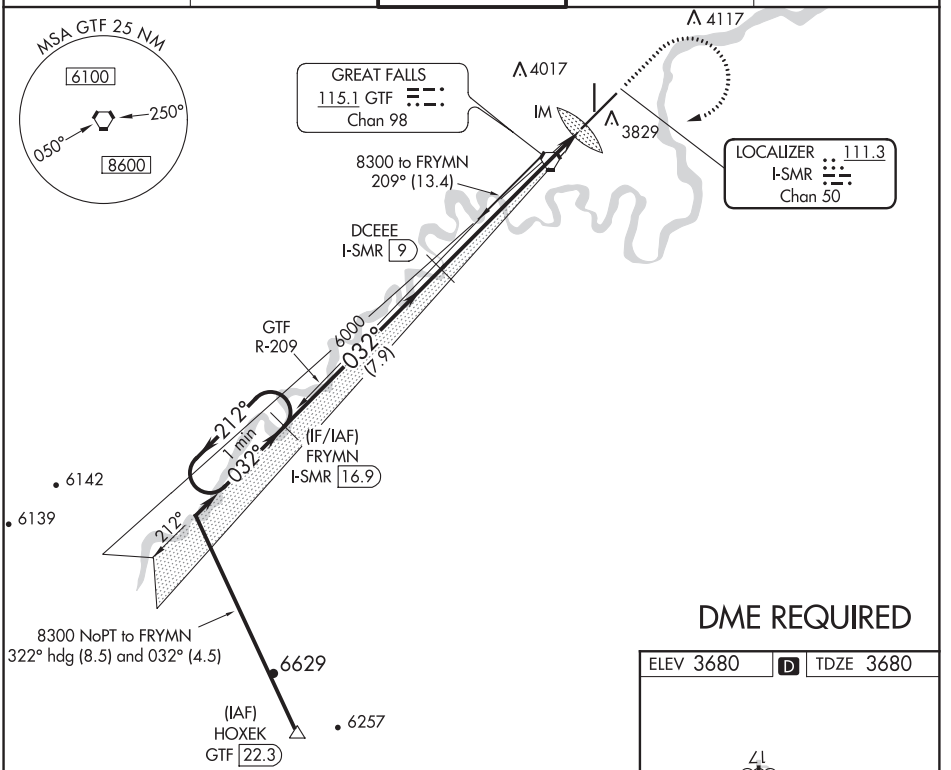
CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. DME required.

-33°C

ALSF-2

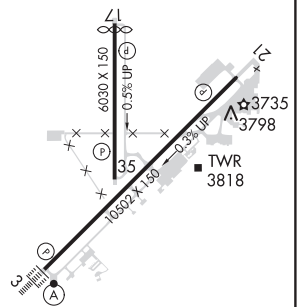
MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then on GTF VORTAC R-209 to FRYMN/I-SMR 16.9 DME and hold.

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



DME REQUIRED

ELEV 3680 | D | TDZE 3680



TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 70).

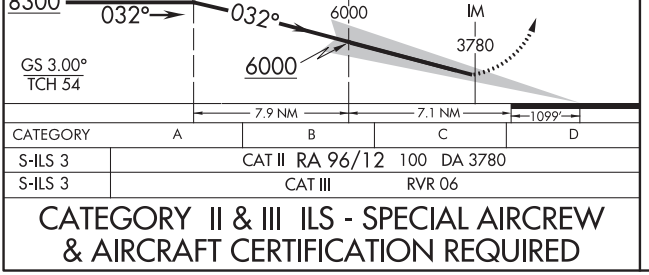
One Minute Holding Pattern

FRYMN I-SMR 16.9

DCEEE I-SMR 9

5000	8300	GTF	GTF R-209	FRYMN I-SMR 16.9

Use I-SMR DME when on the localizer course.



CATEGORY	A	B	C	D
S-ILS 3	CAT II RA 96/12 100 DA 3780			
S-ILS 3	CAT III RVR 06			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 3

GREAT FALLS INTL (GTF)

APP CRS	Rwy Idg	10502
032°	TDZE	3680
	Apt Elev	3680

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

MISSED APCH FIX

7 NM 032° 212° PSHKN

Procedure NA for arrivals at KYELL on V21 northwest bound.

(IAF) KYELL (RNP 0.90) (RF REQD)

5300 to DVINT 170° (8.5)

Procedure NA for arrivals at PSHKN on V257 northeast bound.

(IAF) HANTZ

4621

6700 238° (13.8)

PSHKN (RNP 0.90) (RF REQD)

5400 to KEPPR 209° (8.2)

032° (10.7)

4117 DEELM

032° (6.7)

(IF) KEPPR 180K

4017

Procedure NA for arrivals at SHIMY on V120 westbound and V365 northbound.

(IF) DVINT 180K

5300 (1.9)

RW03

3829

6300 082° (18.7)

(IAF) SHIMY (RNP 0.90) (RF REQD)

5200 083° (7)

5200 (4.3)

4700 (2.5)

032° (3)

(IF) NIMPH

MUDLR 180K

(FAF) TESTR

Procedure NA for arrivals at JAYKE on V120 eastbound.

4700 (4.1)

(IF) DCEEE

AUERR

5700 244° (9.3)

(IAF) JAYKE (RNP 0.50) (RF REQD)

4700 032° (4.1)

5100 (2.6)

(IF) BELLT 180K

MSA RW03 25 NM

8500

6142

5200 027° (9.5)

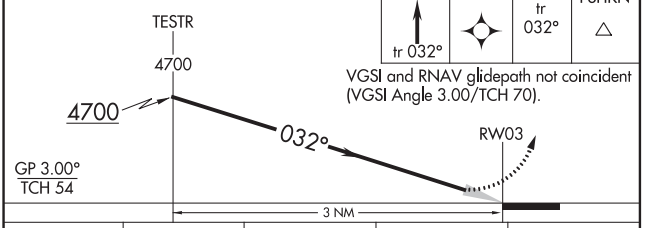
(IAF) MSURY (RNP 0.30)

Procedure NA for arrivals at MSURY on V257 southbound.

See planview for multiple IF locations.

6200	DEELM	tr	PSHKN
tr 032°		032°	

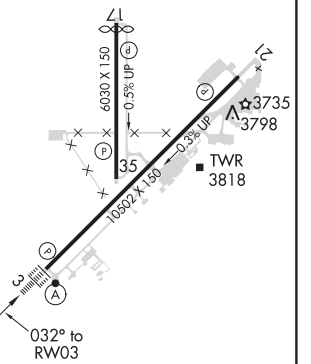
VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	10502
212°	TDZE	3669
	Apt Elev	3680

RNAV (RNP) Z RWY 21

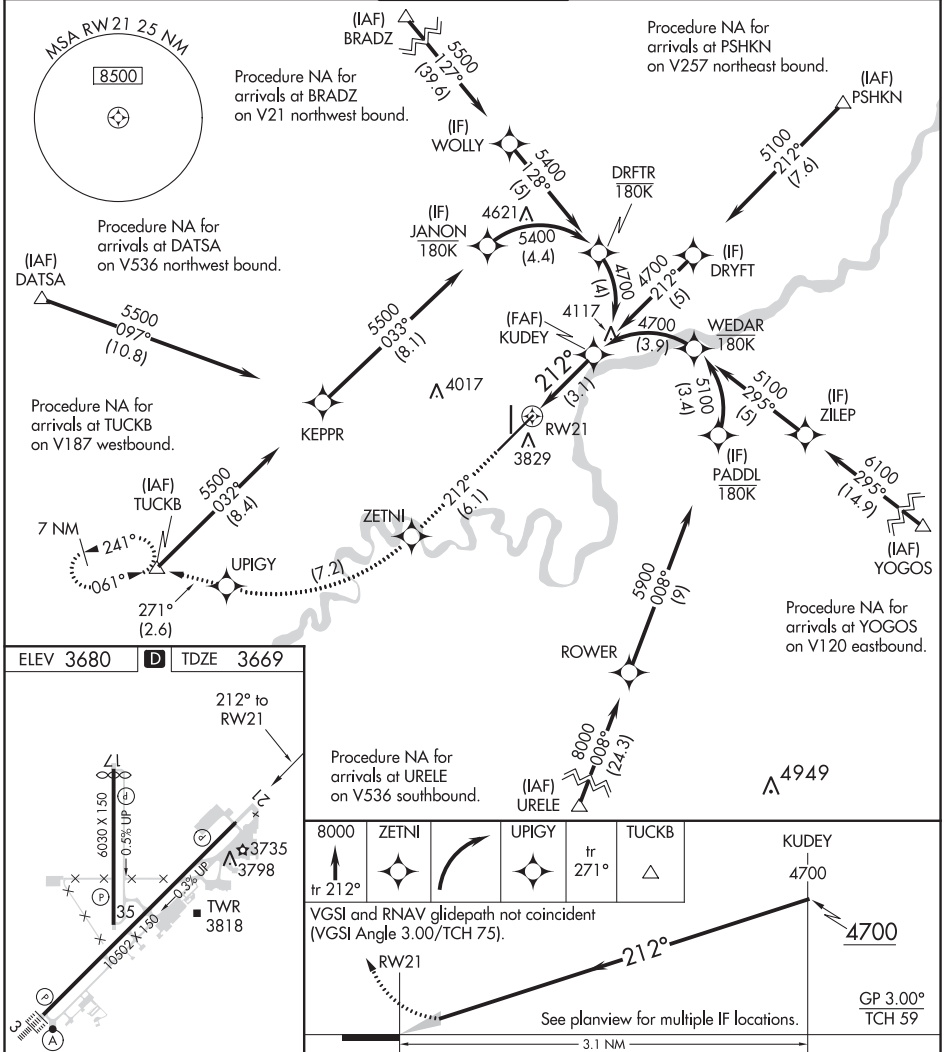
GREAT FALLS INTL (GTF)

-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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GREAT FALLS, MONTANA | AL-177 (FAA) | 19115

RNAV (GPS) RWY 17

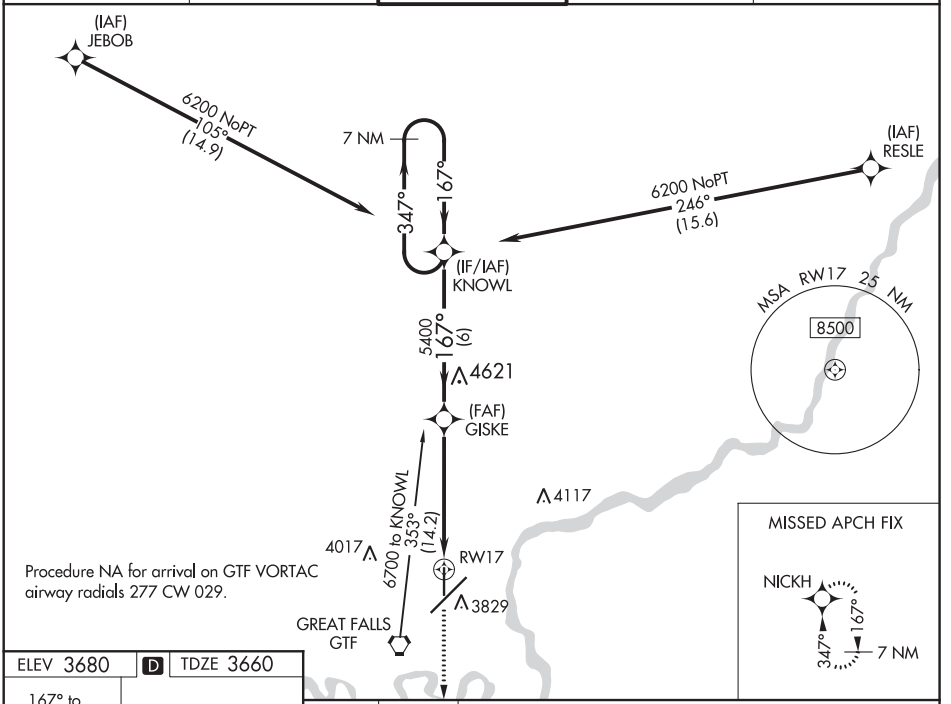
GREAT FALLS INTL (GTF)

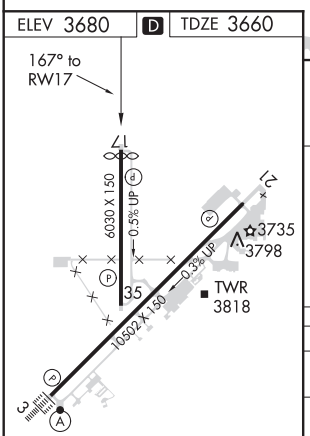
WAAS	APP CRS	Rwy Idg	5800
CH 49240	167°	TDZE	3660
W17A		Apt Elev	3680

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

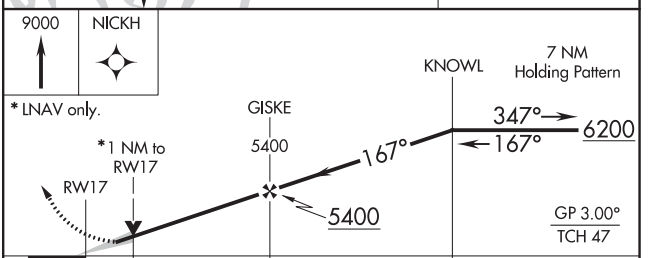
MISSED APPROACH: Climb to 9000 direct NICKH and hold, continue climb-in-hold to 9000.

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





TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35



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)

GREAT FALLS, MONTANA
Orig 17AUG17

47°29'N-111°22'W

GREAT FALLS INTL (GTF)

RNAV (GPS) RWY 17

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 35

GREAT FALLS INTL (GTF)

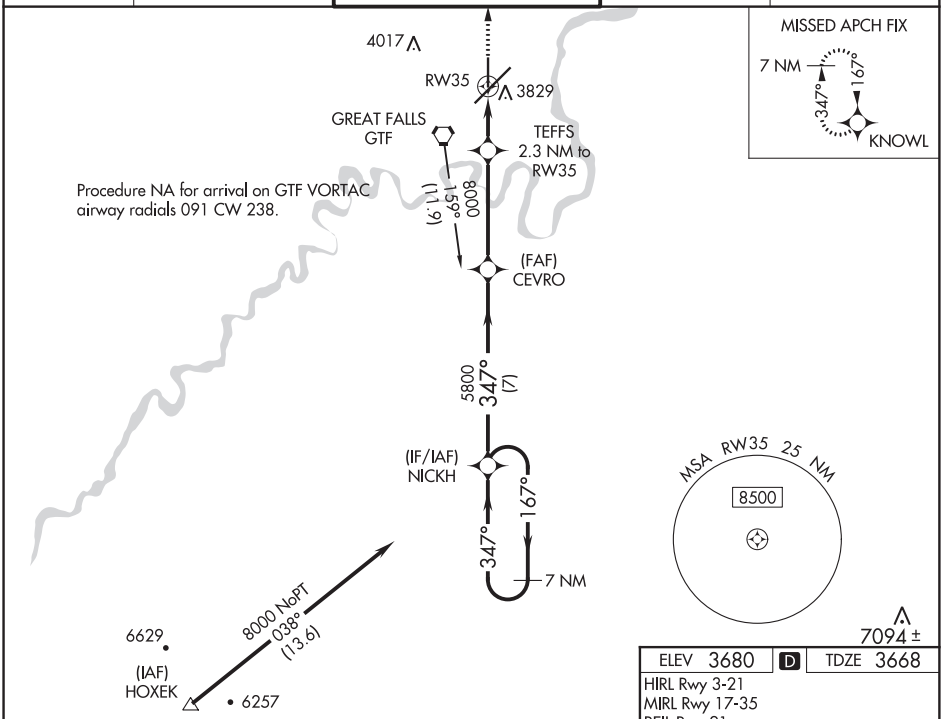
WAAS	APP CRS		
CH 82240 W35A	347°	Rwy Idg	5400
		TDZE	3668
		Apt Elev	3680

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

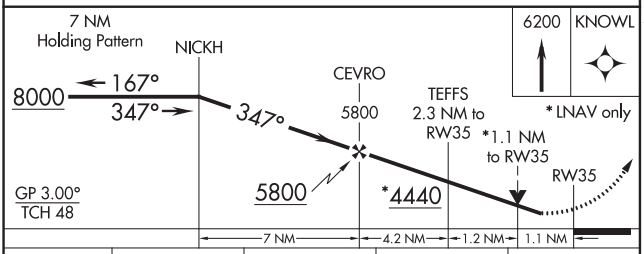
MISSED APPROACH: Climb to 6200 direct KNOWL and hold.

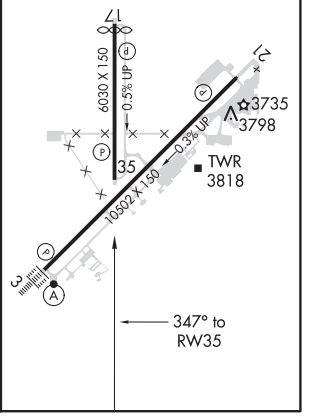
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 379.175	118.7 282.2	121.7 348.6	121.7 348.6



ELEV 3680 D TDZE 3668

HIRL Rwy 3-21
MIRL Rwy 17-35
REIL Rwy 21
TDZ/CL Rwy 3





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

GREAT FALLS, MONTANA | AL-177 (FAA) | 19115

WAAS	APP CRS	Rwy Idg	10502
CH 70602	032°	TDZE	3680
W03A		Apt Elev	3680

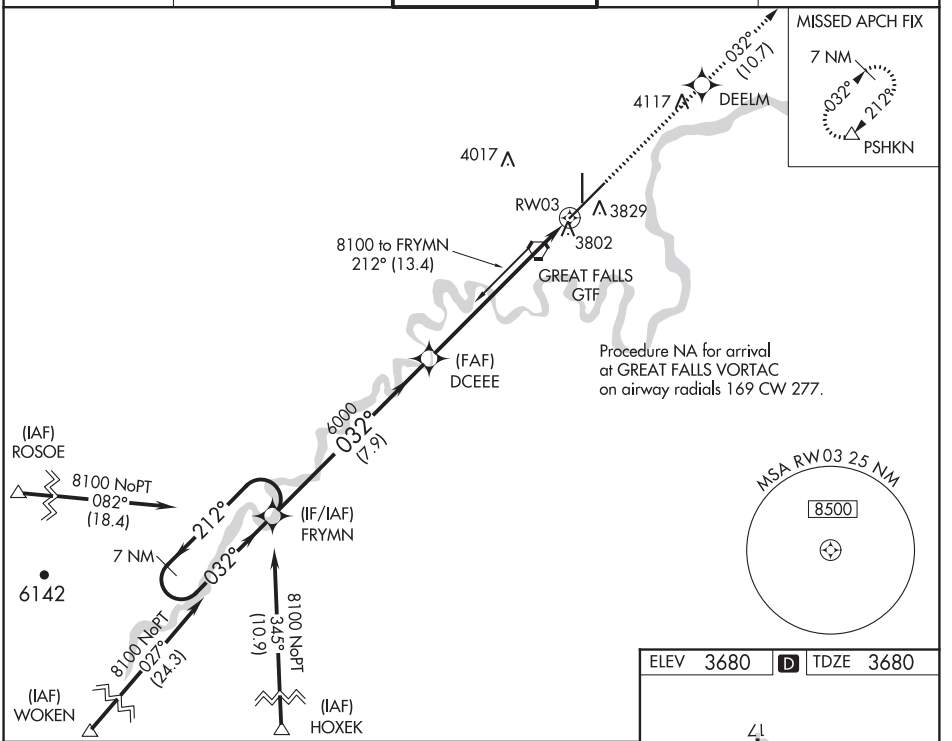
RNAV (GPS) Y RWY 3
GREAT FALLS INTL (GTF)

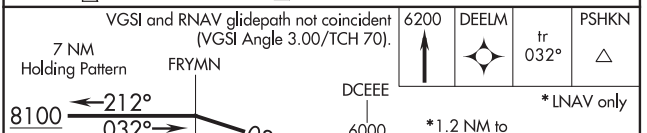
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 50°C (123°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500. -33°C

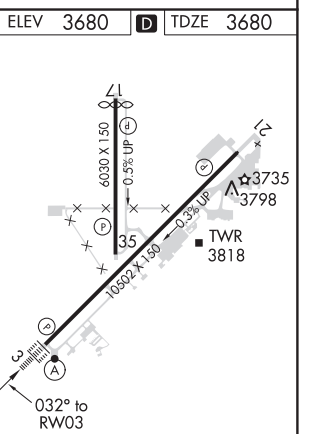
ALSF-2

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







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)

HIRL Rwy 3-21
MIRL Rwy 17-35
REIL Rwy 21
TDZ/CL Rwy 3

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 21

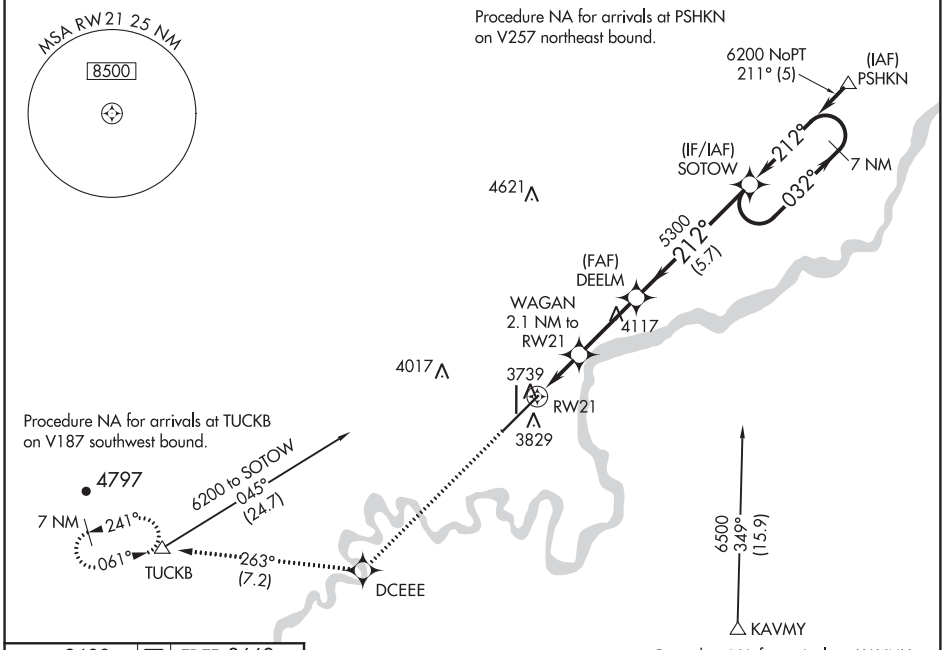
GREAT FALLS INTL (GTF)

WAAS	APP CRS	Rwy Idg	10502
CH 90221	212°	TDZE	3669
W21A		Apt Elev	3680

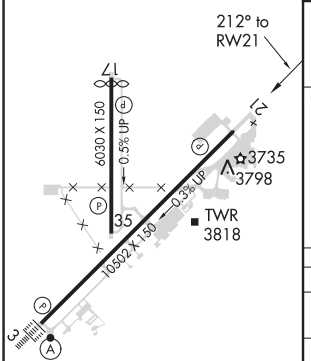
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 49°C (121°F). DME/DME RNP-0.3 NA. -33°C

MISSED APPROACH: Climb to 8000 direct DCEEE and on track 263° to TUCKB and hold, continue climb-in-hold to 8000.

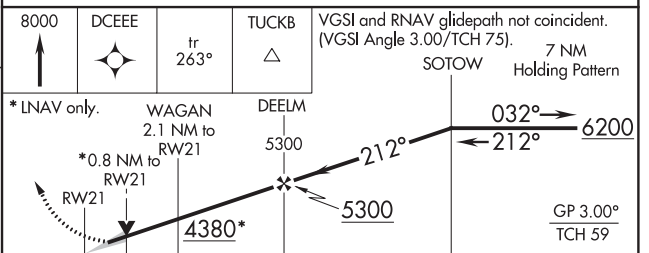
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 379.175	118.7 282.2	121.7 348.6	121.7 348.6



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME RWY 3

GREAT FALLS INTL (GTF)

VORTAC GTF	APP CRS	Rwy Idg	10502
115.1	029°	TDZE	3680
Chan 98		Apt Elev	3680

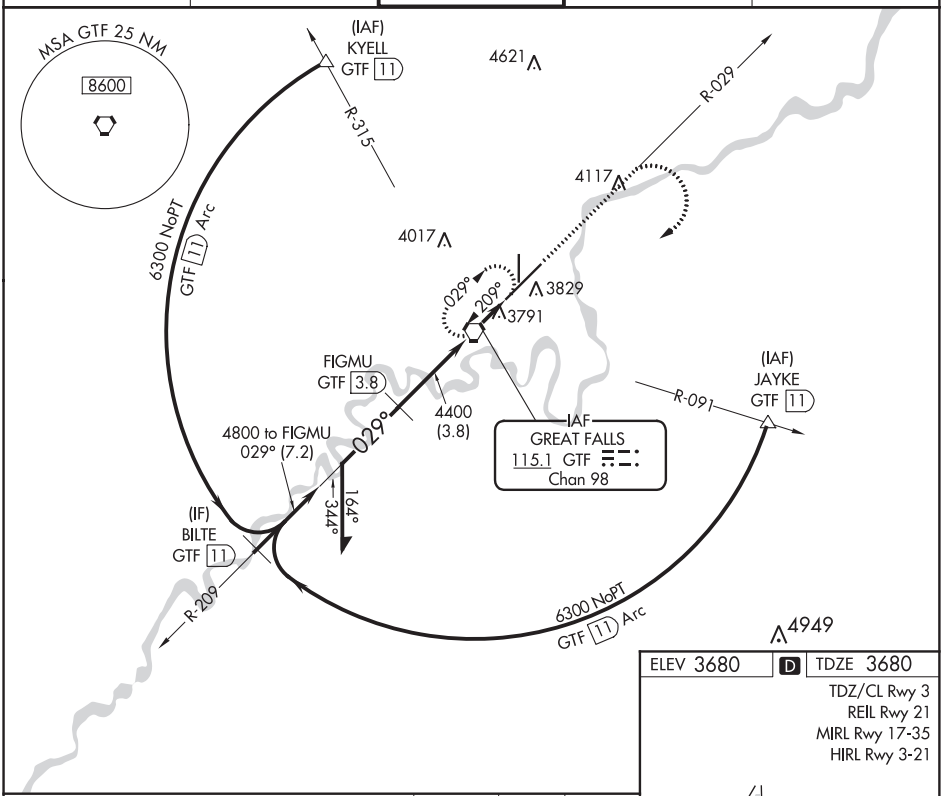
-33°C

For inoperative ALSF-2, increase S-3 Cat D visibility to RVR 6000.

ALSF-2

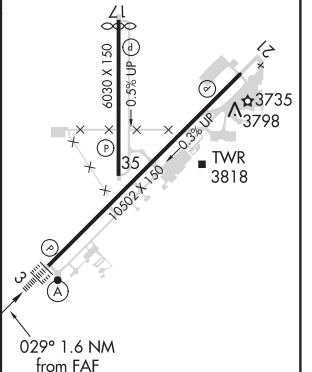
MISSED APPROACH: Climb to 5000 via GTF VORTAC R-029 then climbing right turn to 6300 direct GTF VORTAC and hold, continue climb-in-hold to 6300.

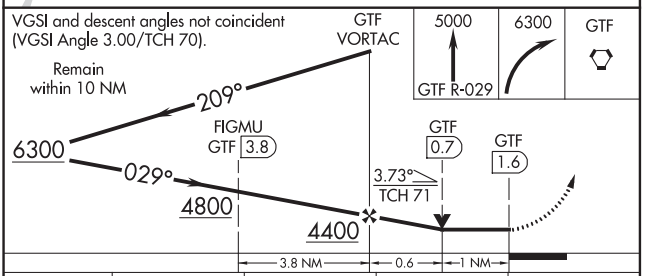
ATIS	GREAT FALLS APP CON	GREAT FALLS TOWER	GND CON	CLNC DEL
126.6 269.0	128.6 379.175	118.7 282.2	121.7 348.6	121.7 348.6



ELEV 3680 D TDZE 3680

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 17-35
HIRL Rwy 3-21





CATEGORY	A	B	C	D
S-3	4060/24 380 (400-½)			NA
CIRCLING	4120-1 440 (500-1)	4140-1 460 (500-1)	4140-1½ 460 (500-1½)	4240-2 560 (600-2)

NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC GTF	APP CRS	Rwy Idg	10502
115.1	209°	TDZE	3669
Chan 98		Apt Elev	3680

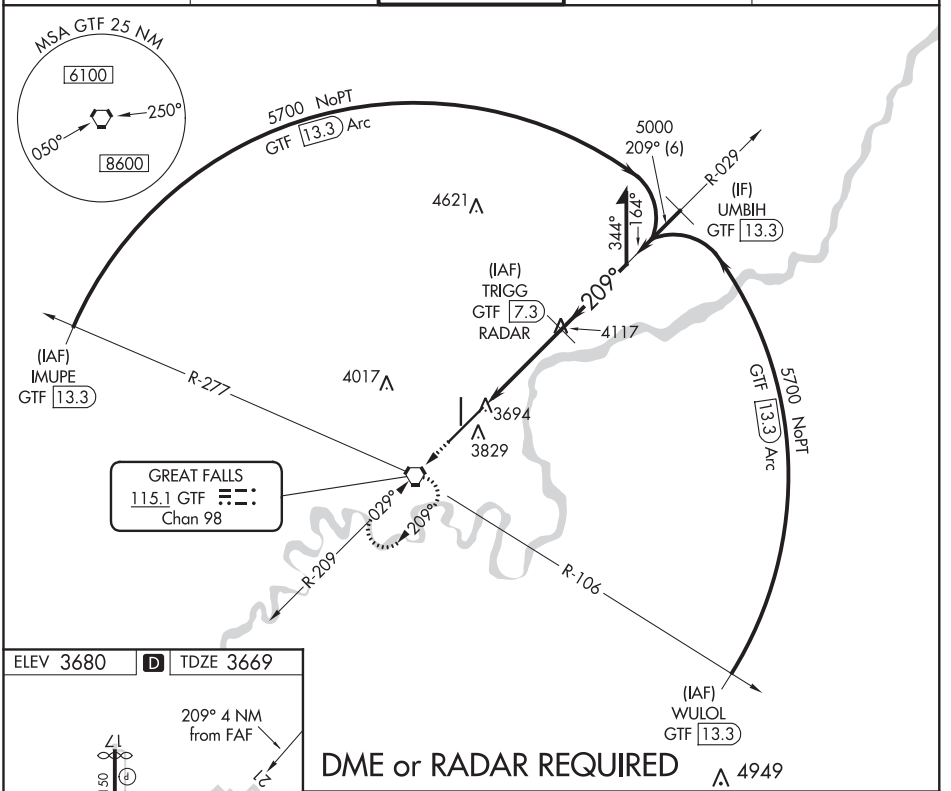
VOR RWY 21
GREAT FALLS INTL (GTF)

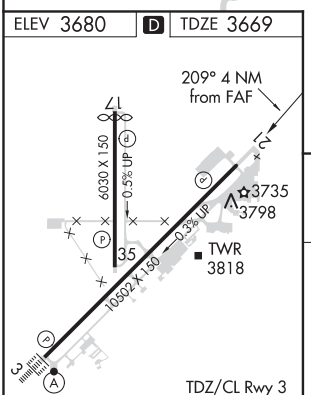
DME or RADAR required.

-33°C

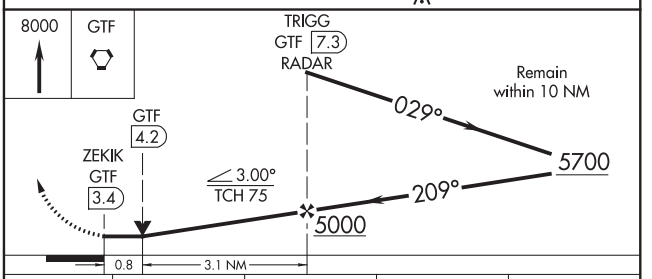
MISSED APPROACH: Climb to 8000 direct GTF VORTAC, continue climb-in-hold to 8000.

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





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

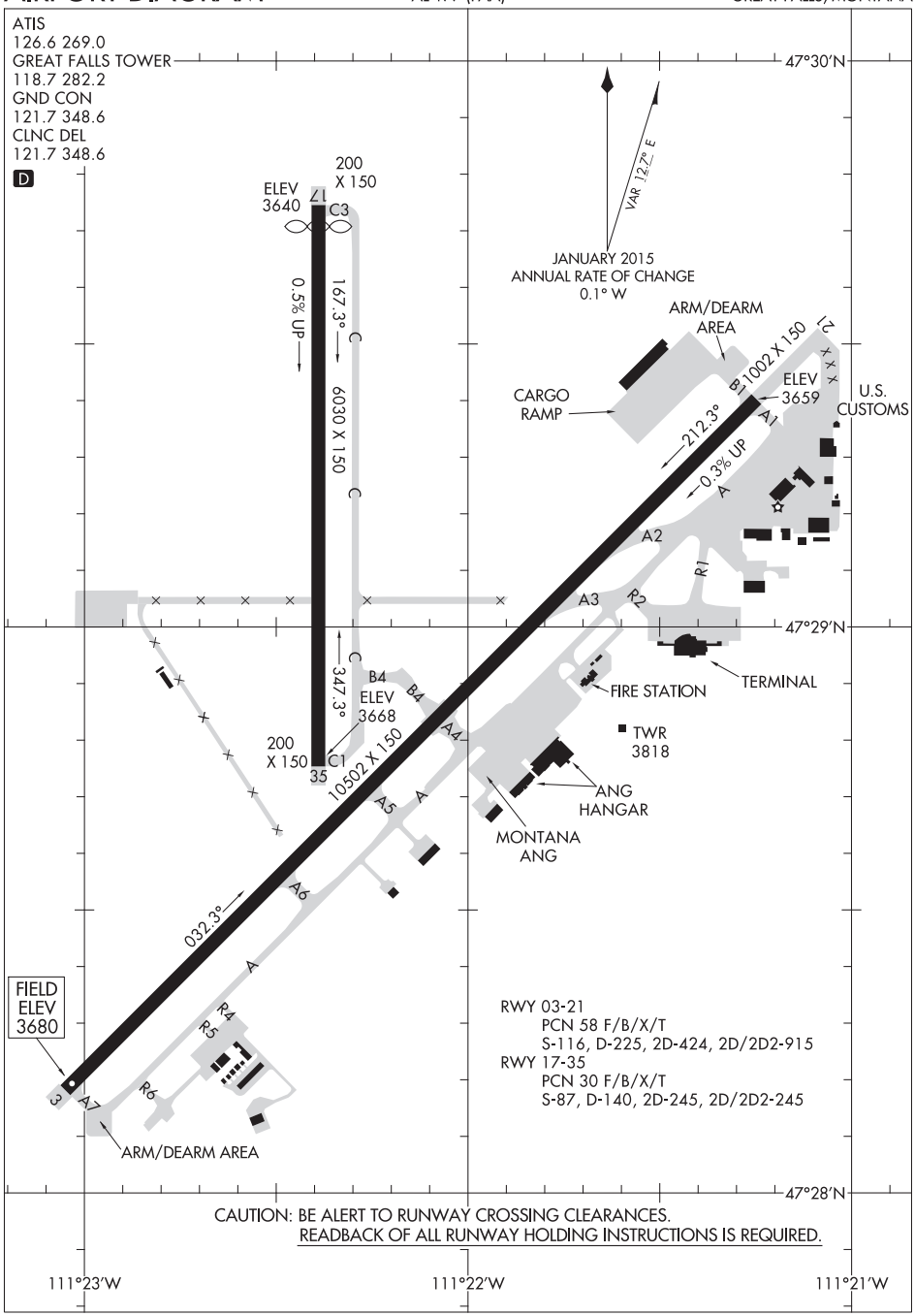
19115

AIRPORT DIAGRAM

AL-177 (FAA)

GREAT FALLS INTL (GTF)

GREAT FALLS, MONTANA



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
19115
GREAT FALLS, MONTANA
GREAT FALLS INTL (GTF)

WAAS	APP CRS	Rwy Idg	3953
CH 56530	076°	TDZE	3942
W08A		Apt Elev	3942

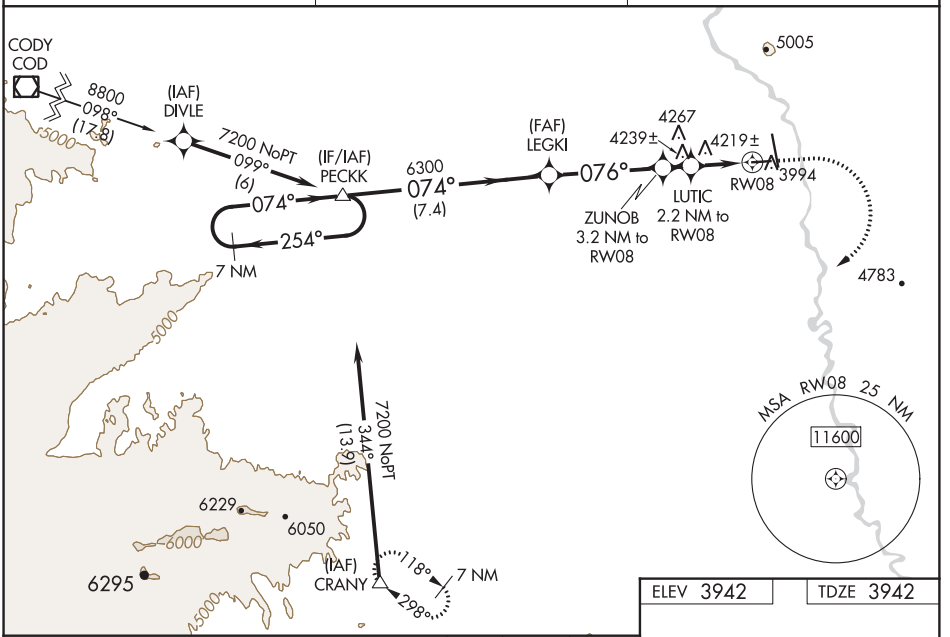
RNAV (GPS) RWY 8
SOUTH BIG HORN COUNTY (GEY)

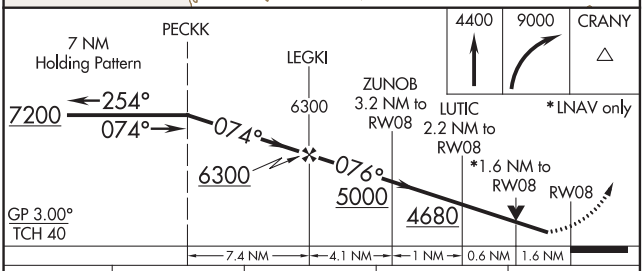
T A -33°C

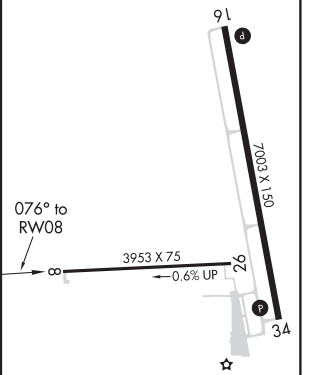
DME/DME RNP-0.3 NA. Straight-in minimums NA at night. When local altimeter setting not received use Cowley/Lovell/Byron altimeter setting: increase LPV DA to 4279 feet and LNAV/VNAV DA to 4654 feet. Increase LPV visibility, all Cats ⅛ SM; increase all MDA 100 feet and LNAV Cats C/D visibility ¼ SM. Rwy 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







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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 34

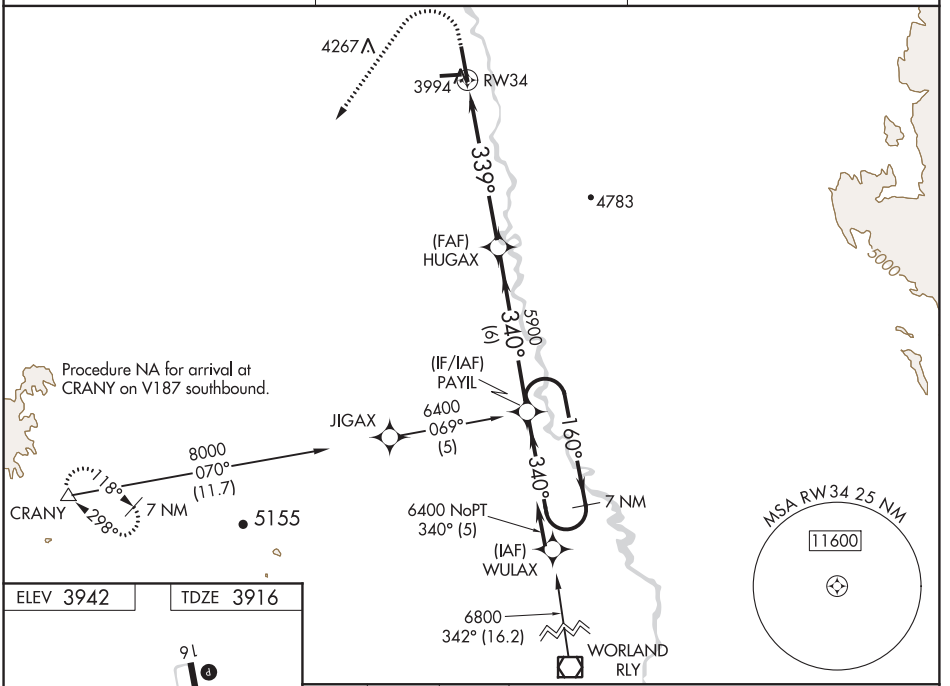
SOUTH BIG HORN COUNTY (GEY)

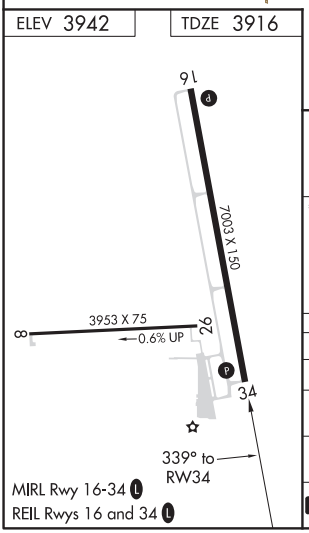
WAAS	APP CRS	Rwy Idg	7003
CH 77542	339°	TDZE	3916
W34A		Apt Elev	3942

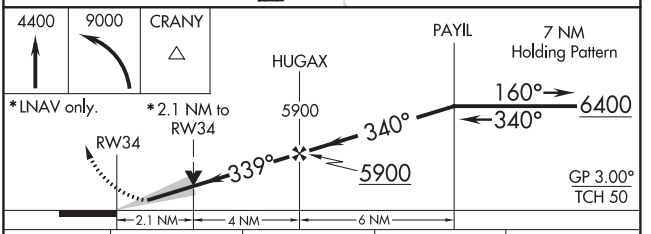
Baro-VNAV NA when using Cowley/Lovell/Byron altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 51°C (124°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Cowley/Lovell/Byron altimeter setting and increase LPV DA to 4253 feet and LNAV/VNAV 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)

44°31′N-108°05′W

NW-1, 30 JAN 2020 to 26 MAR 2020

NDB GEY	APP CRS	Rwy Idg	7003
275	324°	TDZE	3916
		Apt Elev	3942

NDB RWY 34

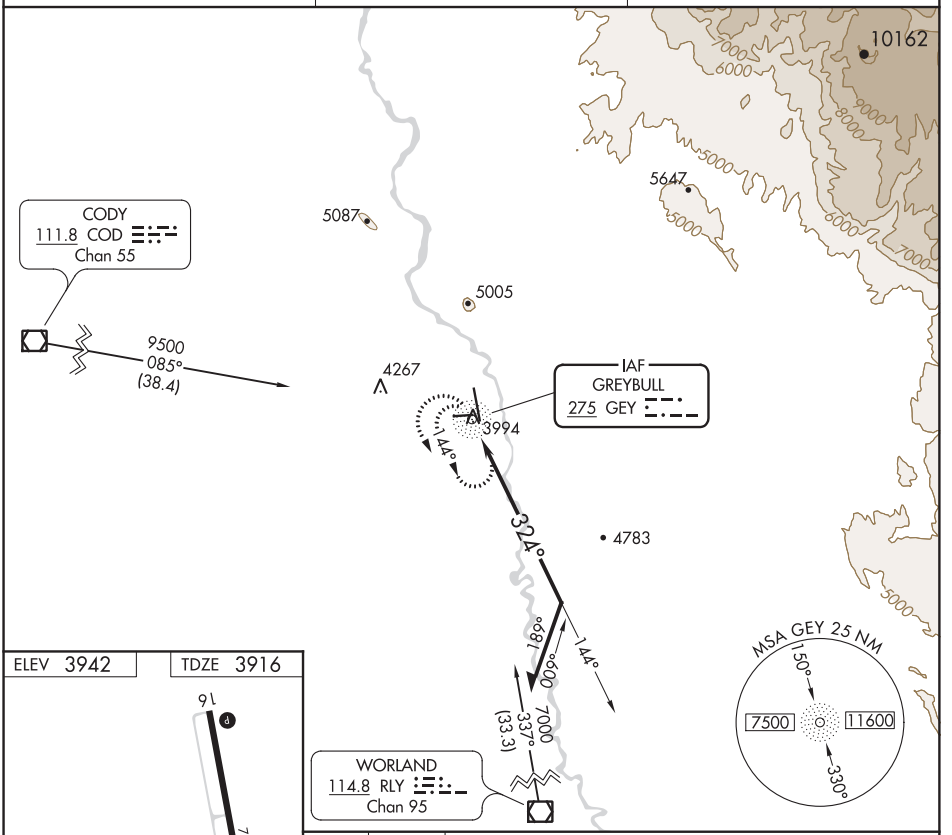
SOUTH BIG HORN COUNTY (GEY)

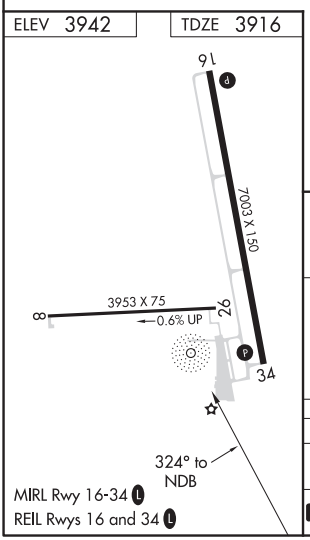
T
A NA
❄ -33°C

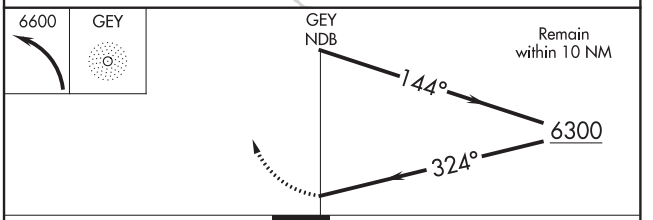
When local altimeter setting not received, use Cowley/Lovell/Byron altimeter setting and increase all MDAs 100 feet.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(PECKK2.PECKK) 17285

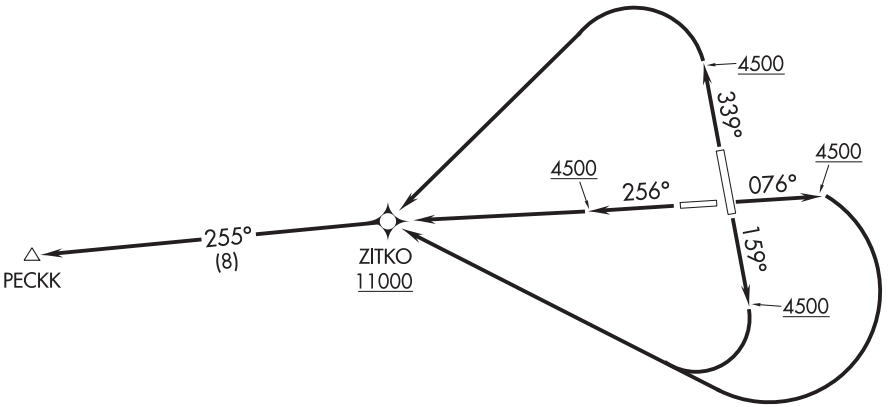
PECKK TWO DEPARTURE (RNAV)

AL-531 (FAA)

SOUTH BIG HORN COUNTY (GEY)
GREYBULL, WYOMING

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5060
CH 69426	321°	TDZE	4380
W32A		Apt Elev	4402

RNAV (GPS) RWY 32

CAMP GUERNSEY (GUR)

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.

NA

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

MISSED APCH FIX

7 NM 141° 321° POLDE

R-7001 A & B

When R-7001 active, procedure NA.

5656

KACTI

Procedure NA for arrivals at KACTI on V247 southeast bound.

8100 211° (20.9)

KEDPE

299° (20.4)

4818 4573 4573 4882 RW32 4634 4773 5260

(FAF) MULLI

6100 321° (6.1)

(IF/IAF) UBODE

141° 321° 7 NM

7600 035° (8.3)

HOCXU

Procedure NA for arrivals at HOCXU on V547 southeast bound.

MSA RW32 25 NM 9000

ELEV 4402 TDZE 4380

TWR 4433

5060 X 90

1.3% UP

32

321° to RW32

MIRL Rwy 14-32 L

9000	KEDPE	tr 299°	POLDE

Visual Segment - Obstacles.

UBODE 7 NM Holding Pattern

MULLI 141° 6900 321° 321°

RW32 6100

5.4 NM 6.1 NM

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NDB RWY 32

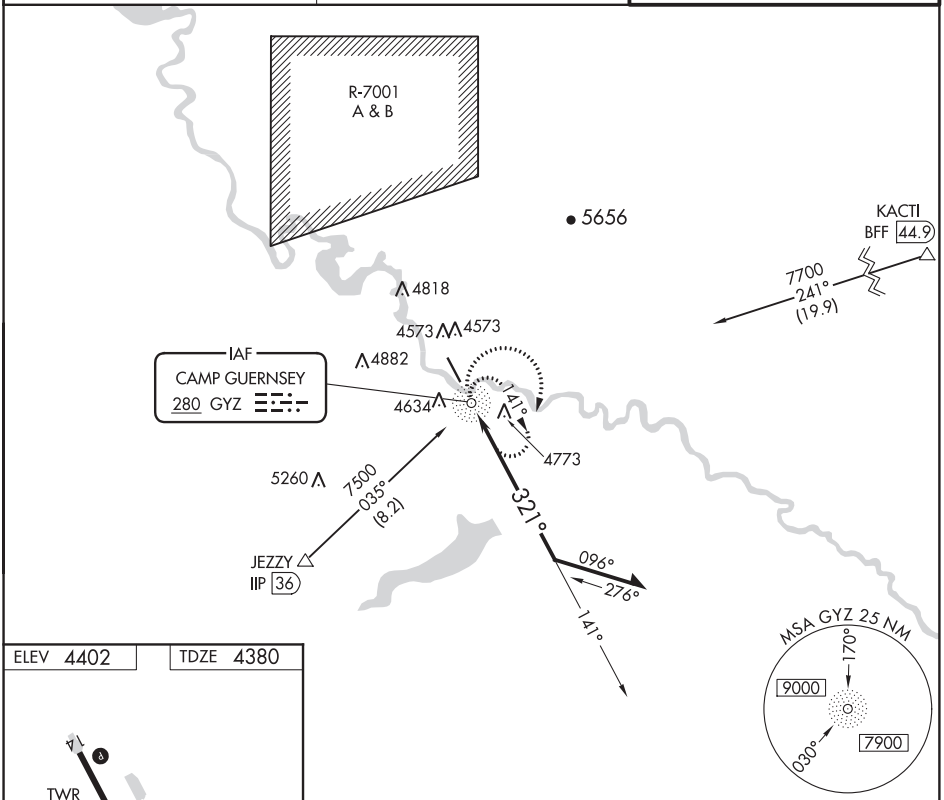
CAMP GUERNSEY (GUR)

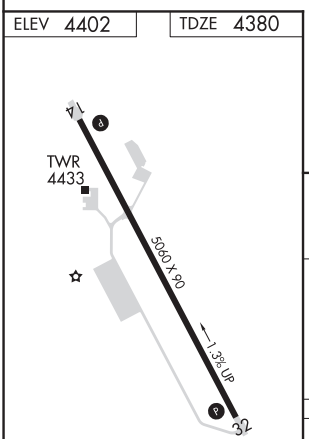
NDB GYZ	APP CRS	Rwy Idg	5060
280	321°	TDZE	4380
		Apt Elev	4402

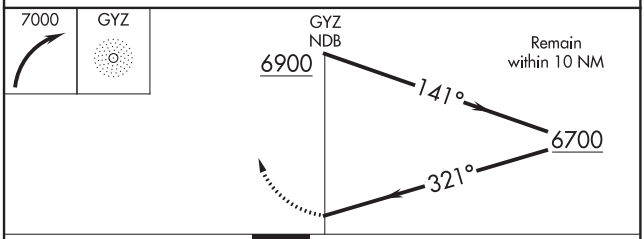
NA Rwy 32 helicopter visibility reduction below ¾ SM NA.

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





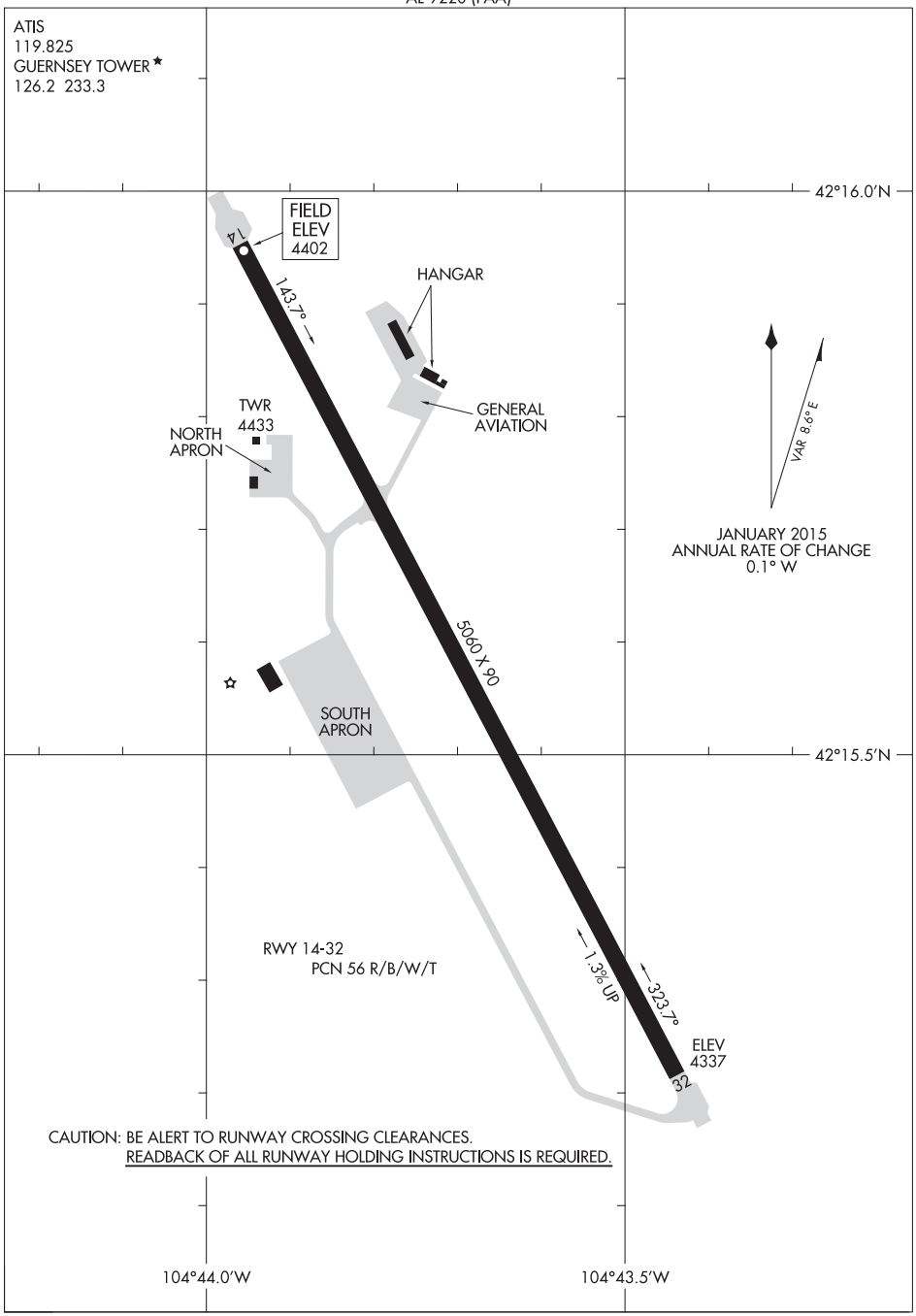


MIRL Rwy 14-32 L

CATEGORY	A	B	C	D
S-32	5660-1¼ 1280 (1300-1¼)	5660-1½ 1280 (1300-1½)	5660-3 1280 (1300-3)	
C CIRCLING	5660-1¼ 1258 (1300-1¼)	5660-1½ 1258 (1300-1½)	5660-3 1258 (1300-3)	5740-3 1338 (1400-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

AL-9220 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

HAILEY, IDAHO

AL-6239 (FAA)

16315

RNAV (GPS) X RWY 31

FRIEDMAN MEMORIAL (SUN)

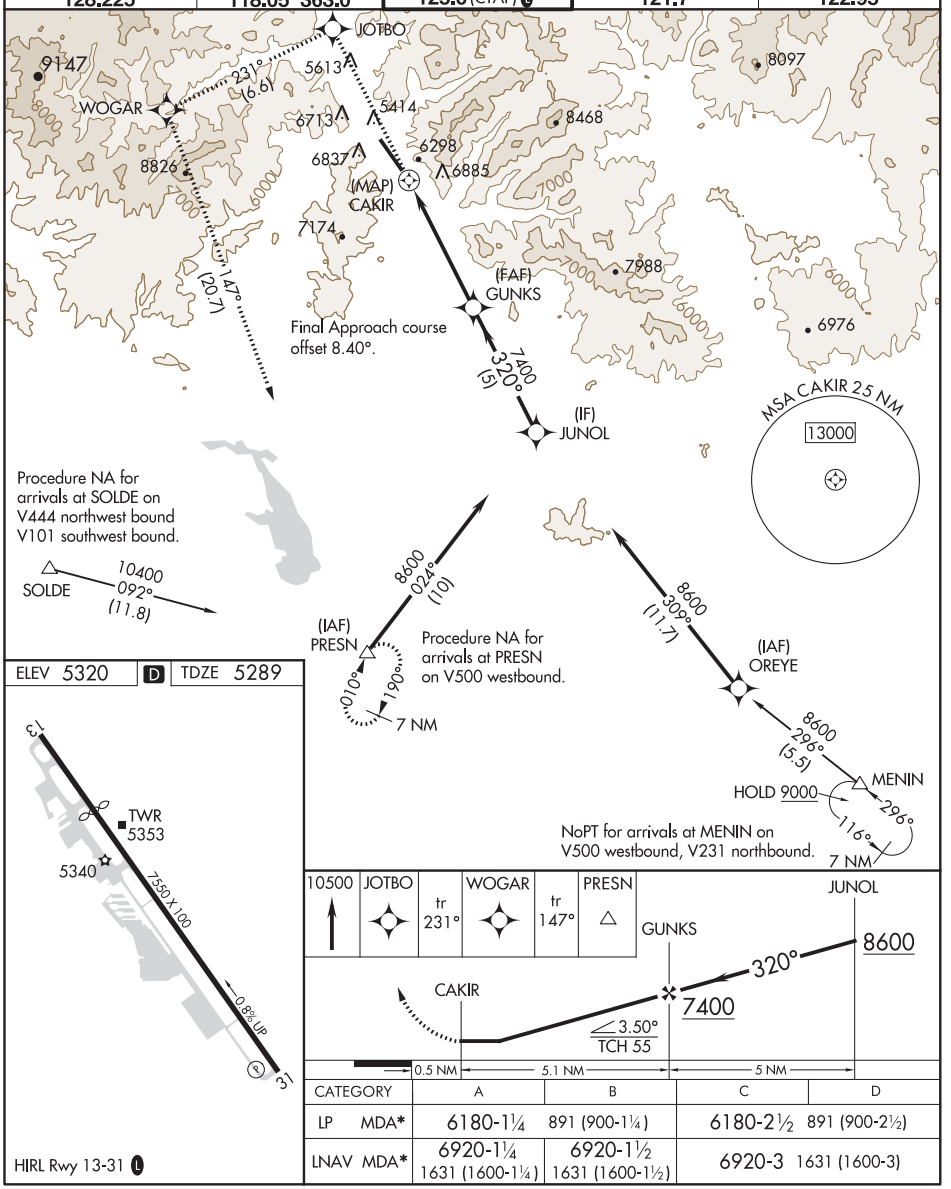
WAAS	APP CRS	Rwy Idg	6631
CH 77639	320°	TDZE	5289
W31A		Apt Elev	5320

T A -16°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)

HAILEY, IDAHO

Orig 21JUL16

43°30'N-114°18'W

FRIEDMAN MEMORIAL (SUN)

RNAV (GPS) X RWY 31

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 31

FRIEDMAN MEMORIAL (SUN)

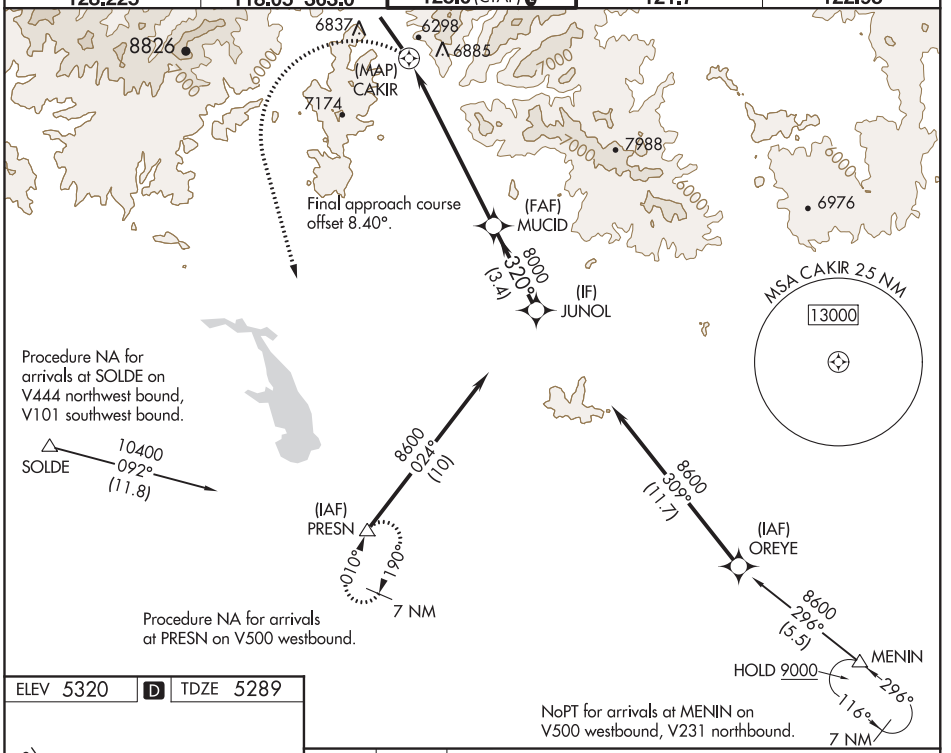
WAAS	APP CRS	Rwy Idg	6631
CH 62939	320°	TDZE	5289
W31B		Apt Elev	5320

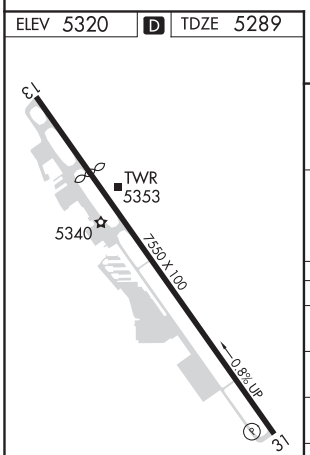
T A -16°C

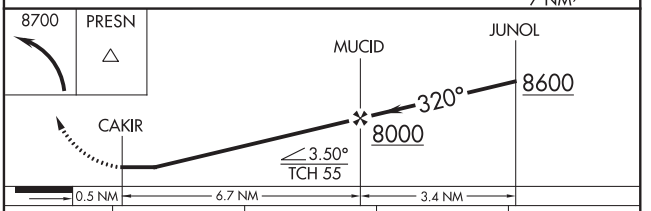
Circling NA northeast of Rwy 13-31. DME/DME RNP-0.3 NA. Rwy 31 helicopter visibility reduction below 1 SM NA.

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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HAILEY, IDAHO | AL-6239 (FAA) | 16315

NDB/DME-A

FRIEDMAN MEMORIAL (SUN)

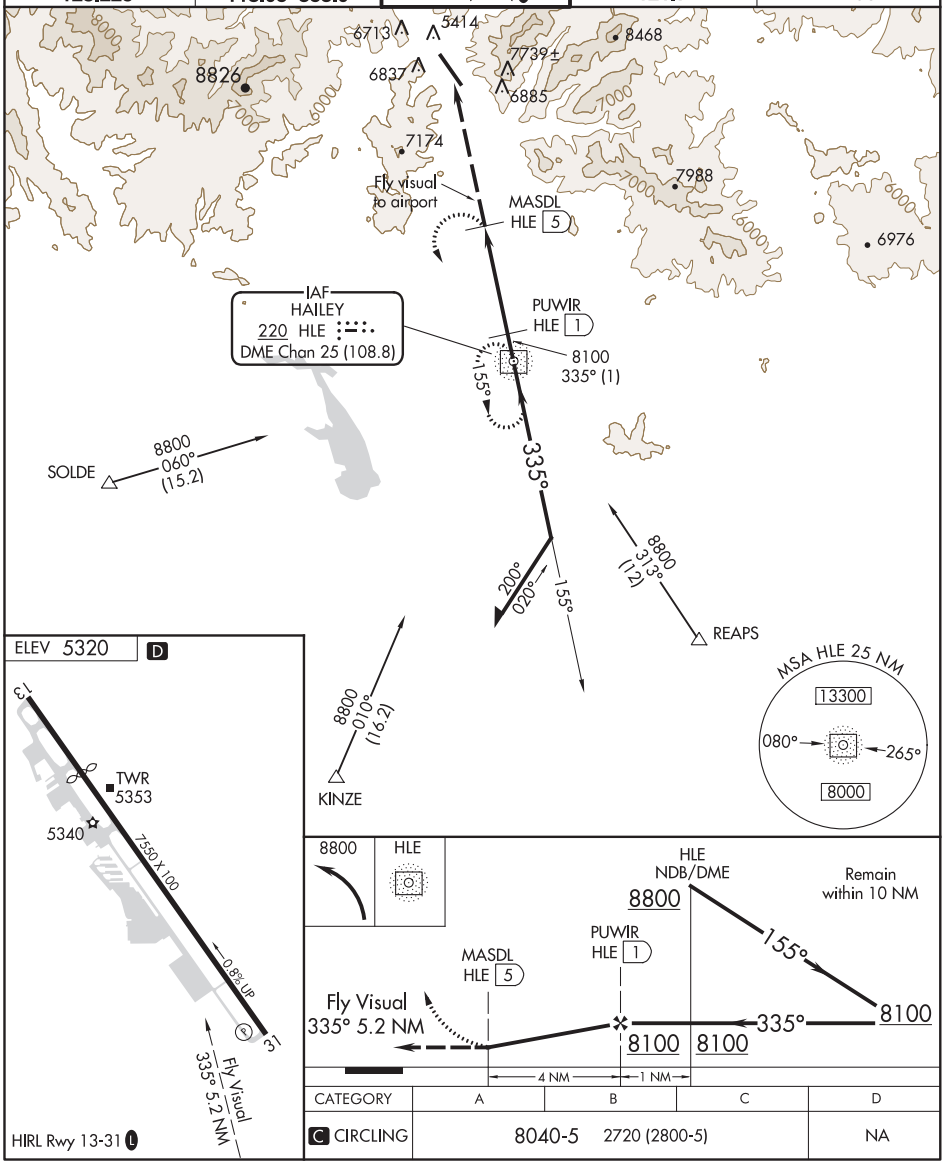
NDB/DME HLE	APP CRS	Rwy Idg	N/A
220	335°	TDZE	N/A
Chan 25 (108.8)		Apt Elev	5320

T
A NA
-16°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

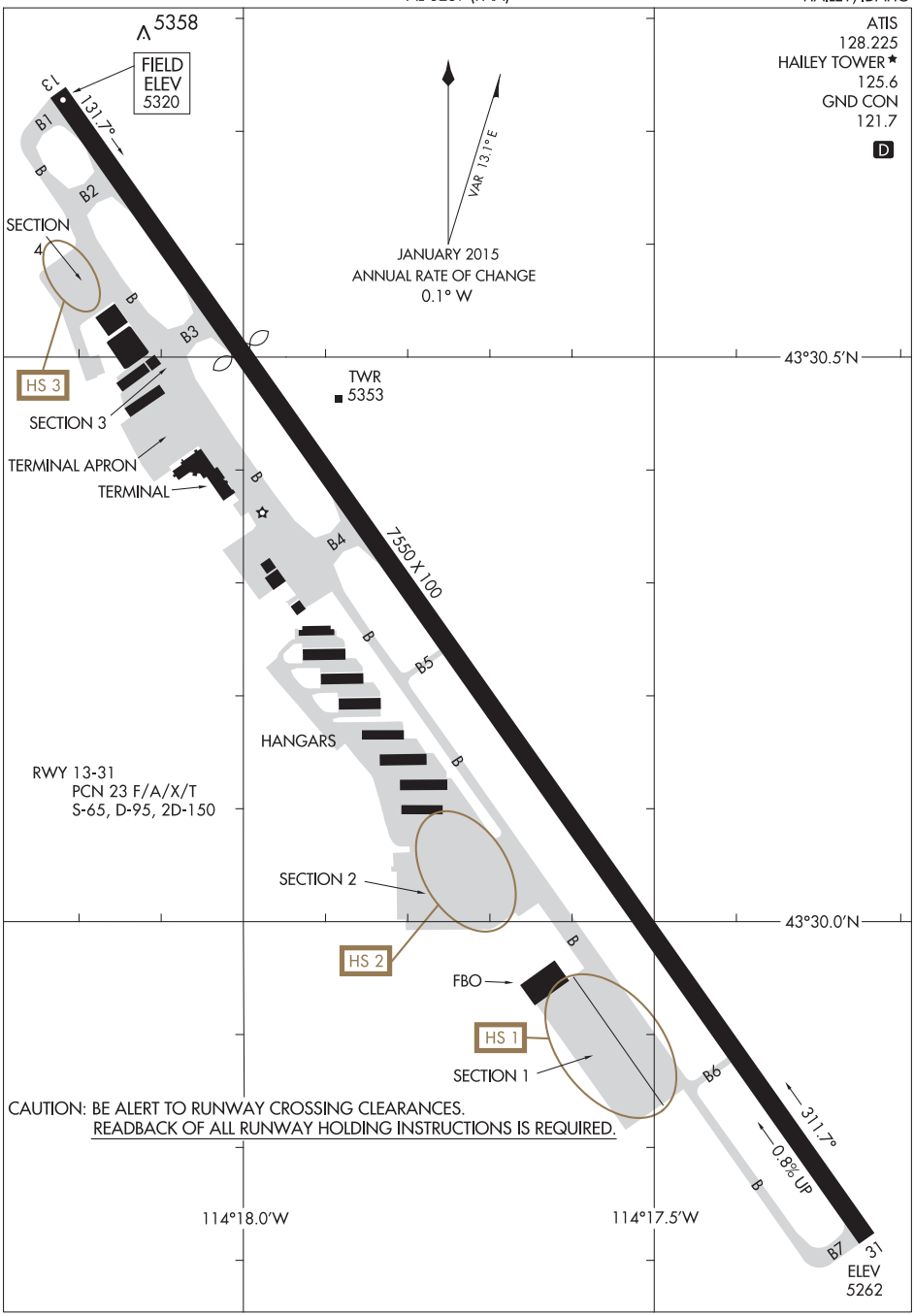
HAILEY, IDAHO
Amdt 1 06FEB14

43°30'N-114°18'W

FRIEDMAN MEMORIAL (SUN)
NDB/DME-A

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

(AUREL3.SIRPE) 17341

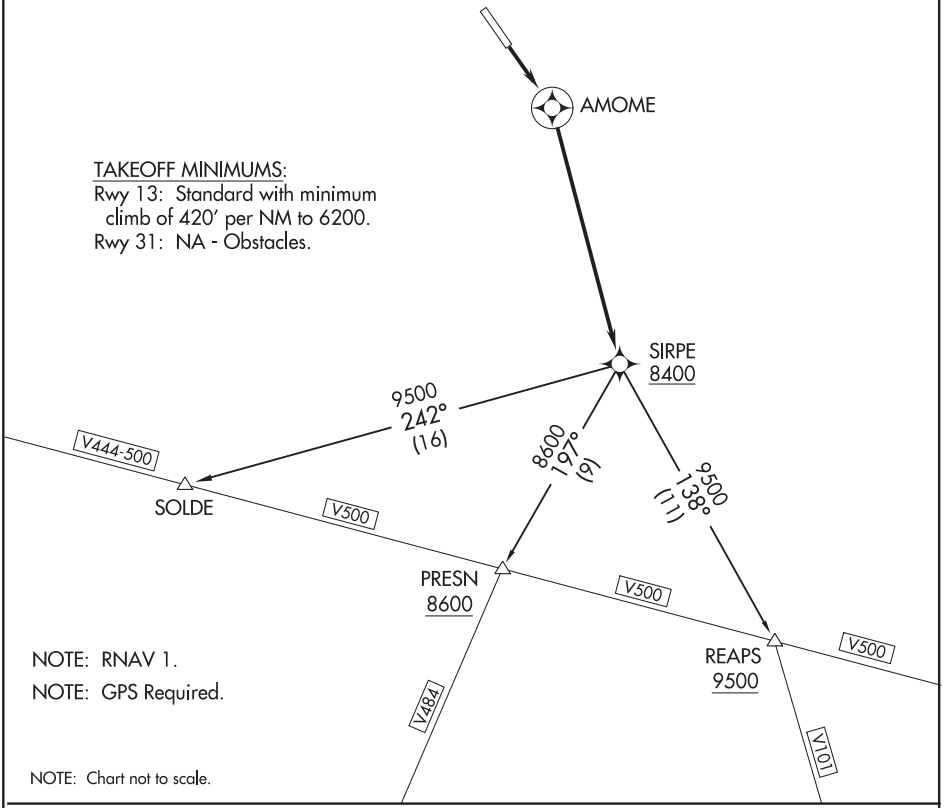
AURELIA THREE DEPARTURE (RNAV)

AL-6239 (FAA)

FRIEDMAN MEMORIAL (SUN)
HAILEY, IDAHO

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



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)

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	N/A
163°	TDZE	N/A
	Apt Elev	3642

RNAV (GPS)-A
RAVALLI COUNTY (6S5)

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

NoPT for arrival on MSO VOR/DME airway radials 239° CW 055°.

7 NM 147° 327° MISSOULA MSO

HOLD 11000 147° (114.4) 9200

6 NM 183° 003° (IAF) MEXUE

6900 183° (12.1)

ILUGE 357° (20.2)

(8.2) 5600 169°

(FAF) HAMEY 163°

RW16 3898± 3779±

5621

MSA RW16 25 NM 11400

7646 7105 7215 7723 7820 9587 7370 9351 8160 8468 8320 8886 8127 8656 7104

ELEV 3642

163° to RW16

91

0.9% UP

4200 X 75

34

MIRL Rwy 16-34 L

10000	HAMEY	tr 357°	MEXUE

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 35).

ILUGE HAMEY 6900 169° 3.25° TCH 32 RW16 163° 5600 Procedure Turn NA

5.7 NM 8.2 NM

CATEGORY	A	B	C	D
CIRCLING	4660-1¼ 1018 (1100-1¼)	4660-1½ 1018 (1100-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HAMILTON, MONTANA | AL-9473 (FAA) | 19115

APP CRS	Rwy Idg	N/A
001°	TDZE	N/A
	Apt Elev	3642

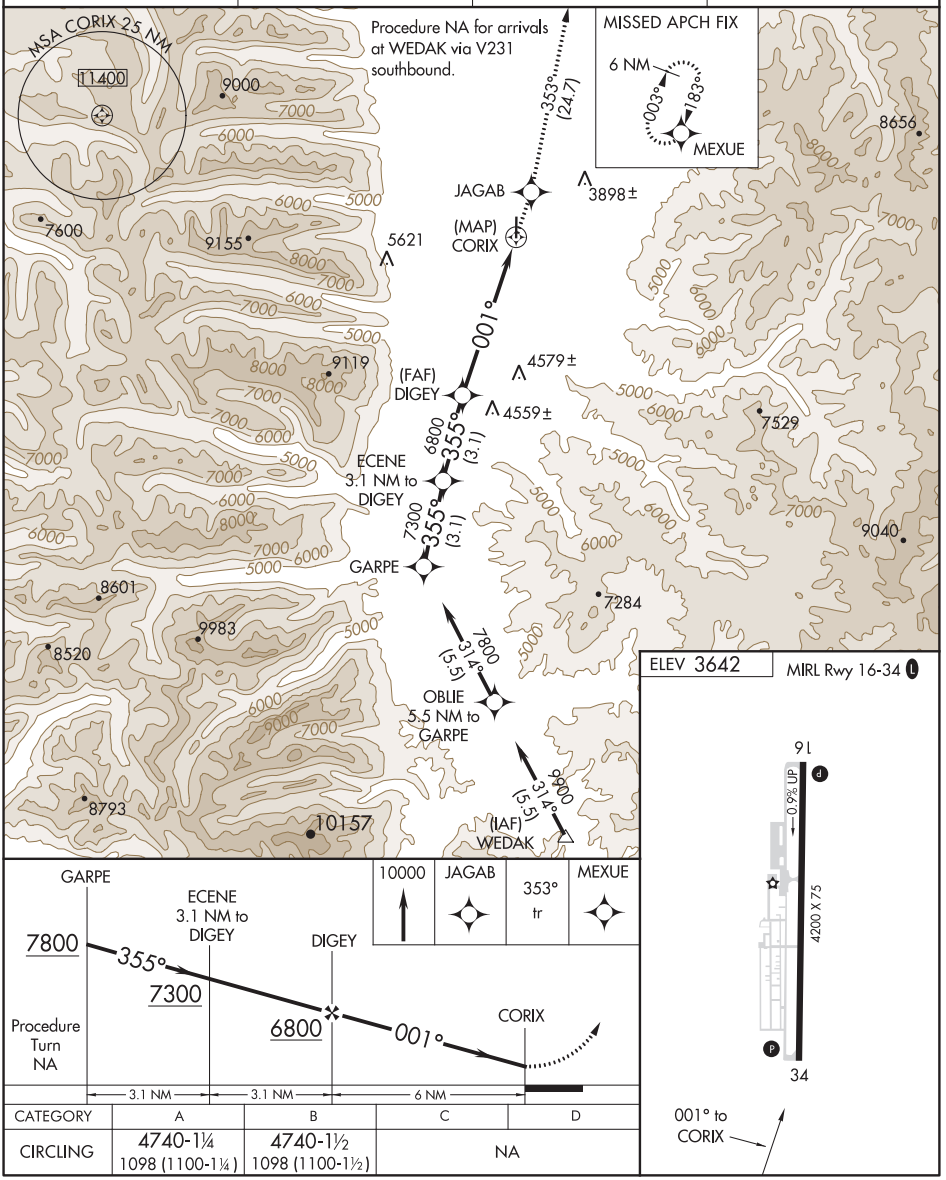
RNAV (GPS)-B
RAVALLI COUNTY (6S5)

DME/DME RNP-0.3 NA.
When local altimeter setting not received, procedure NA.
Procedure NA at night.

NA
-23°C

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



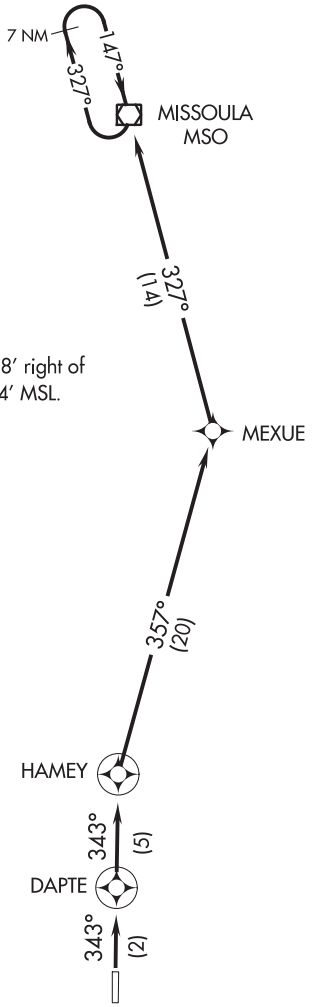
CATEGORY	A	B	C	D
CIRCLING	4740-1¼ 1098 (1100-1¼)	4740-1½ 1098 (1100-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020

HAMILTON, MONTANA
Orig-A 08APR10

46°15'N-114°08'W

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 9

WHEATLAND COUNTY AT HARLOWTON (HWQ)

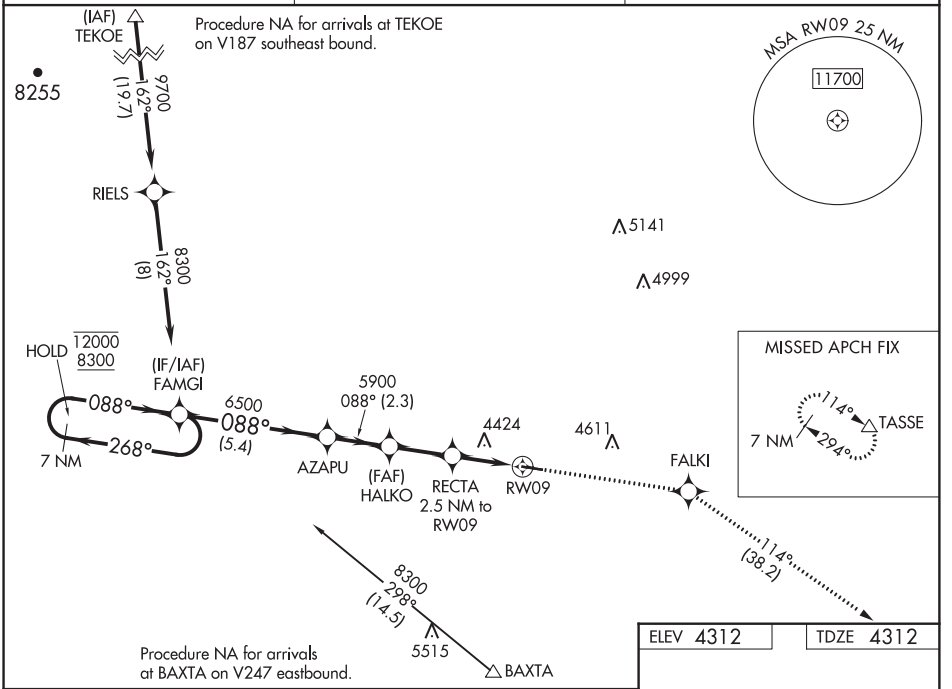
WAAS CH 99443 W09A	APP CRS 088°	Rwy Idg 4200 TDZE 4312 Apt Elev 4312

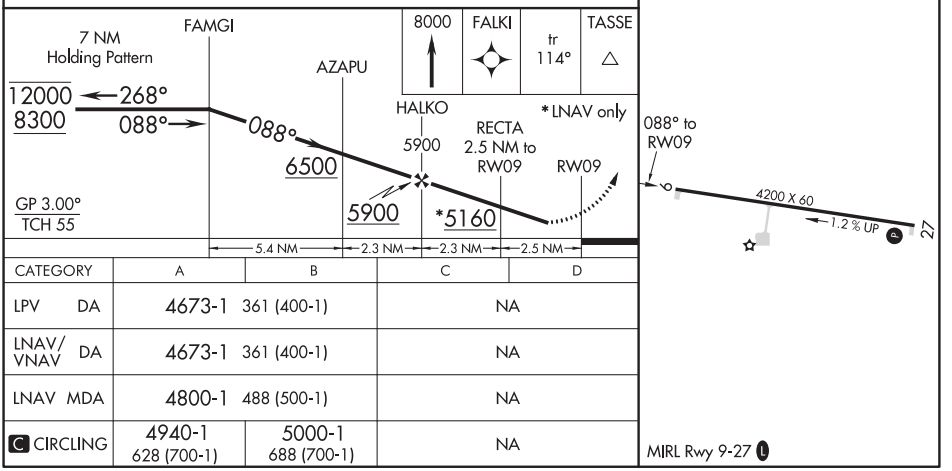
RNP APCH.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 8

HAVRE CITY-COUNTY (HVR)

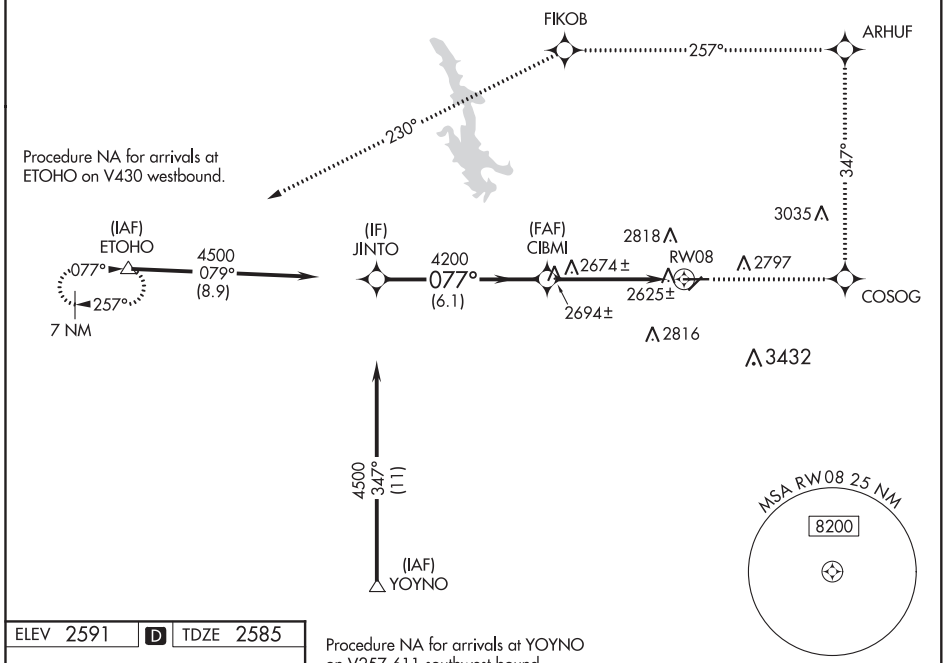
WAAS CH 99316 W08A	APP CRS 077°	Rwy Idg 5205 TDZE 2585 Apt Elev 2591

RNP APCH.

T
-30°C For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

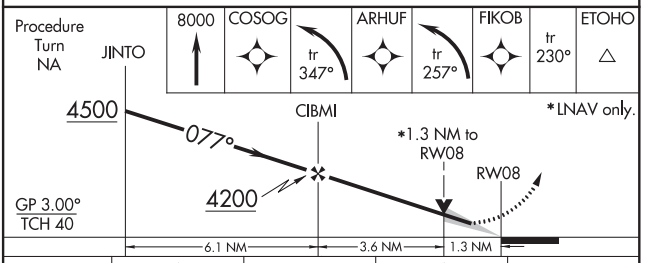
MISSED APPROACH: Climb to 8000 direct COSOG and left on track 347° to ARHUF and left turn on track 257° to FIKOB and on track 230° to ETOHO and hold.

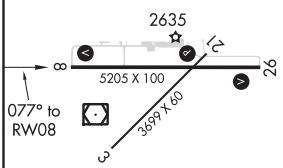
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.225	133.4 285.4	122.5	122.8 (CTAF) L



ELEV 2591	D	TDZE 2585

Procedure NA for arrivals at YOYNO on V257-611 southwest bound.





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)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HAVRE, MONTANA | AL-5575 (FAA) | 19171

RNAV (GPS) RWY 26

HAVRE CITY-COUNTY (HVR)

WAAS	APP CRS	Rwy Idg	5205
CH 48816	257°	TDZE	2586
W26A		Apt Elev	2591

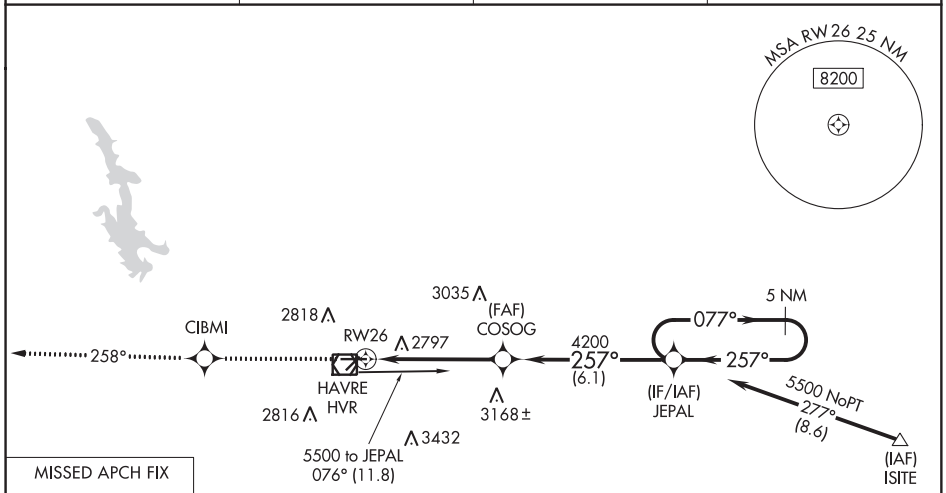
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

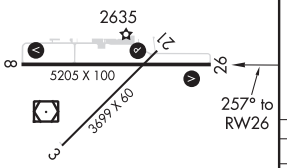
-30°C

MISSED APPROACH: Climb to 8000 direct CIBMI and on track 258° to ETOHO and hold, continue climb-in-hold to 8000.

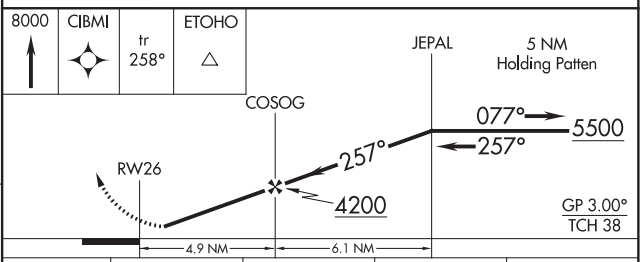
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.225	133.4 285.4	122.5	122.8 (CTAF) L



ELEV 2591 | D | TDZE 2586



REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME HVR	APP CRS	Rwy Idg	5205
111.8	094°	TDZE	2585
Chan 55		Apt Elev	2591

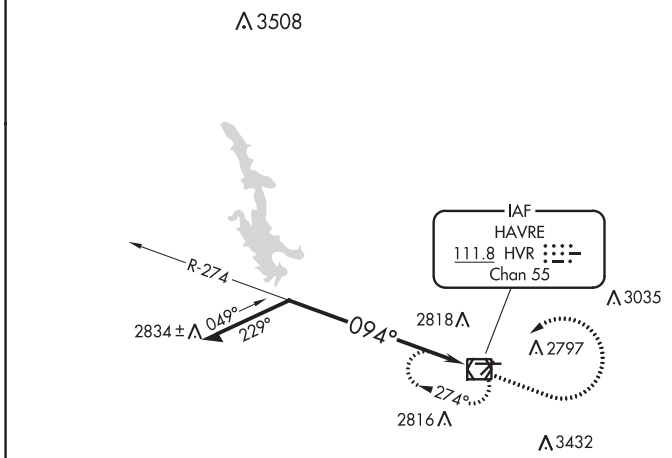
VOR RWY 8

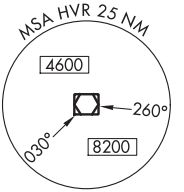
HAVRE CITY-COUNTY (HVR)

T
-30°C

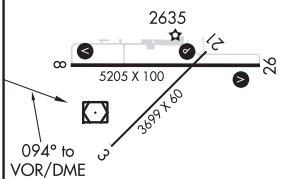
MISSED APPROACH: Climb to 3500 then climbing left turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

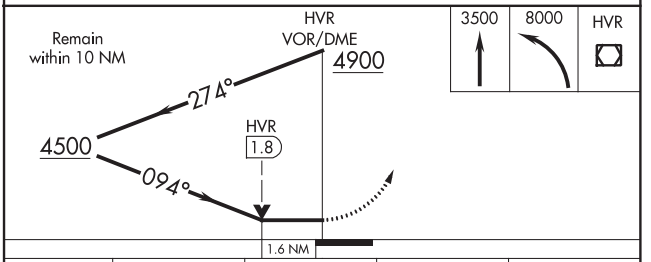
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.225	133.4 285.4	122.5	122.8 (CTAF) L





ELEV 2591 D TDZE 2585





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)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

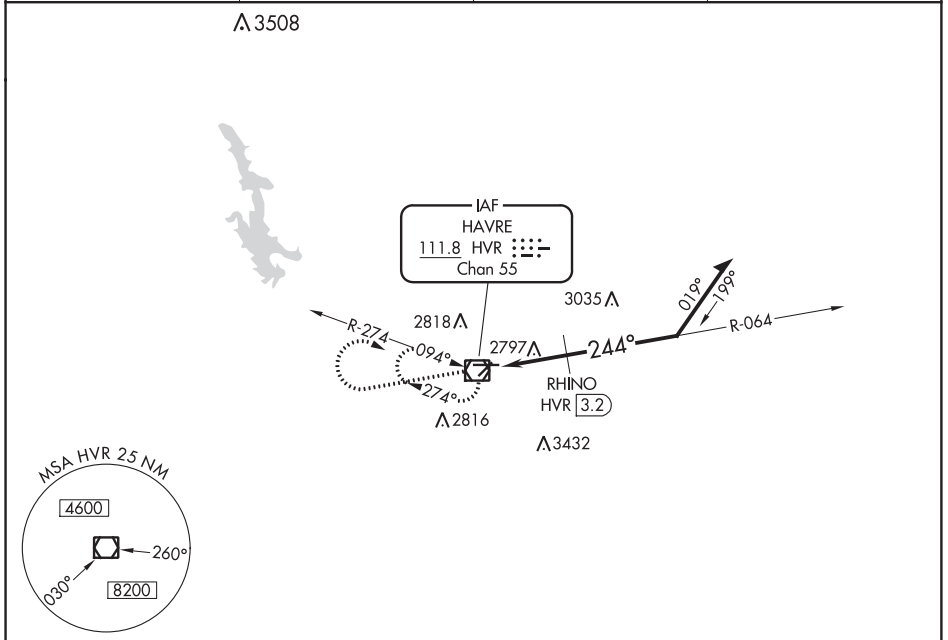
VOR/DME HVR	APP CRS	Rwy Idg	5205
111.8	244°	TDZE	2586
Chan 55		Apt Elev	2591

VOR RWY 26
HAVRE CITY-COUNTY (HVR)

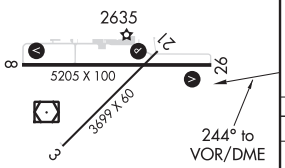
T
A
-30°C

MISSED APPROACH: Climb to 4500 then climbing right turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

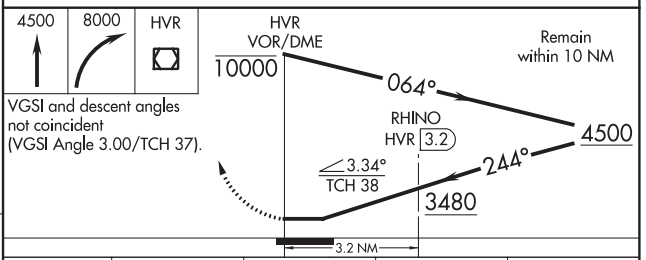
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.225	133.4 285.4	122.5	122.8 (CTAF) L



ELEV 2591 D TDZE 2586

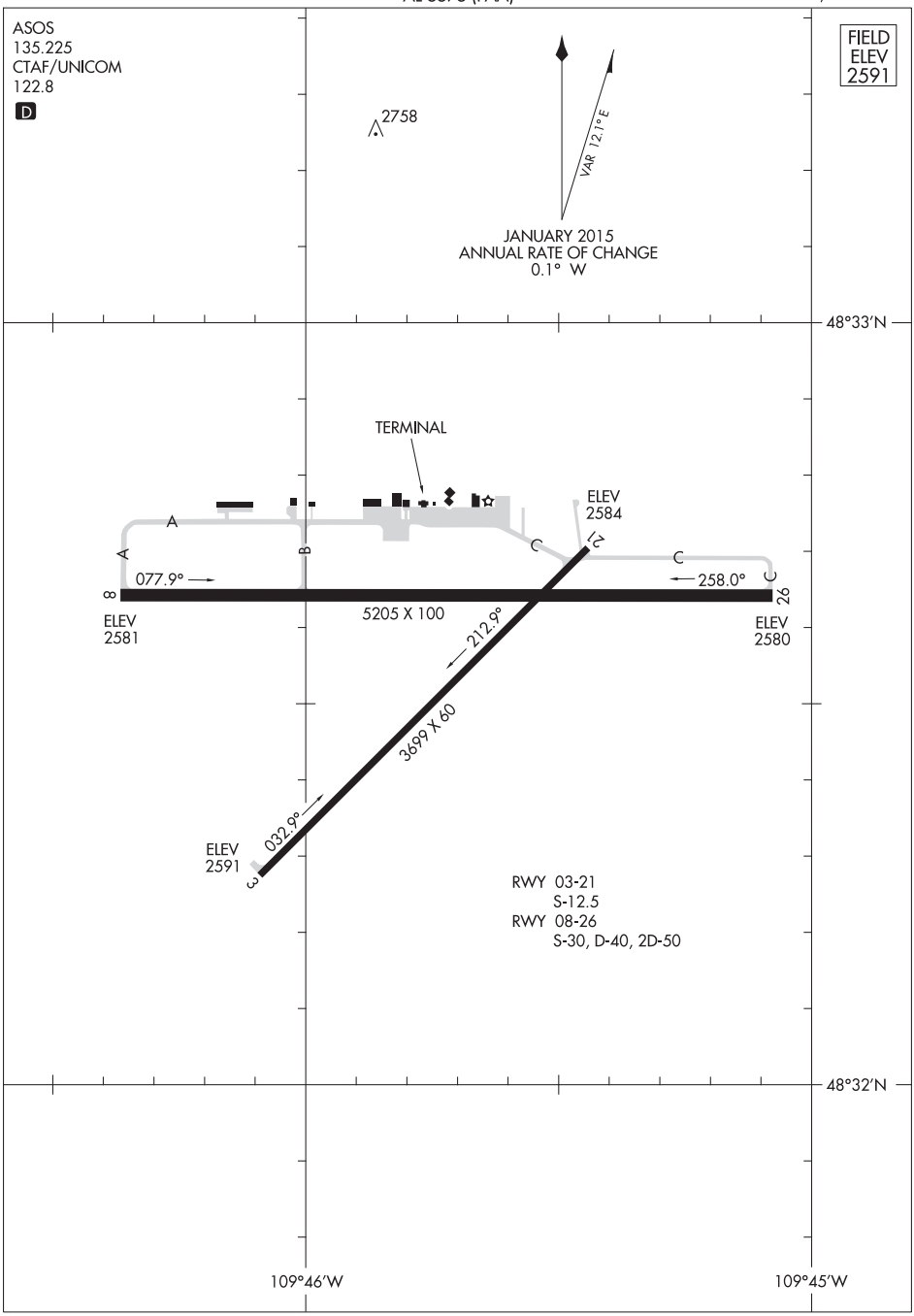


REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

HELENA, MONTANA | AL-192 (FAA) | 19171

ILS or LOC Y RWY 27

HELENA RGNL (HLN)

LOC I-HLN	APP CRS		
110.1	267°	Rwy Idg	9000
		TDZE	3852
		Apt Elev	3877

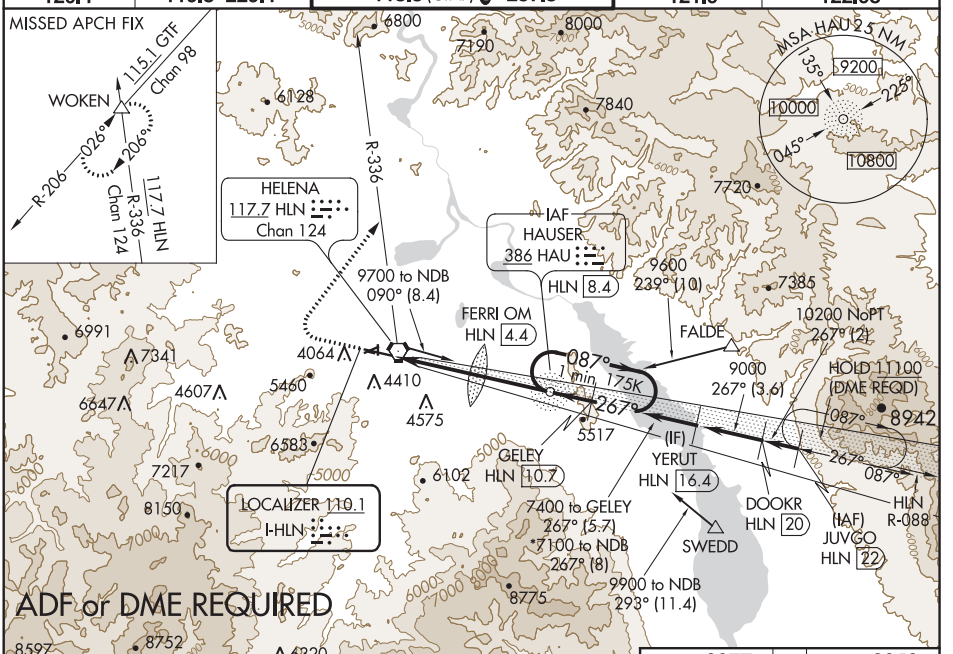
T A -21°C

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.

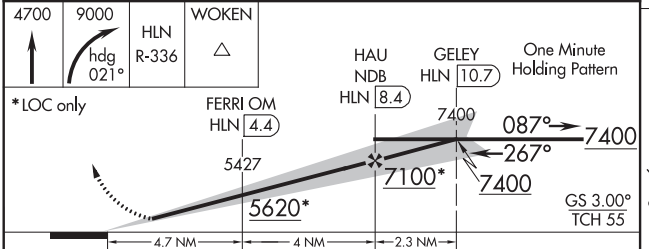
ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95

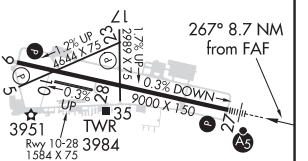


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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)		
CIRCLING	5620-1¼ 1743 (1800-1¼)	5620-1½ 1743 (1800-1½)	5620-3 1743 (1800-3)		
FERRI FIX MINIMUMS*					
S-LOC 27	4580-½ 728 (800-½)		4580-1⅝ 728 (800-1⅝)		
CIRCLING	4640-1 763 (800-1)		4740-2½ 863 (900-2½)	4740-2¾ 863 (900-2¾)	4940-3 1063 (1100-3)

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

LOC I-HLN	APP CRS		
110.1	267°	Rwy Idg	9000
		TDZE	3852
		Apt Elev	3877

ILS or LOC Z RWY 27

HELENA RGNL (HLN)

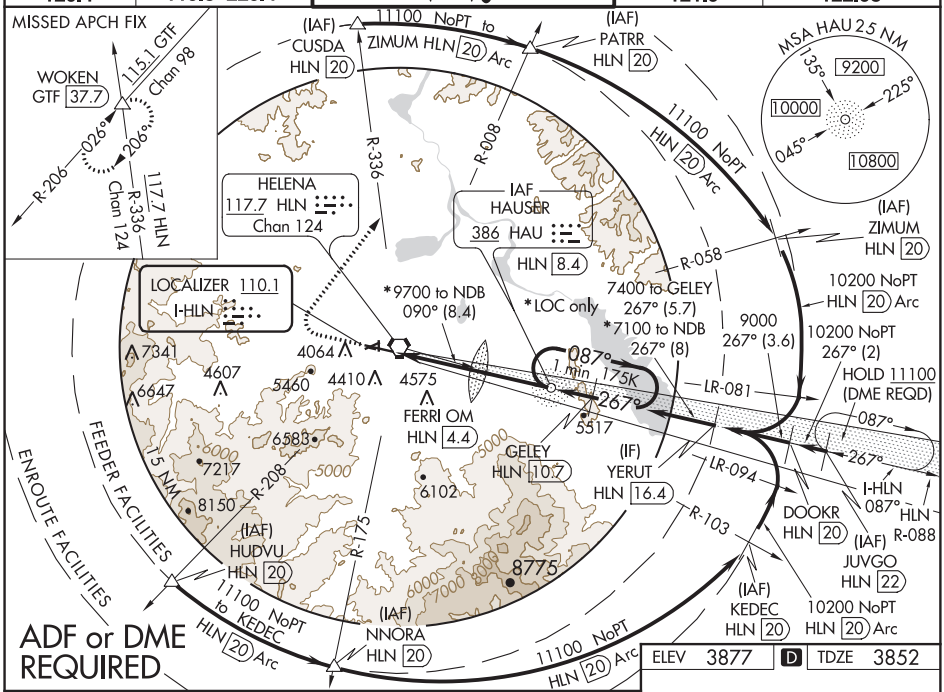
T A ❄ -21°C

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.

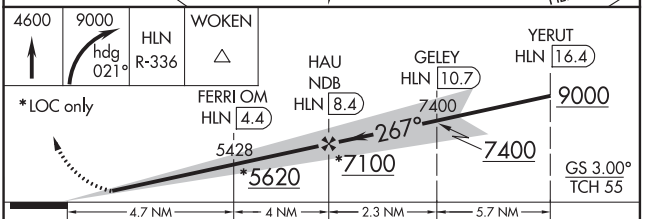
MALSR

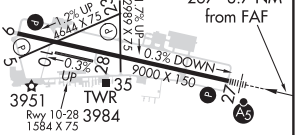
MISSED APPROACH: Climb to 4600 then climbing right turn to 9000 on heading 021° and HLN VORTAC R-336 to WOKEN/ GTF 37.7 DME and hold.

ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) Ⓛ 257.8	121.9	122.95



ELEV 3877 Ⓓ 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 Ⓛ
MIRL Rwys 5-23 and 17-35 Ⓛ
HIRL Rwy 9-27 Ⓛ

FAF to MAP 8.7 NM					
Knots	60	90	120	150	180
Min:Sec	8:42	5:48	4:21	3:29	2:54

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NW-1, 30 JAN 2020 to 26 MAR 2020

HELENA, MONTANA | AL-192 (FAA) | 19171

RNAV (RNP) Y RWY 27

HELENA RGNL (HLN)

APP CRS	Rwy Idg	TDZE	Apt Elev
267°	9000	3852	3877

T A -21°C

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.

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

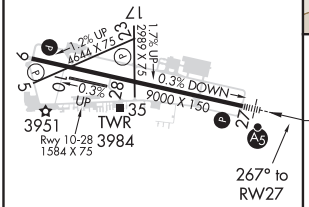
Procedure NA for arrivals on HIA VOR/DME airway radials 276 CW 185 and for arrivals on HLN VORTAC airway radials 009 CW 255 and for arrivals at SUZZY via V343 westbound.

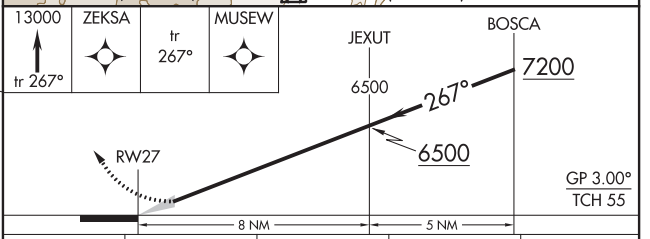
MUSEW 267° (3.7) 267° (4.5) (RF REQD) (RNP 0.50) (IAF) HELENA HLN 267° (2.2) 3956 4064 RW27 5460 4607 ZEKSA 4410 4575 10000 153° (10.7) 6583 6102 5000 3000 6000 8000 267° (8) (FAF) JEXUT 9500 267° (5) 5517 (IF) BOSCA 7200 308° (7.8) 7200 (15.5) (IAF) SWEDD (RNP 0.50) CEMLI 8775 10000 (11.9) DULCA 230K (6.4) 9000 9100 027° (20.3) 9440 10500 022° (18.4) WHITEHALL HIA (RF REQD) (RNP 0.50) (IAF) SUZZY (RF REQD) (RNP 0.50) FAVTA 230K MSA RW 27 25 NM 10700 (IAF) URELE (RNP 0.50) 240K until FALDE 7385 (IAF) LINGE (RNP 0.50) 9000 223° (11.5) 9300 169° (21) FALDE 7200 222° (6.5) (IAF) HEXOL (RNP 0.50) 9000 254° (15.2)

MISSED APCH FIX

086° PIXXI 8 NM 266° 271° (11.9) KELTY 261° (9.6) JEBSI

ELEV 3877 D TDZE 3852





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

HELENA, MONTANA
Orig-D 11DEC14

46°36'N-111°59'W

HELENA RGNL (HLN)

RNAV (RNP) Y RWY 27

NW-1, 30 JAN 2020 to 26 MAR 2020

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RNAV (RNP) Z RWY 9

HELENA RGNL (HLN)

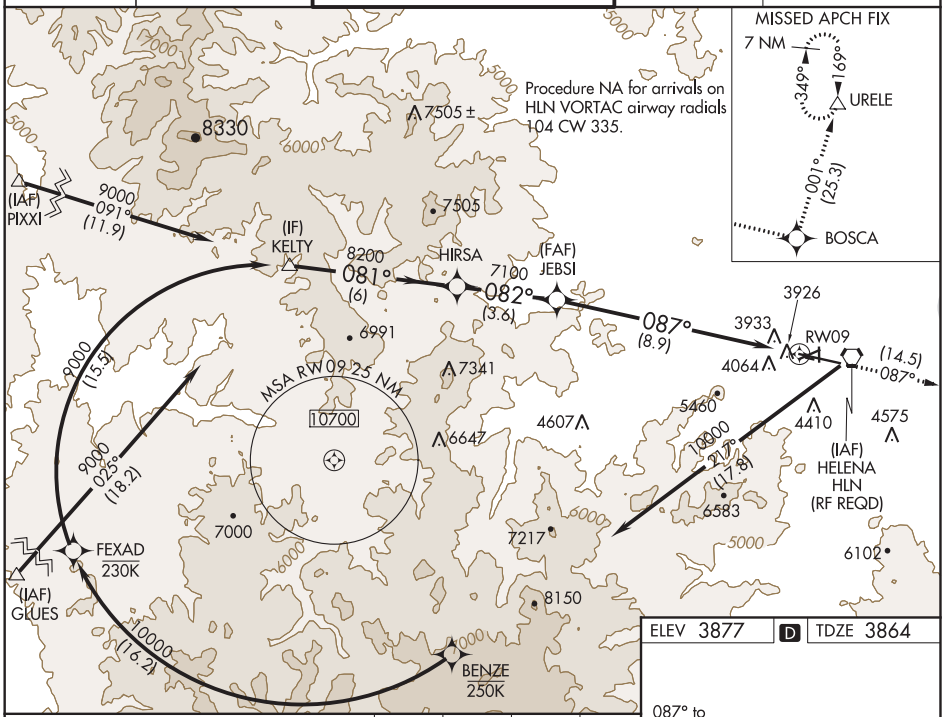
APP CRS	Rwy Idg	9000
087°	TDZE	3864
	Apt Elev	3877

T A -21°C

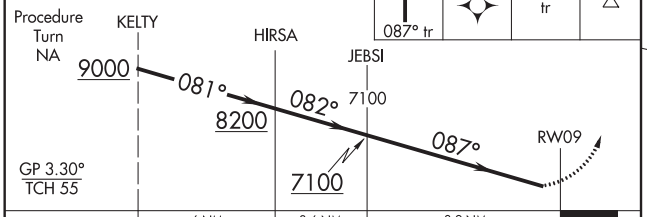
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 54°C (130°F). When VGSI inoperative, procedure NA at night.
*Missed approach requires minimum climb of 260' per NM to 4300.

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



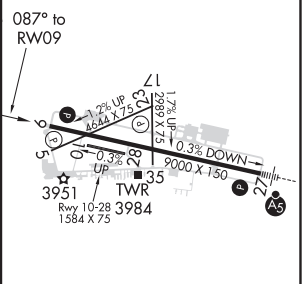
12000	BOSCA	001°	URELE
087° tr		tr	



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

ELEV 3877 D TDZE 3864



REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

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RNAV (RNP) Z RWY 27

HELENA RGNL (HLN)

APP CRS	Rwy Idg	9000
267°	TDZE	3852
	Apt Elev	3877

T A -21°C — 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.

MALSR (A5)

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

Procedure NA for arrivals on HIA VOR/DME airway radials 276 CW 185 and for arrivals on HLN VORTAC airway radials 009 CW 265 and for arrivals at SUZZY via V343 westbound.

(RF REQD) (RNP 0.50) (IAF) HELENA HLN 3956

267° (10.4)

4064 ∧

5460

RW27

4410 ∧

∧ 4607

∧ 4575

10000 153° (10.7)

6583

6102

(FAF) JEXUT

267° (8)

6500

267° (5)

5517

(IF) BOSCA

(IAF) URELE (RNP 0.50)

7385

(IAF) LINGE (RNP 0.50)

9300 169° (21)

9000 223° (15.5)

7200 222° (6.5)

FALDE 240K via URELE

(IAF) HEXOL (RNP 0.50)

9000 254° (15.2)

7200 308° (7.9)

7200 (15.5)

(IAF) SWEDD (RNP 0.50)

CEMLI

MISSED APCH FIX

PIXXI 086° 8 NM

KELTY 271° (11.9)

JEBSI 266° 261° (9.6)

8775

MSA RW27 25 NM

10700

FAVTA 230K

DULCA 230K

6.4° 9000

10000 (11.9)

9100 027° (20.3)

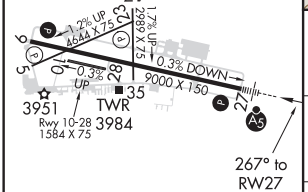
9440

10500 022° (18.4)

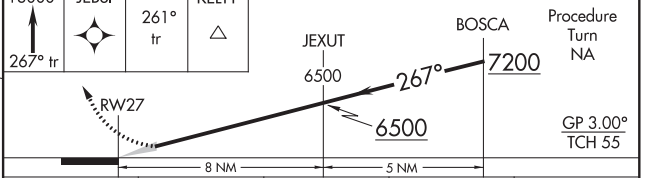
WHITEHALL HIA (RF REQD) (RNP 0.50)

(IAF) SUZZY (RF REQD) (RNP 0.50)

ELEV 3877 | D | TDZE 3852



13000	JEBSI	261° tr	KELTY
267° tr			



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

HELENA, MONTANA
Orig-B 30MAY13

46°36'N-111°59'W

HELENA RGNL (HLN)

RNAV (RNP) Z RWY 27

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RNAV (GPS) X RWY 27

HELENA RGNL (HLN)

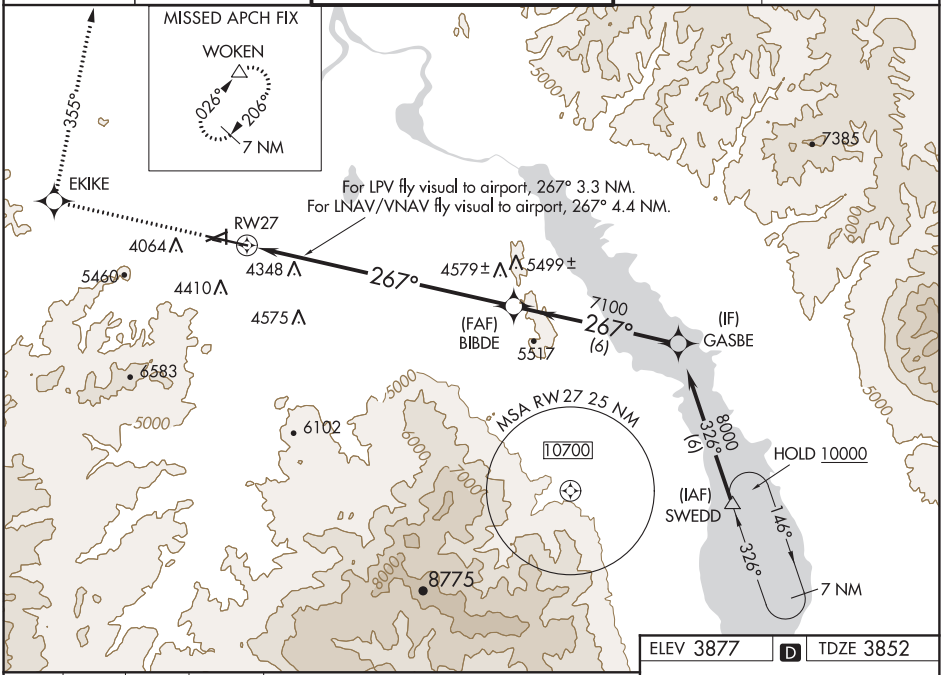
WAAS	APP CRS		
CH **69405**	**267°**	Rwy Idg	**9000**
W27A		TDZE	**3852**
		Apt Elev	**3877**

T A -21°C — 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.

MALSR

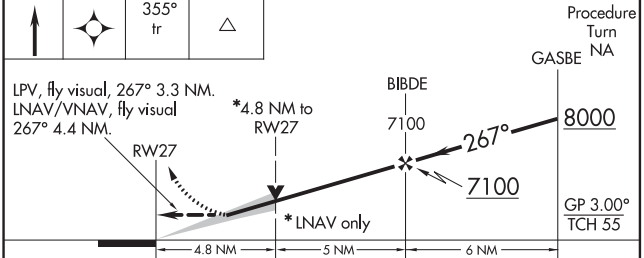
MISSED APPROACH: Climb to 9000 direct EKIKE and via 355° track to WOKEN and hold.

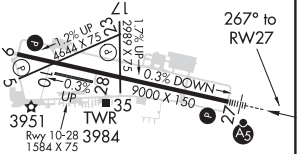
ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	**119.5 229.4**	**118.3** (CTAF) L **257.8**	**121.9**	**122.95**



ELEV 3877	D	TDZE 3852

9000	EKIKE	355° tr	WOKEN





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)	
CIRCLING	5440-1¼ 1563 (1600-1¼)	5440-1½ 1563 (1600-1½)	5440-3 1563 (1600-3)	

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

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APP CRS	Rwy Idg	9000
087°	TDZE	3864
	Apt Elev	3877

RNAV (GPS) Y RWY 9

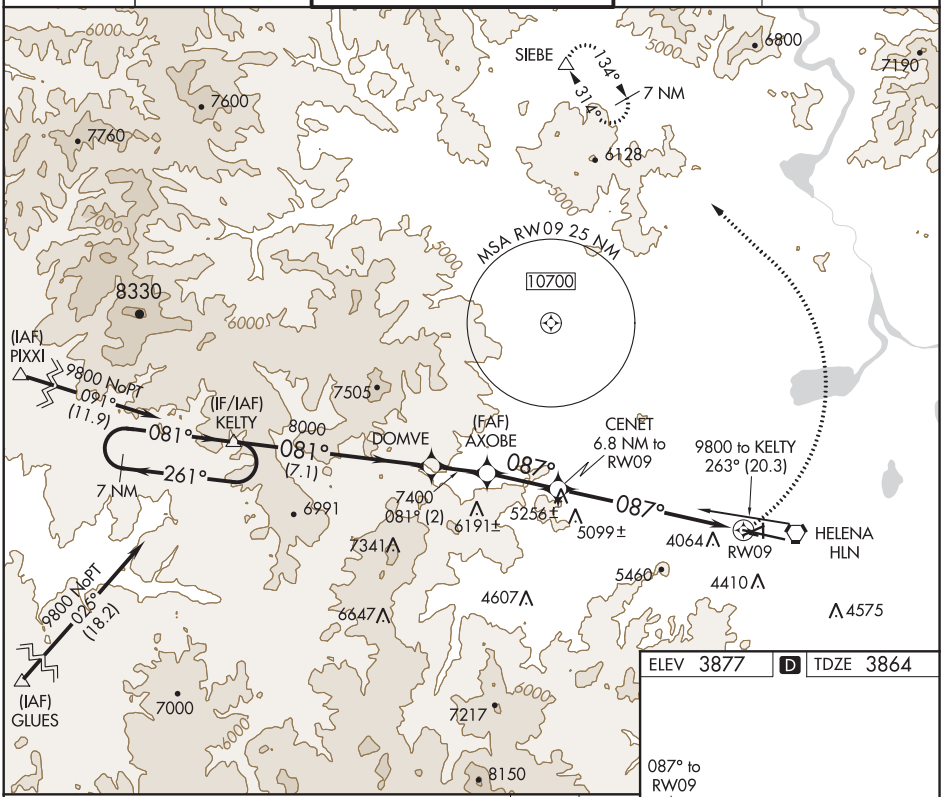
HELENA RGNL (HLN)

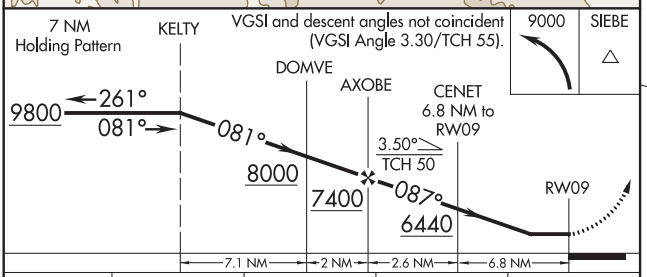
T
A
-21°C

Circling NA for Cat D south of Rwy 9-27.
DME/DME RNP- 0.3 NA.
Visibility reduction by helicopters NA.

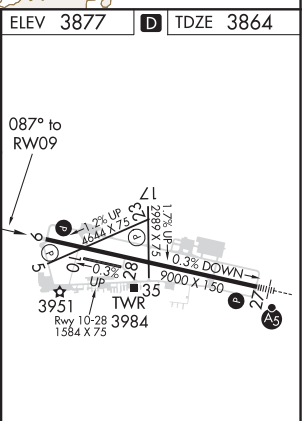
MISSED APPROACH: Climbing left turn to 9000 direct SIEBE and hold.

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





CATEGORY	A	B	C	D
LNAV MDA	5440-1¼ 1576 (1600-1¼)	5440-1½ 1576 (1600-1½)	5440-3 1576 (1600-3)	
CIRCLING	5440-1¼ 1563 (1600-1¼)	5440-1½ 1563 (1600-1½)	5440-3 1563 (1600-3)	



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LOC/DME BC-C

HELENA RGNL (HLN)

LOC I-HLN	APP CRS	Rwy Idg	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. -21°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

ALTERNATE MISSED APCH FIX
086°
266°
R-086
HELENA HLN 117.7 Chan 124

BACK COURSE

(IAF) USOBE HLN 13
6128
9000 HLN 13 Arc
7505 ±
8330
R-266
(IAF) RICHD HLN 19.7
267°
086°
266°
7505 (IF)
LIKVE HLN 13
LR-275
HOLD 9800
9000 to LIKVE 130° hdg (0.3) and 087° (6.5)
(EVAGE)
6991
UPUGE HLN 9
MUSEW HLN 7
SAKPE HLN 2.7
7800
087°
(4)
LR-256
7200
087° (2)
7341
4064
4054±
4410
5460
4607
6647
VOCSU HLN 13
R-228
6583
7000
7217
HLN 13 10900 Arc
R-208
8150
R-175
6102
(IAF) UGACE HLN 13
(IAF) ICADU HLN 13
8775

LOCALIZER 110.1 I-HLN
R-336

MISSED APCH FIX
WOKEN HLN 22.7
115.1 GTF Chan 98
026°
206°
R-206
R-336
117.7 HLN Chan 124

HELENA 117.7 HLN Chan 124

MSA HLN 25 NM
9200
135°
225°
9600
10200
045°
315°
10700

4575

ELEV 3877 D

17
23
5
10
28
35
2% UP
A64A X 75
7899 X 75
1.7% UP
0.3% DOWN
9000 X 150
0.3% UP
3951 TWR 3984
Rwy 10-28 1584 X 75

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

VGSI and descent angles not coincident (VGSI Angle 3.30/TCH 55).

LIKVE HLN 13
UPUGE HLN 9
MUSEW HLN 7
SAKPE HLN 2.7
9000
087°
7800
7200
5.96°
TCH 45
4 NM
2 NM
4.3 NM

9300 HLN R-336
WOKEN
Disregard GS indications.

CATEGORY	A	B	C	D
CIRCLING	5140-1¼ 1263 (1300-1¼)	5140-1½ 1263 (1300-1½)	5140-3 1263 (1300-3)	NA

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HELENA, MONTANA | AL-192 (FAA) | 19171

VOR/DME-B

HELENA RGNL (HLN)

VORTAC HLN	APP CRS	Rwy Idg	N/A
117.7	266°	TDZE	N/A
Chan 124		Apt Elev	3877

Circling NA for Cat D south of Rwy 9-27.
DME Arc to final approach course required for turbojet aircraft.
-21°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

MISSED APCH FIX
WOKEN
GTF 37.7
115.1 GTF
R-206
Chan 98
026°
206°
117.7 HLN
R-336
Chan 124

ALTERNATE MISSED APCH FIX
086°
266°
R-086
HELENA
HLN
117.7
Chan 124

(IAF) KOTLE HLN 15
10000
HLN 15 Arc
(IAF) TICUS HLN 15
7840
R-336
R-008
MSA HLN 25 NM
135°
9200
225°
9600
10200
045°
10700
315°
7720
HELENA
117.7 HLN
Chan 124
(IAF) HONVI HLN 15
R-058
(IAF) FAVOX HLN 15
7385
9400
8400 NoPT
HLN 15 Arc
R-073
LR-078
(IF) JOVIX HLN 15
JUBTI HLN 4
4064
4348
4410
4607
5460
4575
8300 to SEWAL
086° (8.4)
4979±
086°
1 min (175K)
266°
266°
(IAF) SEWAL HLN 8.4
5517
7300
266° (6.6)
R-086
R-103
8400 NoPT
HLN 15 Arc
LR-094
(IAF) CUSRI HLN 15
10000
HLN 15 Arc
R-124
R-175
R-208
6583
7217
6102
8150
8775
(IAF) JEVAM HLN 15
11100
HLN 15 Arc
(IAF) LOCIS HLN 15
HLN 15 Arc
HUDUB HLN 15
11100
HLN 15 Arc

ELEV 3877 D

17
1.7% UP
2289 X 75
C
6644 X 75
0.3% UP
0.3% DOWN
9000 X 150
35
TWR
3951
3984
Rwy 10-28
1584 X 75
A5

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

9000
HLN
R-336
WOKEN
SEWAL
HLN 8.4
One Minute Holding Pattern
JUBTI
HLN 4
HLN
VORTAC
086°
266°
7300
266°
5420
4 NM
4.4 NM

CATEGORY	A	B	C	D
CIRCLING	4760-1¼ 883 (900-1¼)		4760-2¾ 883 (900-2¾)	4760-3 883 (900-3)

HELENA, MONTANA
Amdt 7A 24JUL14

46°36'N-111°59'W

HELENA RGNL (HLN)
VOR/DME-B

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC HLN	APP CRS	Rwy Idg	N/A
117.7	266°	TDZE	N/A
Chan 124		Apt Elev	3877

VOR-A
HELENA RGNL (HLN)

Circling NA for Cat D south of Rwy 9-27.
Night Landing: Rwy 5, 23, 35 NA.
Helicopter visibility reduction below 1 SM NA.
-21°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

MISSED APCH FIX
WOKEN
GTF 37.7
115.1 GTF
Chan 98
R-206
026°
206°
117.7 HLN
Chan 124
R-336

ALTERNATE MISSED APCH FIX
086°
266°
R-086
HELENA
HLN
117.7
Chan 124

IAF
HELENA
117.7 HLN
Chan 124

R-336
266°
041°
221°
R-086
6128
7505
7341
4064
5460
4410
4607
4575
5459±
6647
5517
6583
7217
6102
8150
8775
MSA HLN 25 NM
135°
225°
045°
315°
9200
9600
10200
10700

ELEV 3877 D

9000
HLN
R-336
WOKEN

HLN VORTAC
086°
266°
8200
Remain within 10 NM

Procedure Turn: Descend to 10000 in HLN VORTAC holding pattern prior to departing outbound for procedure turn.

CATEGORY	A	B	C	D
CIRCLING	6700-1¼ 2823 (2900-1¼)	6700-1½ 2823 (2900-1½)	6700-3 2823 (2900-3)	

17
6
5
23
2.2% UP
4644 X 75
7299 X 75
0.3% UP
0.3% DOWN
9000 X 150
35
TWR
3951
3984
Rwy 10-28
1584 X 75
22
A5

REIL Rwys 9, 13 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

COPTER VOR 254°

HELENA RGNL (HLN)

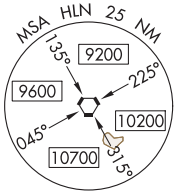
VORTAC HLN	APP CRS	Rwy Idg	N/A
117.7	254°	TDZE	3846
Chan 124		Apt Elev	3877

NA When local altimeter setting not received, procedure NA.

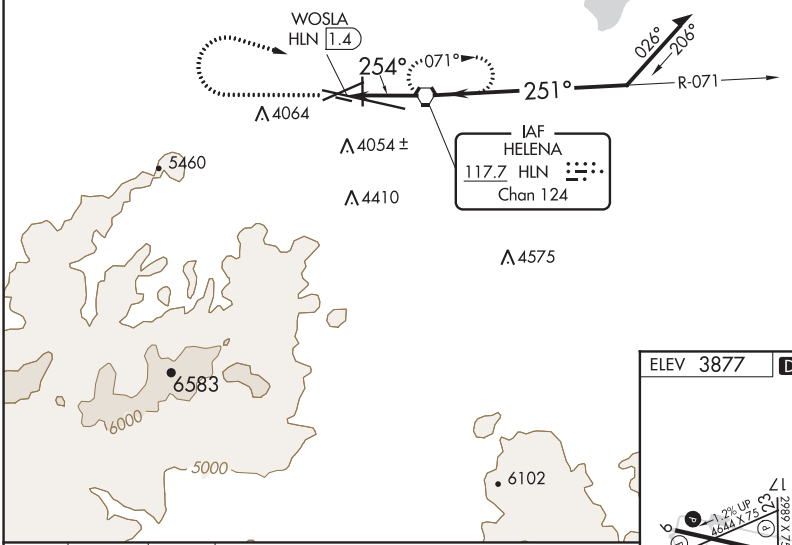
-21°C

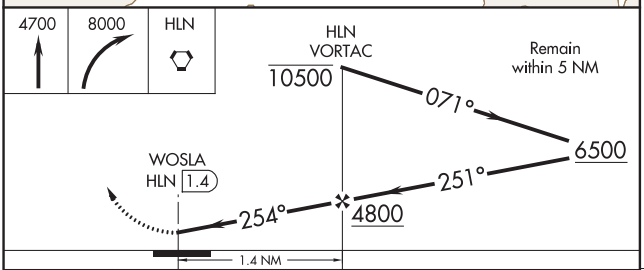
MISSED APPROACH: Climb to 4700 then climbing right turn to 8000 direct HLN VORTAC and hold, continue climb-in-hold to 8000.

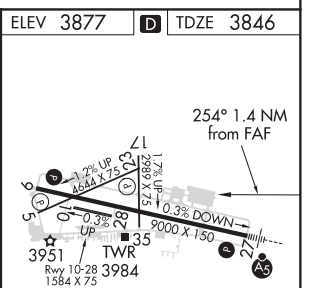
ATIS	HELENA APP CON ★	HELENA TOWER ★	GND CON	UNICOM
120.4	119.5 229.4	118.3 (CTAF) L 257.8	121.9	122.95



NOTE: Designated landing area at WOSLA; intersection of Rwy 9-27 and Taxiway G.
NOTE: Limit final and missed approach to 90K.
NOTE: 800 foot descent gradient may be required for PT outbound.
NOTE: 675 foot descent gradient required for final approach.







REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

AL-192 (FAA)

NW-1, 30 JAN 2020 to 26 MAR 2020

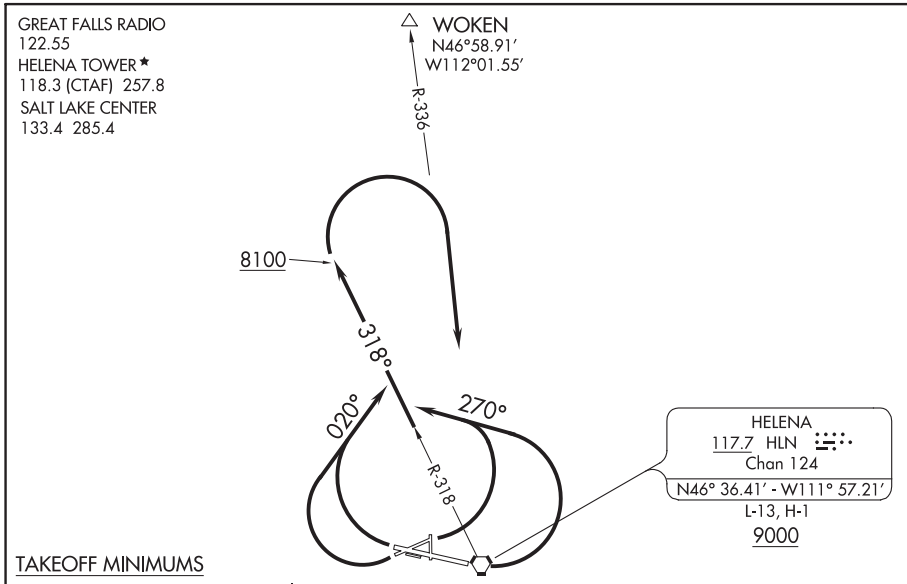
NW-1, 30 JAN 2020 to 26 MAR 2020

(DIVD1.DIVD) 16147

DIVIDE ONE DEPARTURE (OBSTACLE)

SL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA



NW-1, 30 JAN 2020 to 26 MAR 2020

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. . . .

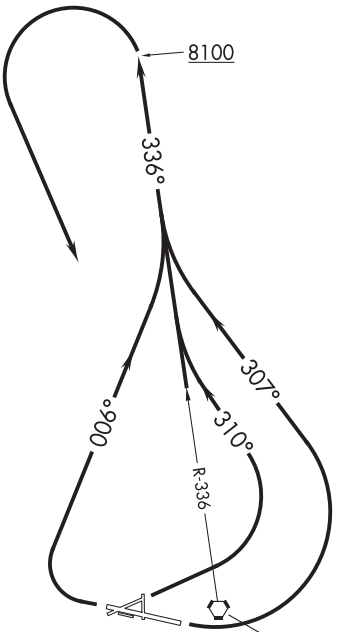
TAKEOFF RUNWAY 23: Climbing right turn heading 020°, thence. . . .

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.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

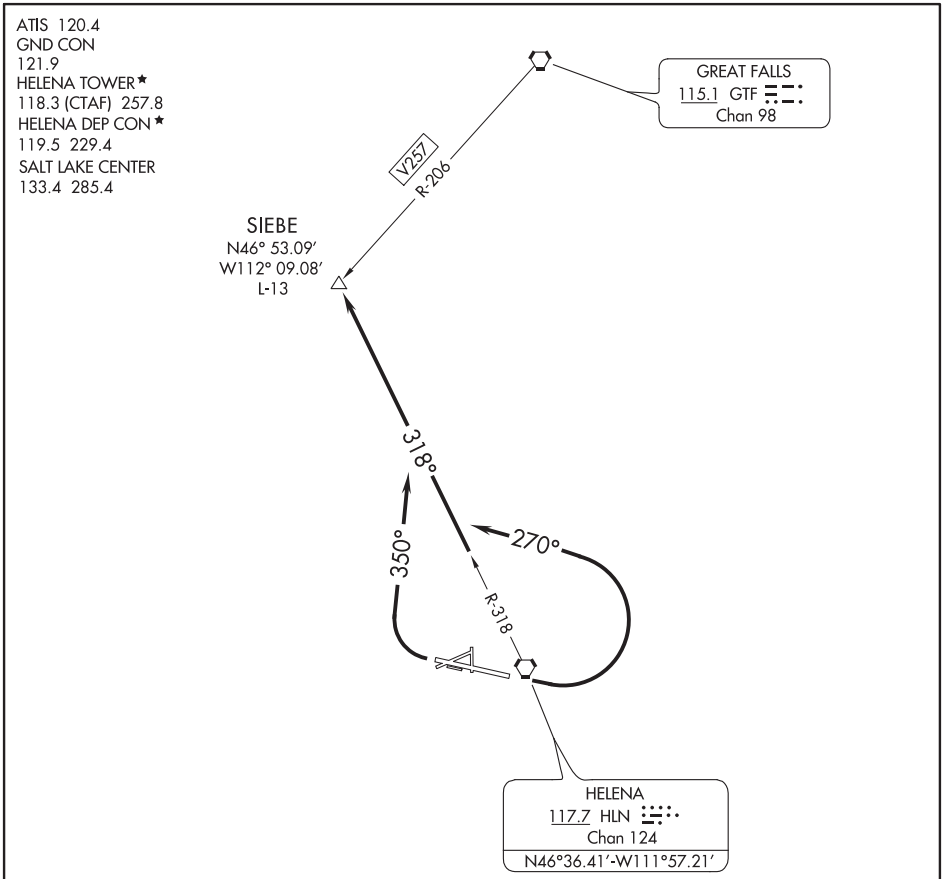
(SIEBE3.SIEBE) 17341

SIEBE THREE DEPARTURE

AL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA

NW-1, 30 JAN 2020 to 26 MAR 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.

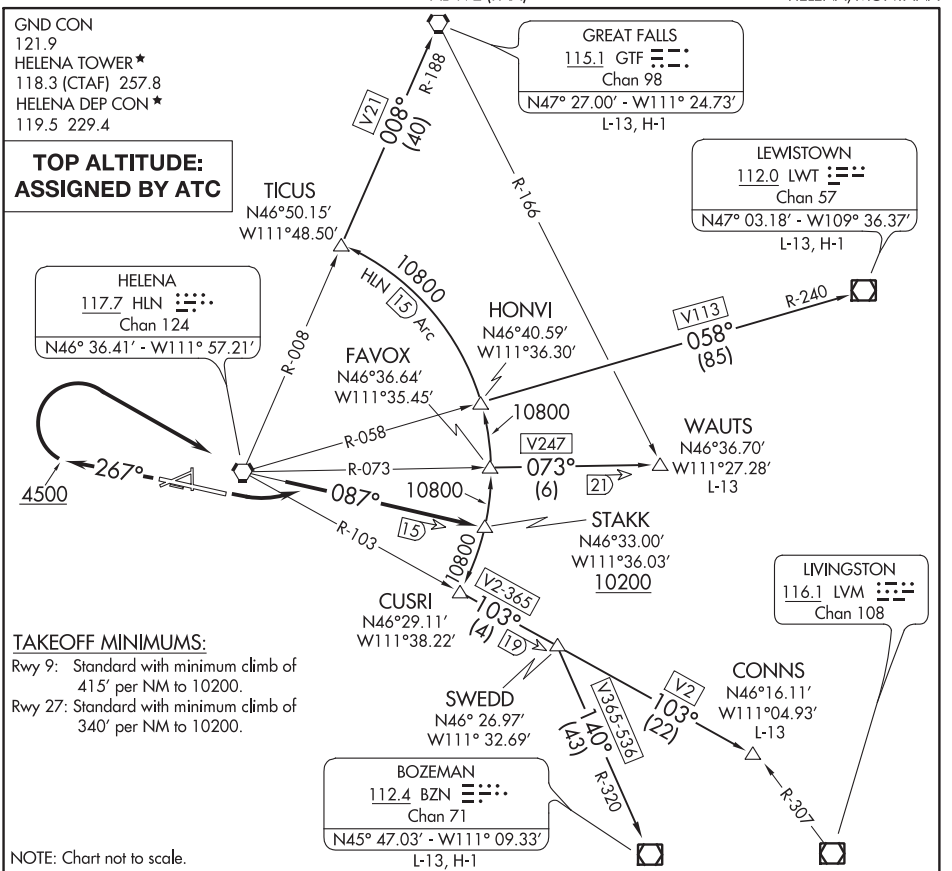
DEPARTURE ROUTE DESCRIPTION

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.

STAKK FOUR DEPARTURE



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HERMISTON, OREGON

AL-6475 (FAA)

18256

RNAV (GPS)-B

HERMISTON MUNI (HRI)

APP CRS	Rwy Idg	N/A
286°	TDZE	N/A
	Apt Elev	644

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

MSA MLIPS 25 NM
4800

698
769
833
(MAP)
MLIPS
778
HONUP
2 NM to
MLIPS
(FAF)
BAYKA
2700
286°
(9.5)
106°
4 NM
286°
(IF/IAF)
PENDLETON
PDT
HOLD
14000
4000

NoPT for arrival on
PDT VORTAC
airway radial R-029.

2435

5100 NoPT
281°
(16)
3765
(IAF)
CABAN

5100 NoPT
303°
(17.1)
3611
(IAF)
PIANO

2880

ELEV 644

4501 X 75

286° to
MLIPS

4000
PDT

PDT
VORTAC
4 NM
Holding Pattern

BAYKA
HONUP
2 NM to
MLIPS
MLIPS
1400
2700
286°
106°
286°
14000
4000

2 NM
3.9 NM
9.5 NM

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

HERMISTON, OREGON
Amdt 1 13SEP18

45°50'N-119°16'W

HERMISTON MUNI (HRI)

RNAV (GPS)-B

NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC PDT	APP CRS	Rwy Idg	N/A
114.7	286°	TDZE	N/A
Chan 94		Apt Elev	644

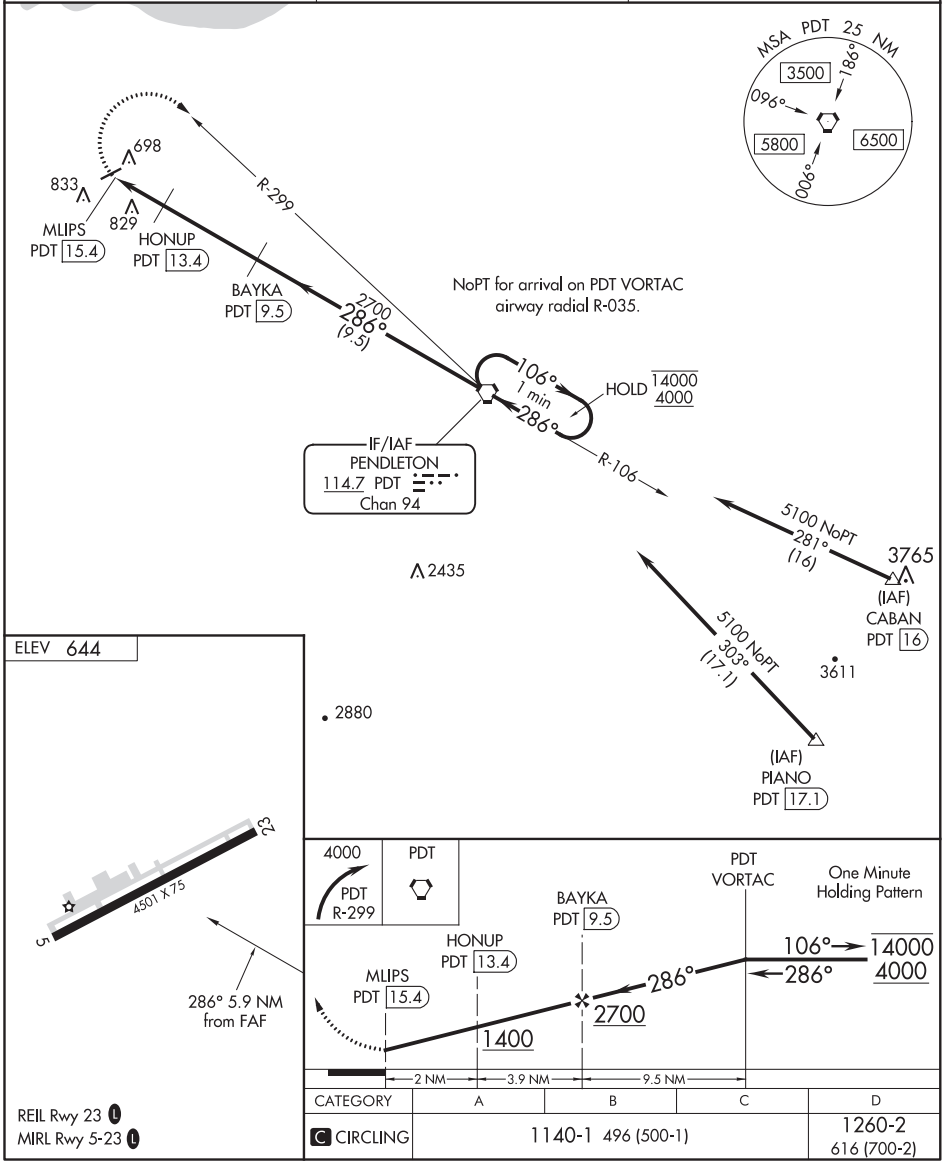
VOR-A
HERMISTON MUNI (HRI)

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)

REIL Rwy 23 L
MIRL Rwy 5-23 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HOQUIAM, WASHINGTON

AL-889 (FAA)

17341

ILS or LOC/DME RWY 24

BOWERMAN (HQM)

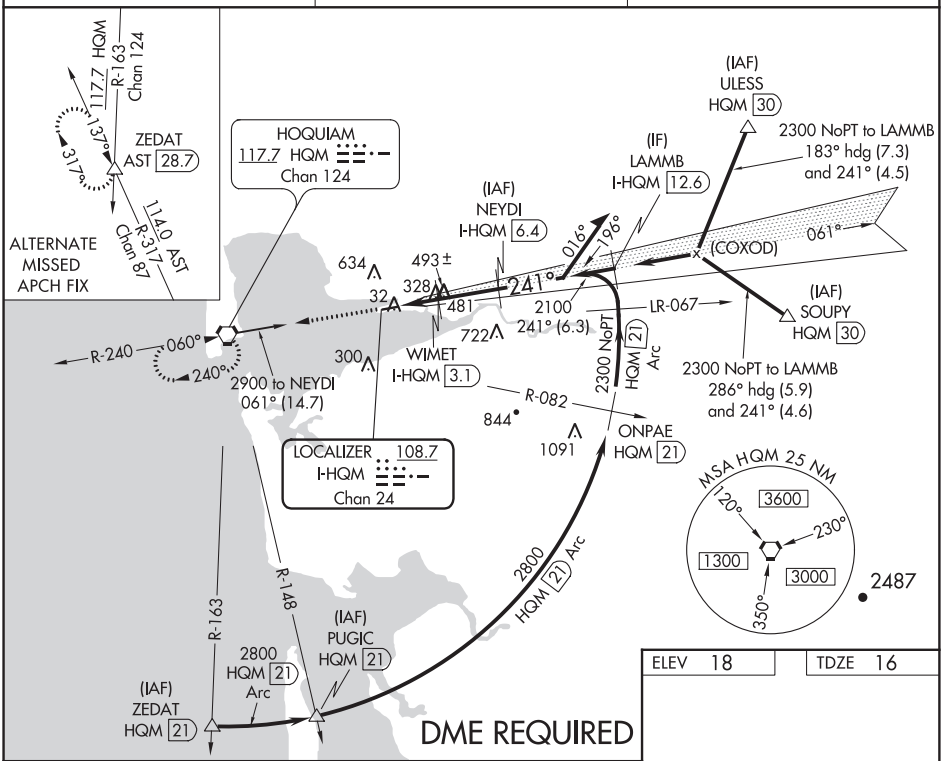
LOC/DME I-HQM	APP CRS	Rwy Idg	5000
108.7	241°	TDZE	16
Chan 24		Apt Elev	18

T 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 1 ⅝ mile. Circling NA northwest of Rwy 6-24.

MALSR (A5)

MISSED APPROACH: Climb 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-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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 6
BOWERMAN (HQM)

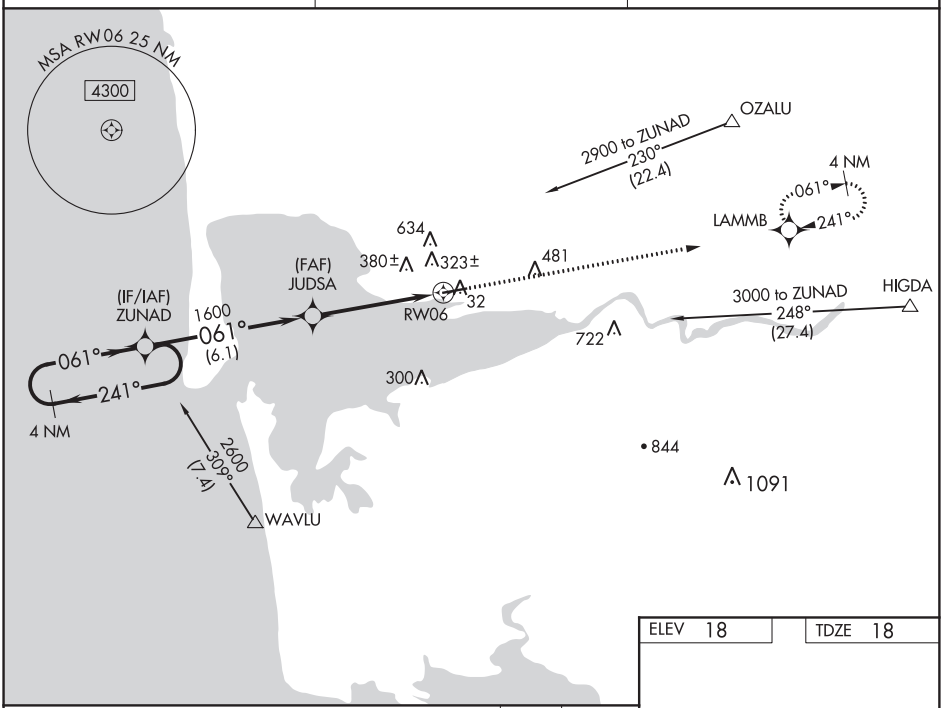
WAAS	APP CRS	Rwy Idg	5000
CH 82015	061°	TDZE	18
W06A		Apt Elev	18

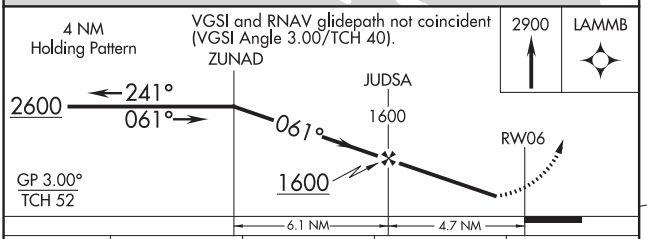
RNP APCH.

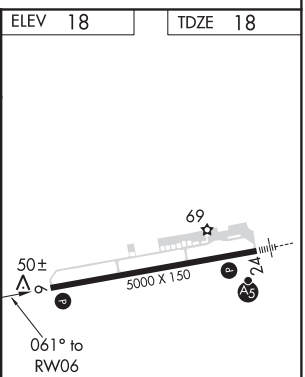
Circling NA northwest of Rwy 6-24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118° F). Rwy 6 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2900 direct LAMMB and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF)







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)

REIL Rwy 6
HIRL Rwy 6-24

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HOQUIAM, WASHINGTON

AL-889 (FAA)

17341

RNAV (GPS) RWY 24

BOWERMAN (HQM)

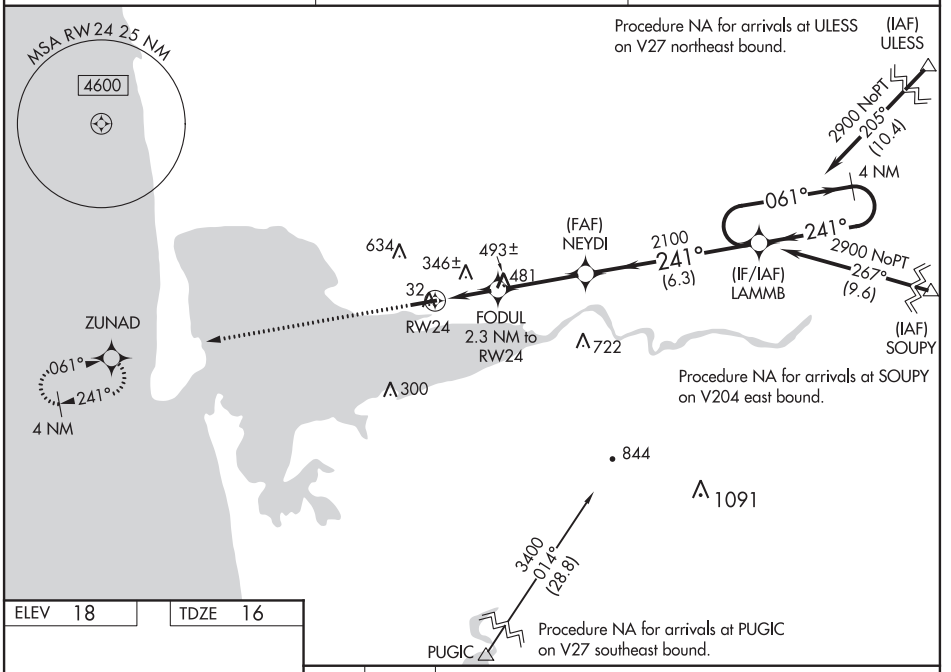
WAAS	APP CRS	Rwy Idg	5000
CH 86902	241°	TDZE	16
W24A		Apt Elev	18

T A — 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.

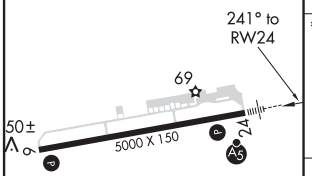
MALSR (A5)

MISSED APPROACH: Climb to 2600 direct ZUNAD and hold.

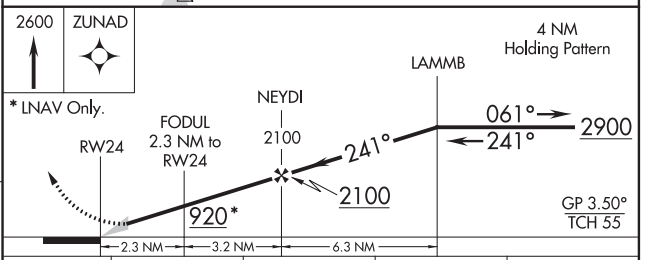
ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L



ELEV 18	TDZE 16



REIL Rwy 6 L
HIRL Rwy 6-24 L



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

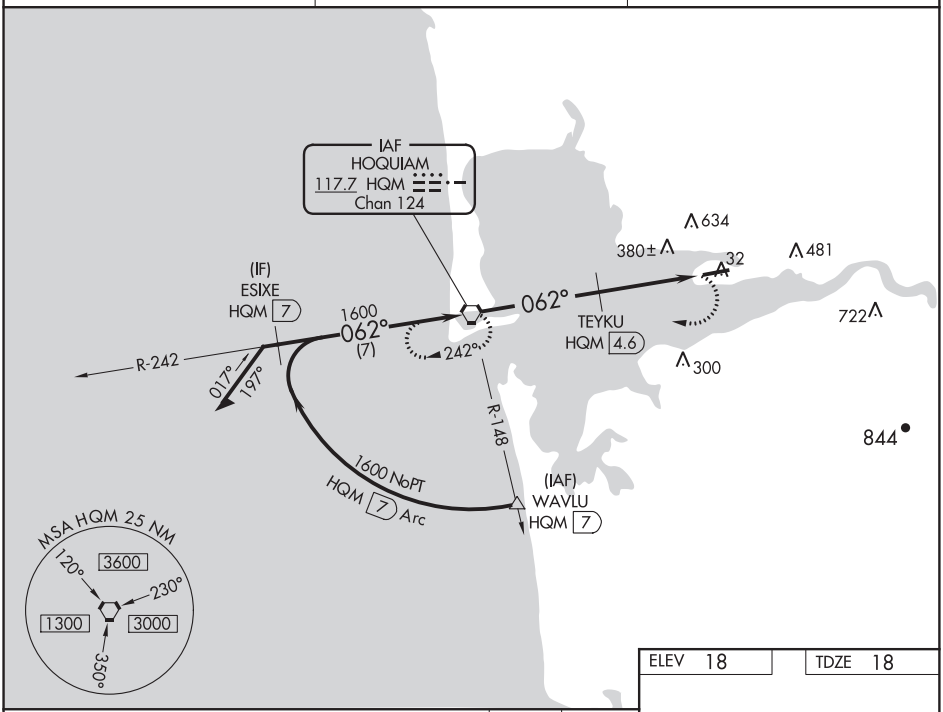
VORTAC HQM	APP CRS	Rwy Idg	5000
117.7	062°	TDZE	18
Chan 124		Apt Elev	18

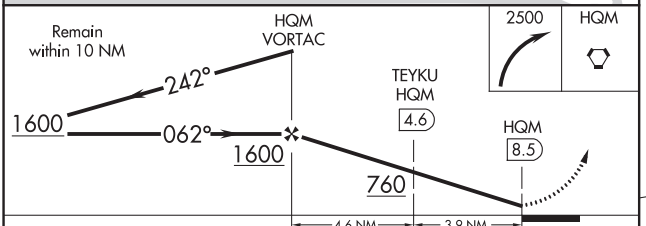
VOR RWY 6
BOWERMAN (HQM)

Visibility reduction by helicopters NA.
Circling NA northwest of Rwy 6 and 24.

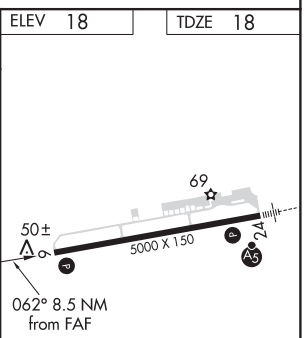
MISSED APPROACH: Climbing right turn to 2500 direct HQM VORTAC and hold.

ASOS	SEATTLE CENTER	UNICOM
135.775	128.3 269.0	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-6	760-1 742 (800-1)	760-1¼ 742 (800-1¼)	760-2¼ 742 (800-2¼)	760-2½ 742 (800-2½)
CIRCLING	760-1 742 (800-1)	760-1¼ 742 (800-1¼)	760-2¼ 742 (800-2¼)	760-2½ 742 (800-2½)
TEYKU FIX MINIMUMS				
S-6	640-1 622 (700-1)		640-1¾ 622 (700-1¾)	640-2 622 (700-2)
CIRCLING	640-1 622 (700-1)		640-1¾ 622 (700-1¾)	640-2 622 (700-2)



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

HULETT, WYOMING | AL-10288 (FAA) | 19171

WAAS	APP CRS	Rwy Idg	5500
CH 82039	132°	TDZE	4227
W13A		Apt Elev	4264

RNAV (GPS) RWY 13

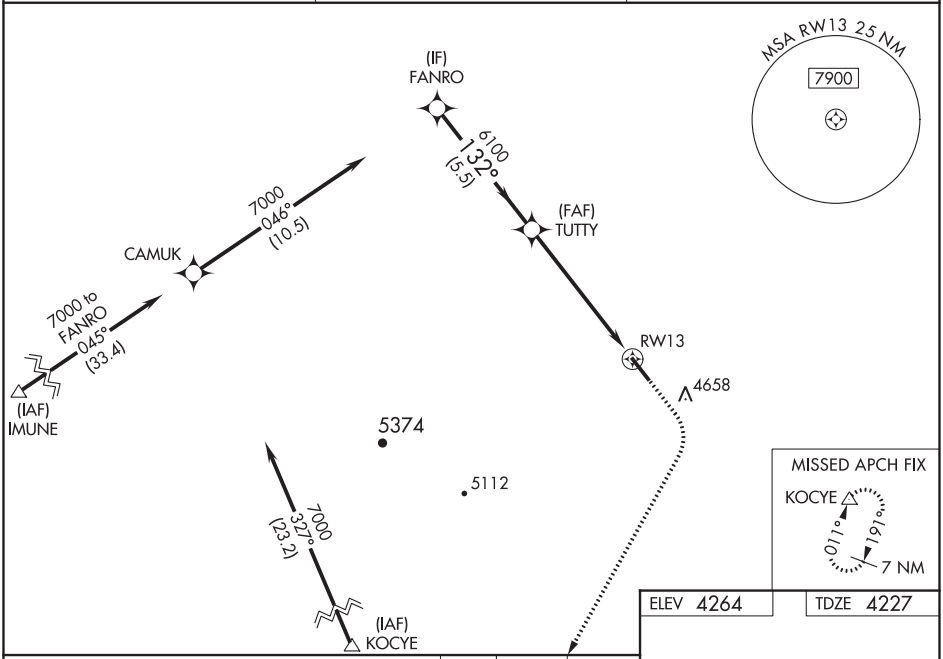
HULETT MUNI (W43)

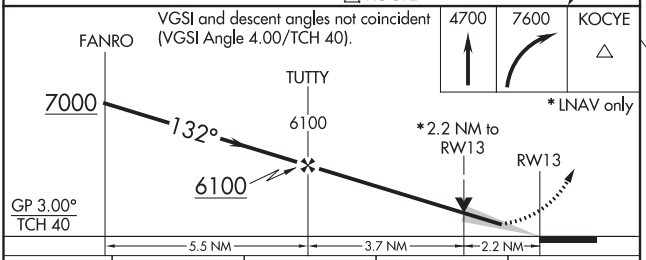
T
A
-34°C

For uncompensated Baro-VNAV systems, procedure NA below -23°C (-9°F) or above 53°C (127°F). Baro-VNAV and VDP NA when using Gillette altimeter setting. DME/DME RNP-0.3 NA. 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.

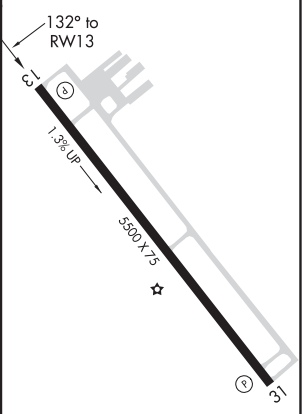
MISSED APPROACH: Climb to 4700 then climbing right turn to 7600 direct KOCYE and hold.

AWOS-3PT	DENVER CENTER	UNICOM
128.775	127.95 338.2	122.8 (CTAF) L





ELEV 4264 | TDZE 4227



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)

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS)-A

HULETT MUNI (W43)

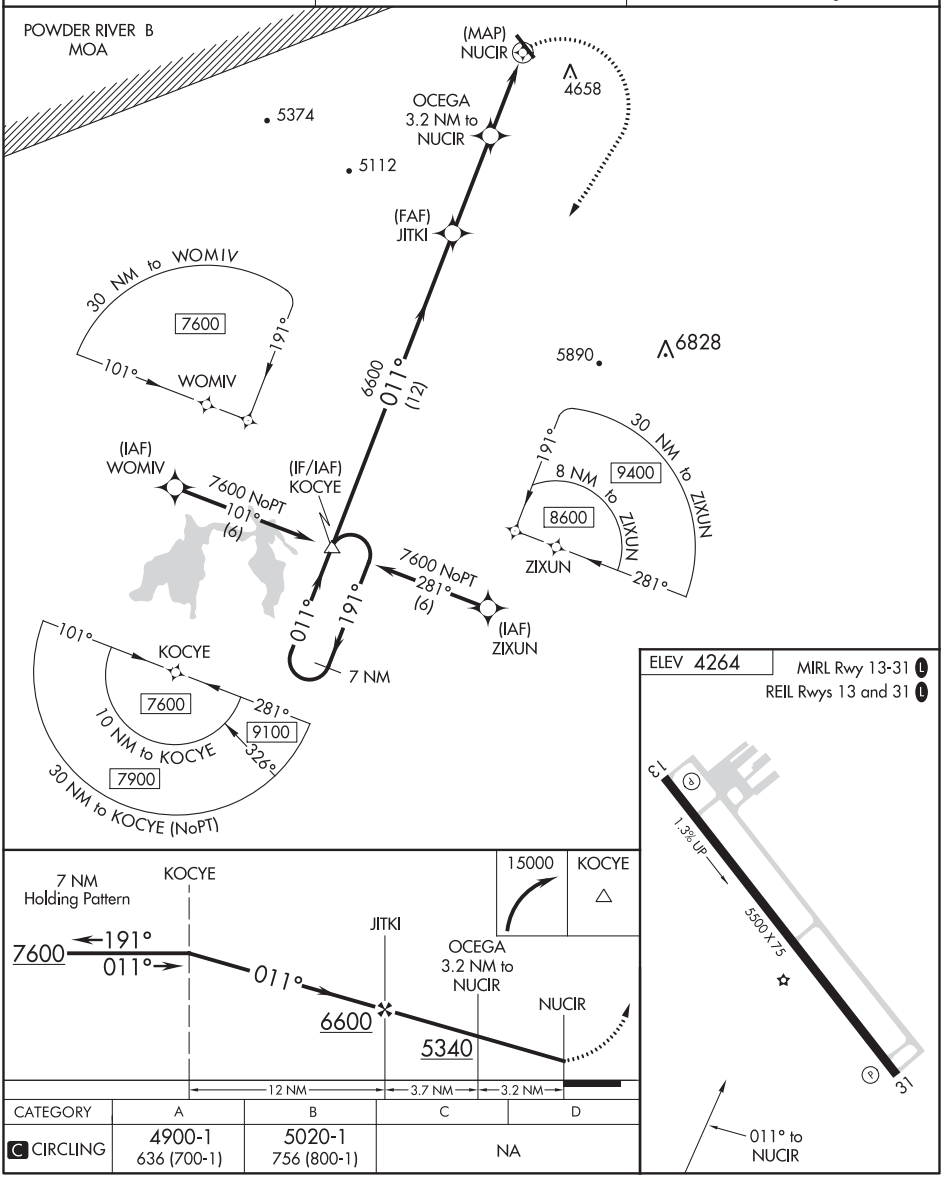
APP CRS	Rwy Idg	N/A
011°	TDZE	N/A
	Apt Elev	4264

T
NA
-34°C

DME/DME RNP-0.3 NA. When local altimeter setting is not received use Gillette-Campbell County 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	4900-1 636 (700-1)	5020-1 756 (800-1)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LLADN ONE DEPARTURE (RNAV)

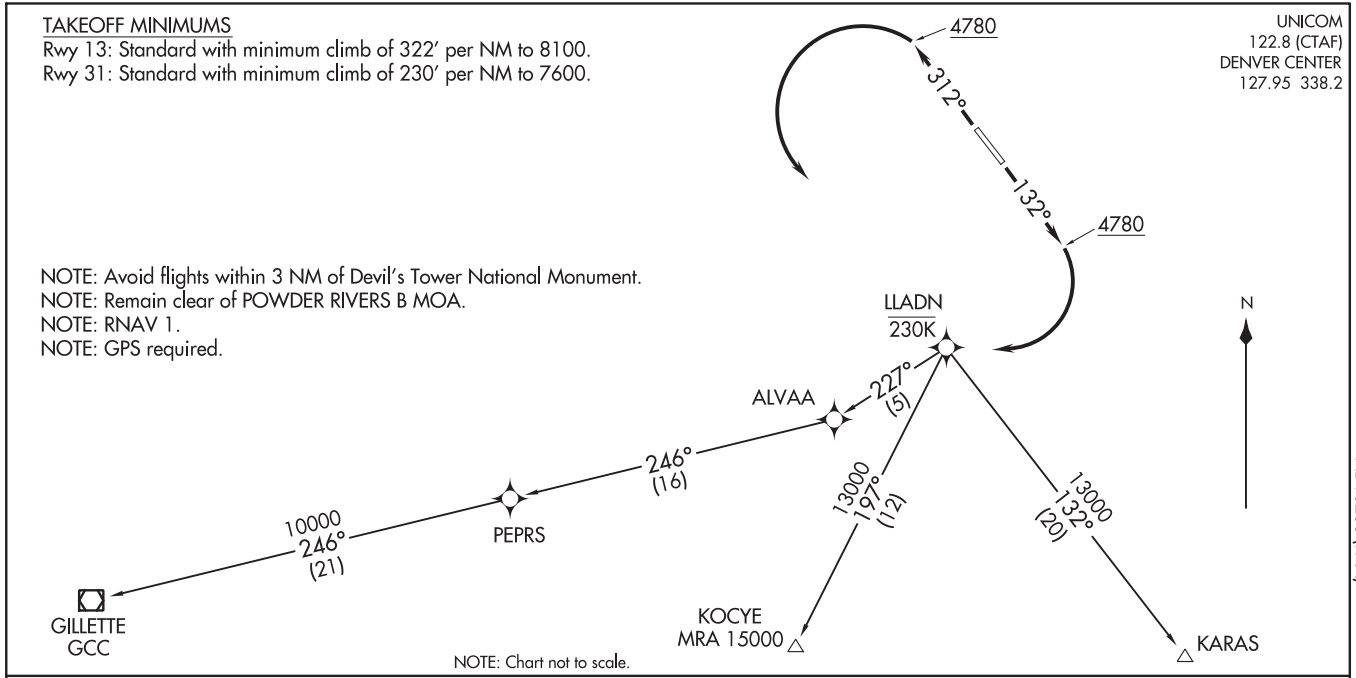
(LLADN1.LLADN) 03APR14

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.

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.



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)

(LLADN1.LLADN) 17341

LLADN ONE DEPARTURE (RNAV)

AL-10288 (FAA)

HULETT MUNI (W43)

HULETT, WYOMING

LOC/DME I-IDA	APP CRS	Rwy Idg	9002
111.1	206°	TDZE	4735
Chan 48		Apt Elev	4744

ILS or LOC RWY 21

IDAHO FALLS RGNL (IDA)

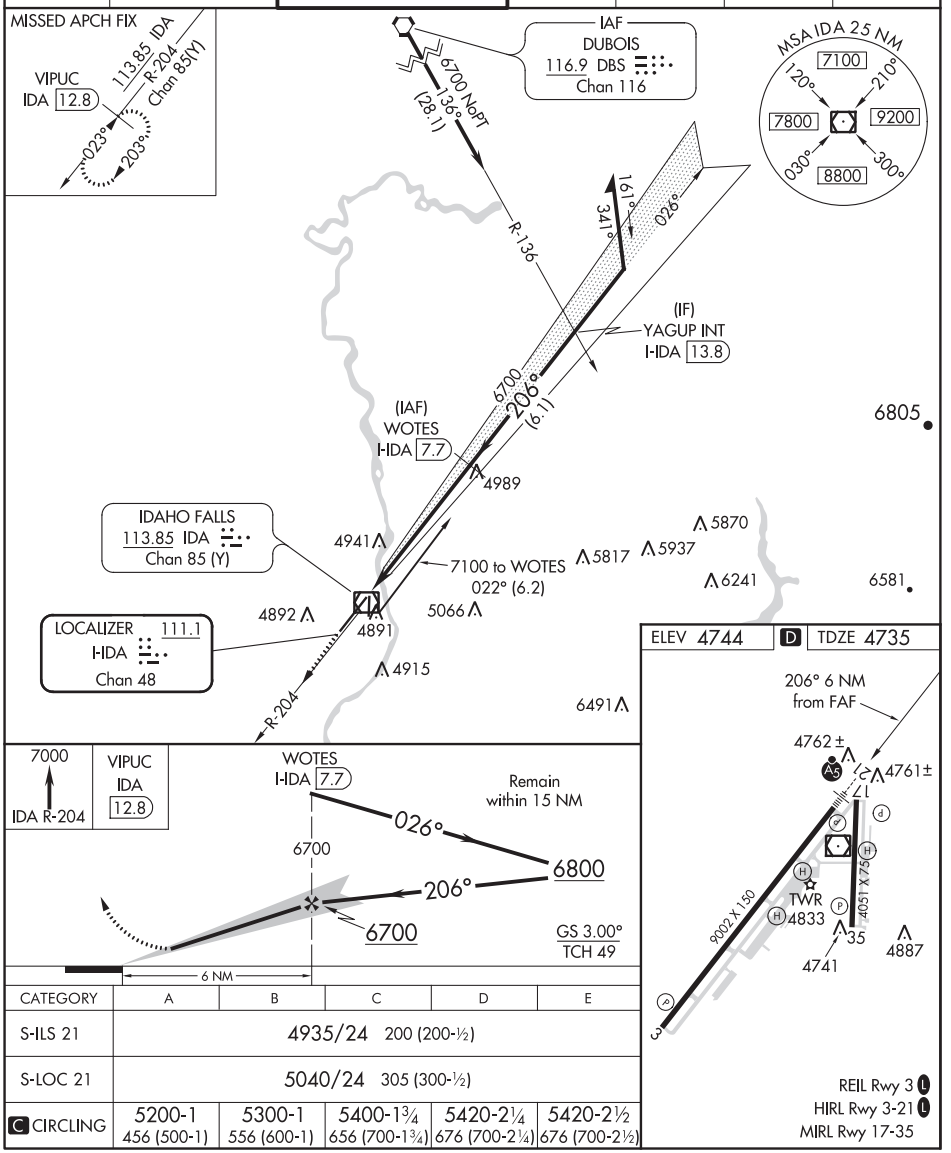
DME required.

T A 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

IDAHO FALLS, IDAHO | AL-590 (FAA) | 19003

RNAV (RNP) Z RWY 3

IDAHO FALLS RGNL (IDA)

APP CRS	Rwy Idg	9002
026°	TDZE	4744
	Apt Elev	4744

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

MISSED APCH FIX

7 NM 360° 180° UFGOD 253° (10.3) TERRE

MSA RW03 25 NM 9000

Procedure NA for arrivals at ZELOR on V365 southwest bound.

Procedure NA for arrivals at LUDIC on V330 east bound.

Procedure NA for arrivals at CHEER on V21 south bound.

(IF) ROCCA 7000 084° (7) FOXUG 6500 (7) (IF) VIPUC 6500 026° (6) (FAF) UGADE 026° (5.4) RW03

(IAF) ZELOR 7500 056° (10.2)

6500 (7.1) JEDUX 8600 (7.4) (IF) OKVIE 230K 9300 218° (4.9) (IAF) HUDEP 10500 219° (17.5)

(IAF) CHEER 7000 015° (9.4)

TOCYU (13.5) 026° (7)

(IAF) LUDIC (RNP 0.70) 6491 6247 6651 6241

4941 4892 4891 5066 4915 5817 5870 5937 6241 6107 7401 6996 7486

ELEV 4744 D TDZE 4744

7500 tr 026°	TOCYU		UFGOD	tr 253°	TERRE

UGADE 6500 6500 026° RW03

GP 3.00° TCH 50

5.4 NM

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

4762± 4761± 4741 4887 TWR 4833 9002 X 150 4051 X 75 35 026° to RW03

REIL Rwy 3 L
HIRL Rwy 3-21 L
MIRL Rwy 17-35

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

IDAHO FALLS, IDAHO
Amdt 1 03JAN19

43°31′N-112°04′W

IDAHO FALLS RGNL (IDA)
RNAV (RNP) Z RWY 3

RNAV (RNP) Z RWY 21

IDAHO FALLS RGNL (IDA)

APP CRS	Rwy Idg	9002
206°	TDZE	4735
	Apt Elev	4744

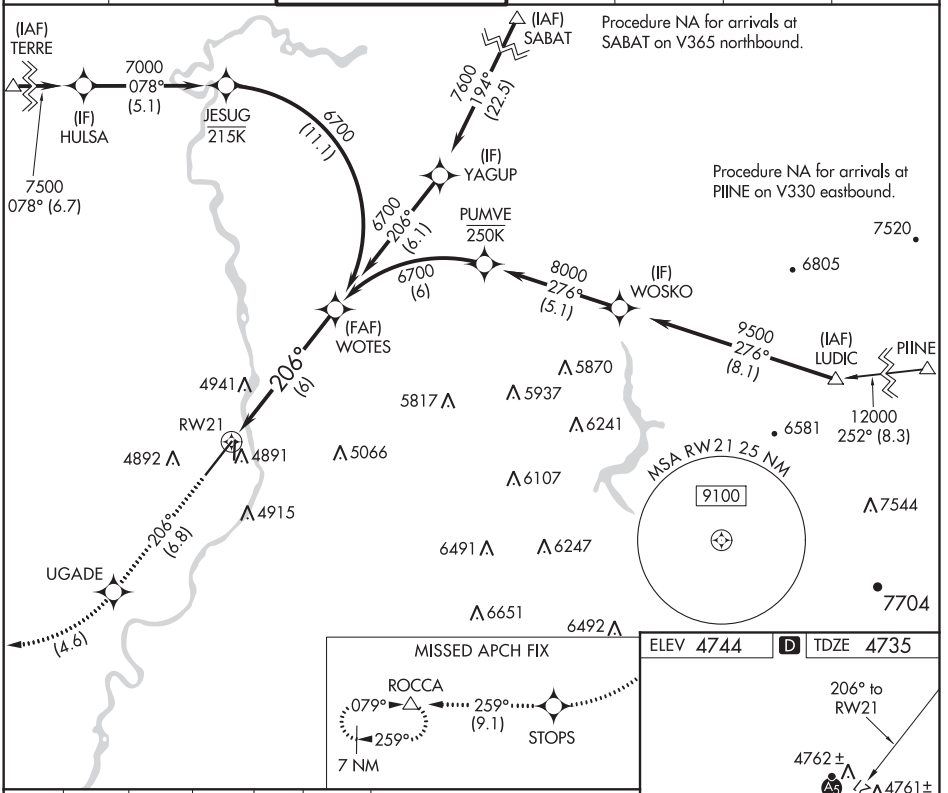
RNP AR APCH. RF required.

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



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 3

IDAHO FALLS RGNL (IDA)

WAAS	APP CRS	Rwy Idg	9002
CH 97501	026°	TDZE	4744
W03A		Apt Elev	4744

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

MISSED APCH FIX

7 NM 360° 180° TERRE

Procedure NA for arrival on IDA VOR/DME airway radials 199 CW 207.

MSA RW03 25 NM 9000

(IAF) ROCCA 7000 NoPT 095° (9.9)

(IF/IAF) VIPUC

Procedure NA for arrivals at ROCCA on V257 south bound.

HOLD 14000 7000 026° 206° 7 NM

(FAF) UGADE 6500 026° (6)

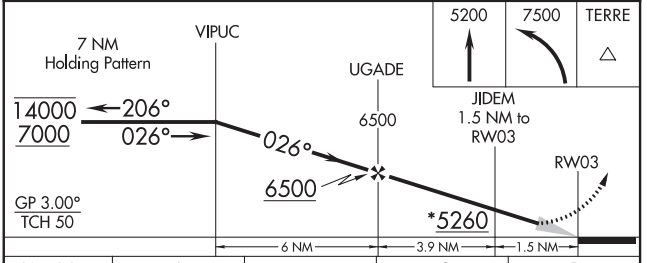
JIDEM 1.5 NM to RW03

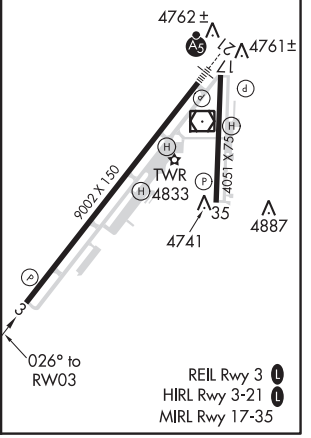
7000 to VIPUC 207° (12.8)

IDAHO FALLS IDA 5066

4941 4799± 4892 RW03 4891 4915 5870 5817 5937 6241 6107 6491 6247 6651 6241 6996 7401 7486

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	9002
CH 40111	206°	TDZE	4735
W21A		Apt Elev	4744

RNAV (GPS) Y RWY 21

IDAHO FALLS RGNL (IDA)

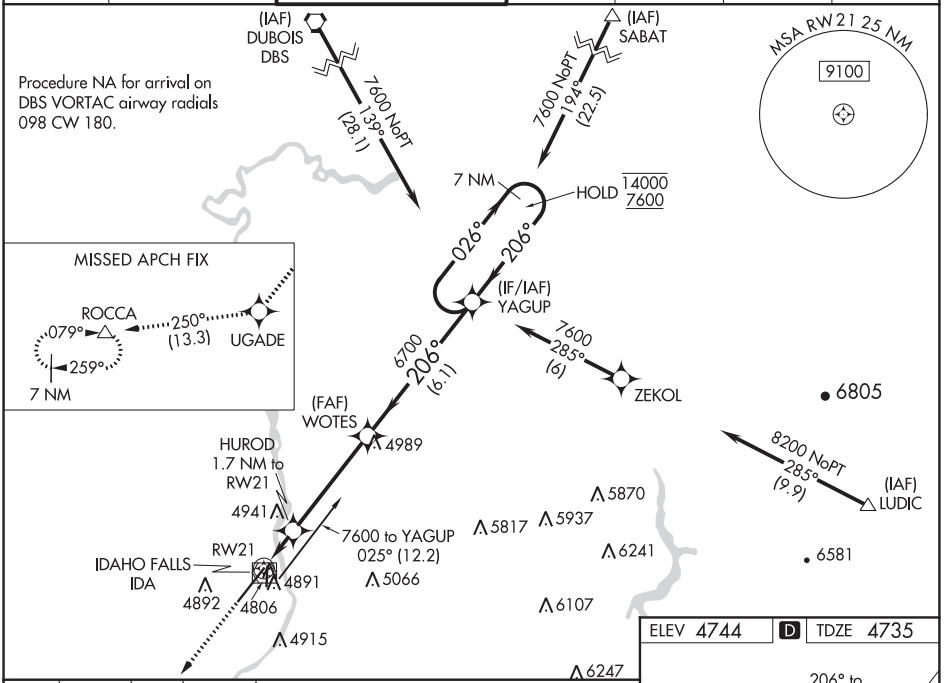
RNP APCH.

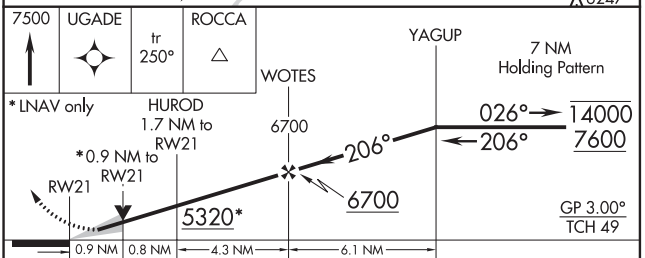
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C or above 49°C . For inop ALS increase LNAV/VNAV visibility all Cats to RVR 4500, LNAV visibility Cats C/D to RVR 5500. #RVR 1800 authorized with the use of FD or AP or HUD to DA.

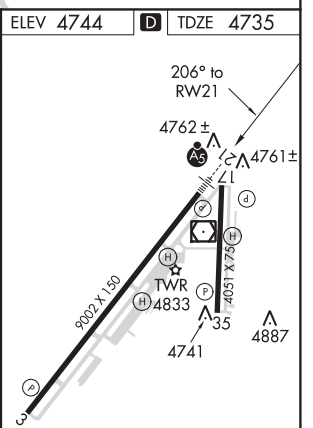
MALSR

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)

REIL Rwy 3 L
HIRL Rwy 3-21 L
MIRL Rwy 17-35

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

IDAHO FALLS, IDAHO | AL-590 (FAA) | 19003

LOC BC RWY 3

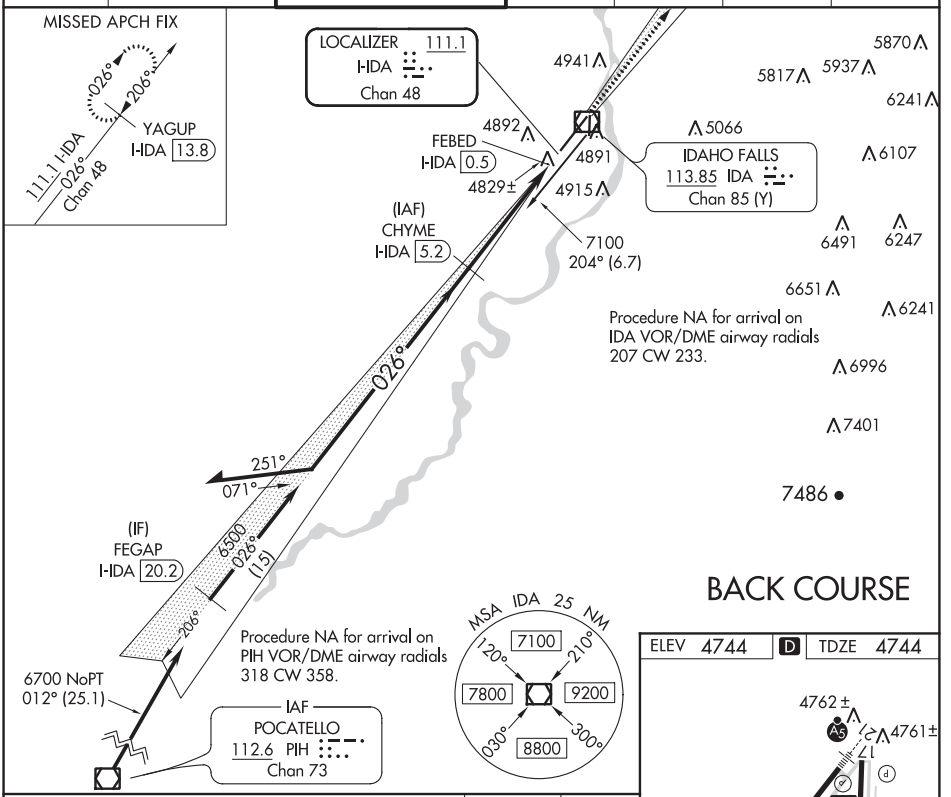
IDAHO FALLS RGNL (IDA)

LOC/DME I-IDA	APP CRS	Rwy Idg	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)

REIL Rwy 3 L
HIRL Rwy 3-21 L
MIRL Rwy 17-35

IDAHO FALLS, IDAHO
Amdt 7 03JAN19

43°31′N-112°04′W

IDAHO FALLS RGNL (IDA)
LOC BC RWY 3

NW-1, 30 JAN 2020 to 26 MAR 2020

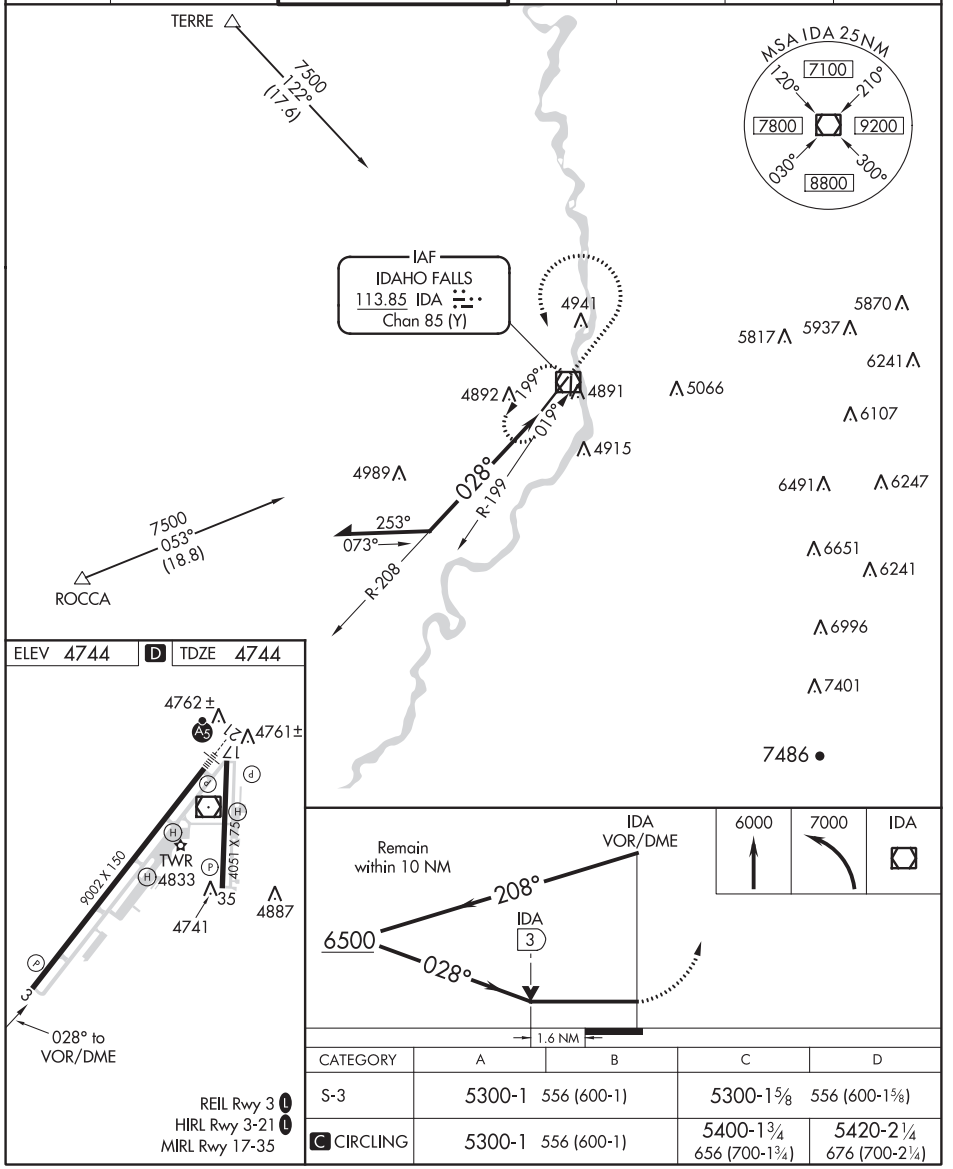
VOR/DME IDA	APP CRS	Rwy Idg	9002
113.85	028°	TDZE	4744
Chan 85 (Y)		Apt Elev	4744

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

IDAHO FALLS, IDAHO | AL-590 (FAA) | 19003

VOR RWY 21

IDAHO FALLS RGNL (IDA)

VOR/DME IDA	APP CRS	Rwy Idg	9002
113.85	192°	TDZE	4735
Chan 85 (Y)		Apt Elev	4744

For inop ALS increase S-21 Cats C/D visibility to 1⅞ SM.

MALSR

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

TERRE
DBS 22.1
7500
122°
(17.6)

MSA IDA 25 NM
7100
120°
210°
7800
9200
030°
300°
8800

147°
327°
R-012
192°
4989
IAF
IDAHO FALLS
113.85 IDA
Chan 85 (Y)
4941
5870
5817
5937
6241
4892
199°
019°
4891
5066
6107
4915
R-199°
6491
6247
7500
053°
(18.8)
6651
6241
6492
ROCCA
PIH 32.9
6996
7401
7486

ELEV 4744 D TDZE 4735

192° to VOR/DME

4762±
4761±
17
35
TWR
4833
9002 X 150
4051 X 75
4741
4887

7000 | IDA

IDA VOR/DME

Remain within 10 NM

012°
IDA
2.1
6900
192°

2 NM

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

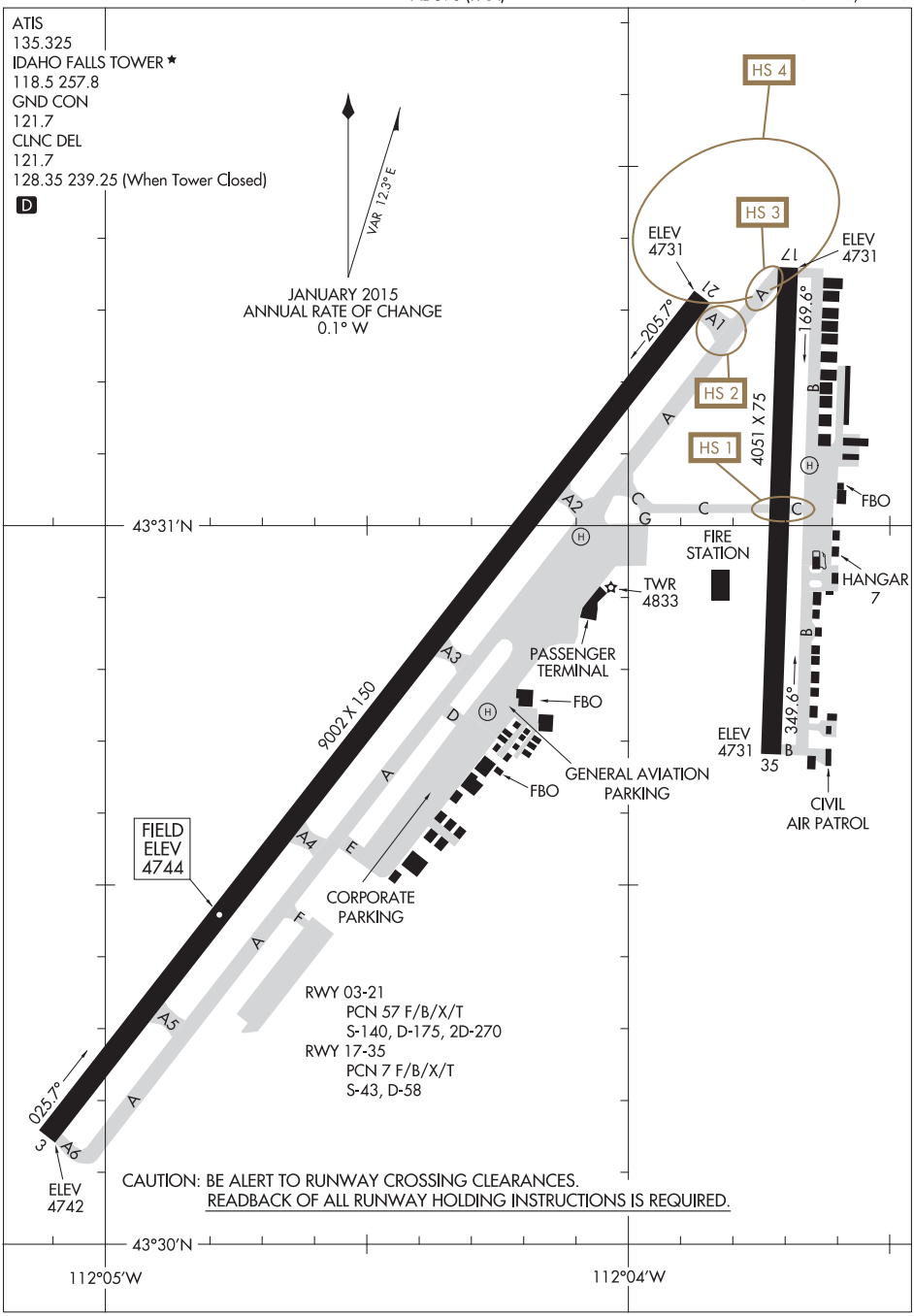
IDAHO FALLS, IDAHO
Amdt 10B 03JAN19

43°31′N-112°04′W

IDAHO FALLS RGNL (IDA)

VOR RWY 21

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

JACKSON, WYOMING | AL-504 (FAA) | 18088

ILS Y or LOC RWY 19

JACKSON HOLE (JAC)

LOC/DME I-JAC	APP CRS	Rwy Idg	6300
109.1	187°	TDZE	6451
Chan 28		Apt Elev	6451

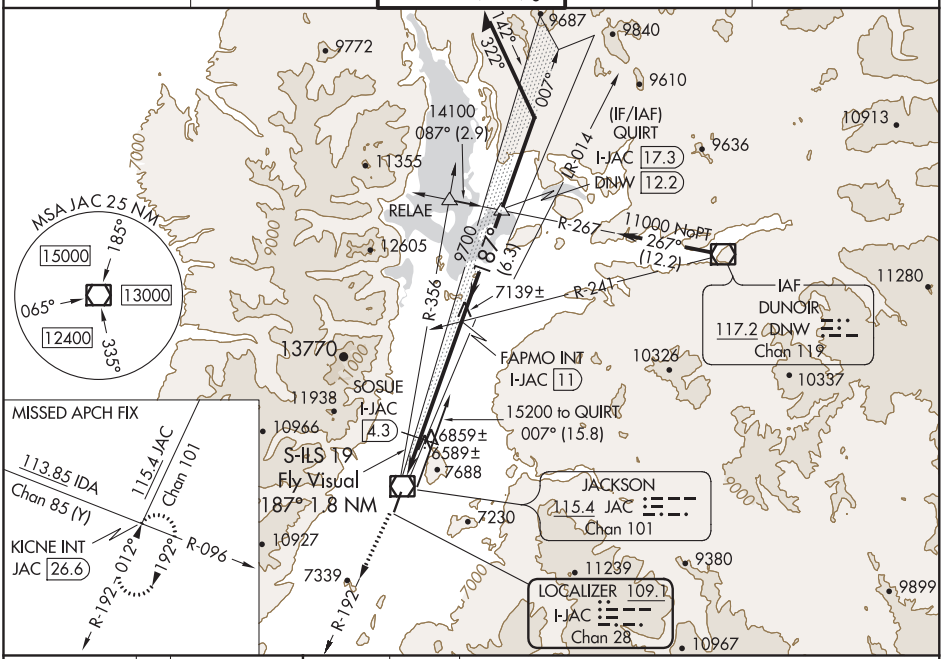
NA
-26°C

Inoperative table does not apply.
Circling NA E of Rwy 1-19.

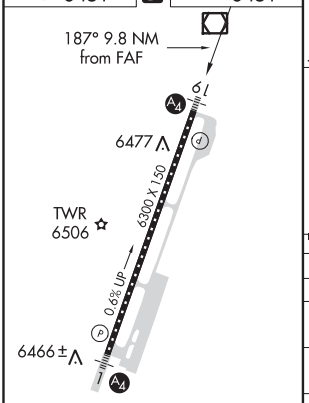
MALS

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.

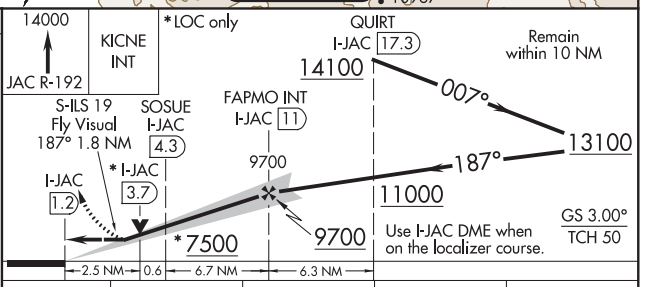
ATIS ★	SALT LAKE CENTER	JACKSON TOWER ★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS Z or LOC Z RWY 19

JACKSON HOLE (JAC)

LOC/DME I-JAC	APP CRS	Rwy Idg	6300
109.1	187°	TDZE	6451
Chan 28		Apt Elev	6451

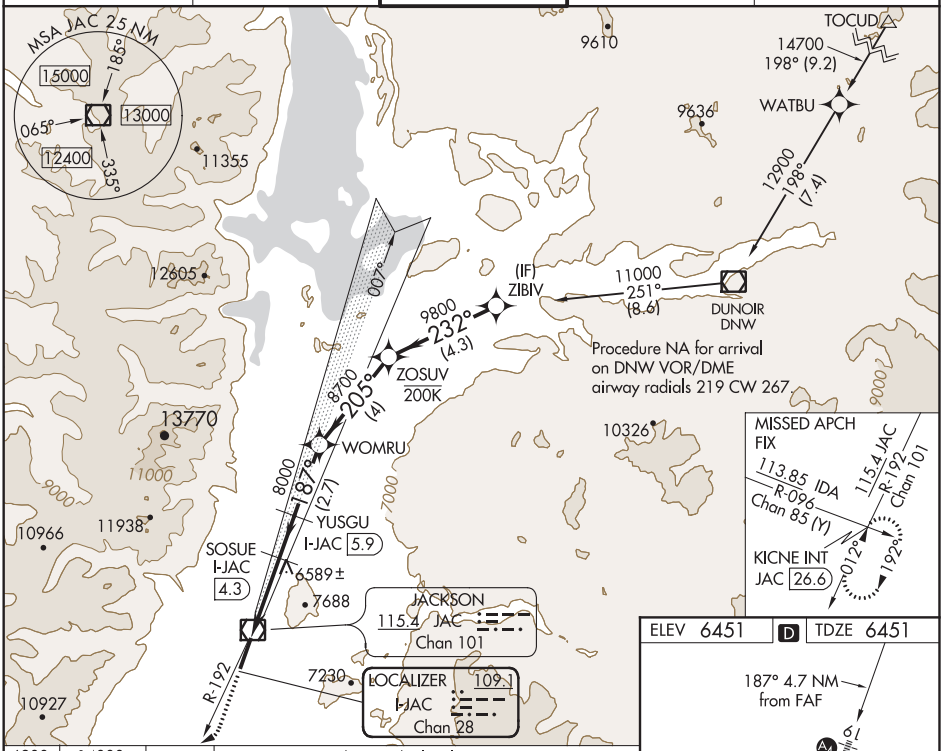
RNAV 1-GPS Required. DME required for LOC only.

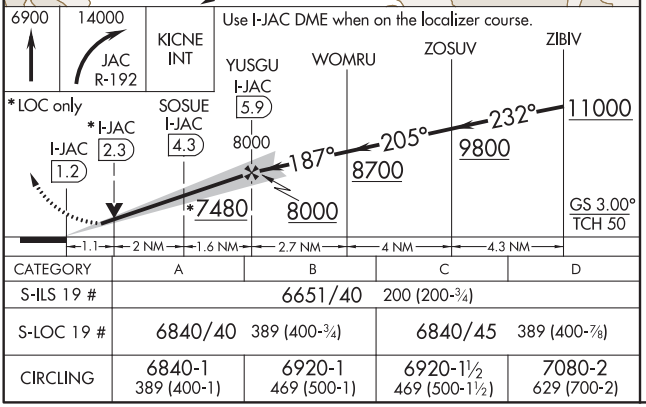
Circling NA east of Rwy 1-19.
For inop ALS, increase S-LOC 19# Cat A/B RVR to 5500 and Cat C/D RVR to 6000.
Inop table does not apply to S-ILS 19#.

MALS

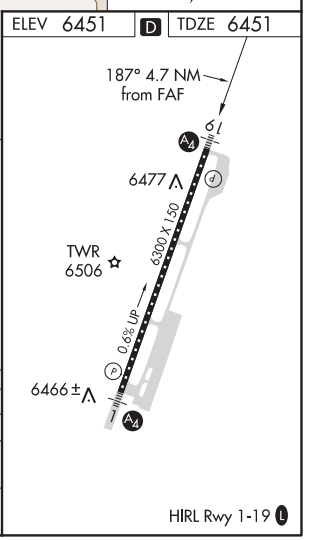
MISSED APPROACH: Climb to 6900 then climbing right turn to 14000 on JAC VOR/DME R-192 to KICNE INT/JAC 26.6 DME and hold, continue climb-in-hold to 14000. #Missed approach requires minimum climb of 235 feet per NM to 10600.

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	6840-1 389 (400-1)	6920-1 469 (500-1)	6920-1½ 469 (500-1½)	7080-2 629 (700-2)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JACKSON, WYOMING | AL-504 (FAA) | 18256

APP CRS	Rwy Idg	6300
006°	TDZE	6431
	Apt Elev	6451

RNAV (RNP) Y RWY 1

JACKSON HOLE (JAC)

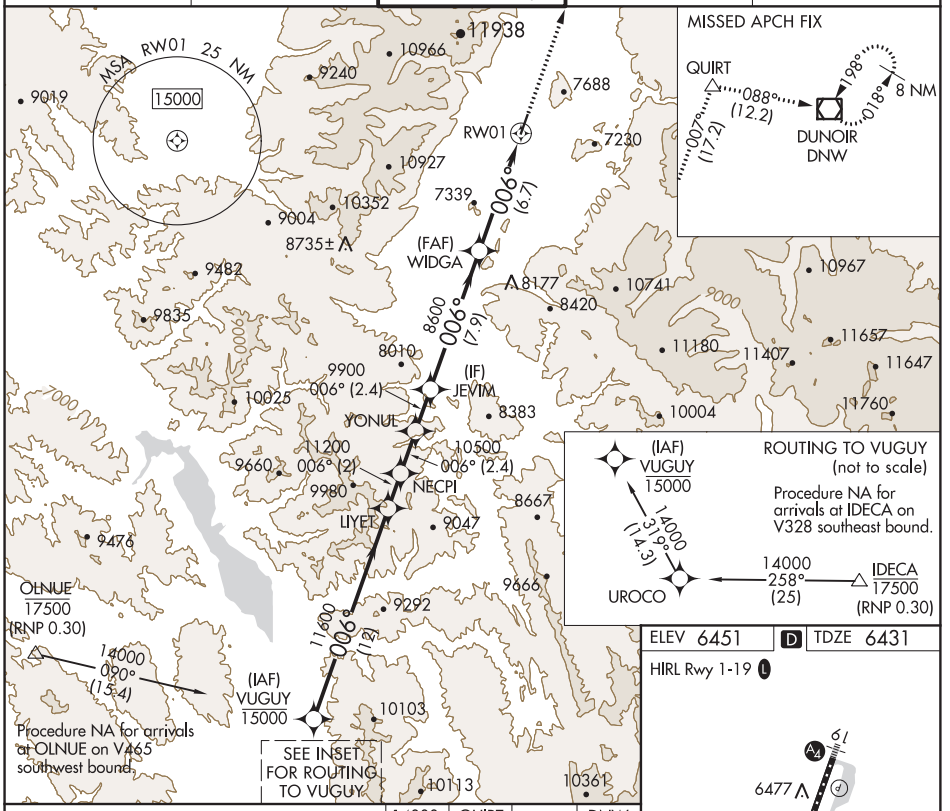
RNP AR APCH.

Inop table does not apply.
For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 54°C .
-26°C

MALS

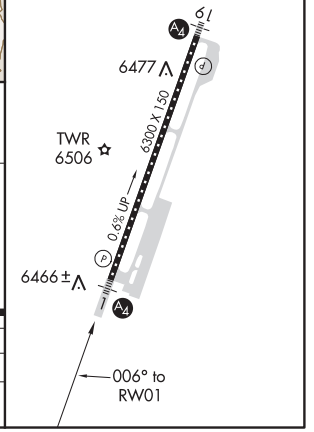
MISSED APPROACH: Climb to 14000 on track 007° to QUIRT and track 088° to DNW VOR/DME and hold, continue climb-in-hold to 14000.

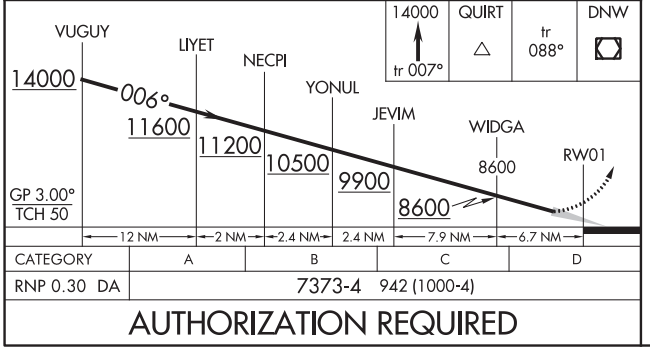
ATIS★	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



ELEV 6451 | D | TDZE 6431

HIRL Rwy 1-19 L





14000 tr 007°	QUIRT	tr 088°	DNW

CATEGORY	A	B	C	D
RNP 0.30 DA	7373-4	942 (1000-4)		

AUTHORIZATION REQUIRED

JACKSON, WYOMING
Amdt 1 13SEP18

43°36'N-110°44'W

JACKSON HOLE (JAC)

RNAV (RNP) Y RWY 1

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Y RWY 19

JACKSON HOLE (JAC)

APP CRS	Rwy Idg	6300
187°	TDZE	6451
	Apt Elev	6451

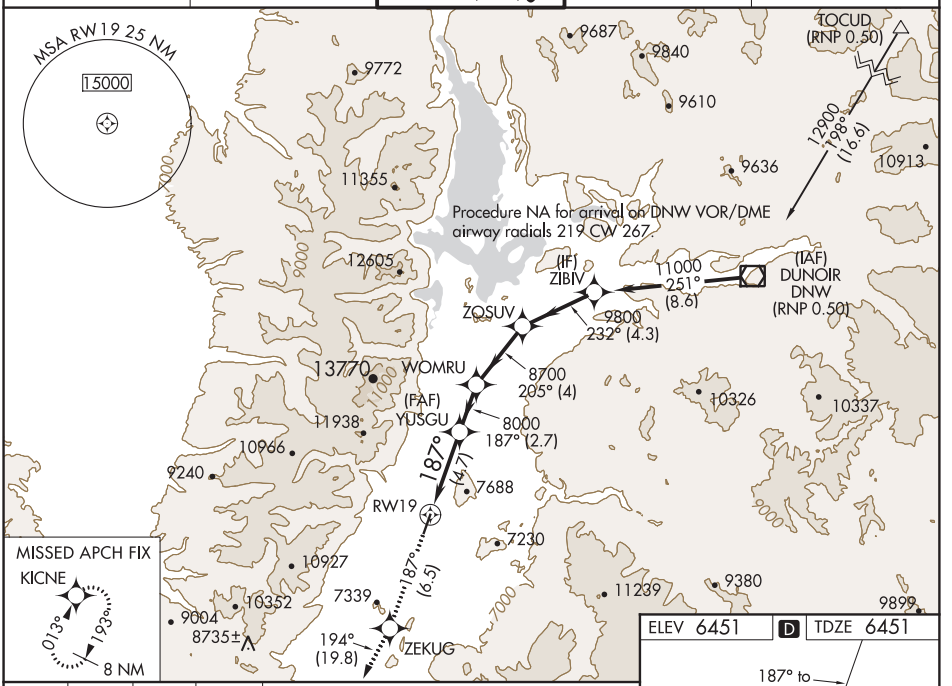
RNP AR APCH.

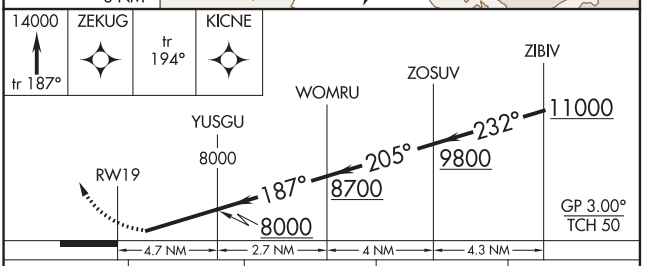
For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to 1⅜ SM. For inop ALS, increase RNP 0.11* all Cats visibility to RVR 4500.

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.

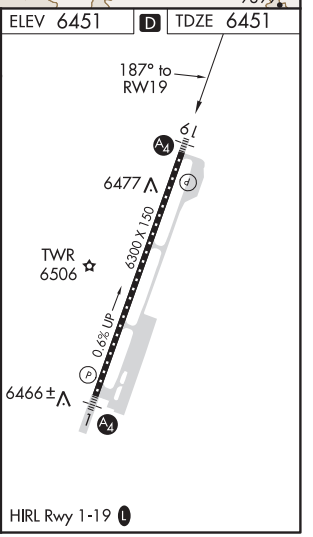
ATIS*	SALT LAKE CENTER	JACKSON TOWER*	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JACKSON, WYOMING | AL-504 (FAA) | 18256

RNAV (RNP) Z RWY 1

JACKSON HOLE (JAC)

APP CRS		
006°	Rwy Idg	6300
	TDZE	6431
	Apt Elev	6451

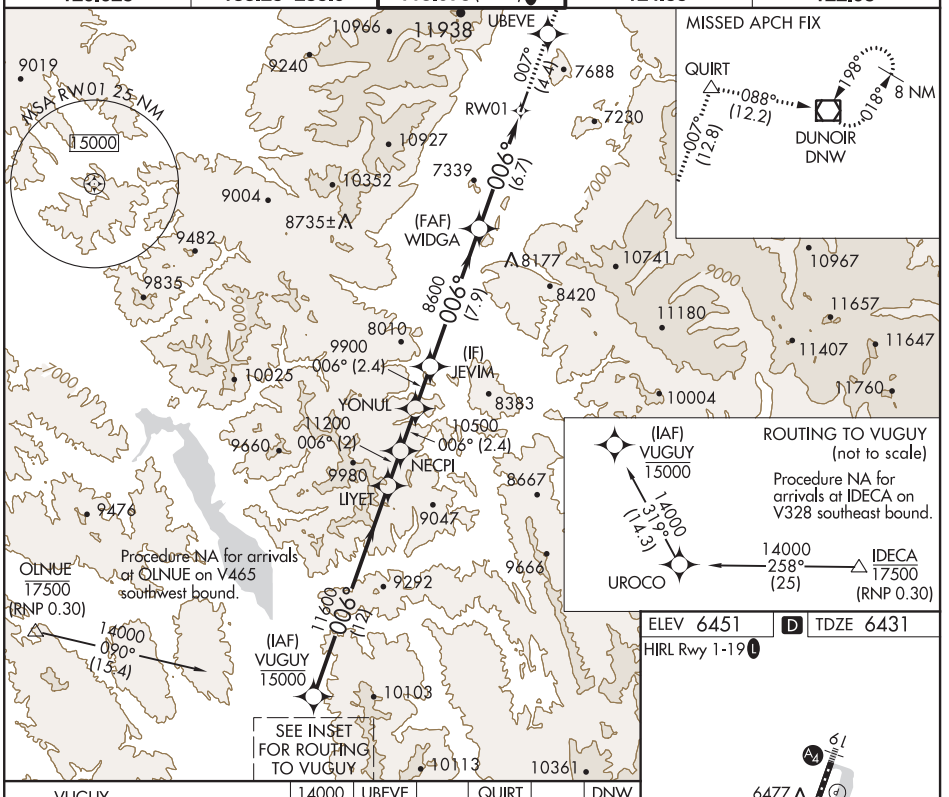
RNP AR APCH.

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.

MALS

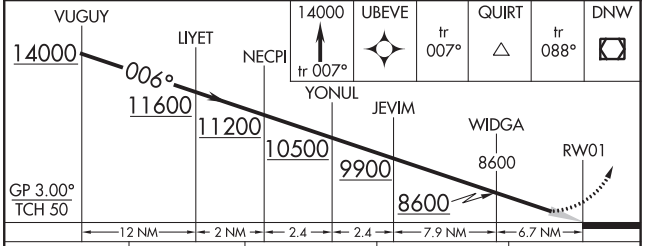
MISSED APPROACH: Climb to 14000 on track 007° to UBEVE and track 007° to QUIRT and track 088° to DNW VOR/DME and hold, continue climb-in-hold to 14000.
* Missed approach requires minimum climb of 330 feet per NM to 8200; if unable to meet climb gradient, see RNAV (RNP) Y RWY 1.

ATIS*	SALT LAKE CENTER	JACKSON TOWER*	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



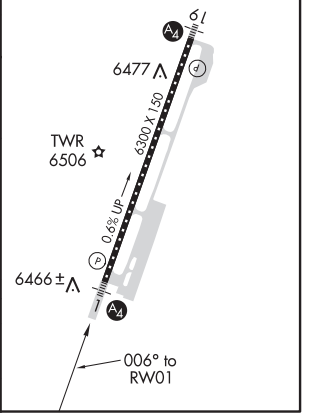
ELEV 6451	D	TDZE 6431

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



JACKSON, WYOMING
Amdt 1 13SEP18

43°36'N-110°44'W

JACKSON HOLE (JAC)

RNAV (RNP) Z RWY 1

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) X RWY 1

JACKSON HOLE (JAC)

WAAS	APP CRS	Rwy Idg	6300
CH 58299	006°	TDZE	6431
W01A		Apt Elev	6451

T A -26°C

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.

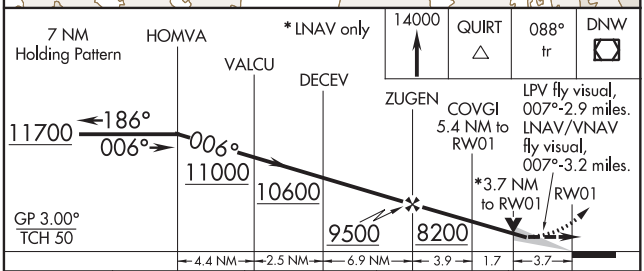
MALS

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

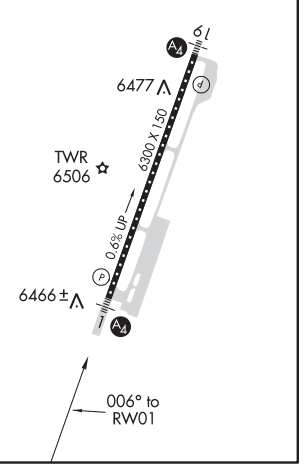
ELEV 6451 D TDZE 6431

HIRL Rwy 1-19 L



14000	QUIRT	088° tr	DNW

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)	



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JACKSON, WYOMING | AL-504 (FAA) | 18312

RNAV (GPS) Z RWY 19

JACKSON HOLE (JAC)

WAAS CH 90232 W19A	APP CRS 187°	Rwy Idg 6300 TDZE 6451 Apt Elev 6451

RNP APCH.

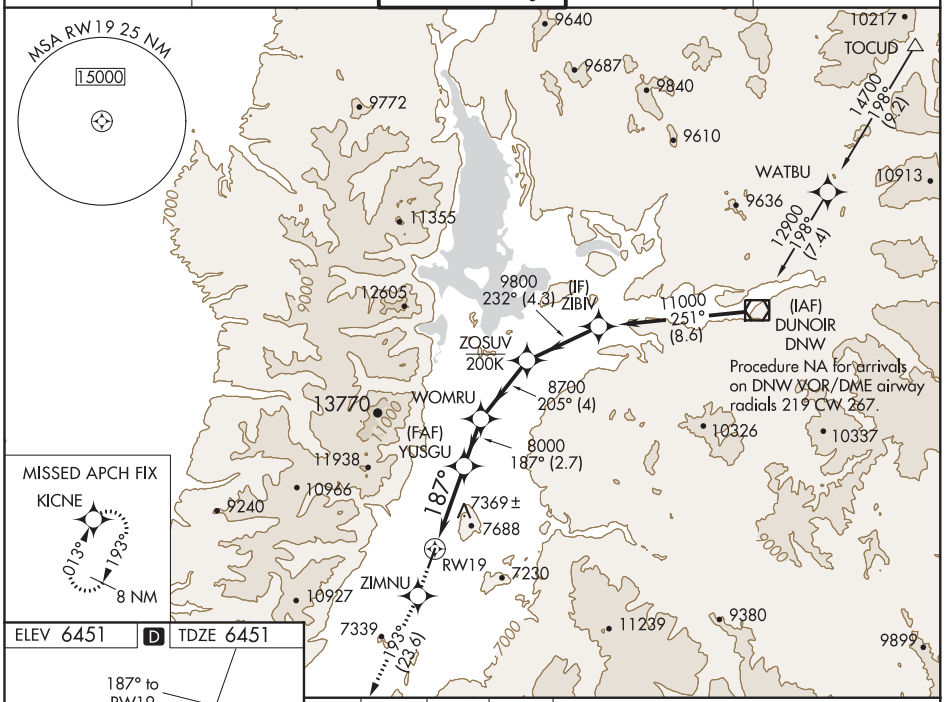
T A -26°C

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.

MALS

MISSED APPROACH: Climb to 14000 direct ZIMNU and on track 193° to KICNE and hold, continue climb-in-hold to 14000.

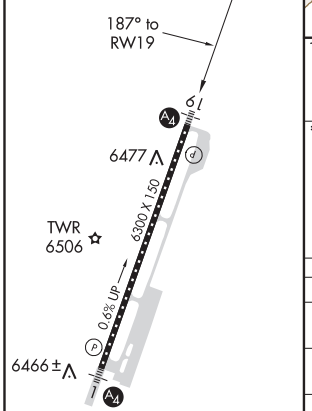
ATIS★	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



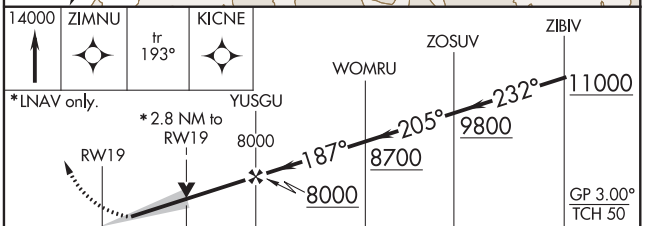
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 6451 D TDZE 6451



HIRL Rwy 1-19 L



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)

JACKSON, WYOMING
Amdt 1B 16AUG18

43°36'N-110°44'W

JACKSON HOLE (JAC)

RNAV (GPS) Z RWY 19

VOR/DME RWY 1

JACKSON HOLE (JAC)

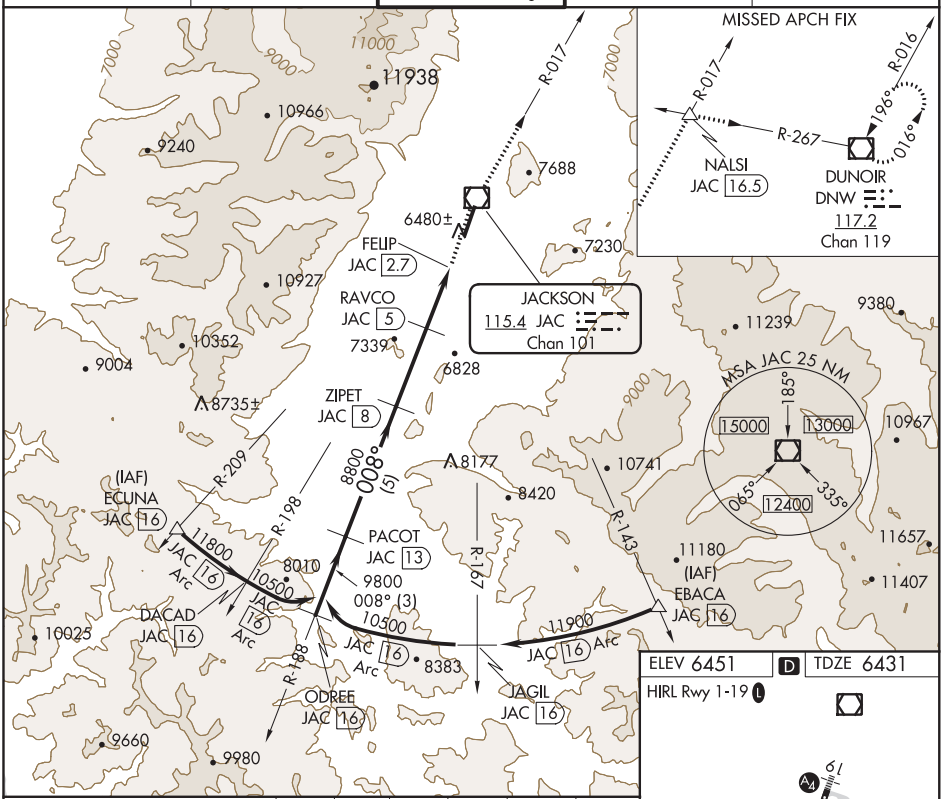
VOR/DME JAC	APP CRS	Rwy Idg	6300
115.4	008°	TDZE	6431
Chan 101		Apt Elev	6451

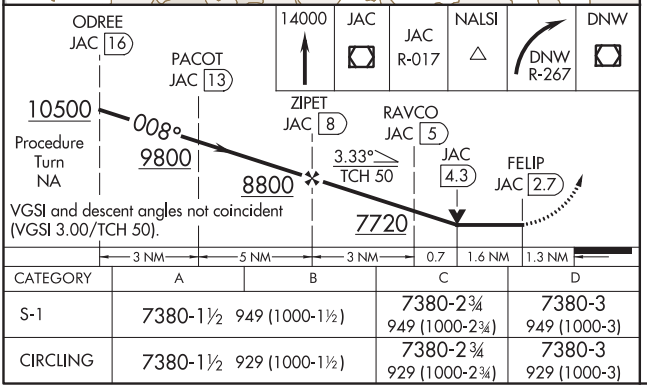
T A -26°C — Circling NA east of Rwy 1-19. Inoperative table does not apply. If local altimeter setting not received, procedure NA.

MALS

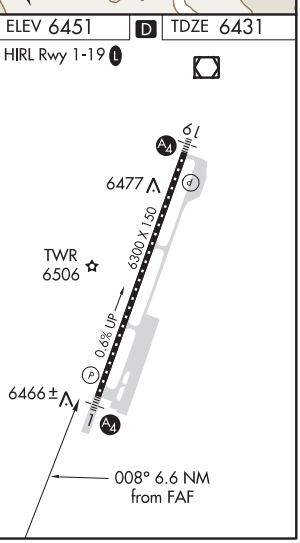
MISSED APPROACH: Climb to 14000 direct JAC VOR/DME, and via JAC R-017 to NALSI Int/JAC 16.5 DME, and right turn via DNW R-267 to DNW VOR/DME and hold.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME RWY 19

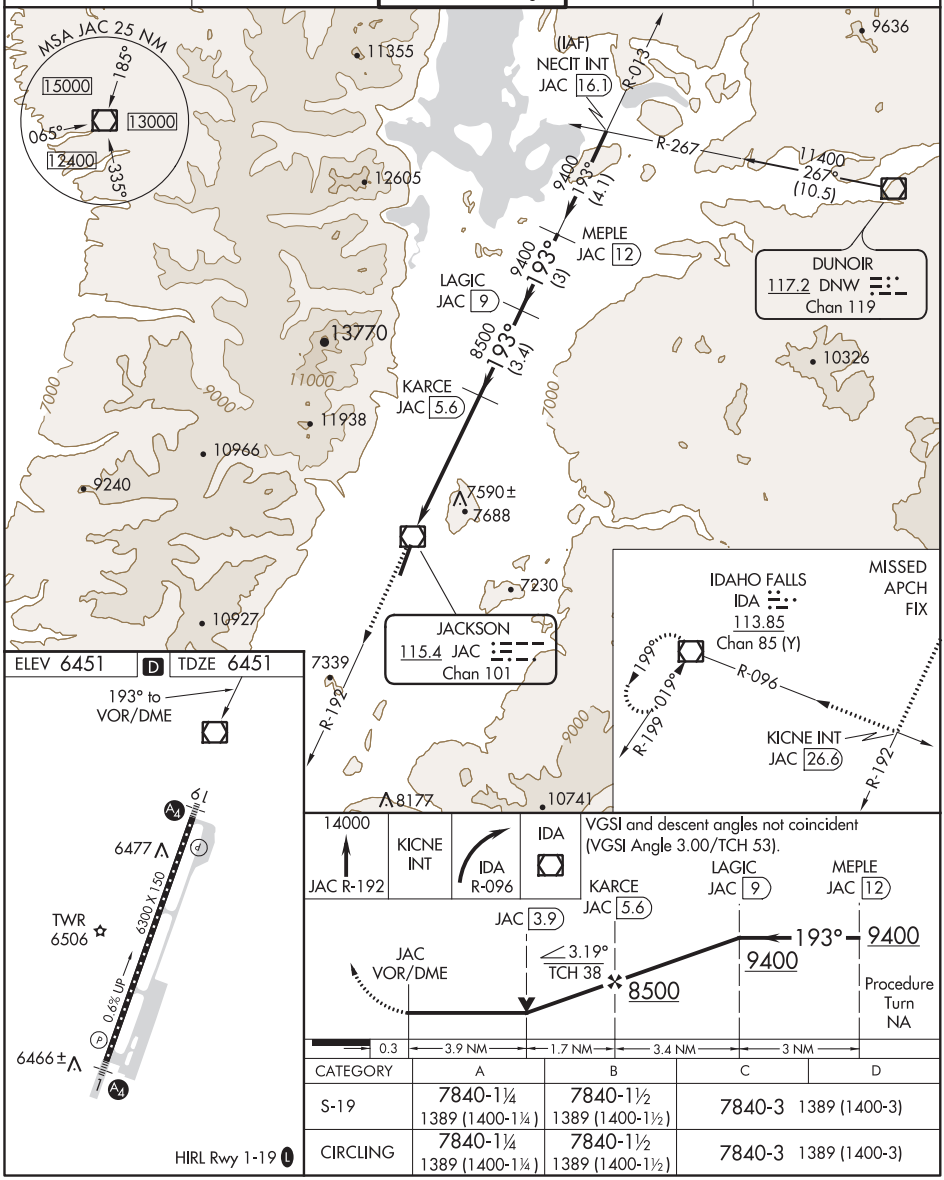
JACKSON HOLE (JAC)

VOR/DME JAC	APP CRS	Rwy Idg	6300
115.4	193°	TDZE	6451
Chan 101		Apt Elev	6451

T A -26°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.

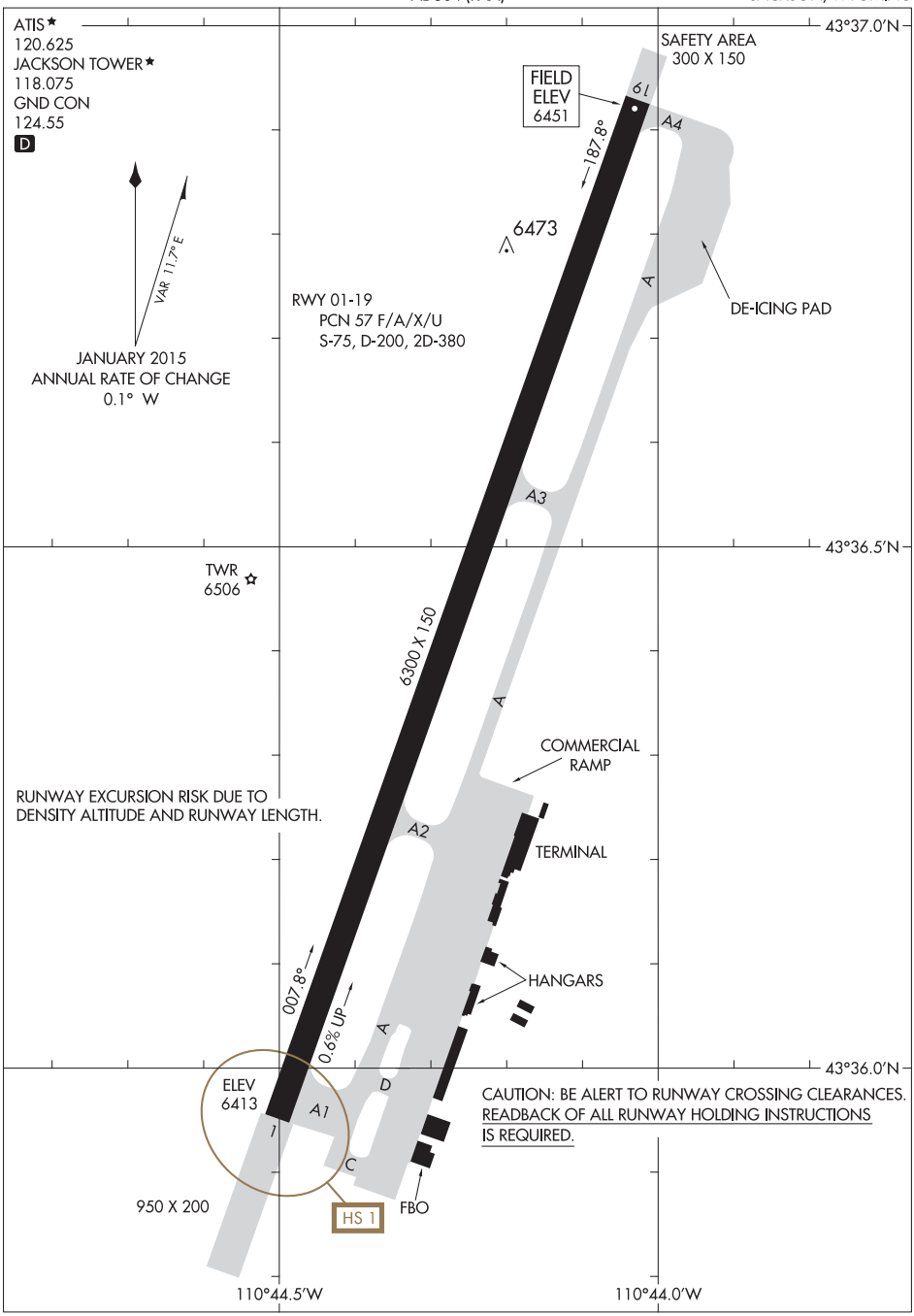
ATIS★	SALT LAKE CENTER	JACKSON TOWER★	GND CON	UNICOM
120.625	133.25 285.6	118.075 (CTAF) L	124.55	122.95



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)	

HIRL Rwy 1-19 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



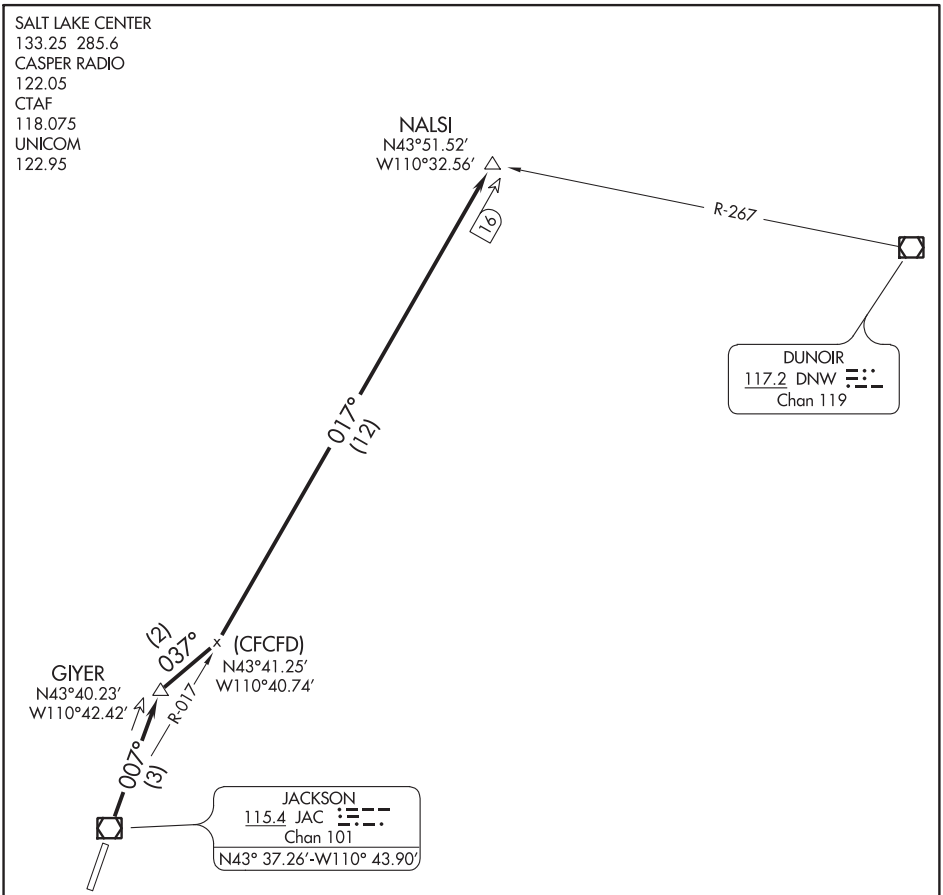
NW-1, 30 JAN 2020 to 26 MAR 2020

(GEYSR5.NALSI) 16203

GEYSER FIVE DEPARTURE (OBSTACLE)

SL-504 (FAA)

JACKSON HOLE (JAC)
JACKSON, WYOMING



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

TAKEOFF MINIMUMS

Rwy 1: Standard with minimum climb of 450′ per NM to 14000, or 4500-3 for climb in visual conditions.

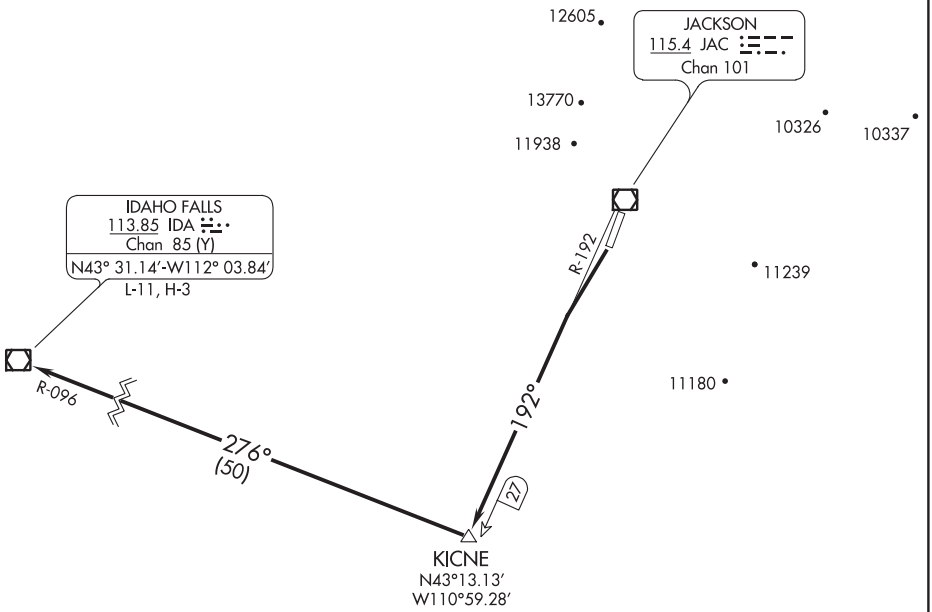
Rwy 19: NA - ATC.

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.

SALT LAKE CENTER
133.25 285.6
CASPER RADIO
122.05
CTAF
118.075
UNICOM
122.95



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.

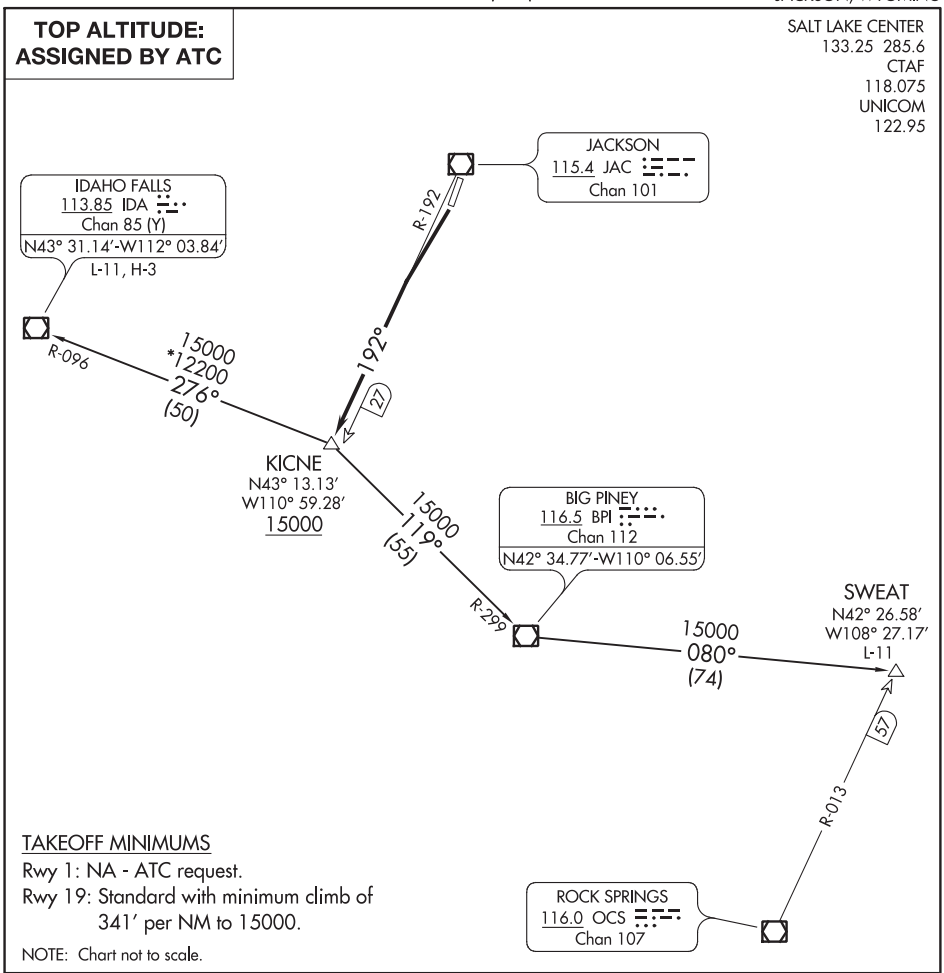
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(ALPIN2.KICNE) 18312

ALPIN TWO DEPARTURE

AL-504 (FAA)

JACKSON HOLE (JAC)
JACKSON, WYOMING



TAKEOFF MINIMUMS

Rwy 1: NA - ATC request.

Rwy 19: Standard with minimum climb of 341' per NM to 15000.

NOTE: Chart not to scale.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5001
CH 90144	086°	TDZE	4019
W09A		Apt Elev	4053

RNAV (GPS) RWY 9

JEROME COUNTY (JER)

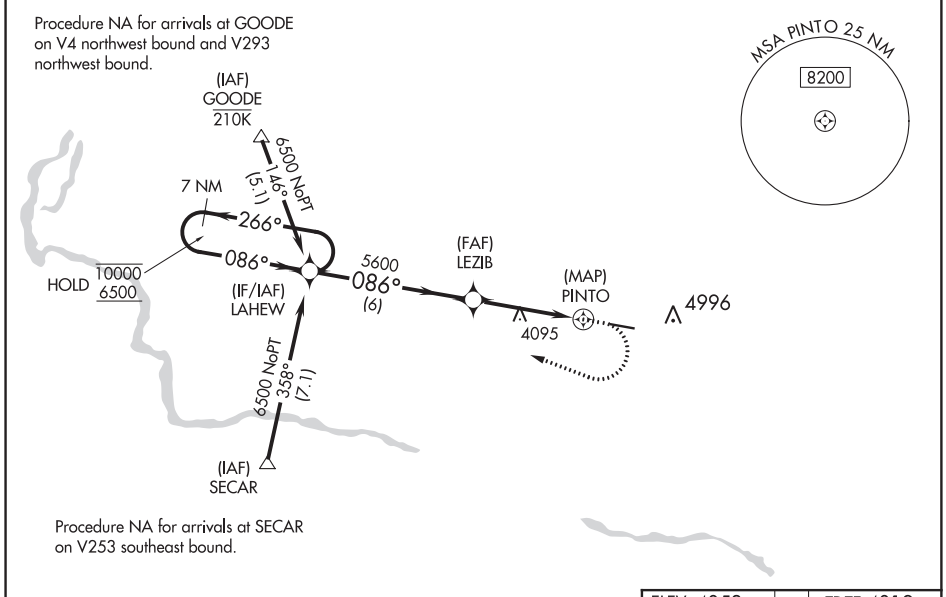
RNP APCH.

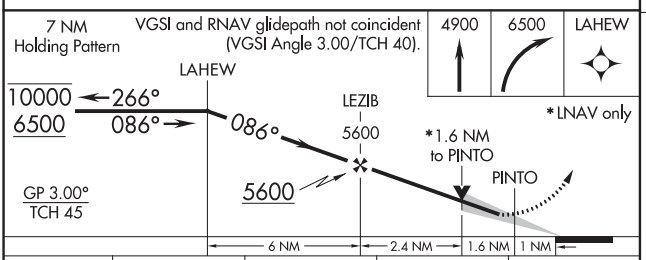
T
A

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. Circling NA north of Rwy 9-27.

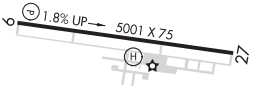
MISSED APPROACH: (Do not exceed 185K until LAHEW) Climb to 4900 then climbing right turn to 6500 direct LAHEW and hold. # Missed approach requires minumum climb of 300 feet per NM to 5200.

ASOS	TWIN FALLS APP CON★	UNICOM
135.225	126.7 353.75	122.8 (CTAF) L





ELEV 4053 TDZE 4019



MIRL Rwy 9-27 L

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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JEROME, IDAHO | AL-6812 (FAA) | 20030

RNAV (GPS) RWY 27

JEROME COUNTY (JER)

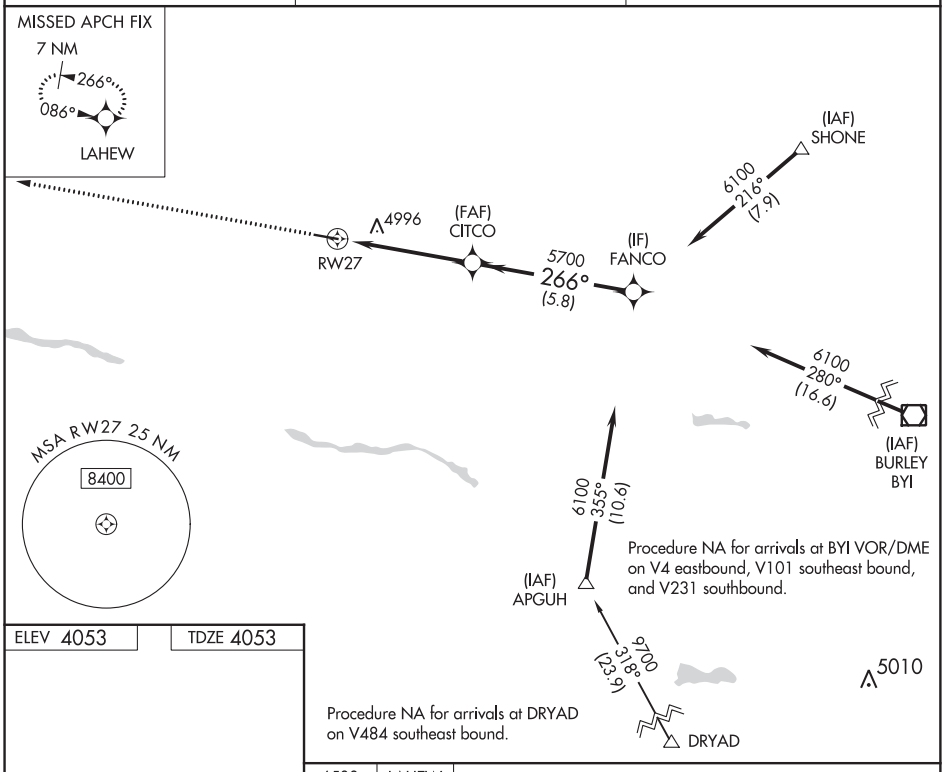
WAAS	APP CRS	Rwy Idg	5001
CH 90514	266°	TDZE	4053
W27A		Apt Elev	4053

RNP APCH.

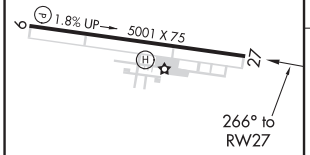
Circling NA north of Rwy 9 and 27.
Rwy 27 helicopter visibility reduction below ¾ SM NA.

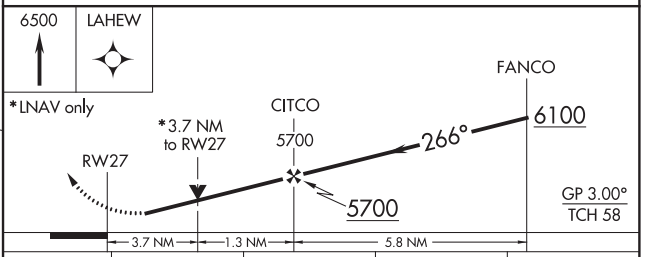
MISSED APPROACH: Climb to 6500 direct LAHEW and hold.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC TWF	APP CRS	Rwy Idg	N/A
115.8	346°	TDZE	N/A
Chan 105		Apt Elev	4053

VOR-A

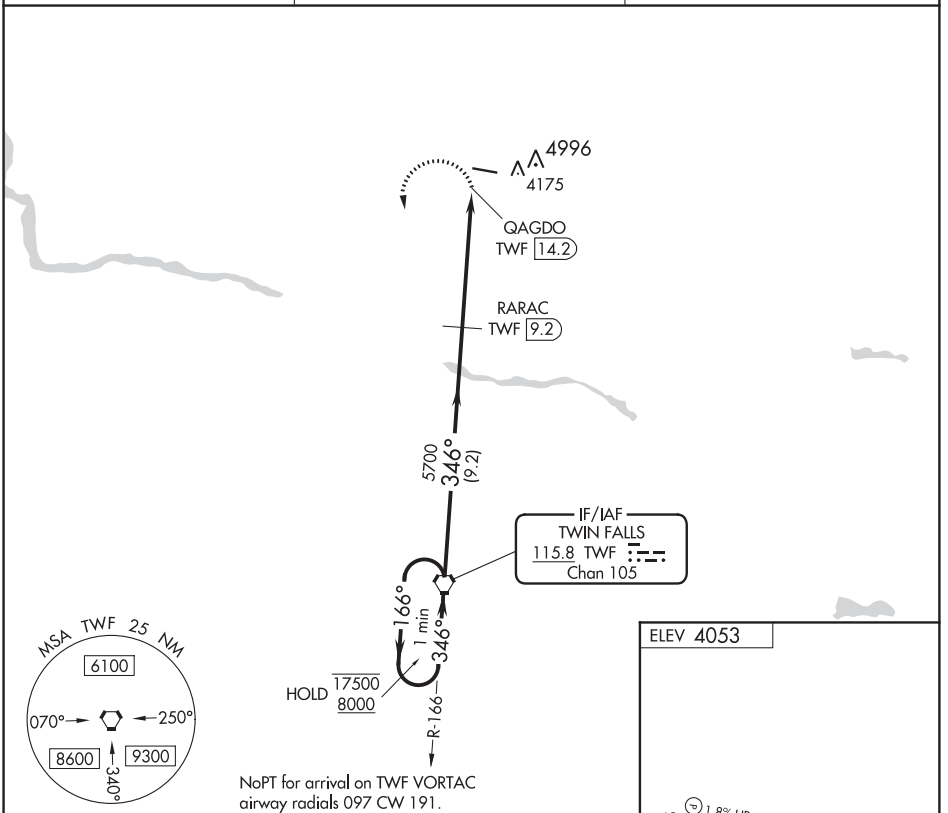
JEROME COUNTY (JER)

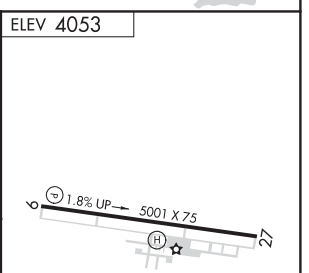
DME required.

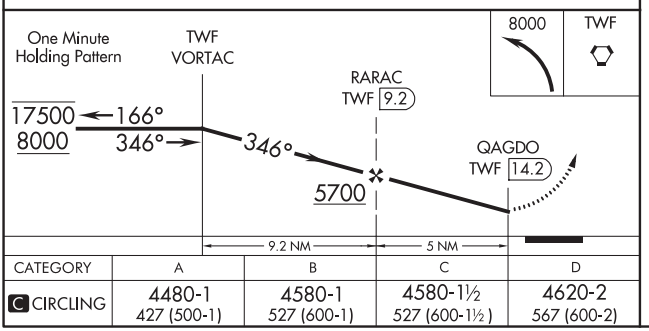
T A Circling NA north of Rwy 9-27.

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	4480-1 427 (500-1)	4580-1 527 (600-1)	4580-1½ 527 (600-1½)	4620-2 567 (600-2)

346° 5 NM from FAF

MIRL Rwy 9-27 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JOHN DAY, OREGON | AL-9264 (FAA) | 19339

APP CRS	Rwy Idg	4471
083°	TDZE	3669
	Apt Elev	3703

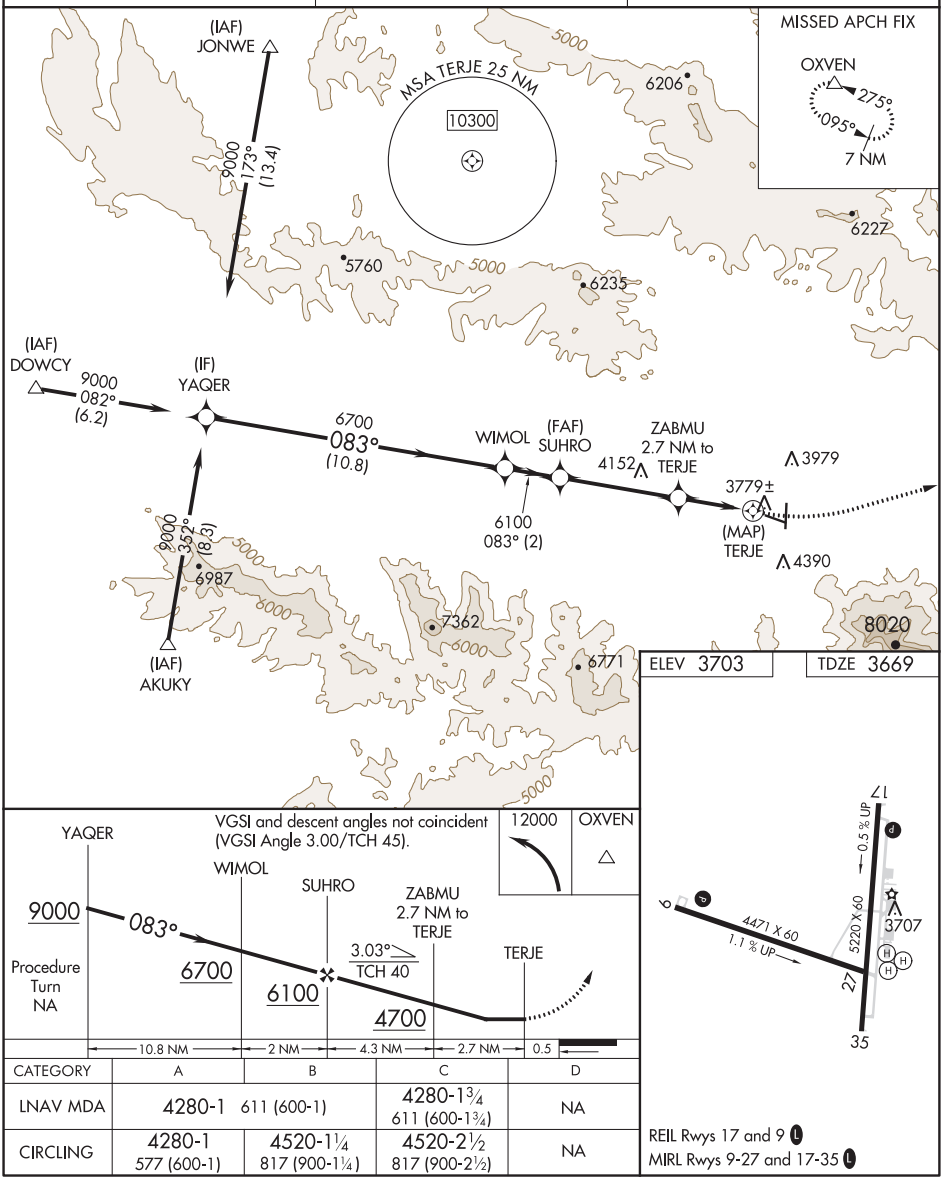
RNAV (GPS) Y RWY 9

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	4471
CH 73010	091°	TDZE	3669
W09A		Apt Elev	3703

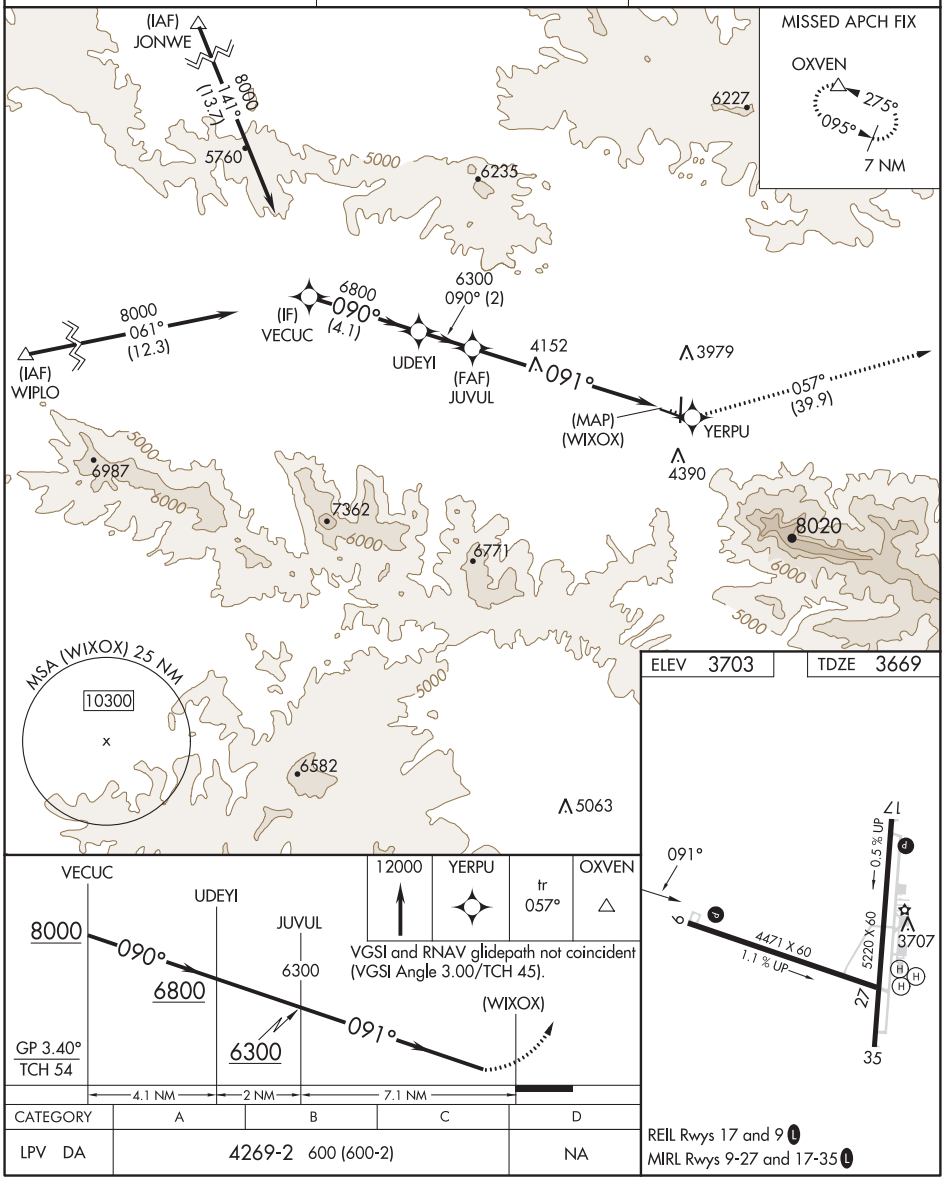
RNAV (GPS) Z RWY 9

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KALISPELL, MONTANA | AL-887 (FAA) | 19339

LOC I-GPI	APP CRS	Rwy Idg	9007
111.5	020°	TDZE	2966
		Apt Elev	2977

ILS or LOC RWY 2
GLACIER PARK INTL (GPI)

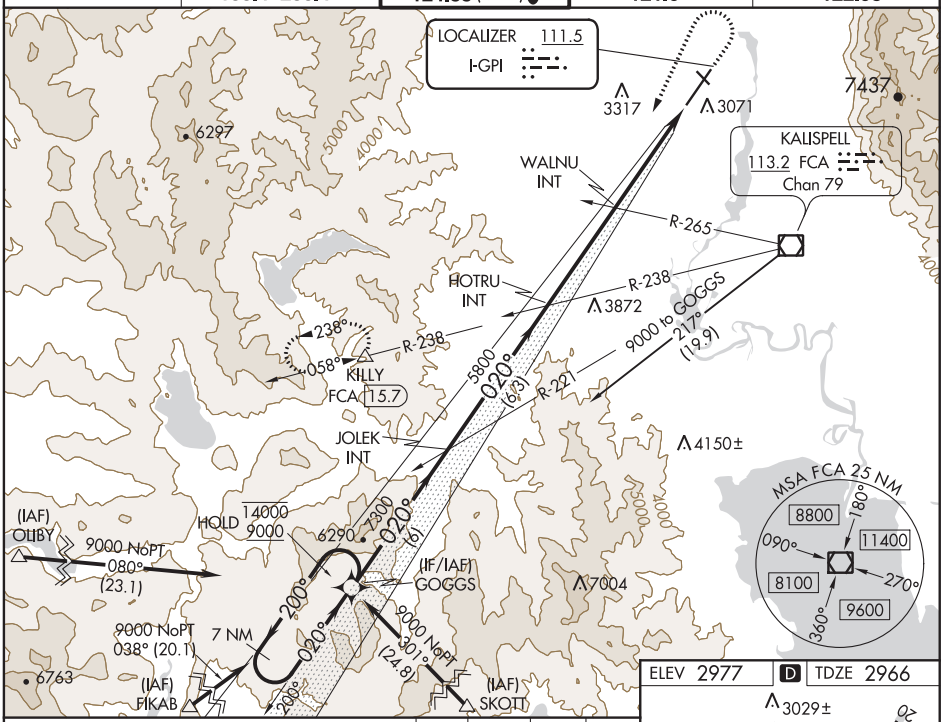
DME required. RNAV 1-GPS or RADAR required for procedure entry.

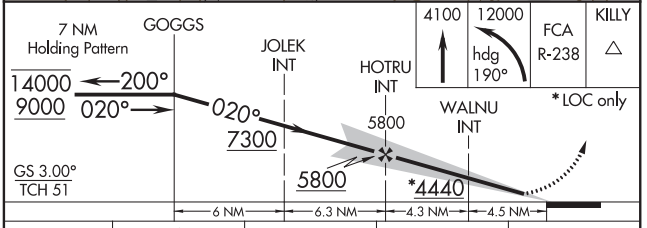
T A Inop table does not apply to S-LOC 2 Cats C/D.

MALSR

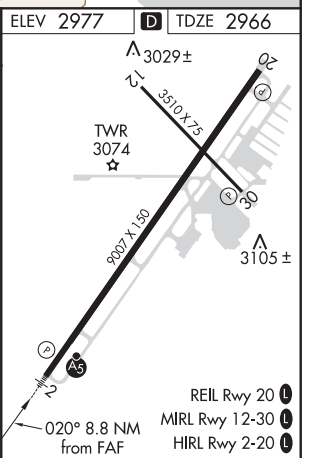
MISSED APPROACH: Climb to 4100 then climbing left turn to 12000 on heading 190° and FCA VOR/DME R-238 to KILLY/15.7 DME and hold, continue climb-in-hold to 12000.

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)



FAF to MAP 8.8 NM					
Knots	60	90	120	150	180
Min:Sec	8:48	5:52	4:24	3:31	2:56

KALISPELL, MONTANA
Amdt 8 05DEC19

48°19'N-114°15'W

GLACIER PARK INTL (GPI)
ILS or LOC RWY 2

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) RWY 20

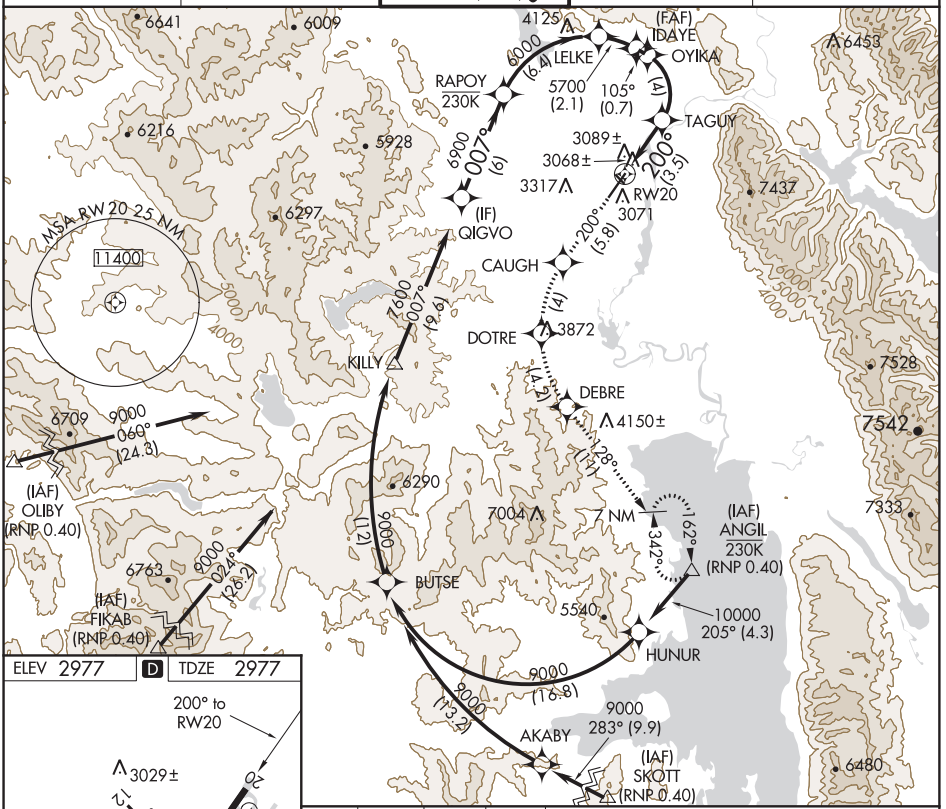
GLACIER PARK INTL (GPI)

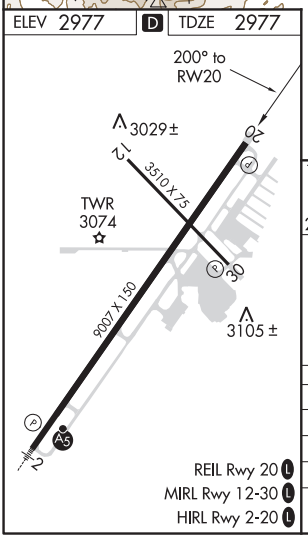
APP CRS	Rwy Idg	9007
200°	TDZE	2977
	Apt Elev	2977

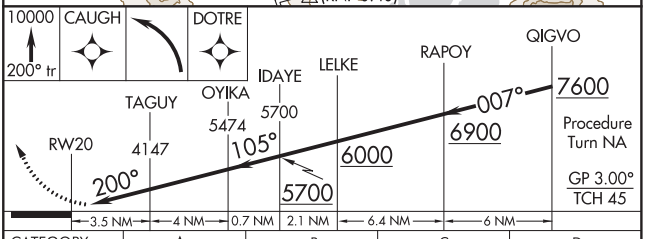
T A RF and GPS required. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). Visibility reduction by helicopters NA. *Missed approach requires minimum climb of 235 feet per NM to 6900.

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







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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KALISPELL, MONTANA | AL-887 (FAA) | 19171

APP CRS	Rwy Idg	9007
020°	TDZE	2966
	Apt Elev	2977

RNAV (RNP) Y RWY 2

GLACIER PARK INTL (GPI)

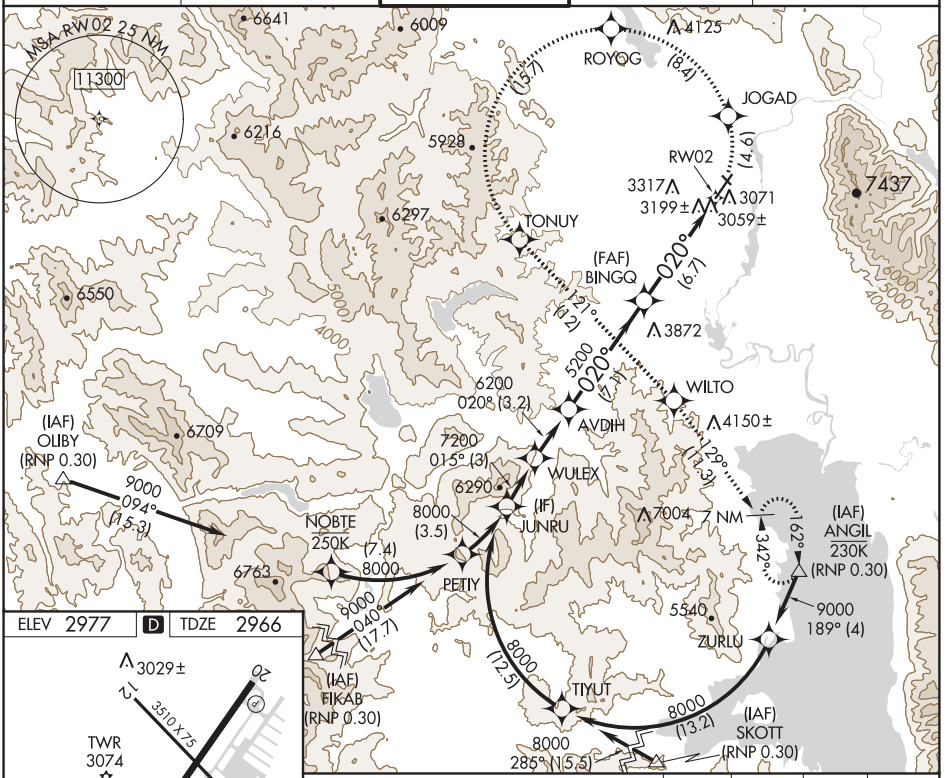
TA

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.

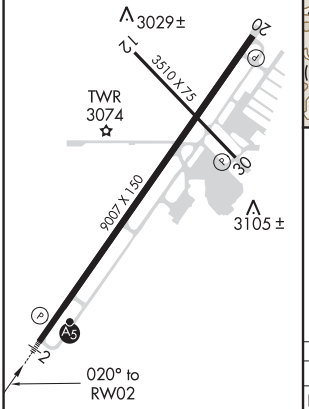
MALSR

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.

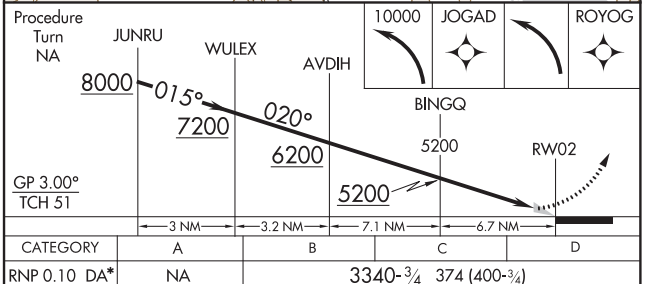
ATIS	SALT LAKE CENTER	GLACIER TOWER *	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95



ELEV 2977 D TDZE 2966



REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 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

KALISPELL, MONTANA
Orig-A 30JUN11

48°19'N-114°15'W

GLACIER PARK INTL (GPI)

RNAV (RNP) Y RWY 2

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 30

GLACIER PARK INTL (GPI)

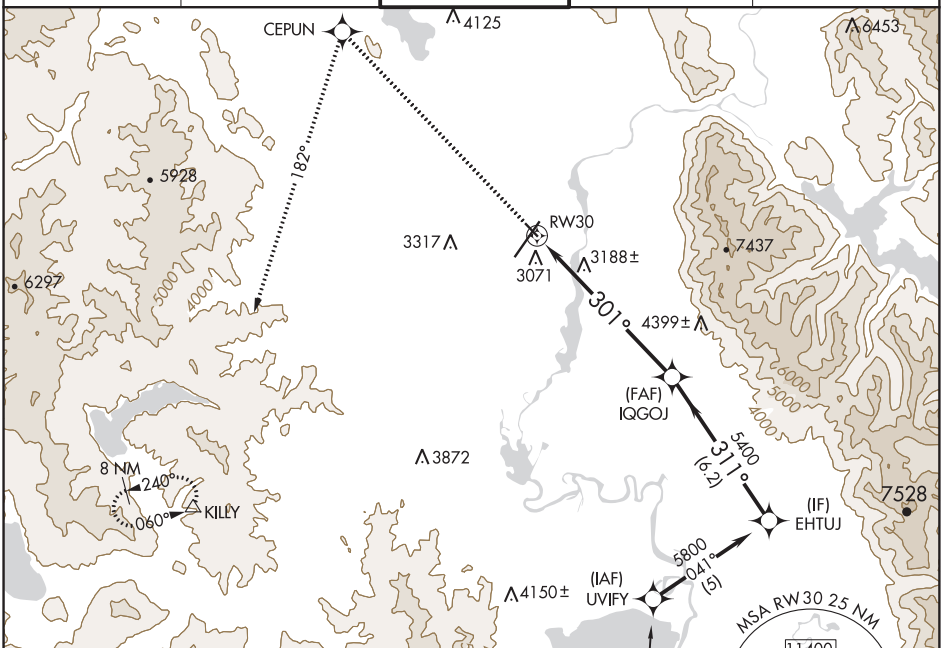
APP CRS	Rwy Idg	3510
301°	TDZE	2974
	Apt Elev	2977

RNP APCH.

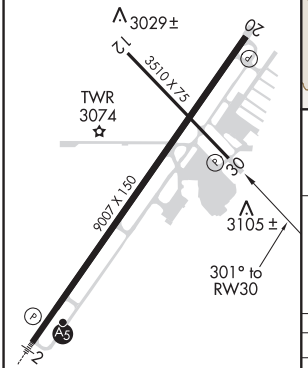
Rwy 30 helicopter visibility reduction below ¾ SM NA.

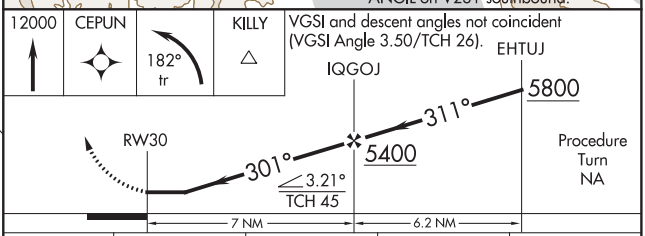
MISSED APPROACH: Climb to 12000 direct CEPUN and left turn via track 182° to KILLY and hold, continue climb-in-hold to 12000.

ATIS	SALT LAKE CENTER	GLACIER TOWER★	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95



ELEV 2977 D TDZ 2974





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KALISPELL, MONTANA | AL-887 (FAA) | 19171

RNAV (GPS) Z RWY 2

GLACIER PARK INTL (GPI)

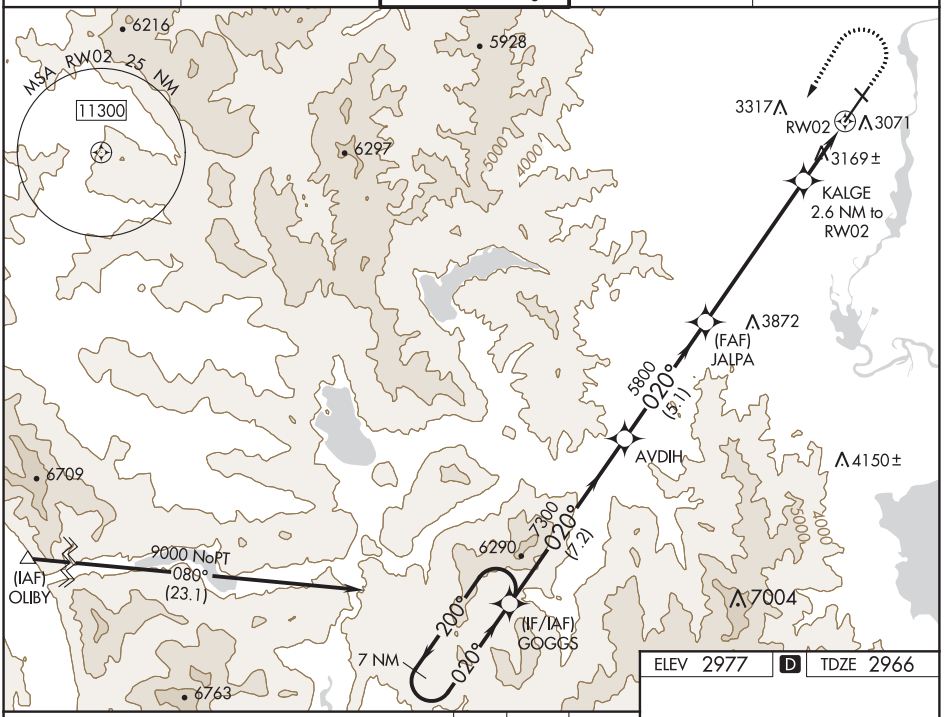
WAAS	APP CRS	Rwy Idg	9007
CH 70799	020°	TDZE	2966
W02A		Apt Elev	2977

T A — 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.

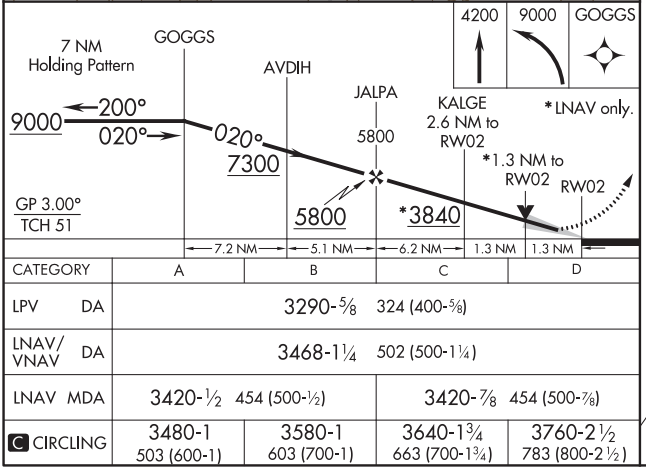
MALSR

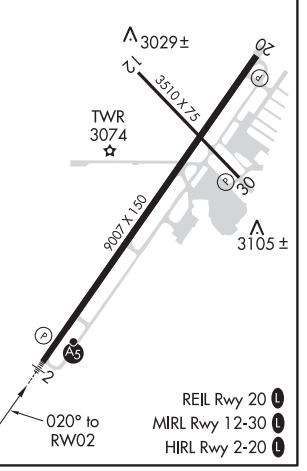
MISSED APPROACH: (Do not exceed 185K until GOGGS) Climb to 4200, then climbing left turn to 9000 direct GOGGS and hold, continue climb-in-hold to 9000.

ATIS	SALT LAKE CENTER	GLACIER TOWER ★	GND CON	UNICOM
132.625	133.4 285.4	124.55 (CTAF) L	121.6	122.95



ELEV 2977 | D | TDZ 2966





CATEGORY	A	B	C	D
LPV DA	3290-5/8 324 (400-5/8)			
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)

KALISPELL, MONTANA
Amdt 3 17AUG17

48°19'N-114°15'W

GLACIER PARK INTL (GPI)

RNAV (GPS) Z RWY 2

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME RWY 30

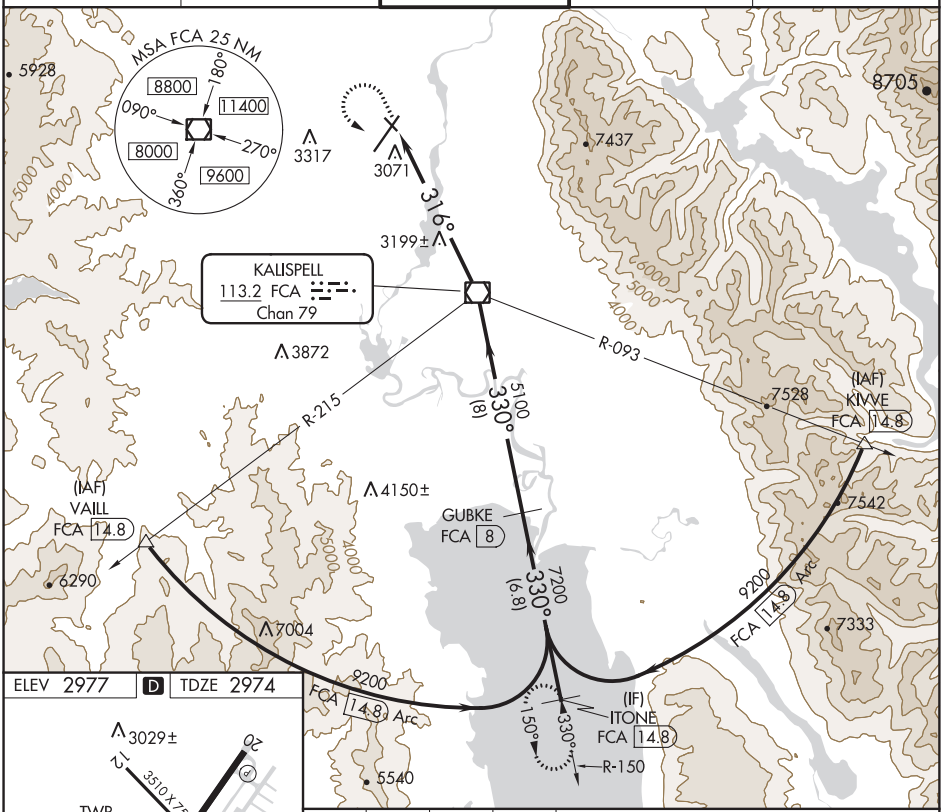
GLACIER PARK INTL (GPI)

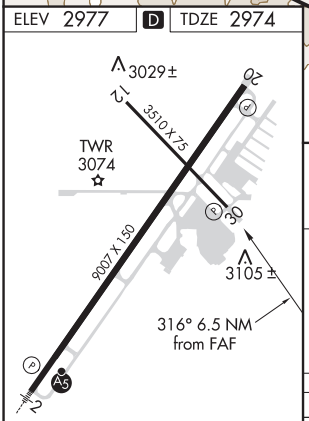
VOR/DME FCA	APP CRS	Rwy Idg	3510
113.2	316°	TDZE	2974
Chan 79		Apt Elev	2977

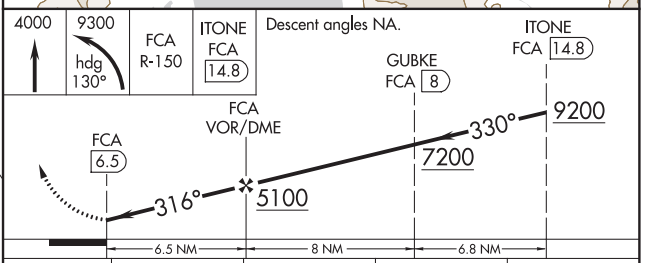
Helicopter visibility reduction below 1 SM not authorized. When VGSI inoperative, straight-in minimums not authorized at night.

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







CATEGORY	A	B	C	D
S-30	3480-1	506 (600-1)	3480-1½	506 (600-1½)
CIRCLING	3520-1	543 (600-1)	3640-1¾ 663 (700-1¾)	3640-2 663 (700-2)

REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20

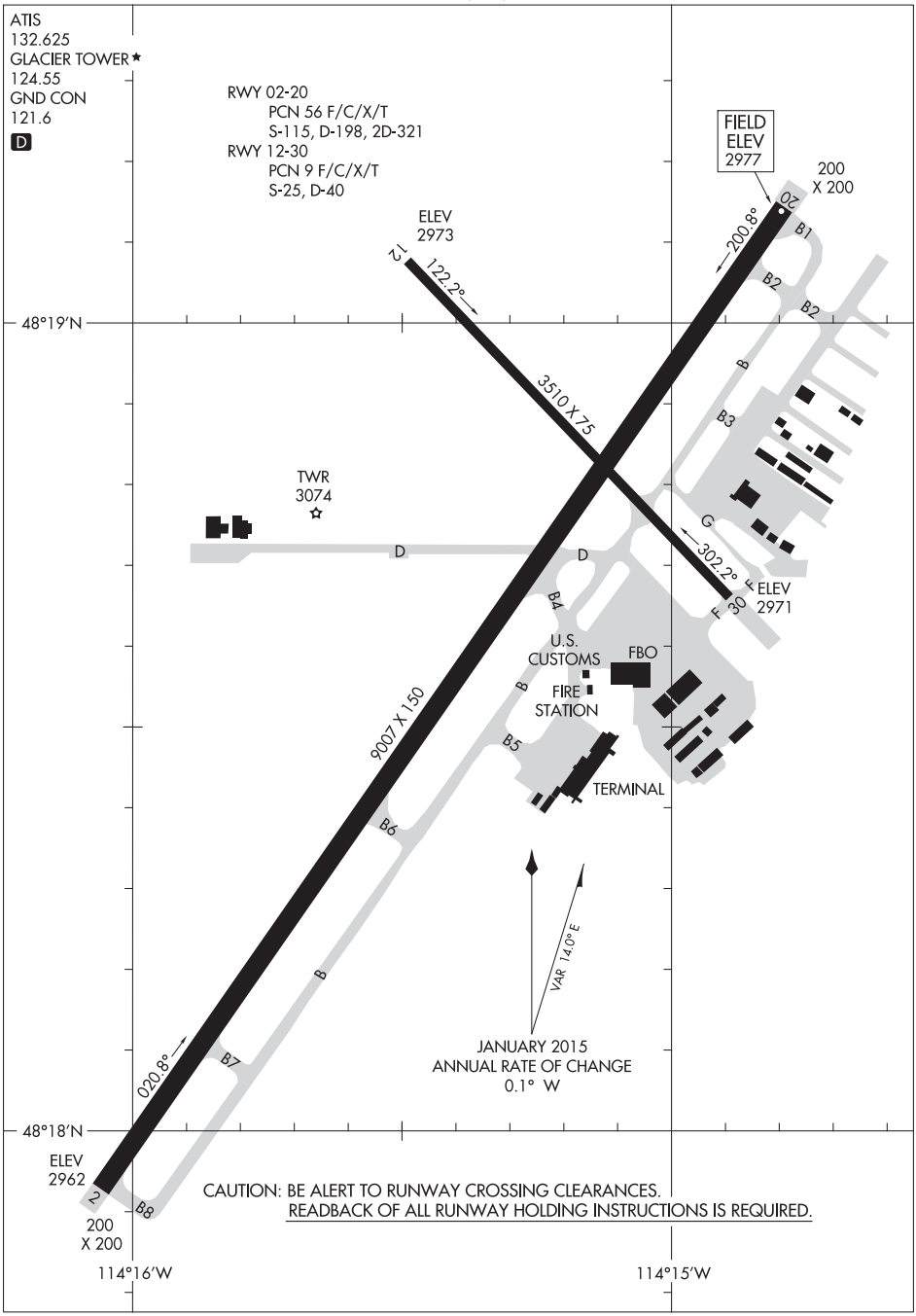
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18088

AIRPORT DIAGRAM

GLACIER PARK INTL (GPI)
KALISPELL, MONTANA

AL-887 (FAA)



AIRPORT DIAGRAM
18088

KALISPELL, MONTANA
GLACIER PARK INTL (GPI)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

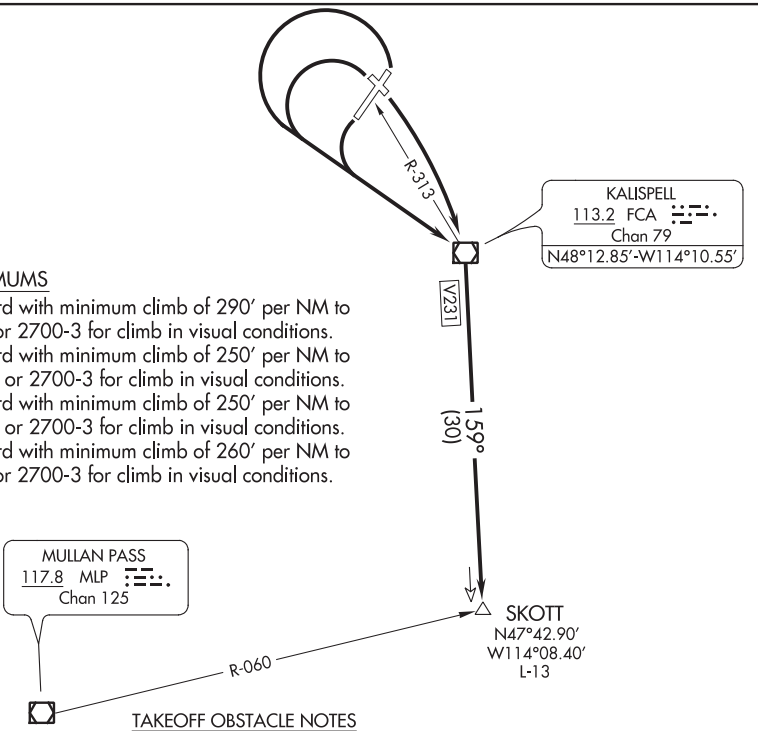
SKOTT TWO DEPARTURE (OBSTACLE)

SL-887 (FAA)

KALISPELL, MONTANA

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

(GPI1.ANGIL) 18312

KALISPELL ONE DEPARTURE (RNAV)

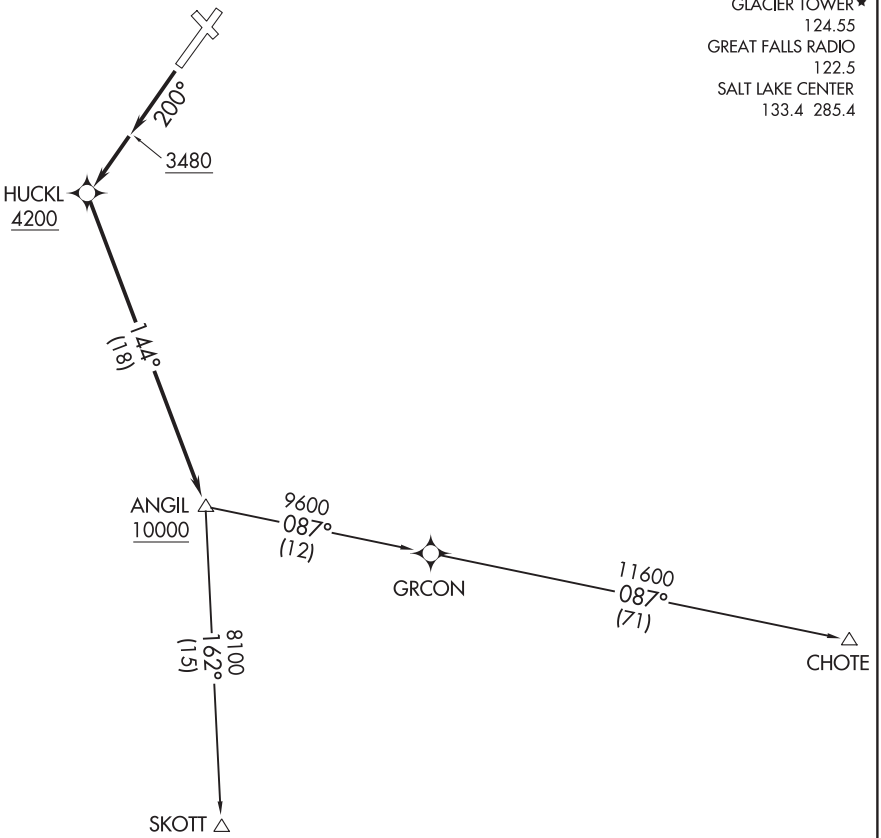
AL-887 (FAA)

GLACIER PARK INTL (GPI)
KALISPELL, MONTANA

NW-1, 30 JAN 2020 to 26 MAR 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)

TOP ALTITUDE:
ASSIGNED BY ATC
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.
NOTE: Chart not to scale.
ATIS 132.625
GND CON 121.6
GLACIER TOWER* 124.55
GREAT FALLS RADIO 122.5
SALT LAKE CENTER 133.4 285.4
KECEK 7000 230K
EEVEL 9000
KNEVL
DAACE 6300
PYGMY 8300
KILLY
RIDDG 10000 250K
ZAMON 10000
BOFVY
OLIBY
EYESE
EYCHO 12000
290°
020°
200°
3480
N
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.

KELSO, WASHINGTON | AL-5638 (FAA) | 18312

RNAV (GPS) RWY 12

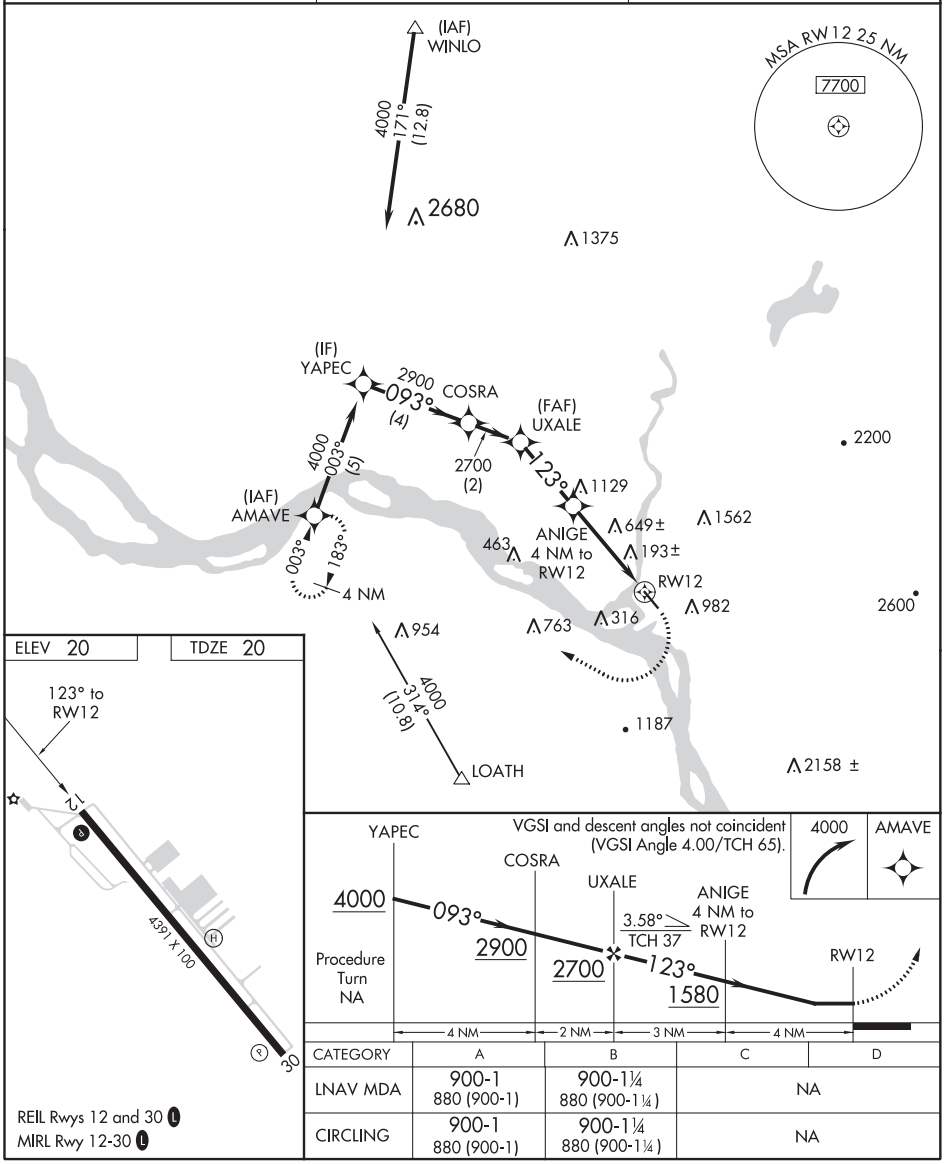
SOUTHWEST WASHINGTON RGNL (KLS)

APP CRS	Rwy Idg	4391
123°	TDZE	20
	Apt Elev	20

Circling NA northeast of Rwy 12-30. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Scappoose altimeter setting and increase all MDA 60 feet and all Cat A visibility ¼ mile.

MISSED APPROACH: 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



CATEGORY	A	B	C	D
LNAV MDA	900-1 880 (900-1)	900-1¼ 880 (900-1¼)	NA	
CIRCLING	900-1 880 (900-1)	900-1¼ 880 (900-1¼)	NA	

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

KELSO, WASHINGTON
Orig 08APR10

46°07′N-122°54′W

SOUTHWEST WASHINGTON RGNL (KLS)

RNAV (GPS) RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

NDB LSO 256	APP CRS 152°	Rwy Idg N/A TDZE N/A Apt Elev 20

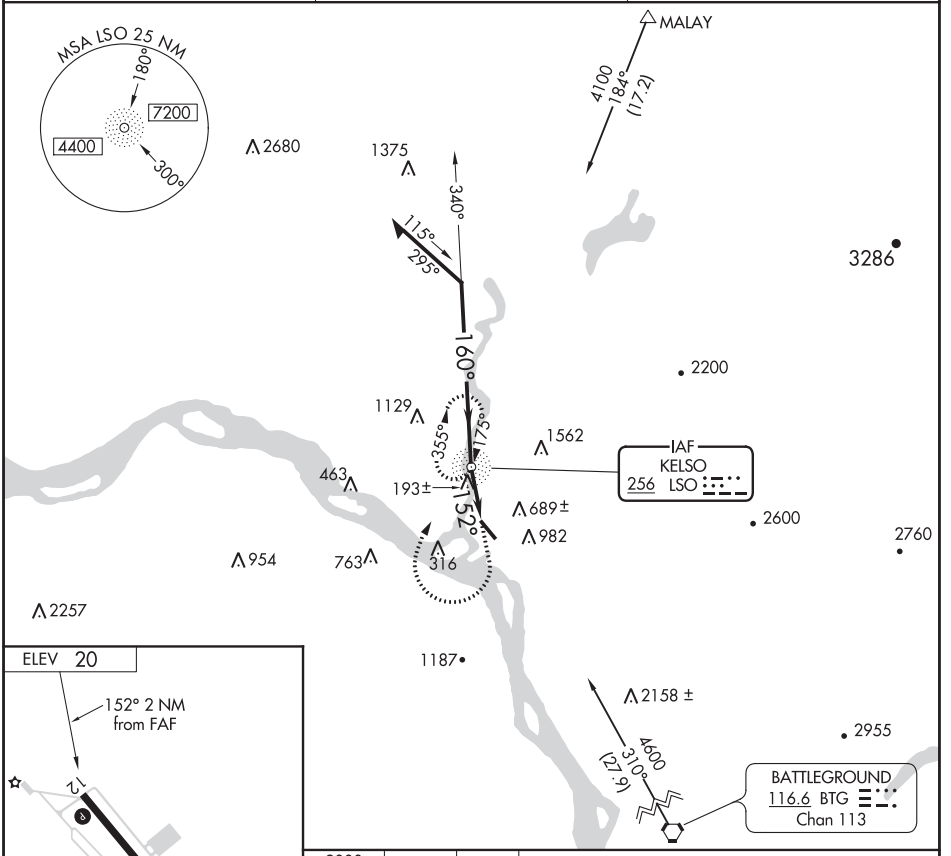
NDB-A

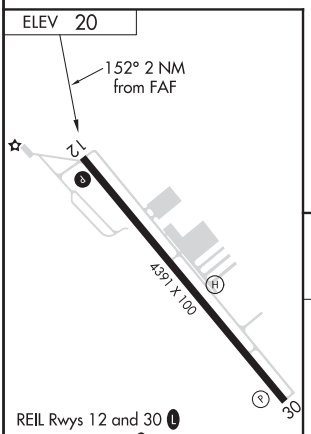
SOUTHWEST WASHINGTON RGNL (KLS)

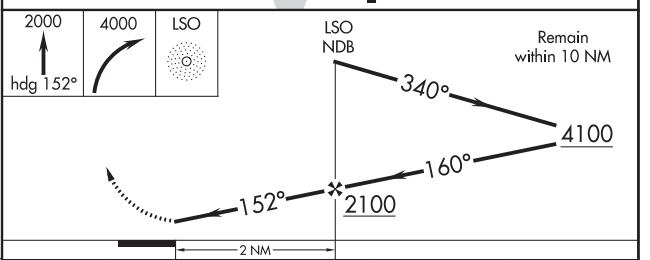
Circling NA NE of Rwy 12-30.
When local altimeter setting not received, use Scappoose altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 2000 via heading 152° then climbing right turn to 4000 direct LSO NDB and hold, continue climb-in-hold to 4000.

AWOS-3PT	SEATTLE CENTER	UNICOM
135.075	124.2 317.6	122.8 (CTAF) L







FAF to MAP 2 NM					
Knots	60	90	120	150	180
Min:Sec	2:00	1:20	1:00	0:48	0:40

CATEGORY	A	B	C	D
CIRCLING	1300-1¼ 1280 (1300-1¼)	1300-1½ 1280 (1300-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(KELSO1.KELNG) 20030

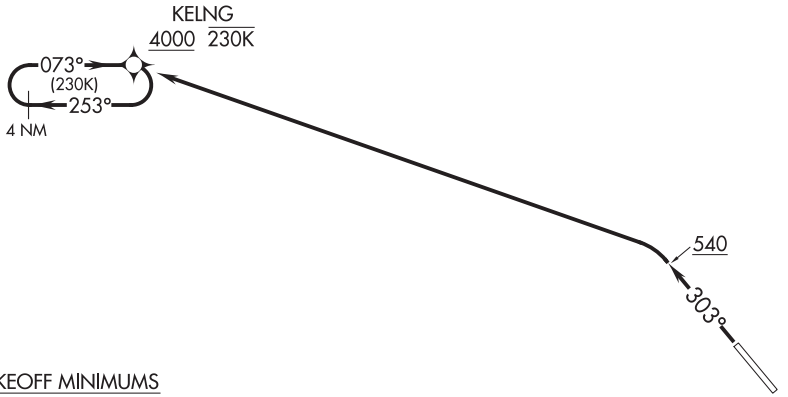
SOUTHWEST WASHINGTON RGNL (KLS)

KELSO ONE DEPARTURE (OBSTACLE) (RNAV)

AL-5638 (FAA)

KELSO, WASHINGTON

SEATTLE CENTER
124.2 317.6
UNICOM
122.8 (CTAF)
SEATTLE RADIO (RCO)
122.55



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	8203
CH 82437	163°	TDZE	7289
W16A		Apt Elev	7289

RNAV (GPS) RWY 16

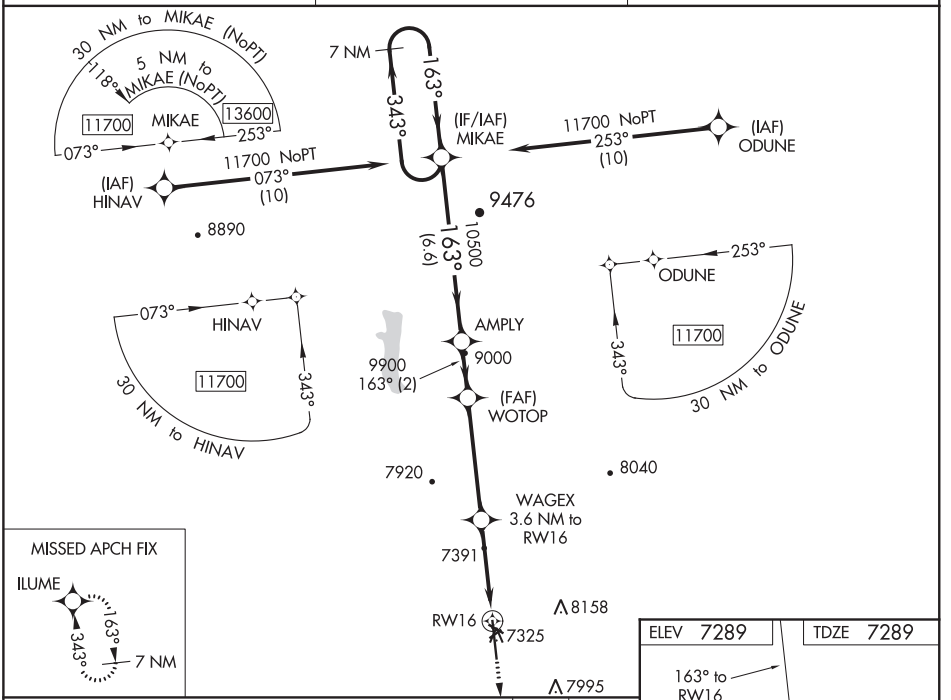
KEMMERER MUNI (EMM)

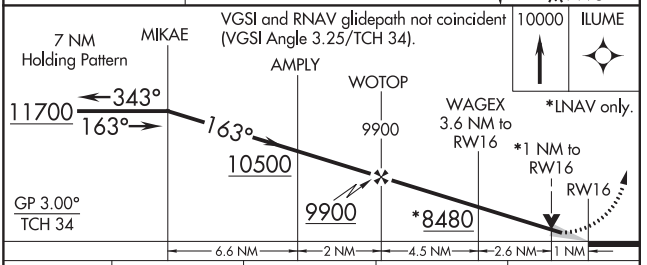
T A -35°C

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.

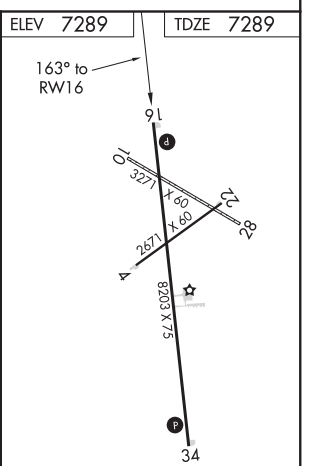
MISSED APPROACH: Climb to 10000 direct ILUME and hold.

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	7660-1 371 (400-1)	8240-1½ 951 (1000-1½)	NA	



REIL Rwys 16 and 34 L

MIRL Rwys 16-34 and 4-22 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KEMMERER, WYOMING | AL-507 (FAA) | 19227

RNAV (GPS) RWY 34

KEMMERER MUNI (EMM)

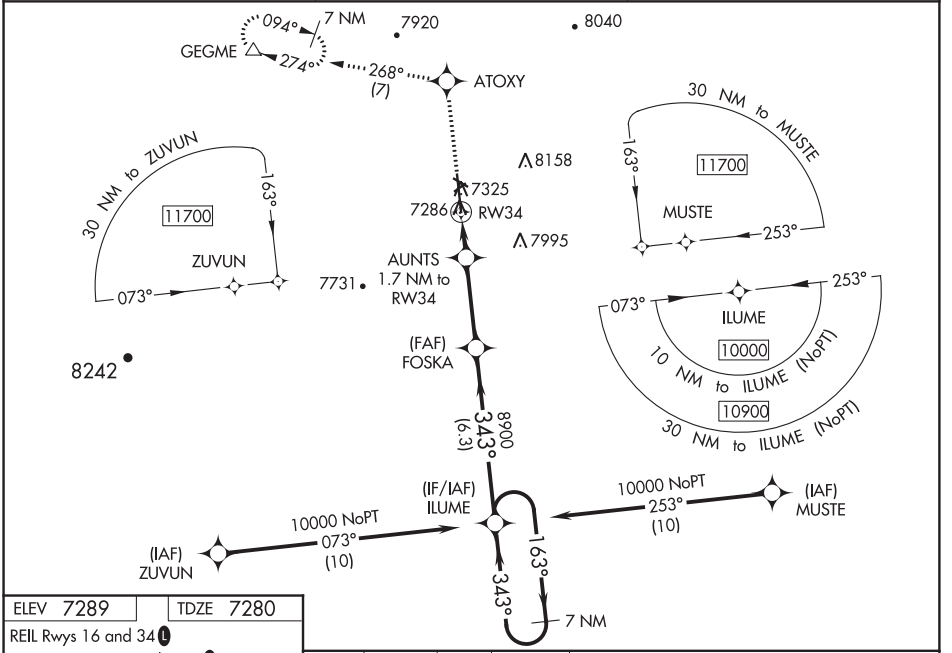
WAAS	APP CRS		
CH 90337	343°	Rwy Idg	8203
W34A		TDZE	7280
		Apt Elev	7289

-35°C

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.

MISSED APPROACH: Climb to 12000 direct ATOXY and on track 268° direct GEGME and hold, continue climb-in-hold to 12000.

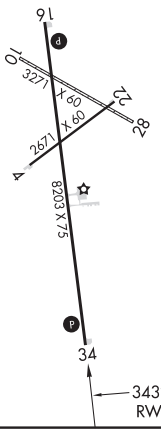
AWOS-3PT	SALT LAKE CITY CENTER	UNICOM
119.675	124.35 353.5	122.8 (CTAF) L★

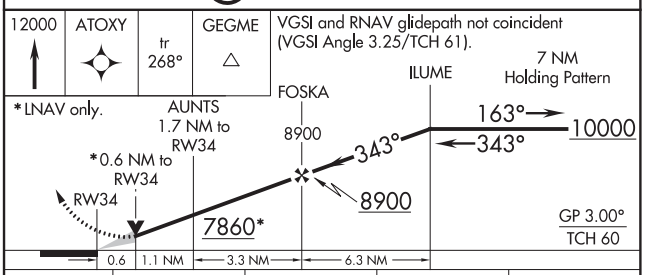


ELEV 7289	TDZE 7280

REIL Rwys 16 and 34 L

MIRL Rwys 16-34 and 4-22 L





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	7660-1 371 (400-1)	8240-1½ 951 (1000-1½)	NA	

KEMMERER, WYOMING
Amdt 2 08JAN15

41°49'N-110°33'W

KEMMERER MUNI (EMM)

RNAV (GPS) RWY 34

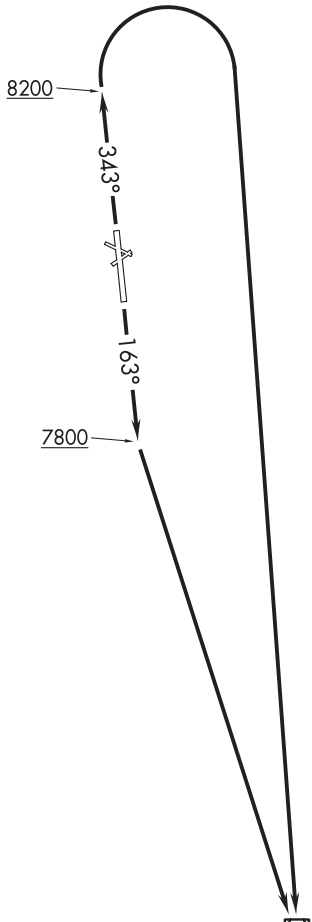
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KLAMATH FALLS, OREGON | AL-473 (FAA) | 20030

LOC I-LMT	APP CRS	Rwy Idg / TDZE / Apt Elev
109.5	321°	10301 / 4095 / 4095

ILS or LOC/DME RWY 32

CRATER LAKE-KLAMATH RGNL (LMT)

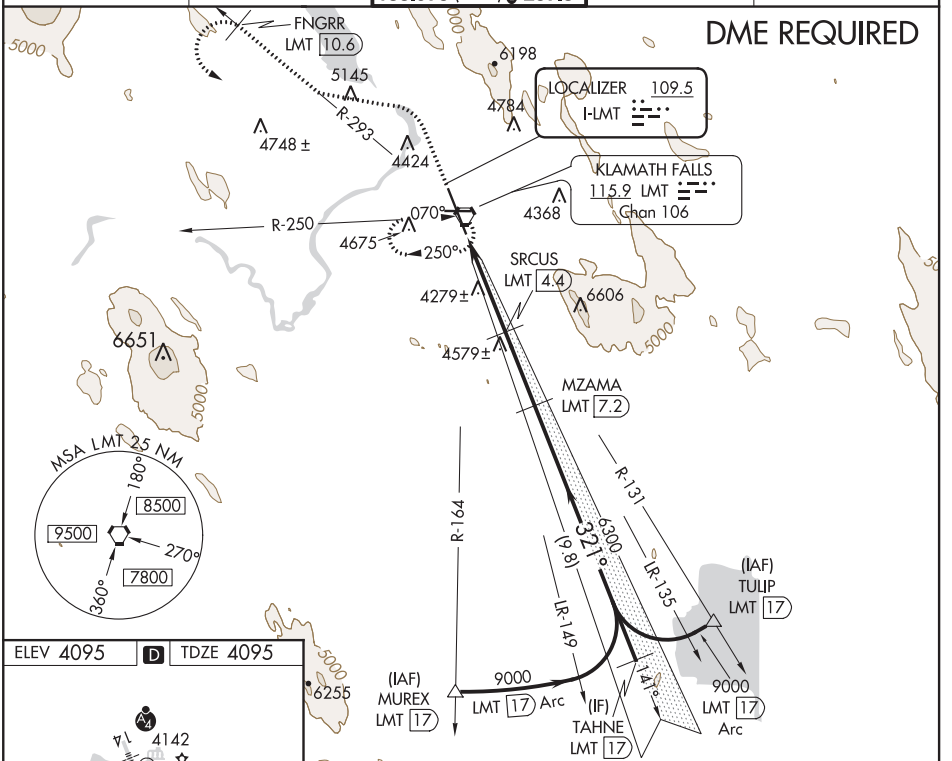
DME from LMT VORTAC. Simultaneous reception of I-LMT and LMT DME required. Circling NA for Cat D east of Rwy 14-32.
##Missed approach requires minimum climb gradient of 217′ per NM to 5600.
**RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

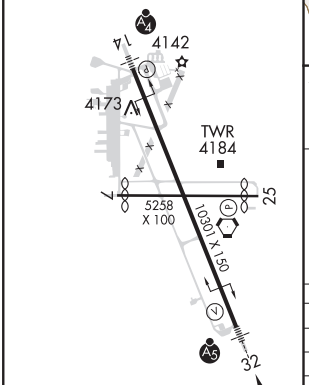
MISSED APPROACH: Climb to 4700 then climbing left turn to 10000 via heading 263° and LMT VORTAC R-293 to FNGRR/LMT VORTAC 10.6 DME then left turn direct LMT VORTAC and hold.

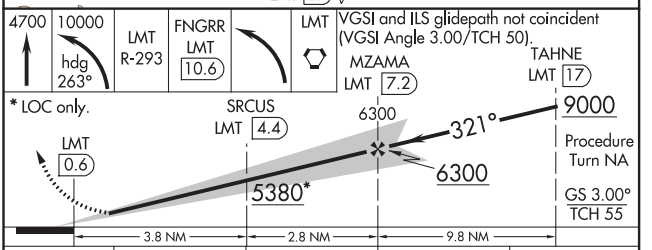
ATIS	KINGSLEY APP CON	KINGSLEY TOWER*	GND CON	UNICOM
126.5 263.0	123.675 270.8	133.975 (CTAF) L 257.8	121.9 348.6	122.95

DME REQUIRED



ELEV 4095	D	TDZE 4095





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 14

CRATER LAKE-KLAMATH RGNL (LMT)

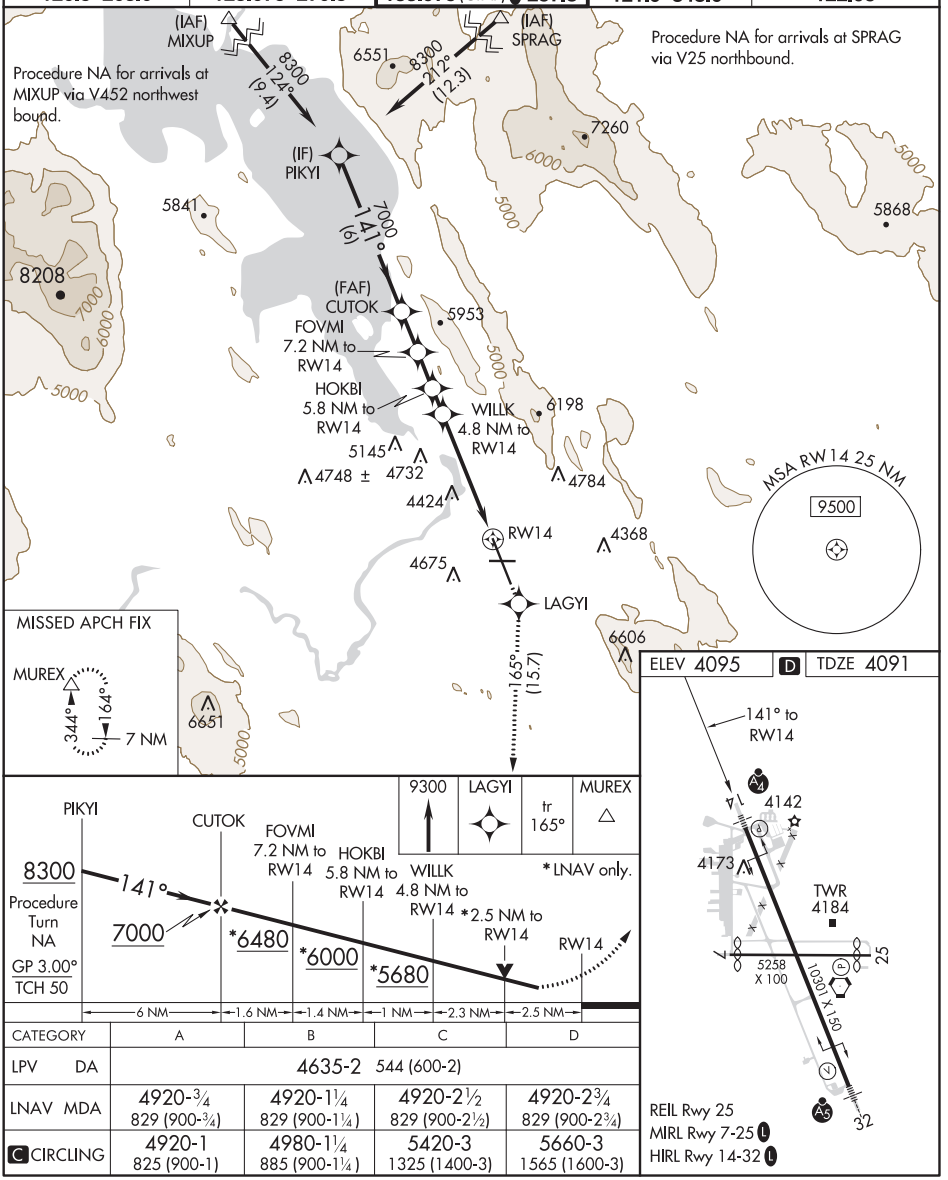
WAAS	APP CRS	Rwy Idg 10301
CH 58001	141°	TDZE 4091
W14A		Apt Elev 4095

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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KLAMATH FALLS, OREGON | AL-473 (FAA) | 20030

RNAV (GPS) RWY 32

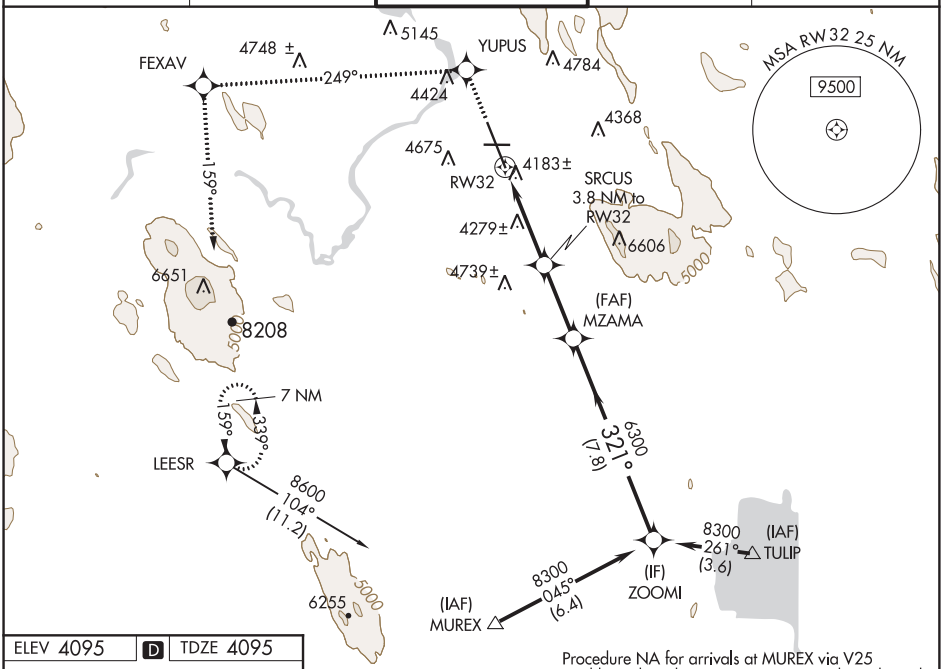
CRATER LAKE-KLAMATH RGNL (LMT)

WAAS	APP CRS	Rwy Idg	TDZE	Apt Elev
CH 70702 W32A	321°	10301	4095	4095

T A — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 41°C (105°F). DME/DME RNP-0.3 NA. For inop MALSR increase LPV visibility all Cats 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



Procedure NA for arrivals at MUREX via V25 southbound, and at TULIP via V452 southeast bound.

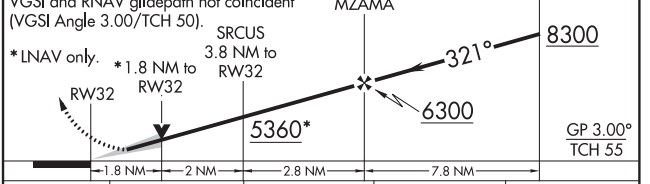
8600	YUPUS	tr 249°	FEXAV	tr 159°	LEESR

Procedure Turn NA

ZOOMI

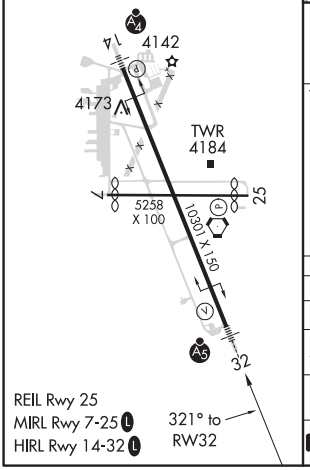
VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 50).

*LNAV only. *1.8 NM to RW32



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)

ELEV 4095 | D | TDZE 4095



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC LMT	APP CRS	Rwy Idg 10301
115.9	134°	TDZE 4091
Chan 106		Apt Elev 4095

VOR/DME or TACAN RWY 14

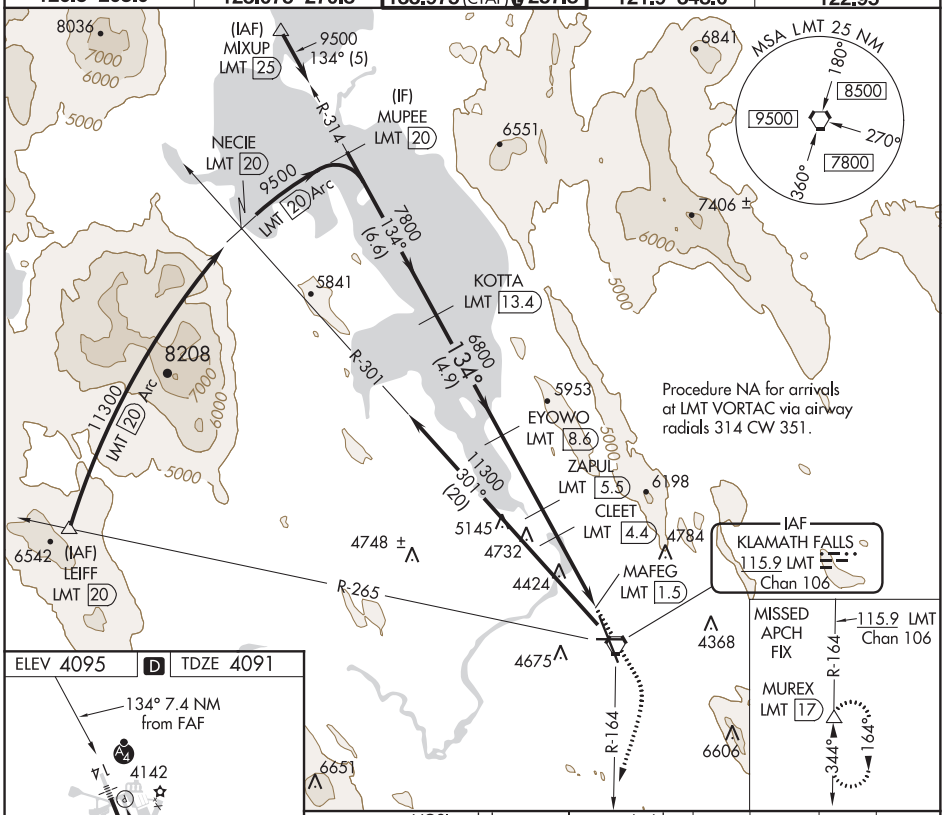
CRATER LAKE-KLAMATH RGNL (LMT)

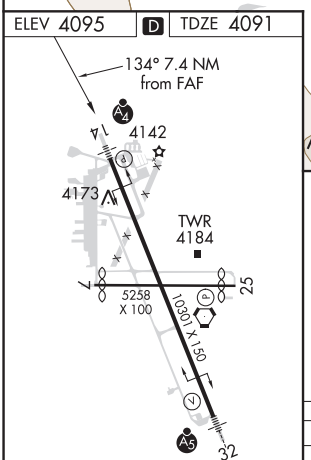
T A — Circling NA for Cat D and E east of Rwy 14-32. Inop table does not apply to Cats B and C. Helicopter visibility reduction below ¾ SM NA.

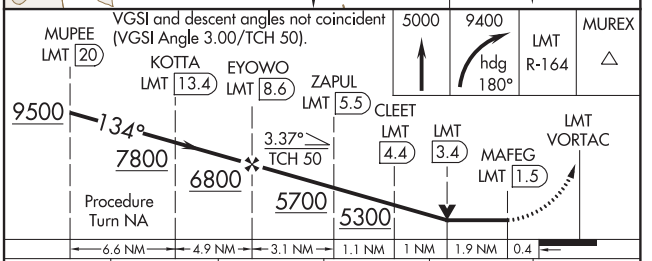
MALSF

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 769 (800-¾)	4860-1¼ 769 (800-1¼)	4860-2¼ 769 (800-2¼)	4860-2½ 769 (800-2½)	4860-2¾ 769 (800-2¾)
C CIRCLING	4880-1 785 (800-1)	4980-1¼ 885 (900-1¼)	5420-3 1325 (1400-3)	5660-3 1565 (1600-3)	5700-3 1605 (1700-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

KLAMATH FALLS, OREGON | AL-473 (FAA) | 20030

VOR/DME or TACAN RWY 32

CRATER LAKE-KLAMATH RGNL (LMT)

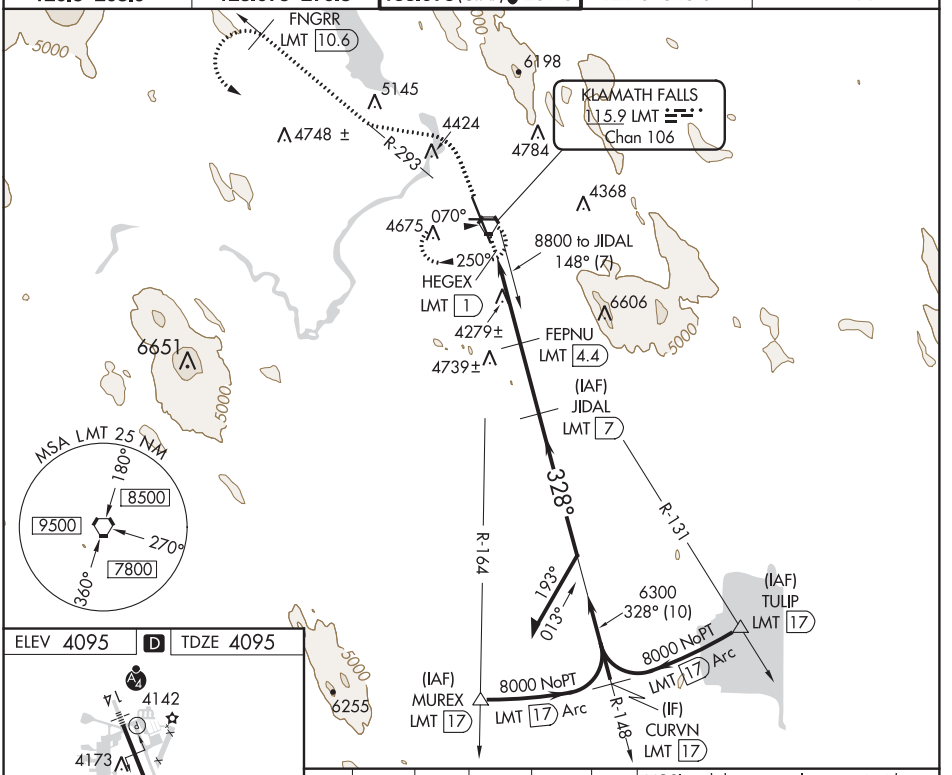
VORTAC LMT	APP CRS	Rwy Idg / TDZE / Apt Elev
115.9 Chan 106	328°	10301 / 4095 / 4095

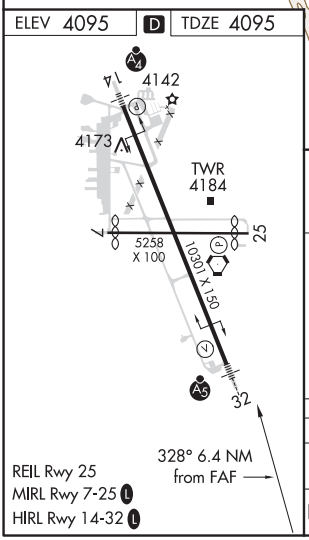
T A — For inop MALSR, increase S-32 Cat E visibility to 1¾ mile. Circling NA for Cat D and E east of Rwy 14-32. Procedure turn NA for Cat E aircraft.

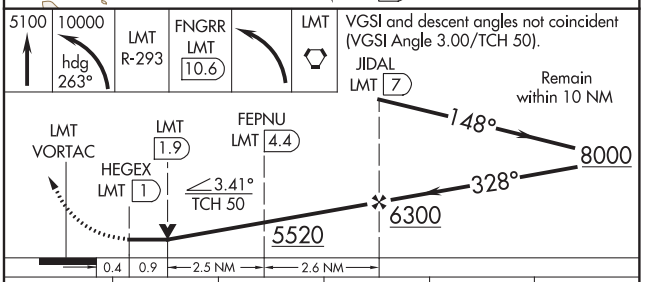
MALSR

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



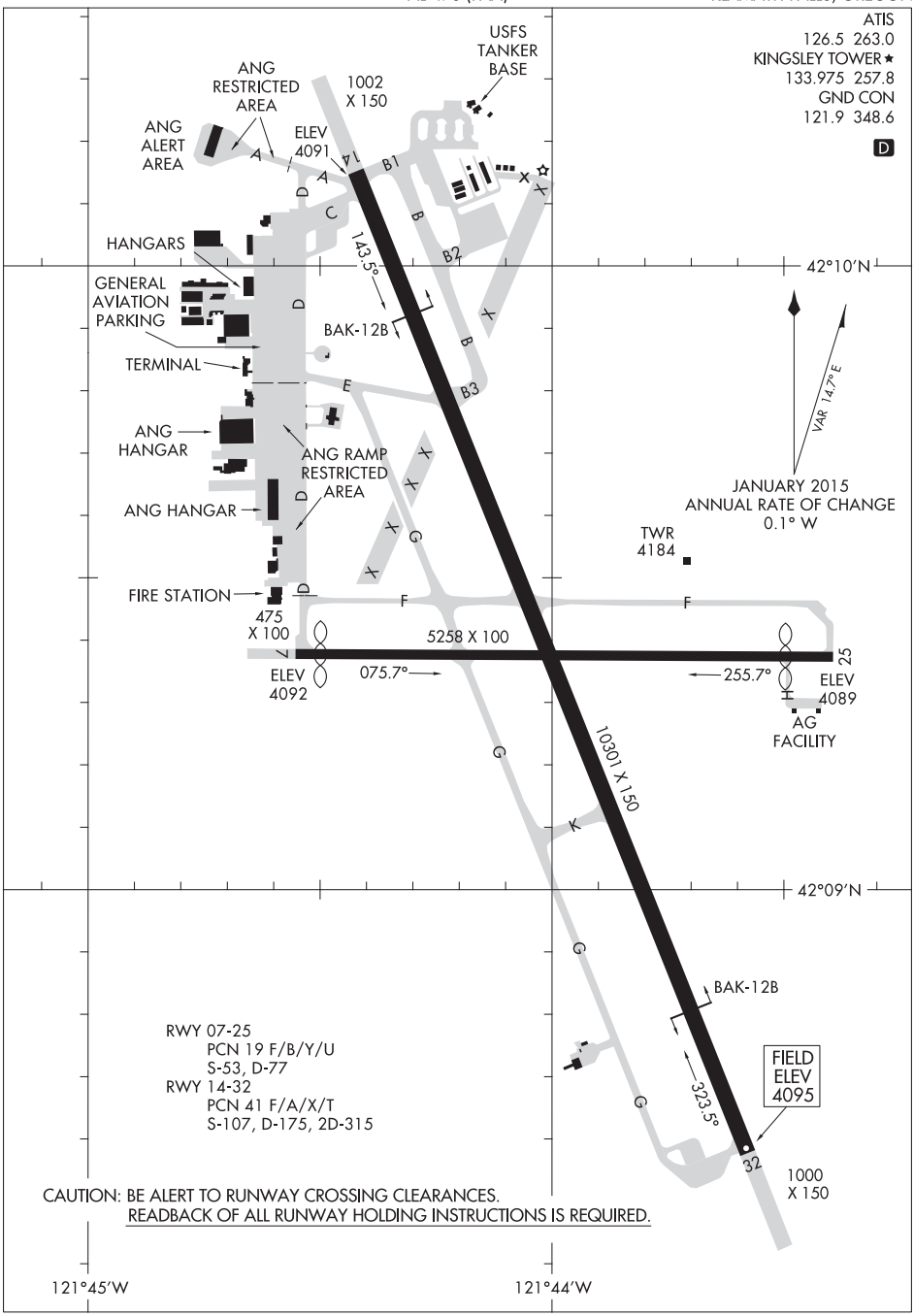




CATEGORY	A	B	C	D	E
S-32	4560/24 465 (500-½)		4560/40 465 (500-¾)	4560/50 465 (500-1)	4560/60 465 (500-1¼)
C CIRCLING	4840-1 745 (800-1)	4980-1¼ 885 (900-1¼)	5420-3 1325 (1400-3)	5660-3 1565 (1600-3)	5700-3 1605 (1700-3)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



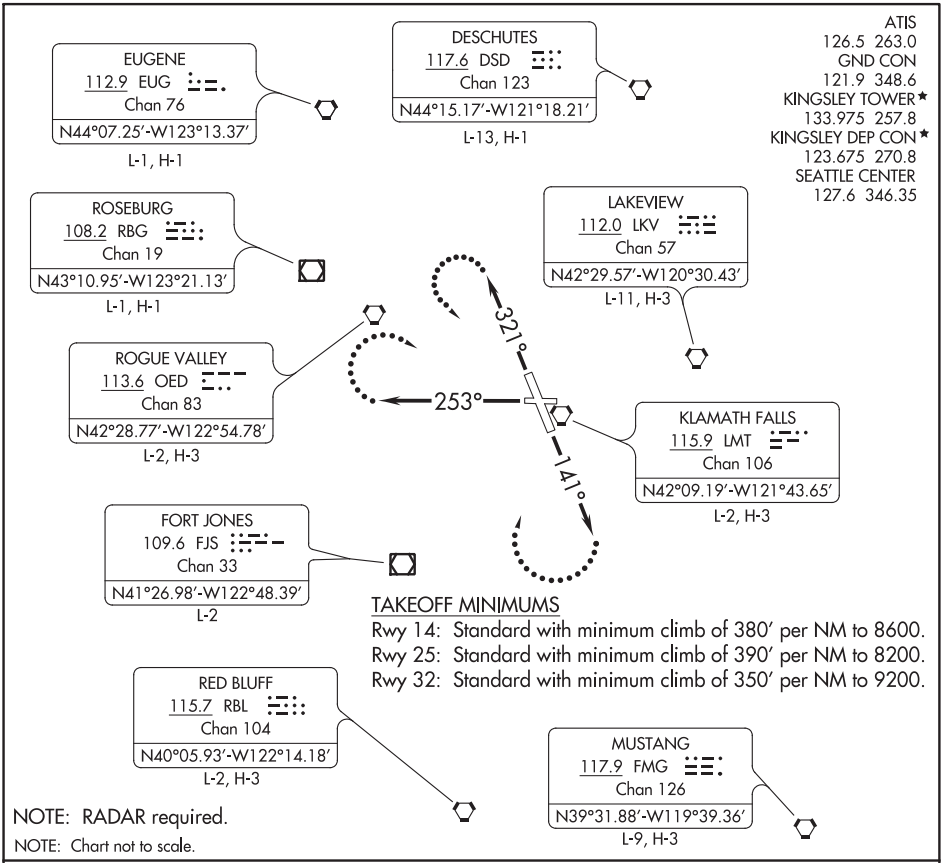
NW-1, 30 JAN 2020 to 26 MAR 2020

(LMT6.LMT) 18200

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.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 16

LA GRANDE/UNION COUNTY (LGD)

WAAS	APP CRS	Rwy Idg	3399
CH 66000	163°	TDZE	2717
W16A		Apt Elev	2717

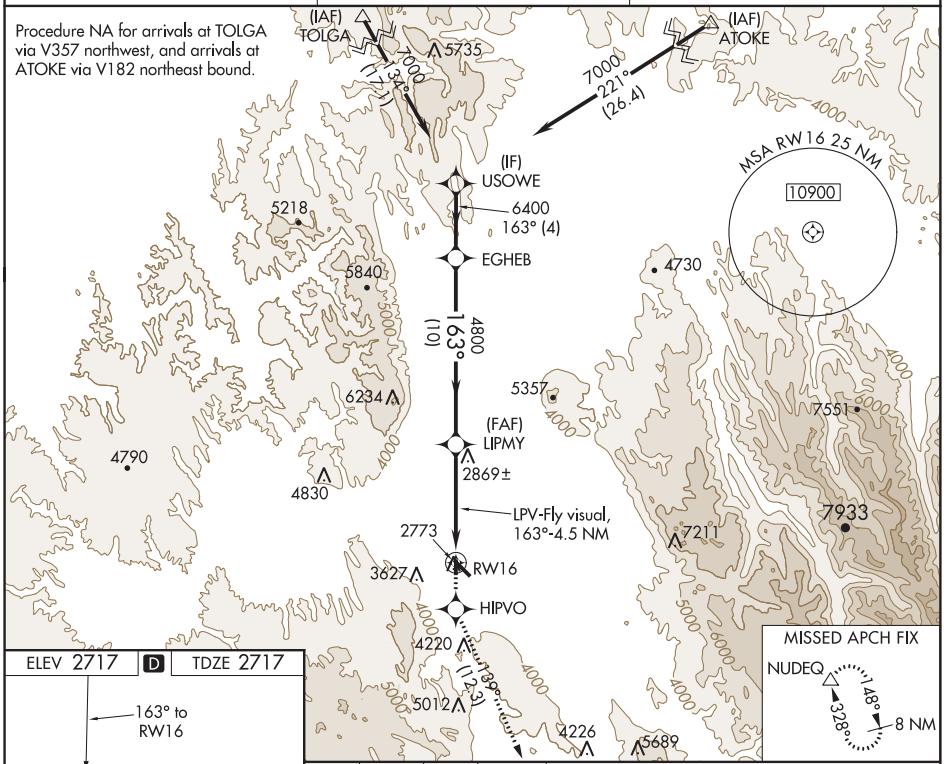
T
NA
-16°C

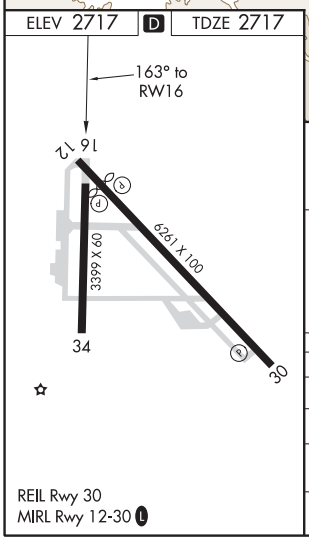
DME/DME RNP-0.3 NA.
If local altimeter setting not received procedure NA.

MISSED APPROACH: Climb to 9000 direct HIPVO and via 139° track to NUDEQ and hold, continue climb-in-hold to 9000.

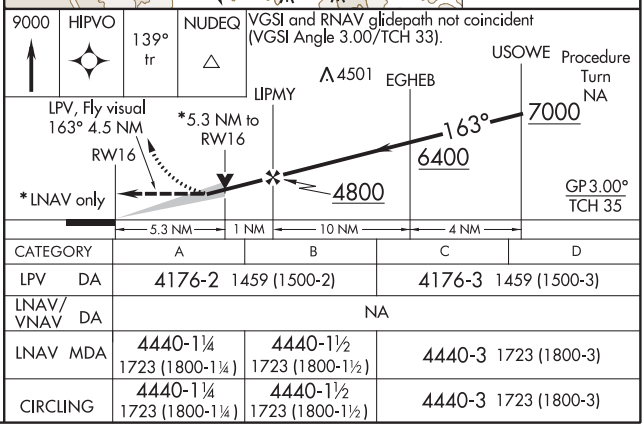
AWOS-3PT	SEATTLE CENTER	UNICOM
135.075	132.6 269.35	122.8 (CTAF) L

Procedure NA for arrivals at TOLGA via V357 northwest, and arrivals at ATOKE via V182 northeast bound.





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, 30 JAN 2020 to 26 MAR 2020

NDB LGD	APP CRS	Rwy Idg	N/A
296	194°	TDZE	N/A
		Apt Elev	2718

NDB-B

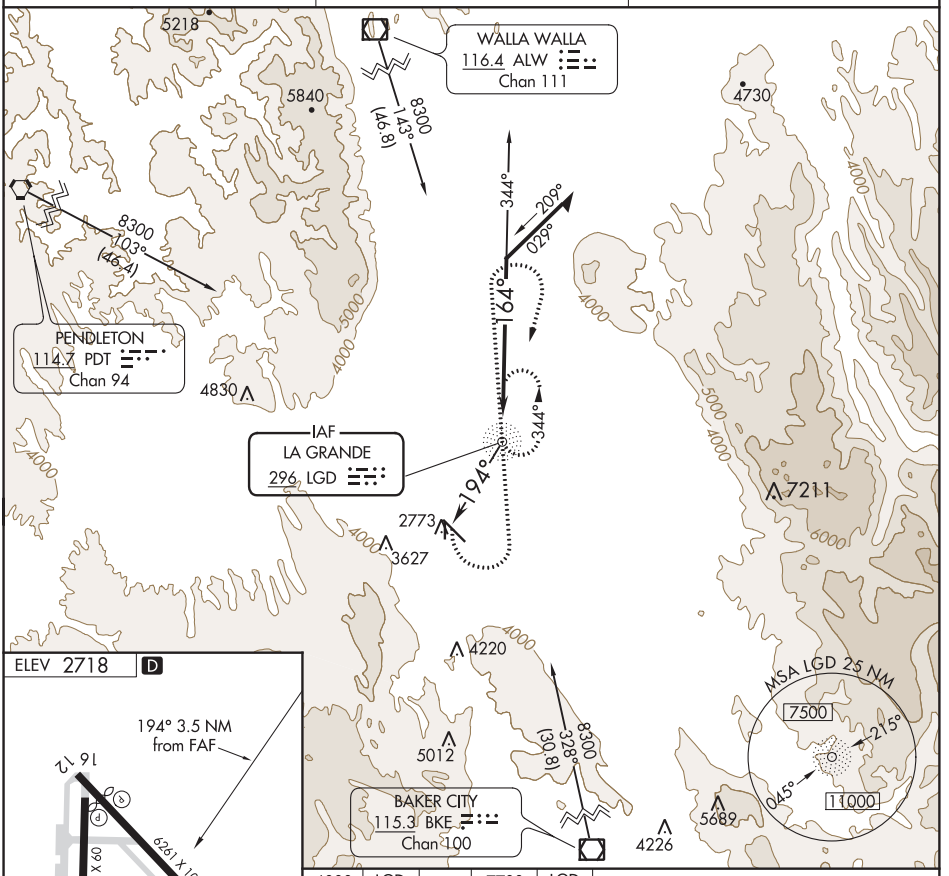
LA GRANDE/UNION COUNTY (LGD)

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 2142 (2200-1¼)	4860-1½ 2142 (2200-1½)	4860-3 2142 (2200-3)	NA

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 17

LAKE COUNTY (LKV)

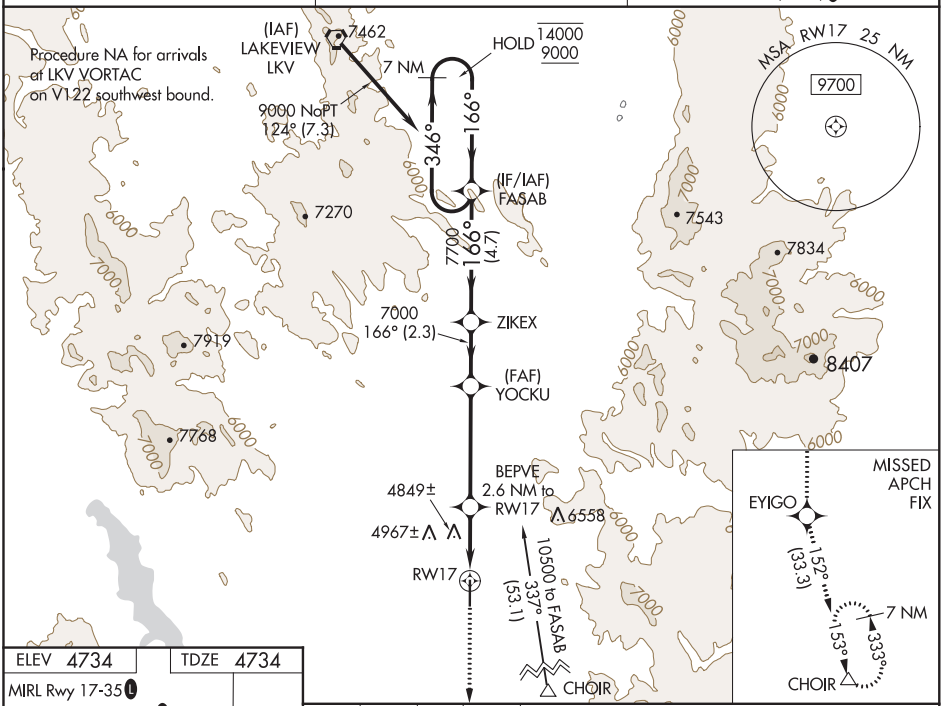
WAAS	APP CRS	Rwy Idg	5318
CH 93532	166°	TDZE	4734
W17A		Apt Elev	4734

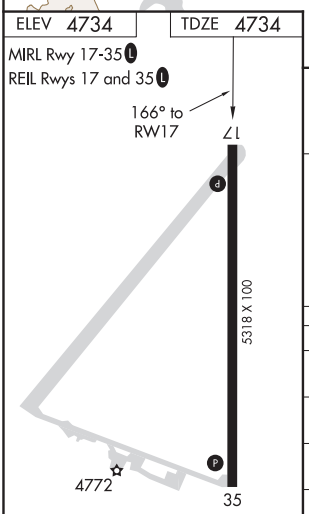
RNP APCH.

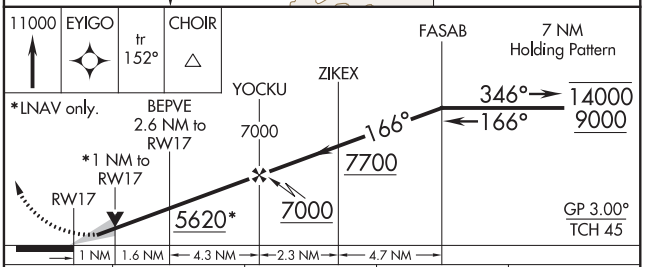
T A Circling NA east of Rwy 17-35. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 50°C.

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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LAKEVIEW, OREGON | AL-5552 (FAA) | 19227

RNAV (GPS) RWY 35

LAKE COUNTY (LKV)

WAAS	APP CRS	Rwy Idg	5318
CH 99332	346°	TDZE	4729
W35A		Apt Elev	4734

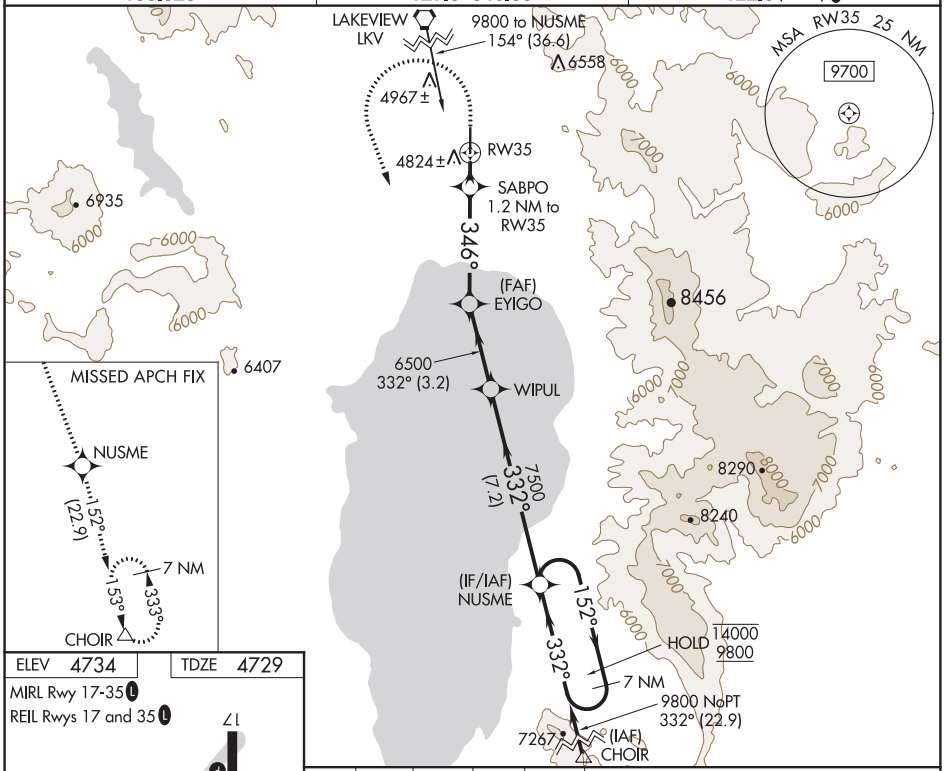
RNP APCH.

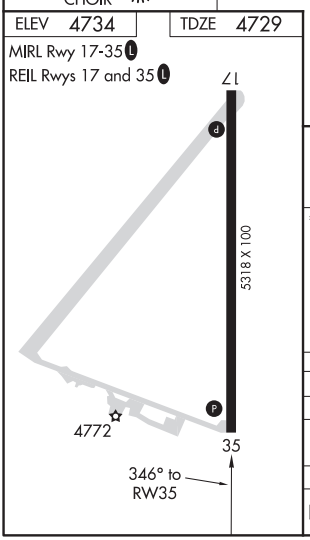
T A

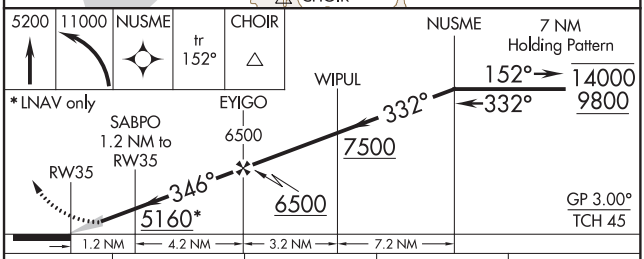
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 50°C. Circling NA east of Rwy 17-35.

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







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)

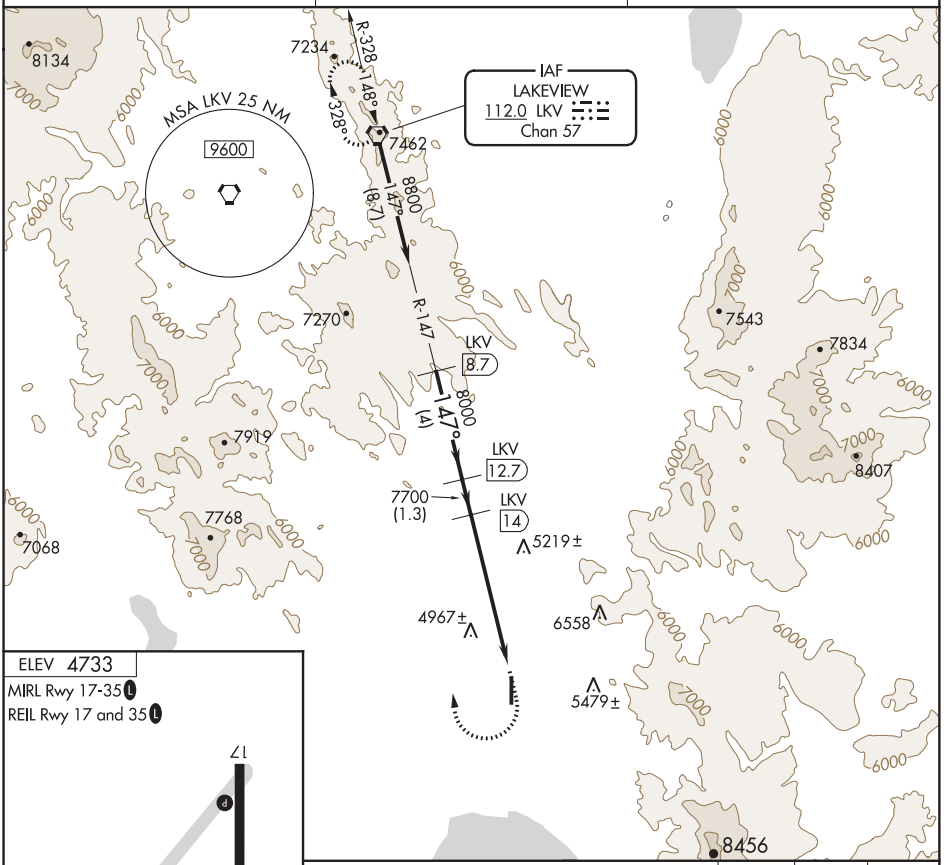
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

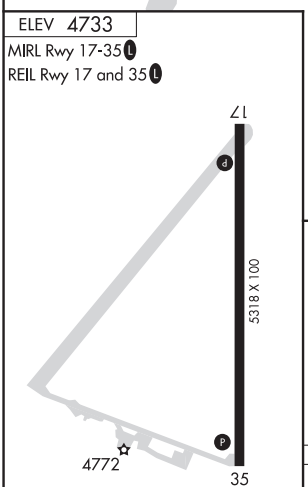
VORTAC LKV	APP CRS	Rwy Idg	N/A
112.0	147°	TDZE	N/A
Chan 57		Apt Elev	4733

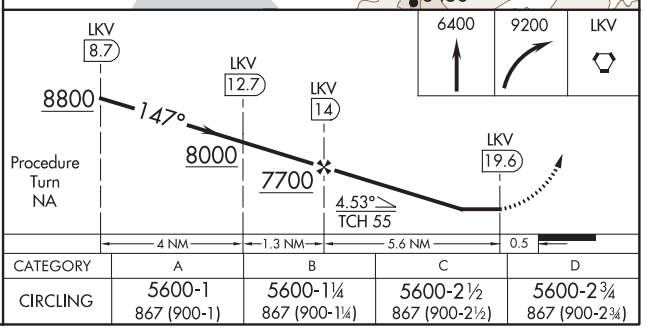
VOR/DME-A
LAKE COUNTY (LKV)

MISSED APPROACH: Climb to 6400 then climbing right turn to 9200 direct LKV VORTAC and hold.

AWOS-3PT	SEATTLE CENTER	UNICOM
135.525	127.6 346.35	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	5600-1 867 (900-1)	5600-1¼ 867 (900-1¼)	5600-2½ 867 (900-2½)	5600-2¾ 867 (900-2¾)

NW-1, 30 JAN 2020 to 26 MAR 2020

LANDER, WYOMING | AL-10396 (FAA) | 19339

WAAS	APP CRS	Rwy Idg	5000
CH 50343	220°	TDZE	5577
W22A		Apt Elev	5589

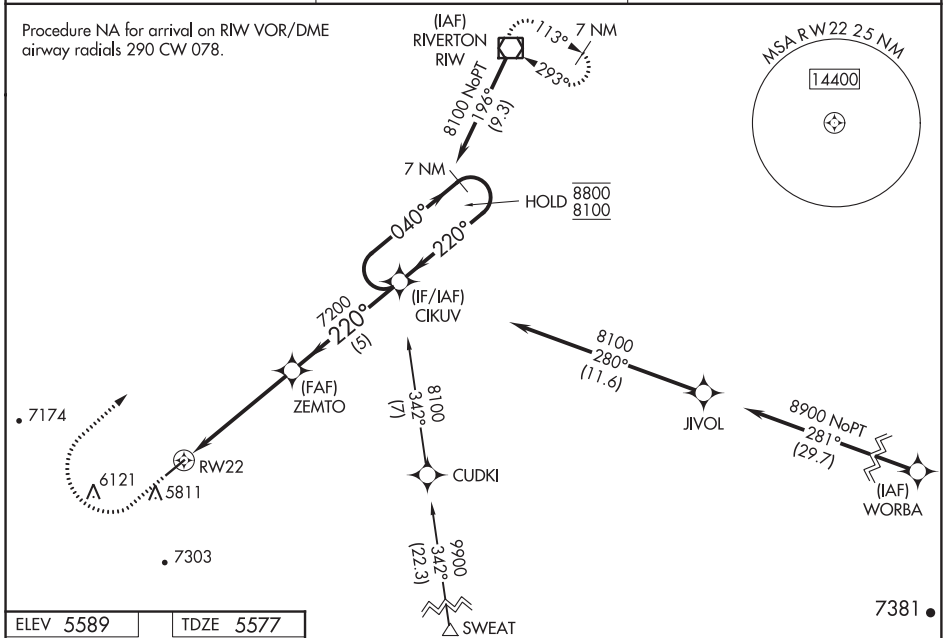
RNAV (GPS) RWY 22
HUNT FIELD (LND)

RNP APCH.

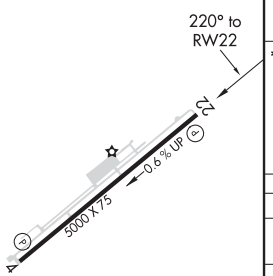
Circling NA southeast of Rwys 4 and 22. Circling Rwy 4 NA at night. Rwy 22 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 54°C.

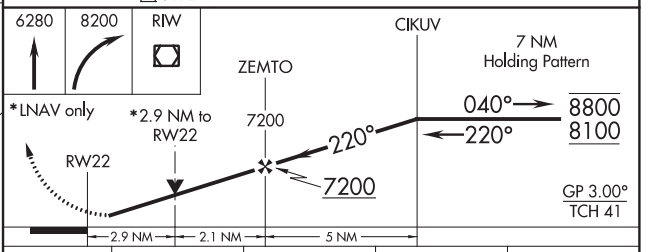
MISSED APPROACH: (Do not exceed 165K until RIW VOR/DME) Climb to 6280 then climbing right turn to 8200 direct RIW VOR/DME and hold.
#Missed approach requires minimum climb of 355 feet per NM to 6700.

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

LANDER, WYOMING
Orig 05DEC19

42°49'N-108°44'W

HUNT FIELD (LND)
RNAV (GPS) RWY 22

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	8502
CH 86325	033°	TDZE	7284
W03A		Apt Elev	7284

RNAV (GPS) RWY 3

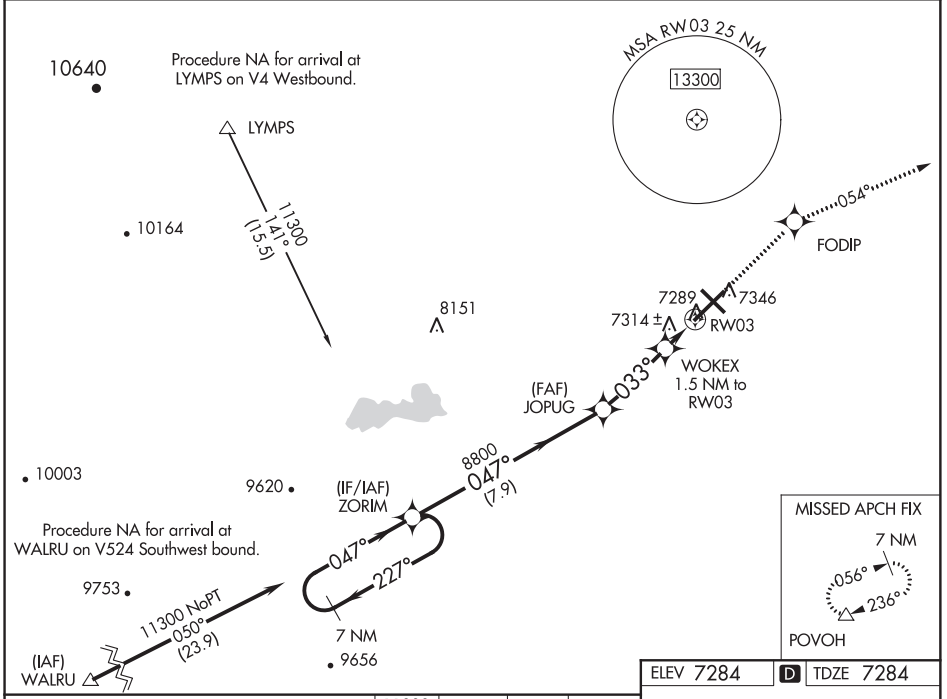
LARAMIE RGNL (LAR)

-35°C

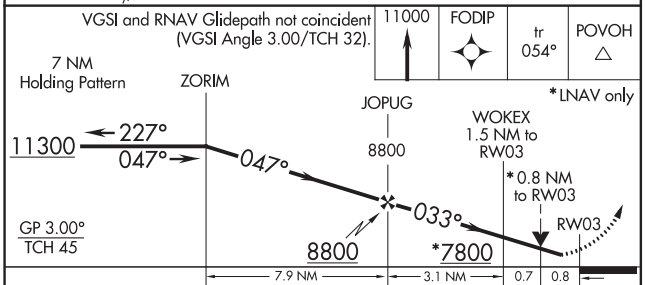
DME/DME RNP-0.3 NA. Circling to Rwy 30 NA at night. Baro-VNAV NA. Helicopter visibility reduction below ¾ SM NA.

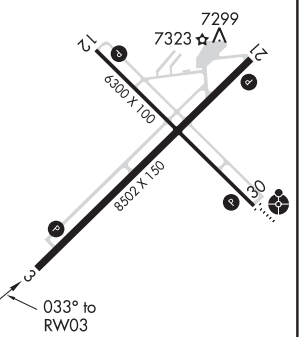
MISSED APPROACH: Climb to 11000 direct FODIP and on track 054° to POVOH and hold, continue climb-in-hold to 11000.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	6300
CH 70600	122°	TDZE	7275
W12A		Apt Elev	7284

RNAV (GPS) RWY 12

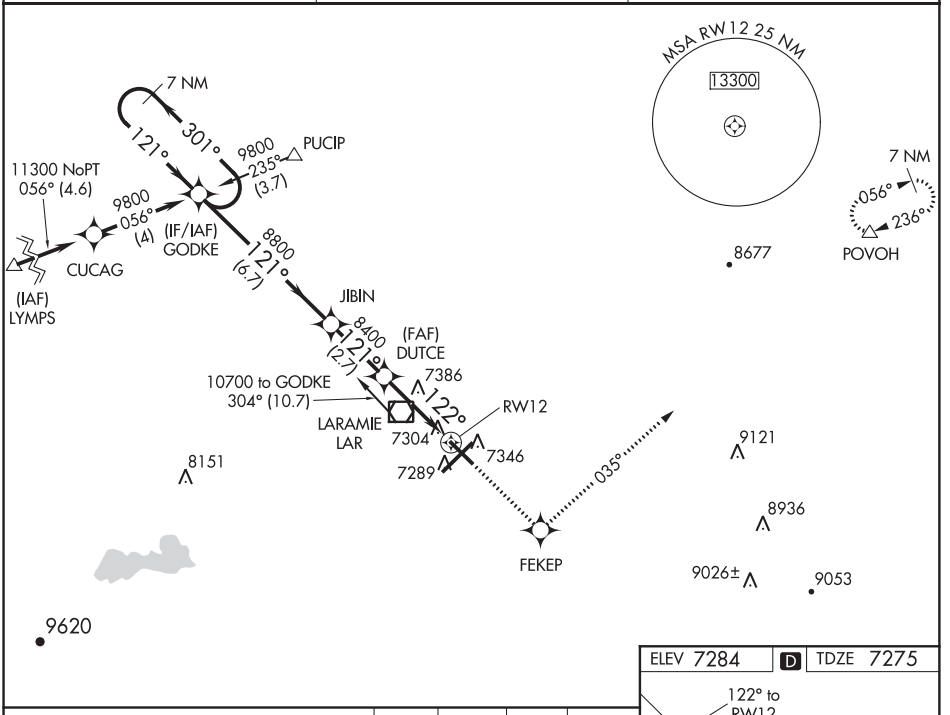
LARAMIE RGNL (LAR)

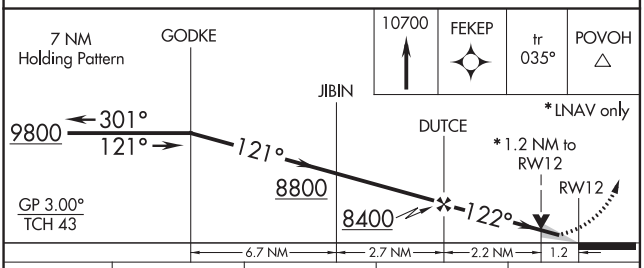
T
-35°C

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).

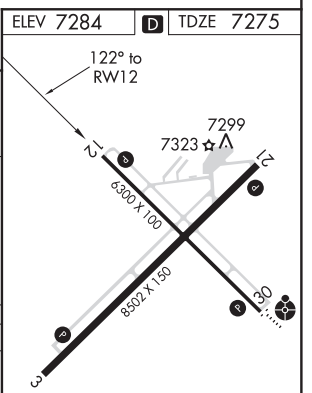
MISSED APPROACH: Climb to 10700 direct FEKEP and via 035° track to POVOH and hold.

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)



REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

41°19'N - 105°41'W

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 21

LARAMIE RGNL (LAR)

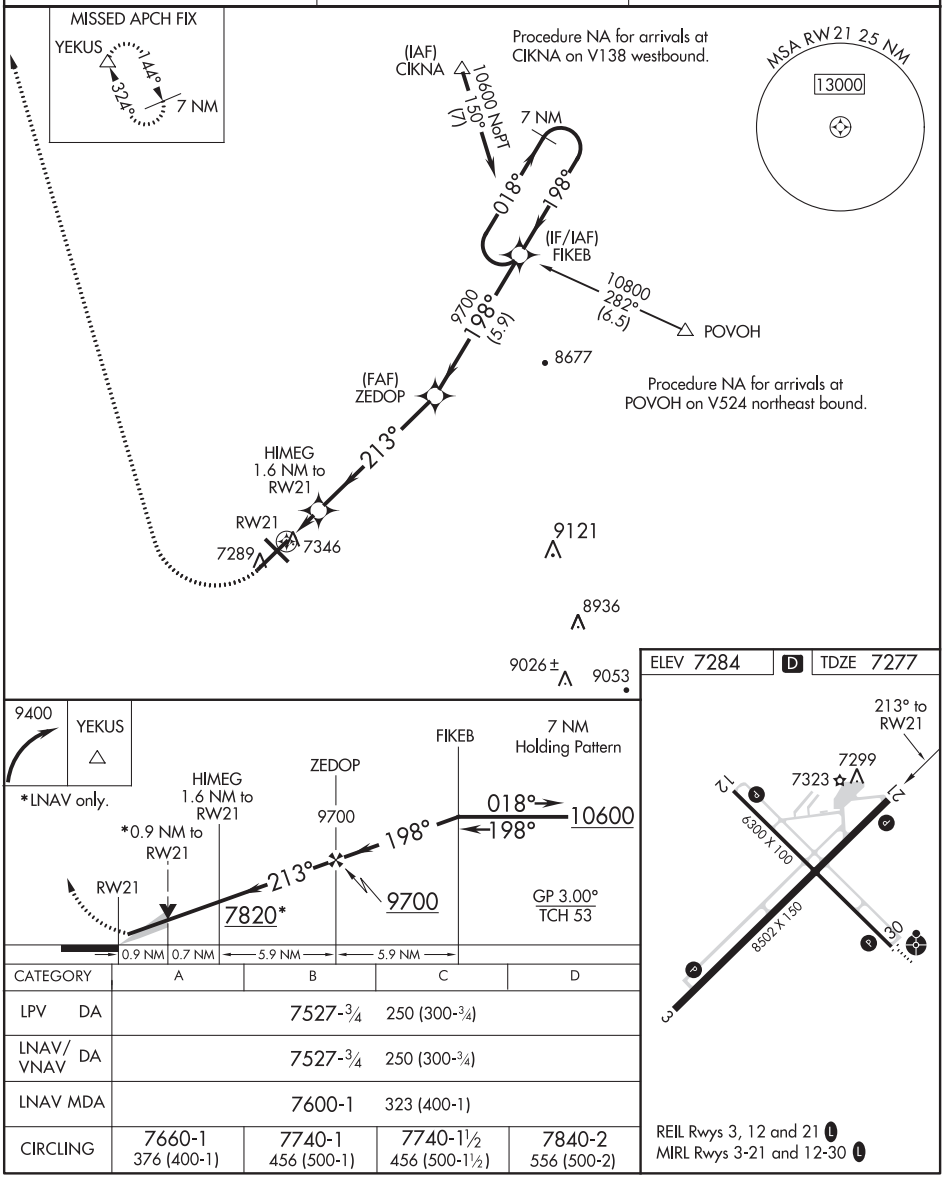
WAAS	APP CRS	Rwy Idg	8502
CH 72825	213°	TDZE	7277
W21A		Apt Elev	7284

-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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LARAMIE, WYOMING | AL-225 (FAA) | 17285

RNAV (GPS) RWY 30

LARAMIE RGNL (LAR)

WAAS	APP CRS	Rwy Idg	6300
CH 53600	302°	TDZE	7278
W30A		Apt Elev	7284

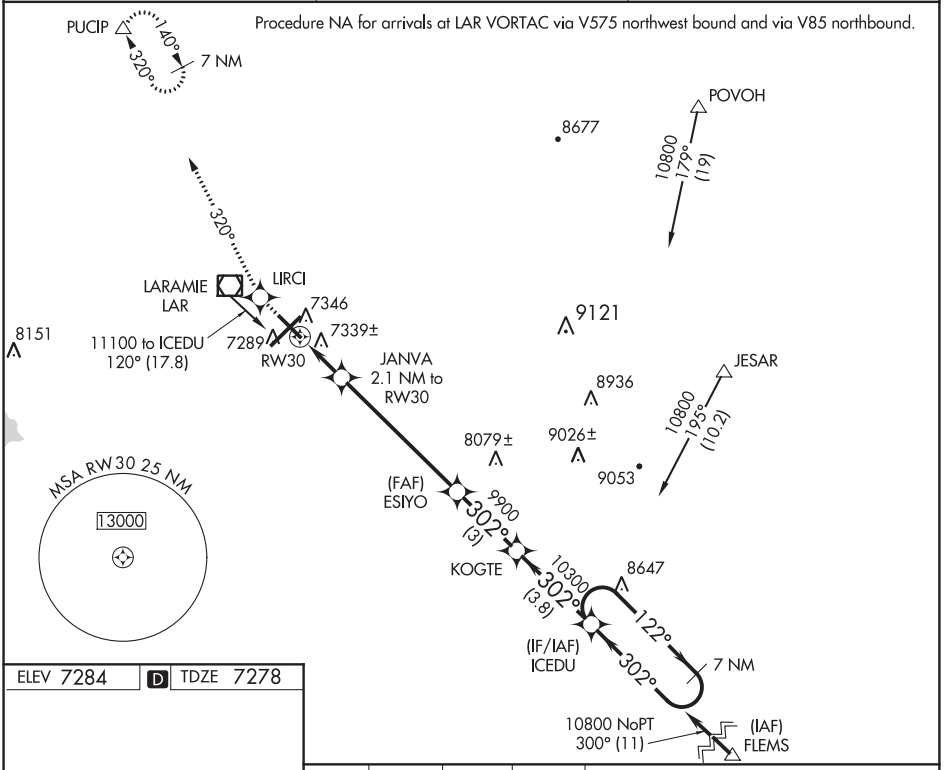
T -35°C — Inop table does not apply. DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 35°C (95°F).

ODALS

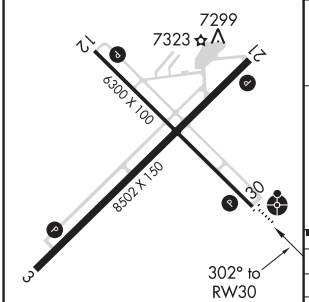
MISSED APPROACH: Climb to 9400 direct LIRCI and via 320° track to PUCIP and hold.

ASOS	DENVER CENTER	UNICOM
135.475	125.9 284.7	123.05 (CTAF) L

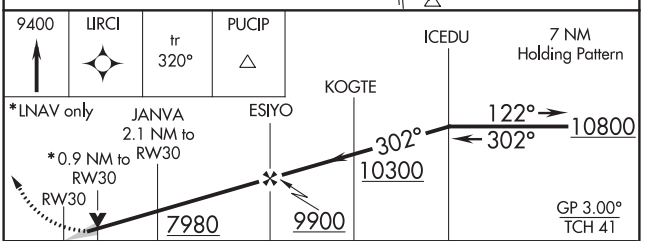
Procedure NA for arrivals at LAR VORTAC via V575 northwest bound and via V85 northbound.



ELEV 7284 | D | TDZE 7278



REIL Rwys 3,12 and 21 L
MIRL Rwys 3-21 and 12-30 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME LAR	APP CRS	Rwy Idg	6300
117.6	107°	TDZE	7275
Chan 123		Apt Elev	7284

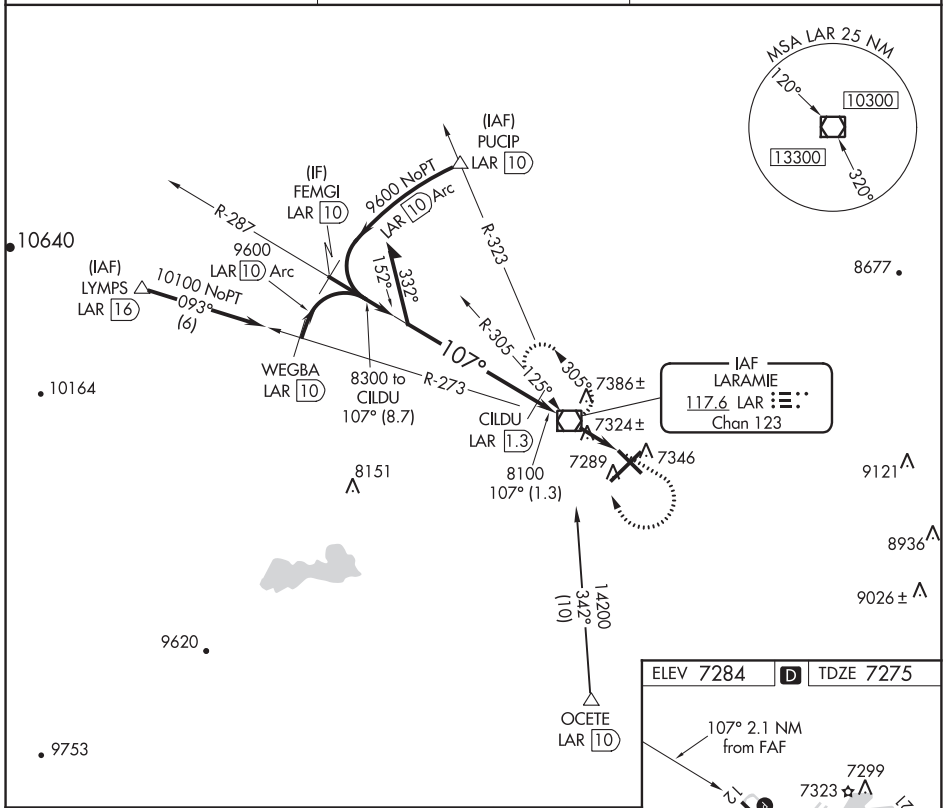
VOR/DME RWY 12

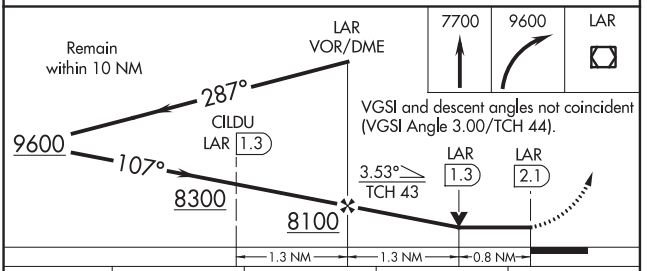
LARAMIE RGNL (LAR)

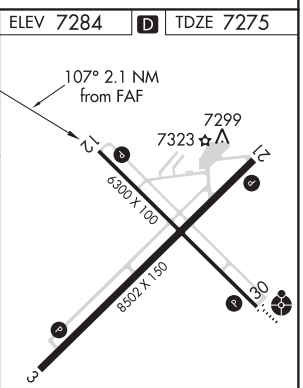
-35°C

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	7660-1 376 (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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LARAMIE, WYOMING | AL-225 (FAA) | 17285

VOR/DME RWY 30
LARAMIE RGNL (LAR)

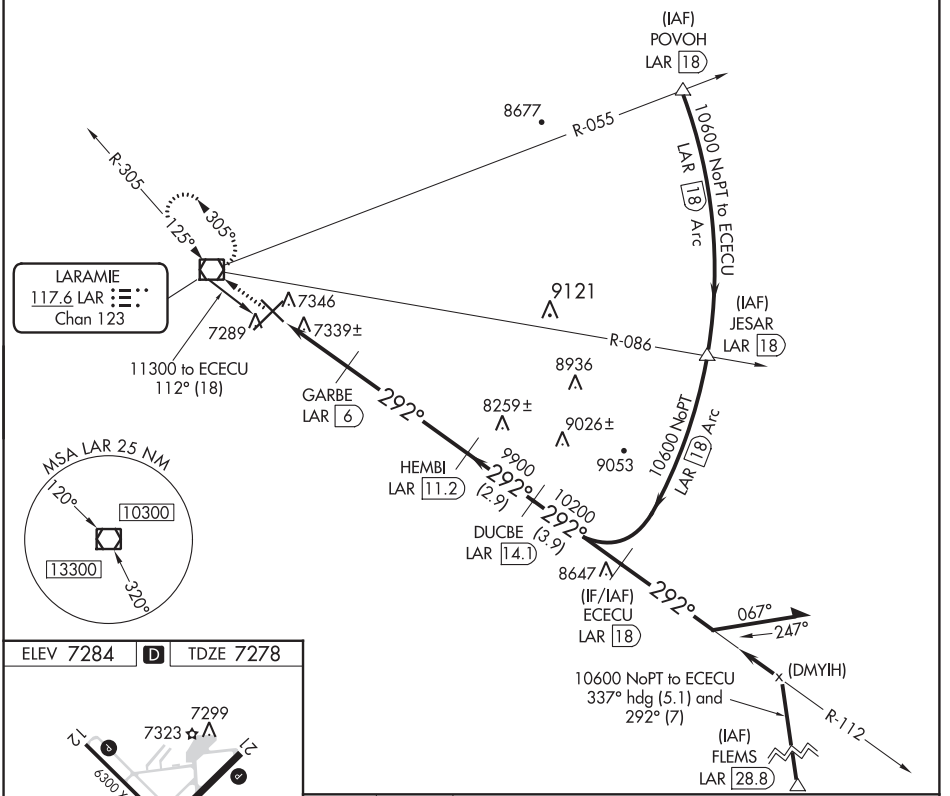
VOR/DME LAR	APP CRS	Rwy Idg	6300
117.6	292°	TDZE	7278
Chan 123		Apt Elev	7284

T
-35°C

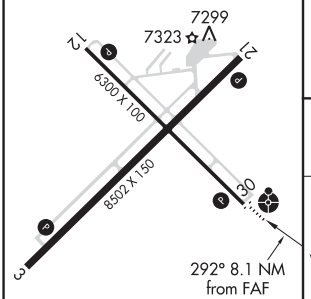
ODALS

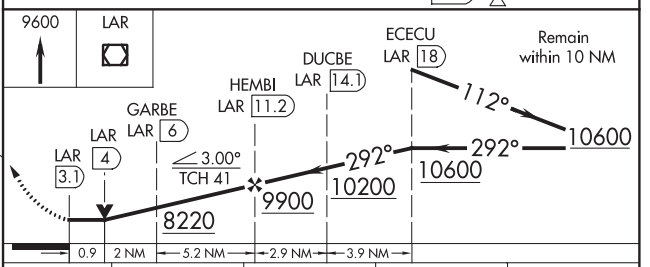
MISSED APPROACH: Climb to 9600 direct LAR VOR/DME and hold, continue climb-in-hold to 9600.

ASOS	DENVER CENTER	UNICOM
135.475	125.9 284.7	123.05 (CTAF) L



ELEV 7284 D TDZE 7278

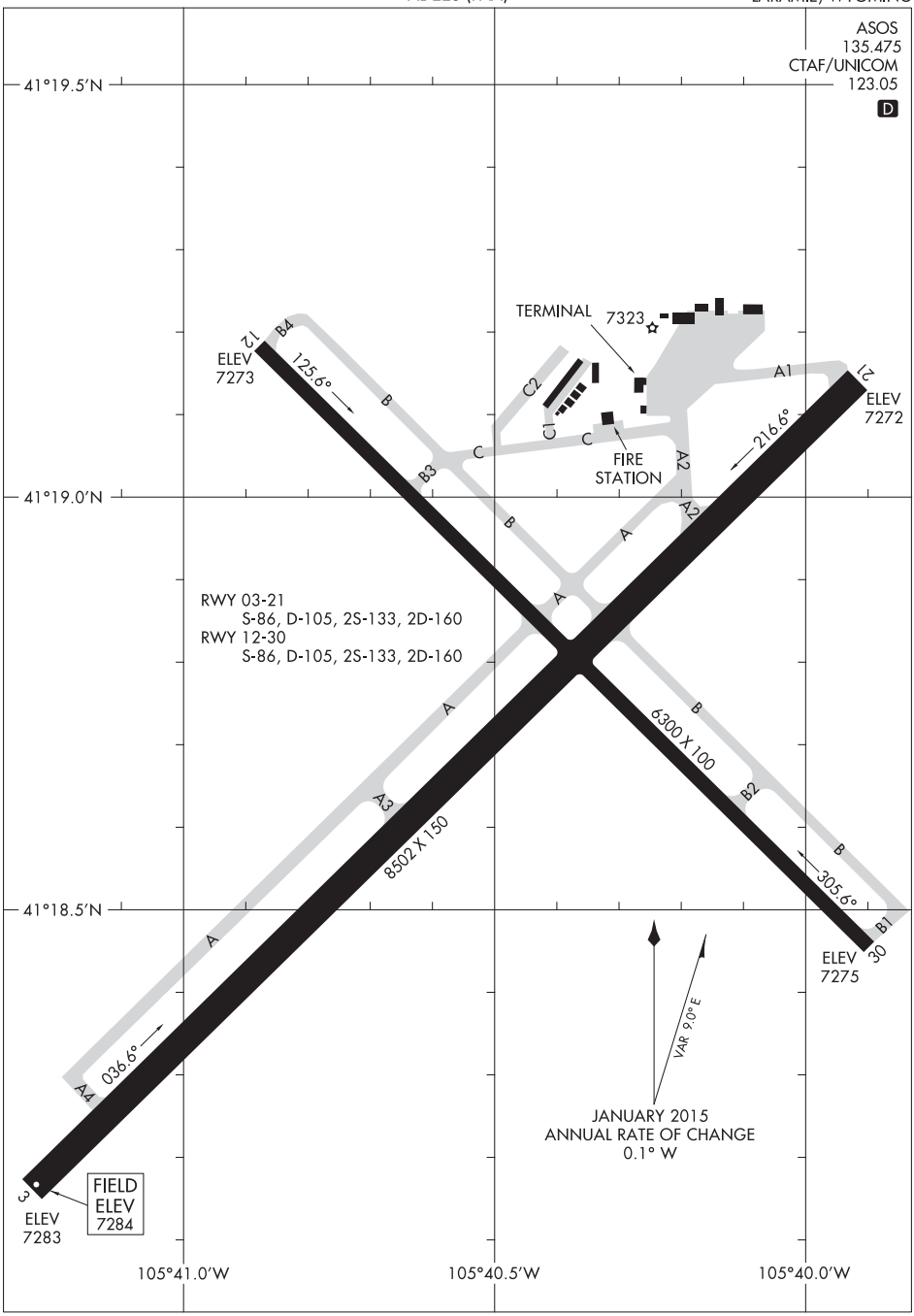




CATEGORY	A	B	C	D
S-30	7600-¾ 322 (400-¾)			7600-1 322 (400-1)
CIRCLING	7660-1 376 (400-1)	7740-1 456 (500-1)	7740-1½ 456 (500-1½)	7840-2 556 (600-2)

REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

(LAR1.LAR) 16147

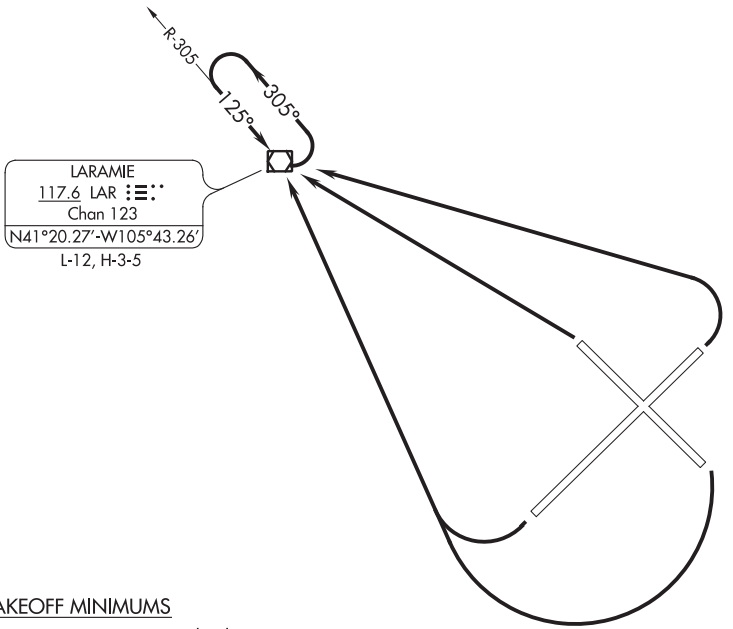
LARAMIE ONE DEPARTURE (OBSTACLE)

SL-225 (FAA)

LARAMIE RGNL (LAR)
LARAMIE, WYOMING

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

WAAS	APP CRS	Rwy Idg	5199
CH 70422	036°	TDZE	3488
W04A		Apt Elev	3543

RNAV (GPS) RWY 4

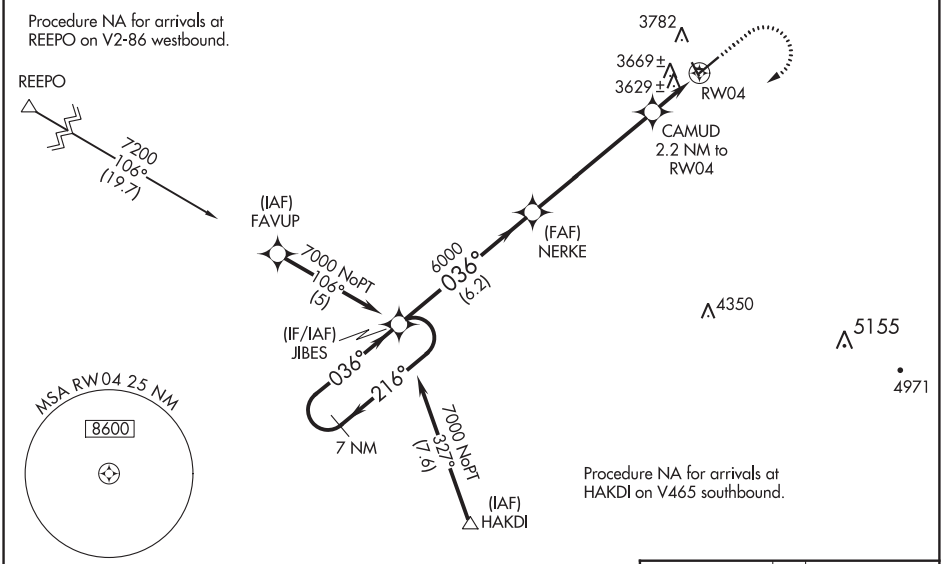
LAUREL MUNI (6S8)

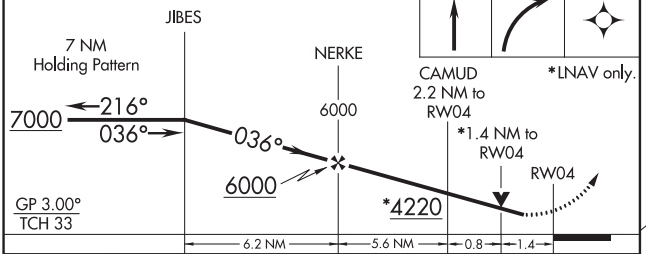
RNP APCH.

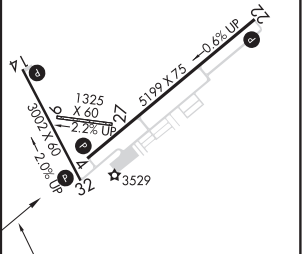
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 54°C. When local altimeter setting not received, use Billings altimeter setting. Baro-VNAV and VDP NA when using Billings altimeter setting. Rwy 4 helicopter visibility reduction below ¾ SM NA. -30°C

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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LAUREL, MONTANA | AL-6781 (FAA) | 20002

RNAV (GPS) RWY 22

LAUREL MUNI (6S8)

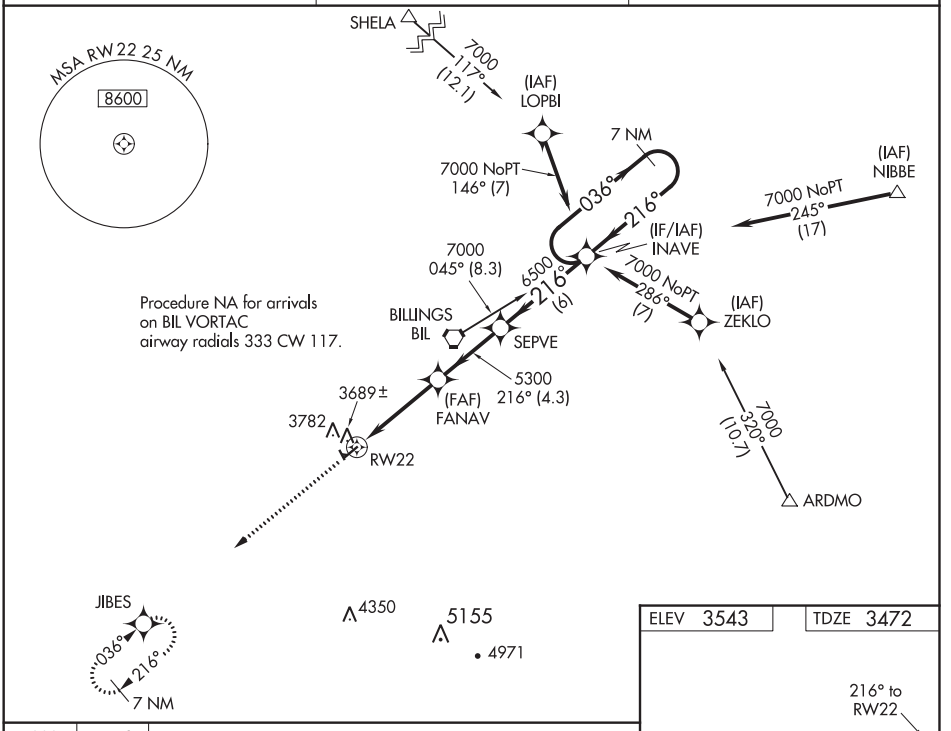
WAAS	APP CRS	Rwy Idg	5199
CH 86822	216°	TDZE	3472
W22A		Apt Elev	3543

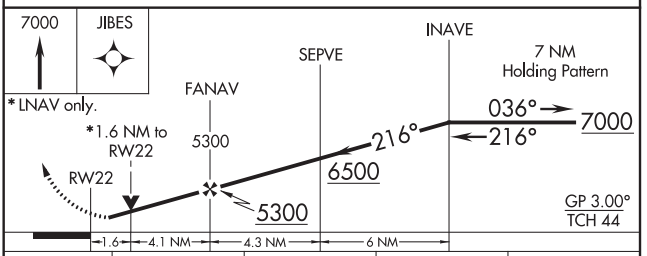
RNP APCH.

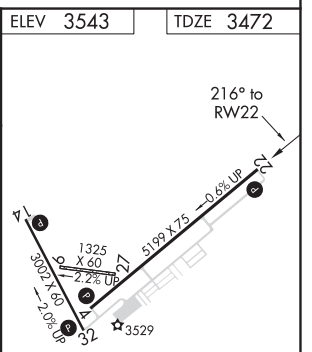
T A -30°C — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 53°C. When local altimeter setting not received, use Billings altimeter setting. Baro-VNAV and VDP NA when using Billings altimeter setting. Rwy 22 helicopter visibility reduction below ¾ SM NA.

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







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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

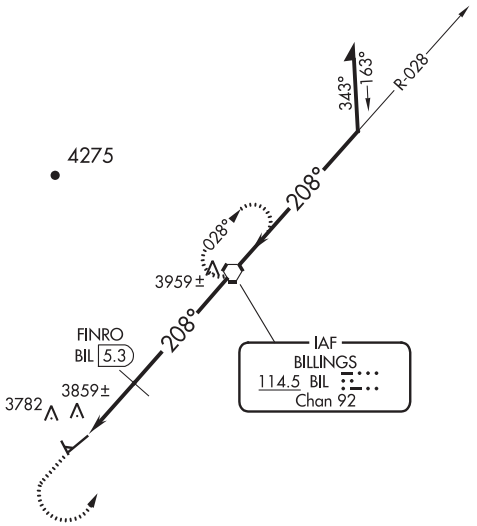
VORTAC BIL	APP CRS	Rwy Idg	5199
114.5	208°	TDZE	3472
Chan 92		Apt Elev	3543

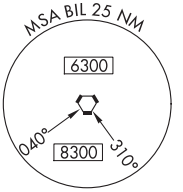
VOR RWY 22
LAUREL MUNI (6S8)

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

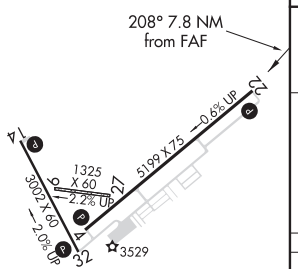
MISSED APPROACH: Climb to 4700 then climbing left turn to 6300 direct BIL VORTAC and hold.

AWOS-2	BILLINGS APP CON	AUNICOM
135.05	119.2 120.5 284.6	123.05 (CTAF) L



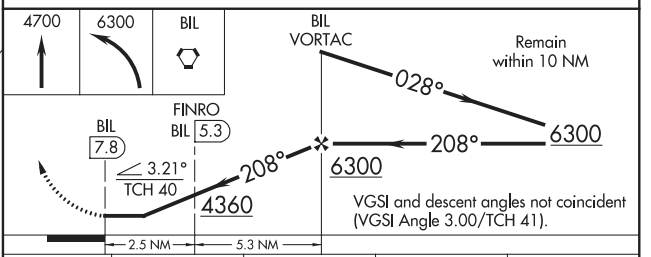


ELEV 3543 TDZE 3472



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



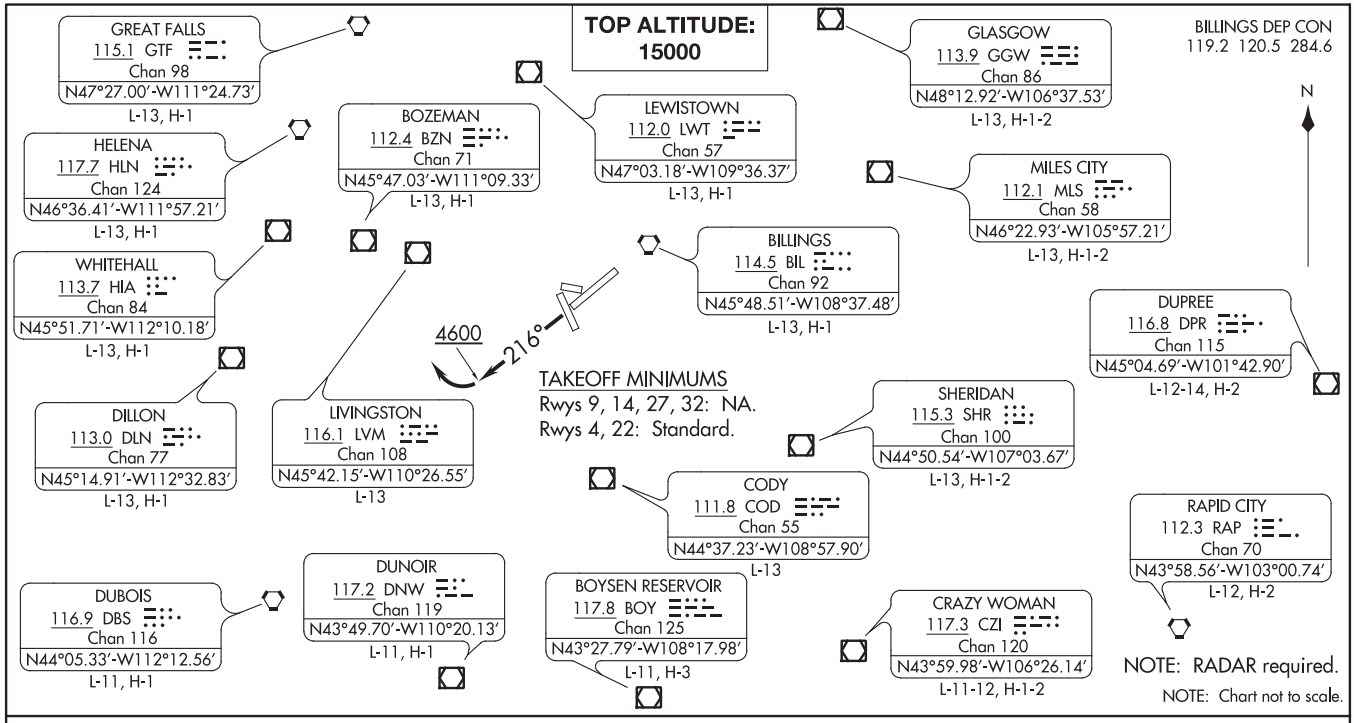
CATEGORY	A	B	C	D
S-22	4360-1¼	888 (900-1¼)	4360-2¾ 888 (900-2¾)	4360-3 888 (900-3)
CIRCLING	4360-1¼	817 (900-1¼)	4360-2¾ 817 (900-2¾)	4360-3 817 (900-3)
FINRO FIX MINIMUMS				
S-22	4160-1	688 (700-1)	4160-2 688 (700-2)	4160-2¼ 688 (700-2¼)
CIRCLING	4220-1	677 (700-1)	4220-2 677 (700-2)	4340-2¾ 797 (800-2¾)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

BILLINGS FIVE DEPARTURE

(BIL5.BIL) 01FEB18

LAUREL, MONTANA
LAUREL MUNI (6S8)



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb on assigned heading for vectors to assigned fix/route, thence. . . .

TAKEOFF RUNWAY 22: Climb heading 216° to 4600 before turning right, then on assigned heading for vectors to assigned fix/route, thence. . . .

. . . . maintain 15000 or assigned lower altitude. Expect clearance to filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for 1 minute after departure, fly last assigned heading until reaching 7000. Proceed direct BIL VORTAC, then on last routing cleared and climb to filed altitude.

(BIL5.BIL) 18032

BILLINGS FIVE DEPARTURE

AL-6781 (FAA)

LAUREL MUNI (6S8)
LAUREL, MONTANA

ILS RWY 26

LEWISTON-NEZ PERCE COUNTY (LWS)

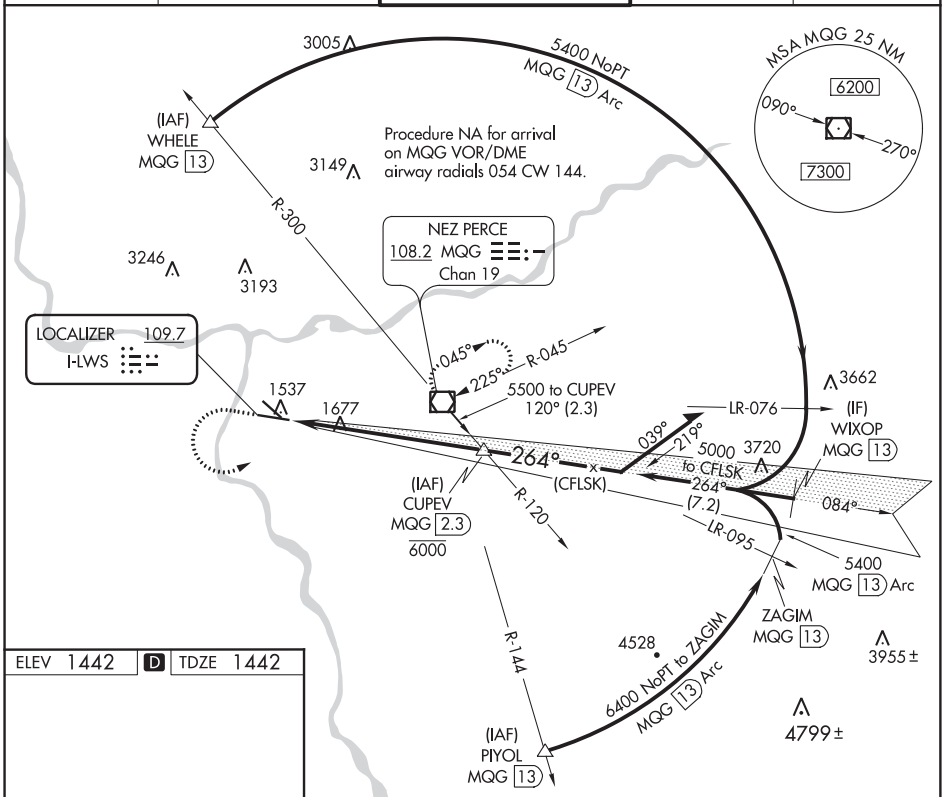
LOC I-LWS	APP CRS	Rwy Idg	6512
109.7	264°	TDZE	1442
		Apt Elev	1442

When local altimeter setting not received, procedure NA. Autopilot coupled approach NA below 2500.

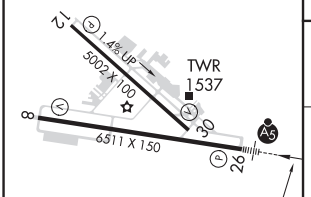
MALSR

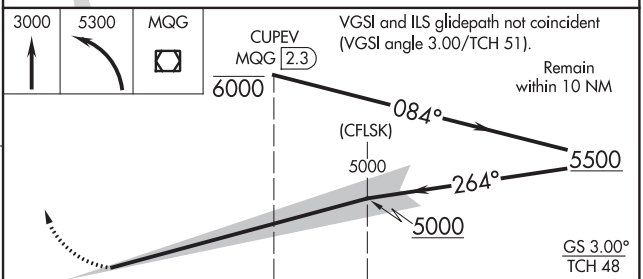
MISSED APPROACH: Climb to 3000 then climbing left turn to 5300 direct MQG VOR/DME and hold, continue climb-in-hold to 5300.

ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) L 318.8	121.9	122.95



ELEV 1442 D TDZ 1442





CATEGORY	A	B	C	D
S-ILS 26	1642-½ 200 (200-½)			

REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LEWISTON, IDAHO | AL-515 (FAA) | 18200

RNAV (RNP) RWY 30

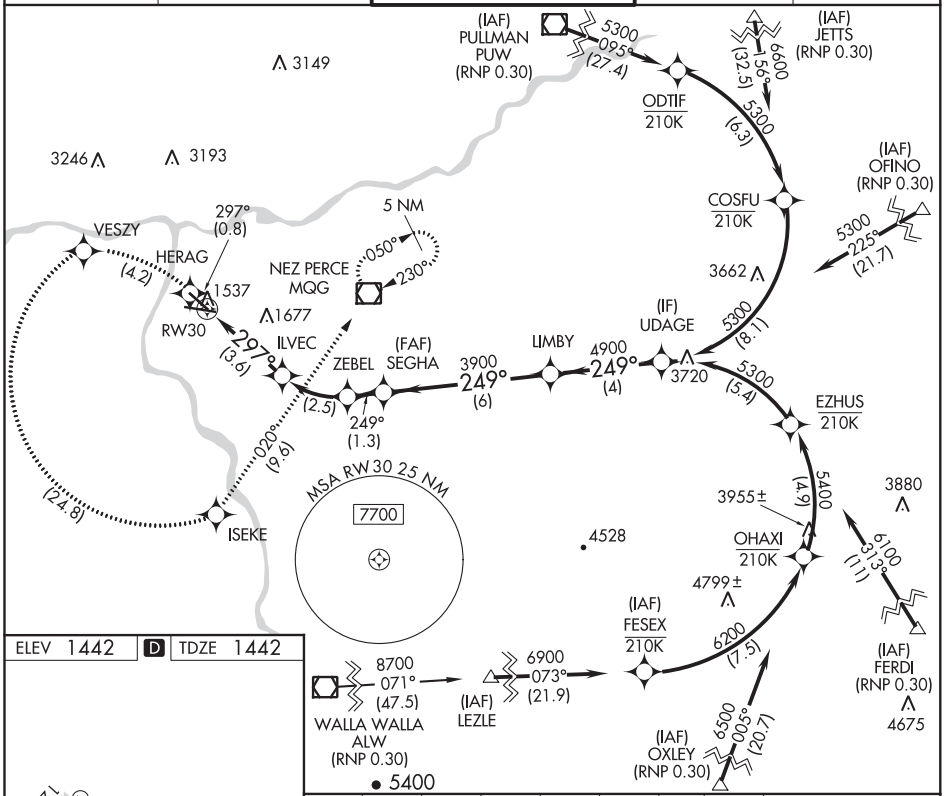
LEWISTON-NEZ PERCE COUNTY (LWS)

APP CRS	Rwy Idg	5000
297°	TDZE	1442
	Apt Elev	1442

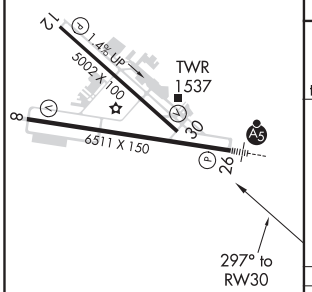
GPS and RF Required. For uncompensated Baro-VNAV systems, procedure NA below -16°C (4°F) or above 46°C (114°F). Missed approach requires RNP less than RNP 1.00.

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.

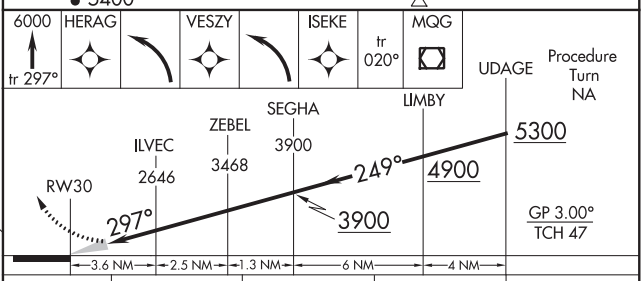
ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) 318.8	121.9	122.95



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

LEWISTON, IDAHO
Orig-C 17AUG17

46°22'N-117°01'W

LEWISTON-NEZ PERCE COUNTY (LWS)

RNAV (RNP) RWY 30

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 8

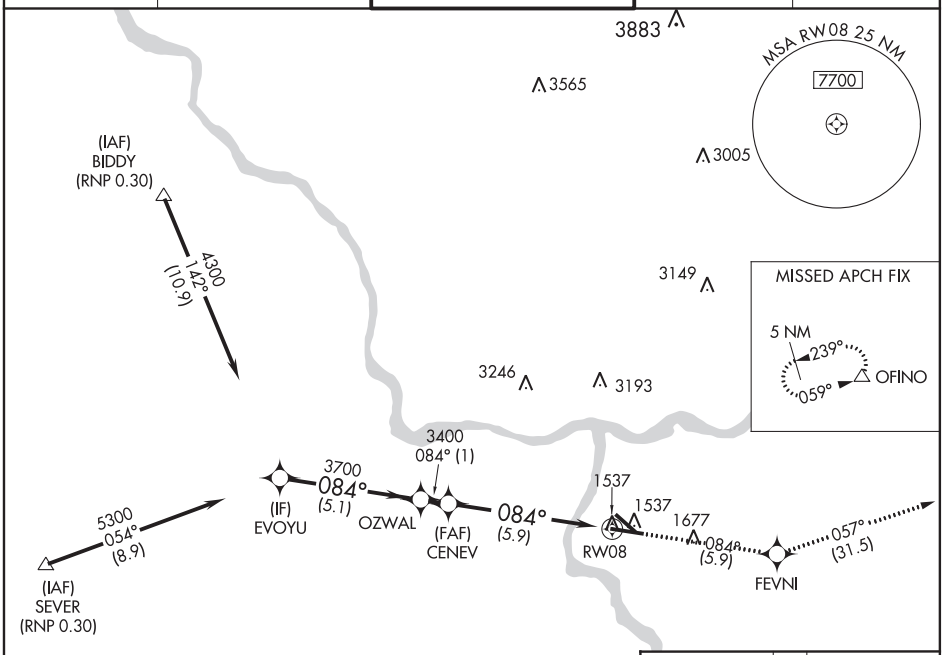
LEWISTON-NEZ PERCE COUNTY (LWS)

APP CRS		
084°	Rwy Idg	6511
	TDZE	1440
	Apt Elev	1442

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.

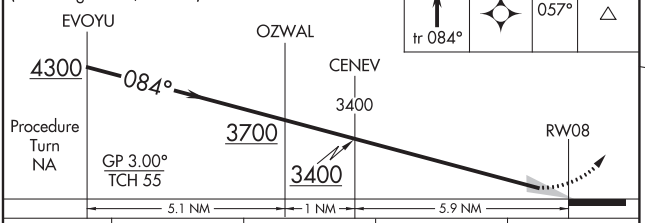
MISSED APPROACH: Climb to 6000 via track 084° to FEVNI and via track 057° to OFINO and hold.

ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) L 318.8	121.9	122.95

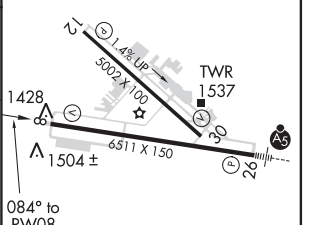


ELEV 1442 D TDZE 1440

VGSI and RNAV glidepath not coincident
(VGSI Angle 3.00/TCH 45).



6000	FEVNI	tr 057°	OFINO
tr 084°			



CATEGORY	A	B	C	D
RNP 0.30 DA	1752-1 312 (400-1)			

REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LEWISTON, IDAHO | AL-515 (FAA) | 18200

RNAV (RNP) Z RWY 12

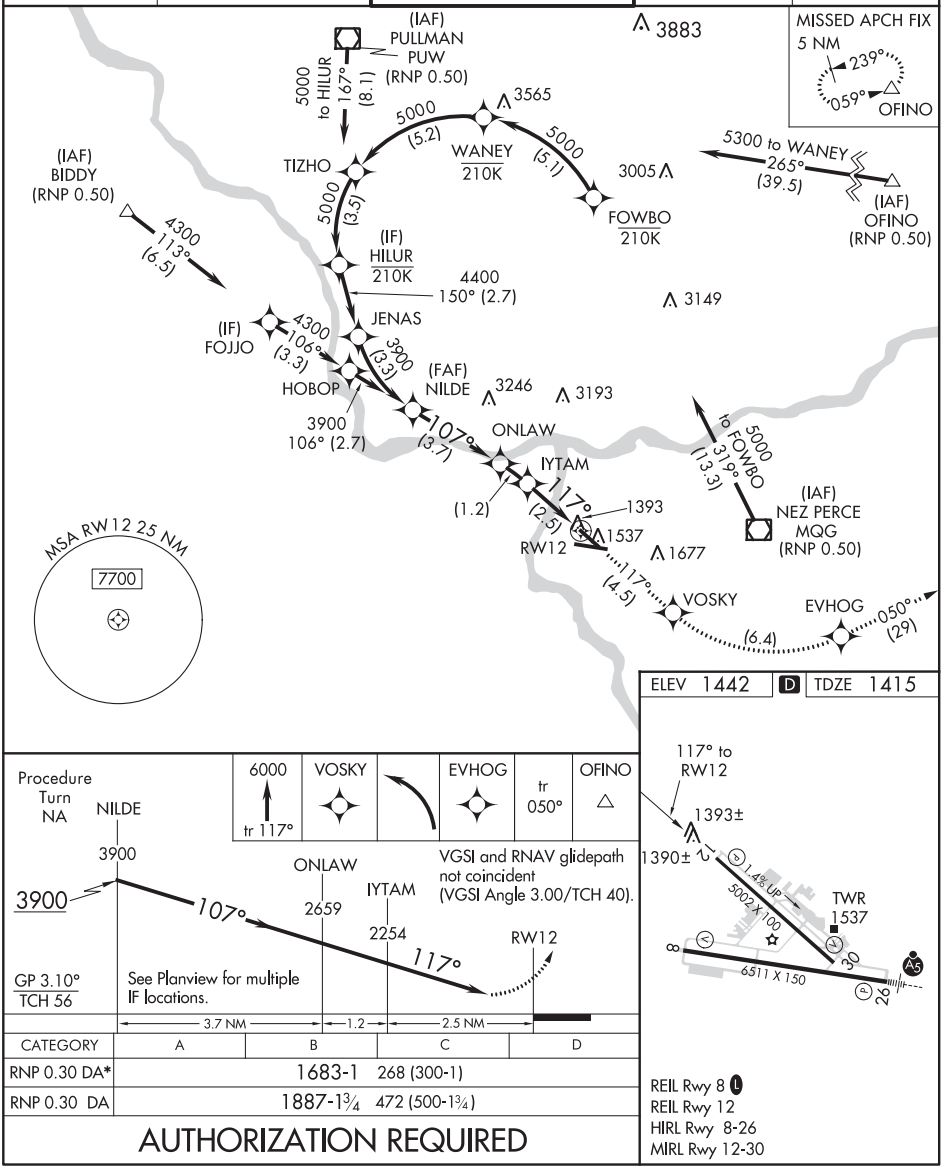
LEWISTON-NEZ PERCE COUNTY (LWS)

APP CRS		
117°	Rwy Idg	5002
	TDZE	1415
	Apt Elev	1442

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

6000	VOSKY		EVHOG	tr	OFINO
tr 117°				050°	

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40).

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

REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

LEWISTON, IDAHO
Orig-A 30JUN11

46°22'N-117°01'W

LEWISTON-NEZ PERCE COUNTY (LWS)

RNAV (RNP) Z RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 26

LEWISTON-NEZ PERCE COUNTY (LWS)

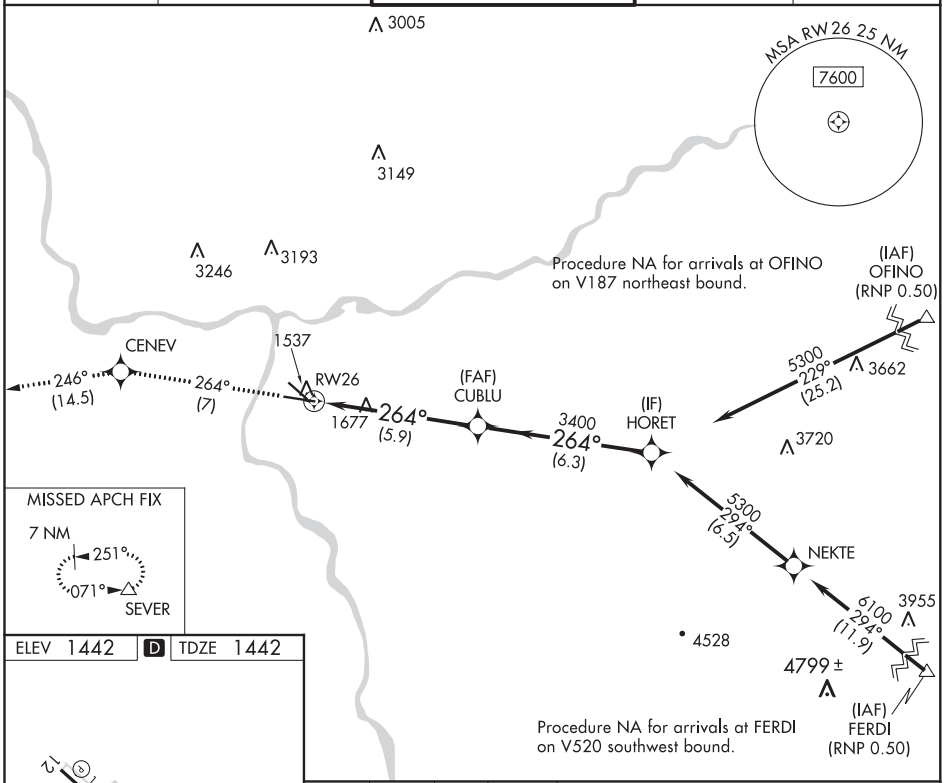
APP CRS	Rwy Idg	6511
264°	TDZE	1442
	Apt Elev	1442

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.

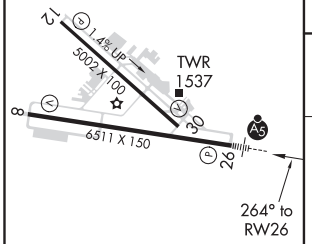
MALSR

MISSED APPROACH: Climb to 7000 on track 264° to CENEV and on track 246° to SEVER and hold, continue climb-in-hold to 7000.

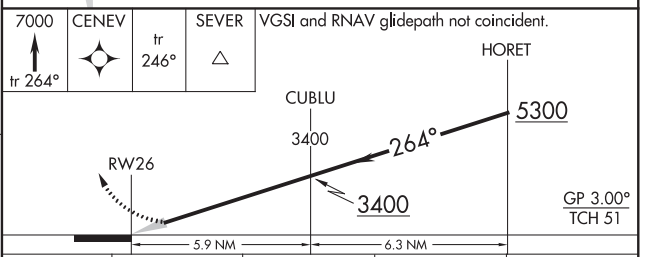
ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) L 318.8	121.9	122.95



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 0.20 DA	1806-¾ 364 (400-¾)			
RNP 0.30 DA	2003-1½ 561 (600-1½)			

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LEWISTON, IDAHO | AL-515 (FAA) | 18200

RNAV (GPS) Y RWY 8

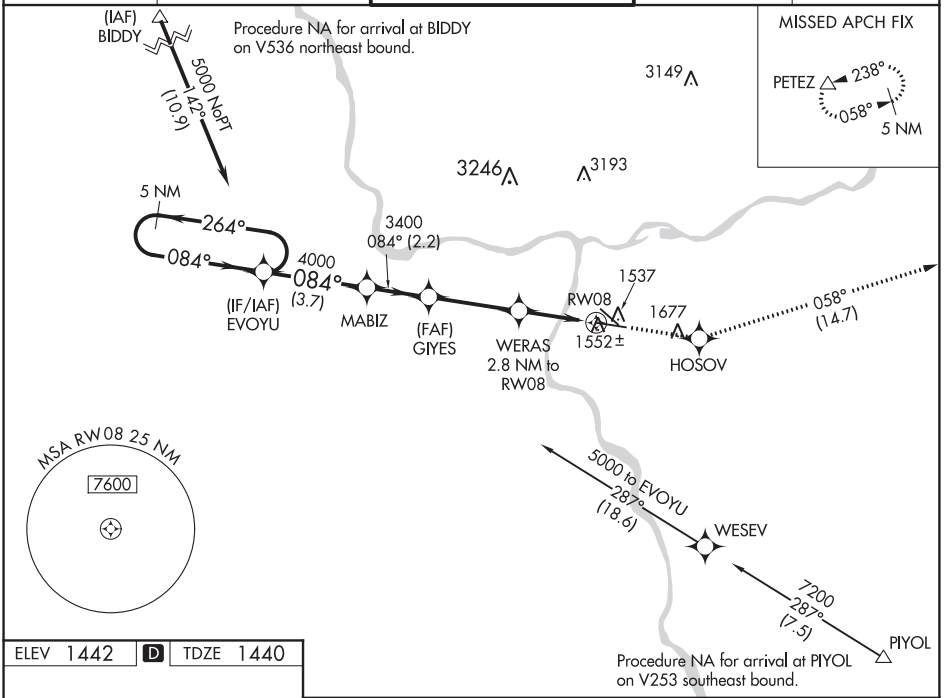
LEWISTON-NEZ PERCE COUNTY (LWS)

WAAS	APP CRS	Rwy Idg	6511
CH 97600	084°	TDZE	1440
W08A		Apt Elev	1442

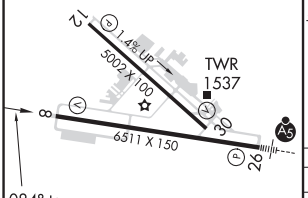
T A — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 34°C (93°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 5700 direct HOSOV and on track 058° to PETEZ and hold, continue climb-in-hold to 5700.

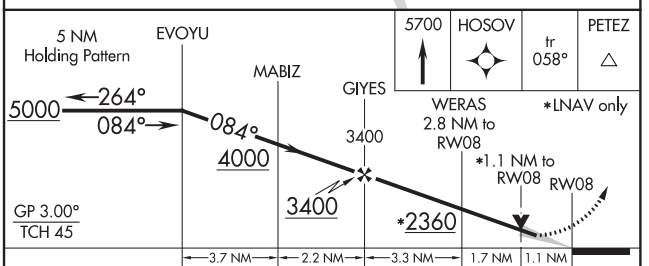
ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) L 318.8	121.9	122.95



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 12

LEWISTON-NEZ PERCE COUNTY (LWS)

WAAS	APP CRS	Rwy Idg	5002
CH 56500	117°	TDZE	1415
W12A		Apt Elev	1442

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

(IAF) PULLMAN PUW

Procedure NA for arrival at PUW VOR/DME on V253 northwest bound.

5000 174° (9.1)

(IAF) LEKIC

5000 116° (6.3)

(IF) COKEB

4000 116° (6.7)

(FAF) JUGON

117°

RW12

3883 3565 3005 3149 3246 3193 1537 1677

MSA RW12 25 NM

7600

047° (15)

DIPBA

MISSED APCH FIX

PETEZ 238° 058° 5 NM

ELEV 1442 D TDZE 1415

117° to RW12

1.4% UP

5002 X 100

TWR 1537

6511 X 150

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40).

5700	DIPBA	tr 047°	PETEZ

COKEB 5000 116° 4000 JUGON 4000 117° RW12

GP 3.87° TCH 55

6.7 NM 6.3 NM

CATEGORY	A	B	C	D
LPV DA	1793-1	378 (400-1)	NA	

REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LEWISTON, IDAHO | AL-515 (FAA) | 18200

WAAS	APP CRS	Rwy Idg	6511
CH 78012	264°	TDZE	1442
W26A		Apt Elev	1442

RNAV (GPS) Y RWY 26

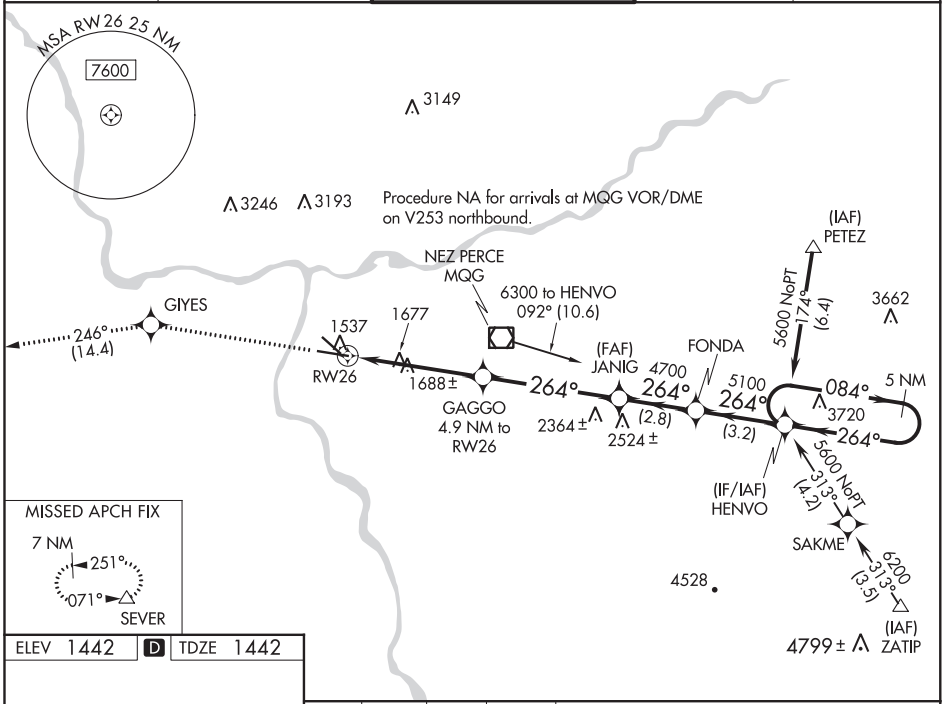
LEWISTON-NEZ PERCE COUNTY (LWS)

T A — 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.

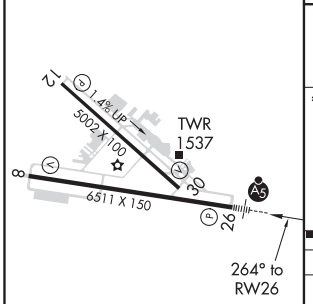
MALSR

MISSED APPROACH: Climb to 7000 direct GIYES and on track 246° to SEVER and hold, continue climb-in-hold to 7000.

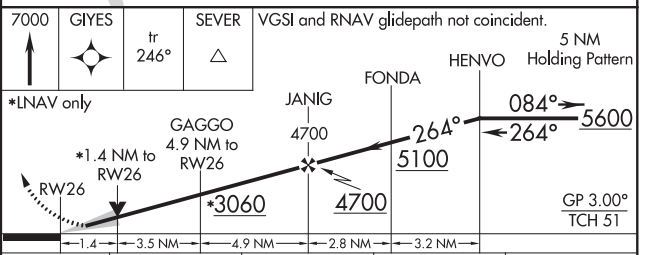
ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) L 318.8	121.9	122.95



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
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)

LEWISTON, IDAHO
Orig-B 17AUG17

46°22′N-117°01′W

LEWISTON-NEZ PERCE COUNTY (LWS)

RNAV (GPS) Y RWY 26

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

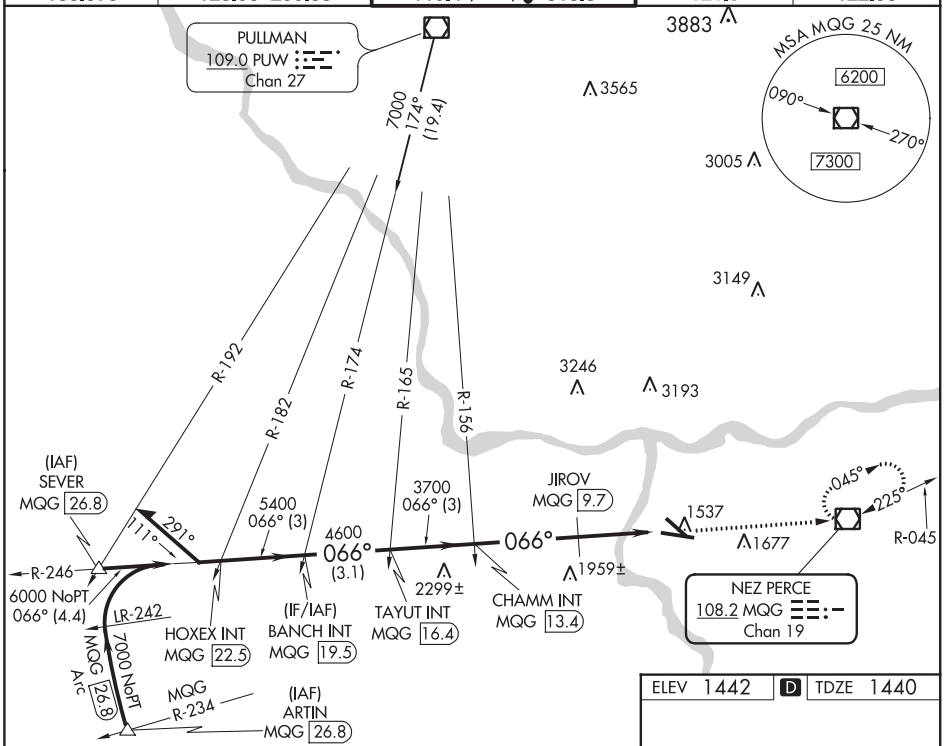
VOR/DME MQG	APP CRS	Rwy Idg	6511
108.2	066°	TDZE	1440
Chan 19		Apt Elev	1442

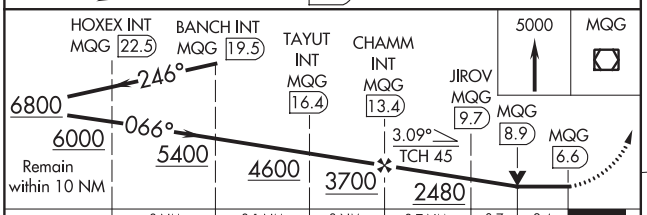
VOR RWY 8

LEWISTON-NEZ PERCE COUNTY (LWS)

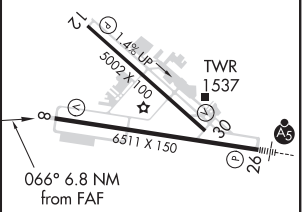
MISSED APPROACH: Climb to 5000 direct MQG VOR/DME and hold, continue climb-in-hold to 5000.

ASOS	SEATTLE CENTER	LEWISTON TOWER ★	GND CON	UNICOM
135.575	123.95 290.55	119.4 (CTAF) 318.8	121.9	122.95





CATEGORY	A	B	C	D
S-8	2480-1¼ 1040 (1100-1¼)	2480-1½ 1040 (1100-1½)	2480-3 1040 (1100-3)	
CIRCLING	2480-1¼ 1038 (1100-1¼)	2480-1½ 1038 (1100-1½)	2480-3 1038 (1100-3)	
JIROV FIX MINIMUMS				
S-8	2220-1 780 (800-1)	2220-1¼ 780 (800-1¼)	2220-2¼ 780 (800-2¼)	2220-2½ 780 (800-2½)
CIRCLING	2220-1 778 (800-1)	2220-1¼ 778 (800-1¼)	2220-2¼ 778 (800-2¼)	2220-2½ 778 (800-2½)



REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

FAF to MAP 6.8 NM					
Knots	60	90	120	150	180
Min:Sec	6:48	4:32	3:24	2:43	2:16

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

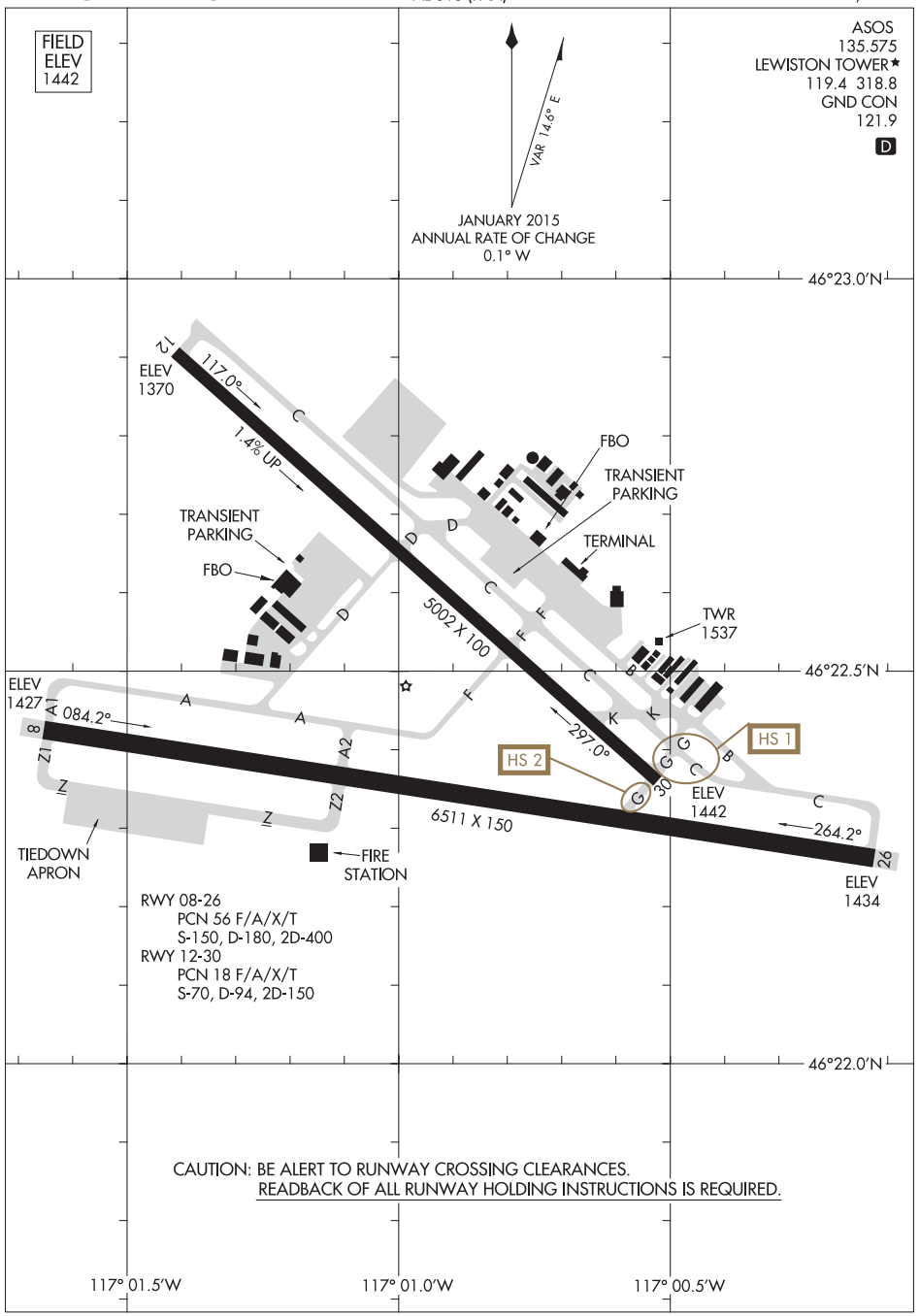
20030

AIRPORT DIAGRAM

LEWISTON-NEZ PERCE COUNTY (LWS)

LEWISTON, IDAHO

AL-515 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

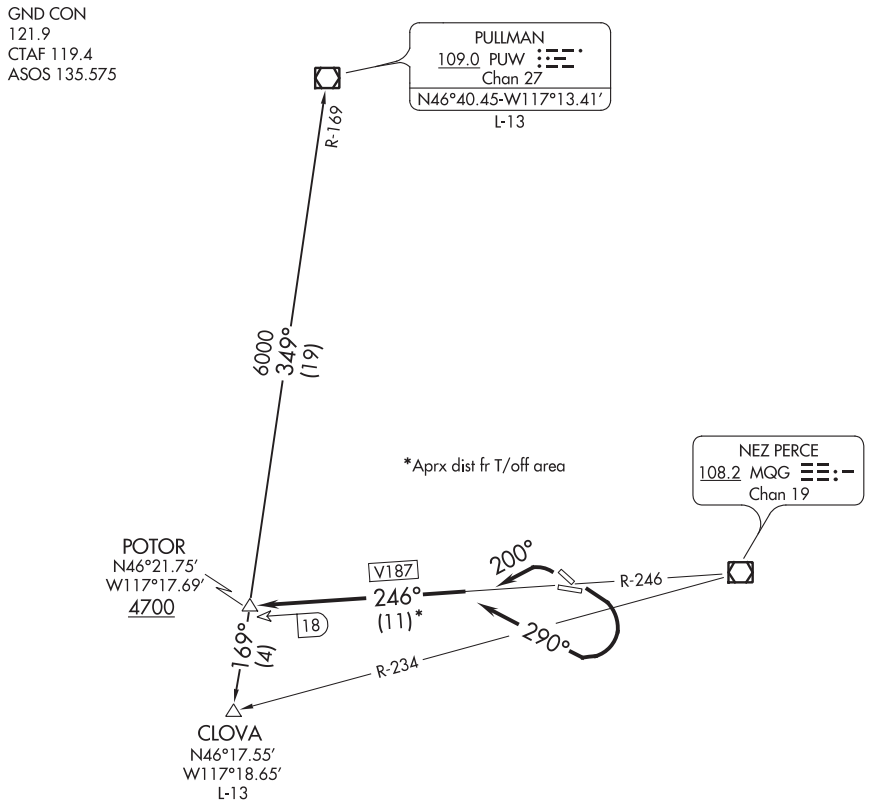
AIRPORT DIAGRAM

LEWISTON, IDAHO

LEWISTON-NEZ PERCE COUNTY (LWS)

20030

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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 8

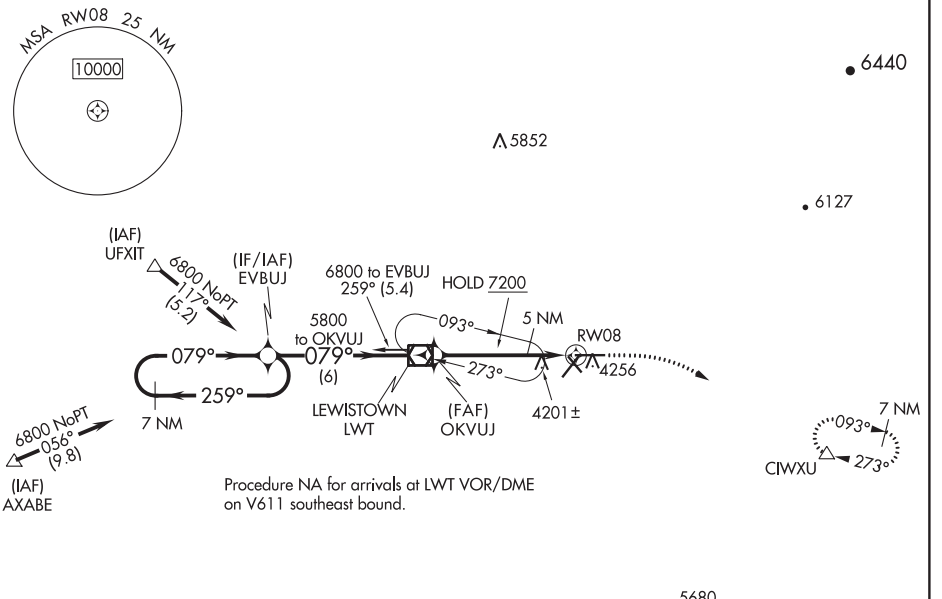
LEWISTOWN MUNI (LWT)

WAAS	APP CRS	Rwy Idg	6100
CH 86700	079°	TDZE	4129
W08A		Apt Elev	4170

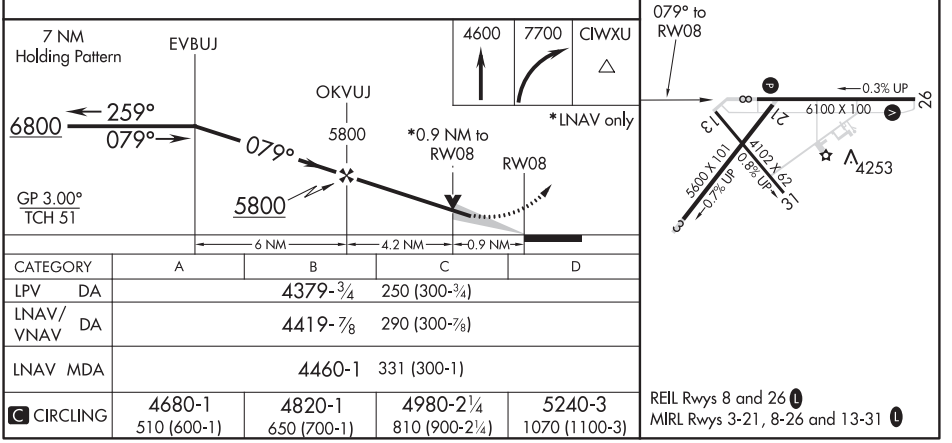
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 50°C (123°F). DME/DME RNP- 0.3 NA.

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	GREAT FALLS RADIO	UNICOM
118.375	133.4 285.4	122.35	123.0 (CTAF) L



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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 26

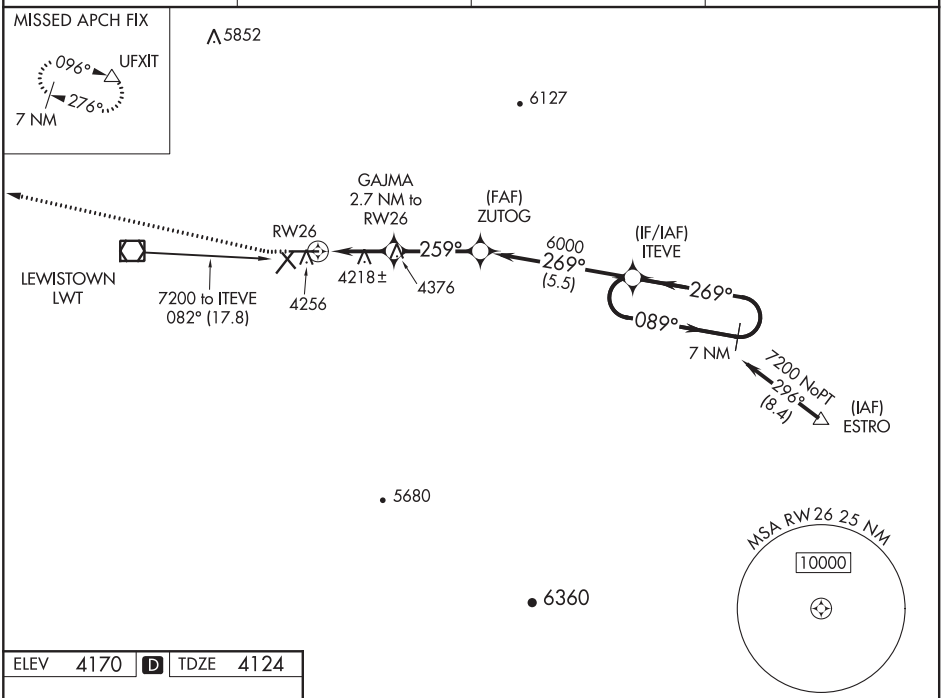
LEWISTOWN MUNI (LWT)

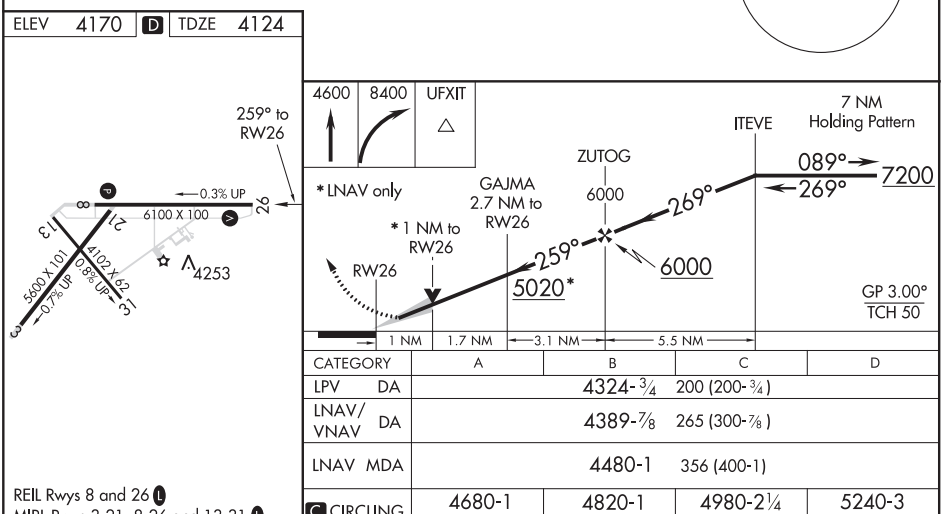
WAAS	APP CRS	Rwy Idg	6100
CH 50230	259°	TDZE	4124
W26A		Apt Elev	4170

T A 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	GREAT FALLS RADIO	UNICOM
118.375	133.4 285.4	122.35	123.0 (CTAF) L





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

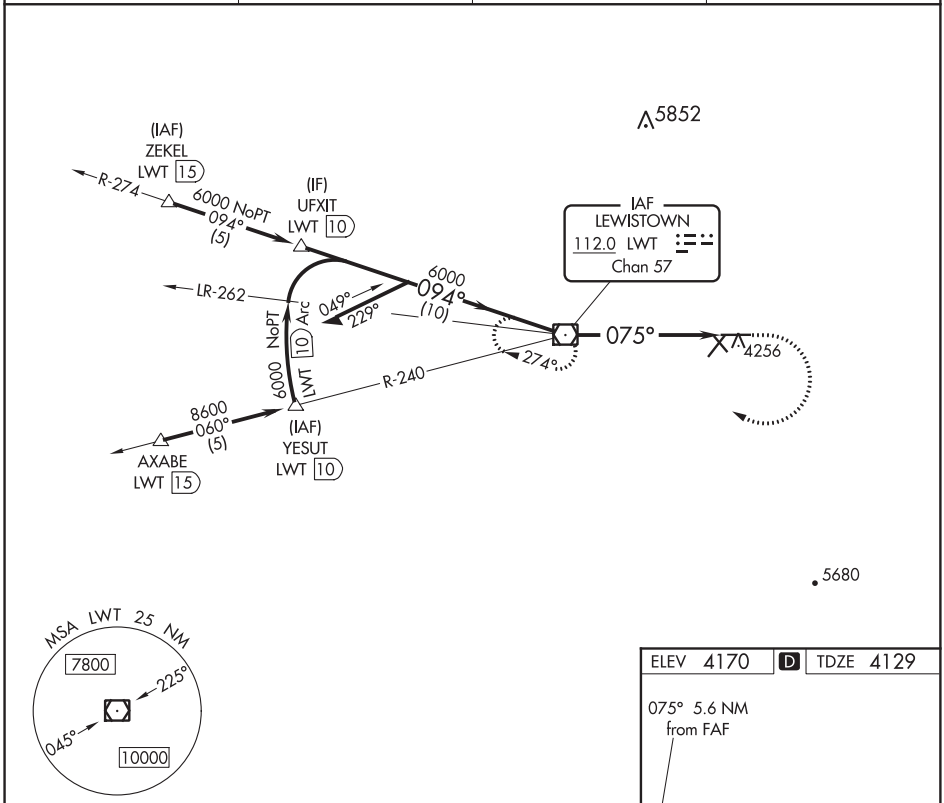
VOR RWY 8

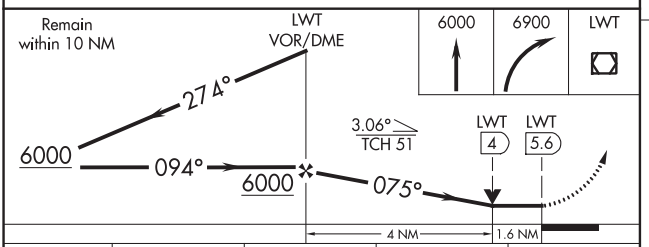
LEWISTOWN MUNI (LWT)

VOR/DME LWT	APP CRS	Rwy Idg	6100
112.0	075°	TDZE	4129
Chan 57		Apt Elev	4170

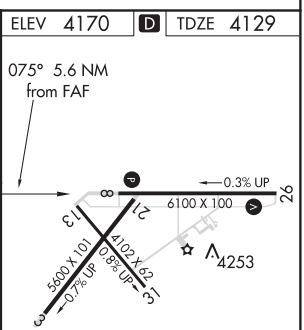
MISSED APPROACH: Climb to 6000 then climbing right turn to 6900 direct LWT VOR/DME and hold.

ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
118.375	133.4 285.4	122.35	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-8	4680-1	551 (600-1)	4680-1⅝	551 (600-1⅝)
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

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	4156
082°	TDZE	1618
	Apt Elev	1634

RNAV (GPS) RWY 8

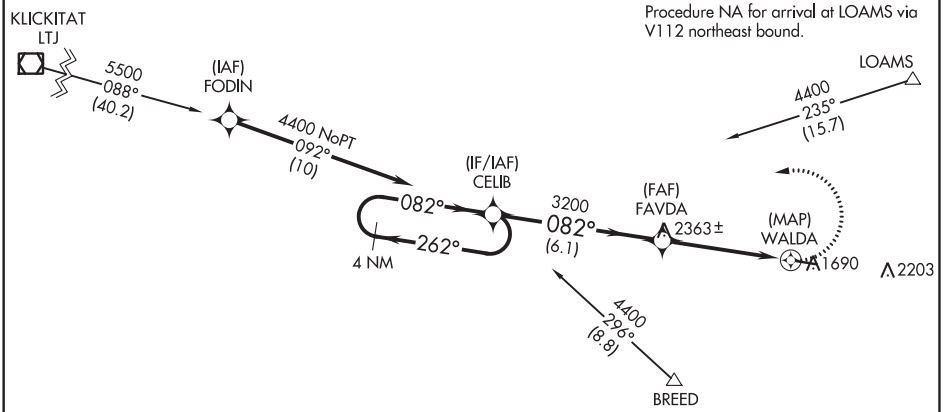
LEXINGTON (9S9)

T NA — 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.

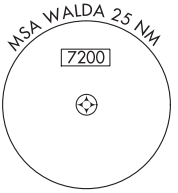
AWOS-3	SEATTLE CENTER	CTAF
134.475	132.6 269.35	122.9 L

Procedure NA for arrival on LTJ VOR/DME airway radials 032 CW 116.



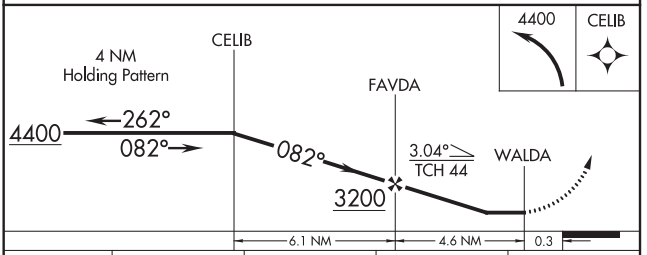
Procedure NA for arrival at LOAMS via V112 northeast bound.

Procedure NA for arrival at BREED via V182 east bound.



3562

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS)-A

LEXINGTON (9S9)

APP CRS	Rwy Idg	N/A
210°	TDZE	N/A
	Apt Elev	1634

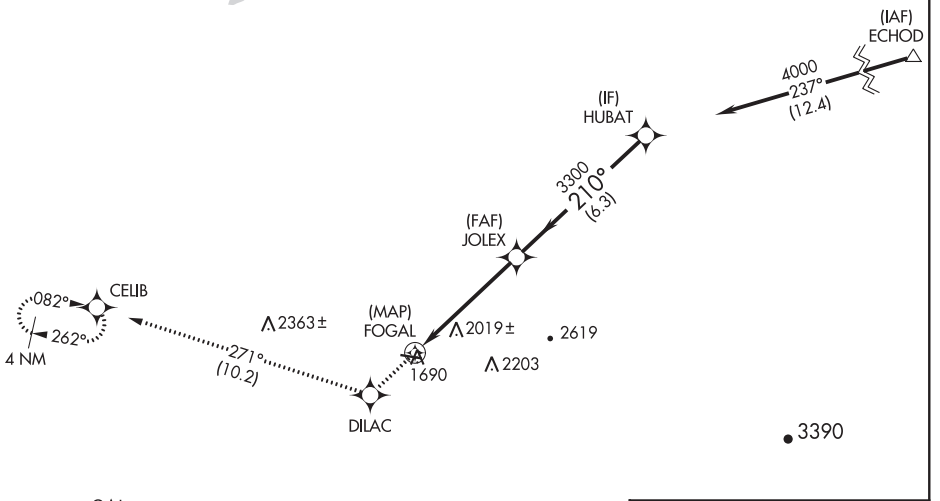
When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 220 feet, increase Cats A/B visibility ¼ mile, and Cat C visibility ½ mile. Procedure NA at night. DME/DME RNP- 0.3 NA. Helicopter visibility reduction below 1 SM NA.

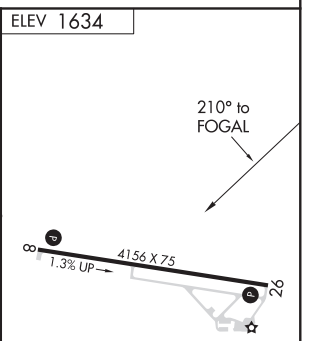
NA

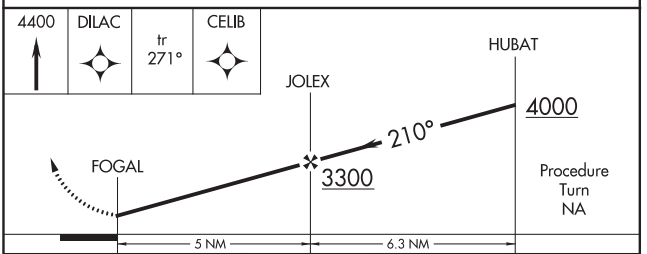
MISSED APPROACH: Climb to 4400 direct DILAC and via 271° track to CELIB and hold.

AWOS-3	SEATTLE CENTER	CTAF
134.475	132.6 269.35	122.9 L

Procedure NA for arrivals at ECHOD via V112 northeast bound.







CATEGORY	A	B	C	D
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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

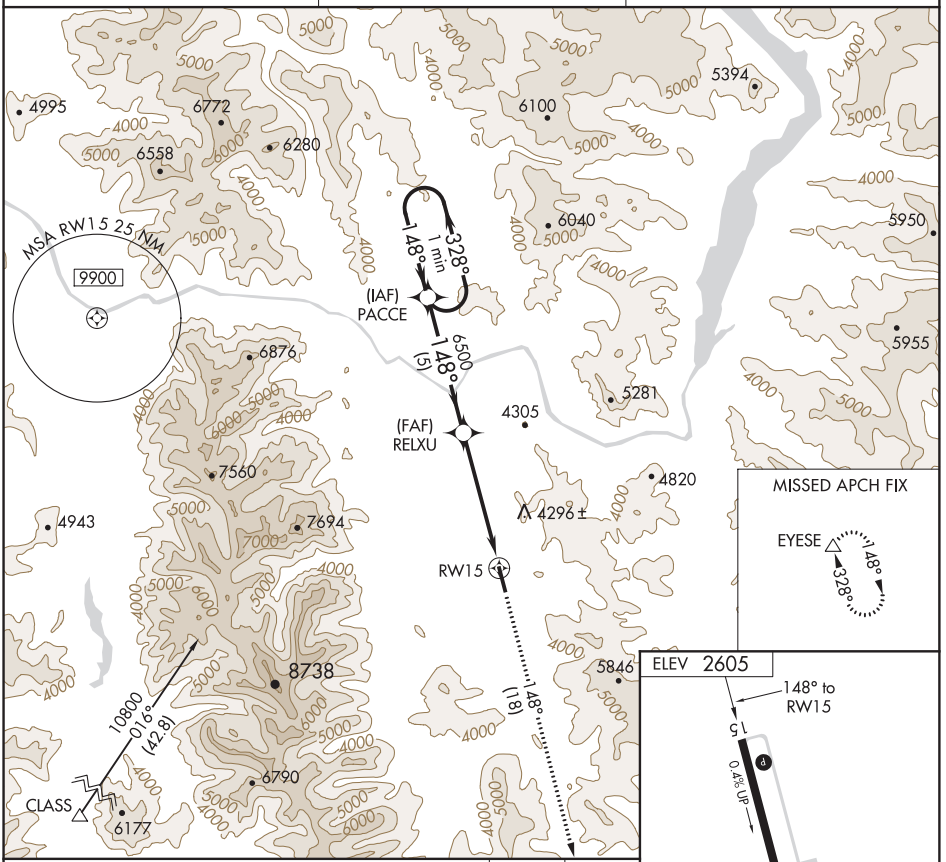
APP CRS	Rwy Idg	N/A
148°	TDZE	N/A
	Apt Elev	2605

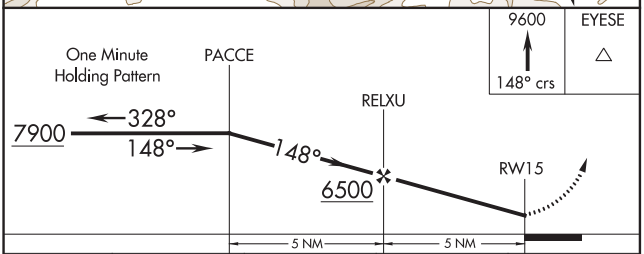
GPS-A
LIBBY (S59)

NA — Procedure NA at night. Rwy 15, 33 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, procedure NA.

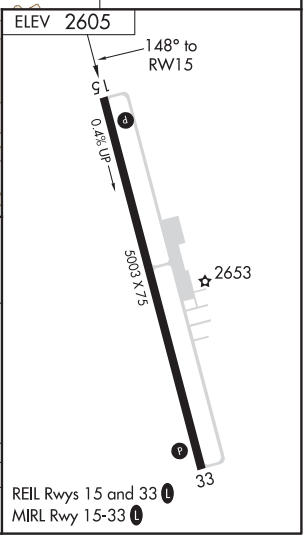
MISSED APPROACH: Climb to 9600 on 148° course to EYESE and hold.

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	



NW-1, 30 JAN 2020 to 26 MAR 2020

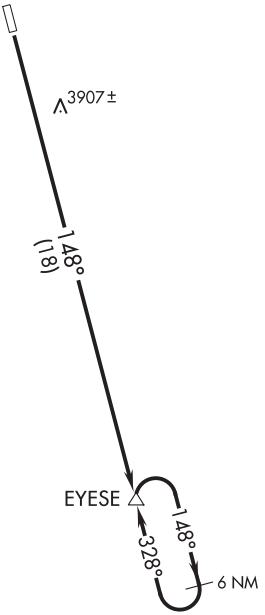
(EYESE1.EYESE) 16147

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 22

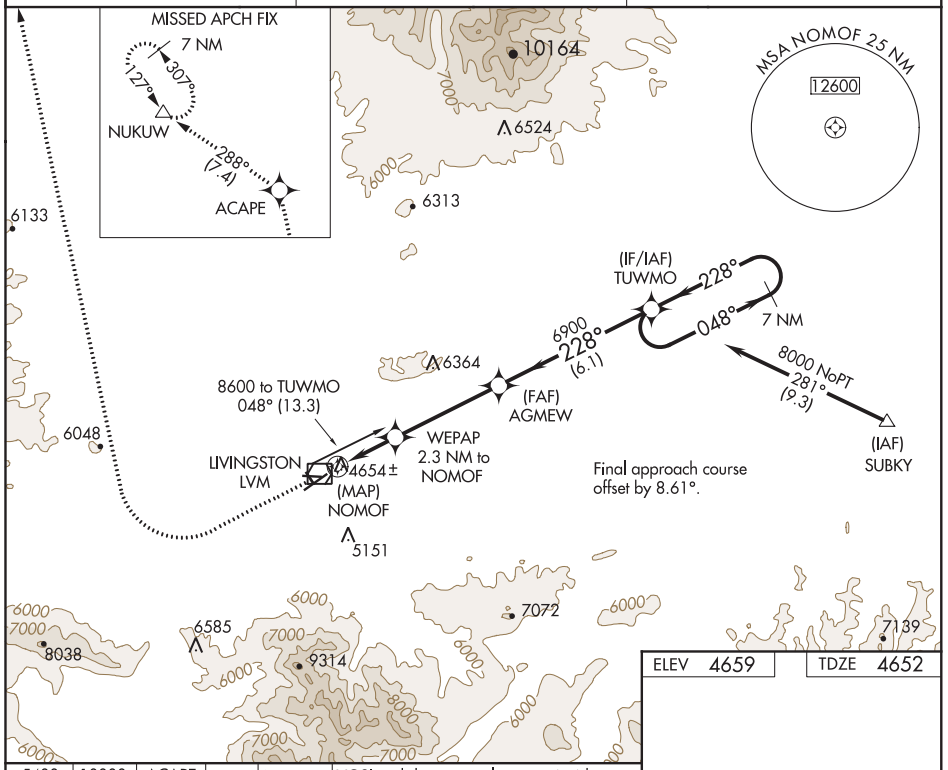
MISSION FIELD (LVM)

WAAS	APP CRS	Rwy Idg	5701
CH 48824	228°	TDZE	4652
W22A		Apt Elev	4659

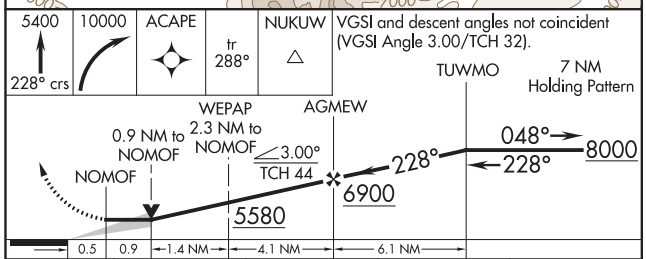
T A — DME/DME RNP-0.3 NA. Circling Rwys 8-26 and 13-21 NA at night.

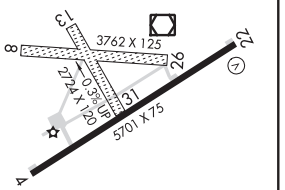
MISSED APPROACH: Climb to 5400 on 228° course then climbing right turn to 10000 direct ACAPE and on track 288° to NUKUW and hold.

ASOS	BIG SKY APP CON ★	UNICOM
135.275	119.55 235.775	123.0 (CTAF) L



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

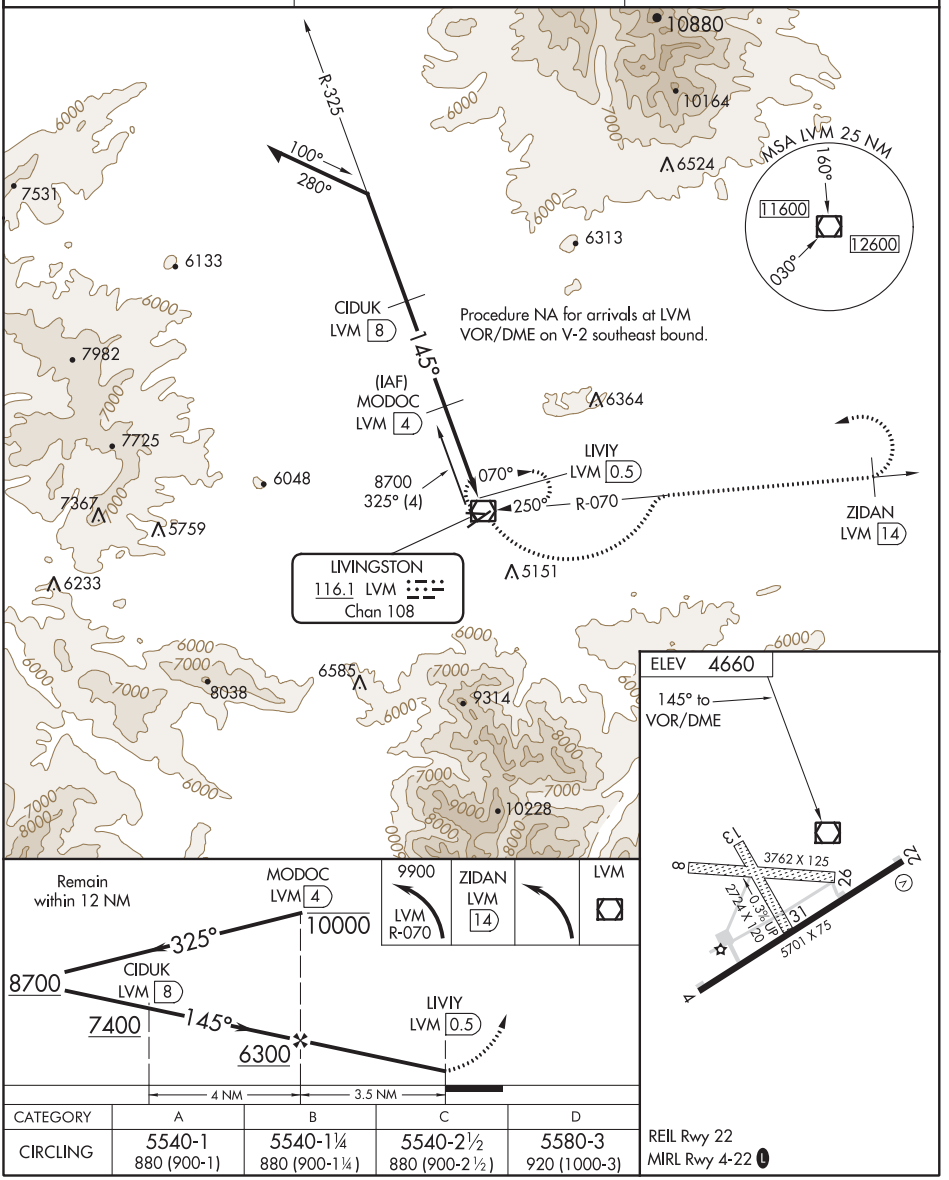
LIVINGSTON, MONTANA | AL-5348 (FAA) | 20030

VOR/DME LVM	APP CRS	Rwy Idg	N/A
116.1	145°	TDZE	N/A
Chan 108		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	5540-1 880 (900-1)	5540-1¼ 880 (900-1¼)	5540-2½ 880 (900-2½)	5580-3 920 (1000-3)

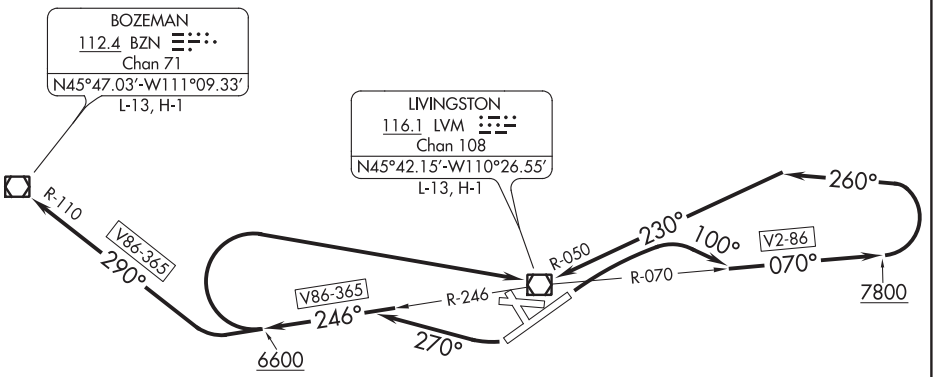
REIL Rwy 22
MIRL Rwy 4-22 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5089
CH 93518	164°	TDZE	2433
W16A		Apt Elev	2437

RNAV (GPS) RWY 16

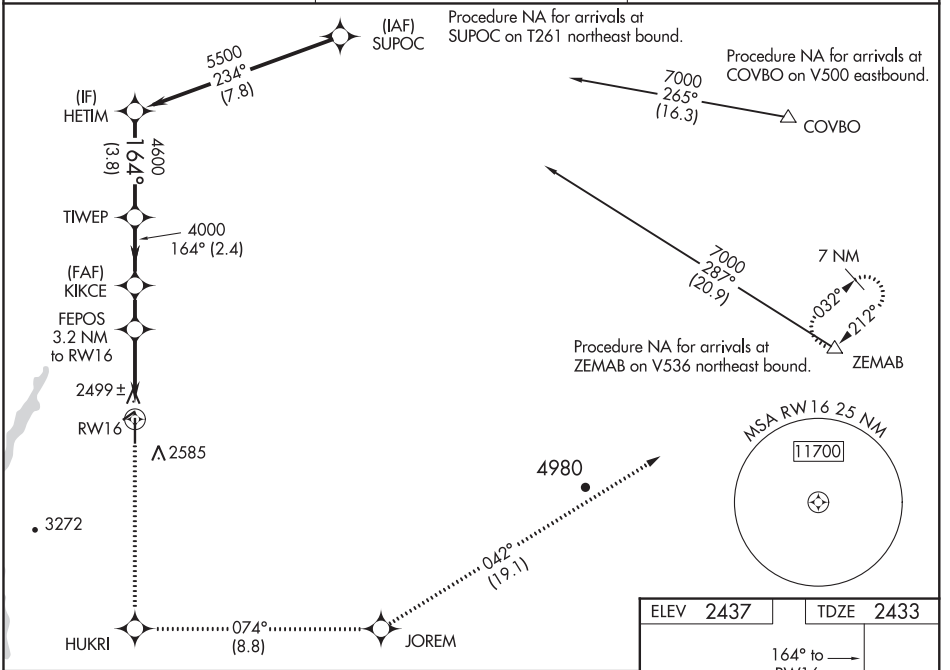
MADRAS MUNI (S33)

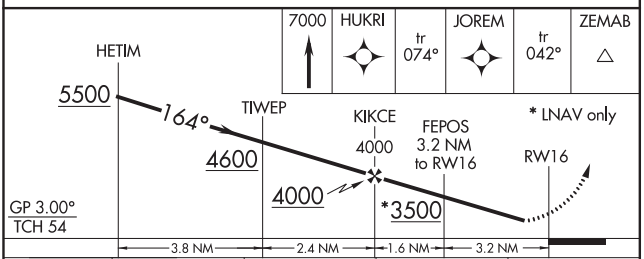
T
NA

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). 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 2 ⅞ 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.

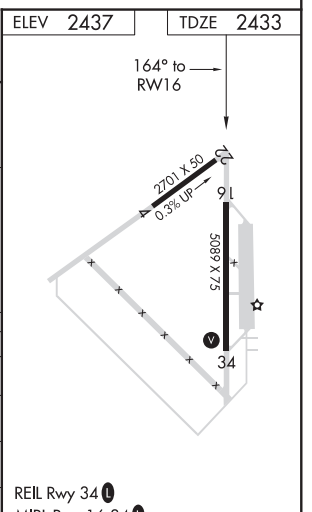
MISSED APPROACH: Climb to 7000 direct HUKRI and on track 074° to JOREM and on track 042° to ZEMAB and hold.

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



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 34

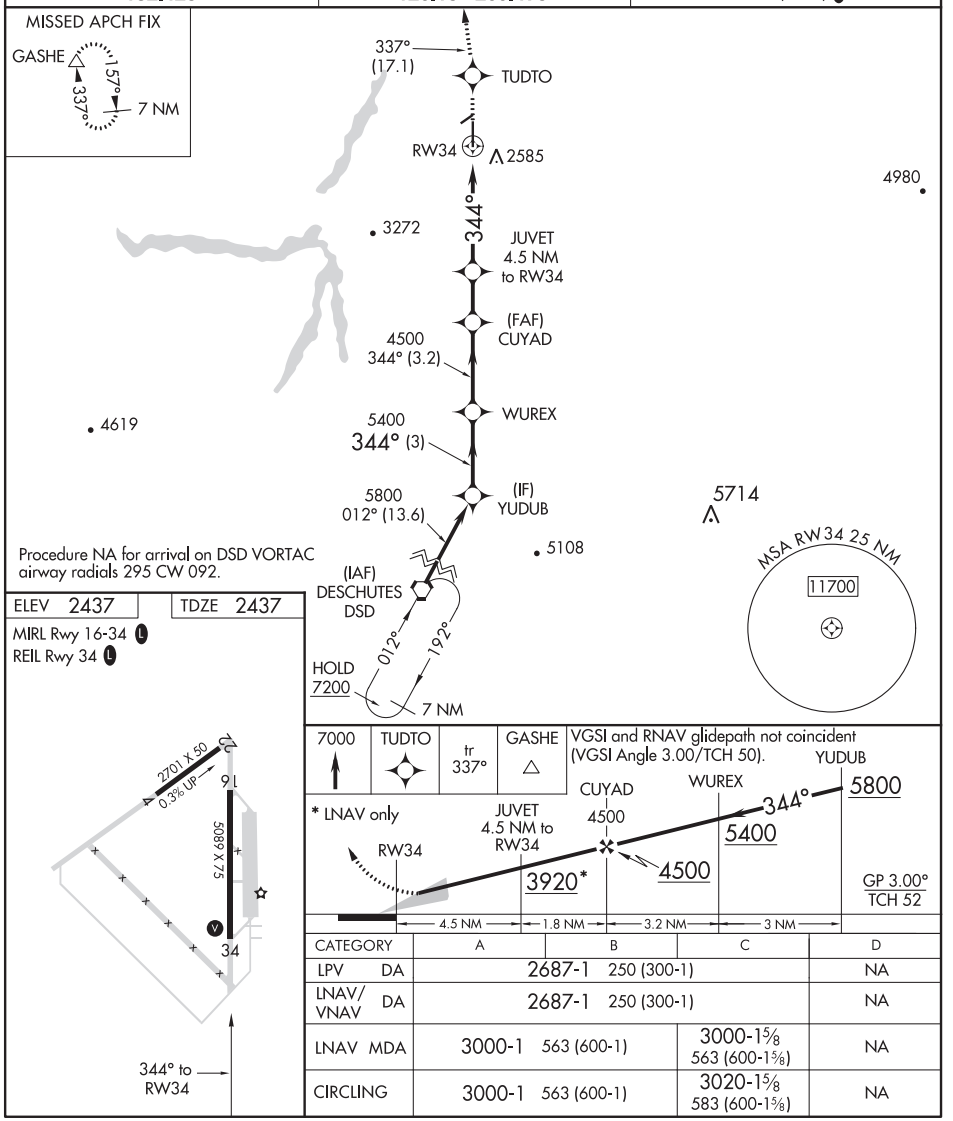
MADRAS MUNI (S33)

WAAS	APP CRS	Rwy Idg	5089
CH 60930	344°	TDZE	2437
W34A		Apt Elev	2437

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MALTA, MONTANA AL-9493 (FAA) 19171

RNAV (GPS) RWY 8

MALTA (M75)

WAAS	APP CRS	Rwy Idg	4500
CH 86621	077°	TDZE	2254
W08A		Apt Elev	2254

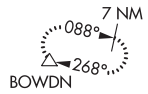
RNP APCH.

-37°C

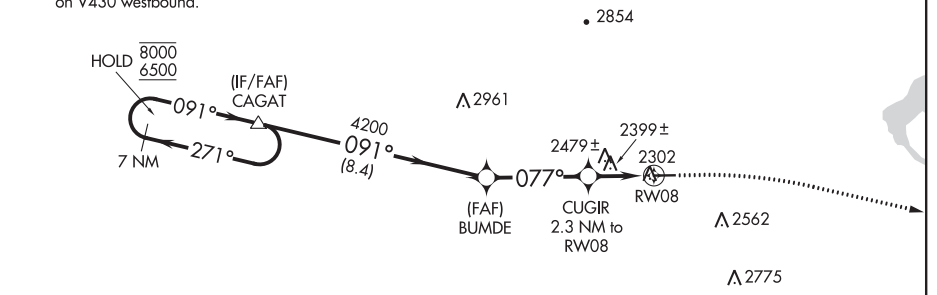
MISSED APPROACH: Climb to 6500 direct BOWDN and hold, continue climb-in-hold to 6500.

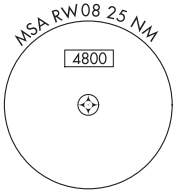
AWOS-3	SALT LAKE CITY CENTER	AUNICOM
119.25	126.85 305.2	122.8 (CTAF) L

MISSED APCH FIX



Procedure NA for arrival at CAGAT on V430 westbound.



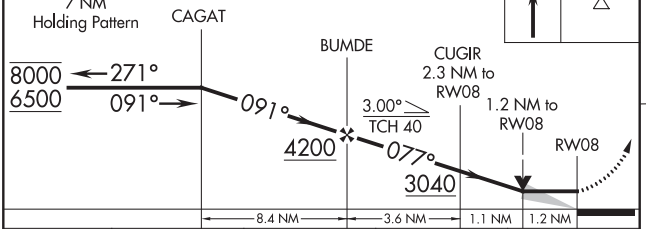


2964

ELEV 2254 TDZE 2254

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 27).

6500 BOWDN



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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 26

MALTA (M75)

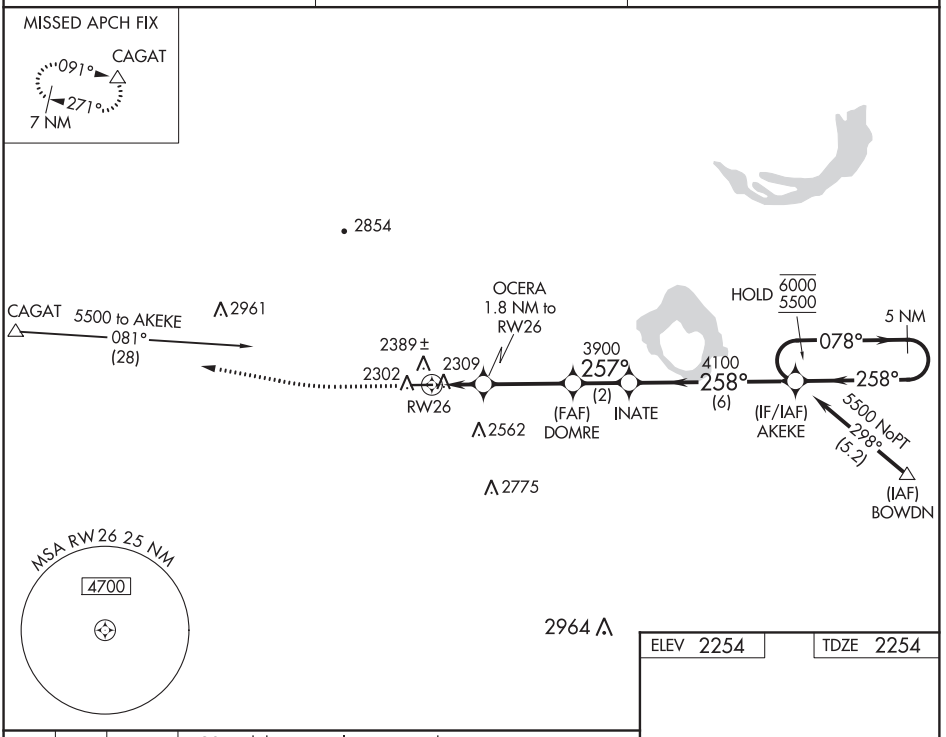
WAAS CH 97721 W26A	APP CRS 257°	Rwy Idg 4500 TDZE 2254 Apt Elev 2254

RNP APCH.

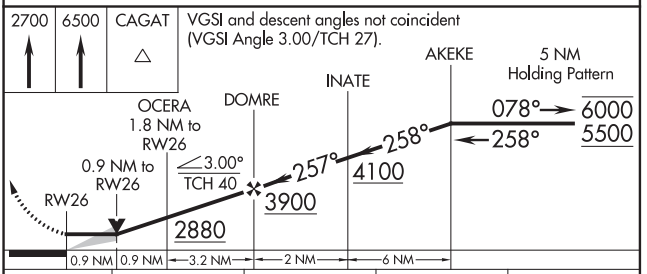
-37°C

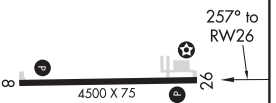
MISSED APPROACH: Climb to 2700, then climb to 6500 direct CAGAT and hold, continue climb-in-hold 6500.

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, 30 JAN 2020 to 26 MAR 2020

MC CALL, IDAHO | AL-6936 (FAA) | 20030

APP CRS	Rwy Idg	6108
181°	TDZE	5024
	Apt Elev	5024

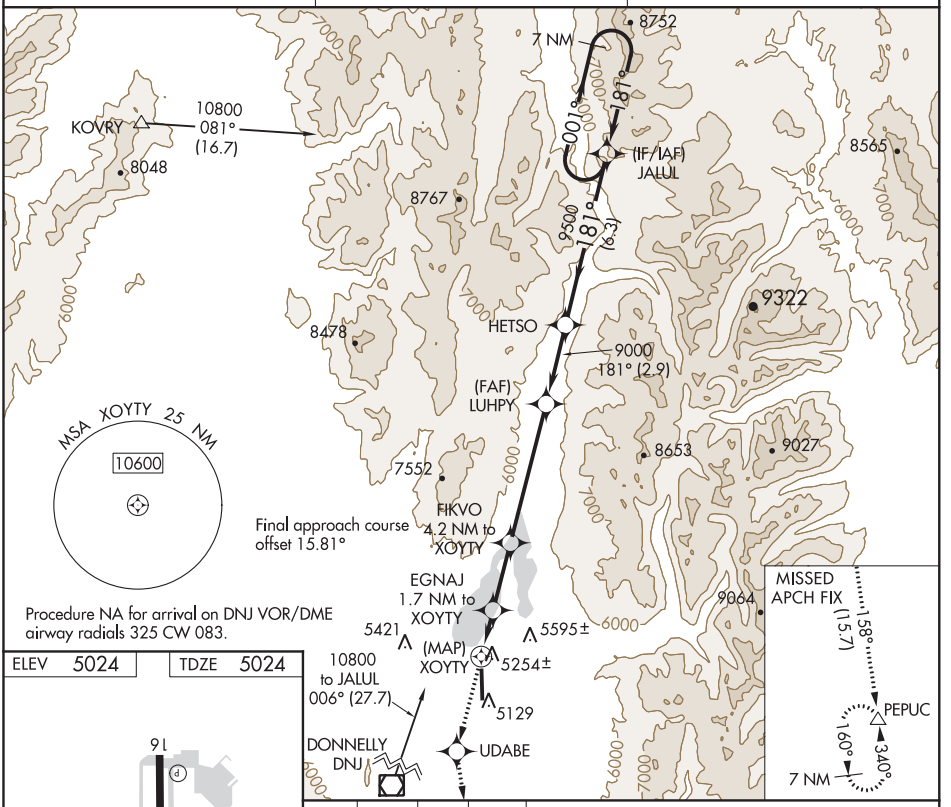
RNAV (GPS) RWY 16

MC CALL MUNI (MYL)

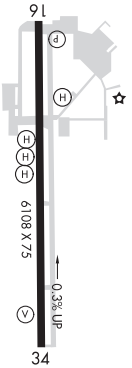
Rwy 16 helicopter visibility reduction below 1 SM NA.
DME/DME RNP-0.3 NA.
-21°C Straight-in Rwy 16 NA at night, Circling Rwy 16 NA at night.

MISSED APPROACH: Climb to 11700 direct UDABE and on track 158° to PEPUC and hold, continue climb-in-hold to 11700.

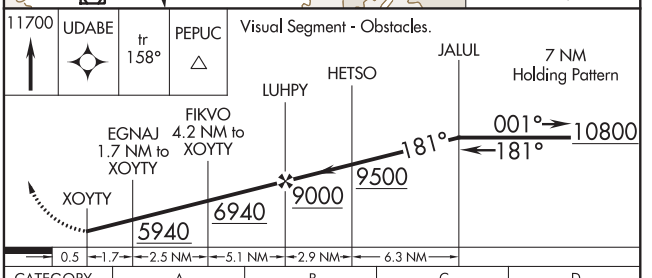
ASOS	SALT LAKE CENTER	UNICOM
119.925	128.05 306.95	122.8 (CTAF) L



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	6108
CH 49016	346°	TDZE	5012
W34A		Apt Elev	5024

RNAV (GPS) RWY 34

MC CALL MUNI (MYL)

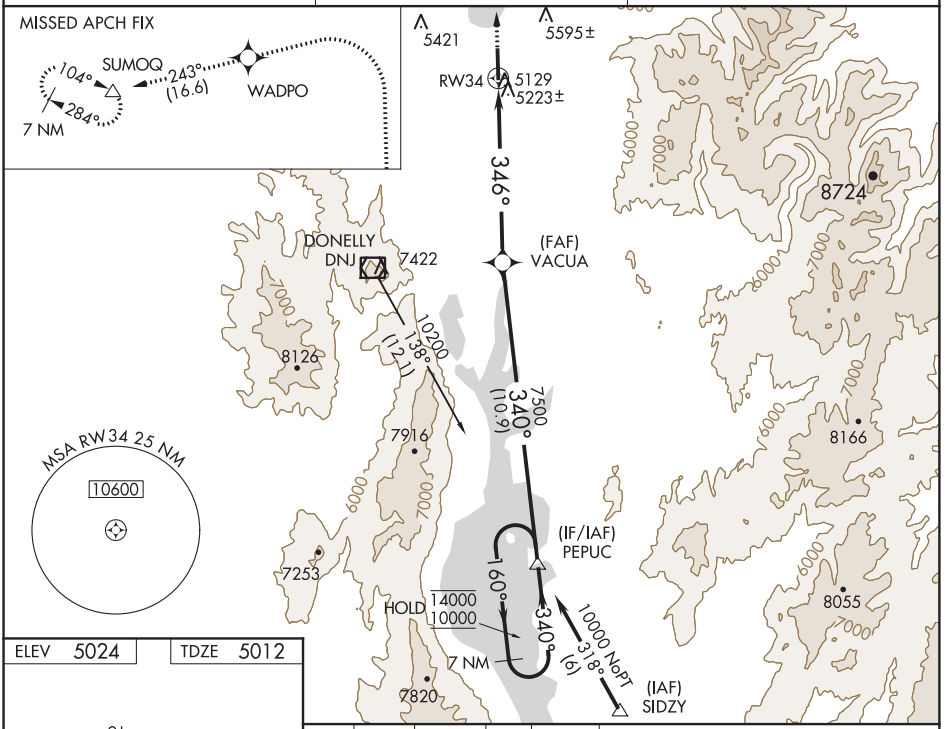
RNP APCH.

T A ❄ -21°C

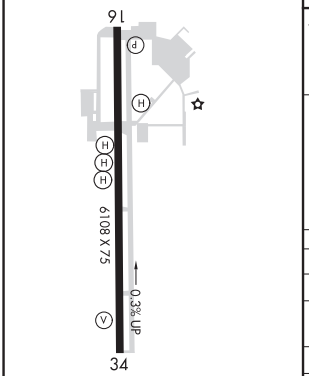
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C or above 40°C. Rwy 34 helicopter visibility reduction below ¾ SM NA. Circling Rwy 16 NA at night.

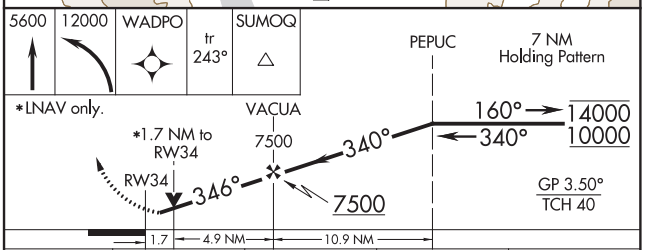
MISSED APPROACH: Climb to 5600 then climbing left turn to 12000 direct WADPO and on track 243° to SUMOQ and hold, continue climb-in-hold to 12000. #Missed approach requires minimum climb of 260 feet per NM to 6100.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

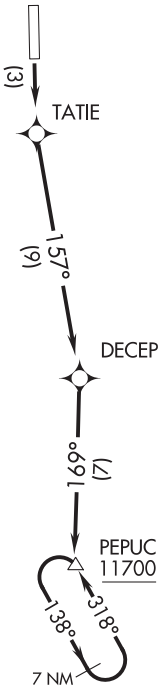
(PEPUC2.PEPUC) 17285 AL-6936 (FAA)

PEPUC TWO DEPARTURE (OBSTACLE) (RNAV)

MC CALL MUNI (MYL)
MC CALL, IDAHO

ASOS
119.925
BOISE RADIO
122.35
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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 22

MC MINNVILLE MUNI (MMV)

LOC I-MMV	APP CRS	Rwy Idg	5420
110.9	218°	TDZE	161
		Apt Elev	163

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

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	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	118.35	123.0 (CTAF) L

Procedure NA for arrivals on BTG VORTAC airway radials 160 CW 175.

IAF BATTLEGROUND 116.6 BTG Chan 113

3100 NoPT 185° (24.8)

TOCBU INT BTG 24.8

2704

1734

2900 185° (4.9)

R-185

R-054

NEWBERG 117.4 UBG Chan 121

1557

3800 111° (4.4)

038°

BTG R-196

R-177

R-144

038° 1 min 218°

(IF/IAF) OZIER INT UBG 4.4 BTG 29.7

LUSEY UBG 6

1100

1900

2500 218° (2.5)

R-111

024°

204°

539±

218° (3.8)

UNECE INT

(IAF) RAWER

2900 NoPT 291° (6.1)

R-204

364±

294±

LIYEV INT

LOCALIZER 110.9 I-MMV

958

MSA UBG 25 NM

170° 3100 4800 260° 3600 350°

900	3000 hdg 069°	UBG R-204	LUSEY △

OZIER INT UBG 4.4 One Minute Holding Pattern

UNECE INT

LIYEV INT

1900

038° 2900

218° 218°

2500

1900

GS 3.00° TCH 57

5.2 NM 3.8 NM 2.5 NM

ELEV 163 D TDZE 161

218° 5.2 NM from FAF

5420 X 100

4340 X 75

228

35

231

REIL Rwy 4 L

HIRL Rwy 4-22 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)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MC MINNVILLE, OREGON | AL-5626 (FAA) | 19311

APP CRS	Rwy Idg	5320
038°	TDZE	161
	Apt Elev	163

RNAV (GPS) RWY 4

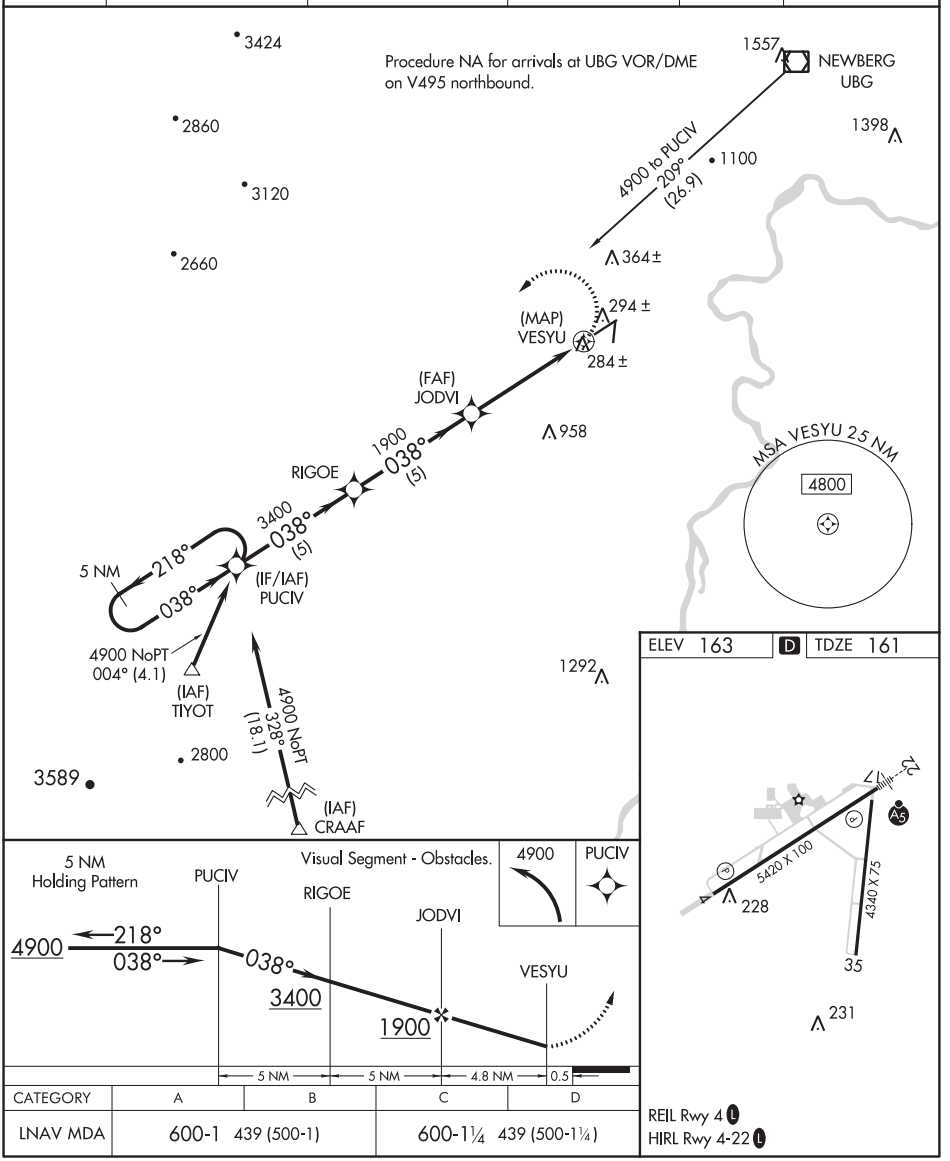
MC MINNVILLE MUNI (MMV)

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	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	118.35	123.0 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	600-1 439 (500-1)		600-1¼ 439 (500-1¼)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 50309 W22A	APP CRS 218°	Rwy Idg 5420 TDZE 161 Apt Elev 163

RNAV (GPS) RWY 22

MC MINNVILLE MUNI (MMV)

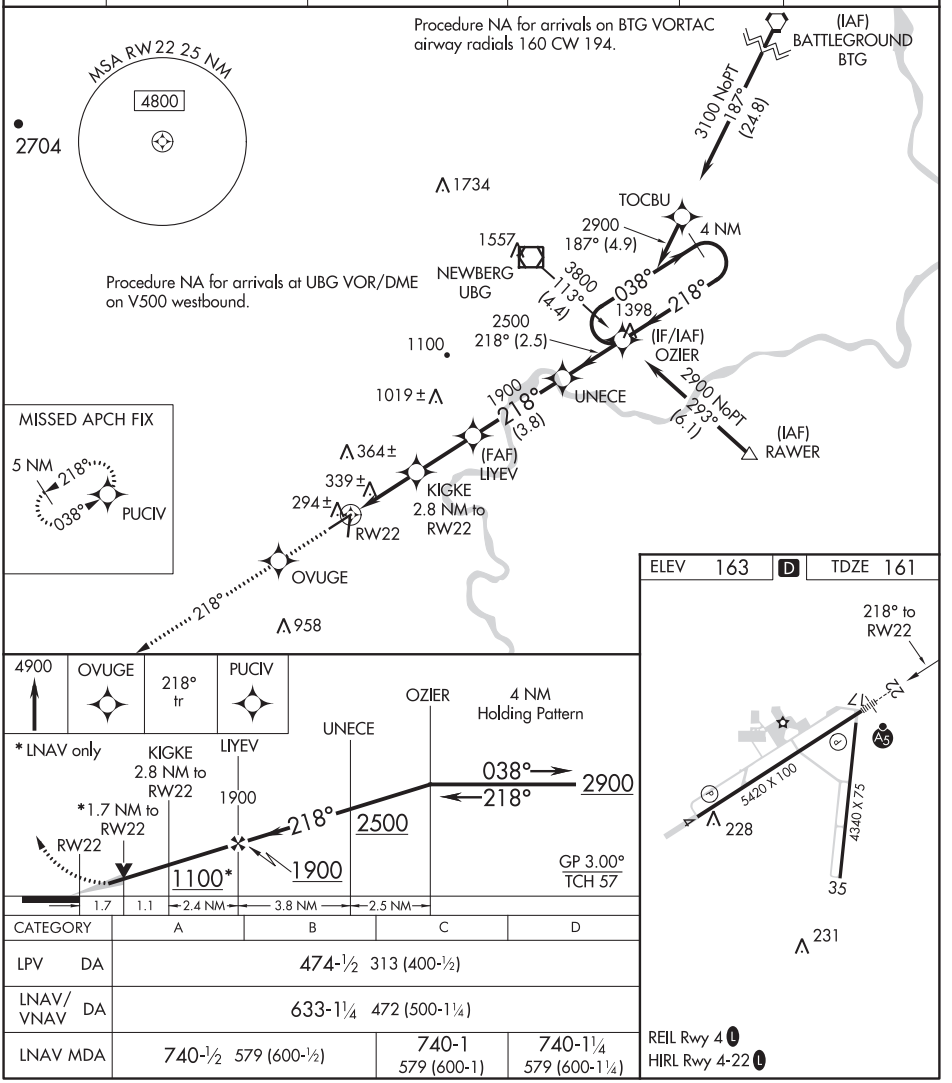
RNP APCH.

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	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	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)

REIL Rwy 4 L
HIRL Rwy 4-22 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MC MINNVILLE, OREGON AL-5626 (FAA) 18312

VOR/DME UBG	APP CRS	Rwy Idg	N/A
117.4	014°	TDZE	N/A
Chan 121		Apt Elev	163

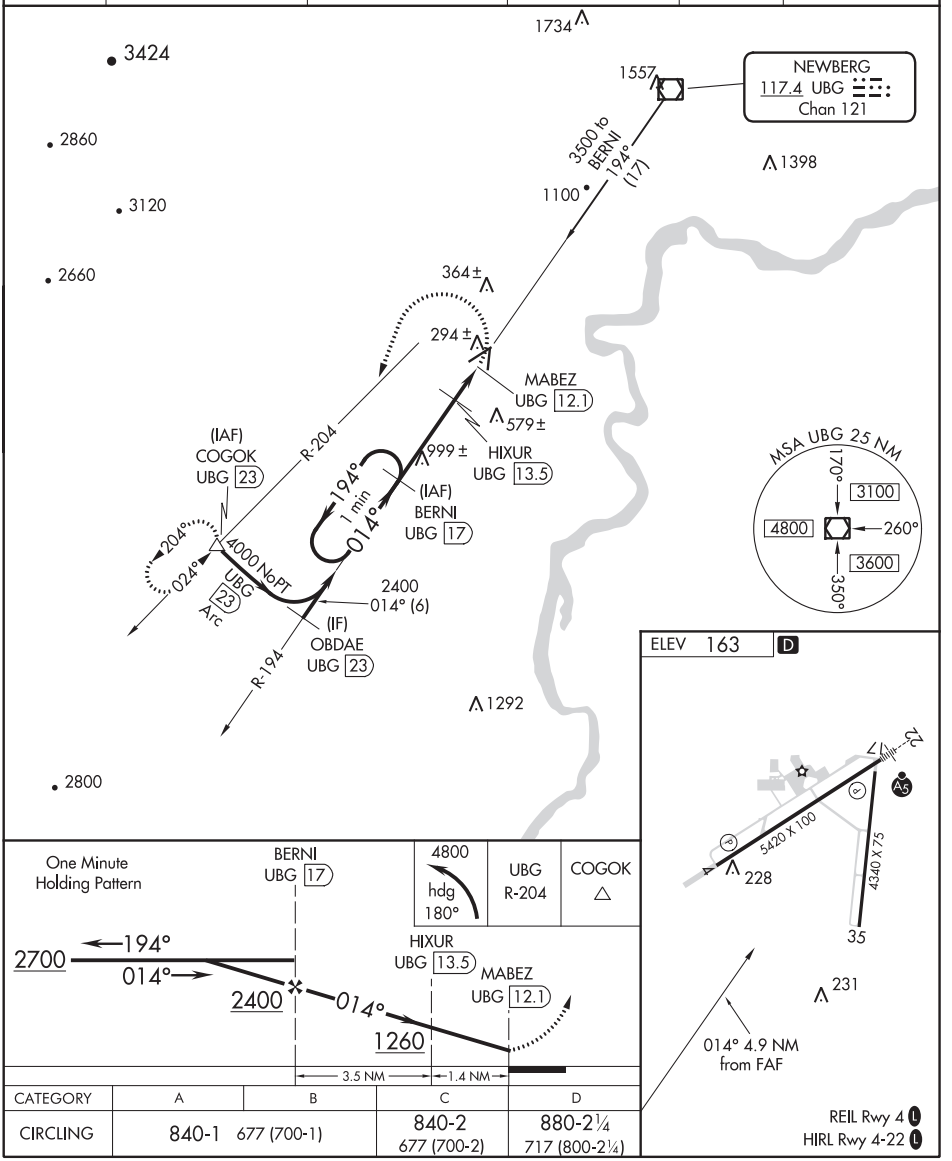
VOR/DME-B

MC MINNVILLE MUNI (MMV)

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	McMINNVILLE RADIO	CLNC DEL	UNICOM
135.675	126.0 284.6 (NORTH)	125.8 291.7 (SOUTH)	122.45	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

ILS or LOC RWY 16

LOC I-MAR	APCH CRS	Rwy ldg 10,108 / THRE 282 / Arpt Elev 322
109.9	165°	

AL-414 [USAF]

MC CHORD FIELD (KTCM)

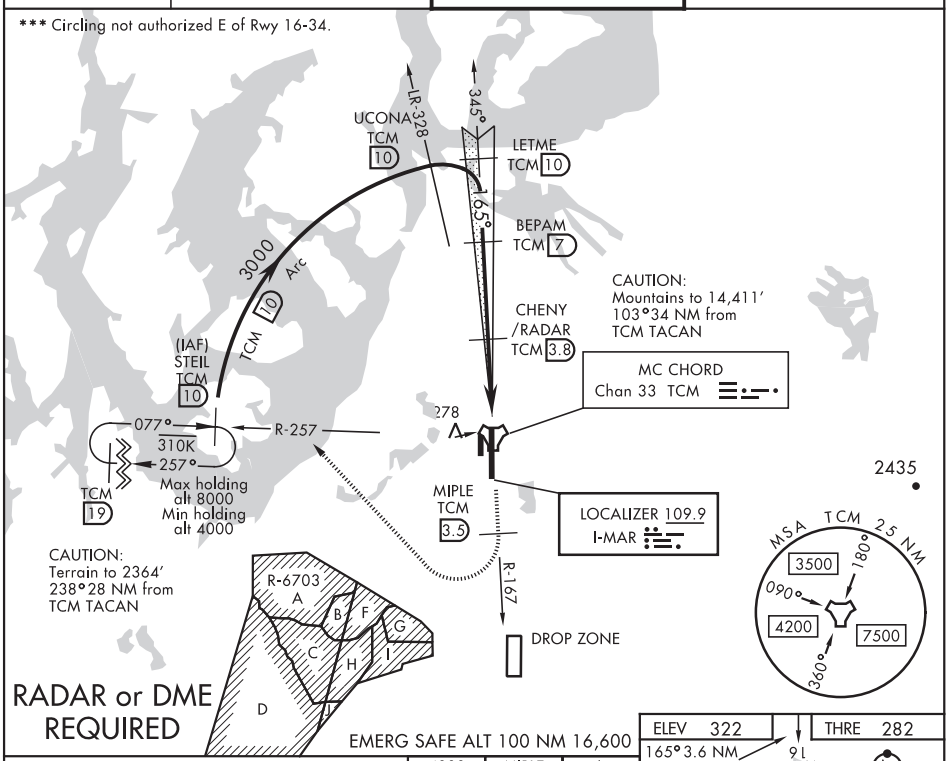
* When ALS inop, increase RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1⅜ miles.

ALSF-1

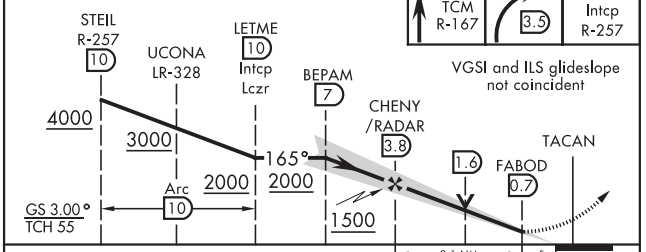
MISSED APPROACH: Climb to 4000 on TCM TACAN R-167. At 3.5 DME turn right via 295° course to intercept TCM R-257 to STEIL and hold. Continue climb in hold to 4000.

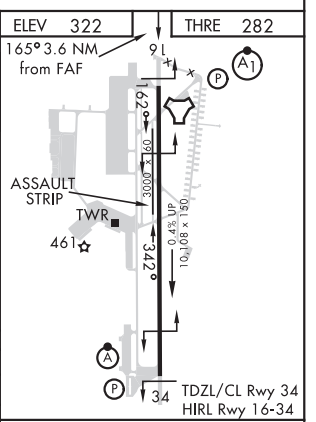
ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65

*** Circling not authorized E of Rwy 16-34.



4000 TCM R-167	MIPLE 3.5	tr 295° Intcp R-257





CATEGORY	A	B	C	D	E
S-ILS 16 *	482/24		200 (200-½)		
S-LOC 16**	800/24 518 (500-½)		800/55 518 (500-1)		
CIRCLING ***	940-1 619 (700-1)		940-1¾ 619 (700-1¾)	940-2 619 (700-2)	1020-2½ 699 (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
Amdt 1 15OCT15

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

ILS or LOC RWY 16

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

ILS or LOC RWY 34

LOC I-TCM	APCH CRS	Rwy ldg 10,108 / THRE 322 / Arpt Elev 322
108.5	345°	

AL-414 [USAF]

MC CHORD FIELD (KTCM)

▼ *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	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65

*** Circling not authorized E of Rwy 16-34.

OYABO TCM 6

R-345

(IAF) SQRIT TCM 13 4000

CUBIT TCM 12

087° 310K 267°

R-267

TCM 21

Max holding alt 8000 Min holding alt 4000

LOCALIZER 108.5 I-TCM

MC CHORD Chan 33 TCM

CAUTION: Mountains to 14,411' 103° 34 NM from TCM TACAN

CAUTION: Terrain to 2364' 238° 28 NM from TCM TACAN

350

(IAF) OOHOP TCM 13 4000

R-102

2435

TCM 13 4000 Arc

R6703 A B C D E F G H I

SPAAN /RADAR TCM 5.8

DROP ZONE

345°

JETEM TCM 12

OLYMPIA 113.4 OLM Chan 81

(IF) RIMOE TCM 13

LR-174 165° LR-156

M.S.A TCM 2.5 NM 180° 3500 090° 4200 7500 360°

CFGHB N46°53.82" W122°28.50"

CFKTV N46°52.47" W122°28.49"

4000 049° (4) R-095 (3.9) 305° 4000

(IAF) MCKEN OLM 15.3 4000

(IAF) ALDER OLM 22 4000

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 16,600

4000 TCM R-345	OYABO tr 215°	TCM R-267 CUBIT

SPAAN /RADAR 5.8

JETEM 12

RIMOE 13

345° 4000 Intcpt localizer

3700

TACAN

GUTBE 1.9

2.8

1800

GS 3.00° TCH 59

.5 NM 3.9 NM

ELEV 322 THRE 322

9L 27R 6200 x 150 3000 x 60 0.4% DOWN 10,008 x 150 342° 34

ASSAULT STRIP TWR 461

345° 4.4 NM from FAF

TDZL/CL Rwy 34 HIRL Rwy 16-34

CATEGORY	A	B	C	D
S-ILS 34 *	521/18 200 (200-½)			
S-LOC 34 **	820/24 499 (500-½)		820/50 499 (500-1)	
CIRCLING ***	940-1 619 (700-1)		940-1¾ 619 (700-1¾)	940-2 619 (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

TACOMA, WASHINGTON

Amdt 1 18AUG16

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

ILS or LOC RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

ILS RWY 34 (CAT II)

MC CHORD FIELD (KTCM)

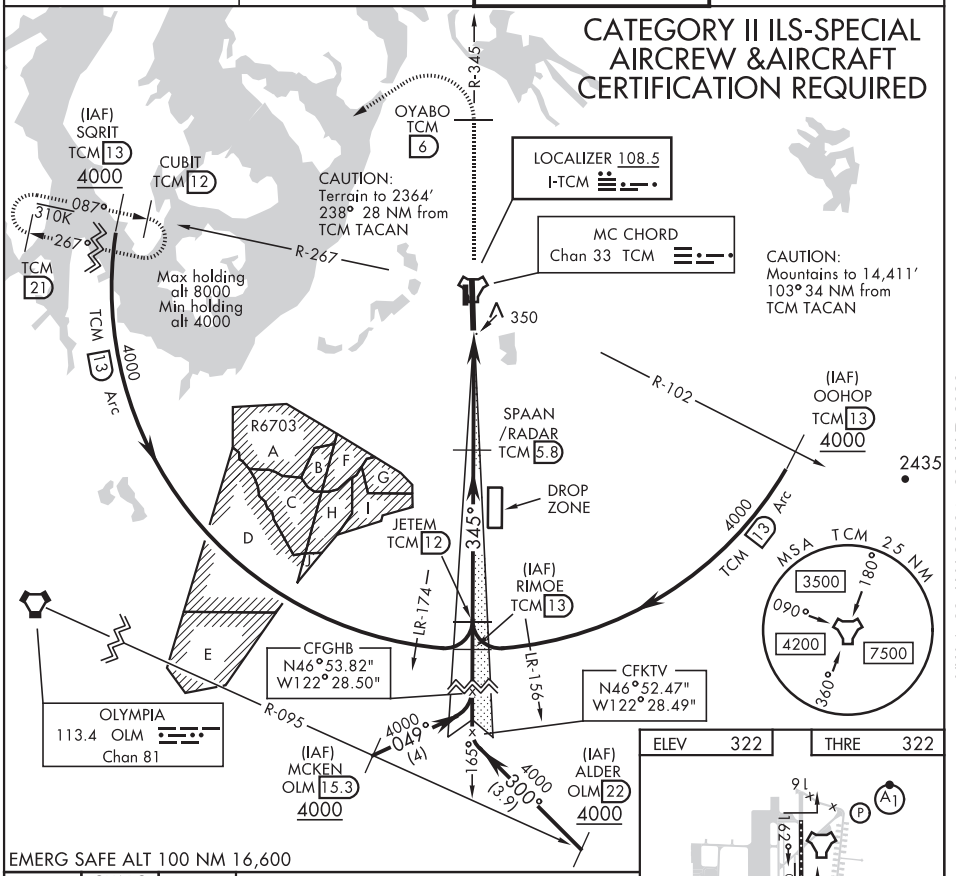
LOC I-TCM	APCH CRS	Rwy ldg 10,108 THRE 322 Arpt Elev 322
108.5	345°	AL-414 [USAF]

ALSF-2

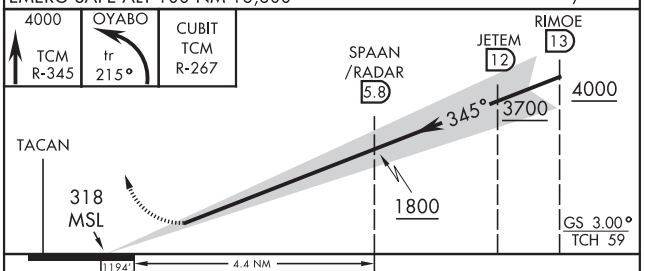
MISSED APPROACH: Climb to 4000 on TCM TACAN R-345 to OYABO, then turn left via 215° course to intercept TCM R-267 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65

CATEGORY II ILS-SPECIAL AIRCREW &AIRCRAFT CERTIFICATION REQUIRED

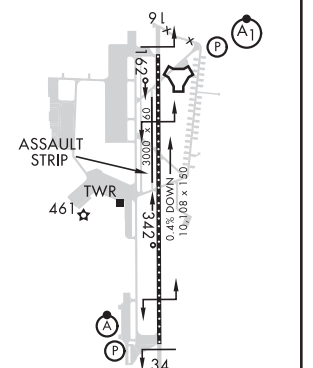


EMERG SAFE ALT 100 NM 16,600



CATEGORY	A	B	C	D	E
S-ILS 34	RA 139/12		100	DA 421	

ELEV 322 THRE 322



TDZL/CL Rwy 34
HIRL Rwy 16-34

TACOMA, WASHINGTON

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

Amdt 2 08DEC16

ILS RWY 34 (CAT II)

NW-1, 30 JAN 2020 to 26 MAR 2020

16315

TACOMA, WASHINGTON

RNAV (GPS) RWY 16

APCH CRS	Rwy ldg	10,108
165°	THRE	282
	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.

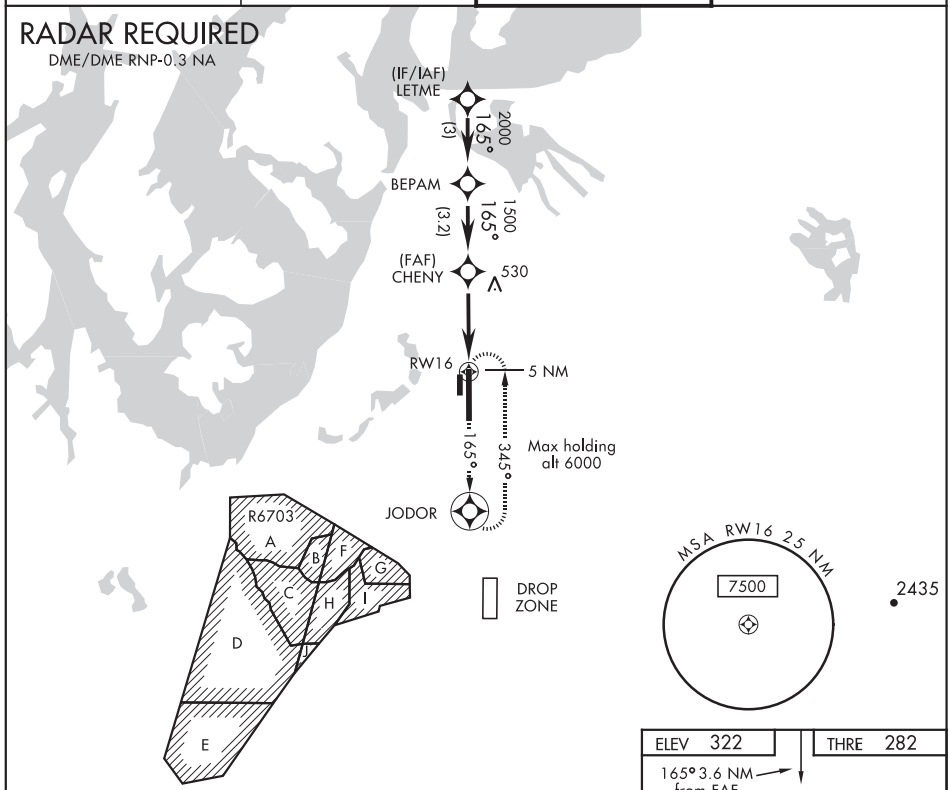
ALSF-1

MISSED APPROACH: Climb to 4000 direct JODOR and hold. Continue climb in hold to 4000.

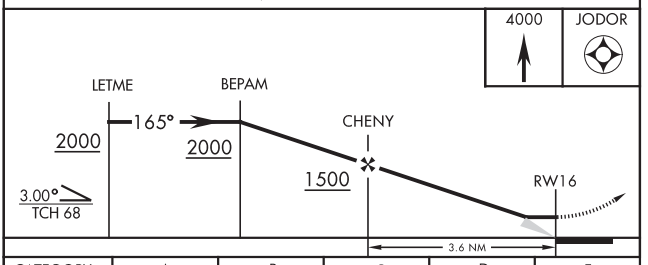
ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65

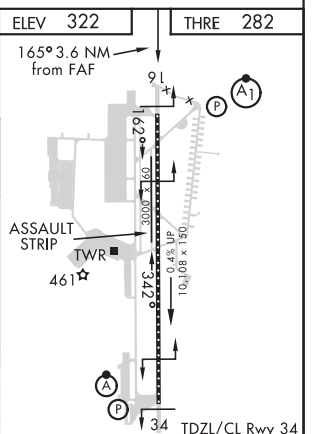
RADAR REQUIRED

DME/DME RNP-0.3 NA



EMERG SAFE ALT 100 NM 16,600





CATEGORY	A	B	C	D	E
LNAV MDA *	780/24 498 (500-½)		780/50 498 (500-1)		
CIRCLING **	940-1 619 (700-1)		940-1¾ 619 (700-1¾)	940-2 619 (700-2)	1020-2½ 699 (700-2½)

TACOMA, WASHINGTON

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

Amdt 1 15SEP16

RNAV (GPS) RWY 16

NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

RNAV (GPS) RWY 34

APCH CRS	Rwy ldg	10,108
345°	THRE	322
	Arpt Elev	322

AL-414 [USAF]

MC CHORD FIELD (KTCM)

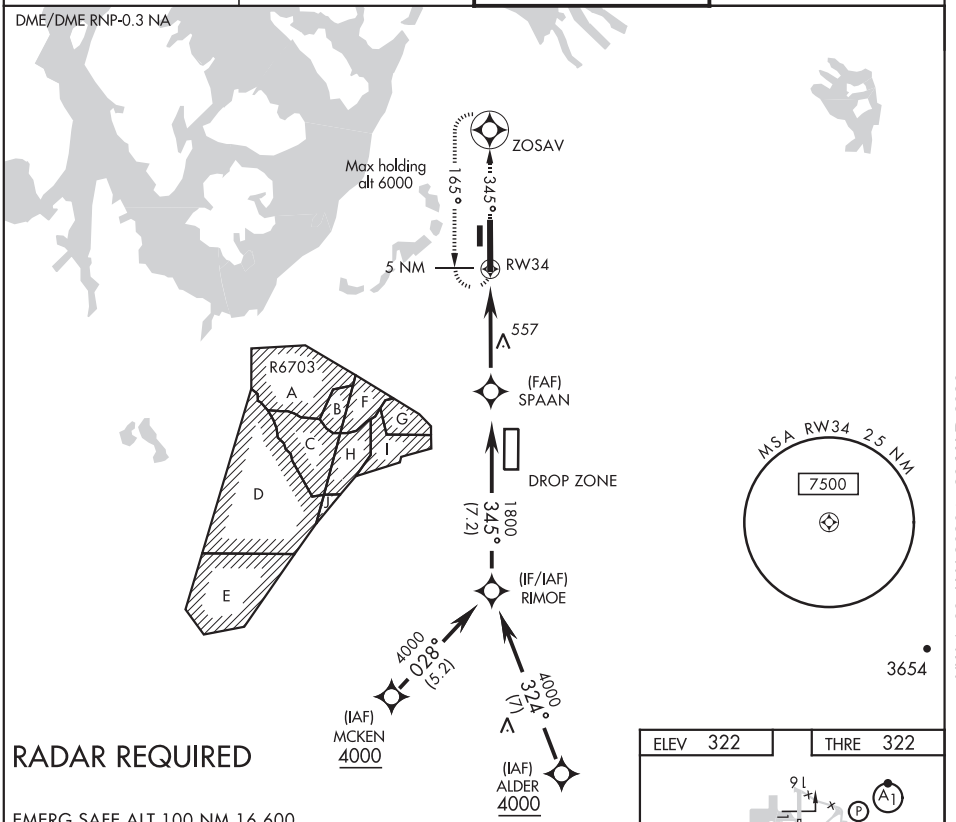
* When ALS inop, increase CAT AB RVR to 55, vis to 1 mile and CAT CDE vis to 1⅜ miles.
** Circling not authorized E of rwy 16-34.

ALSF-2

MISSED APPROACH: Climb to 4000 direct ZOSAV and hold, Continue climb in hold to 4000.

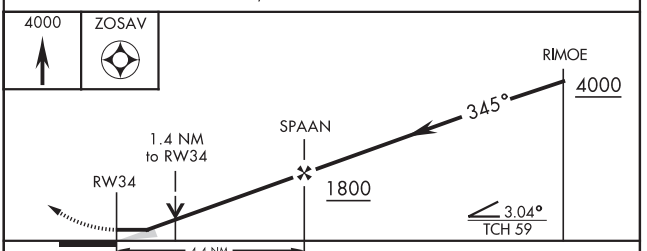
ATIS	SEATTLE APP CON	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65

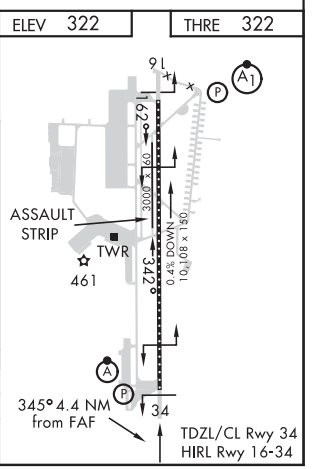
DME/DME RNP-0.3 NA



RADAR REQUIRED

EMERG SAFE ALT 100 NM 16,600





CATEGORY	A	B	C	D	E
LNAV MDA *	820/24	499 (500-½)	820/50	499 (500-1)	
CIRCLING **	940-1	619 (700-1)	940-1¾ 619 (700-1¾)	940-2 619 (700-2)	1020-2½ 699 (700-2½)

TACOMA, WASHINGTON
Amdt 1 15OCT15

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

RNAV (GPS) RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

TACAN RWY 16

TACAN	APCH CRS	Rwy ldg	10,108
TCM Chan 33	160°	THRE	282
		Arpt Elev	322

AL-414 [USAF]

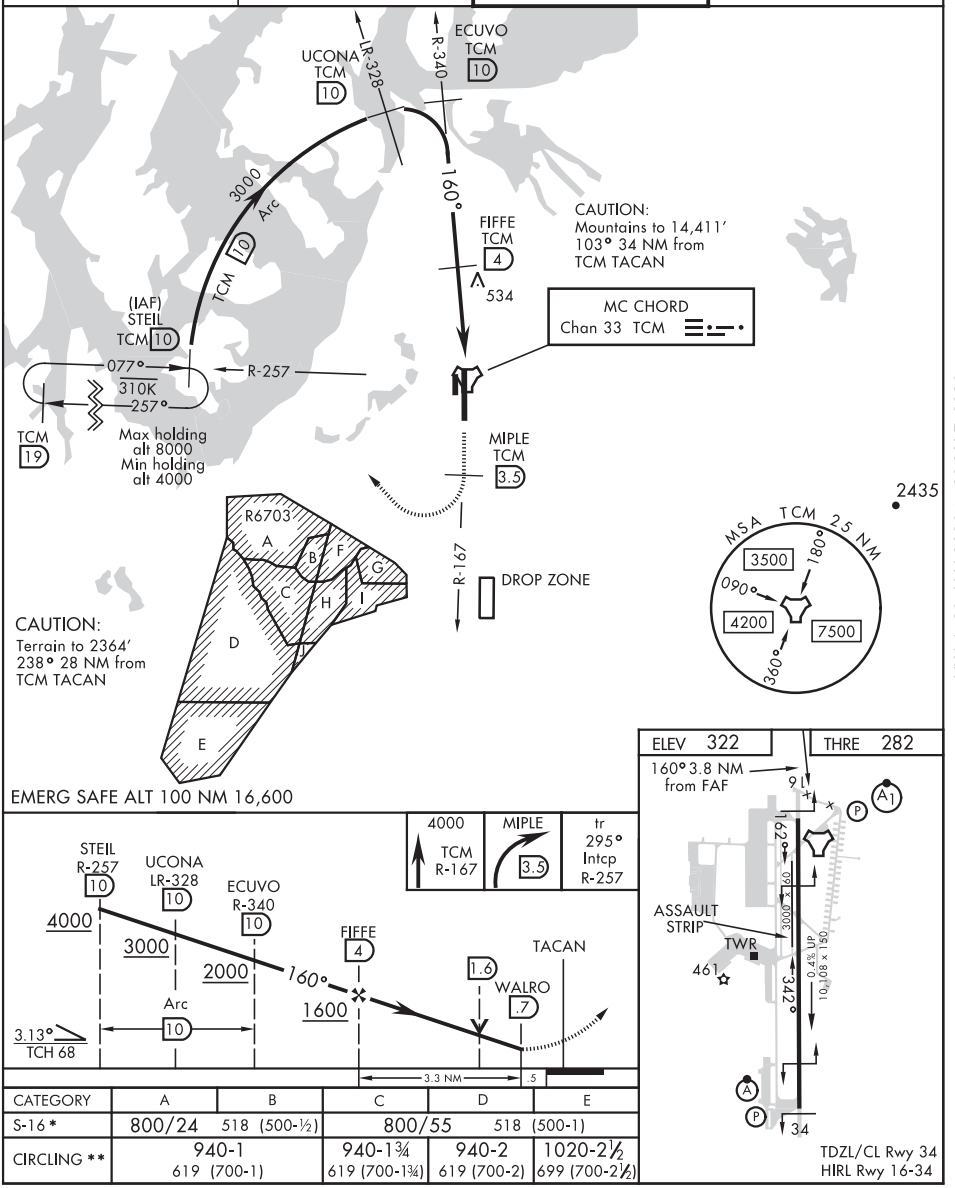
MC CHORD FIELD (KTCM)

▼ * 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	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65



CATEGORY	A	B	C	D	E
S-16 *	800/24	518 (500-½)	800/55	518 (500-1)	
CIRCLING **	940-1 619 (700-1)		940-1¾ 619 (700-1¾)	940-2 619 (700-2)	1020-2½ 699 (700-2½)

47°08'N-122°29'W

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

TACAN RWY 34

TACAN	APCH CRS	Rwy ldg 10,108
Chan 33 TCM	347°	THRE 322
		Arpt Elev 322

AL-414 [USAF]

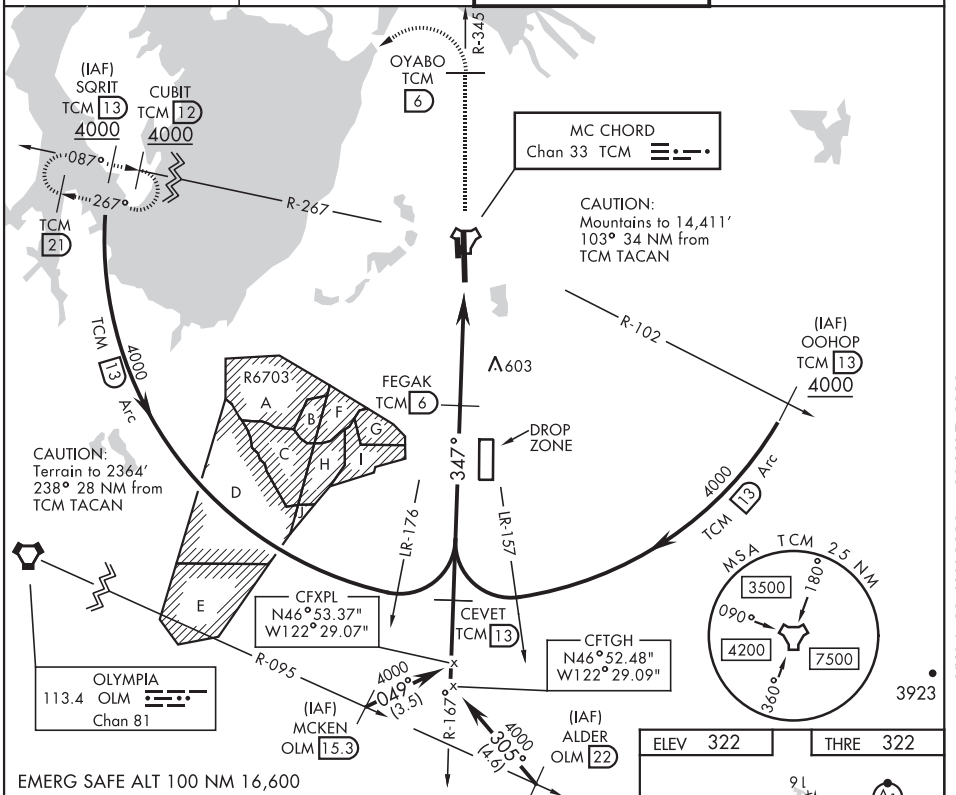
MC CHORD FIELD (KTCM)

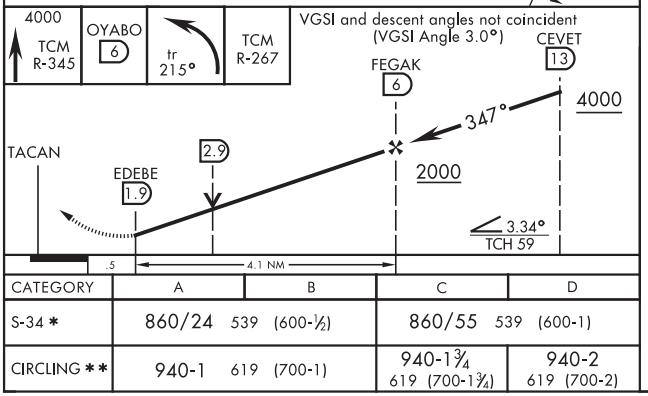
▼* When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CD vis to 1½ miles.
** Circling not authorized E of rwy 16-34.

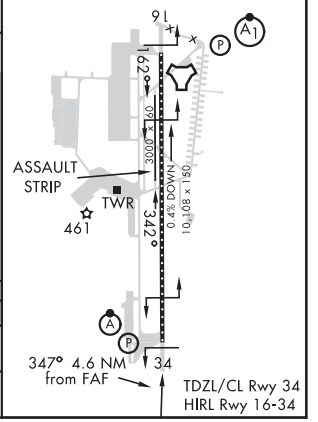
ALSF-2

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	MC CHORD TOWER	GND CON
270.1	126.5 377.15	124.8 259.3	118.175 279.65







CATEGORY	A	B	C	D
S-34 *	860/24 539 (600-½)		860/55 539 (600-1)	
CIRCLING **	940-1 619 (700-1)		940-1¾ 619 (700-1¾)	940-2 619 (700-2)

TACOMA, WASHINGTON
Amdt 2 18AUG16

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

TACAN RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

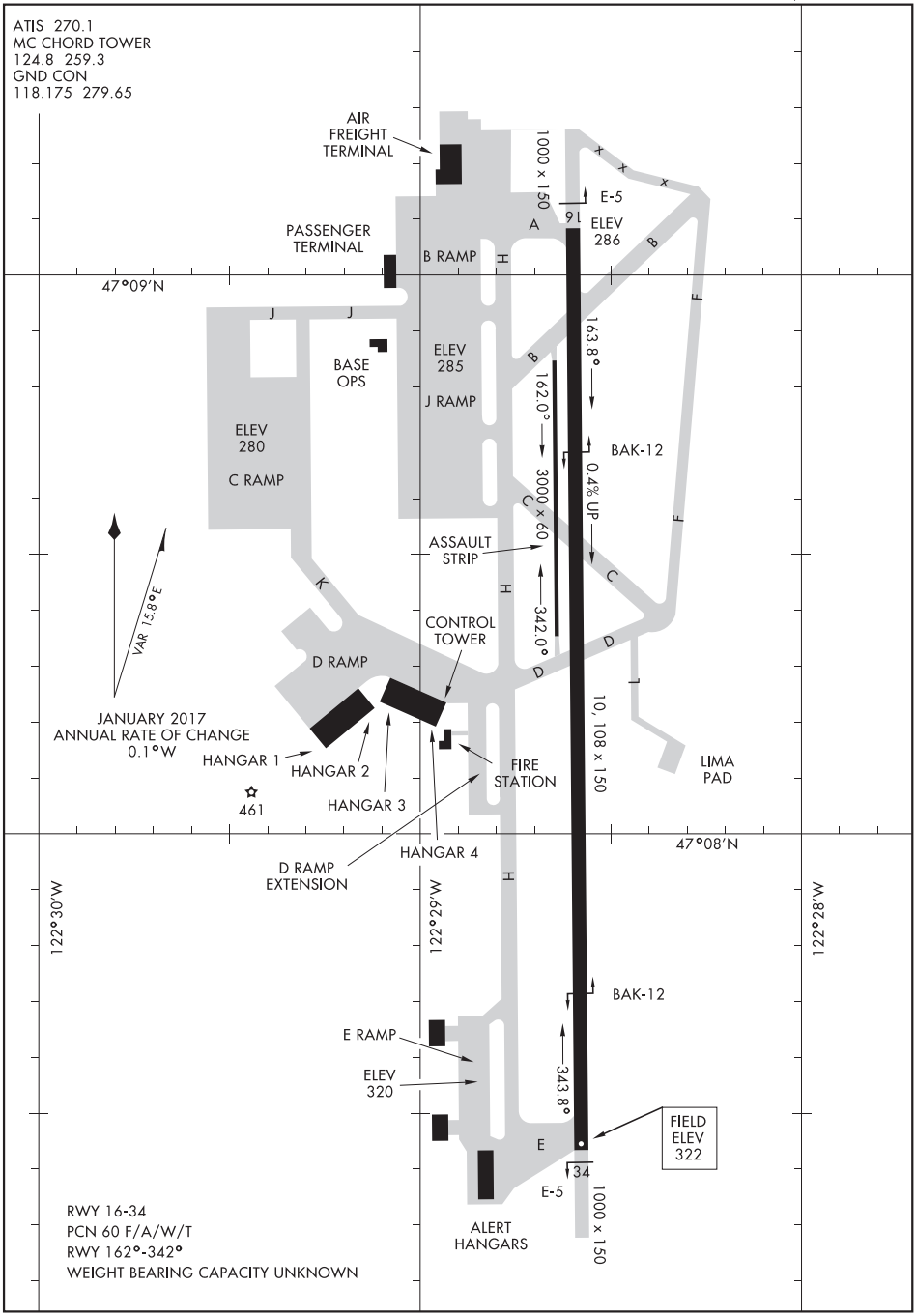
17005

AIRPORT DIAGRAM

AFD-414 [USAF]

MC CHORD FIELD (KTCM)

TACOMA, WASHINGTON



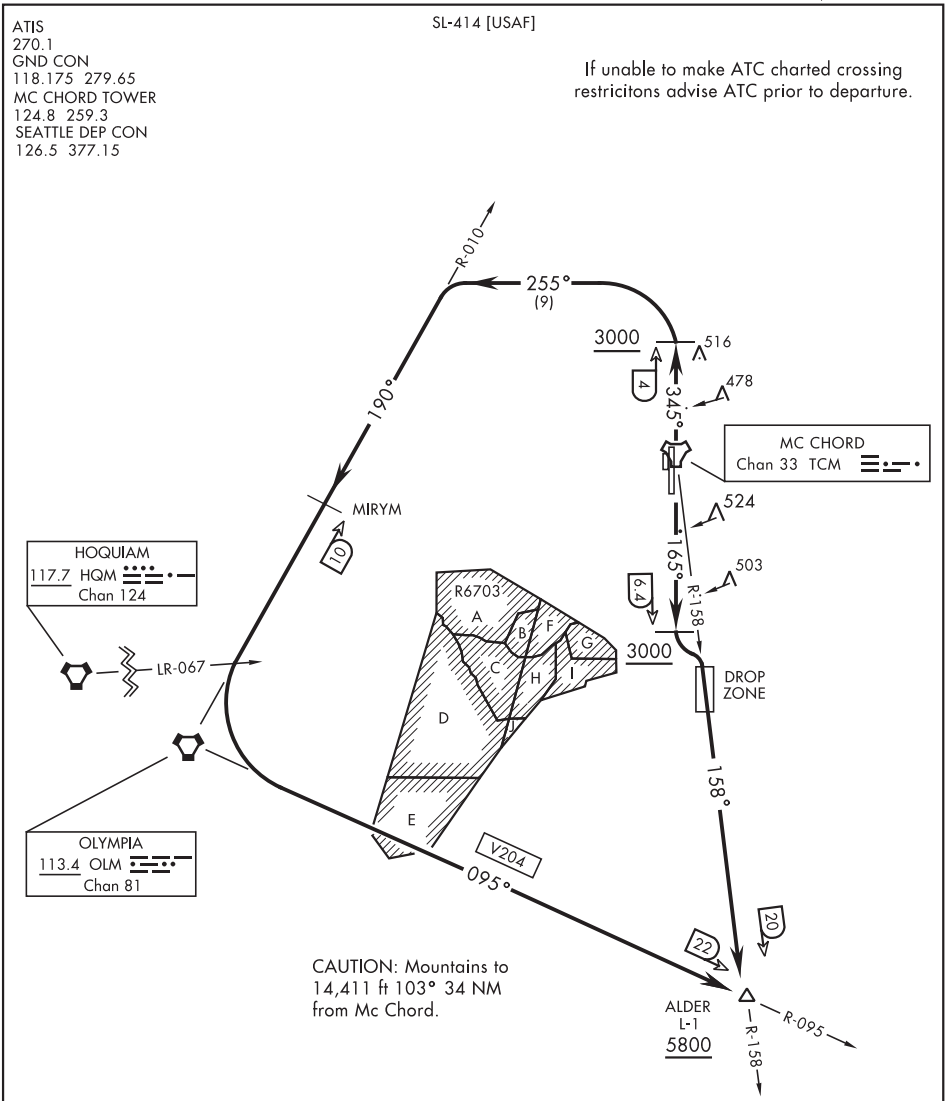
AIRPORT DIAGRAM

TACOMA, WASHINGTON

MC CHORD FIELD (KTCM)

NW-1, 30 JAN 2020 to 26 MAR 2020

ALDER-TWO DEPARTURE (ALDER2 • ALDER)



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.

ALDER-TWO DEPARTURE (ALDER2 • ALDER)
TACOMA, WASHINGTON
MC CHORD FIELD (KTCM)
NW-1, 30 JAN 2020 to 26 MAR 2020

(MOCAA3.MOCAA) 17341

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

MOCAA THREE DEPARTURE (RNAV)

TACOMA, WASHINGTON

MOCAA THREE DEPARTURE (RNAV)
TACOMA, WASHINGTON

(MOCAA3.MOCAA) 15OCT15

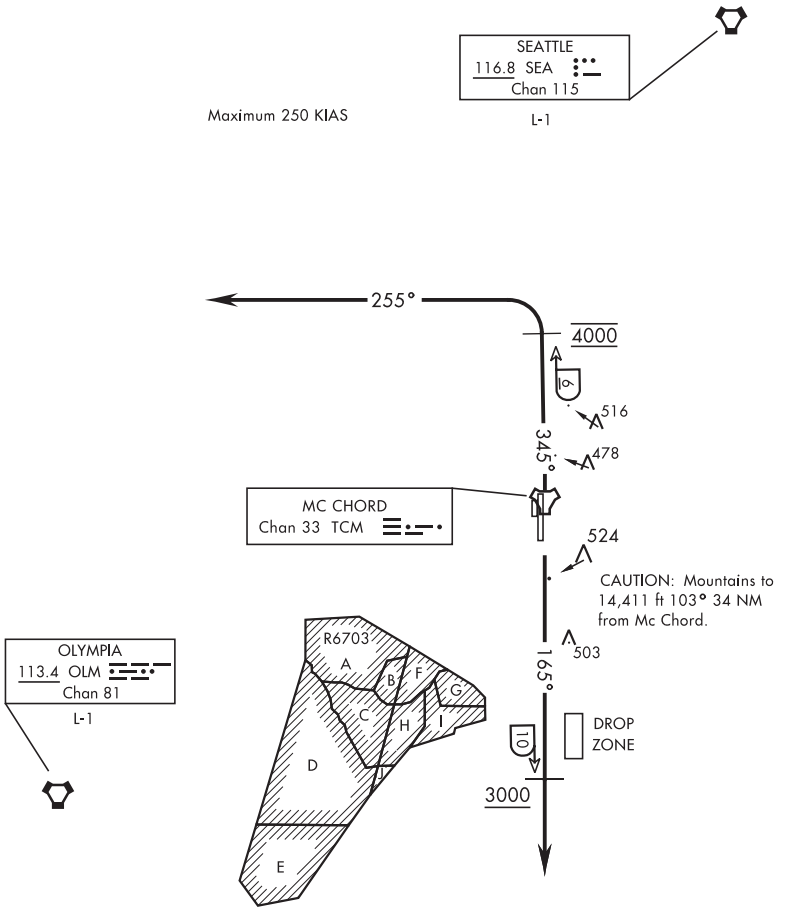
MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

OLYMPIC-FOUR DEPARTURE

SL-414 [USAF]

ATIS
270.1
GND CON
118.175 279.65
MC CHORD 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

19339

PUGET-SIX DEPARTURE

SL-414 [USAF]

MC CHORD FIELD (KTCM)
TACOMA, WASHINGTON

ATIS
270.1
GND CON
118.175 279.65
MC CHORD 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.

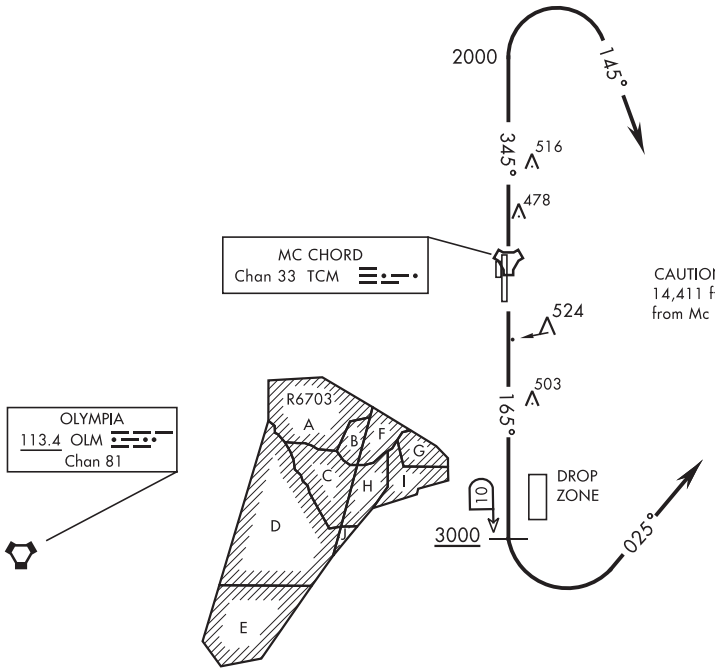
RADAR REQUIRED

Maximum 250 KIAS

Radar vectors required within 10 NM after departure

SEATTLE
116.8 SEA
Chan 115

L-1



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.

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 14

ROGUE VALLEY INTL-MEDFORD (MFR)

LOC/DME I-MFR	APP CRS	Rwy Idg	8800
110.3	143°	TDZE	1303
Chan 40		Apt Elev	1335

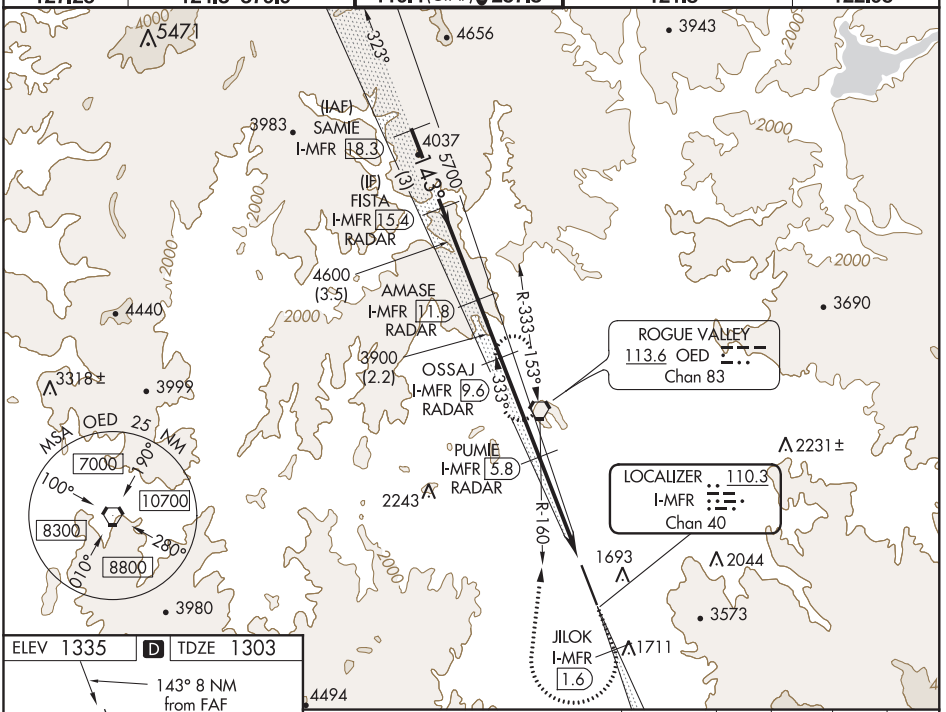
DME required. DME or RADAR required for procedure entry.

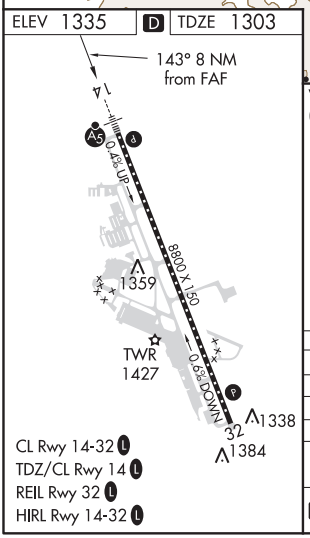
T A -5°C Circling NA for Cats C and D northeast of Rwy 14-32. When Medford altimeter setting not received, procedure NA. For inop ALS, increase S-ILS 14 visibility to 1¾ SM, increase S-LOC 14# Cats C and D visibility to RVR 5500, increase S-LOC 14 Cats C and D visibility to 2½ SM.

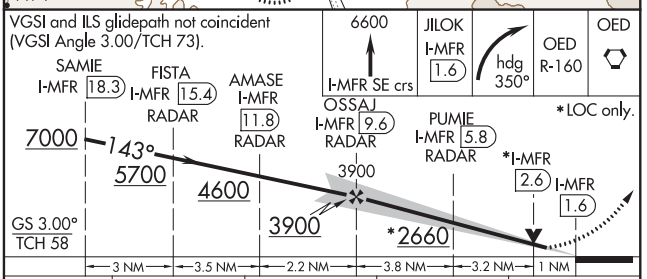
MALSR

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MEDFORD, OREGON | AL-251 (FAA) | 18256

RNAV (RNP) RWY 32

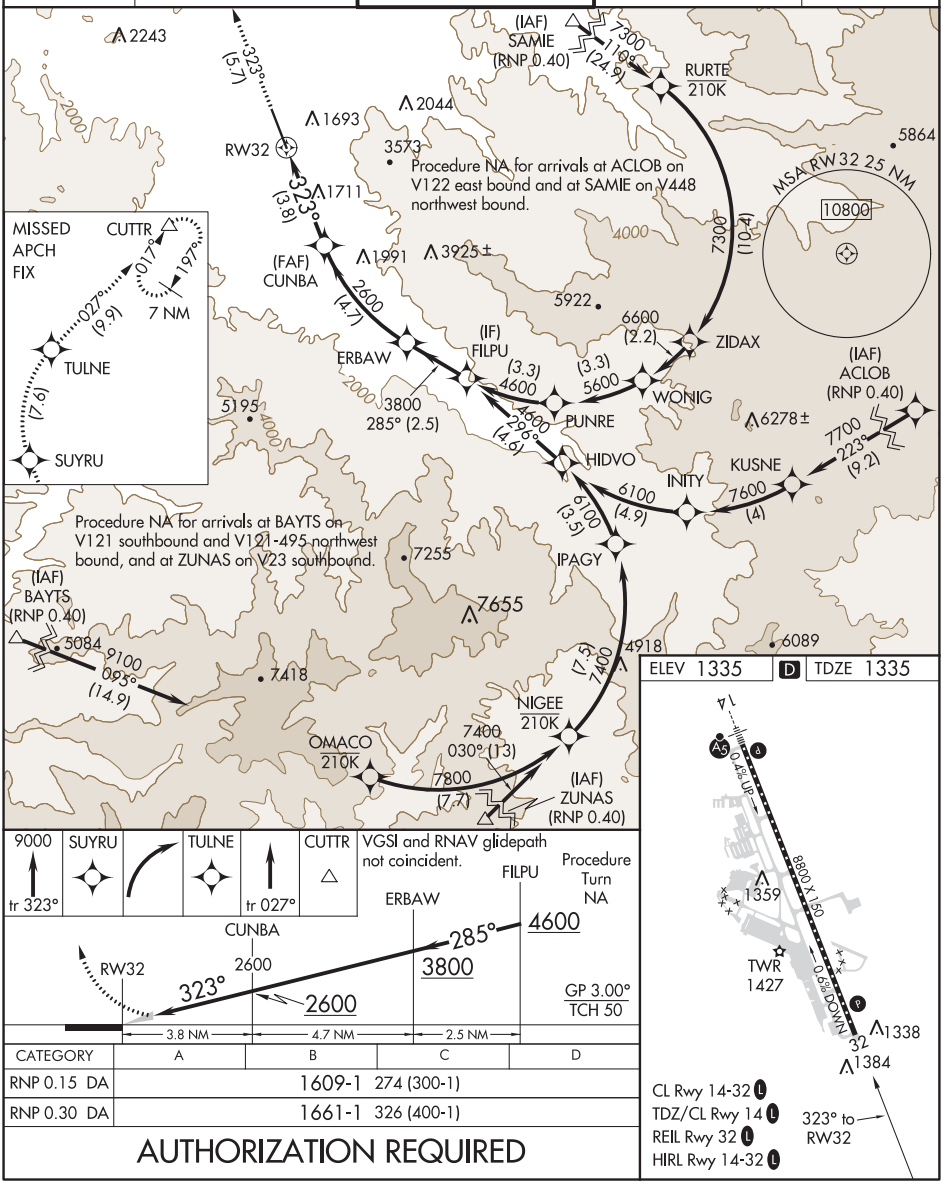
ROGUE VALLEY INTL-MEDFORD (MFR)

APP CRS	Rwy Idg	8800
323°	TDZE	1335
	Apt Elev	1335

T -5°C — GPS required. RF required. For uncompensated Baro-VNAV systems, procedure NA below -8°C (17°F) or above 45°C (113°F).

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



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

MEDFORD, OREGON
Orig-A 30JUN11

42°22'N-122°52'W

ROGUE VALLEY INTL-MEDFORD (MFR)

RNAV (RNP) RWY 32

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 14

ROGUE VALLEY INTL-MEDFORD (MFR)

APP CRS	Rwy ldg	8800
143°	TDZE	1303
	Apt Elev	1335

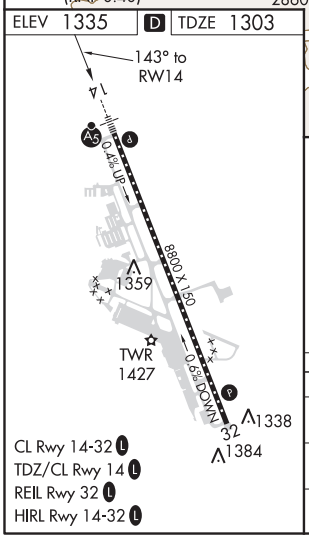
GPS required. RF required. For uncompensated Baro-VNAV systems, procedure NA below -8°C (17°F) or above 46°C (115°F). For inop MALSR, increase RNP 0.30 DA* all Cats visibility to RVR 6000, increase RNP 0.30 DA all Cats visibility to 3.
* Missed approach requires minimum climb of 259 feet per NM to 8300.

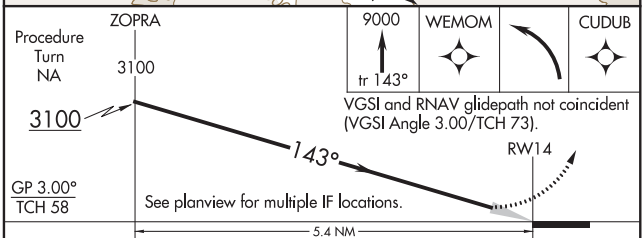
-5°C

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

MEDFORD, OREGON

AL-251 (FAA)

19311

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.

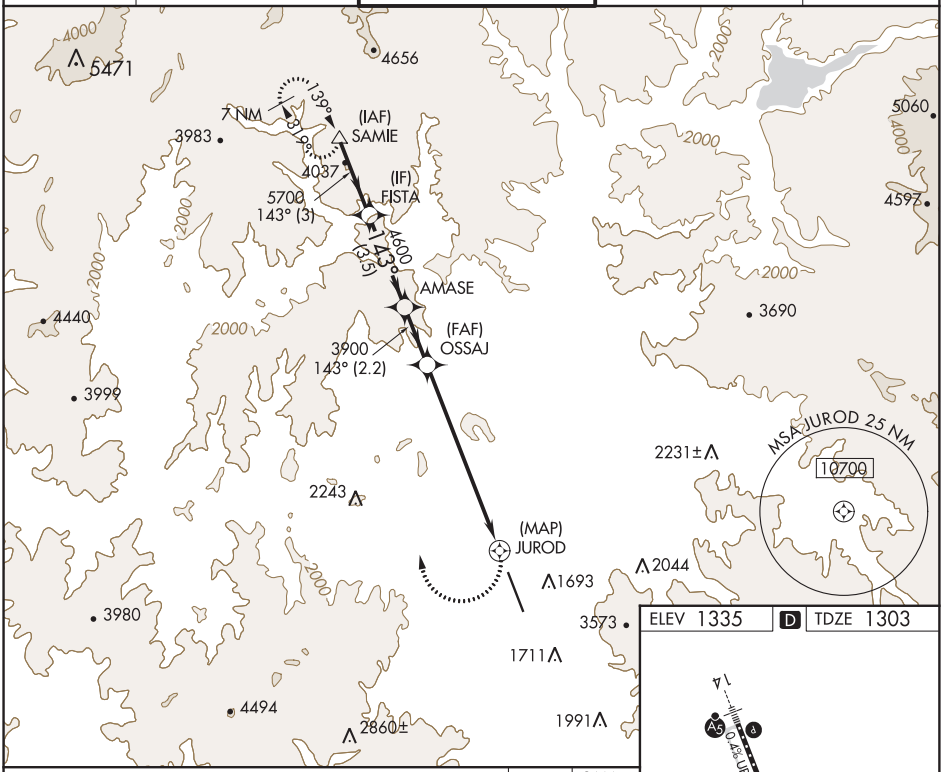
-5°C

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS)-D

ROGUE VALLEY INTL-MEDFORD (MFR)

APP CRS	Rwy Idg	N/A
328°	TDZE	N/A
	Apt Elev	1335

RNP APCH.

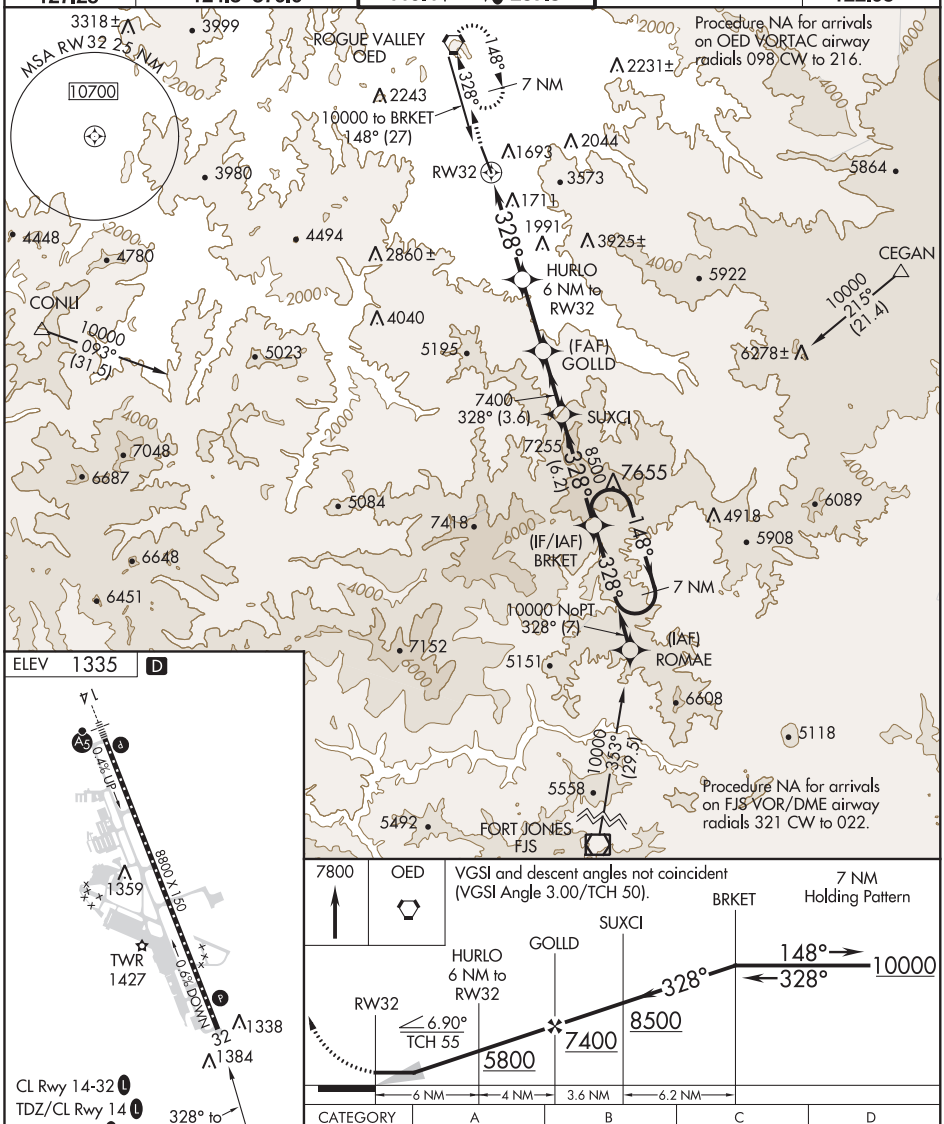
T

A

-5°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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MEDFORD, OREGON | AL-251 (FAA) | 18256

LOC/DME I-MFR	APP CRS	Rwy Idg	N/A
110.3	323°	TDZE	N/A
Chan 40		Apt Elev	1335

LOC/DME BC-B

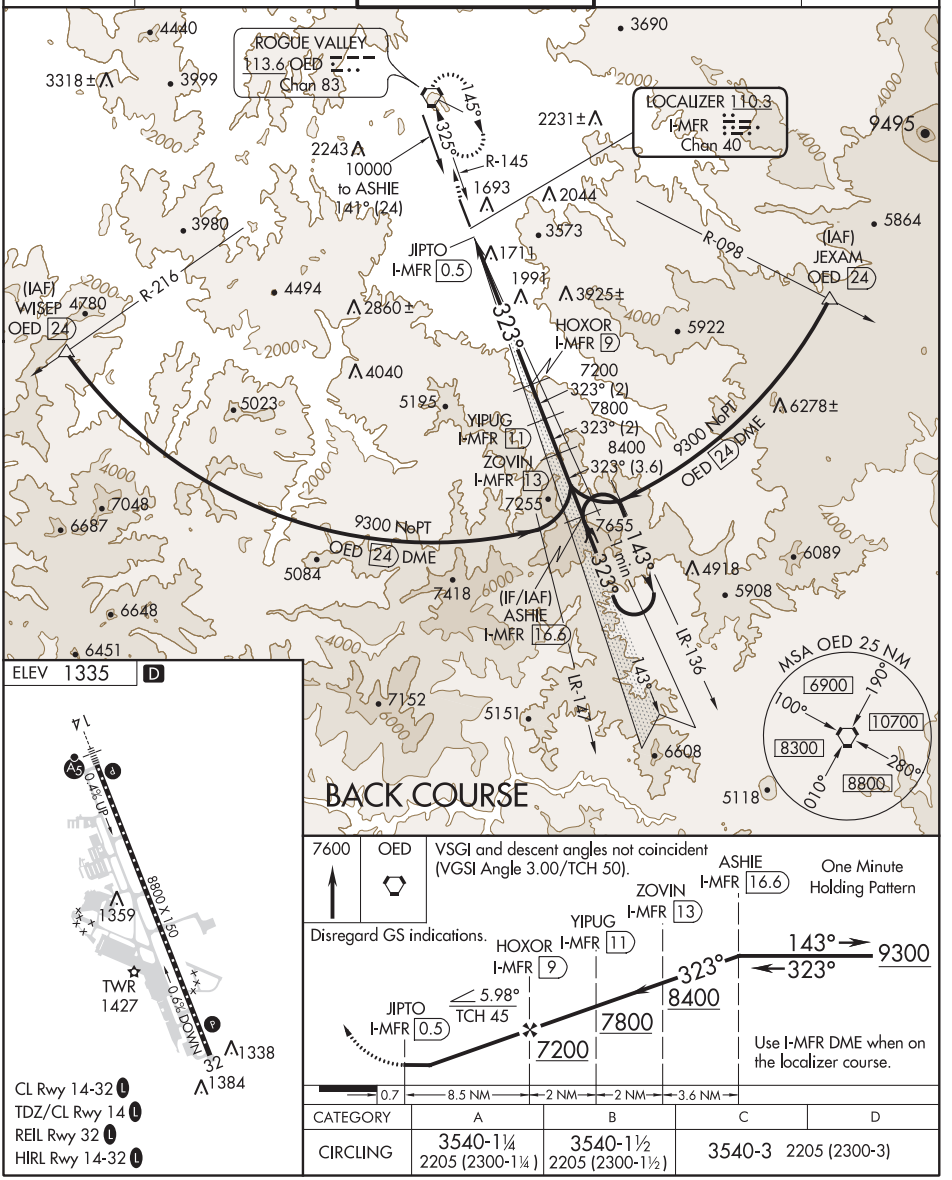
ROGUE VALLEY INTL-MEDFORD (MFR)

Visibility reduction by helicopters NA.

-5°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



CL Rwy 14-32 L
TDZ/CL Rwy 14 L
REIL Rwy 32 L
HIRL Rwy 14-32 L

7600 | OED

VSGI and descent angles not coincident (VGSI Angle 3.00/TCH 50).

Disregard GS indications.

CATEGORY	A	B	C	D
CIRCLING	3540-1¼ 2205 (2300-1¼)	3540-1½ 2205 (2300-1½)	3540-3 2205 (2300-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC OED	APP CRS	Rwy Idg	8800
113.6	146°	TDZE	1303
Chan 83		Apt Elev	1335

VOR/DME RWY 14

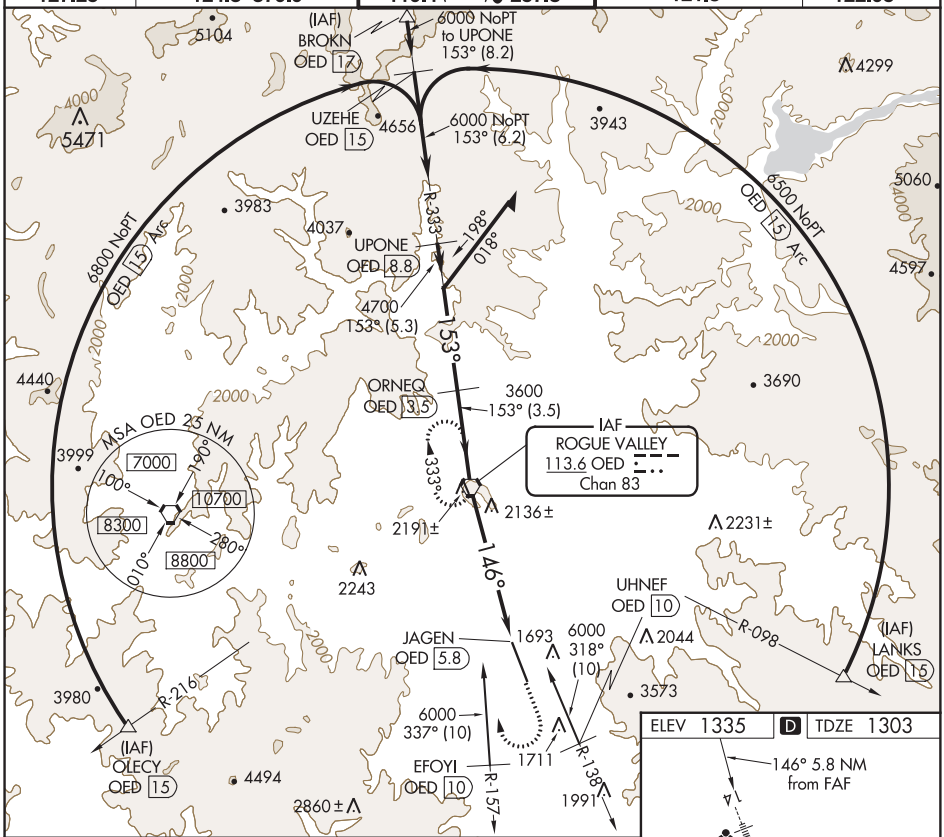
ROGUE VALLEY INTL-MEDFORD (MFR)

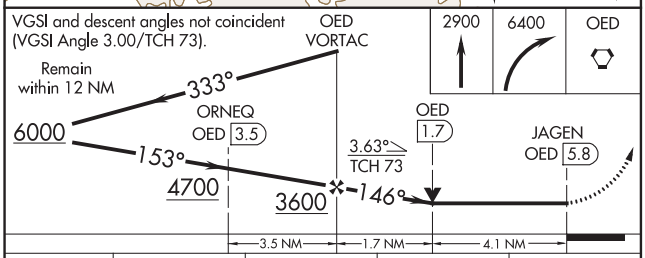
Inoperative table does not apply to S-14 Cat A.
For inoperative MALSR increase S-14 Cat B visibility to 1½.
-5°C

MALSR

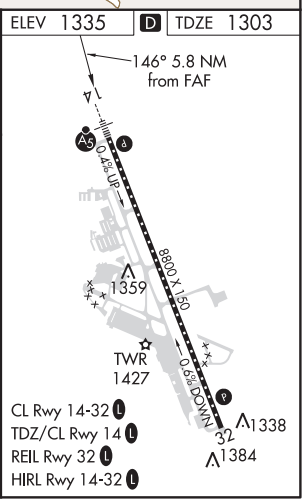
MISSED APPROACH: Climb to 2900 then climbing right turn to 6400 direct OED VORTAC and hold, continue climb-in-hold to 6400.

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





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)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC OED 113.6 Chan 83	APP CRS 325°	Rwy Idg N/A TDZE N/A Apt Elev 1335

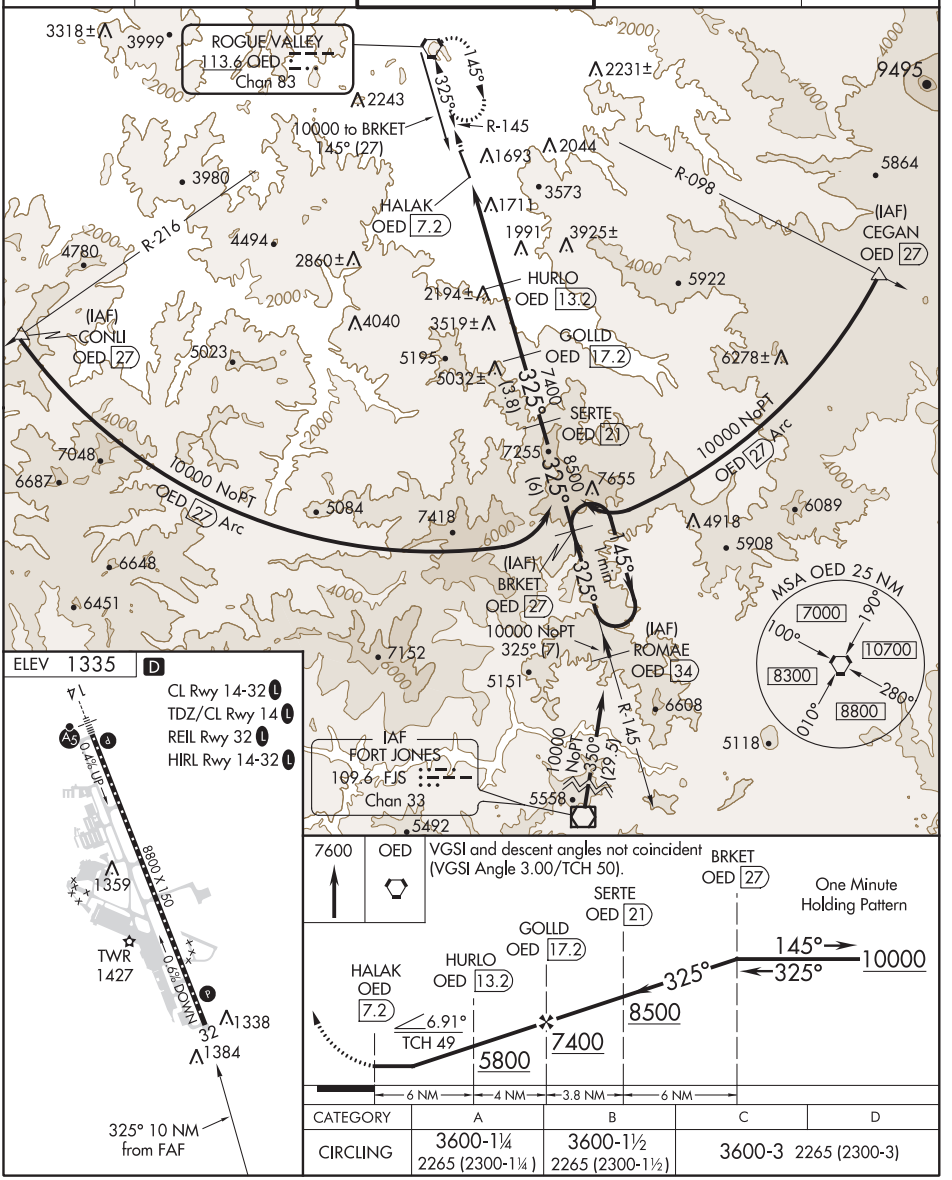
VOR/DME-C

ROGUE VALLEY INTL-MEDFORD (MFR)

T A -5°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 2265 (2300-1¼)	3600-1½ 2265 (2300-1½)	3600-3 2265 (2300-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC OED	APP CRS	Rwy Idg	N/A
113.6	146°	TDZE	N/A
Chan 83		Apt Elev	1335

VOR-A

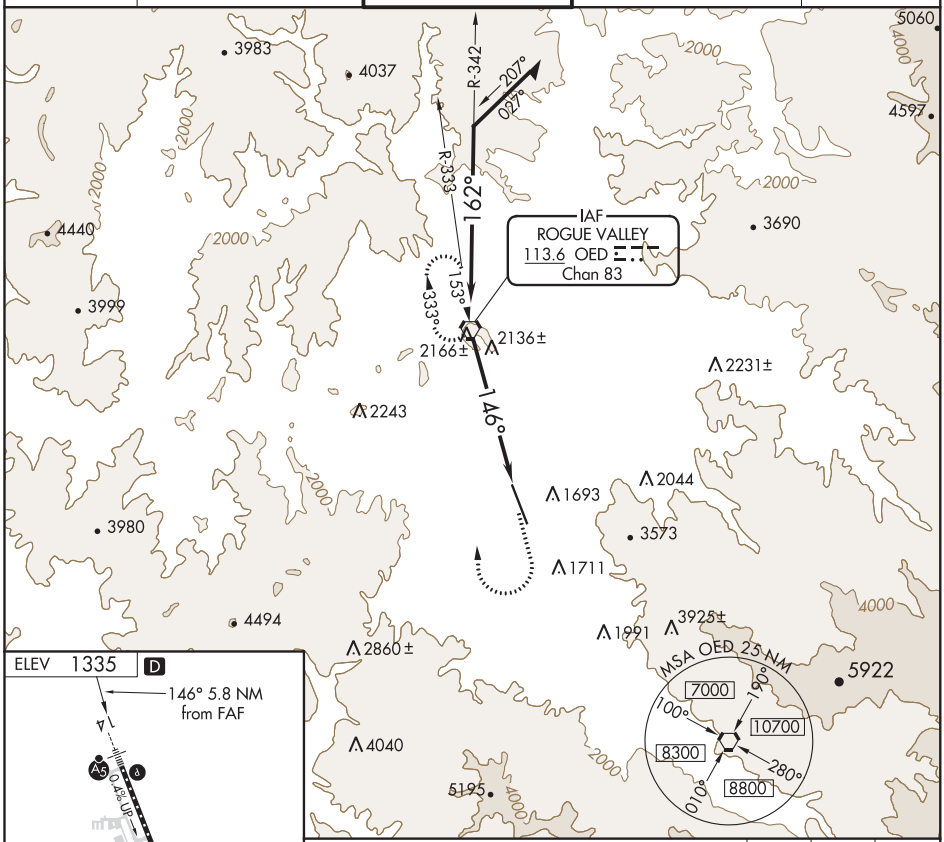
ROGUE VALLEY INTL-MEDFORD (MFR)

If local altimeter setting not received, procedure NA.

-5°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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

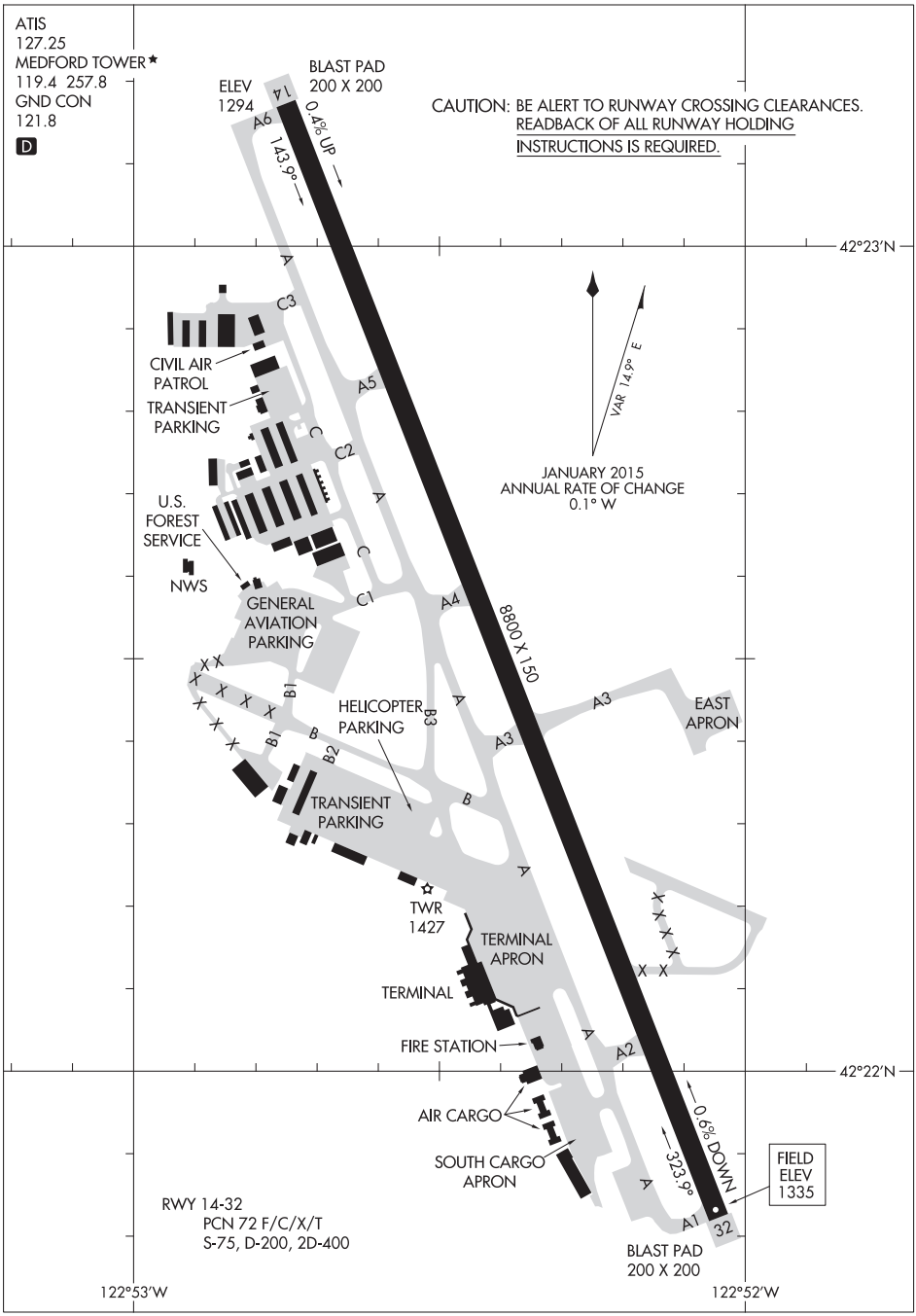
18256

AIRPORT DIAGRAM

ROGUE VALLEY INTL - MEDFORD (MFR)

AL-251 (FAA)

MEDFORD, OREGON



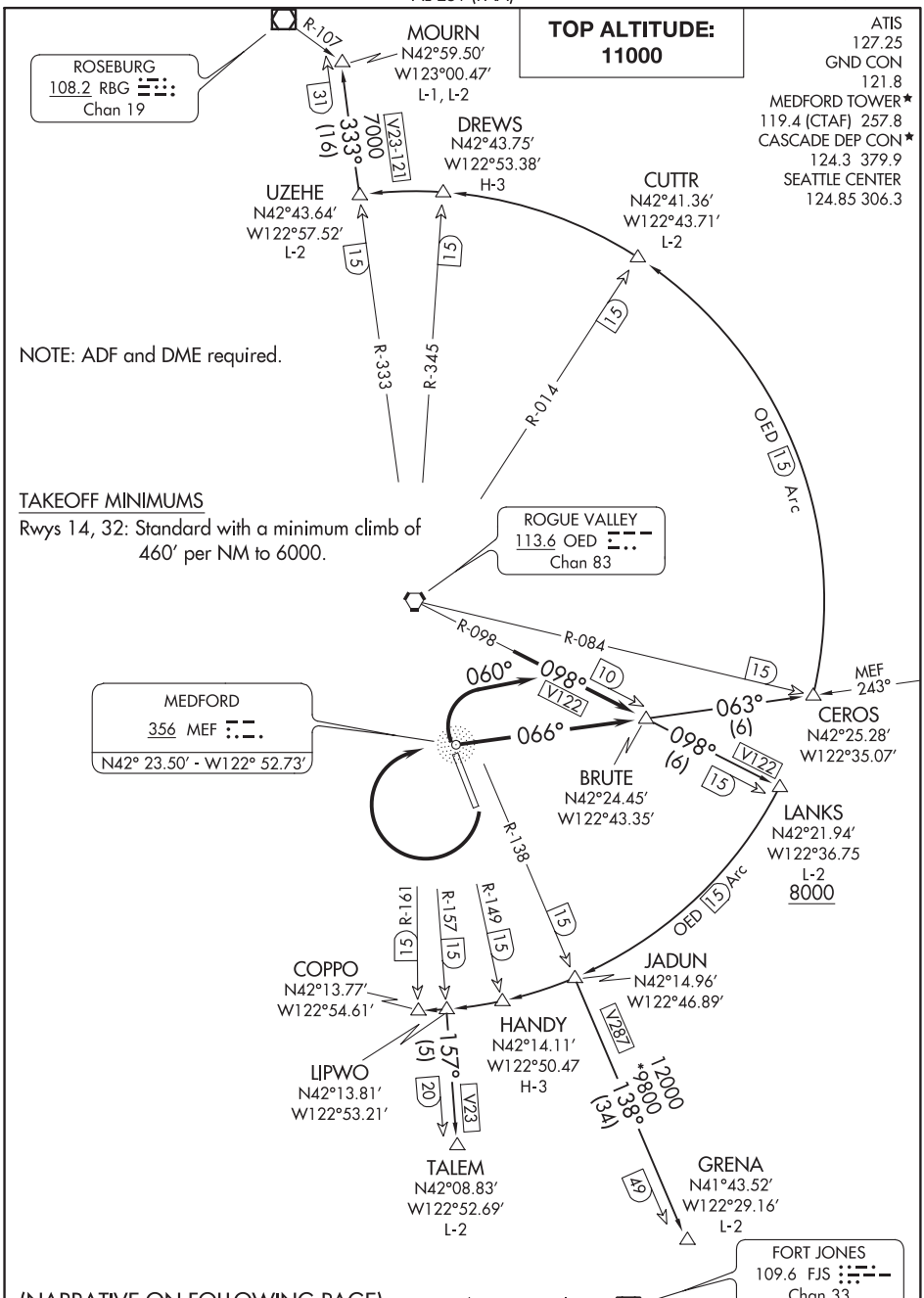
AIRPORT DIAGRAM

MEDFORD, OREGON

ROGUE VALLEY INTL - MEDFORD (MFR)

18256

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

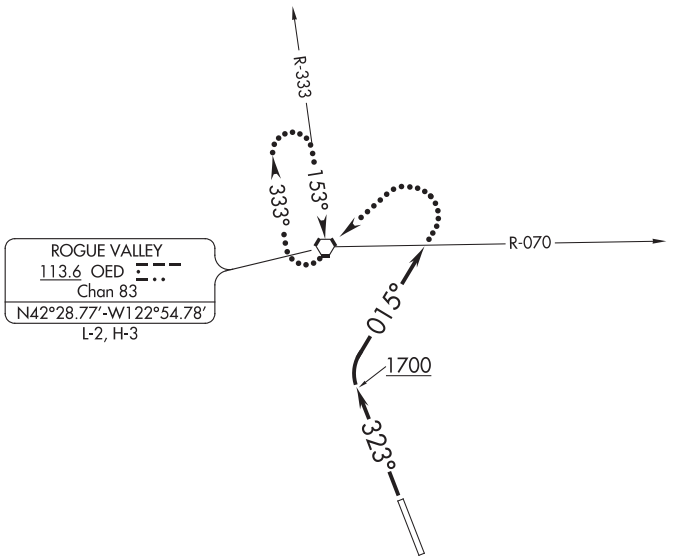
EAGLE SIX DEPARTURE

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

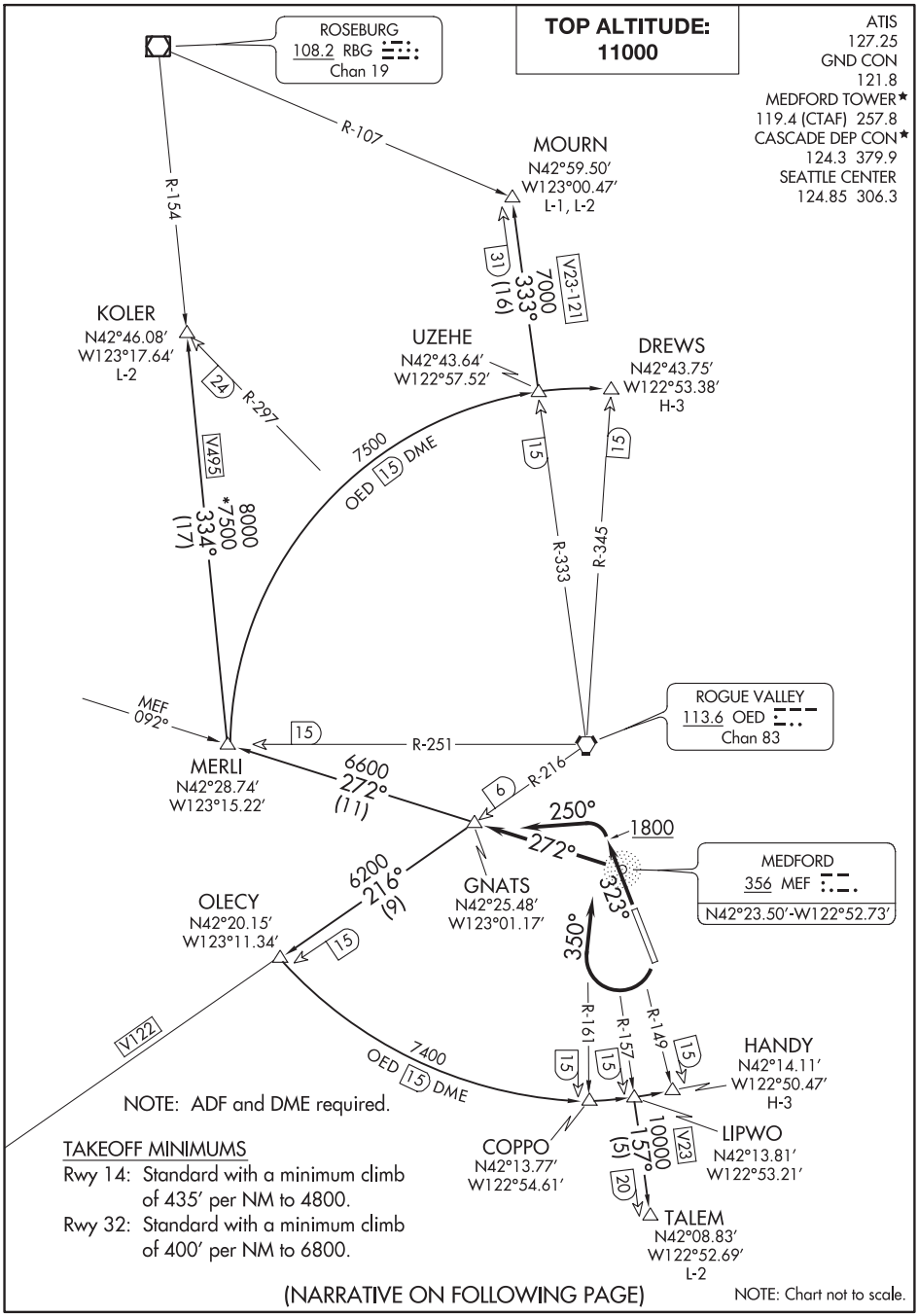
(GNATS7.GNATS) 18060

GNATS SEVEN DEPARTURE

ROGUE VALLEY INTL-MEDFORD (MFR)

MEDFORD, OREGON

AL-251 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 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.

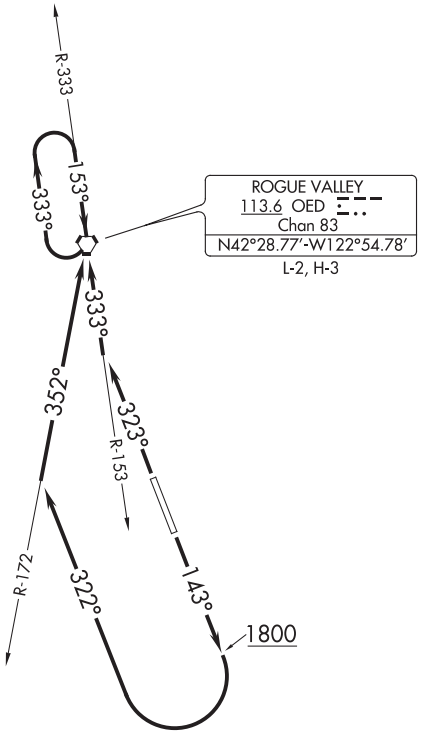
NW-1, 30 JAN 2020 to 26 MAR 2020

(JKSN1.OED) 18060

JACKSON ONE DEPARTURE

ROGUE VALLEY INTL-MEDFORD (MFR)
MEDFORD, OREGON
AL-251 (FAA)

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 4

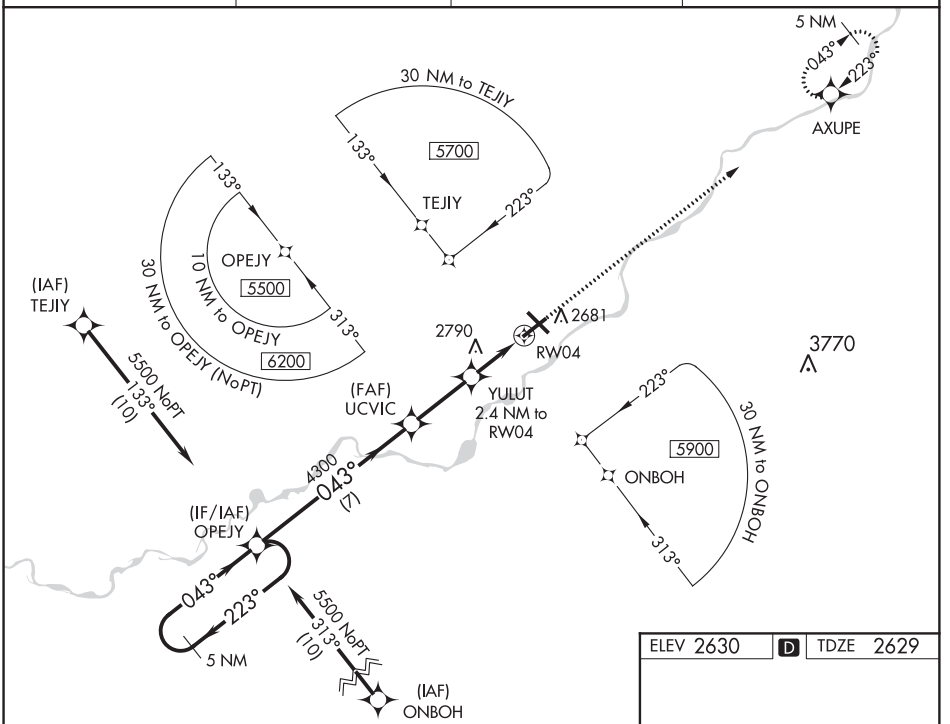
FRANK WILEY FIELD (MLS)

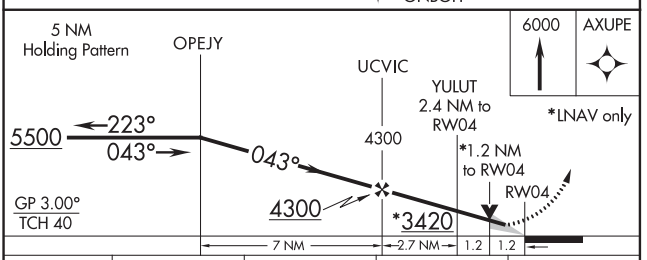
WAAS	APP CRS	Rwy Idg	5680
CH 42600	043°	TDZE	2629
W04A		Apt Elev	2630

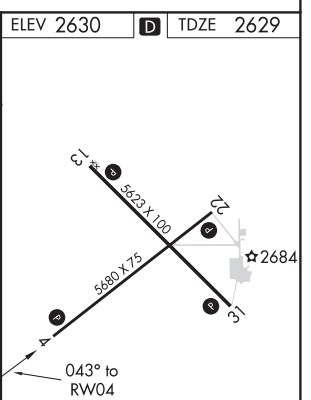
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME RNP -0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting: increase LPV and LNAV/VNAV DA to 2967 and all visibility 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	GREAT FALLS RADIO	UNICOM
135.575	132.425 317.45	122.2 255.4	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)

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MILES CITY, MONTANA

AL-259 (FAA)

19171

RNAV (GPS) RWY 13

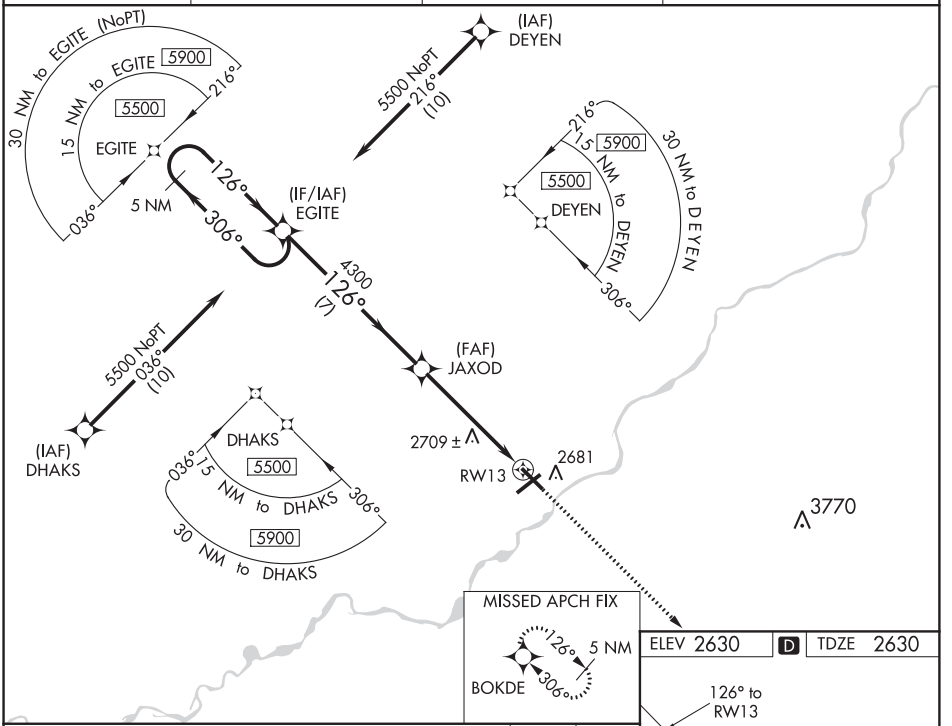
FRANK WILEY FIELD (MLS)

WAAS	APP CRS	Rwy Idg	5623
CH 97340	126°	TDZE	2630
W13A		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 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	GREAT FALLS RADIO	UNICOM
135.575	132.425 317.45	122.2 255.4	123.0 (CTAF) L



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)

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

MILES CITY, MONTANA
Orig 26MAY16

46°26′N-105°53′W

FRANK WILEY FIELD (MLS)

RNAV (GPS) RWY 13

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 22

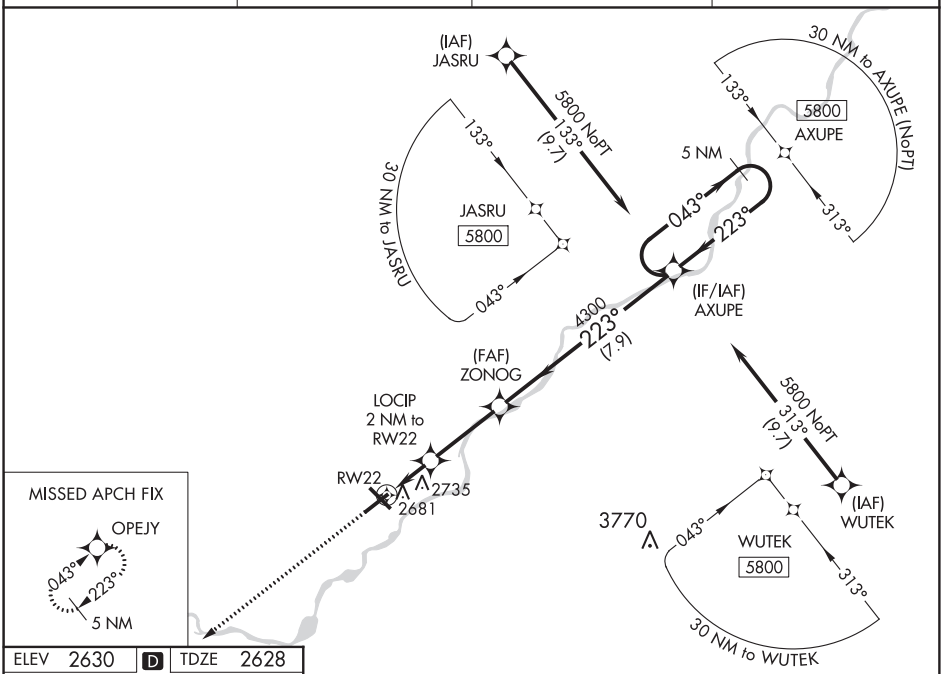
FRANK WILEY FIELD (MLS)

WAAS	APP CRS	Rwy Idg	5680
CH 77924	223°	TDZE	2628
W22A		Apt Elev	2630

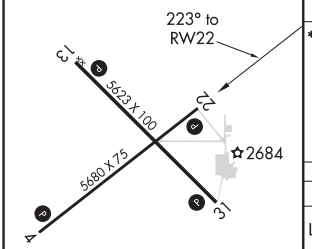
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting: increase LPV DA to 2966 and LNAV/VNAV DA to 2980 and all 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.

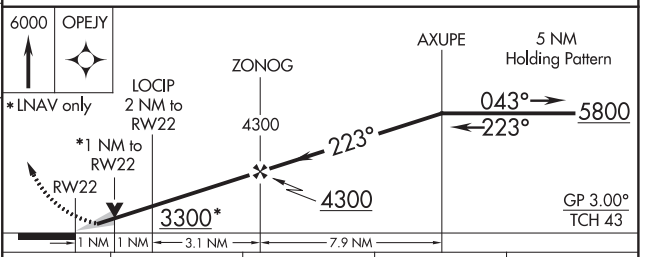
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.575	132.425 317.45	122.2 255.4	123.0 (CTAF) L



ELEV 2630 D TDZE 2628



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



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
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MILES CITY, MONTANA AL-259 (FAA) 19171

WAAS CH 56240 W31A	APP CRS 306°	Rwy ldg 5623 TDZE 2627 Apt Elev 2630

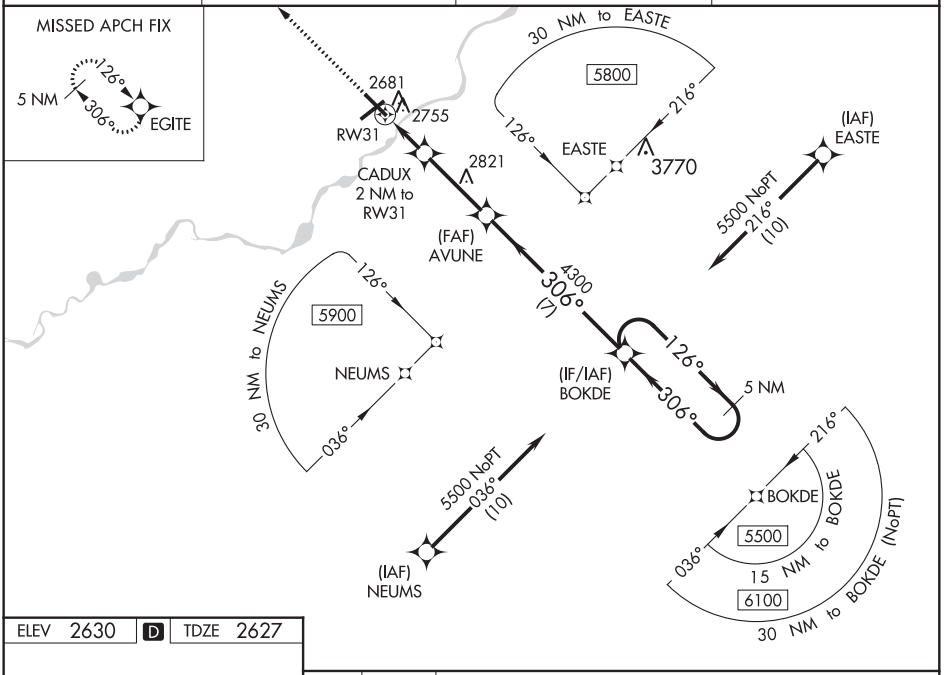
RNAV (GPS) RWY 31

FRANK WILEY FIELD (MLS)

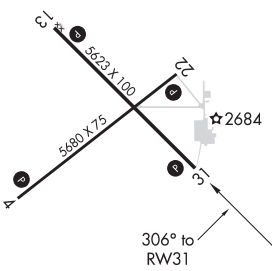
T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME A RNP-0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting; increase LPV DA to 2965 and all visibility ⅛ mile, 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.

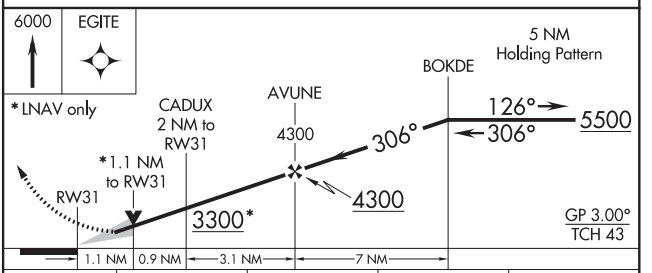
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.575	132.425 317.45	122.2 255.4	123.0 (CTAF) L



ELEV 2630 D TDZE 2627



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



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)

MILES CITY, MONTANA
Orig 26MAY16

46°26′N-105°53′W

FRANK WILEY FIELD (MLS)

RNAV (GPS) RWY 31

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME RWY 22

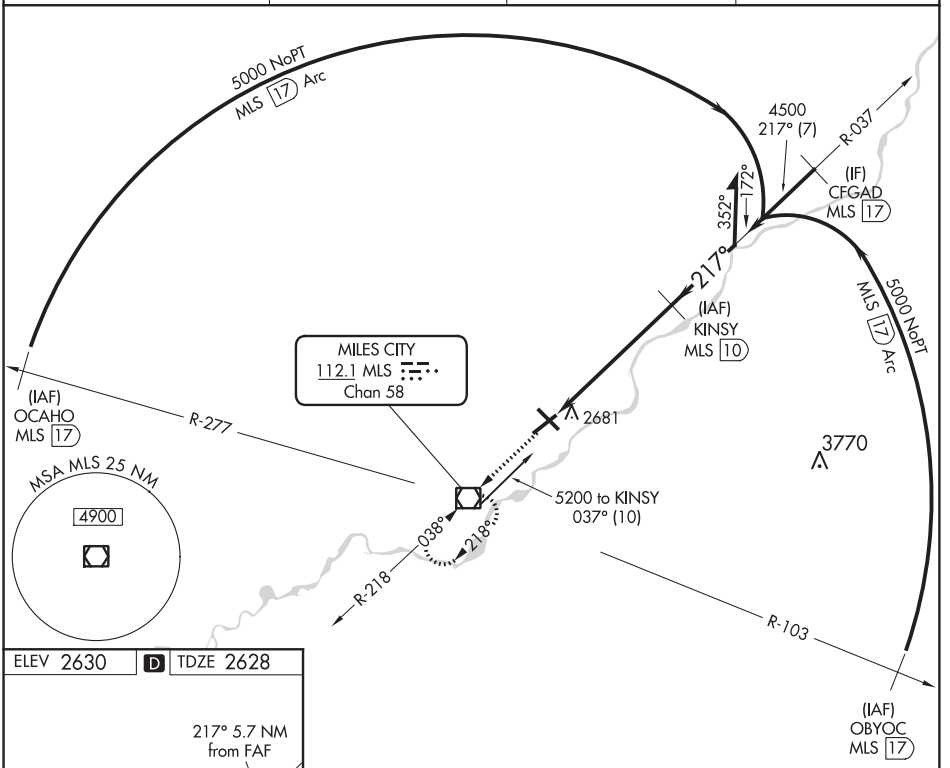
FRANK WILEY FIELD (MLS)

VOR/DME MLS	APP CRS	Rwy Idg	5680
112.1	217°	TDZE	2628
Chan 58		Apt Elev	2630

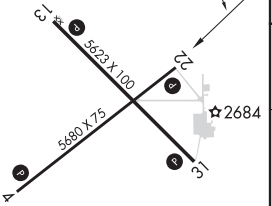
When local altimeter setting not received, use Forsyth altimeter setting and increase all MDA 100 feet, and increase S-22 Cat C/D visibility ¼ mile and Circling Cat D visibility ¼ mile.

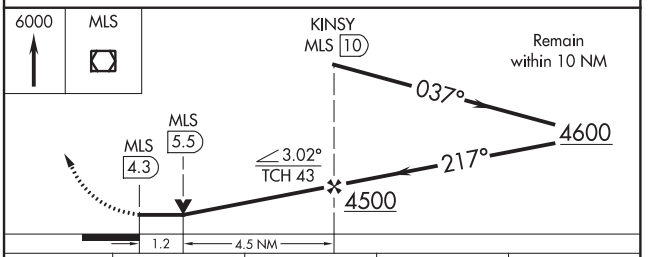
MISSED APPROACH: Climb to 6000 direct MLS VOR/DME and hold, continue climb-in-hold to 6000.

ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.575	132.425 317.45	122.2 255.4	123.0 (CTAF) L



ELEV 2630 | D | TDZE 2628





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)

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

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NW-1, 30 JAN 2020 to 26 MAR 2020

MILES CITY, MONTANA

AL-259 (FAA)

19171

VOR RWY 4

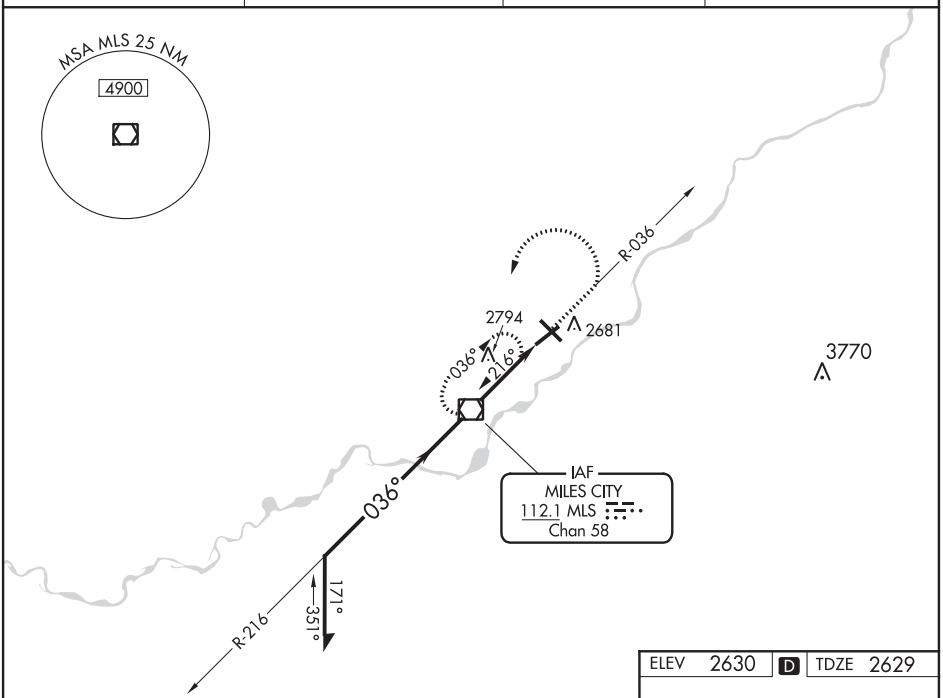
FRANK WILEY FIELD (MLS)

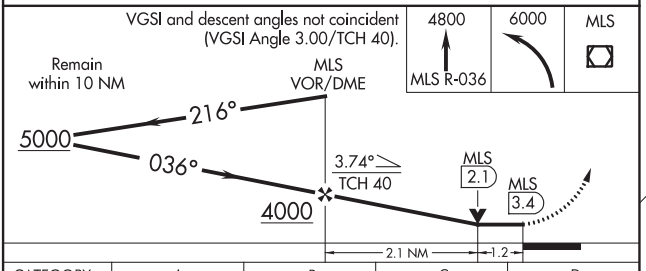
VOR/DME MLS	APP CRS	Rwy Idg	5680
112.1	036°	TDZE	2629
Chan 58		Apt Elev	2630

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.

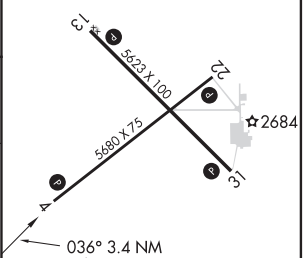
ASOS	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
135.575	132.425 317.45	122.2 255.4	123.0 (CTAF) L





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



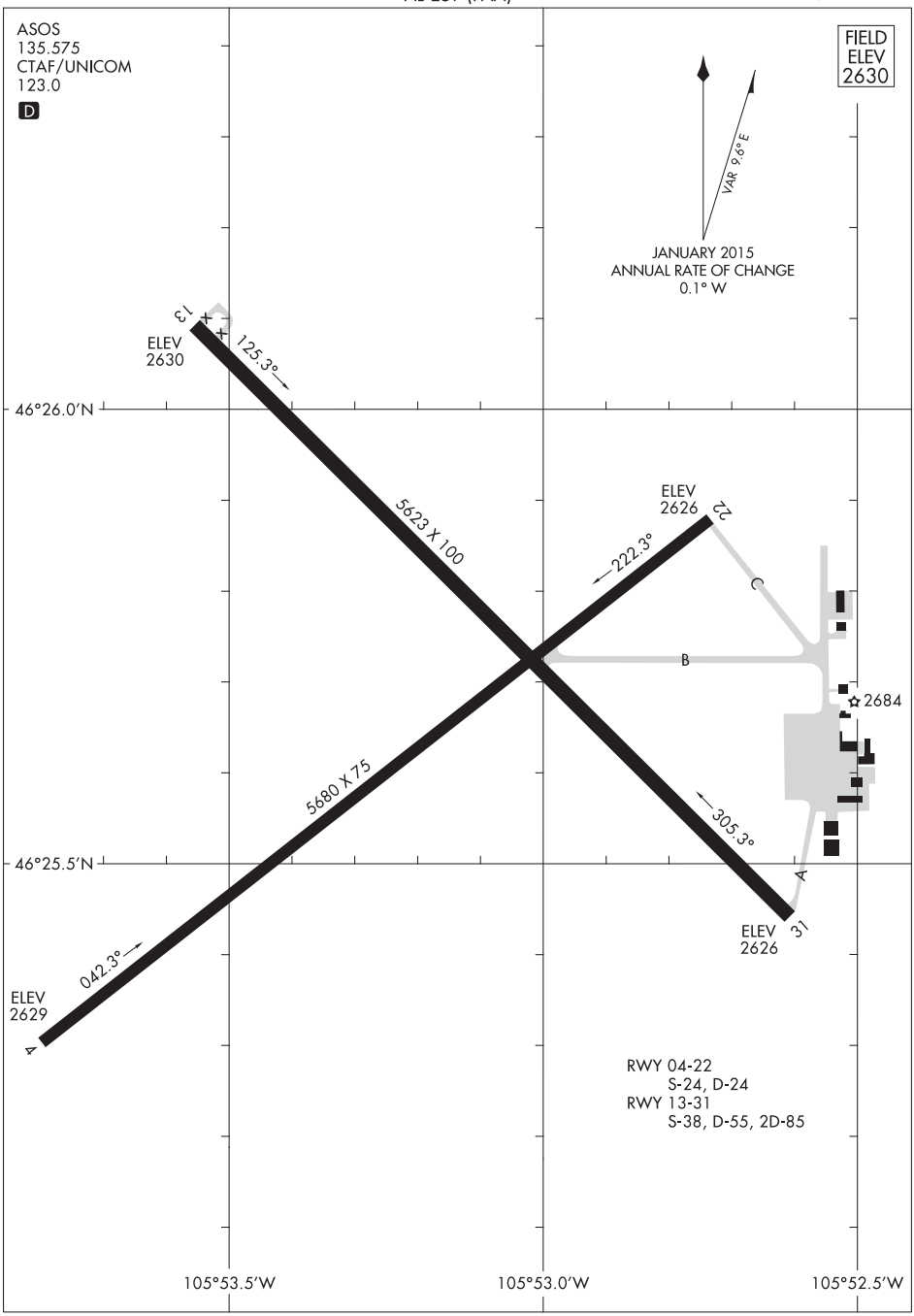
REIL Rwys 4, 13, 22 and 31 L
MIRL Rwy 4-22 L
MIRL Rwy 13-31

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

ILS Y RWY 12

MISSOULA INTL (MSO)

LOC I-MSO	APP CRS	Rwy Idg	9501
109.3	117°	TDZE	3200
		Apt Elev	3206

DME required.

NA

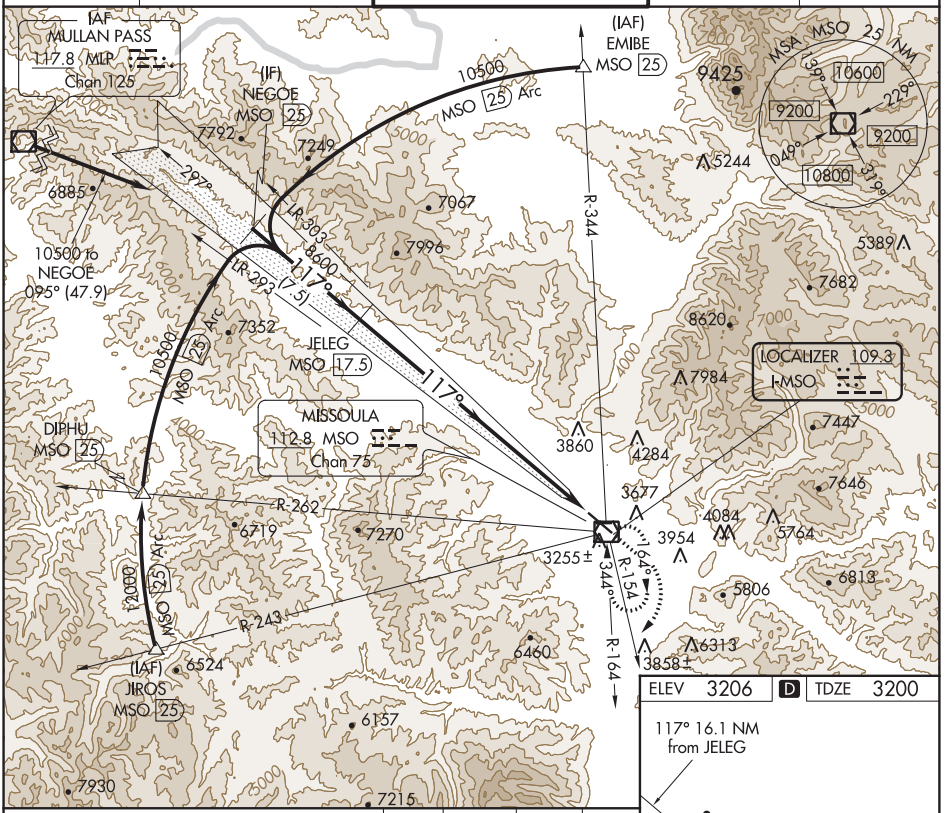
-17°C

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



CATEGORY	A	B	C	D
S-ILS 12	5022-7	1822 (1900-7)		

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS Z RWY 12

MISSOULA INTL (MSO)

LOC I-MSO	APP CRS	Rwy Idg	9501
109.3	117°	TDZE	3200
		Apt Elev	3206

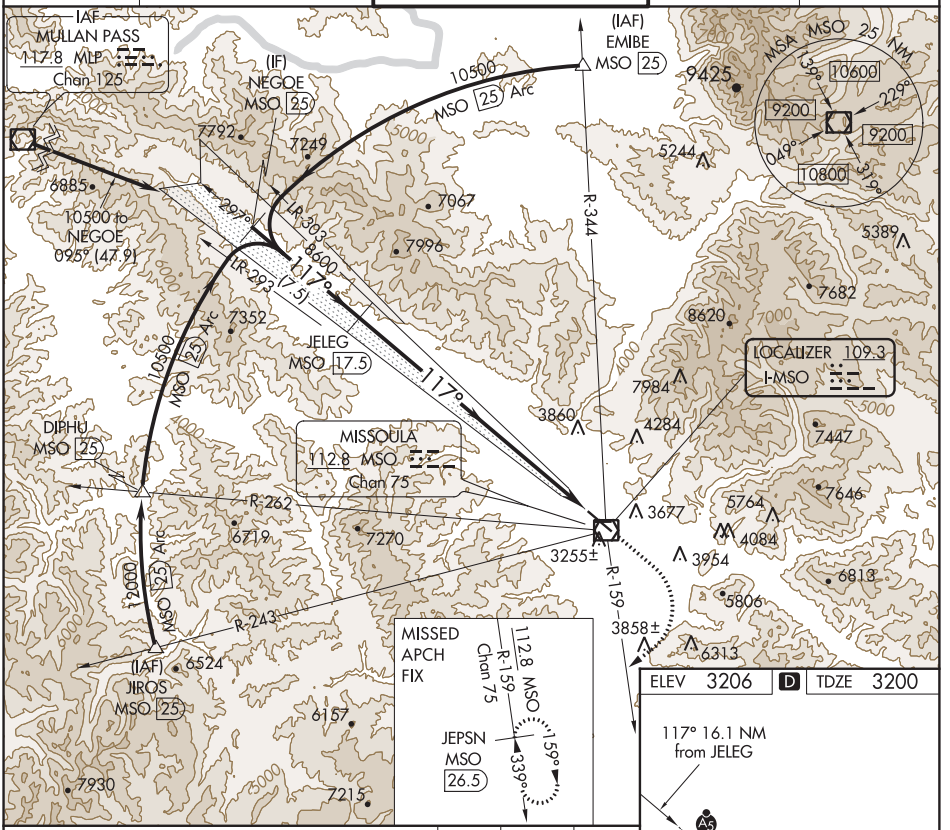
DME required.

T A -17°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



CATEGORY	A	B	C	D
S-ILS 12	3411/24	211 (300-½)		

RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	9501
298°	TDZE	3206
	Apt Elev	3206

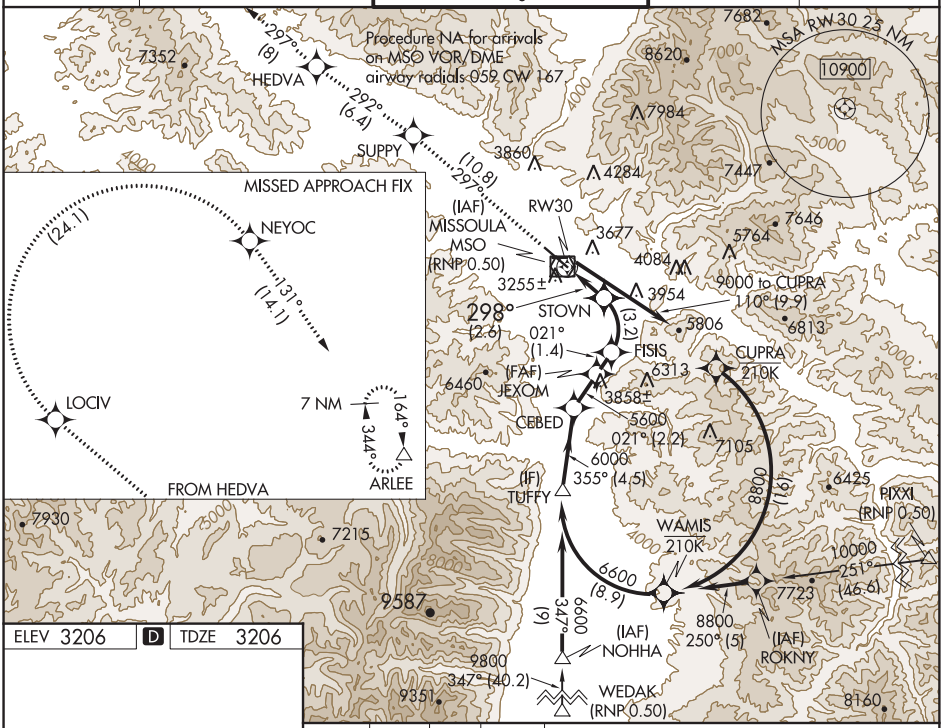
RNAV (RNP) RWY 30
MISSOULA INTL (MSO)

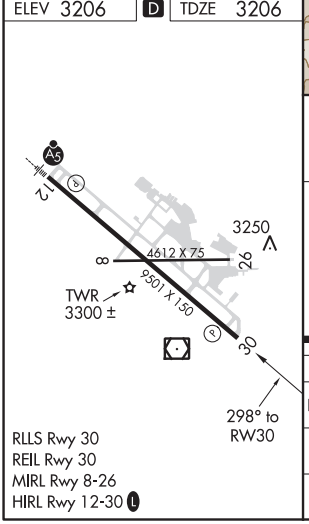
RNP AR APCH, RF required.

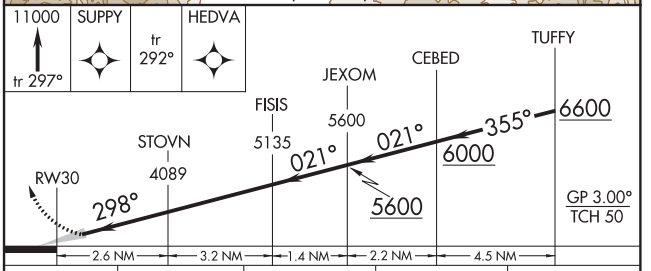
T A -17°C For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). When local altimeter setting not received, procedure NA.

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







CATEGORY	A	B	C	D
RNP 0.30 DA *	3524-1 318 (400-1)			
RNP 0.30 DA	3582-1¼ 376 (400-1¼)			

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 12

MISSOULA INTL (MSO)

APP CRS	Rwy Idg	9501
117°	TDZE	3200
	Apt Elev	3206

RNP AR apch.

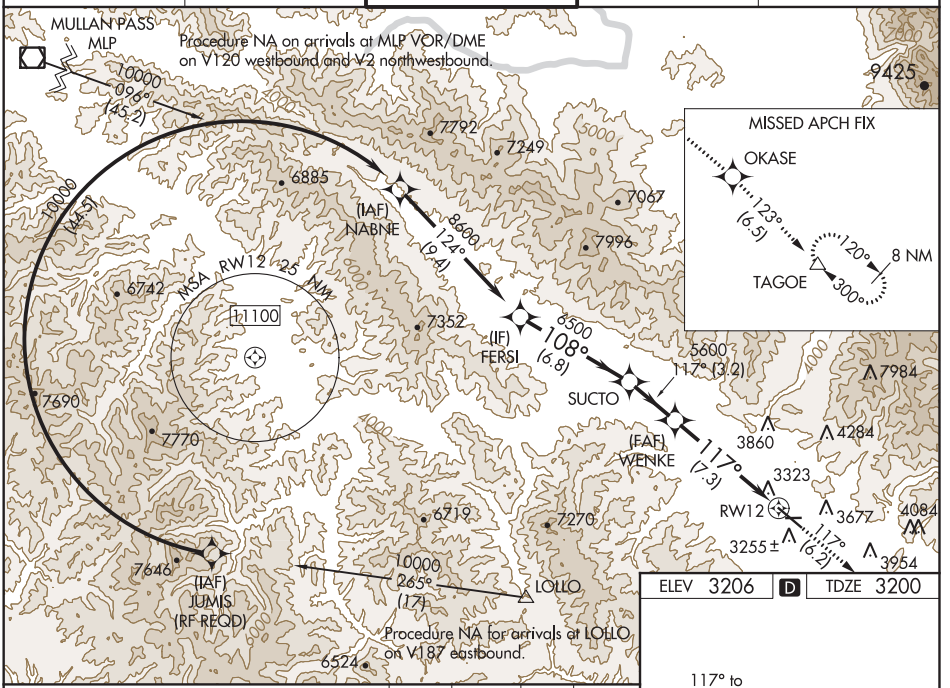
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21° C (-6°F) or above 43°C (109°F). For inop ALS, increase RNP 0.12 all Cats visibility to RVR 6000. For inop ALS, increase RNP 0.30 all Cats visibility to 2½ SM. When local weather not received, procedure NA.

-17°C

MALSR

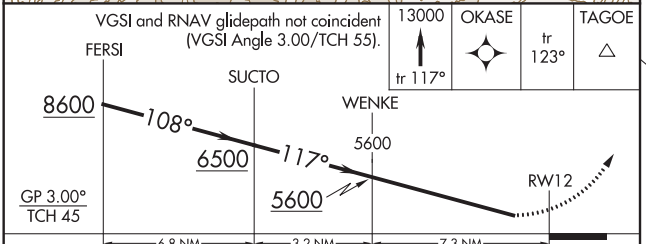
MISSED APPROACH: Climb to 13000 on track 117° to OKASE and on track 123° to TAGOE and hold, continue climb-in-hold to 13000.
*Missed approach requires minimum climb of 350 feet per NM to 8300; if unable to meet climb gradient, see RNAV (GPS) Y RWY 12.
#Missed approach requires minimum climb of 425 feet 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, 30 JAN 2020 to 26 MAR 2020

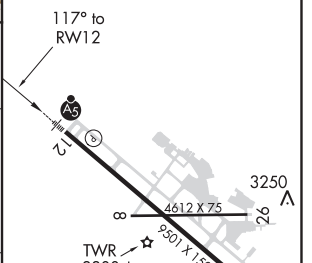
NW-1, 30 JAN 2020 to 26 MAR 2020



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) | 19171

RNAV (GPS) Y RWY 12

MISSOULA INTL (MSO)

WAAS	APP CRS		
CH 65715	117°	Rwy Idg	9501
W12B		TDZE	3200
		Apt Elev	3206

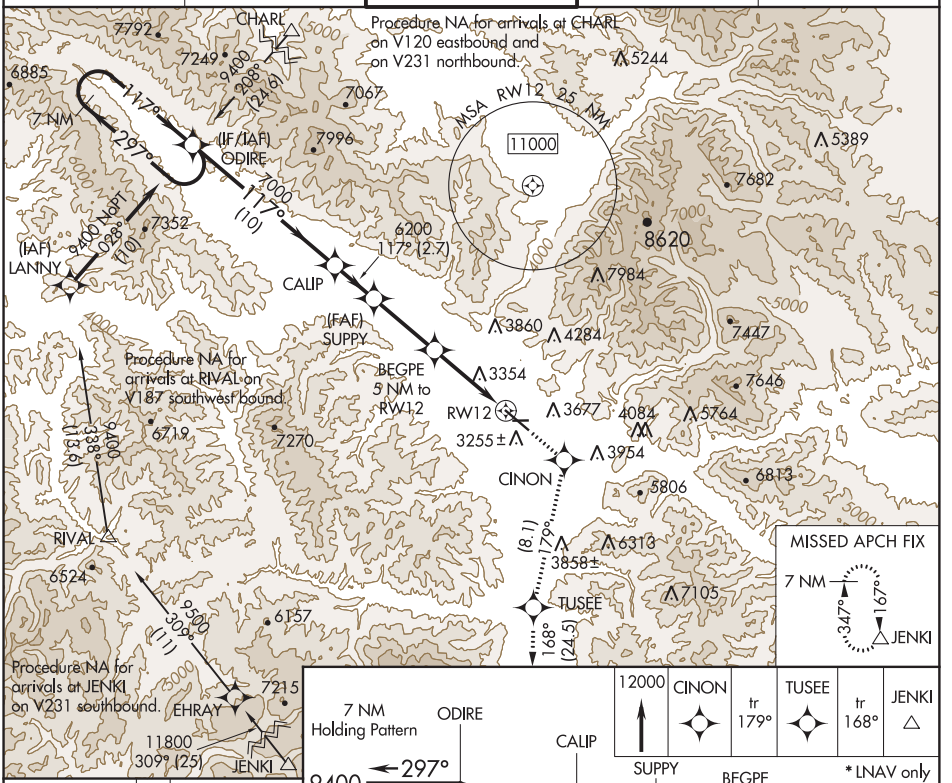
RNP apch.

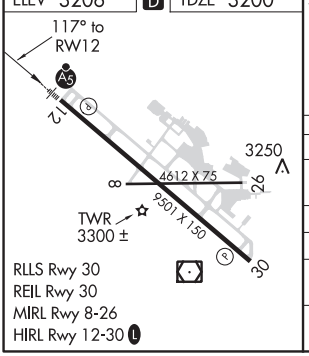
T A -17°C Circling NA for Cats C and D northeast of Rwy 12-30. Inop table does not apply to LNAV # Cats C/D. Inop table does not apply to LPV† all Cats. **RVR 1800 authorized with use of FD or AP or HUD to DA.

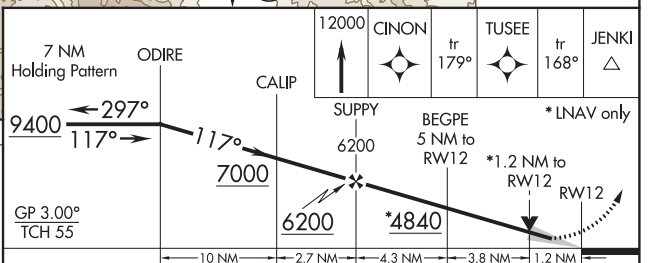
MALSR

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







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)

MISSOULA, MONTANA
Amdt 3 24MAY18

46°55′N-114°05′W

MISSOULA INTL (MSO)

RNAV (GPS) Y RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS)-D

MISSOULA INTL (MSO)

APP CRS	Rwy Idg	N/A
339°	TDZE	N/A
	Apt Elev	3206

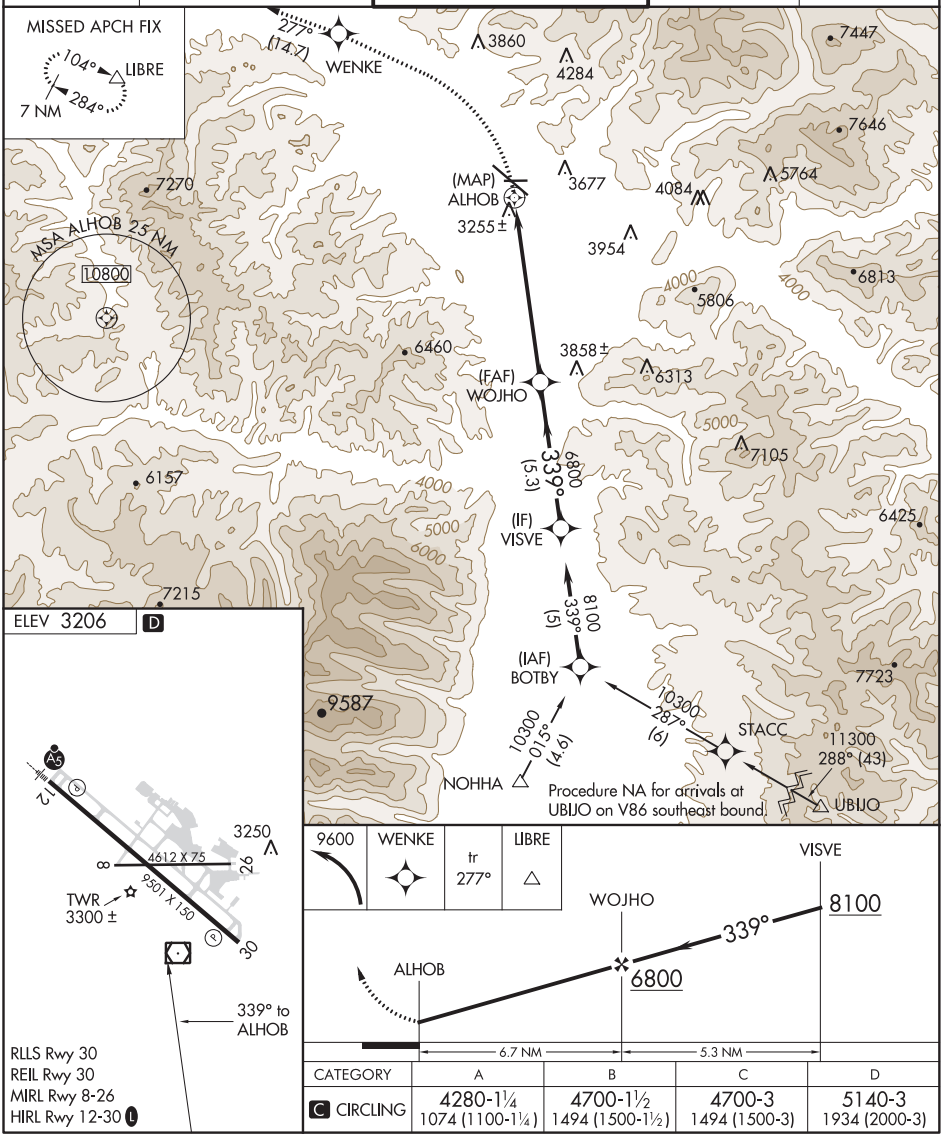
RNP Apch.

Circling NA for Cats C and D northeast of Rwy 12-30.

-17°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



CATEGORY	A	B	C	D
C CIRCLING	4280-1¼ 1074 (1100-1¼)	4700-1½ 1494 (1500-1½)	4700-3 1494 (1500-3)	5140-3 1934 (2000-3)

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR-A

MISSOULA INTL (MSO)

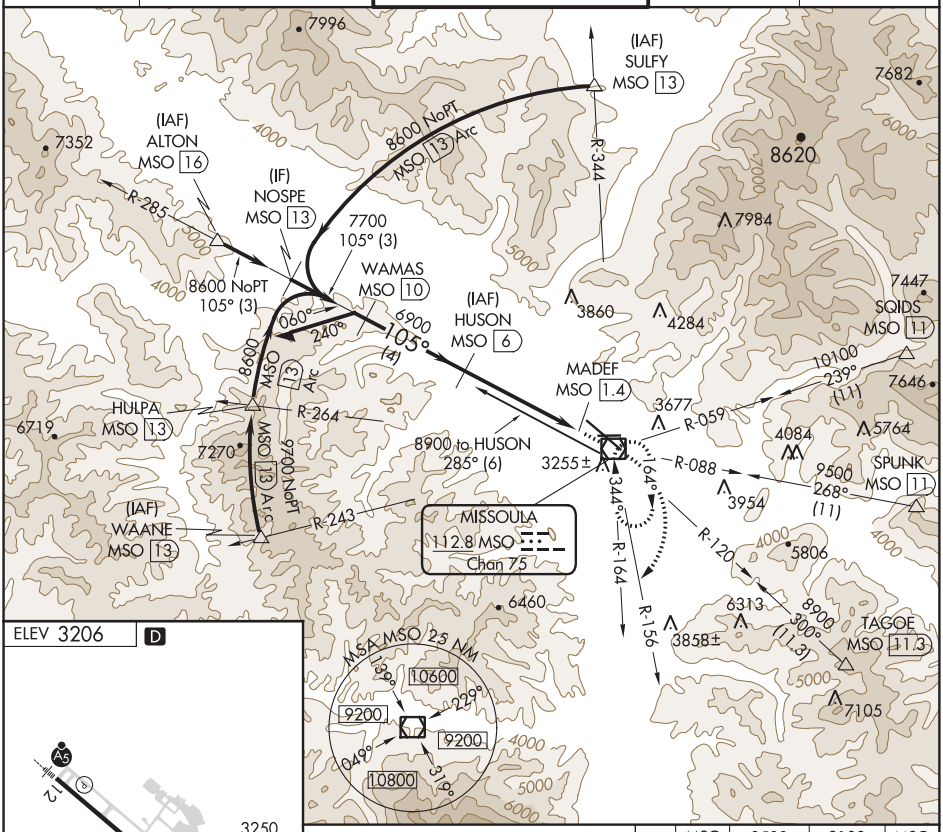
VOR/DME MSO	APP CRS	Rwy Idg	N/A
112.8	105°	TDZE	N/A
Chan 75		Apt Elev	3206

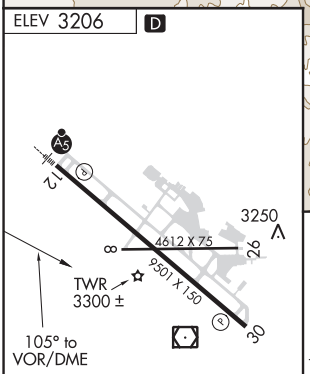
DME required.

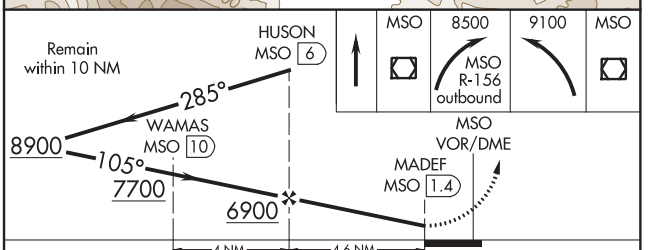
T
A
-17°C

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







CATEGORY	A	B	C	D
C CIRCLING	5120-1¼ 1914 (2000-1¼)	5120-1½ 1914 (2000-1½)	5120-3 1914 (2000-3)	5160-3 1954 (2000-3)

46°55'N-114°05'W

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR-B

MISSOULA INTL (MSO)

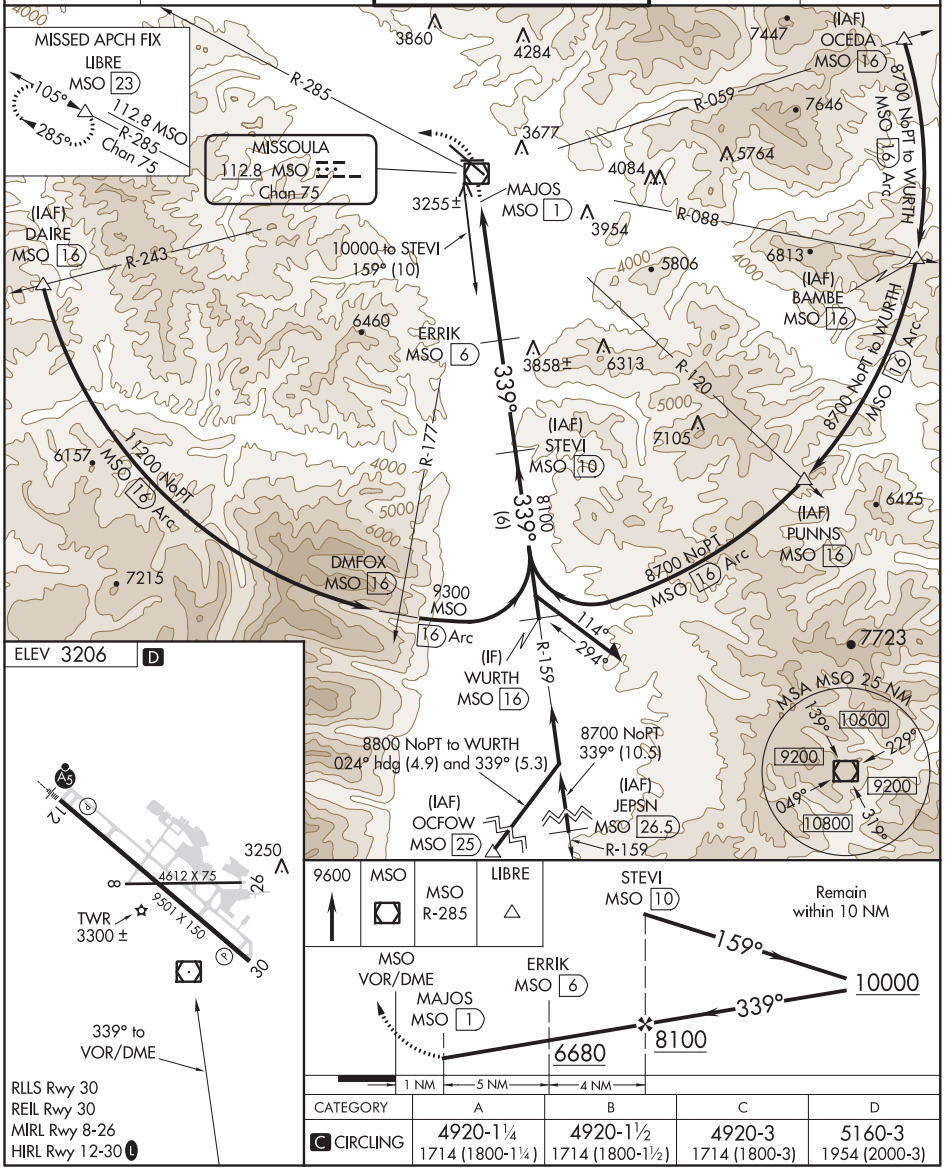
VOR/DME MSO	APP CRS	Rwy Idg	N/A
112.8	339°	TDZE	N/A
Chan 75		Apt Elev	3206

RADAR required for procedure entry at JEPSN. DME required.

T A ❄ -17°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 1714 (1800-1¼)	4920-1½ 1714 (1800-1½)	4920-3 1714 (1800-3)	5160-3 1954 (2000-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18144

AIRPORT DIAGRAM

MISSOULA INTL (MSO)

MISSOULA, MONTANA

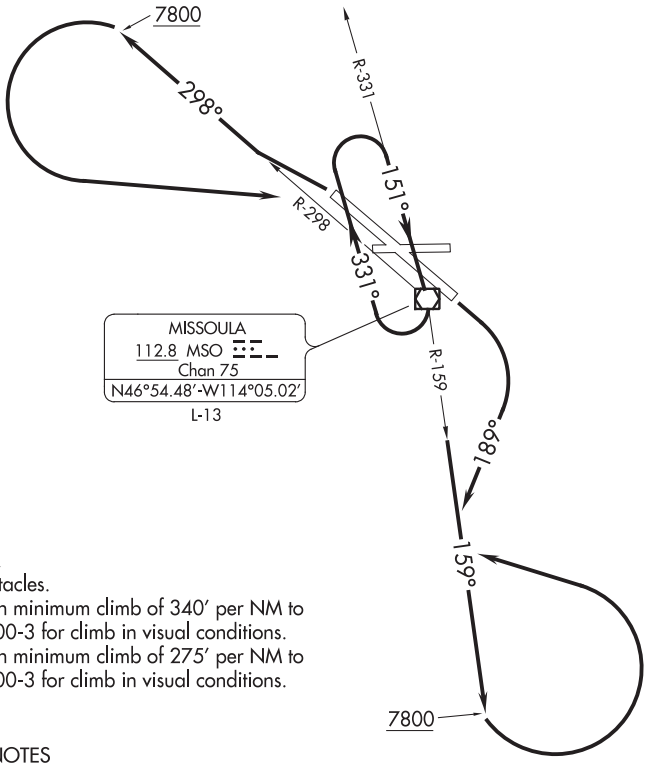
AL-266 (FAA)

AIRPORT DIAGRAM
18144

MISSOULA, MONTANA
MISSOULA INTL (MSO)

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

(DIDLY5.DIDLY) 18144

DIDLY FIVE DEPARTURE

AL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA

NW-1, 30 JAN 2020 to 26 MAR 2020

TOP ALTITUDE: 14000

KALISPELL
113.2 FCA
Chan 79
N48°12.85'-W114°10.55'
L-13, H-1

R-159
V231
339°
*8700
13000
(45)

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

MULLAN PASS
117.8 MLP
Chan 125
N47°27.41'-W115°38.76'
L-13, H-1

CHARL
N47°28.34'
W114°07.37'

R-074
339°
*8700
13000
(5)
50

R-078
JESSY
N47°23.43'
W114°07.03'
13000

R-095
10000
275°
(48)

ORONE
N47°10.86'
W114°32.62'

25
10000
*9100
298°
(12)

DIDLY
N47°03.01'
W114°19.34'
7800

344°
*9700
13000
(29)

13
298°

R-298

MISSOULA
112.8 MSO
Chan 75
N46°54.48'-W114°05.02'
L-13
10000

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.

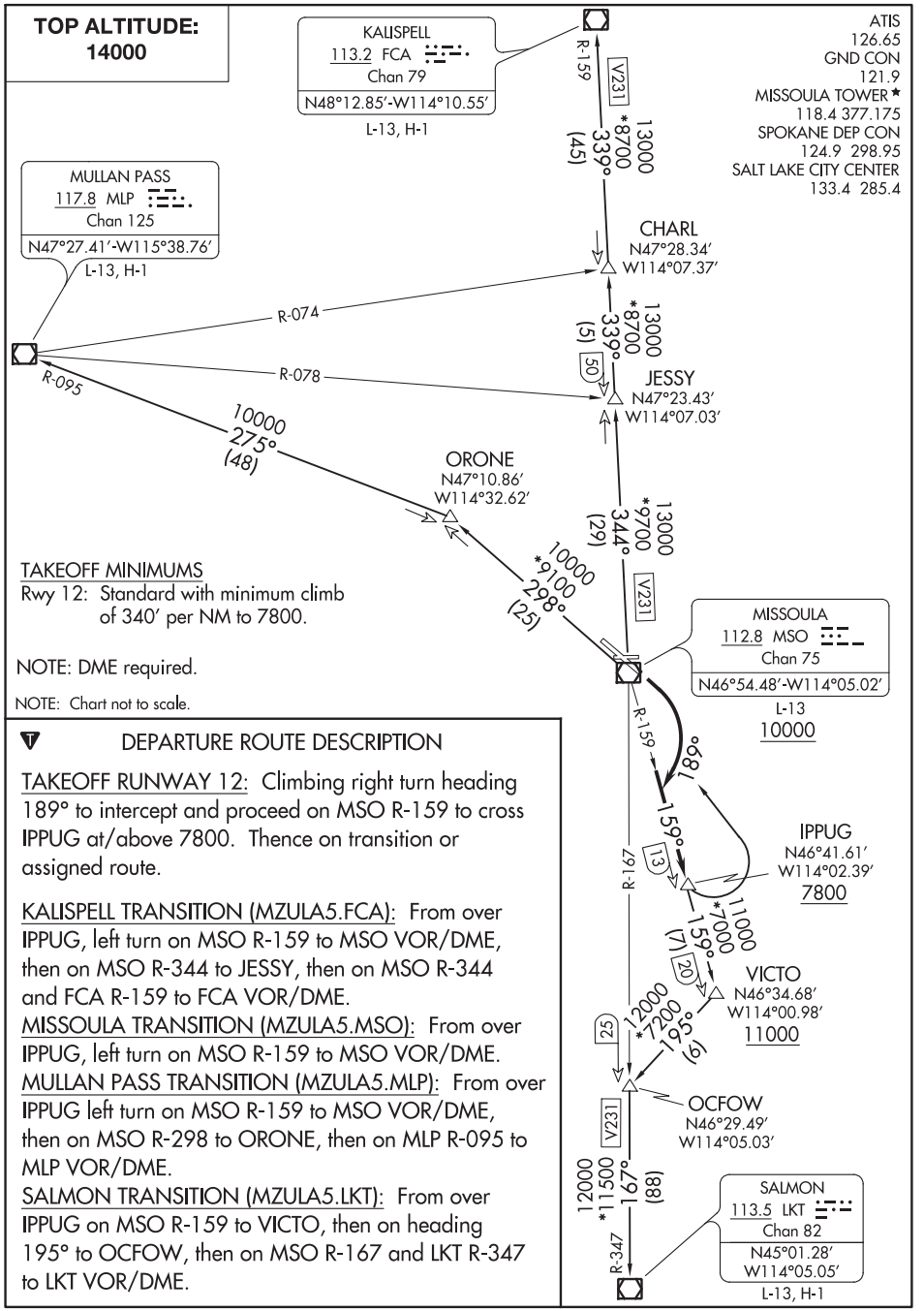
MULLAN PASS TRANSITION (DIDLY5.MLP): From over DIDLY on MSO R-298 to ORONE, then on MLP R-095 to MLP VOR/DME.

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.

V231
12000
*11500
167°
(113)

R-347

SALMON
113.5 LKT
Chan 82
N45°01.28'-W114°05.05'
L-13, H-1



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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 32R

GRANT COUNTY INTL (MWH)

LOC I-MWH	APP CRS	Rwy Idg	13492
109.5	324°	TDZE	1167
		Apt Elev	1189

T A 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

ADF OR DME REQUIRED

EPHRATA 112.6 EPH Chan 73

WIPES

ALTERNATE MISSED APCH FIX

EPHRATA EPH 112.6 Chan 73

LOCALIZER 109.5 I-MWH

MOSES LAKE 115.0 MWH Chan 97

BATUM MWH 9.8

LOM/IAF PELLY 408 MW MWH 6

QUINT PLUSS RUBEL

MSA MW 25 NM 4200 3300

ELEV 1189 D TDZE 1167

TWR 1299

HIRL Rwy 14L-32R
REIL Rwys 4, 14L and 22
MIRL Rwys 4-22 and 18-36

1800 4000 BATUM MWH R-054

MW LOM MWH 6

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).

Remain within 10 NM

GS 3.00° TCH 55

4.7 NM

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy ldg	10000
036°	TDZE	1189
	Apt Elev	1189

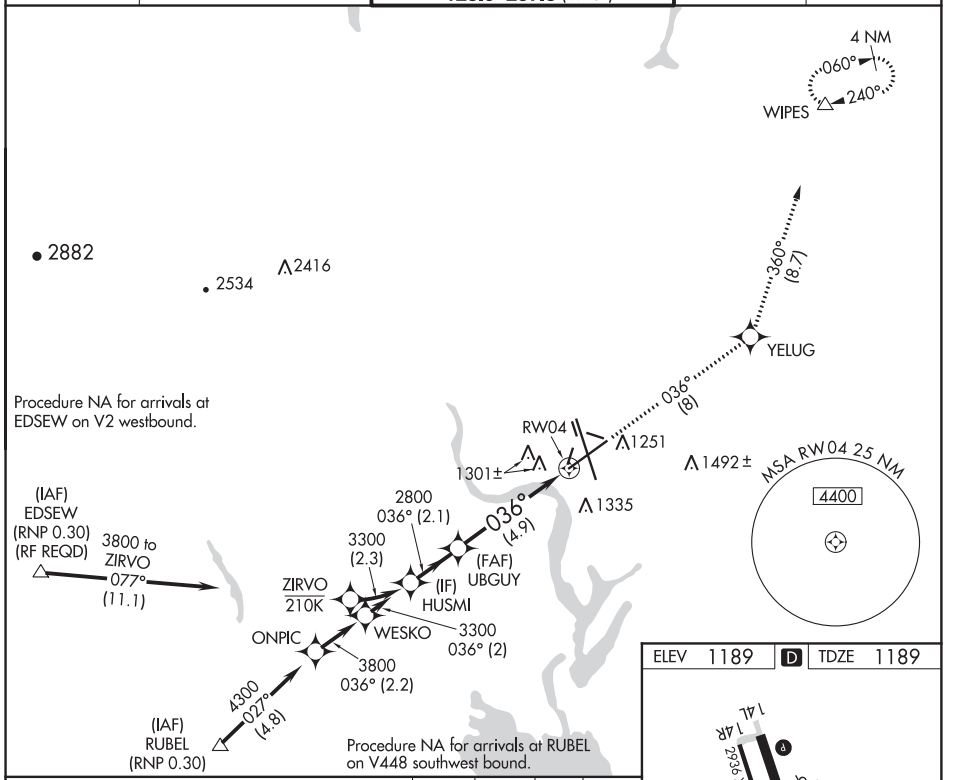
RNAV (RNP) Z RWY 4

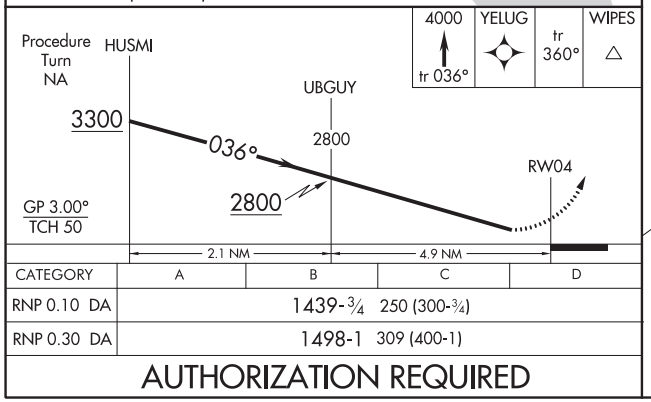
GRANT COUNTY INTL (MWH)

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.

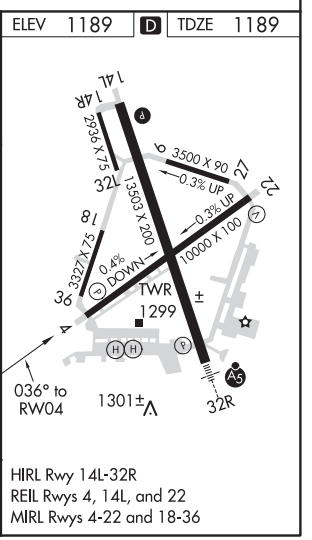
ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95





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



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MOSES LAKE, WASHINGTON AL-961 (FAA) 19115

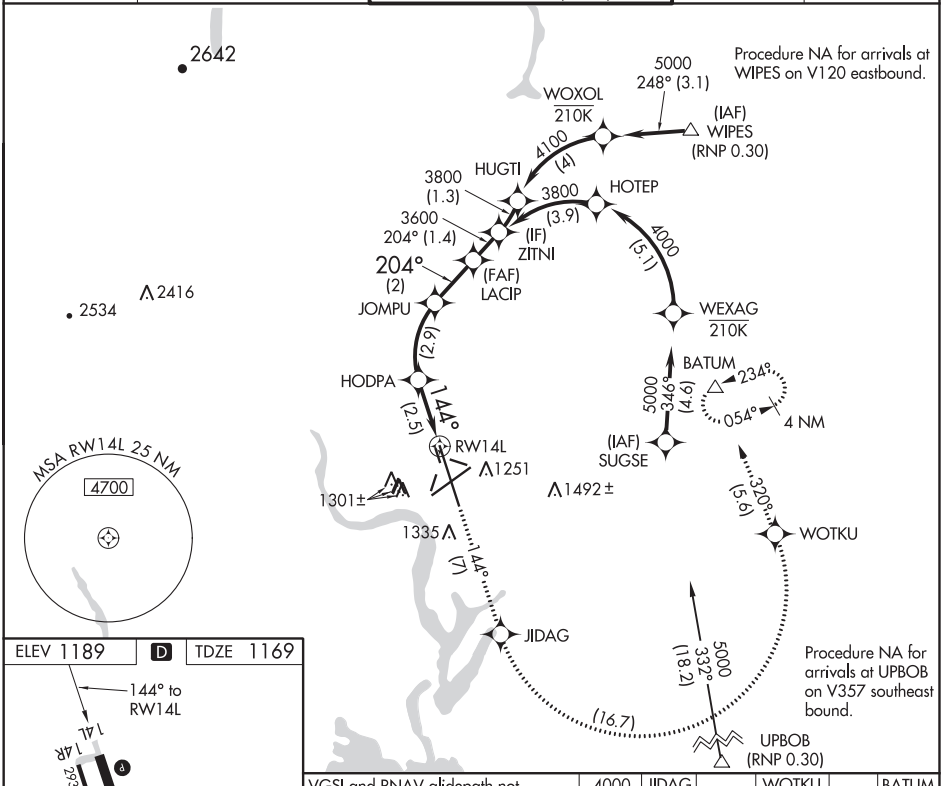
APP CRS	Rwy ldg	13503
144°	TDZE	1169
	Apt Elev	1189

RNAV (RNP) Z RWY 14L
GRANT COUNTY INTL (MWH)

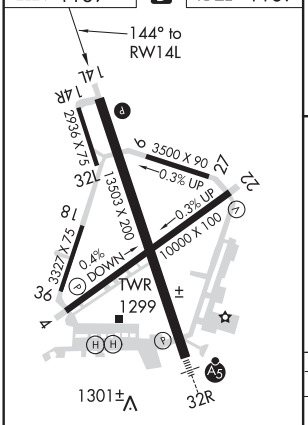
For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 47°C (116°F). RF required. GPS required.

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) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95

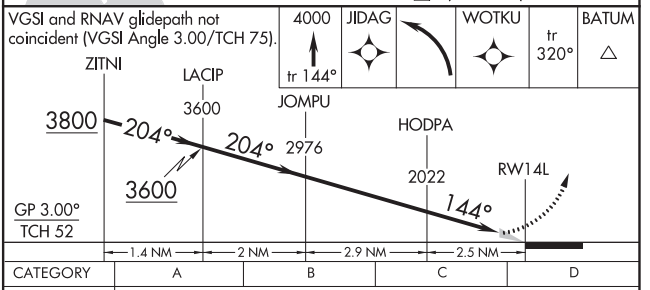


ELEV 1189	D	TDZE 1169



HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
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

MOSES LAKE, WASHINGTON
Orig-A 01MAY14

47°13′N-119°19′W

GRANT COUNTY INTL (MWH)
RNAV (RNP) Z RWY 14L

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 22

GRANT COUNTY INTL (MWH)

APP CRS	Rwy ldg	10000
216°	TDZE	1166
	Apt Elev	1189

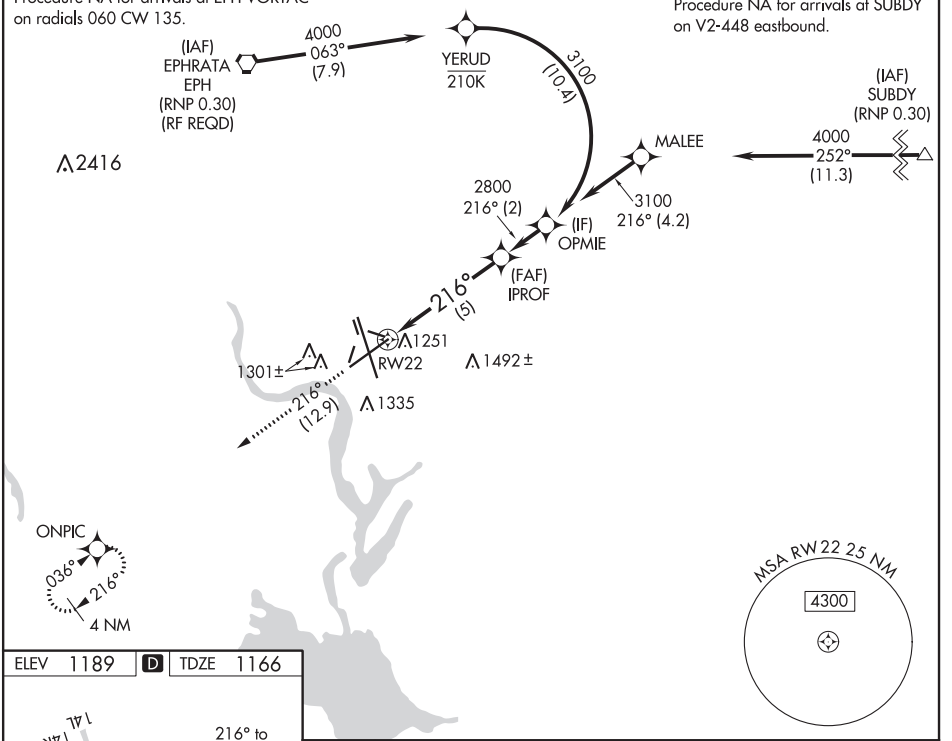
For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 46°C (114°F). GPS required.

MISSED APPROACH: Climb to 4000 on track 216° to ONPIC and hold.

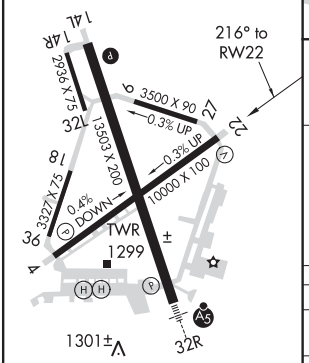
ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95

Procedure NA for arrivals at EPH VORTAC on radials 060 CW 135.

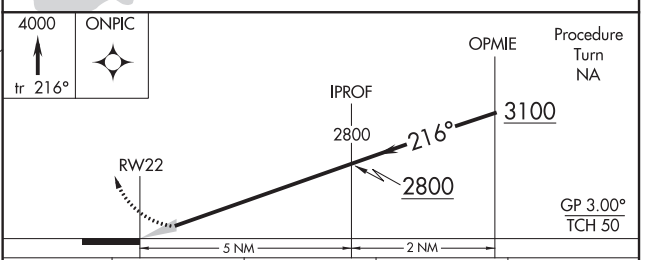
Procedure NA for arrivals at SUBDY on V2-448 eastbound.



ELEV 1189 D TDZE 1166



HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 32R

GRANT COUNTY INTL (MWH)

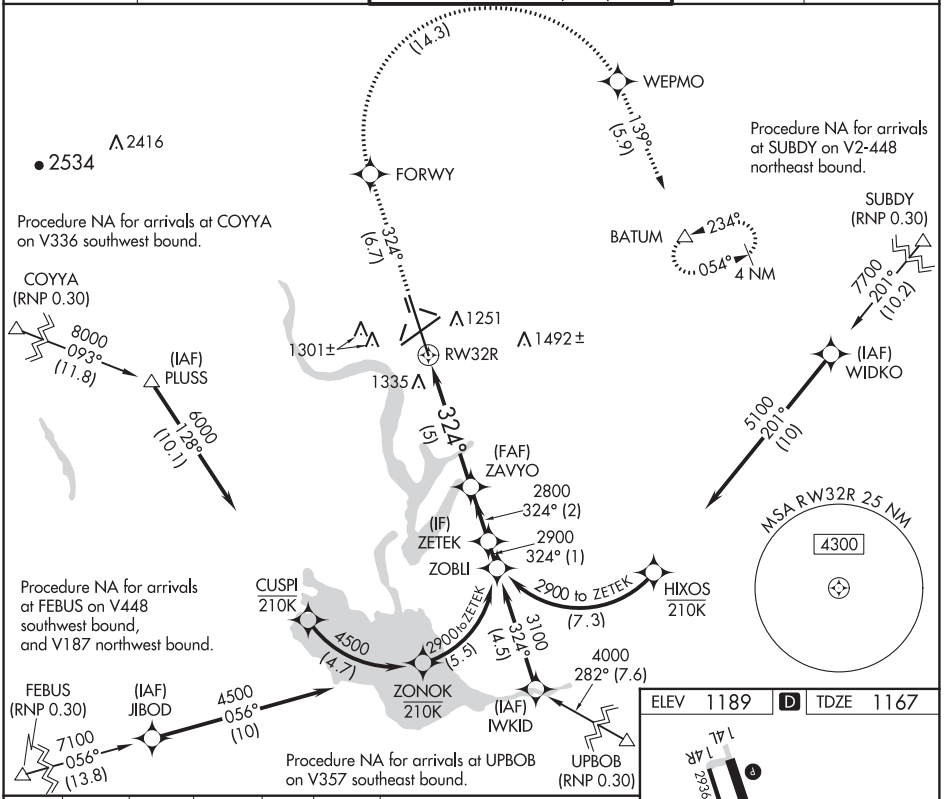
APP CRS	Rwy Idg	13492
324°	TDZE	1167
	Apt Elev	1189

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

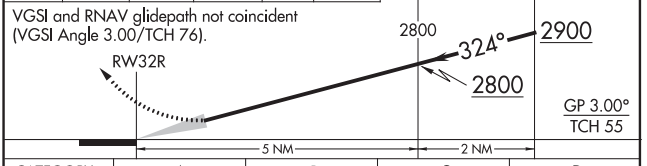
MISSED APPROACH: Climb to 4000 on track 324° to FORWY right turn to WEPMO and track 139° to BATUM and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95



4000	FORWY		WEPMO	tr 139°	BATUM
tr 324°					

Procedure Turn NA

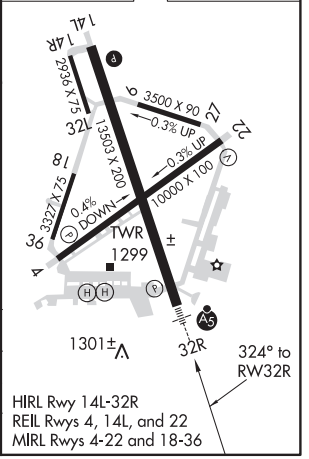


VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 76).

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



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	10000
CH 42809	036°	TDZE	1189
W04A		Apt Elev	1189

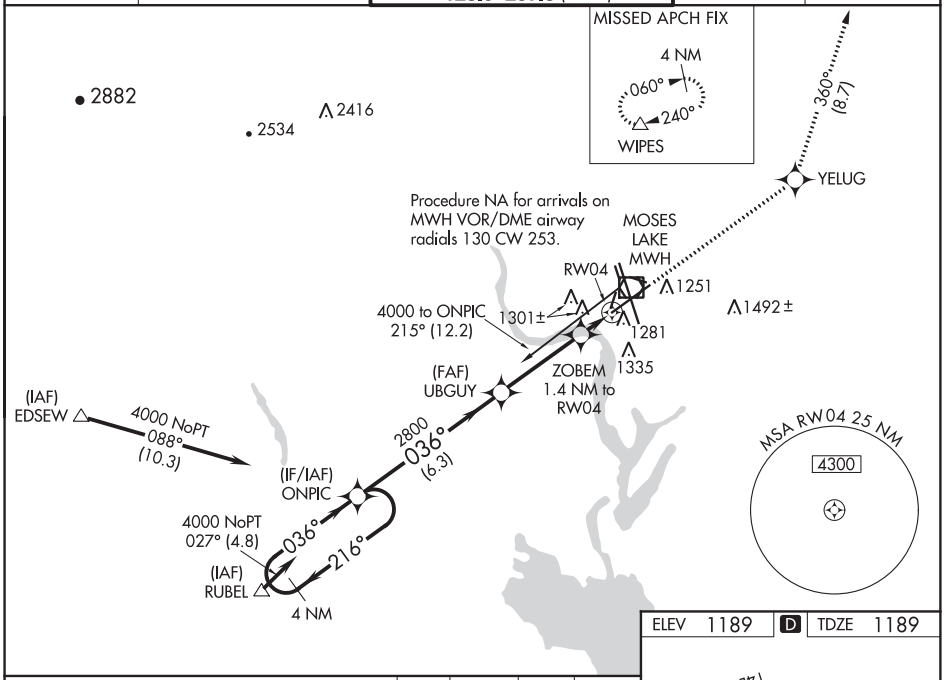
RNAV (GPS) Y RWY 4

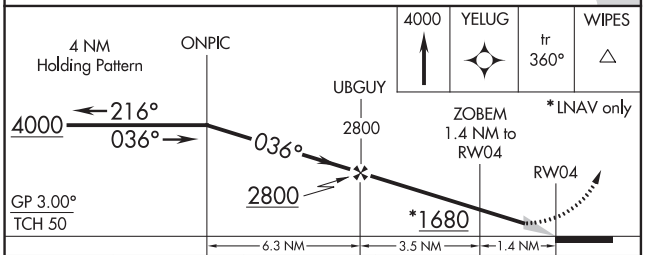
GRANT COUNTY INTL (MWH)

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.

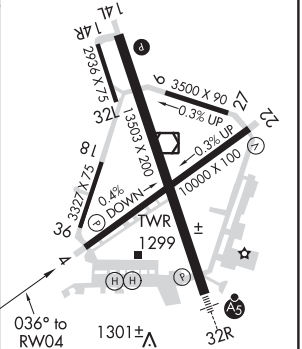
ATIS	GRANT COUNTY APP CON *	GRANT COUNTY TOWER *	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95





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



HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
MIRL Rwys 4-22 and 18-36

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MOSES LAKE, WASHINGTON AL-961 (FAA) 19115

WAAS	APP CRS		
CH **90509**	**144°**	Rwy Idg	**13503**
W14A		TDZE	**1169**
		Apt Elev	**1189**

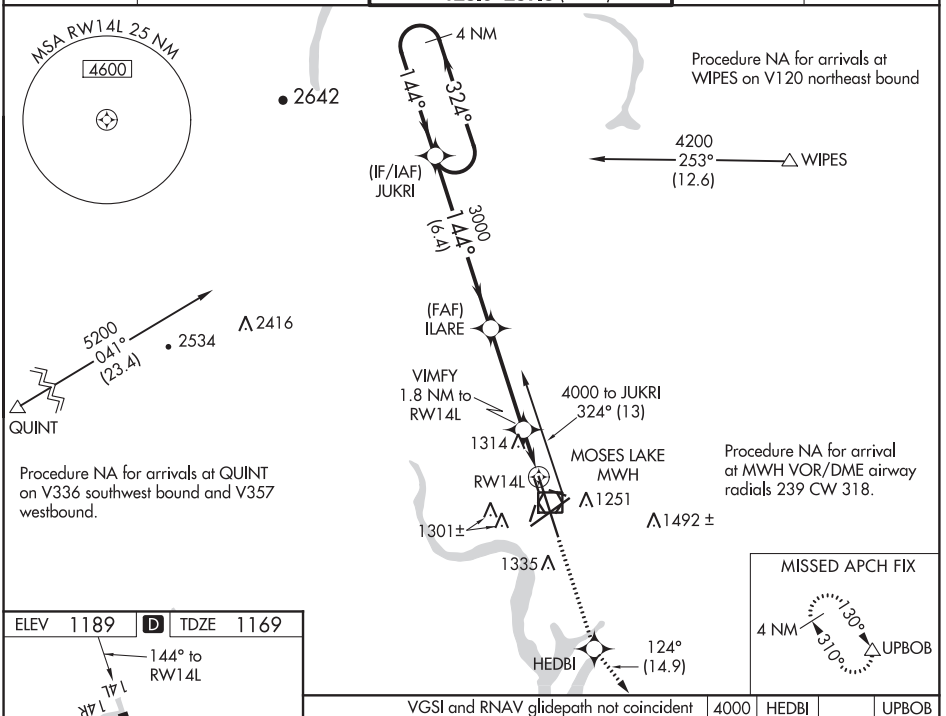
RNAV (GPS) Y RWY 14L

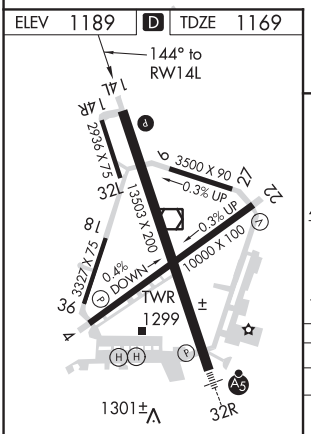
GRANT COUNTY INTL (MWH)

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.

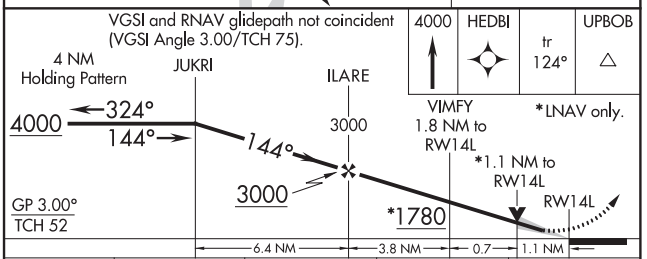
MISSED APPROACH: Climb to 4000 direct HEDBI and on track 124° to UPBOB and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	**126.4 379.95**	**118.25** (CTAF) **257.8** (EAST) **128.0 257.8** (WEST)	**121.9**	**122.95**





HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
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, 30 JAN 2020 to 26 MAR 2020

WAAS CH 70410 W22A	APP CRS 216°	Rwy Idg 10000 / TDZE 1166 / Apt Elev 1189

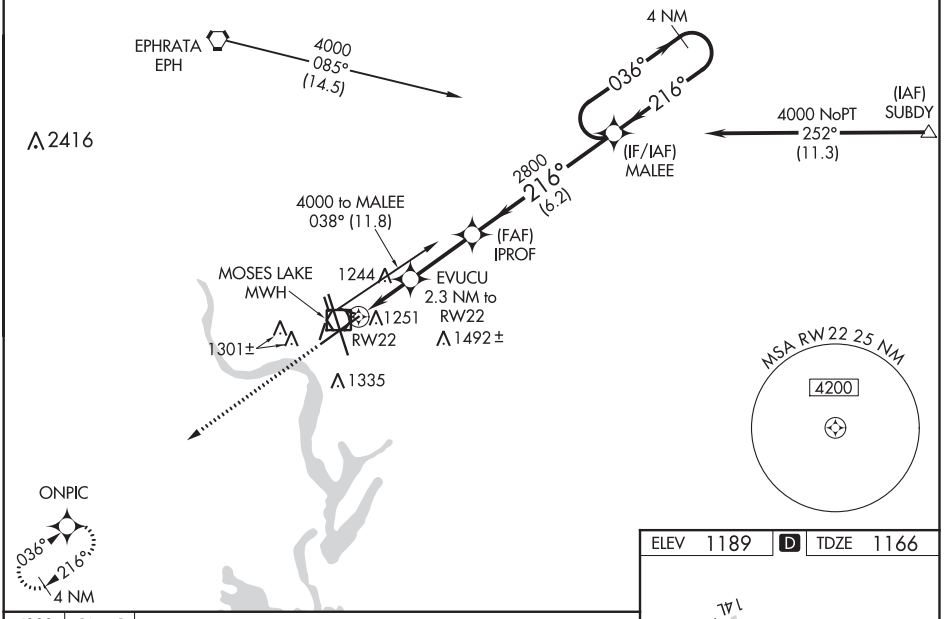
RNAV (GPS) Y RWY 22
GRANT COUNTY INTL (MWH)

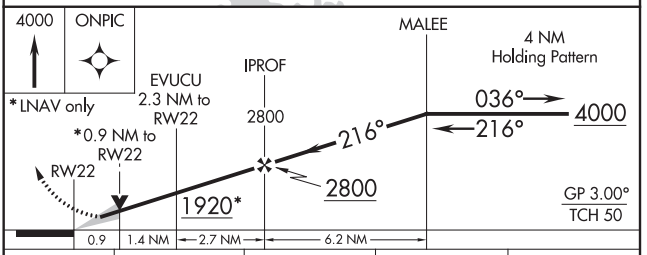
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 36°C (96°F). DME/DME RNP- 0.3 NA. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase 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) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95

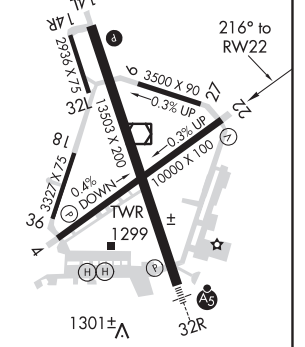
Procedure NA for arrivals at EPH VORTAC on airway radials 060 CW 135.





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



HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
MIRL Rwys 4-22 and 18-36

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 32R

GRANT COUNTY INTL (MWH)

WAAS	APP CRS	Rwy Idg	13492
CH 77799	324°	TDZE	1167
W32A		Apt Elev	1189

T A 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 (A5)

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) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95

MISSED APCH FIX

4 NM 144° 324° JUKRI

Procedure NA for arrivals at MWH VOR/DME on V497 northbound.

MOSES LAKE MWH 1251

1301± 1306 RW32R 1492±

1335 4000 to IWKID 145° (13.8)

UKMEZ 1.6 NM to RW32R

(FAF) ZAVYO

2800 (7.6) 324°

SUBDY 4100 182° (18.7)

MSA RW32R 25 NM 4200

(IAF) YUNUV 1779±

4000 NoPT 234° (9.5)

(IF/IAF) IWKID

144° 324°

(IAF) PEWYE 4000 NoPT 054° (7.9)

4000 NoPT 282° (7.6) (IAF) UPBOB

4000 NoPT 352° (6.8)

4 NM

4000 063° (19.6) FEBUS

(IAF) ODECE

ELEV 1189 D TDZE 1167

4000 JUKRI

*LNAV only

VGSI and RNAV glidepath not coincident. (VGSI Angle 3.00/TCH 76)

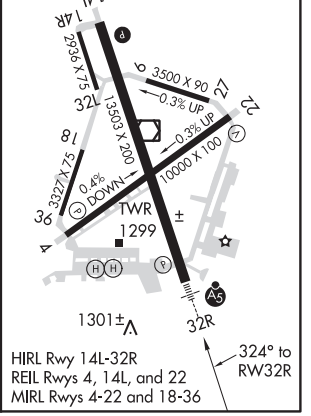
4 NM Holding Pattern

UKMEZ 1.6 NM to RW32R ZAVYO 2800 IWKID 144° 324° 4000

RW32R 1720* 2800 GP 3.00° TCH 55

1.6 NM 3.4 NM 7.6 NM

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

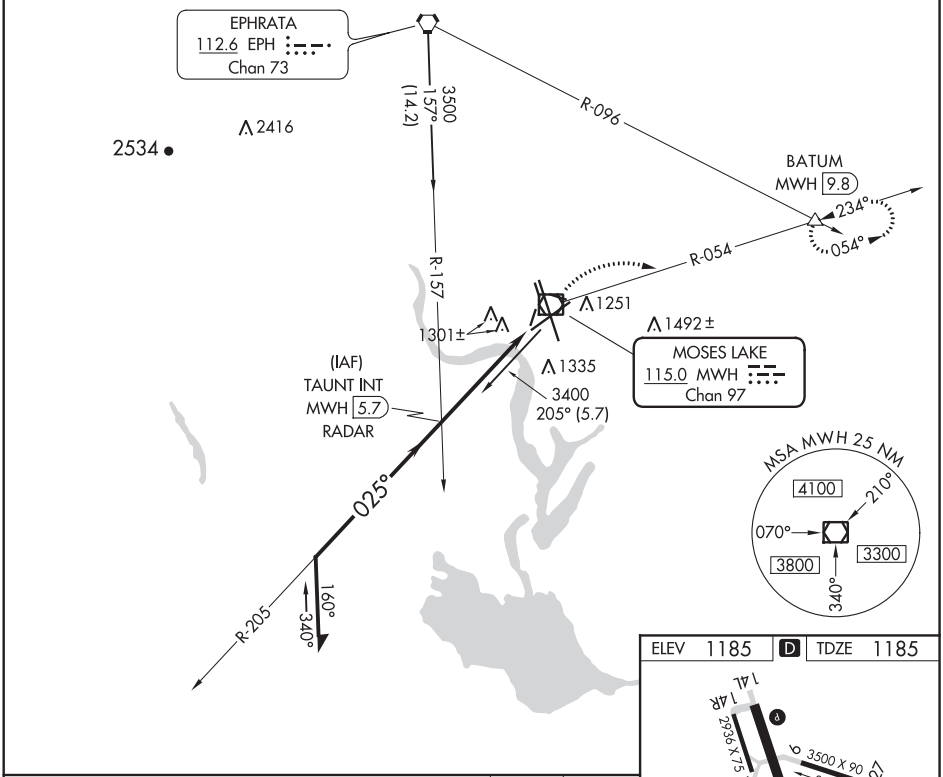
VOR/DME MWH	APP CRS	Rwy Idg	10000
115.0	025°	TDZE	1185
Chan 97		Apt Elev	1185

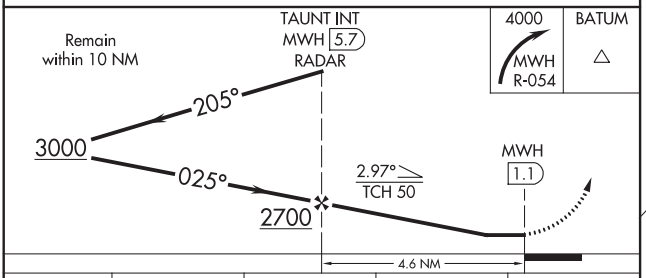
VOR RWY 4

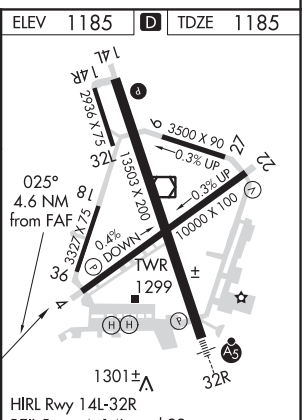
GRANT COUNTY INTL (MWH)

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) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95







HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
MIRL Rwys 4-22 and 18-36

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)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

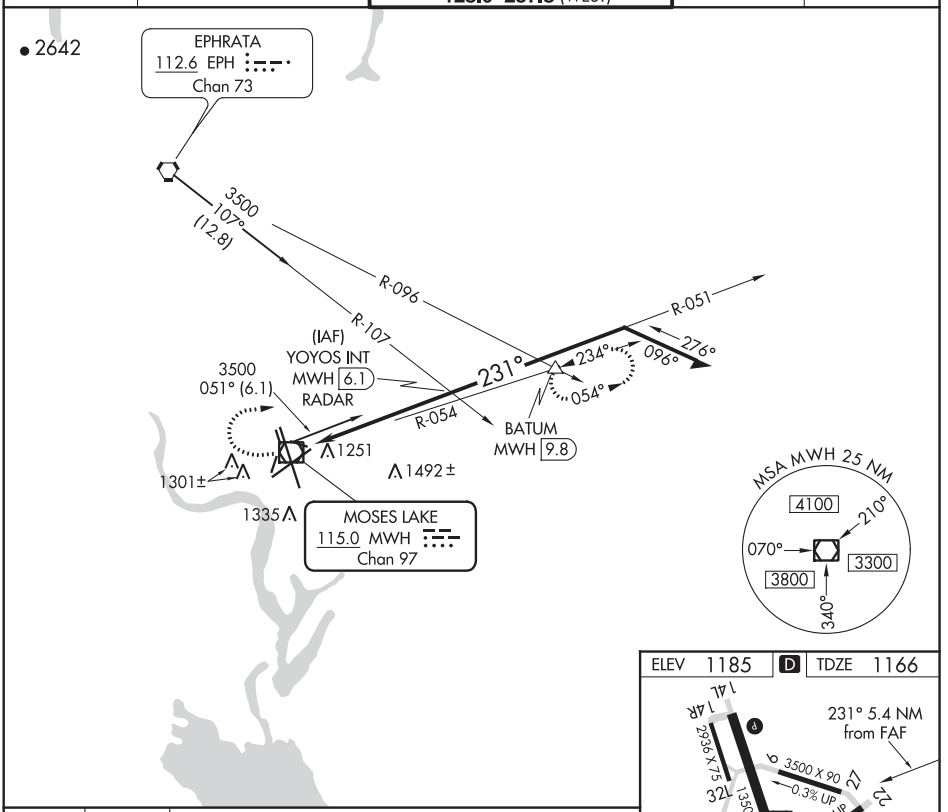
VOR/DME MWH	APP CRS	Rwy Idg	10000
115.0	231°	TDZE	1166
Chan 97		Apt Elev	1185

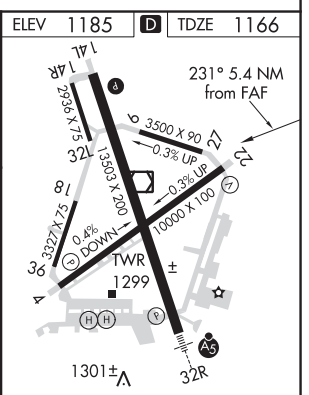
VOR RWY 22

GRANT COUNTY INTL (MWH)

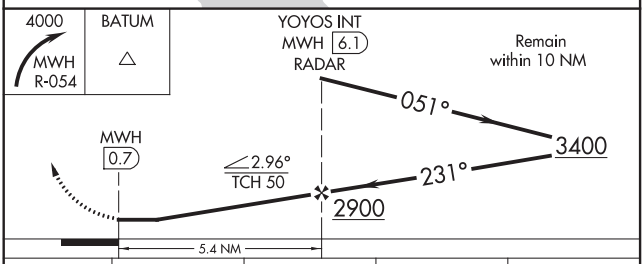
MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95





HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
MIRL Rwys 4-22 and 18-36



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

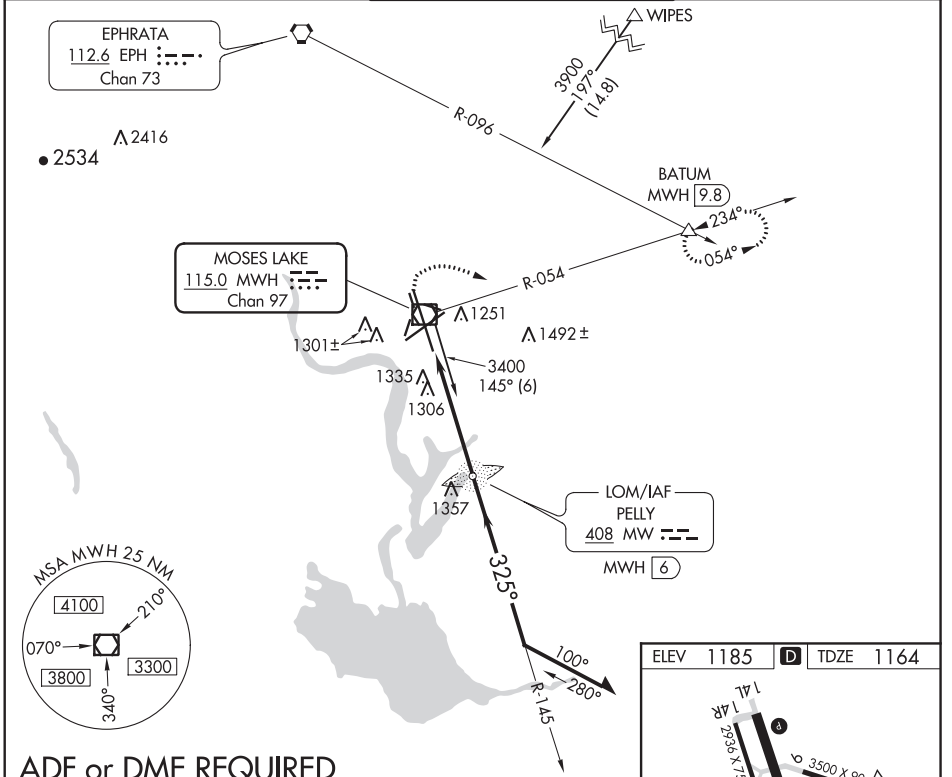
VOR RWY 32R
GRANT COUNTY INTL (MWH)

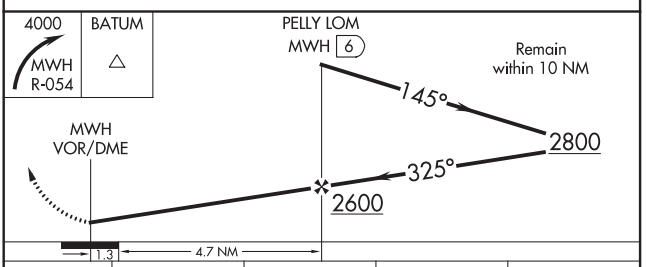
VOR/DME MWH 115.0 Chan 97	APP CRS 325°	Rwy Idg 13492 TDZE 1164 Apt Elev 1185

MALSR

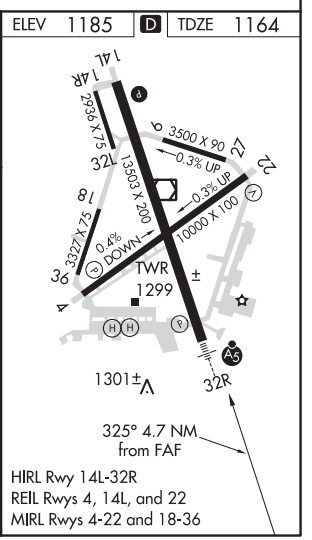
MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95





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)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

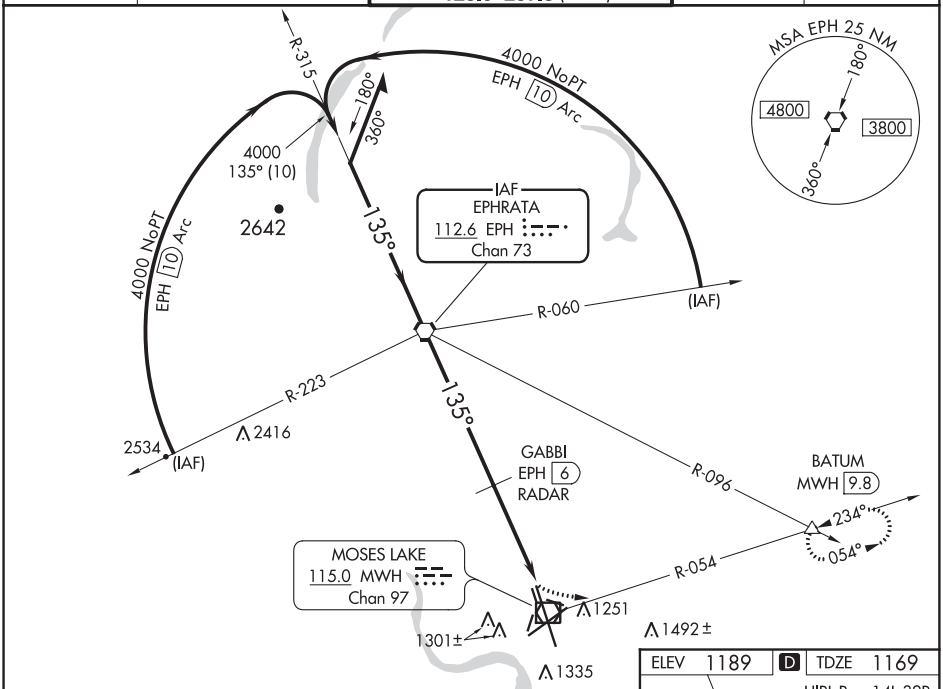
MOSES LAKE, WASHINGTON | AL-961 (FAA) | 19115

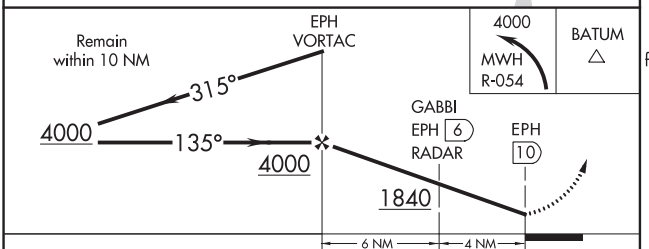
VORTAC EPH	APP CRS	Rwy Idg	13503
112.6	135°	TDZE	1169
Chan 73		Apt Elev	1189

VOR-1 RWY 14L
GRANT COUNTY INTL (MWH)

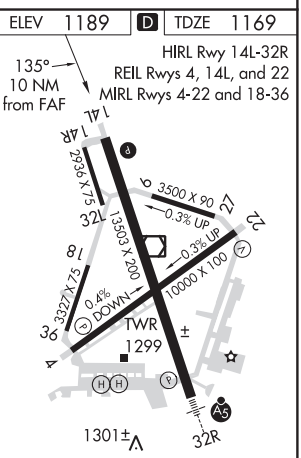
MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

ATIS	GRANT COUNTY APP CON ★	GRANT COUNTY TOWER ★	GND CON	UNICOM
119.05	126.4 379.95	118.25 (CTAF) 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)



FAF to MAP 10 NM					
Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20

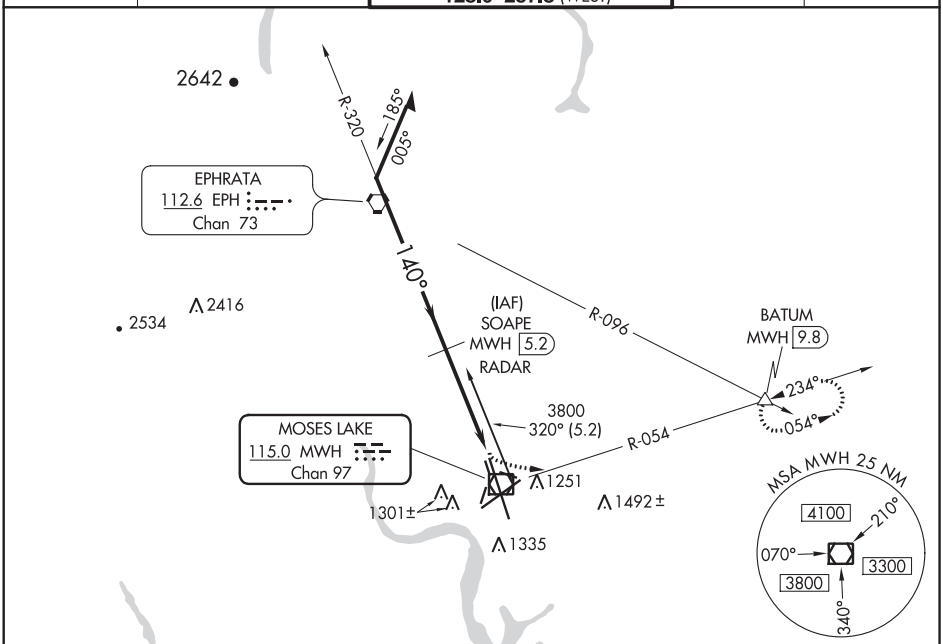
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME MWH	APP CRS	Rwy Idg	13503
115.0	140°	TDZE	1166
Chan 97		Apt Elev	1185

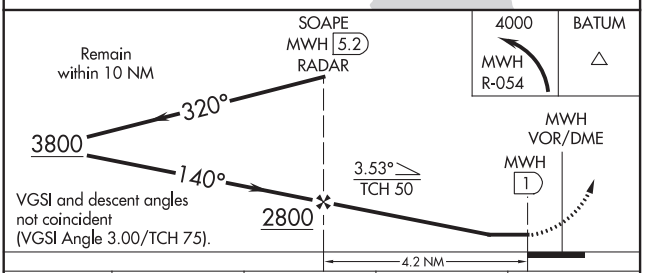
VOR-3 RWY 14L
GRANT COUNTY INTL (MWH)

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



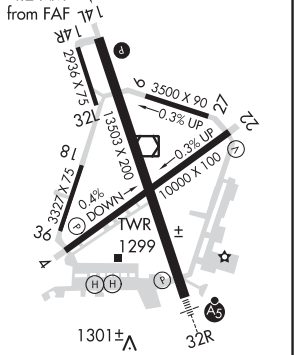
RADAR or DME REQUIRED



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

HIRL Rwy 14L-32R
REIL Rwys 4, 14L, and 22
MIRL Rwys 4-22 and 18-36



FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

MOSES LAKE, WASHINGTON | AL-961 (FAA) | 20030

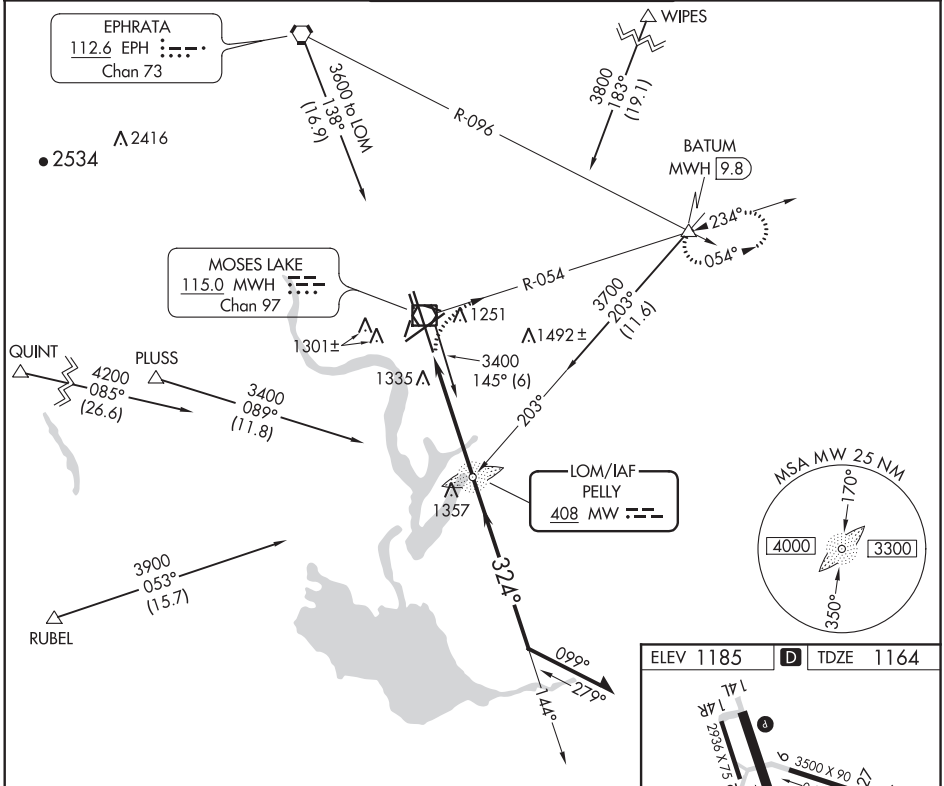
LOM MW	APP CRS	Rwy Idg	13492
408	324°	TDZE	1164
		Apt Elev	1185

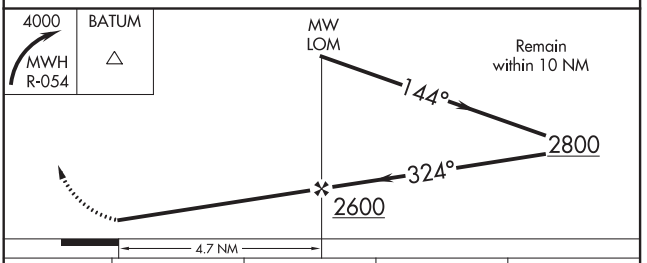
NDB RWY 32R
GRANT COUNTY INTL (MWH)

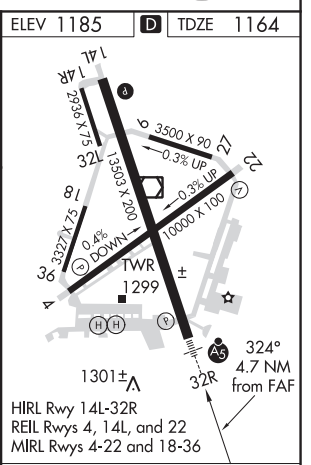
MALSR

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) 257.8 (EAST) 128.0 257.8 (WEST)	121.9	122.95



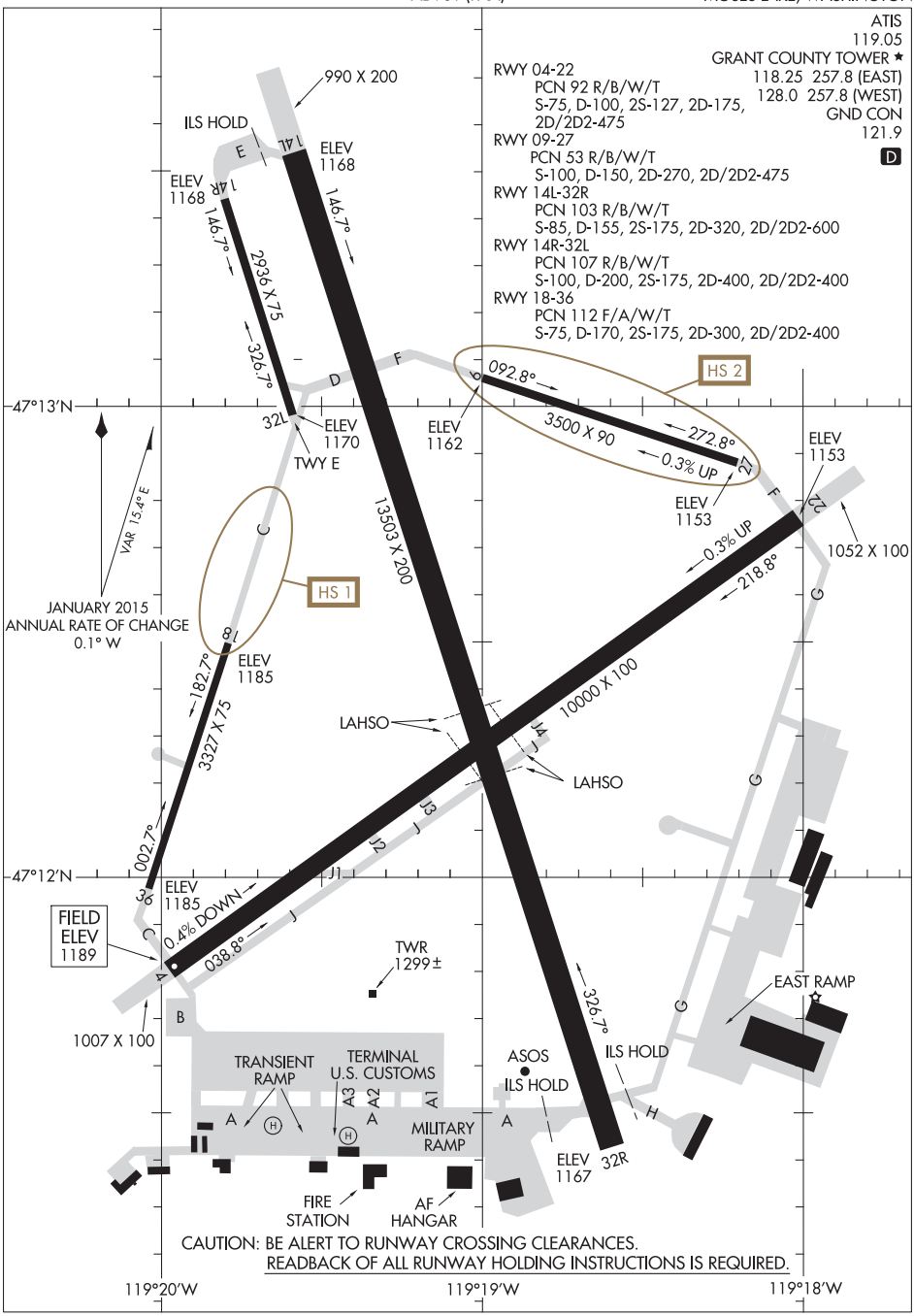




CATEGORY	A	B	C	D
S-32R	1680/40	516 (500-¾)	1680/50 516 (500-1)	1680-1½ 516 (500-1½)
CIRCLING	1680-1	495 (500-1)	1680-1½ 495 (500-1½)	1740-2 555 (600-2)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



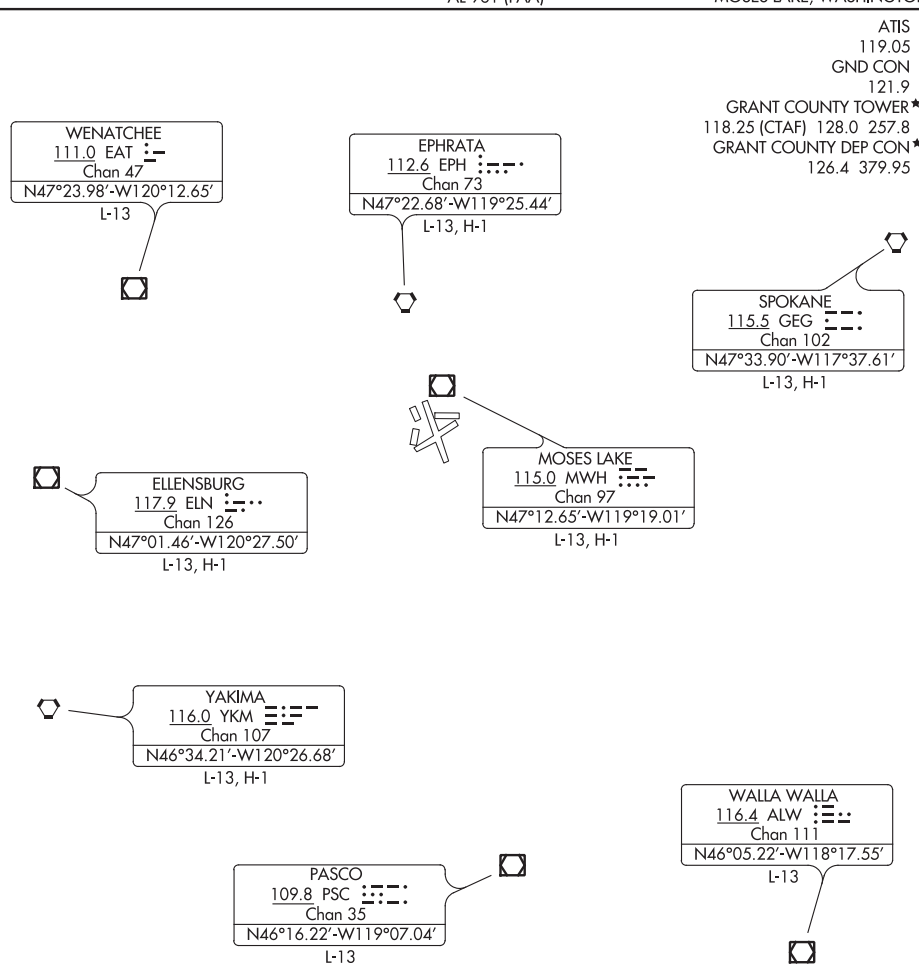
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18032

MOSES THREE DEPARTURE

AL-961 (FAA)

GRANT COUNTY INTL (MWH)
MOSES LAKE, WASHINGTON



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

ALL RUNWAYS: Fly runway heading, or ATC assigned heading, for vector to assigned route/fix. Maintain 5000 or ATC assigned altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions received for 1 minute after departure, maintain runway heading, or ATC assigned heading to 6000, then climbing right turn to filed altitude, direct MWH VOR/DME, then via assigned fix/route.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 28

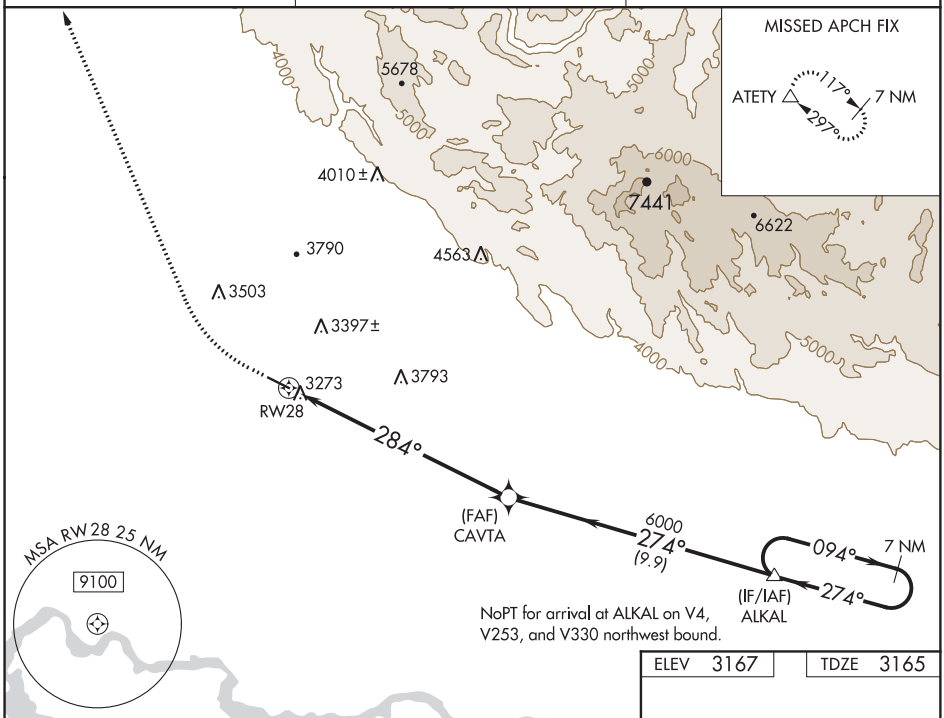
MOUNTAIN HOME MUNI (U76)

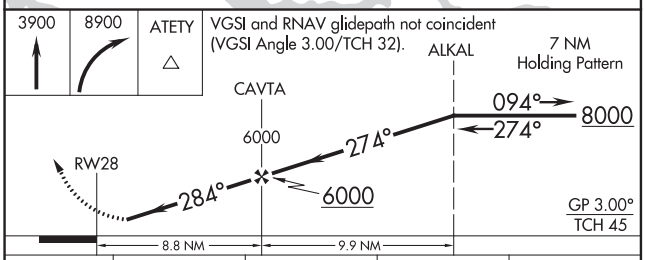
WAAS	APP CRS	Rwy Idg	5000
CH 42815	284°	TDZE	3165
W28A		Apt Elev	3167

T 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.

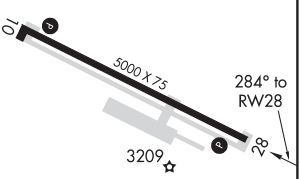
MISSED APPROACH: Climb to 3900 then climbing right turn 8900 direct ATETY and hold, continue climb-in-hold to 8900.

MUO AWOS	MOUNTAIN HOME APP CON ★	AUNICOM
273.5	124.8 259.1	122.8 (CTAF) L





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

17229

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]

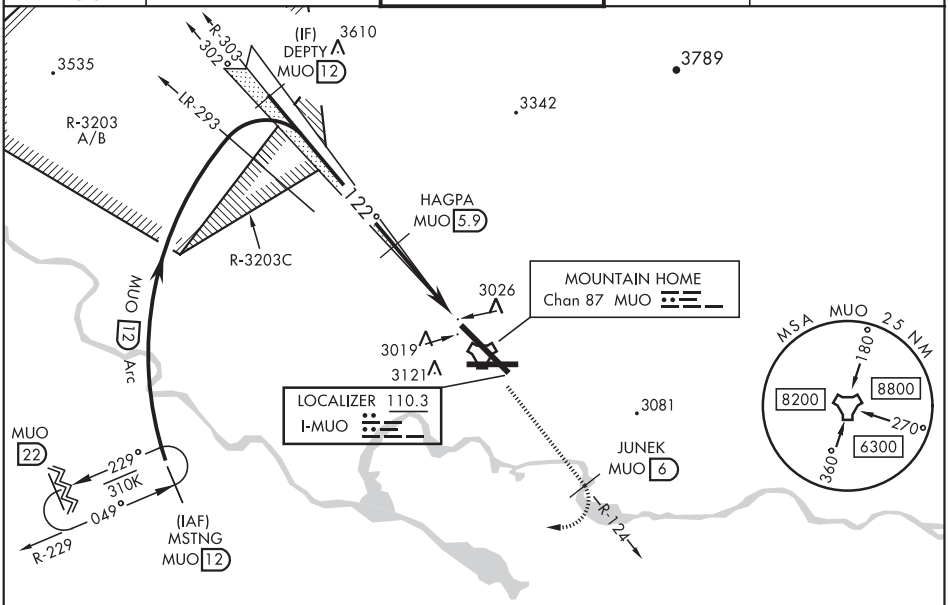
MOUNTAIN HOME AFB (KMUO)

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

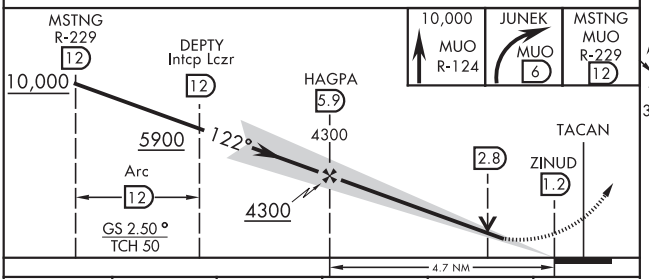


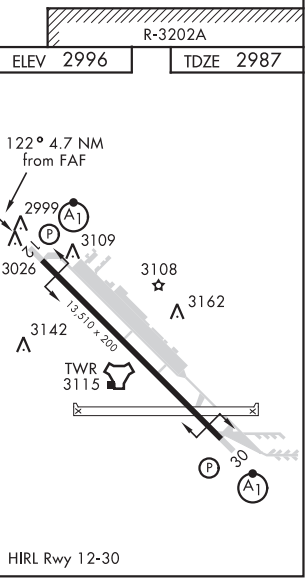
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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)

HIRL Rwy 12-30

MOUNTAIN HOME, IDAHO

43°03'N-115°52'W

MOUNTAIN HOME AFB (KMUO)

Amdt 4 17AUG17

ILS or LOC Z RWY 12

MOUNTAIN HOME, IDAHO

ILS or LOC Z RWY 30

LOC I-BRN	APCH CRS	Rwy ldg 13,510 / TDZE 2996 / Arpt Elev 2996
111.7	302°	AL-323 [USAF]

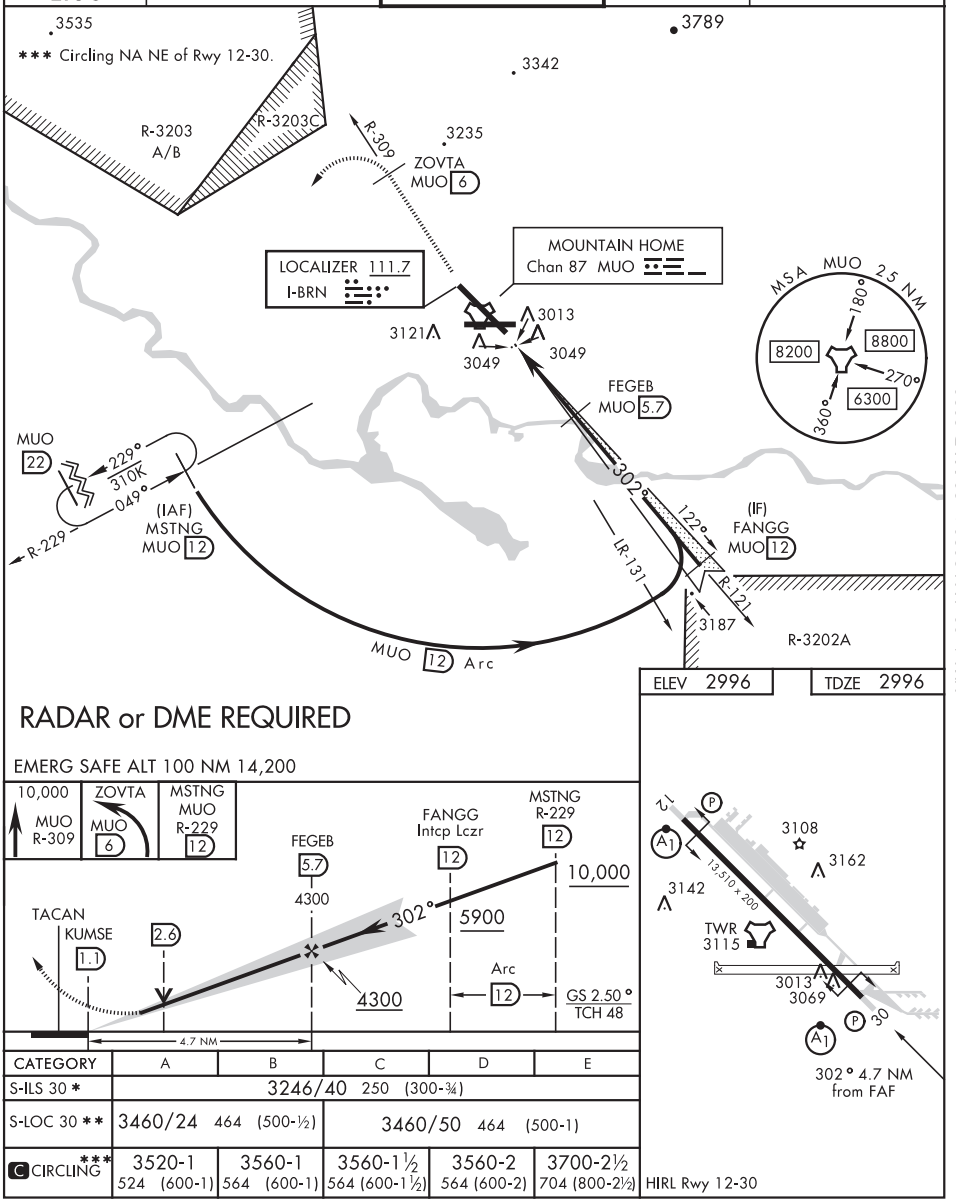
MOUNTAIN HOME AFB (KMUO)

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

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

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

MOUNTAIN HOME, IDAHO 43°03'N-115°52'W MOUNTAIN HOME AFB (KMUO)

Amdt 3 17AUG17

ILS or LOC Z RWY 30

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

17229

MOUNTAIN HOME, IDAHO

TACAN Z RWY 12

TACAN	APCH CRS	Rwy ldg	13,510
MUO Chan 87	129°	TDZE	2987
		Arpt Elev	2996

AL-323 [USAF]

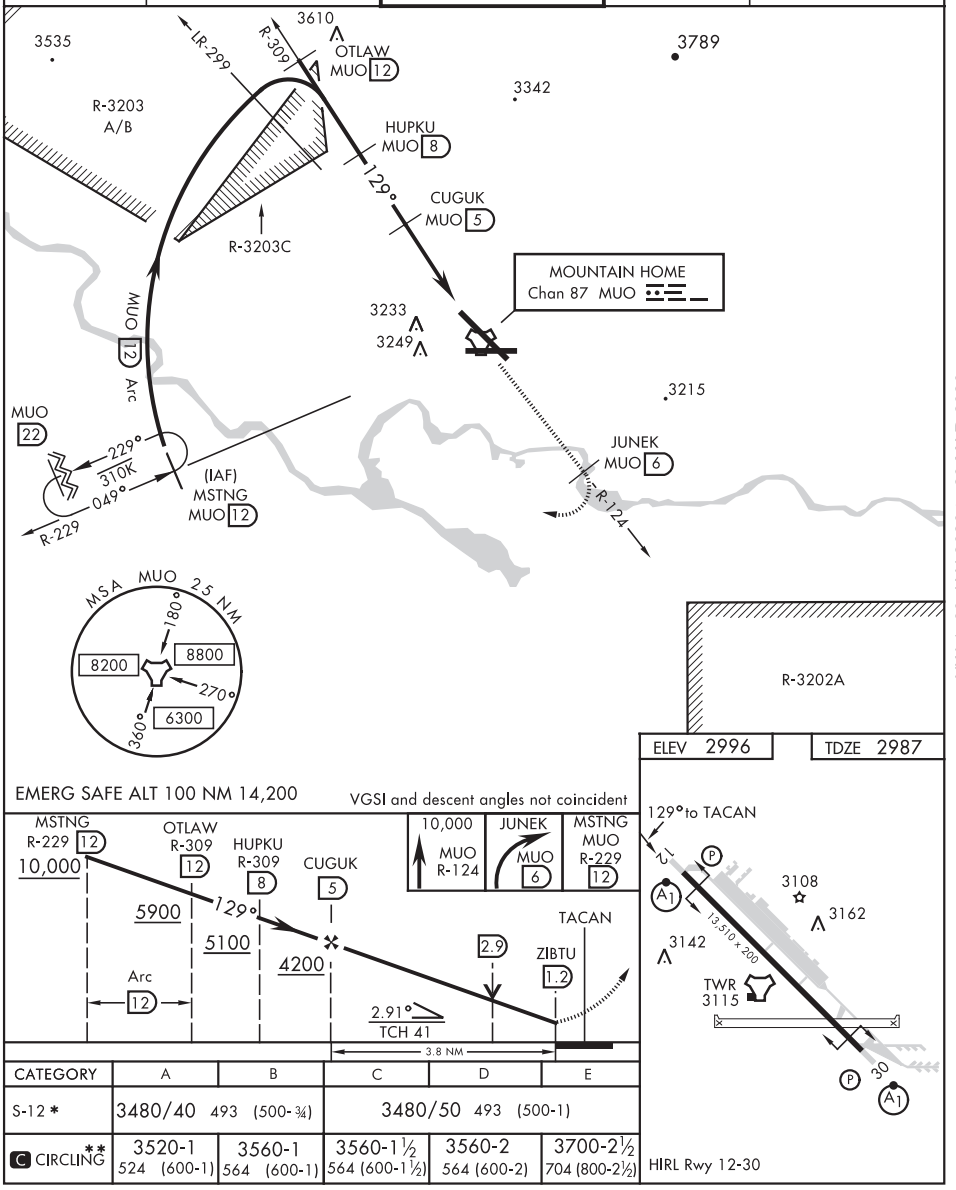
MOUNTAIN HOME AFB (KMUO)

* 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



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)

HIRL Rwy 12-30

MOUNTAIN HOME, IDAHO

43°03'N-115°52'W

MOUNTAIN HOME AFB (KMUO)

Amdt 3 17AUG17

TACAN Z RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

MOUNTAIN HOME, IDAHO

TACAN Z RWY 30

TACAN	APCH CRS	Rwy ldg	13,510
MUO Chan 87	295°	TDZE	2996
		Arpt Elev	2996

AL-323 [USAF]

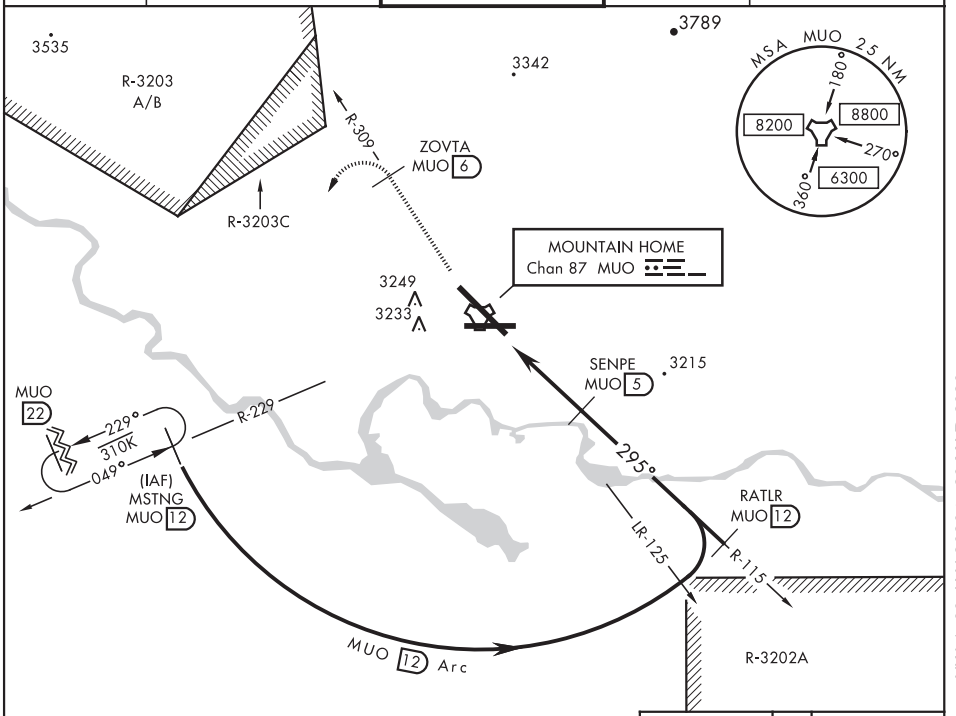
MOUNTAIN HOME AFB (KMUO)

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)

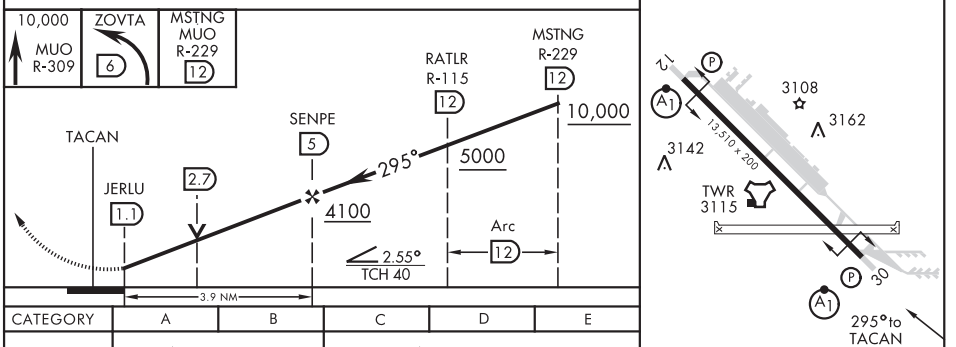
MISSED APPROACH: Climb to 10,000 via MUO R-309 to ZOVTA/6 DME, turn left and intercept MUO R-229 to MSTNG/12 DME and hold. Continue climb in hold to 10,000.

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



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
Amdt 3 17AUG17

43°03'N-115°52'W

MOUNTAIN HOME AFB (KMUO)

TACAN Z RWY 30

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

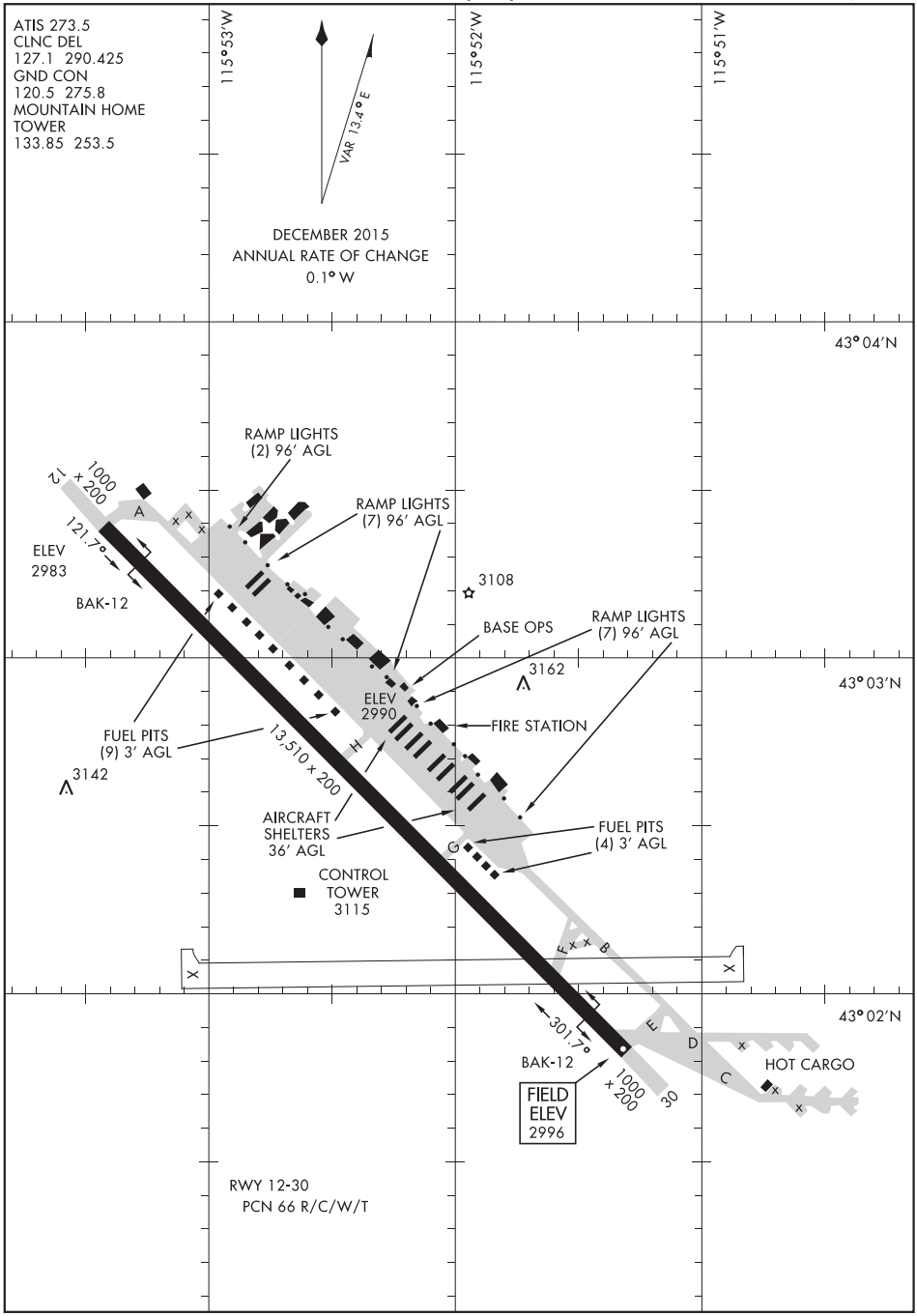
15344

AIRPORT DIAGRAM

MOUNTAIN HOME AFB (KMUO)

AFD-323 [USAF]

MOUNTAIN HOME, IDAHO



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

MOUNTAIN HOME, IDAHO

MOUNTAIN HOME AFB (KMUO)

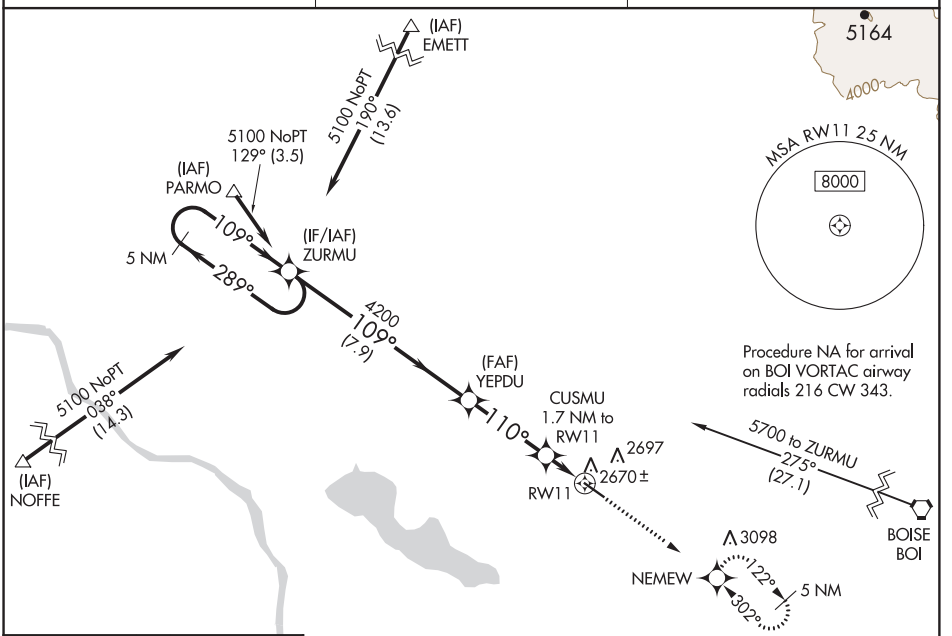
WAAS	APP CRS	Rwy Idg	5000
CH 78202	110°	TDZE	2537
W11A		Apt Elev	2537

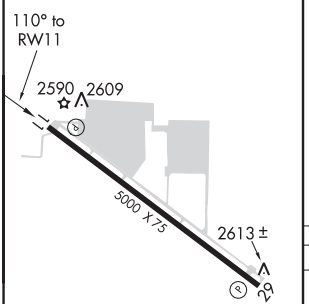
RNAV (GPS) RWY 11
NAMPA MUNI (MAN)

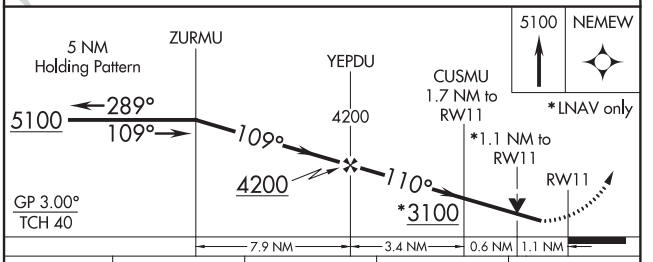
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). When Circling to Rwy 29 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. DME/DME RNP-0.3 NA. Rwy 11 helicopter visibiliy reduction below ¾ SM NA.

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







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)

MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NAMPA, IDAHO | AL-6807 (FAA) | 19283

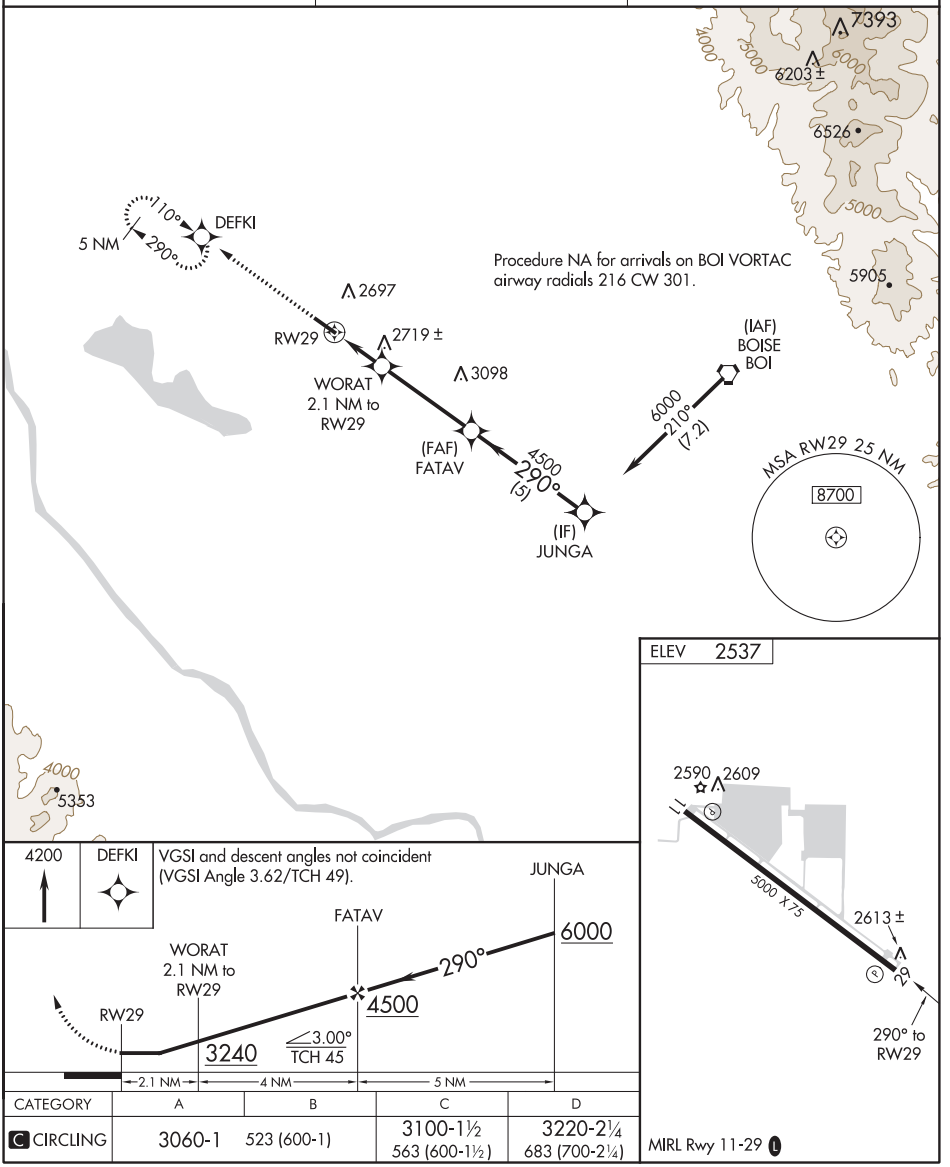
APP CRS	Rwy Idg	N/A
290°	TDZE	N/A
	Apt Elev	2537

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)

MIRL Rwy 11-29 L

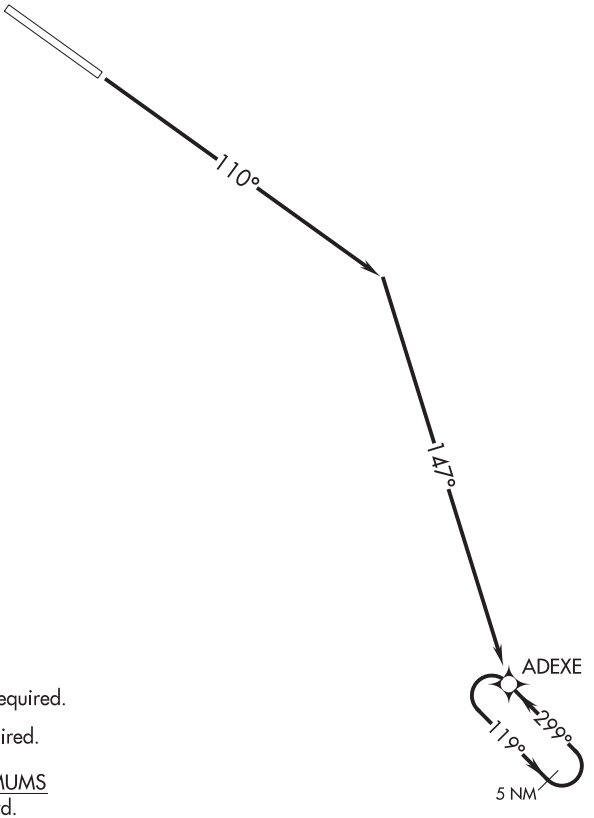
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ADEXE ONE DEPARTURE (OBSTACLE) (RNAV)

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

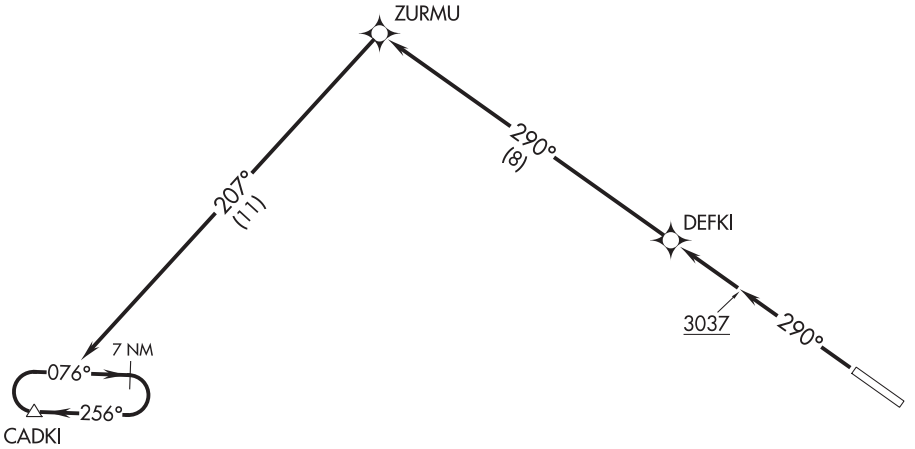
(CADKI1.CADKI) 20030

CADKI ONE DEPARTURE (OBSTACLE) (RNAV)

AL-6807 (FAA)

NAMPA MUNI (MAN)
NAMPA, IDAHO

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, 30 JAN 2020 to 26 MAR 2020

WAAS CH 56525 W14A	APP CRS 136°	Rwy Idg 5310 TDZE 4168 Apt Elev 4176

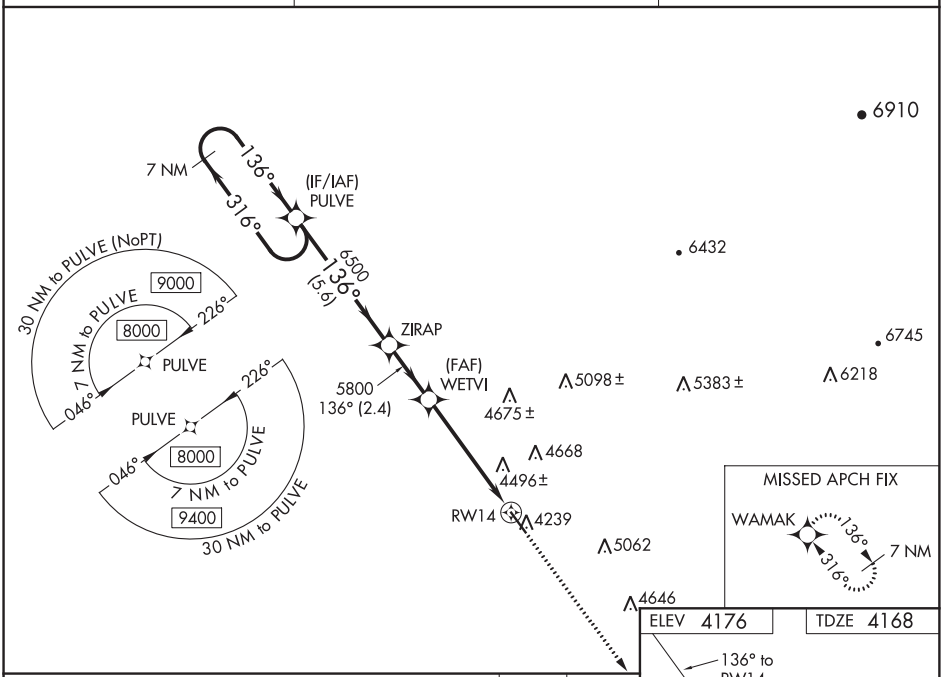
RNAV (GPS) RWY 14
MONDELL FIELD (ECS)

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)

REIL Rwy 14 L
MIRL Rwy 14-32 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NEWCASTLE, WYOMING | AL-5774 (FAA) | 19115

RNAV (GPS) RWY 32

MONDELL FIELD (ECS)

WAAS	APP CRS	Rwy Idg	5310
CH 61225	316°	TDZE	4176
W32A		Apt Elev	4176

RNP APCH.

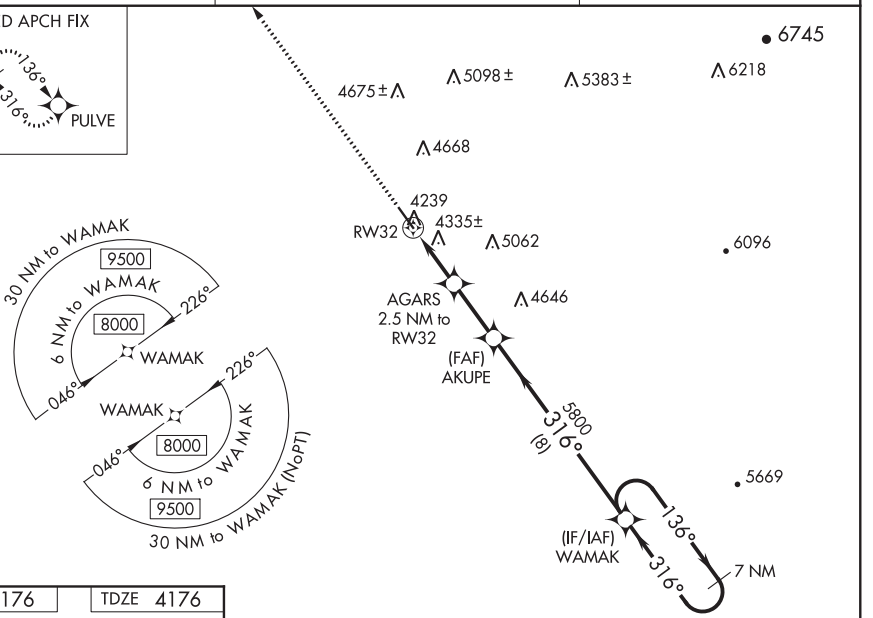
When Newcastle altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 53°C (128°F). Circling NA northeast of Rwy 14-32. For inop ODAL, increase LNAV/VNAV visibility all Cats and LNAV Cats C/D ⅛ mile. Inop table does not apply to LPV all Cats and LNAV Cats A/B.

ODALS

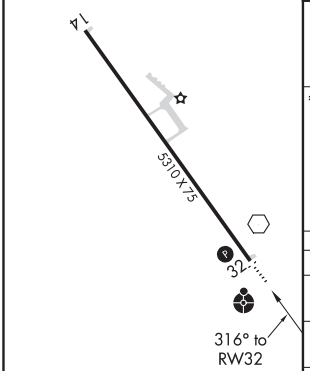
MISSED APPROACH: Climb to 9500 direct PULVE and hold, continue climb-in-hold to 9500.

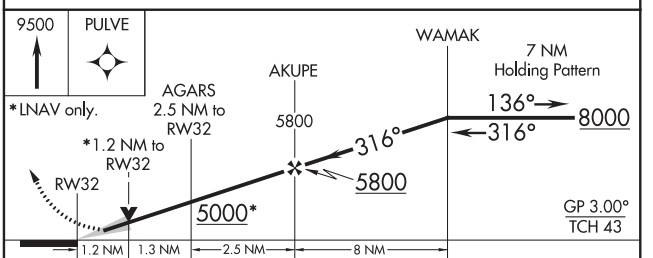
AWOS-3PT	DENVER CENTER	UNICOM
118.0	127.95 338.2	122.8 (CTAF) L

MISSED APCH FIX



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

NEWCASTLE, WYOMING
Amdt 1A 28MAR19

43°53′N-104°19′W

MONDELL FIELD (ECS)

RNAV (GPS) RWY 32

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 32
MONDELL FIELD (ECS)

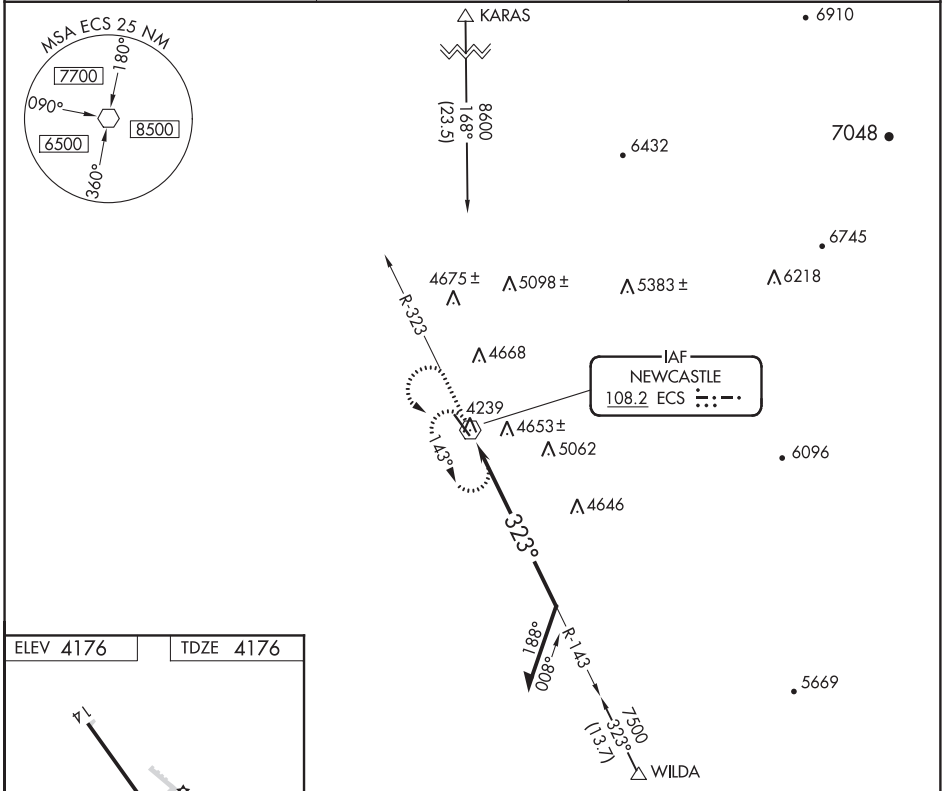
VOR ECS	APP CRS	Rwy Idg	5310
108.2	323°	TDZE	4176
		Apt Elev	4176

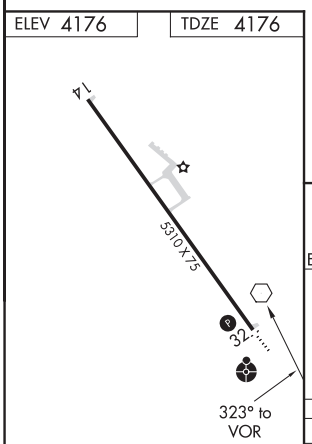
When Newcastle altimeter setting not received, procedure NA. Circling NA NE of Rwy 14-32.

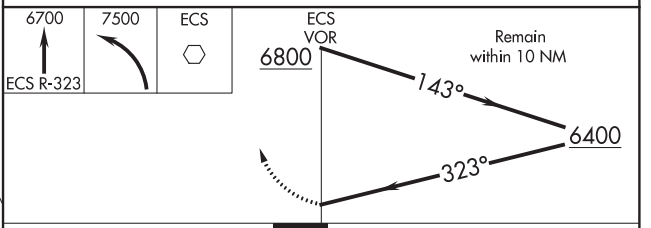
ODALS

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







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)

REIL Rwy 14 L
MIRL Rwy 14-32 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NEWPORT, OREGON | AL-735 (FAA) | 17173

ILS or LOC RWY 16

NEWPORT MUNI (ONP)

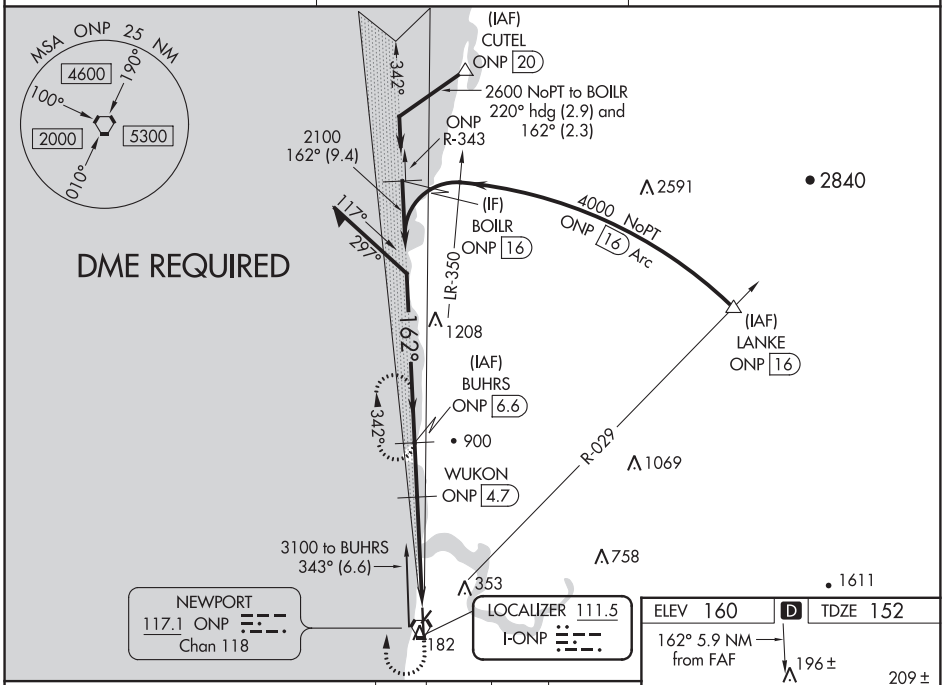
LOC I-ONP	APP CRS		
111.5	162°	Rwy Idg	5398
		TDZE	152
		Apt Elev	160

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

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)



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 53439 W16A	APP CRS 162°	Rwy Idg 5398 TDZE 152 Apt Elev 160

RNAV (GPS) RWY 16

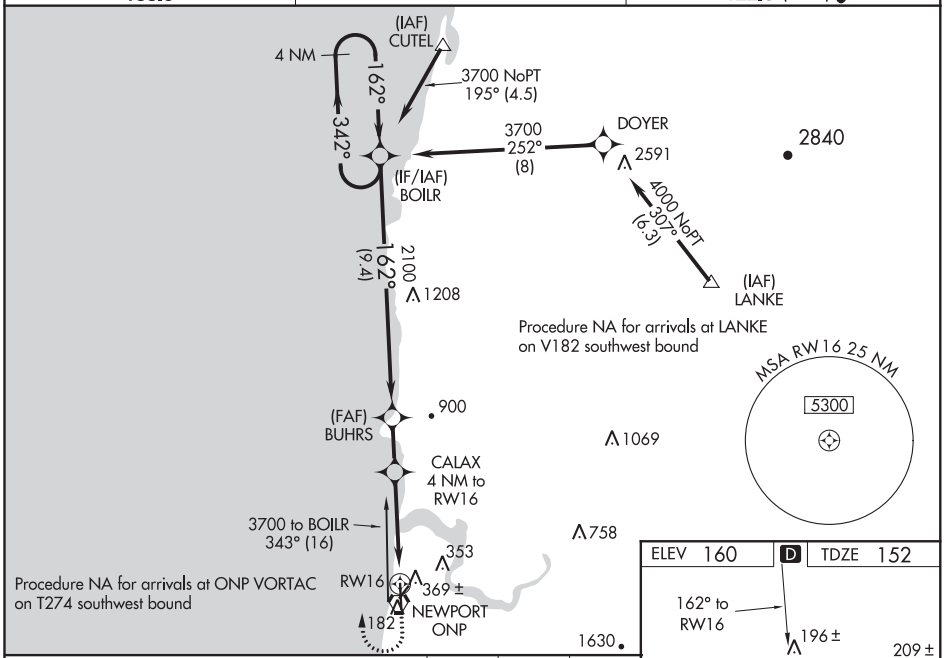
NEWPORT MUNI (ONP)

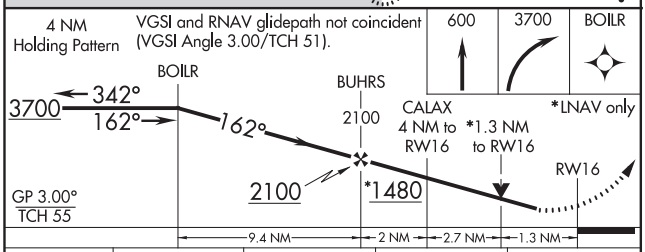
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Tillamook altimeter setting. DME/DME RNP-0.3 NA. Inop table does not apply to LPV all Cats. When local altimeter setting not received, use Tillamook altimeter setting: increase LPV 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

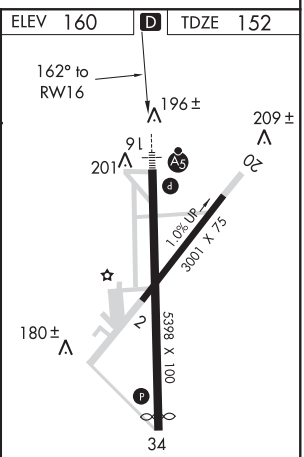
MISSED APPROACH: Climb to 600 then climbing right turn to 3700 direct BOILR and hold.

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)



REIL Rwy 34 L
MIRL Rwy 2-20 L
HIRL Rwy 16-34 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NEWPORT, OREGON | AL-735 (FAA) | 18032

RNAV (GPS) RWY 34

NEWPORT MUNI (ONP)

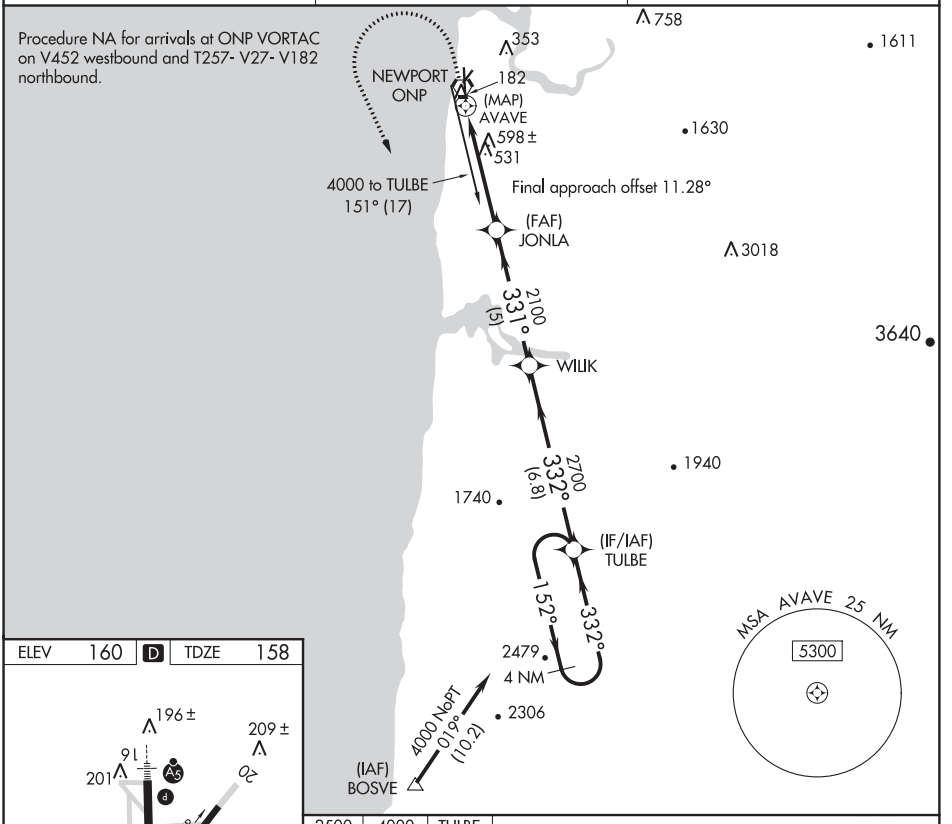
APP CRS	Rwy ldg	5098
331°	TDZE	158
	Apt Elev	160

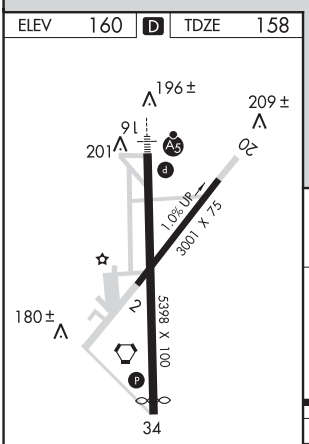
Rwy 34 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500 then climbing left turn to 4000 direct TULBE and hold.

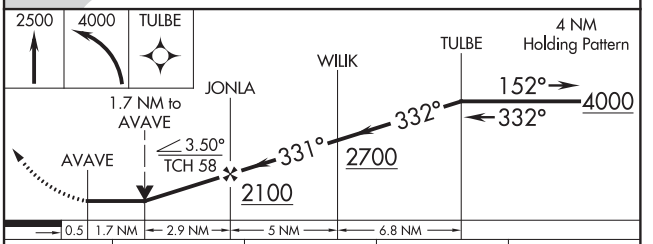
AWOS-3	SEATTLE CENTER	UNICOM
133.9	125.8 291.7	122.8 (CTAF) L

Procedure NA for arrivals at ONP VORTAC on V452 westbound and T257- V27- V182 northbound.





REIL Rwy 34 L
MIRL Rwy 2-20 L
HIRL Rwy 16-34 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)

NEWPORT, OREGON
Amdt 1B 01FEB18

44°35′N-124°03′W

NEWPORT MUNI (ONP)

RNAV (GPS) RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 16
NEWPORT MUNI (ONP)

VORTAC ONP	APP CRS	Rwy Idg	5398
117.1	170°	TDZE	152
Chan 118		Apt Elev	160

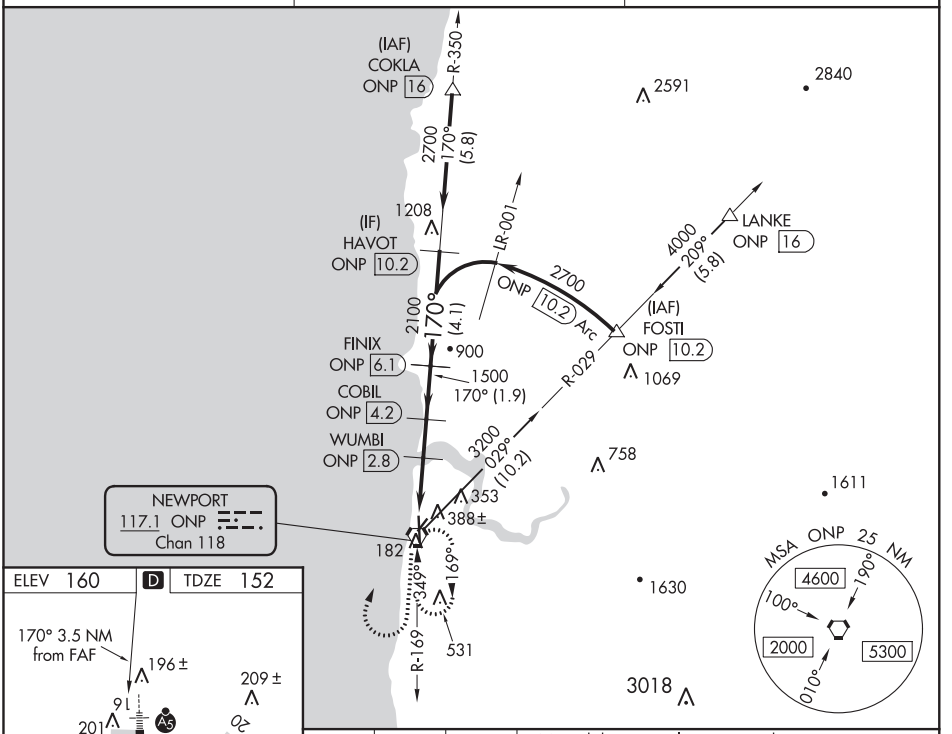
DME required

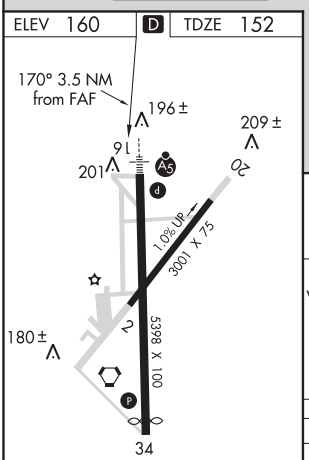
T Rwy 16 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Tillamook altimeter setting; increase all MDA 140 feet; increase S-16 Cat C and D visibility ⅜ SM and increase Circling Cat B visibility ¼ SM. For inop ALS when using Tillamook altimeter setting; increase S-16 Cat A/B visibility to 1 SM Cat C/D to 2 SM. For inop ALS, increase S-16 Cat A/B visibility to 1 SM and Cat C/D to 1⅝ SM.

MALSR

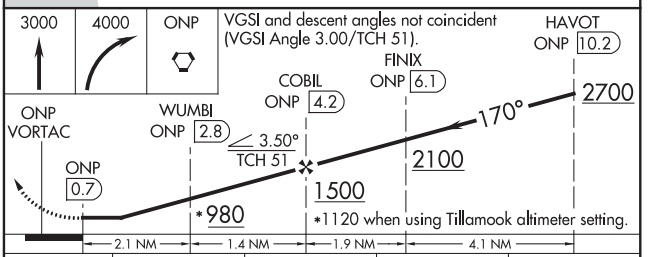
MISSED APPROACH: Climb to 3000 then climbing right turn to 4000 direct ONP VORTAC and hold.

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-16	720-¾ 568 (600-¾)		720-1¼ 568 (600-1¼)	
C CIRCLING	880-1 720 (800-1)	1000-1¼ 840 (900-1¼)	1400-3 1240 (1300-3)	1600-3 1440 (1500-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NEWPORT, OREGON AL-735 (FAA) 17089

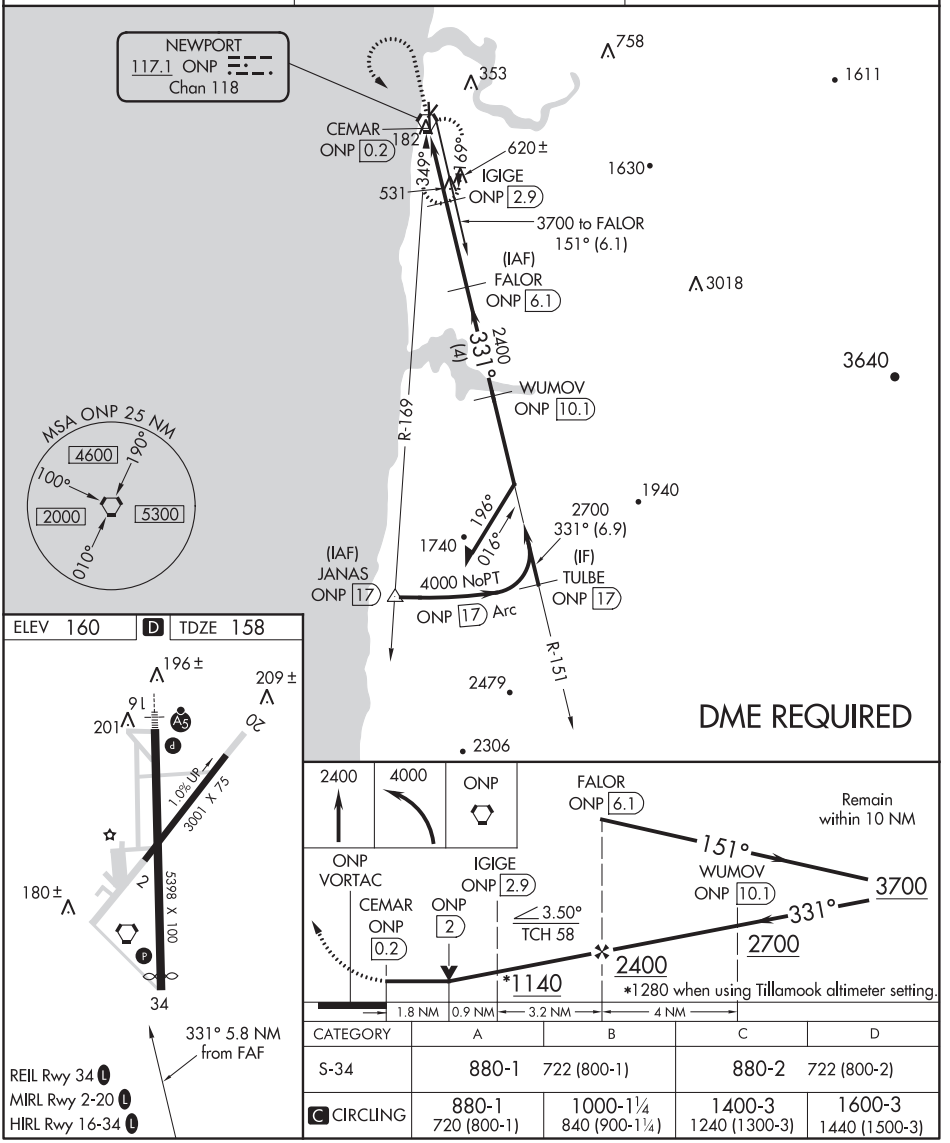
VORTAC ONP	APP CRS	Rwy Idg	5098
117.1	331°	TDZE	158
Chan 118		Apt Elev	160

VOR RWY 34
NEWPORT MUNI (ONP)

DME required. VDP NA when using Tillamook altimeter setting. When local altimeter setting not received, use Tillamook altimeter setting; increase all MDA 140 feet; increase S-34 Cat B/C/D visibility ½ SM, and Circling Cat A and B visibility ¼ SM. Rwy 34 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2400 then climbing left 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



CATEGORY	A	B	C	D
S-34	880-1	722 (800-1)	880-2	722 (800-2)
C CIRCLING	880-1 720 (800-1)	1000-1¼ 840 (900-1¼)	1400-3 1240 (1300-3)	1600-3 1440 (1500-3)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC ONP	APP CRS	Rwy Idg	N/A
117.1	146°	TDZE	N/A
Chan 118		Apt Elev	160

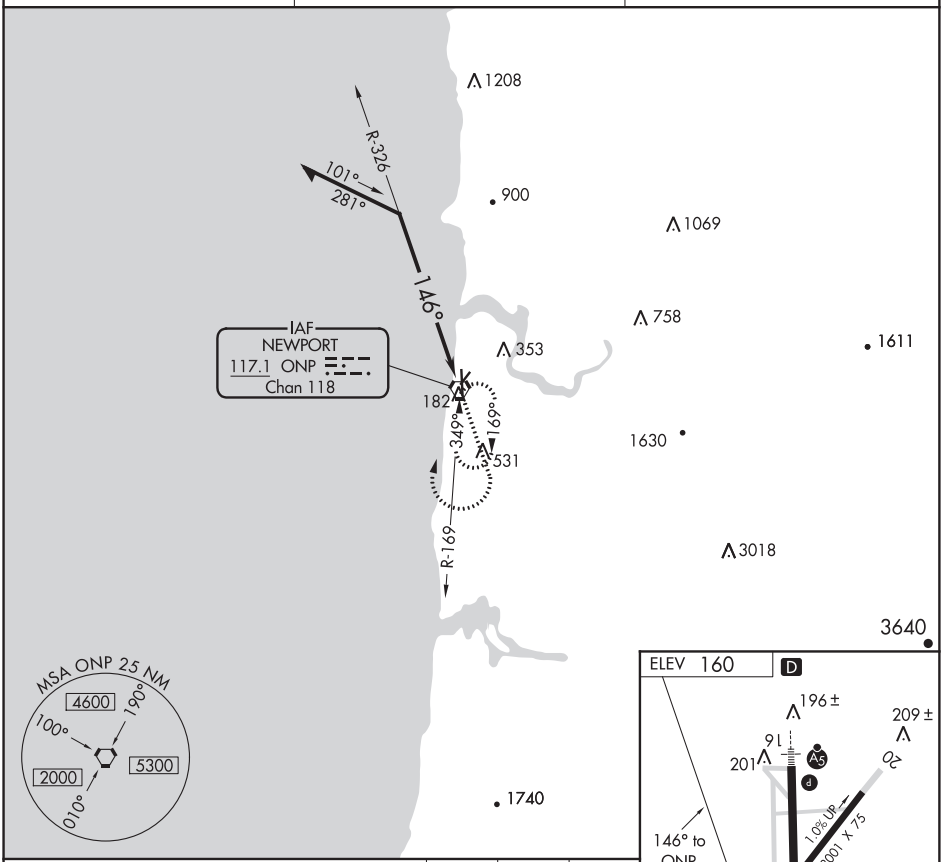
VOR-A

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



CATEGORY	A	B	C	D
C CIRCLING	1060-1¼	900 (900-1¼)	1400-3 1240 (1300-3)	1600-3 1440 (1500-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(ONP1.ONP) 16203

NEWPORT ONE DEPARTURE (OBSTACLE)

SL-735 (FAA)

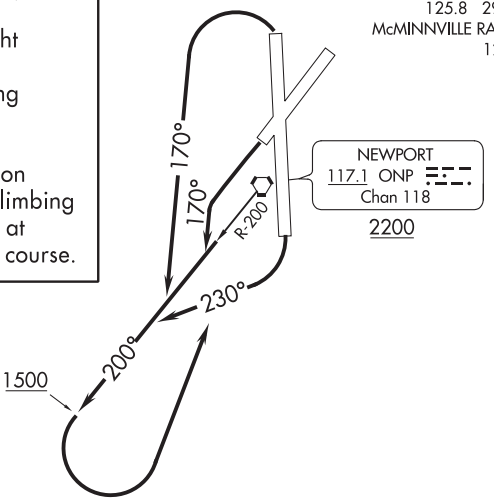
NEWPORT MUNI (ONP)
NEWPORT, OREGON

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, 30 JAN 2020 to 26 MAR 2020

LOC I-OTH	APP CRS	Rwy Idg	5320
108.5	046°	TDZE	16
		Apt Elev	17

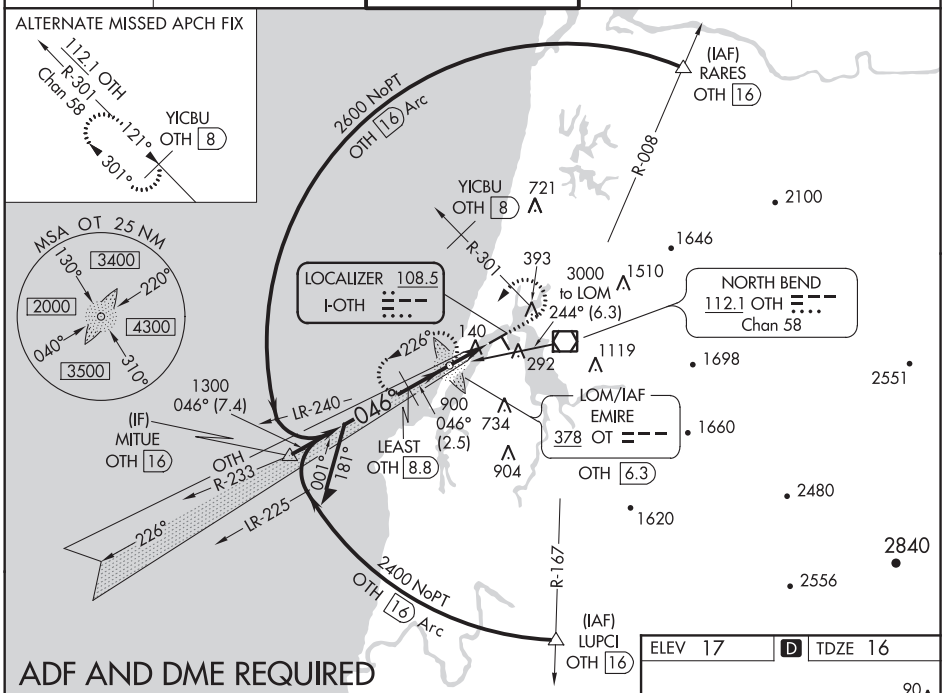
ILS or LOC RWY 4
SOUTHWEST OREGON RGNL (OTH)

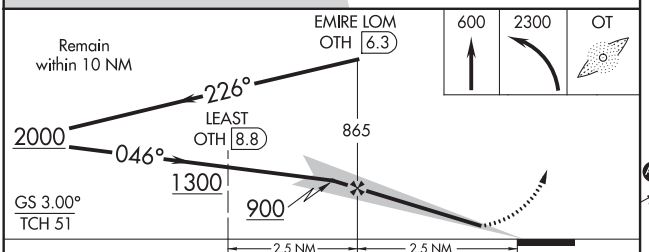
T Night landing: Rwy 31 NA. For inop MALSR, increase S-ILS 4 all Cats visibility to ⅞ mile, S-LOC 4 Cat C/D visibility to 1⅛ mile. ADF and DME required.
A *Missed approach requires minimum climb of 248 feet per NM to 800.

MALSR

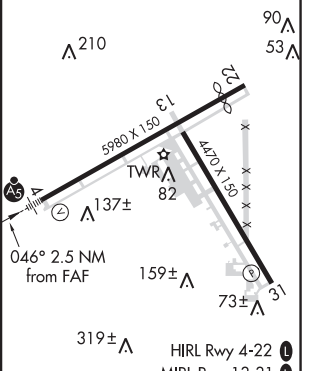
MISSED APPROACH: Climb to 600 then climbing left turn to 2300 direct EMIRE LOM and hold, continue climb-in-hold to 2300.

AWOS-3PT	SEATTLE CENTER	NORTH BEND TOWER*	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF) L	122.4 255.4	127.1





CATEGORY	A	B	C	D
S-ILS 4*	216-½ 200 (200-½)			
S-ILS 4	278-½ 262 (300-½)			
S-LOC 4	400-½ 384 (400-½)		400-¾ 384 (400-¾)	
C CIRCLING	680-1 663 (700-1)	820-1 803 (900-1)	1100-3 1083 (1100-3)	1180-3 1163 (1200-3)



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NORTH BEND, OREGON | AL-929 (FAA) | 19283

APP CRS	Rwy Idg	5320
046°	TDZE	16
	Apt Elev	17

RNAV (RNP) Z RWY 4

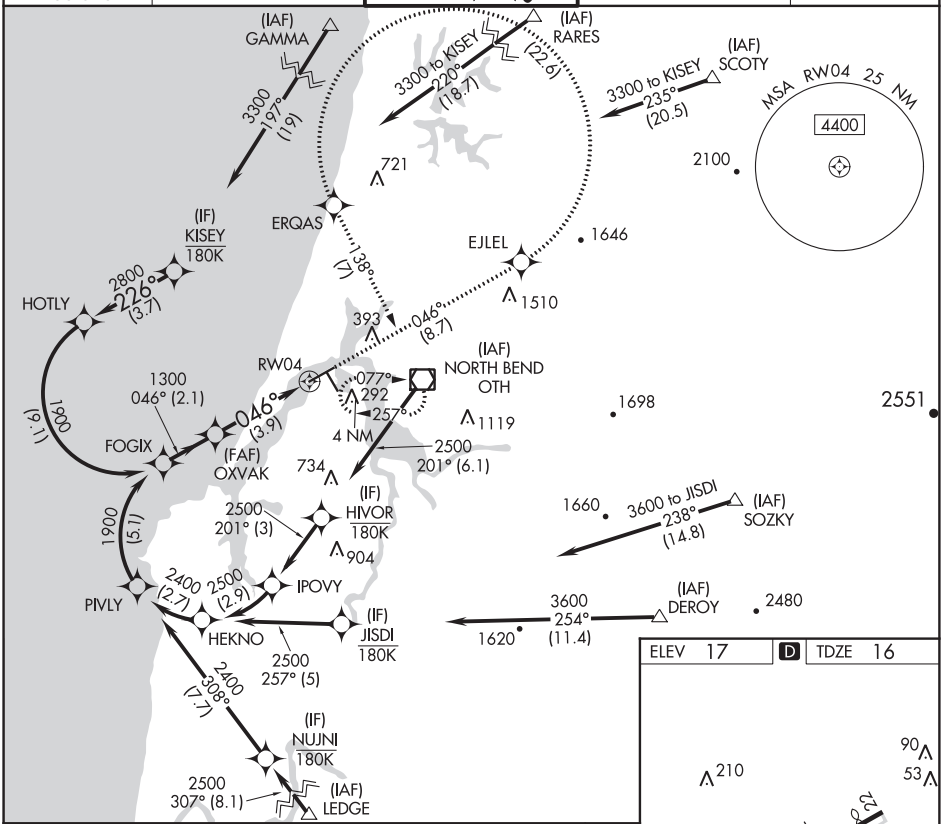
SOUTHWEST OREGON RGNL (OTH)

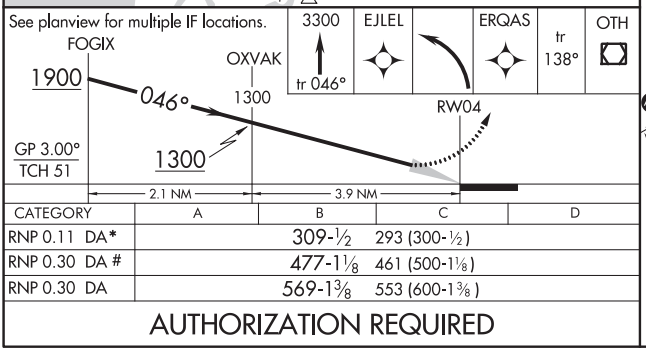
RF required. GPS required. For inop MALSR, increase RNP 0.30# all Cats visibility to 1½ mile. For uncompensated Baro-VNAV systems, procedure NA below -2°C (29°F) or above 54°C (130°F).
* Missed approach requires a minimum climb of 400 feet per NM to 1200.
# Missed approach requires a minimum climb of 255 feet per NM to 2400.

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.

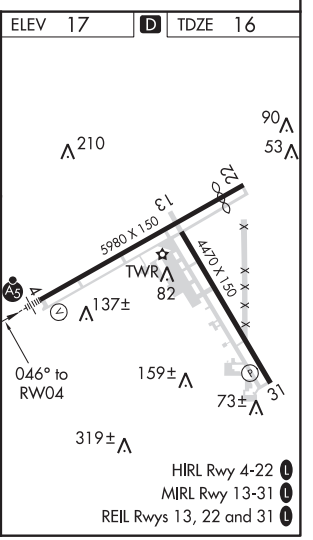
AWOS-3PT	SEATTLE CENTER	NORTH BEND TOWER★	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF) L	122.4 255.4	127.1





CATEGORY	A	B	C	D
RNP 0.11 DA*		309-½	293 (300-½)	
RNP 0.30 DA #		477-1⅛	461 (500-1⅛)	
RNP 0.30 DA		569-1⅜	553 (600-1⅜)	

AUTHORIZATION REQUIRED



NORTH BEND, OREGON
Amdt 1 25JUN15

43°25'N-124°15'W

SOUTHWEST OREGON RGNL (OTH)
RNAV (RNP) Z RWY 4

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 4

SOUTHWEST OREGON RGNL (OTH)

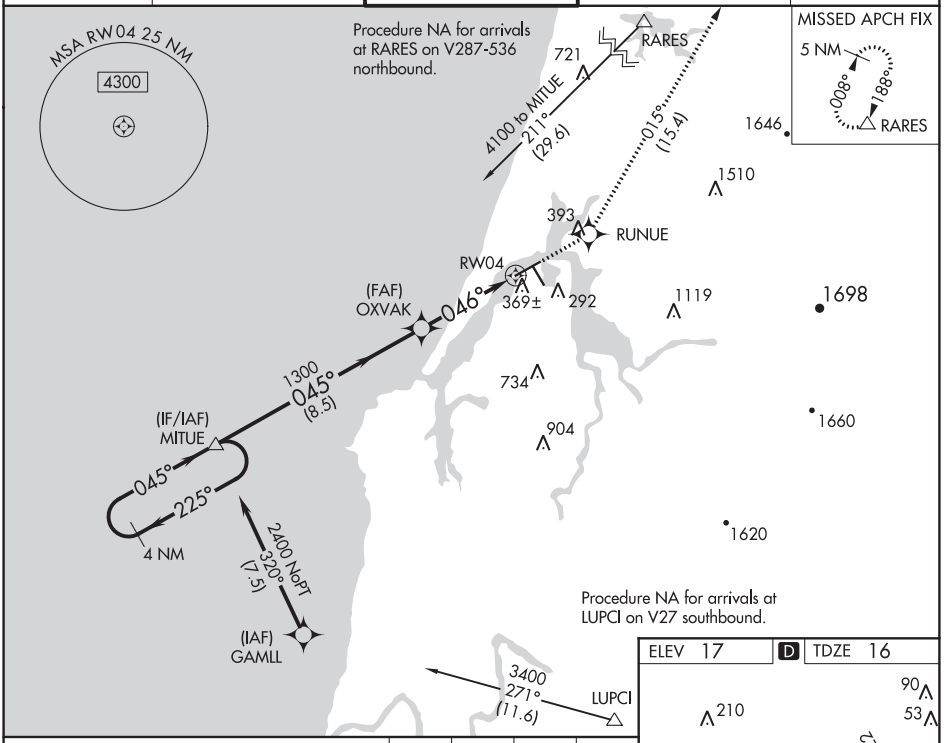
WAAS CH 82416 W04A	APP CRS 046°	Rwy Idg 5320 / TDZE 16 / Apt Elev 17

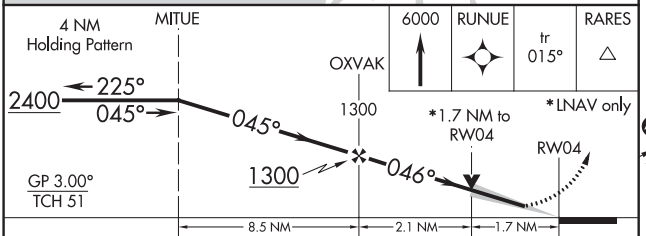
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C (29°F) or above 54°C (130°F). DME/DME RNP- 0.3 NA. For inop MALSR, increase LPV all Cats visibility to 1 mile, LNAV/VNAV all Cats visibility to 1¾ mile, and increase LNAV Cat C/D visibility to 1¾ mile. Night landing: Rwy 31 NA.

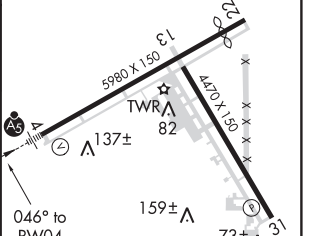
MALSR

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★	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF)	122.4 255.4	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)

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NORTH BEND, OREGON AL-929 (FAA) 19283

VOR/DME RWY 4

SOUTHWEST OREGON RGNL (OTH)

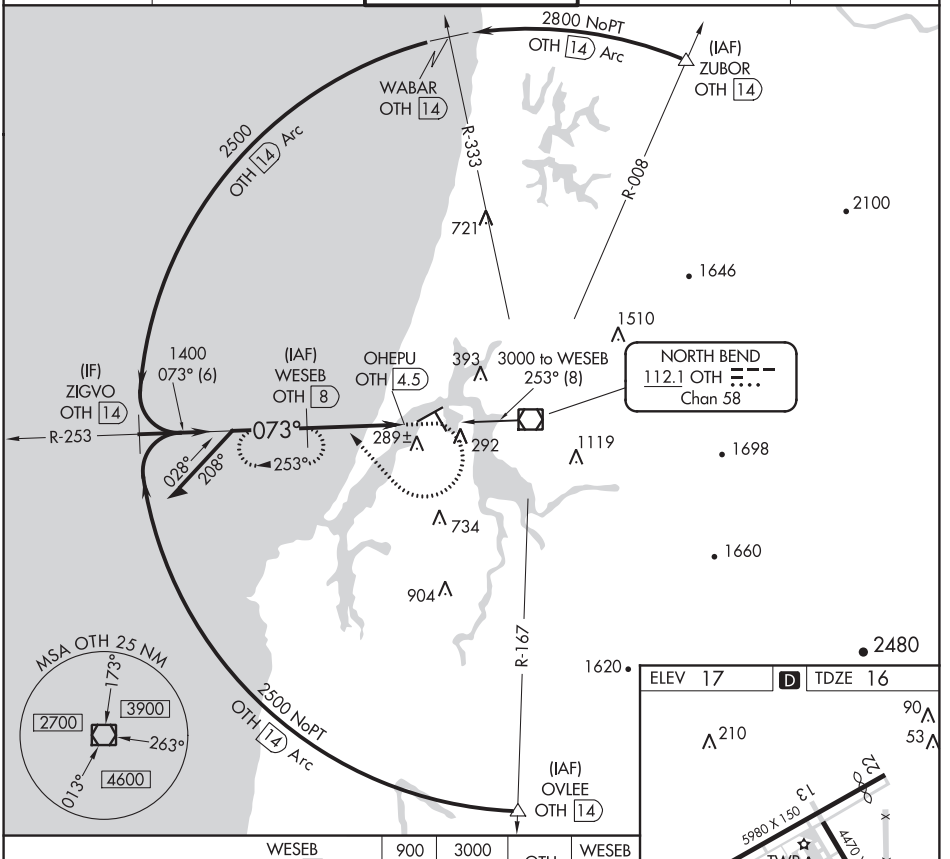
VOR/DME OTH	APP CRS	Rwy Idg	5320
112.1	073°	TDZE	16
Chan 58		Apt Elev	17

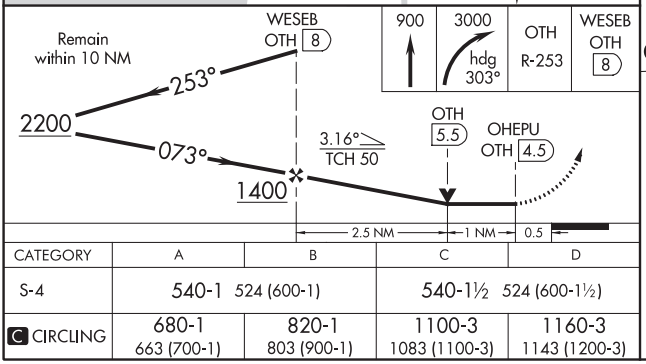
Night Landing: Rwy 31 NA.
Inoperative table does not apply.

MALSR

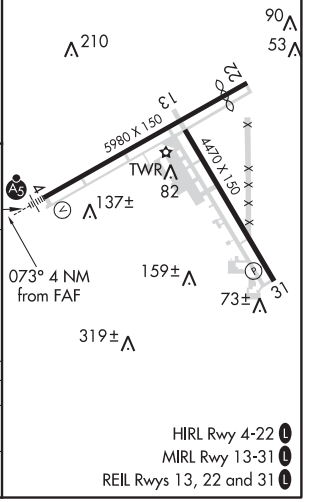
MISSED APPROACH: Climb to 900 then climbing right turn to 3000 on heading 303° and on OTH VOR/DME R-253 to WESEB/8 DME and hold, continue climb-in-hold to 3000.

AWOS-3PT	SEATTLE CENTER	NORTH BEND TOWER★	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF) L	122.4 255.4	127.1





900	3000	OTH	WESEB
	hdg 303°	R-253	OTH 8



CATEGORY	A	B	C	D
S-4	540-1 524 (600-1)		540-1½ 524 (600-1½)	
C CIRCLING	680-1 663 (700-1)	820-1 803 (900-1)	1100-3 1083 (1100-3)	1160-3 1143 (1200-3)

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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME OTH	APP CRS	Rwy Idg	N/A
112.1	257°	TDZE	N/A
Chan 58		Apt Elev	17

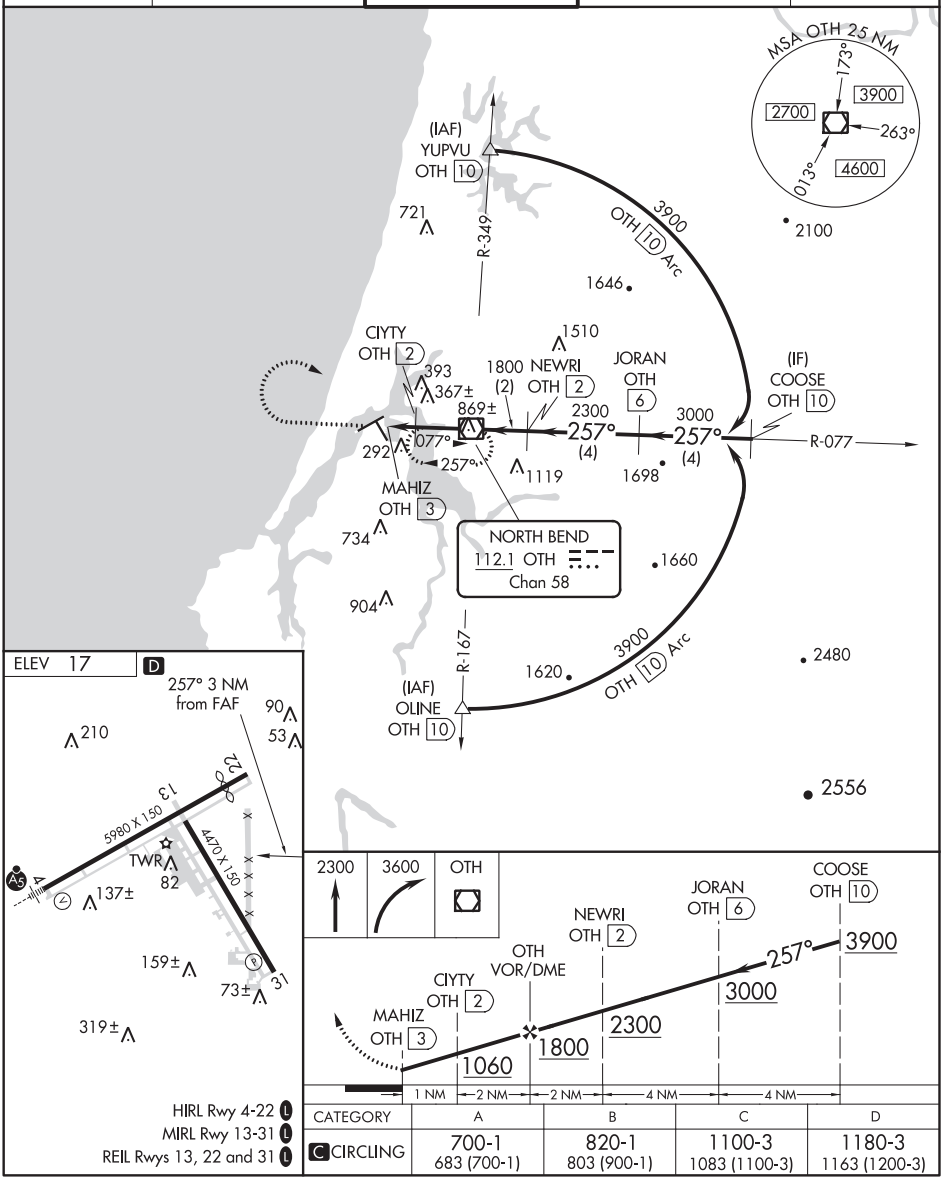
VOR/DME-B

SOUTHWEST OREGON RGNL (OTH)

Night landing: Rwy 31 NA.
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*	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF) L	122.4 255.4	127.1



CATEGORY	A	B	C	D
C CIRCLING	700-1 683 (700-1)	820-1 803 (900-1)	1100-3 1083 (1100-3)	1180-3 1163 (1200-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NORTH BEND, OREGON | AL-929 (FAA) | 19283

VOR-A

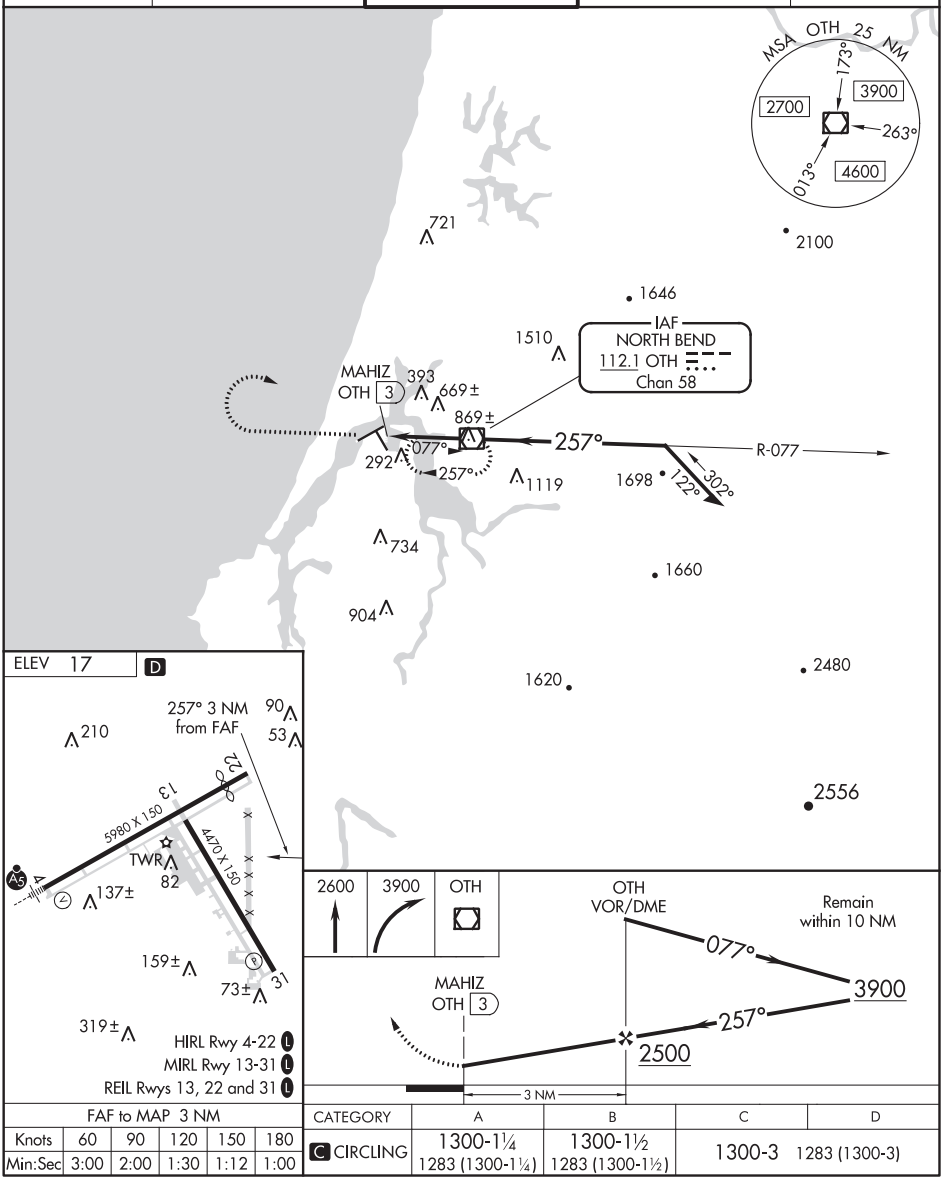
SOUTHWEST OREGON RGNL (OTH)

VOR/DME OTH	APP CRS	Rwy Idg	N/A
112.1	257°	TDZE	N/A
Chan 58		Apt Elev	17

Night Landing: Rwy 31 NA.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2600 then climbing right turn to 3900 direct OTH VOR/DME and hold.

AWOS-3PT	SEATTLE CENTER	NORTH BEND TOWER*	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF)	122.4 255.4	127.1



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
C CIRCLING	1300-1¼ 1283 (1300-1¼)	1300-1½ 1283 (1300-1½)	1300-3	1283 (1300-3)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-OTH	APP CRS	Rwy Idg	5320
108.5	046°	TDZE	16
		Apt Elev	17

COPTER ILS or LOC RWY 4

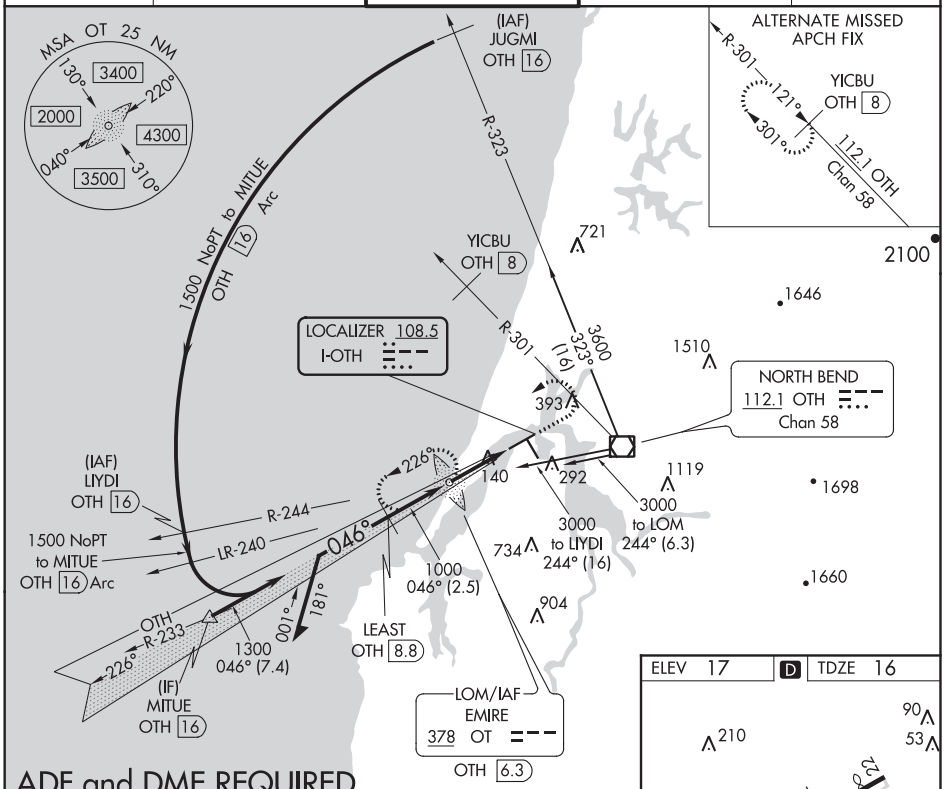
SOUTHWEST OREGON RGNL (OTH)

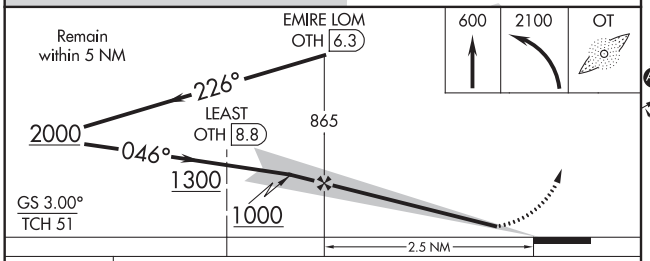
ADF and DME required.

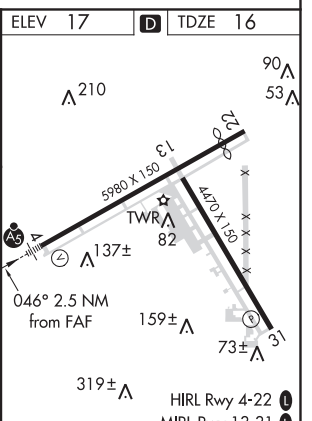
MALSR

MISSED APPROACH: Climb to 600 then climbing left turn to 2100 direct EMIRE LOM and hold, continue climb-in-hold to 2100.

AWOS-3PT	SEATTLE CENTER	NORTH BEND TOWER★	MC MINNVILLE RADIO	GND CON
135.075	127.55 254.35	118.45 (CTAF) L	122.4 255.4	127.1







CATEGORY	COPTER
H-ILS 4	216-½ 200 (200-½)
H-LOC 4	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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

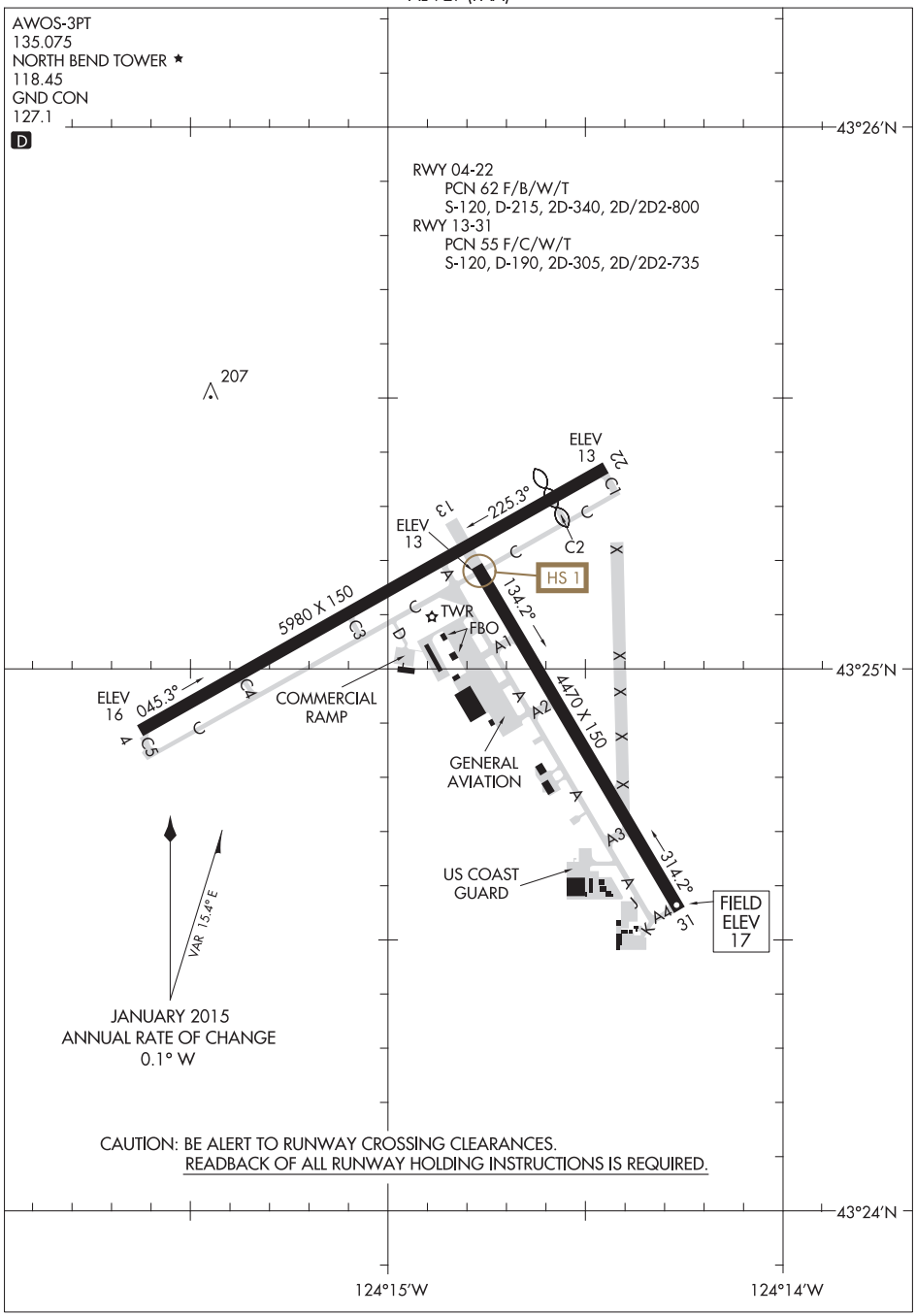
18144

AIRPORT DIAGRAM

SOUTHWEST OREGON RGNL (OTH)

NORTH BEND, OREGON

AL-929 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

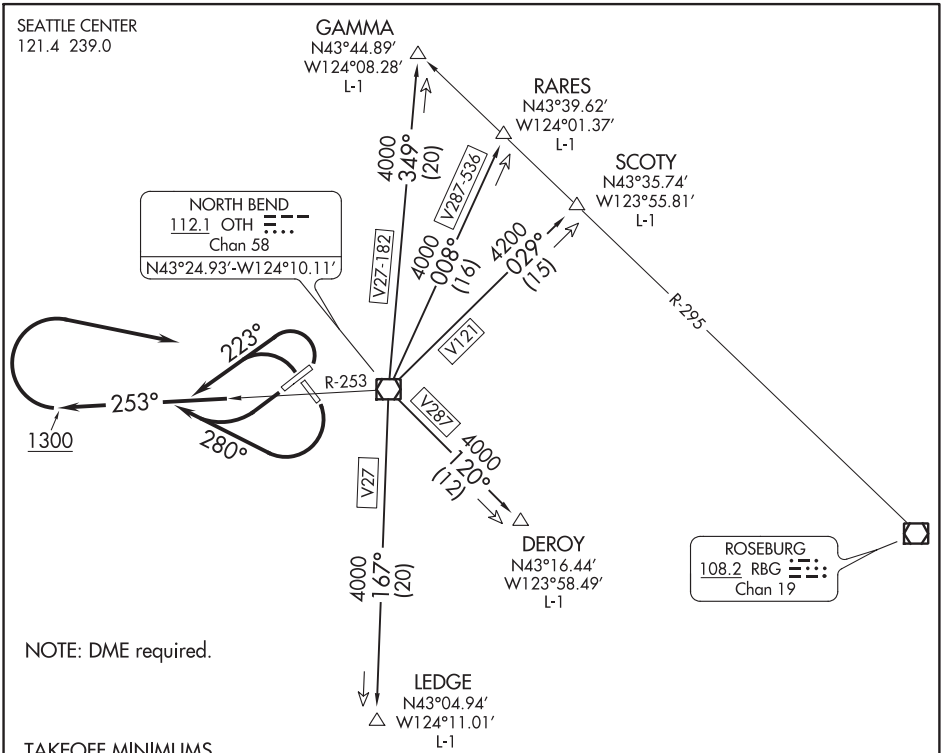
NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

SOUTHWEST OREGON RGNL (OTH)

NORTH BEND, OREGON

18144



NOTE: DME required.

TAKEOFF MINIMUMS

Rwy 4: 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 22: 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 4, 31: Climbing left turn heading 223° and on OTH R-253 thence . . . .
TAKEOFF RUNWAYS 13, 22: 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 (OTH6.DEROY): From over OTH VOR/DME on OTH R-120 to DEROY INT.
GAMMA TRANSITION (OTH6.GAMMA): From over OTH VOR/DME on OTH R-349 to GAMMA INT.
LEDGE TRANSITION (OTH6.LEDGE): From over OTH VOR/DME on OTH R-167 to LEDGE INT.
RARES TRANSITION (OTH6.RARES): From over OTH VOR/DME on OTH R-008 to RARES INT.
SCOTY TRANSITION (OTH6.SCOTY): From over OTH VOR/DME on OTH R-029 to SCOTY INT.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON | AL-6615 (FAA) | 19283

RNAV (GPS) RWY 7

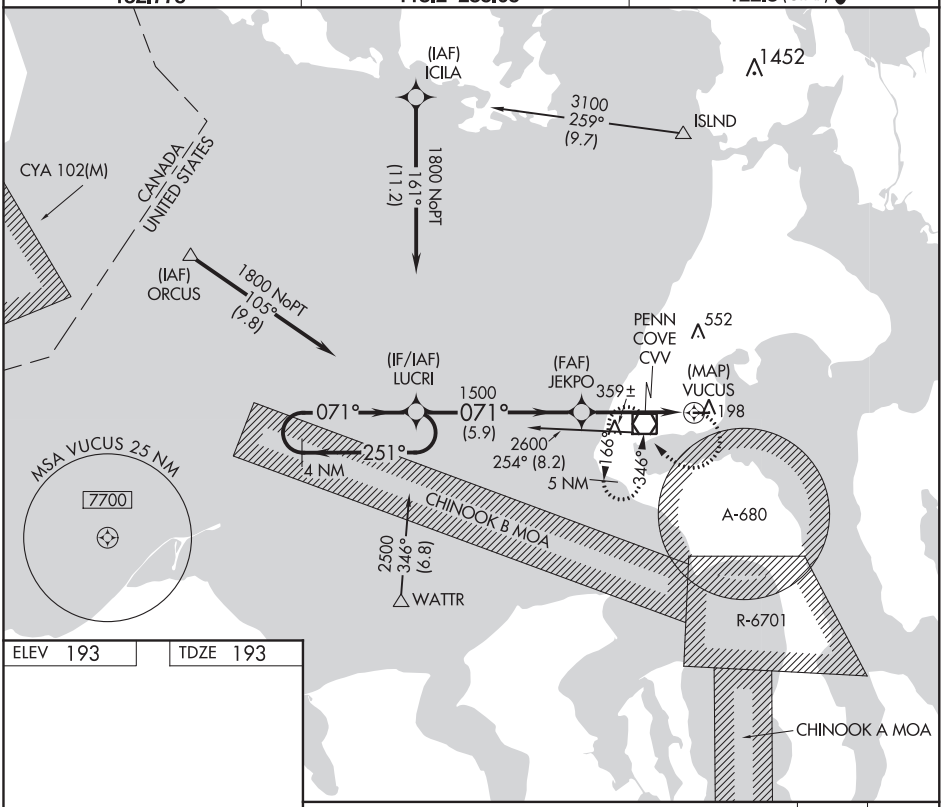
AJ EISENBERG (OKH)

APP CRS	Rwy Idg	2758
071°	TDZE	193
	Apt Elev	193

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.

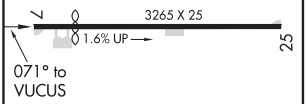
AWOS-3	WHIDBEY APP CON	UNICOM
132.775	118.2 285.65	122.8 (CTAF) L



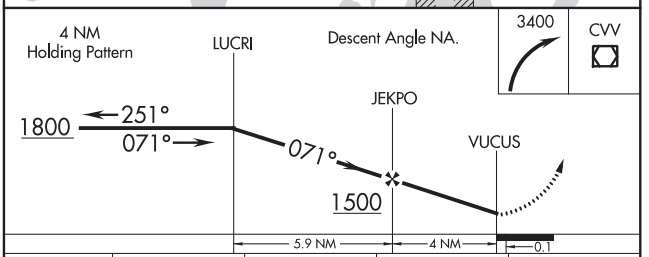
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 193 | TDZE 193



LIRL Rwy 7-25 L



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	

OAK HARBOR, WASHINGTON
Amdt 2E 10DEC15

48°15'N-122°40'W

AJ EISENBERG (OKH)
RNAV (GPS) RWY 7

ILS or LOC RWY 17

OLYMPIA RGNL (OLM)

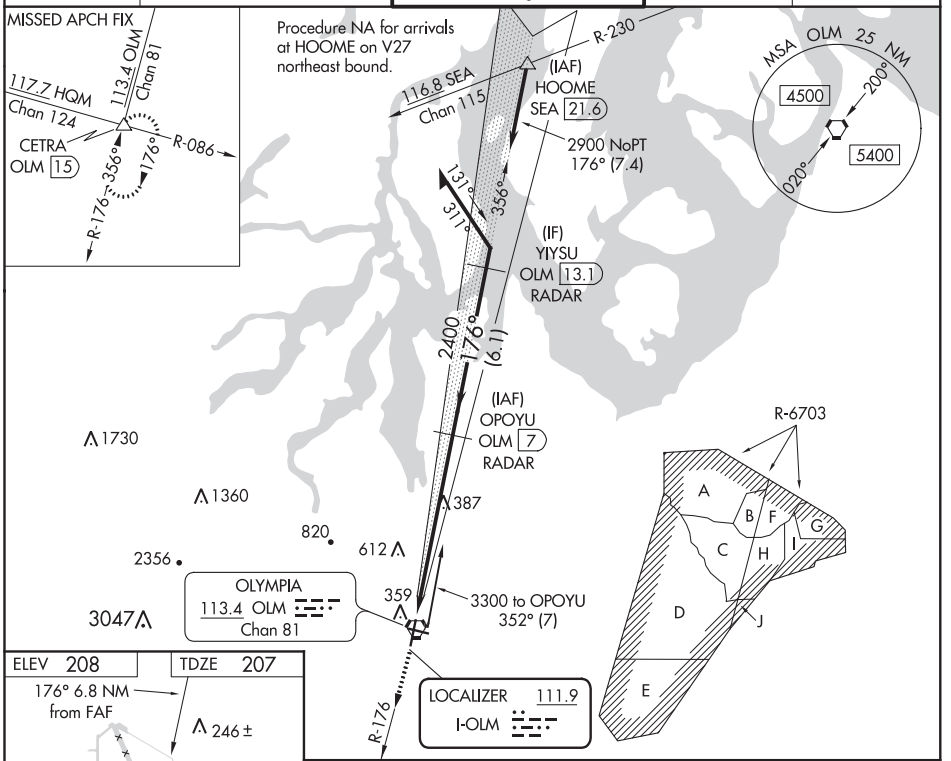
LOC I-OLM	APP CRS	Rwy Idg	5500
111.9	176°	TDZE	207
		Apt Elev	208

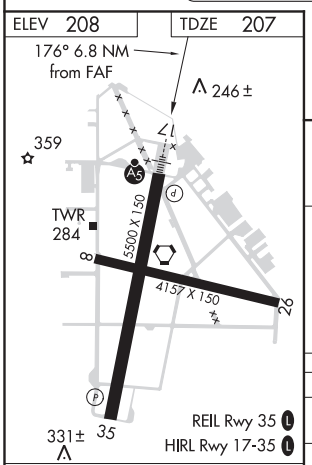
DME or RADAR required. For inop ALS, increase S-LOC 17 Cat C/D visibility to 1⅜ SM.

MALSR

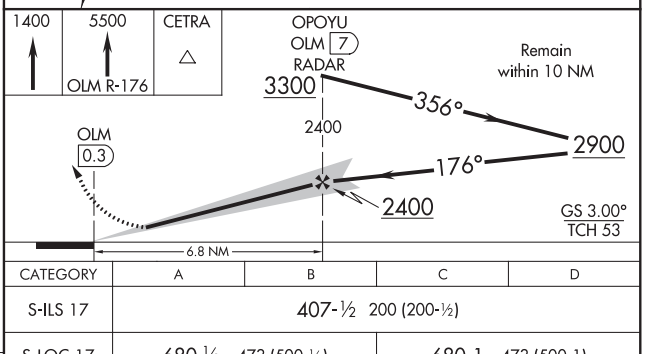
MISSED APPROACH: Climb to 1400 then climb to 5500 on OLM VORTAC R-176 to CETRA INT/OLM 15 DME and hold, continue climb-in-hold to 5500.

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





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

OLYMPIA, WASHINGTON | AL-645 (FAA) | 18200

RNAV (GPS) RWY 17

OLYMPIA RGNL (OLM)

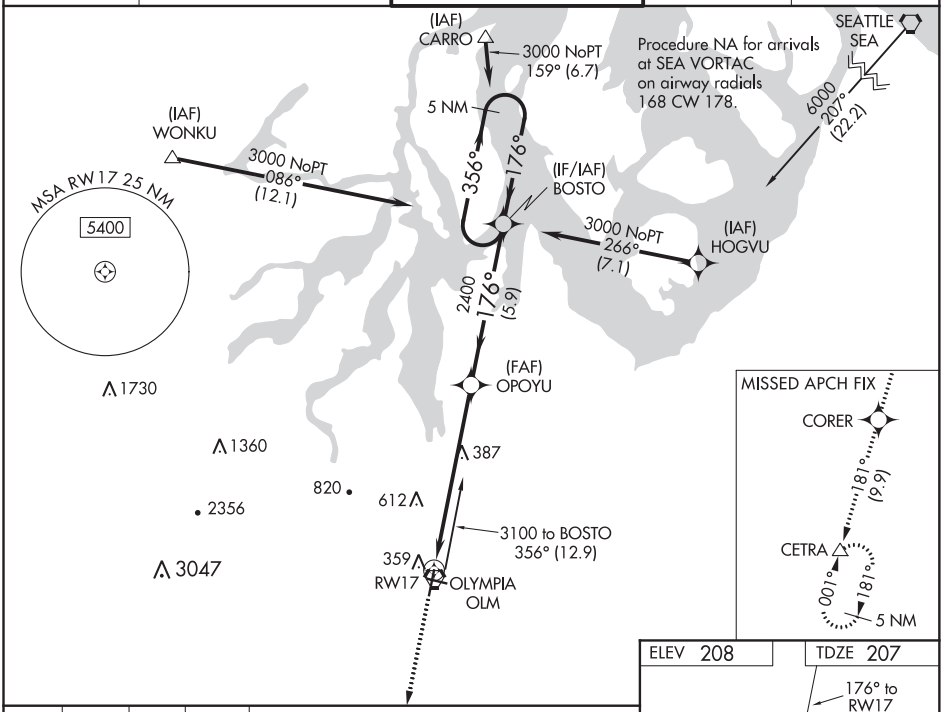
WAAS	APP CRS	Rwy Idg	5500
CH 45599	176°	TDZE	207
W17A		Apt Elev	208

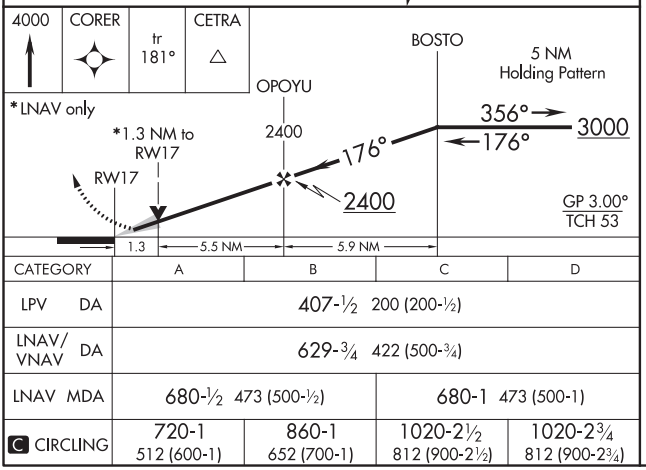
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -9°C (16°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS; increase LNAV/VNAV visibility all Cats to 1⅛ SM. Increase LNAV Cats C/D to 1⅜ SM.

MALSR

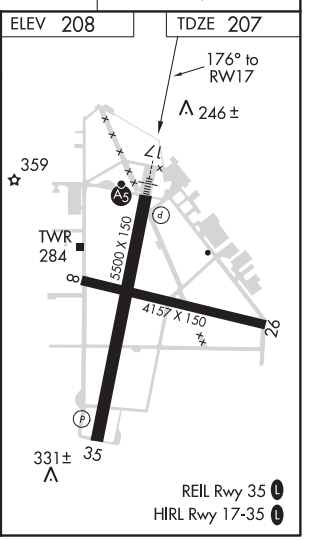
MISSED APPROACH: Climb to 4000 direct CORER and on track 181° to CETRA and hold, continue climb-in-hold to 4000.

ATIS★	SEATTLE APP CON	OLYMPIA TOWER★	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) 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)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 35

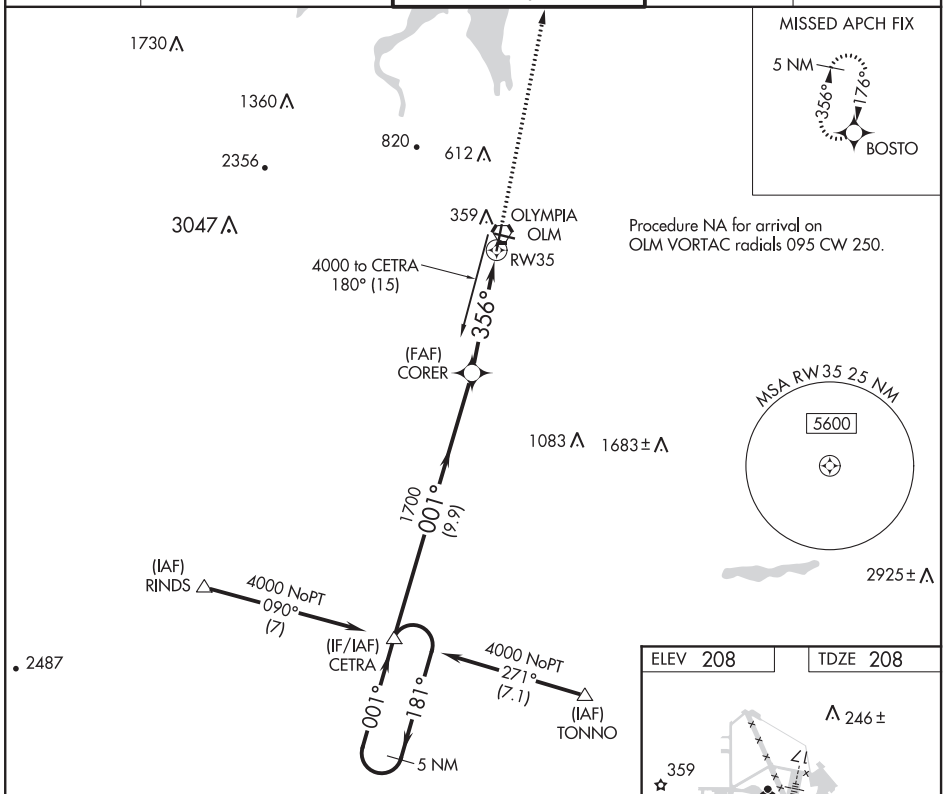
OLYMPIA RGNL (OLM)

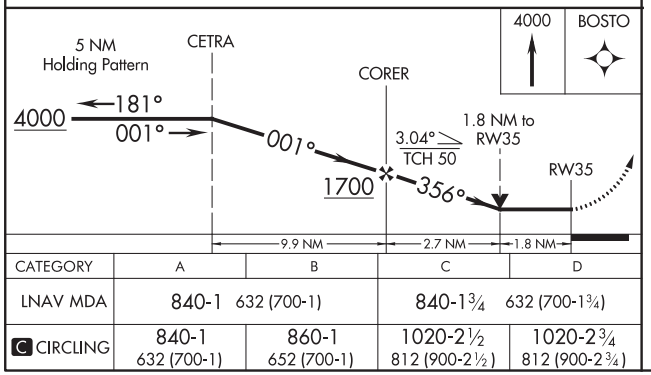
APP CRS	Rwy Idg	5500
356°	TDZE	208
	Apt Elev	208

Rwy 35 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA.

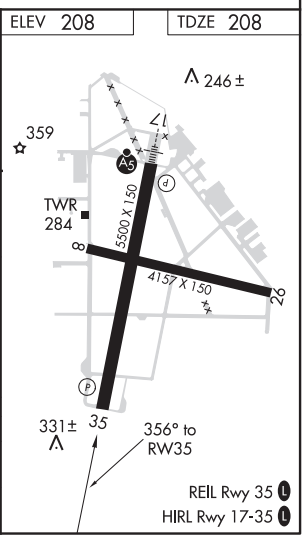
MISSED APPROACH: Climb to 4000 direct BOSTO and hold, continue climb-in-hold to 4000.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

OLYMPIA, WASHINGTON | AL-645 (FAA) | 18200

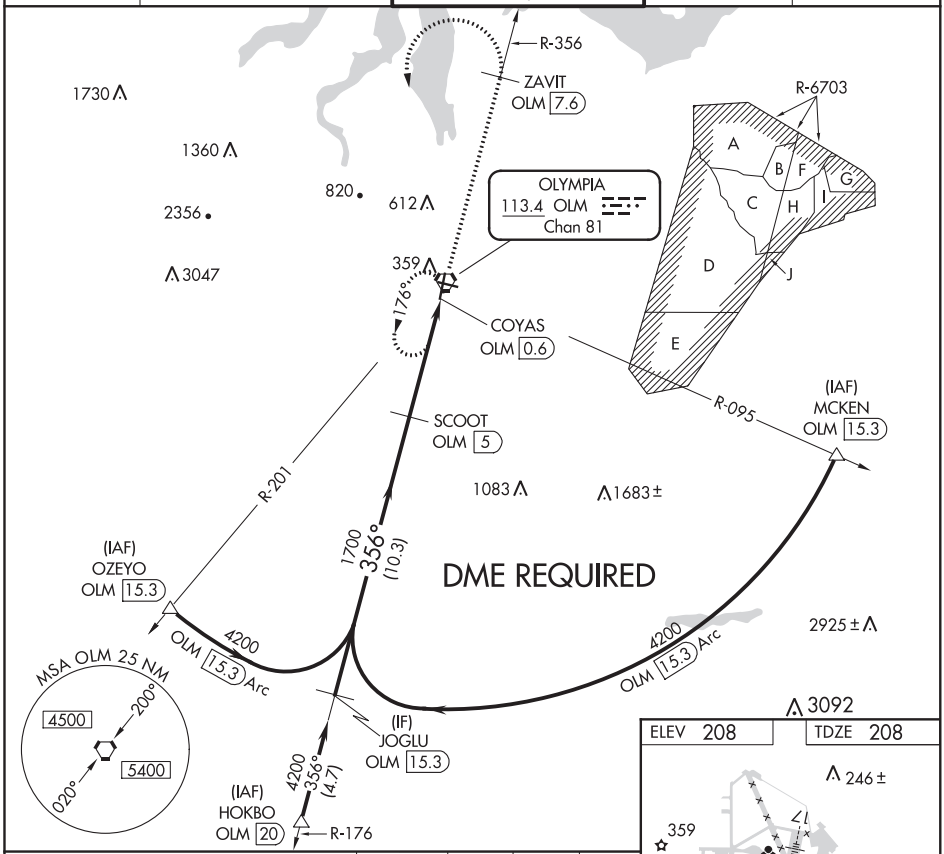
VORTAC OLM	APP CRS	Rwy Idg	5500
113.4	356°	TDZE	208
Chan 81		Apt Elev	208

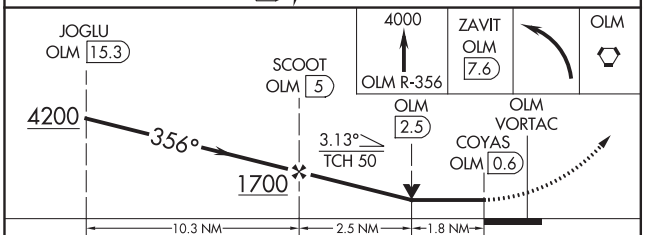
VOR RWY 35
OLYMPIA RGNL (OLM)

Rwy 35 helicopter visibility reduction below ¾ SM NA.
DME required.

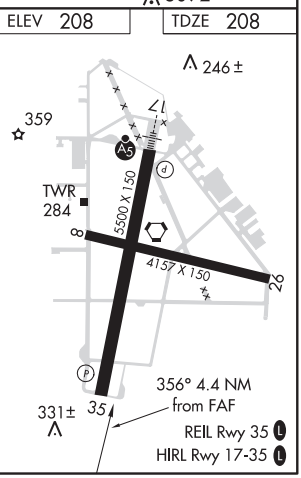
MISSED APPROACH: Climb to 4000 on OLM VORTAC R-356 to ZAVIT/OLM 7.6 DME then climbing left turn direct OLM VORTAC and hold.

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)



OLYMPIA, WASHINGTON
Amdt 13 24MAY18

46°58′N-122°54′W

OLYMPIA RGNL (OLM)
VOR RWY 35

NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC OLM	APP CRS	Rwy Idg	N/A
113.4	171°	TDZE	N/A
Chan 81		Apt Elev	208

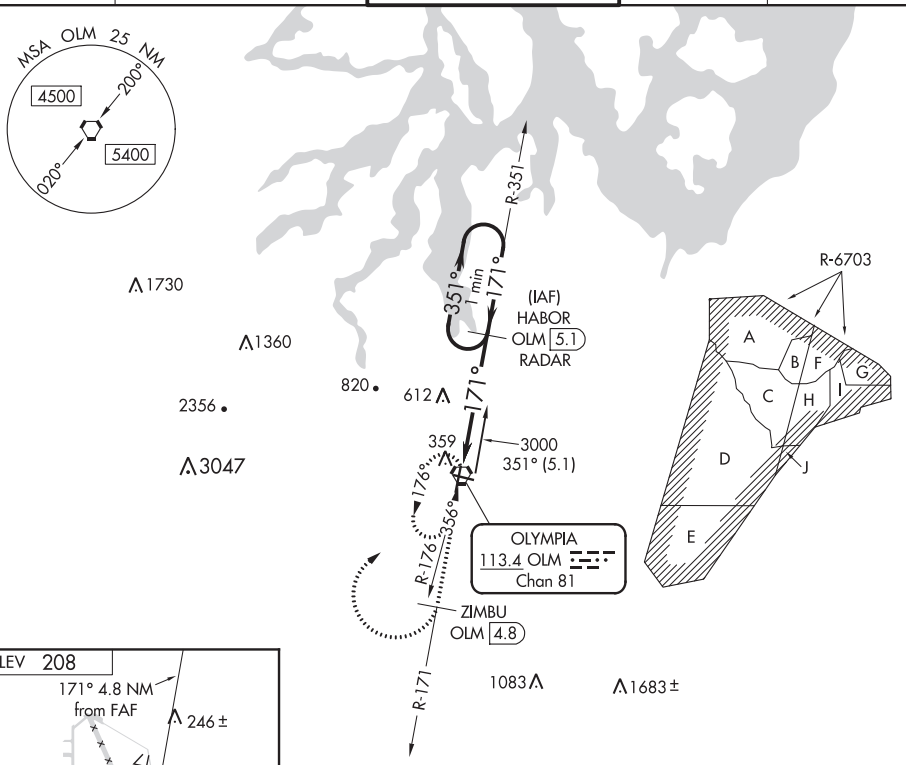
VOR-A

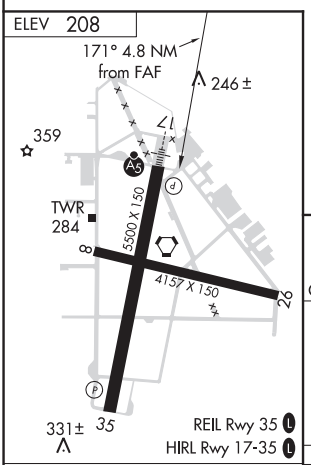
OLYMPIA RGNL (OLM)

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.

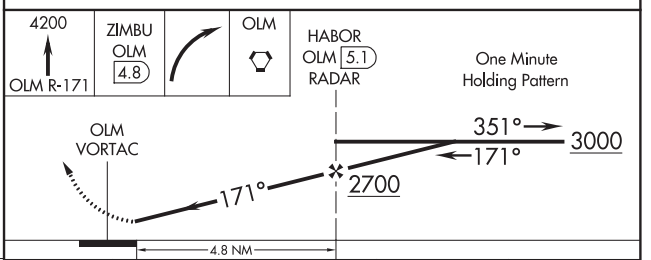
ATIS★	SEATTLE APP CON	OLYMPIA TOWER★	GND CON	UNICOM
135.725	121.1 290.9	124.4 (CTAF) L 254.25	121.6	122.95





DME or RADAR REQUIRED

2925±



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)

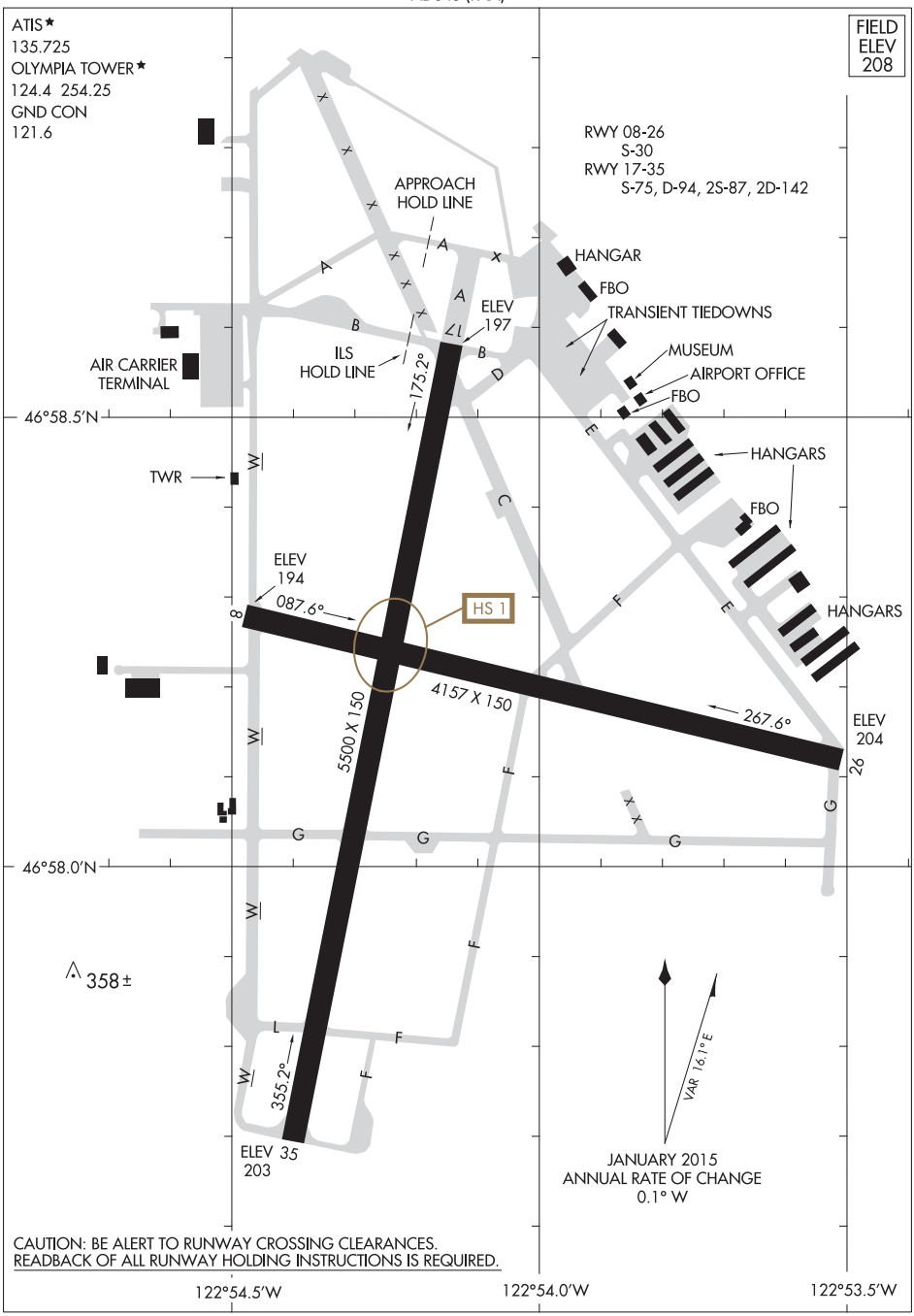
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18200

AIRPORT DIAGRAM

OLYMPIA RGNL (OLM)
OLYMPIA, WASHINGTON

AL-645 (FAA)

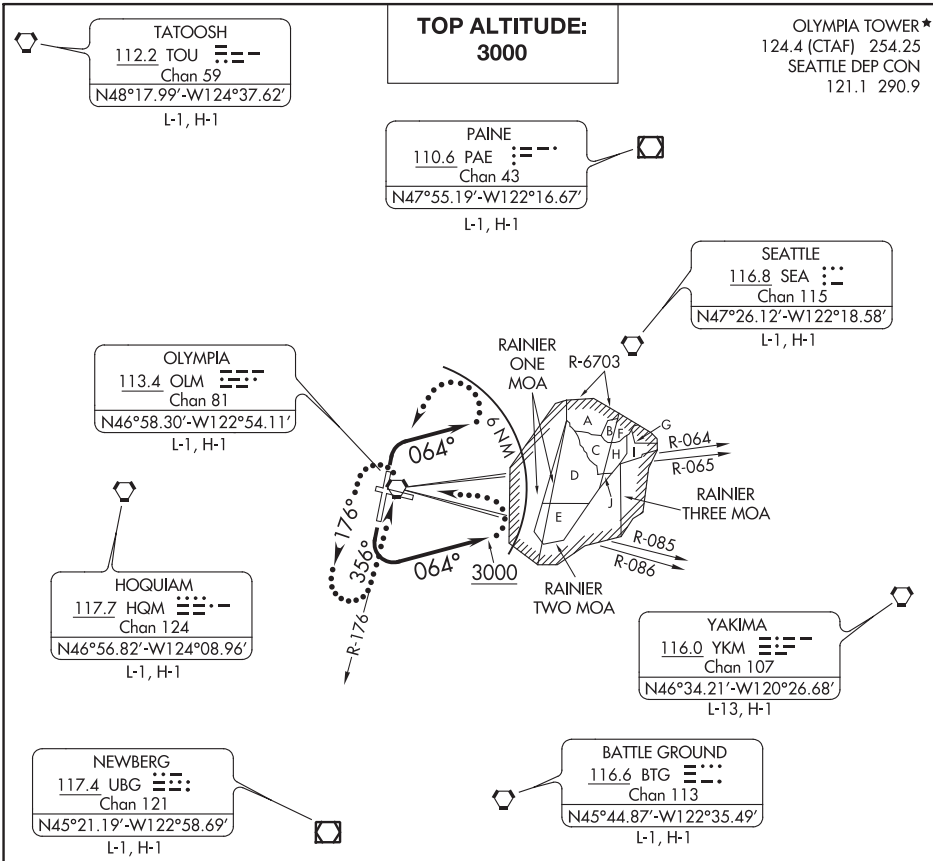


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
18200

OLYMPIA, WASHINGTON
OLYMPIA RGNL (OLM)



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

OMAK, WASHINGTON | AL-5453 (FAA) | 20030

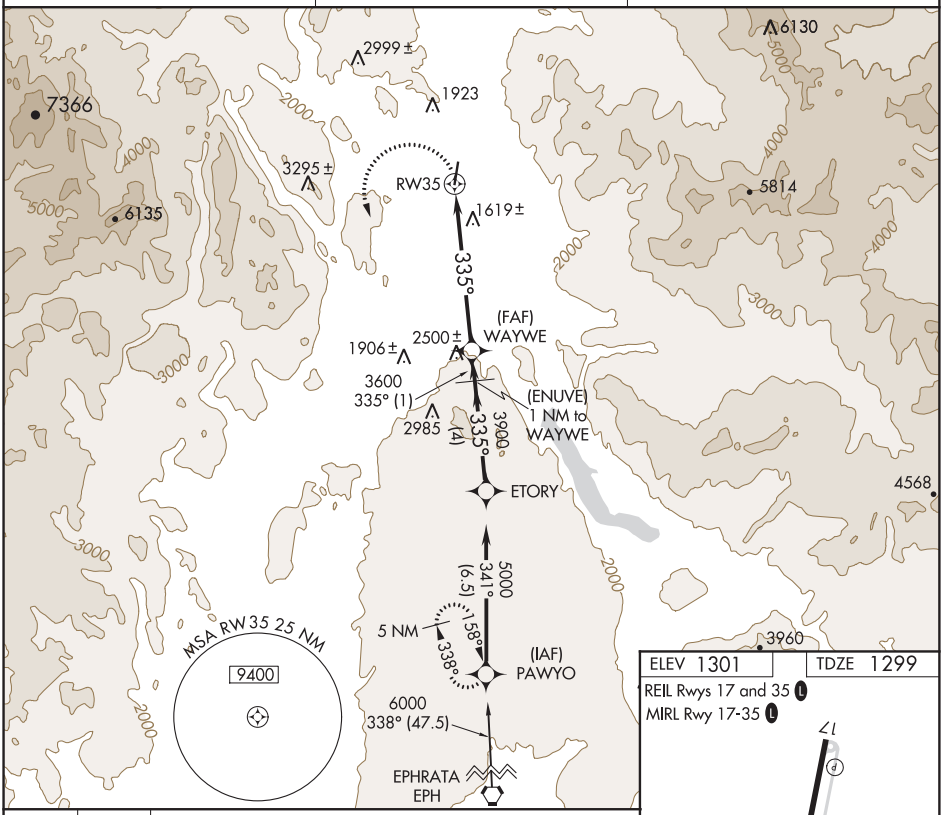
GPS RWY 35
OMAK (OMK)

APP CRS	Rwy Idg	4667
335°	TDZE	1299
	Apt Elev	1301

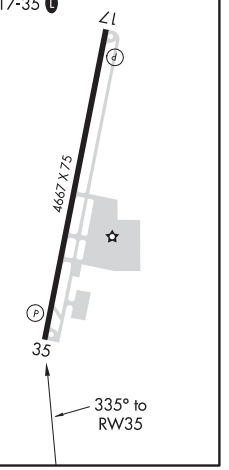
NA
-15°C

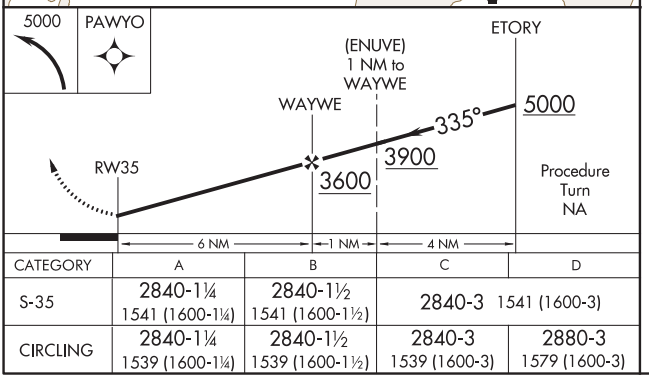
MISSED APPROACH: Climbing left turn to 5000 direct PAWYO WP and hold.

ASOS	SEATTLE CENTER	UNICOM
118.325	126.1 291.6	122.8 (CTAF) L



ELEV 1301 | TDZE 1299
REIL Rwys 17 and 35 L
MIRL Rwy 17-35 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)

NW-1, 30 JAN 2020 to 26 MAR 2020

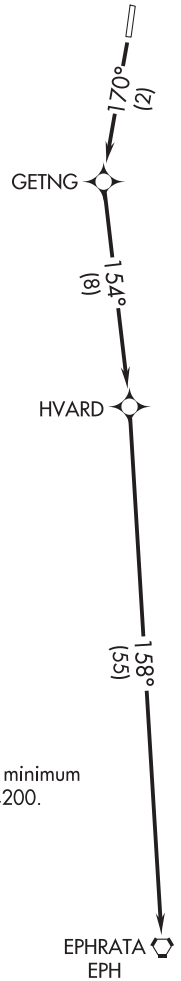
NW-1, 30 JAN 2020 to 26 MAR 2020

OMAK, WASHINGTON
Orig 04NOV99

48°28′N-119°31′W

OMAK (OMK)
GPS RWY 35

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, 30 JAN 2020 to 26 MAR 2020

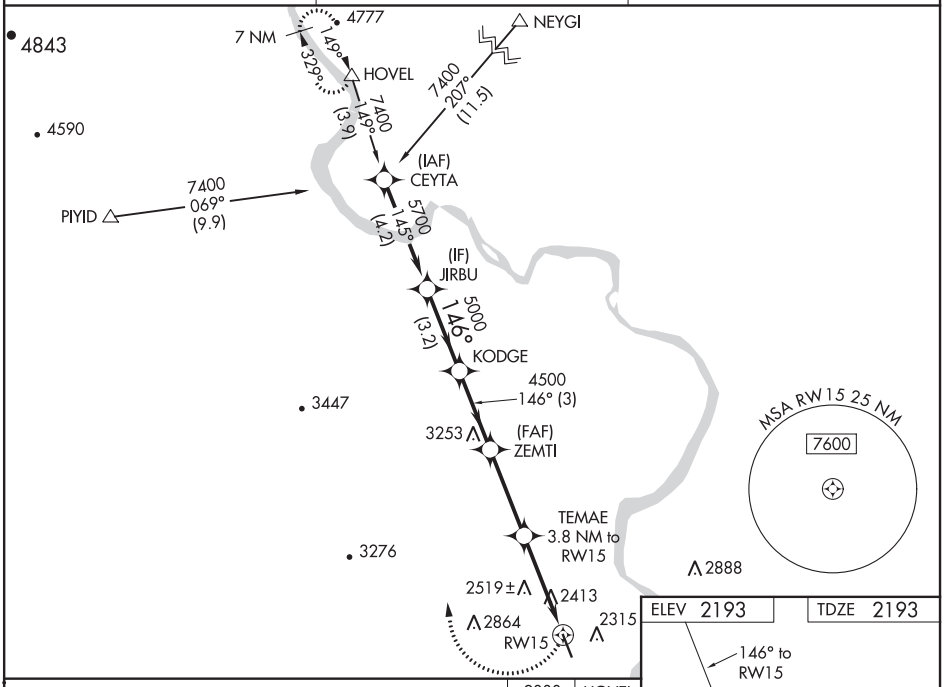
WAAS	APP CRS	Rwy Idg	5006
CH 78207	146°	TDZE	2193
W15A		Apt Elev	2193

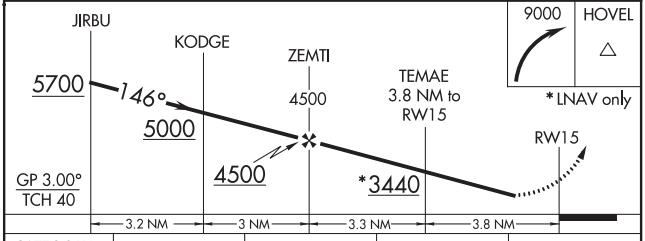
RNAV (GPS) RWY 15
ONTARIO MUNI (ONO)

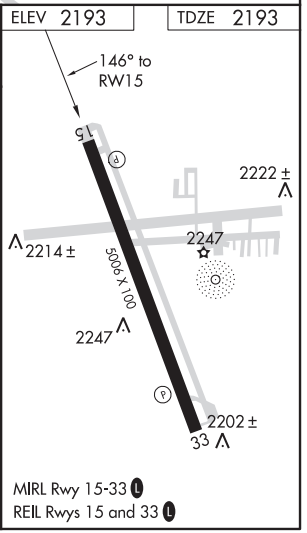
T Baro-VNAV NA when using Caldwell altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
A When local altimeter setting not received, use Caldwell altimeter setting and increase LPV DA to 2867 feet, LNAV/VNAV DA to 2911 feet, 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

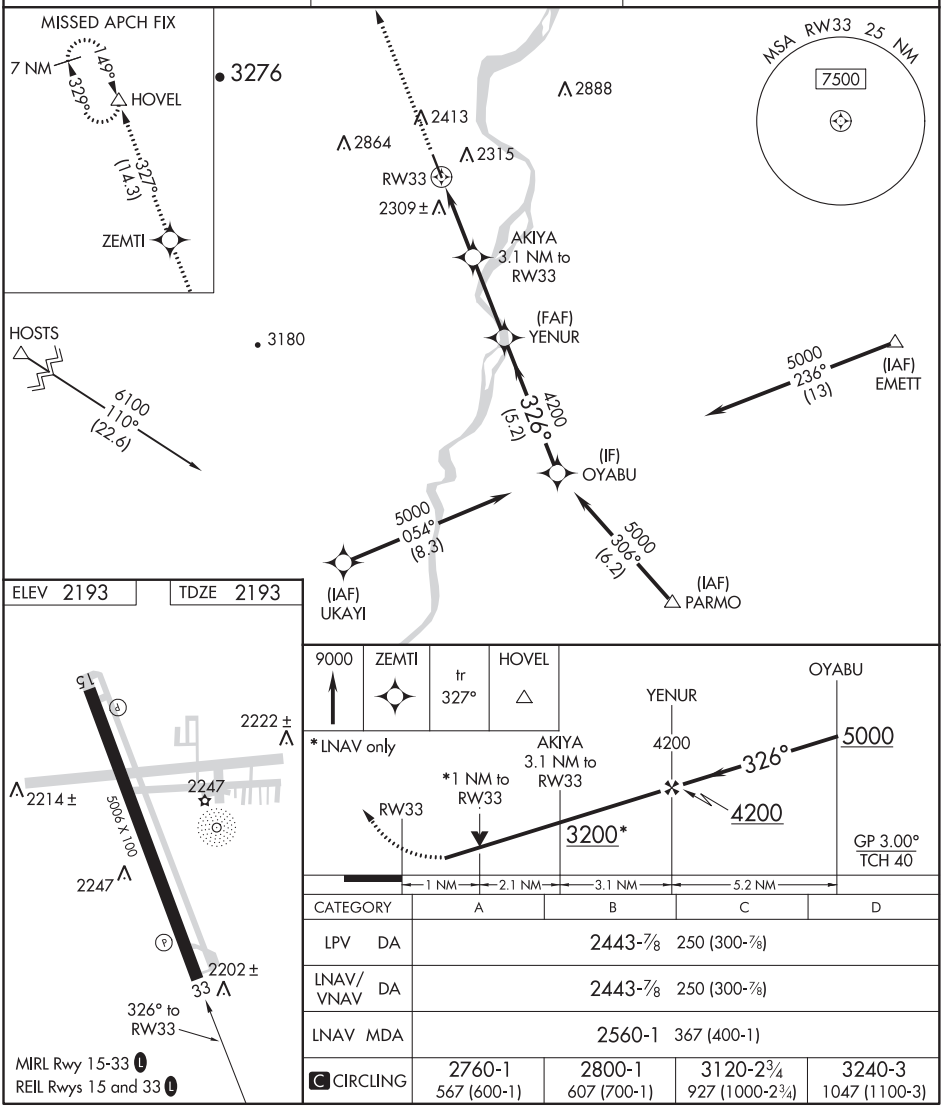
WAAS	APP CRS	Rwy Idg	5006
CH 87007	326°	TDZE	2193
W33A		Apt Elev	2193

RNAV (GPS) RWY 33
ONTARIO MUNI (ONO)

T A 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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PARIS, IDAHO | AL-10475 (FAA) | 19003

RNAV (GPS) RWY 10

BEAR LAKE COUNTY (1U7)

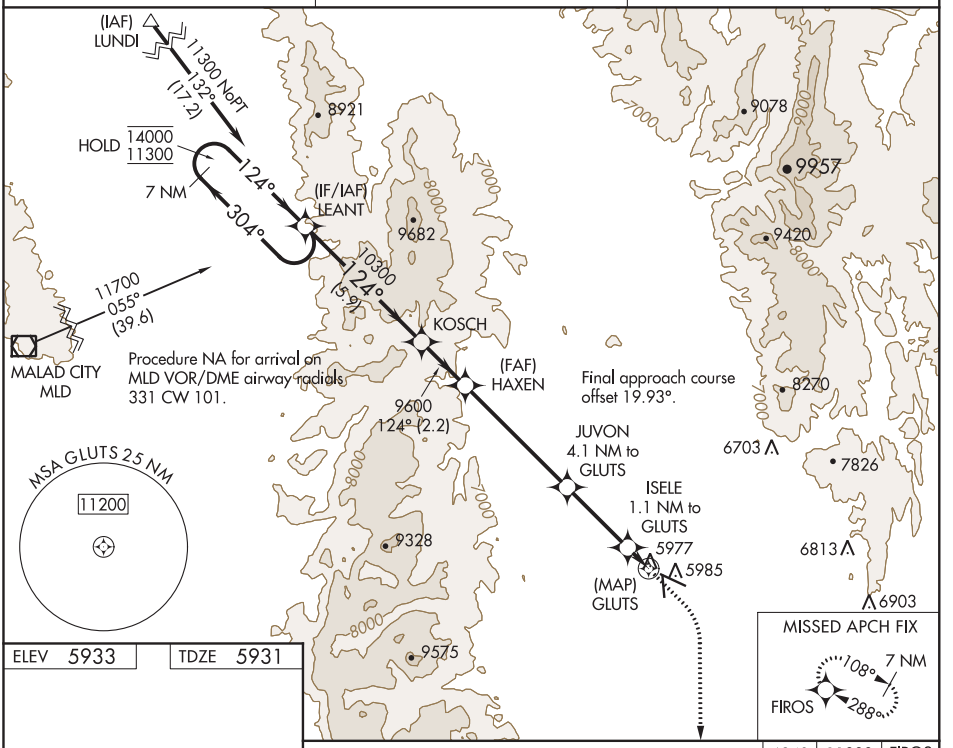
WAAS	APP CRS	Rwy Idg	5728
CH 65742	124°	TDZE	5931
W10A		Apt Elev	5933

RNP APCH.

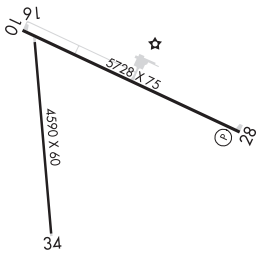
NA When local altimeter setting not received, procedure NA.

MISSED APPROACH: (Do not exceed 185K until FIROS) Climb to 6340 then climbing right turn to 11000 direct FIROS and hold.

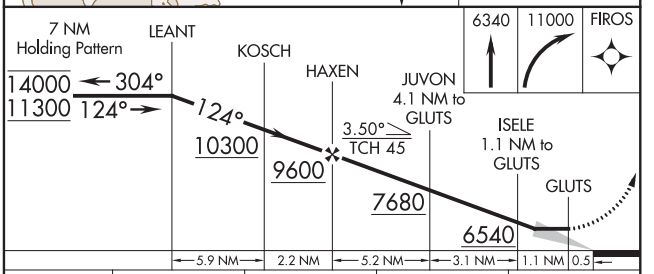
AWOS-3	SALT LAKE CENTER	UNICOM
118.525	128.35 239.25	122.8 (CTAF) L



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)

PARIS, IDAHO
Orig 13SEP18

42°15′N-111°20′W

BEAR LAKE COUNTY (1U7)

RNAV (GPS) RWY 10

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5728
CH 62842	284°	TDZE	5933
W28A		Apt Elev	5933

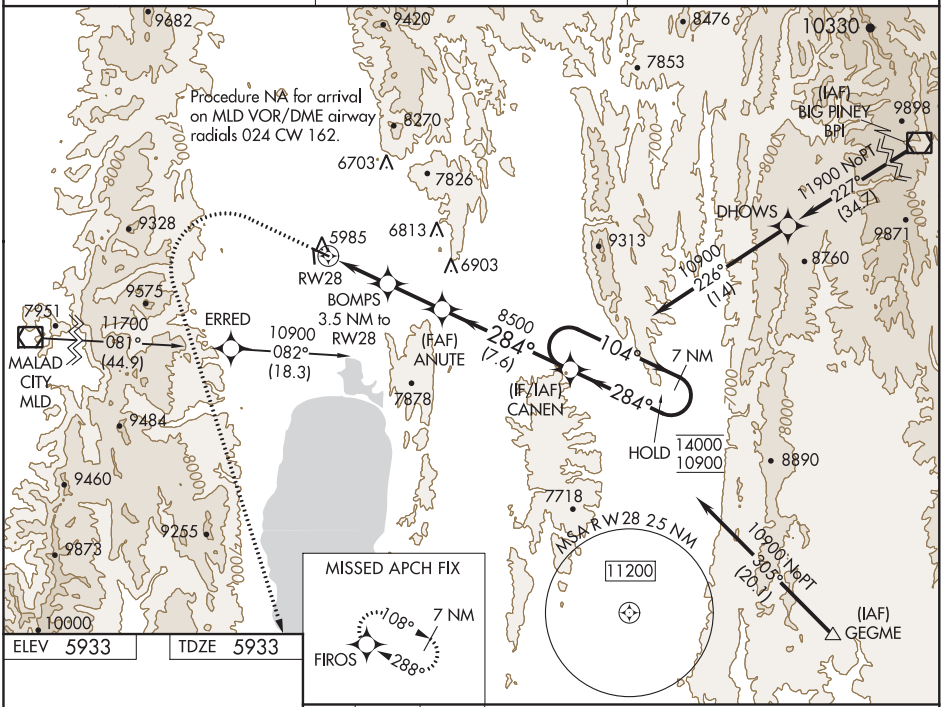
RNAV (GPS) RWY 28
BEAR LAKE COUNTY (1U7)

RNP APCH.

T A NA Baro-VNAV NA.
When local altimeter setting not received, procedure NA.

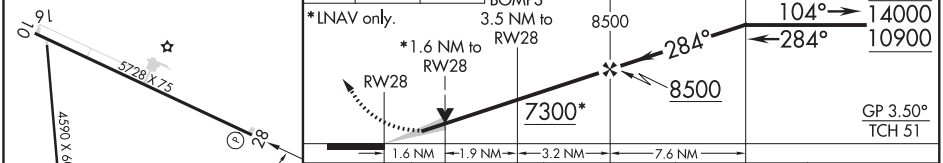
MISSED APPROACH: (Do not exceed 185K until FIROS) Climb to 6560 then climbing left turn to 11000 direct FIROS and hold.

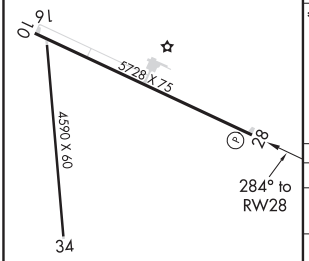
AWOS-3	SALT LAKE CENTER	UNICOM
118.525	128.35 239.25	122.8 (CTAF) L



ELEV 5933	TDZE 5933

6560	11000	FIROS





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)

MIRL Rwy 10-28 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PASCO, WASHINGTON AL-474 (FAA) 19339

ILS or LOC RWY 21R

TRI-CITIES (PSC)

LOC/DME I-PSC	APP CRS	Rwy Idg	7111
108.7	211°	TDZE	404
Chan 24		Apt Elev	410

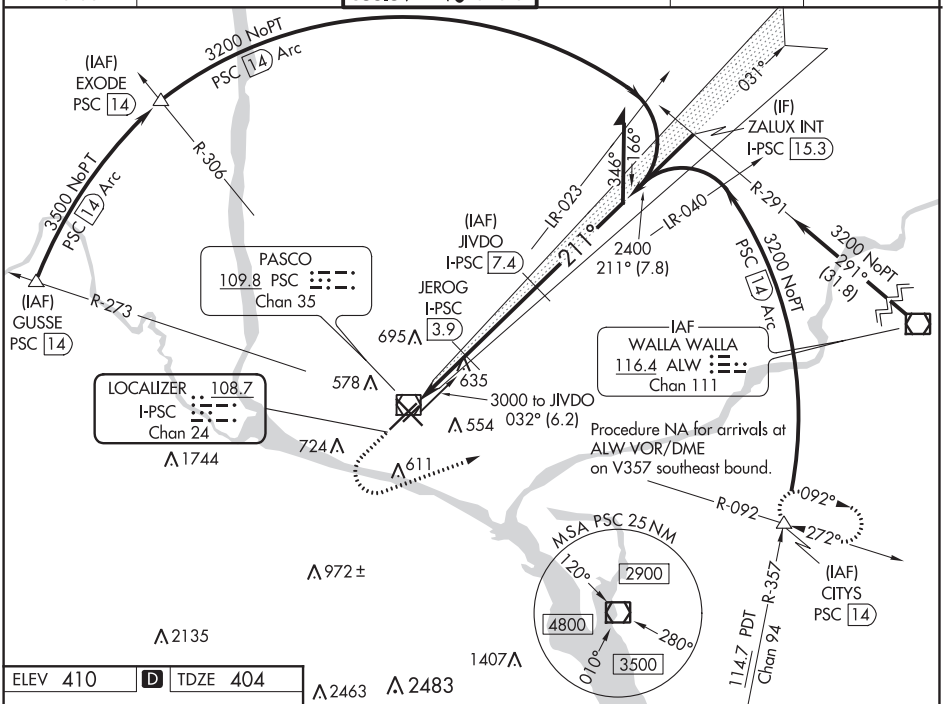
DME required for LOC only.

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).

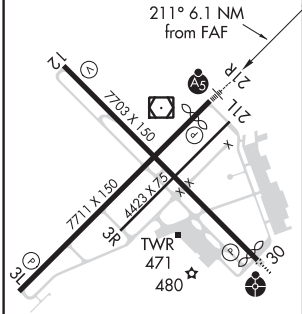
MALSR

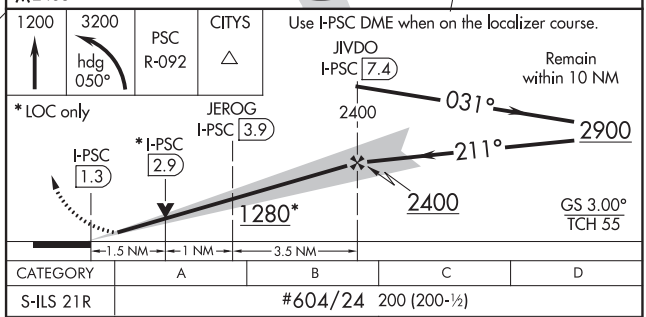
MISSED APPROACH: Climb to 1200 then climbing left turn to 3200 on heading 050° and PSC VOR/DME R-092 to CITYS INT/PSC VOR/DME 14 DME and hold.

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



ELEV 410	D	TDZE 404





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
Amdt 13B 05DEC19

46°16′N-119°07′W

TRI-CITIES (PSC)

ILS or LOC RWY 21R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	7711
031°	TDZE	410
	Apt Elev	410

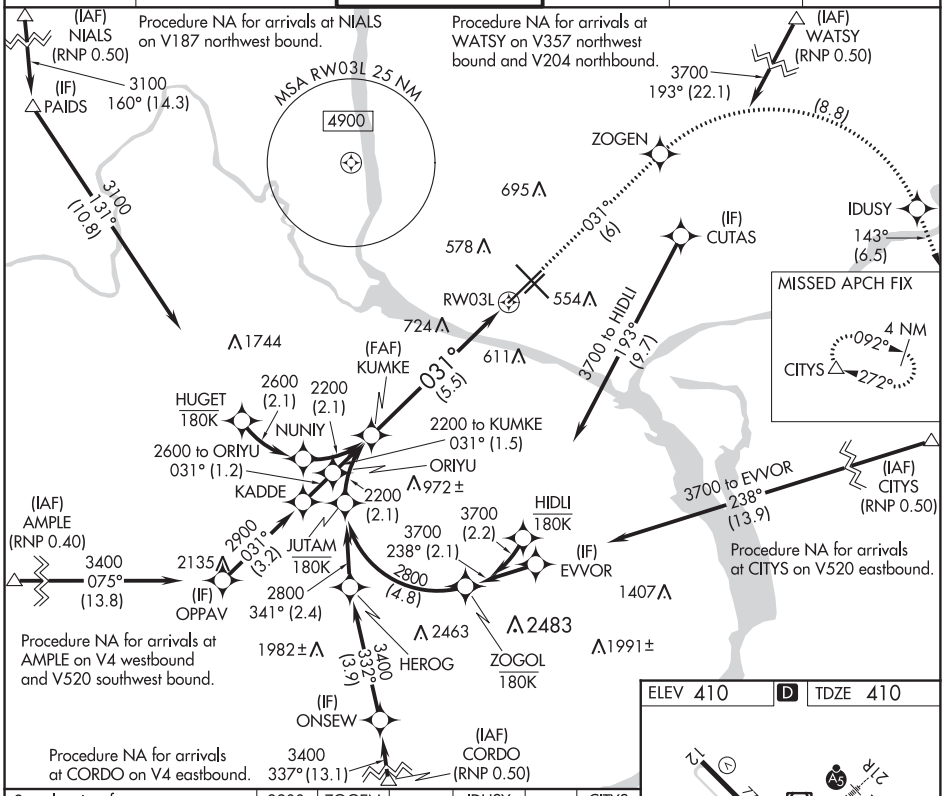
RNAV (RNP) Z RWY 3L

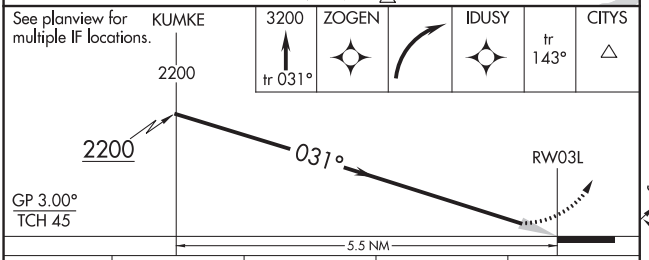
TRI-CITIES (PSC)

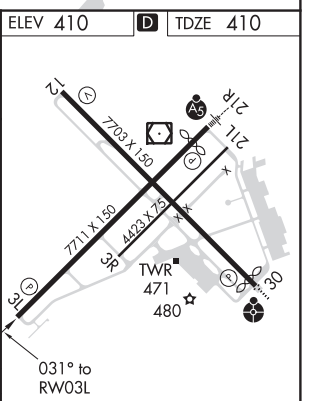
For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 54°C (130°F). RF required. GPS required.

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







CATEGORY	A	B	C	D
RNP 0.11 DA	729-1 319 (400-1)			
RNP 0.30 DA	849-1½ 439 (500-1½)			

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PASCO, WASHINGTON | AL-474 (FAA) | 19339

RNAV (RNP) Z RWY 12

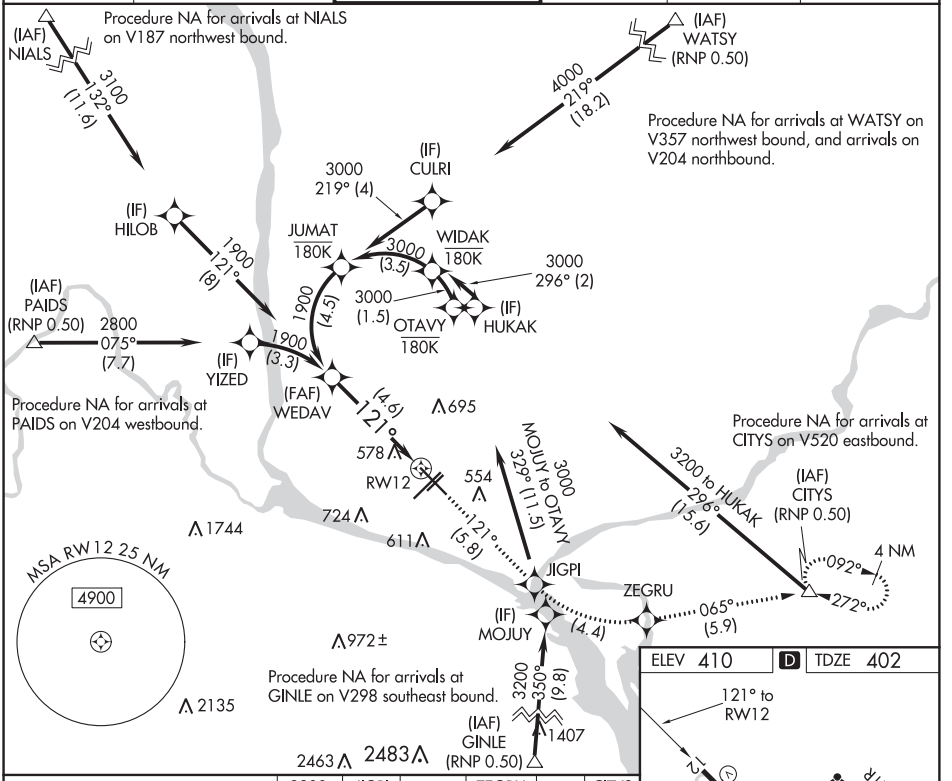
TRI-CITIES (PSC)

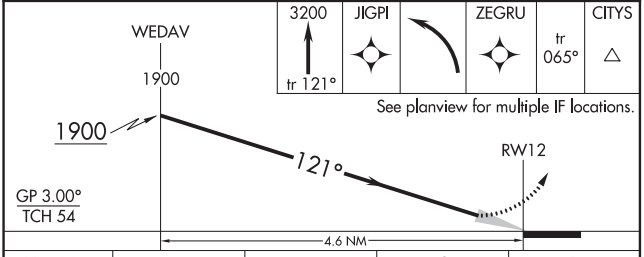
APP CRS	Rwy Idg	7503
121°	TDZE	402
	Apt Elev	410

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 54°C (130°F). GPS required. RF required.

MISSED APPROACH: Climb to 3200 on track 121° to JIGPI, left turn to ZEGRU, and on track 065° to CITYS and hold.

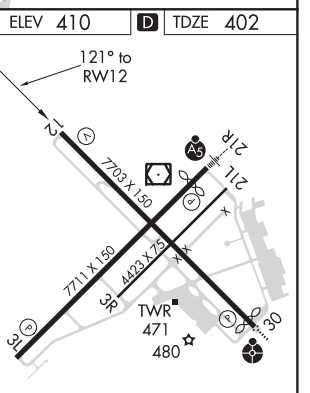
ATIS	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95





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



PASCO, WASHINGTON
Amdt 1 13NOV14

46°16'N-119°07'W

TRI-CITIES (PSC)

RNAV (RNP) Z RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	7111
211°	TDZE	404
	Apt Elev	410

RNAV (RNP) Z RWY 21R

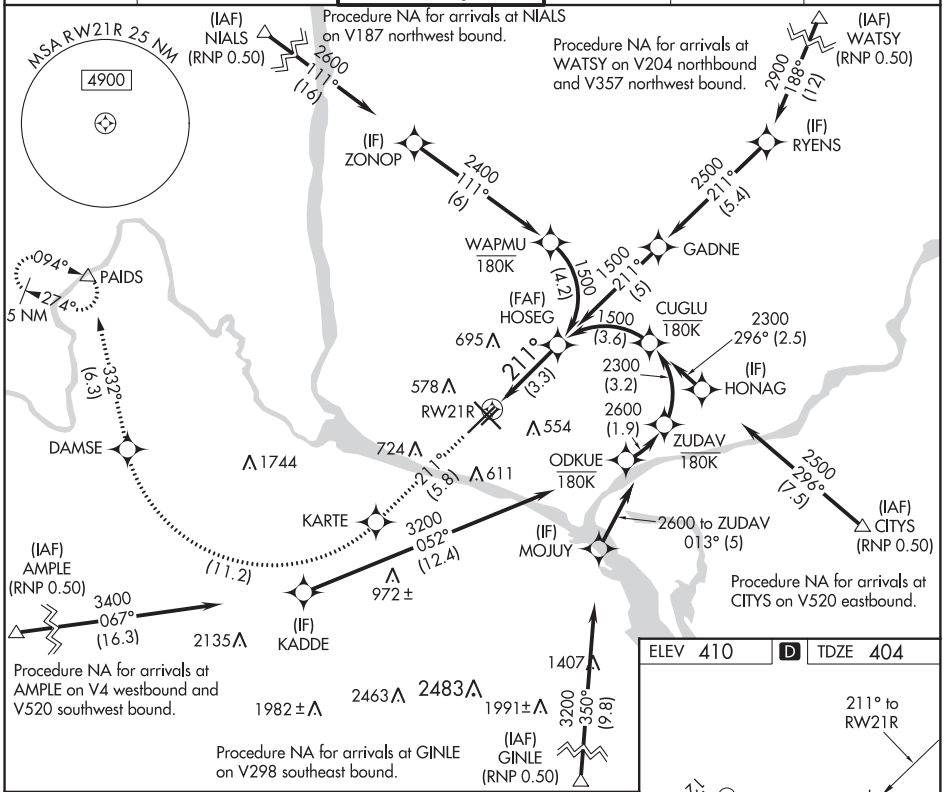
TRI-CITIES (PSC)

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 54°C (130°F). GPS required. RF required. For inoperative MALSR, increase RNP 0.11 all Cats visibility to RVR 5700 and RNP 0.30 all Cats visibility to 1⅜ mile.

MALSR

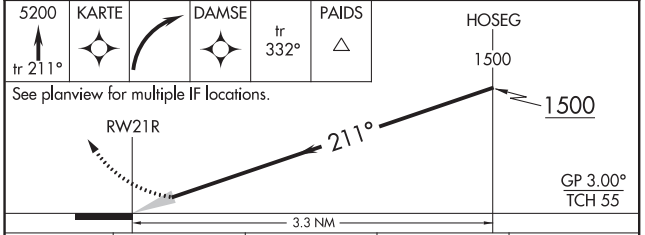
MISSED APPROACH: Climb to 5200 on track 211° to KARTE, right turn to DAMSE, and on track 332° to PAIDS and hold.

ATIS	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95



5200 tr 211°	KARTE		DAMSE	tr 332°	PAIDS

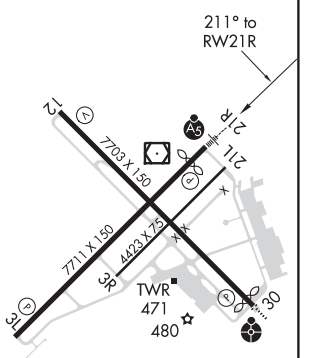
See planview for multiple IF locations.



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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 30

TRI-CITIES (PSC)

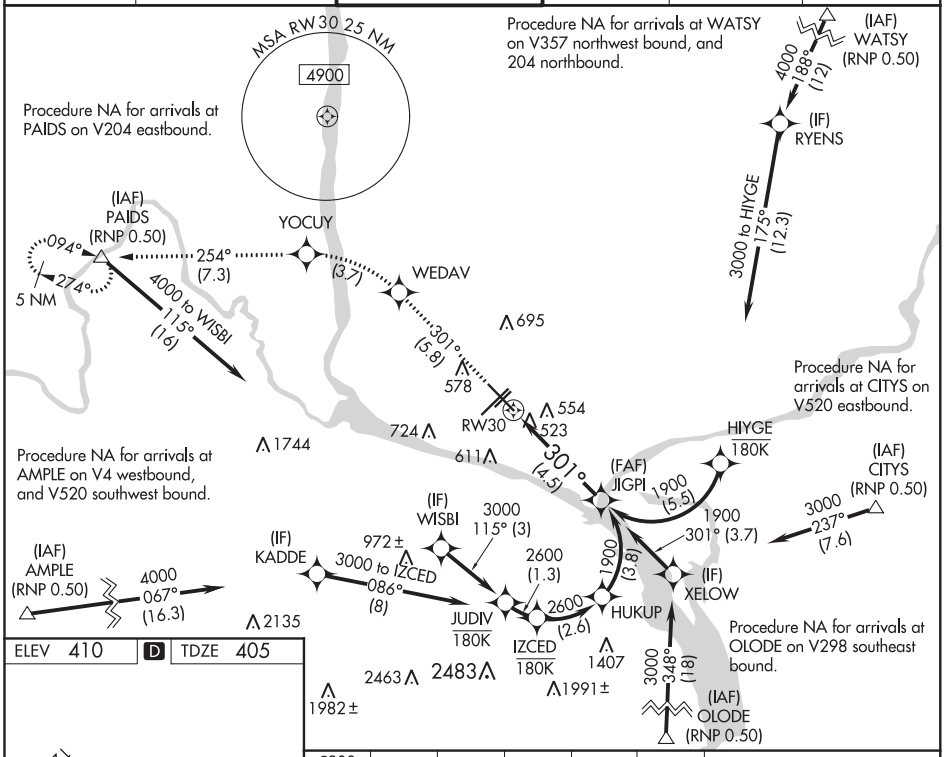
APP CRS	Rwy Idg	TDZE	Apt Elev
301°	7503	405	410

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 323.6	121.8	120.0	122.95



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 3L

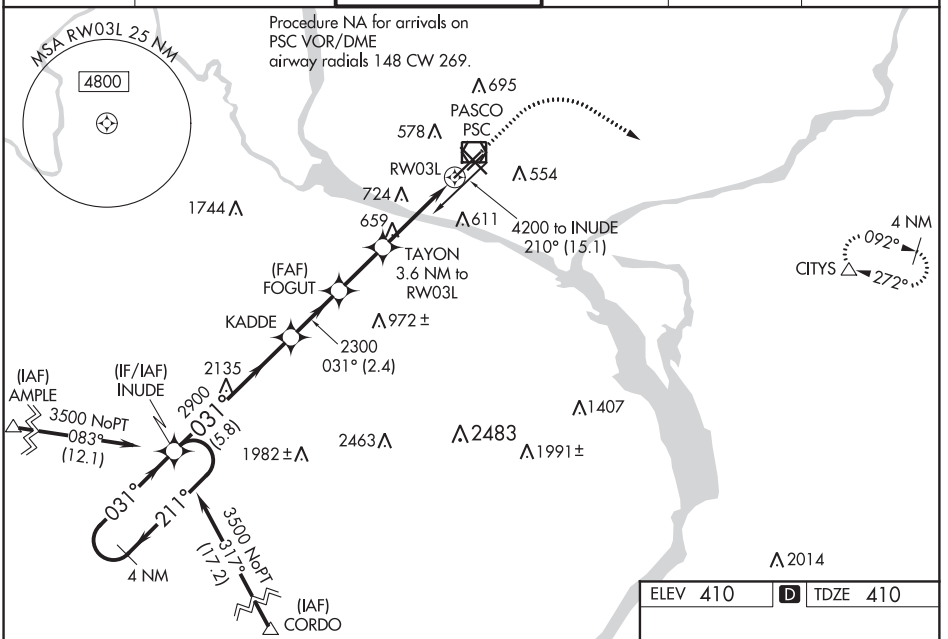
TRI-CITIES (PSC)

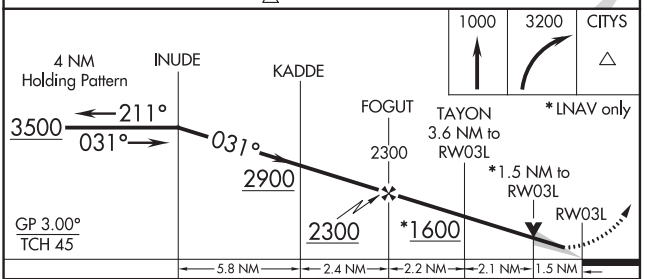
WAAS CH 40206 W03A	APP CRS 031°	Rwy Idg 7711	TDZE 410	Apt Elev 410

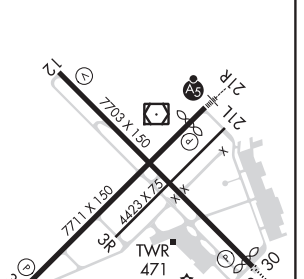
T A Baro-VNAV NA when using Hermiston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting: increase all DA 95 feet and all MDA 100 feet. Increase LPV all Cats 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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 12

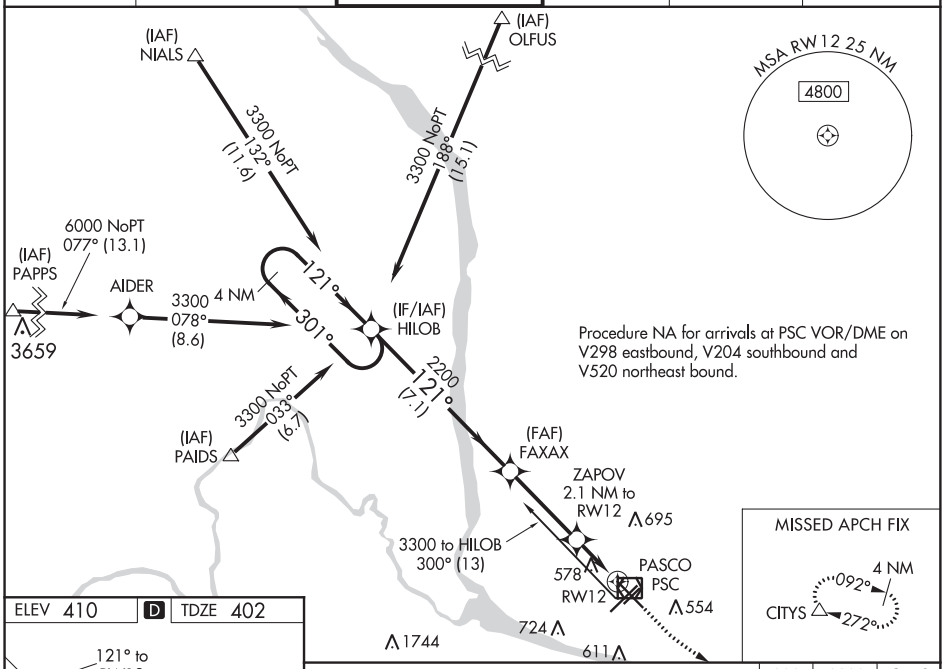
TRI-CITIES (PSC)

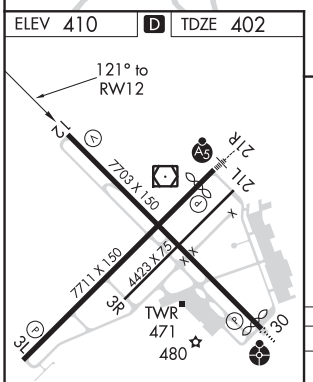
WAAS CH 58006 W12A	APP CRS 121°	Rwy Idg 7503 / TDZE 402 / Apt Elev 410

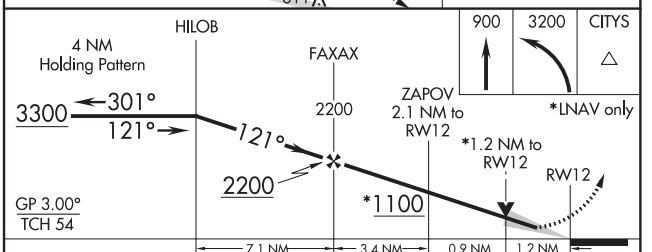
T A Baro-VNAV NA when using Hermiston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting: increase all DA 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







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)

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 21R

TRI-CITIES (PSC)

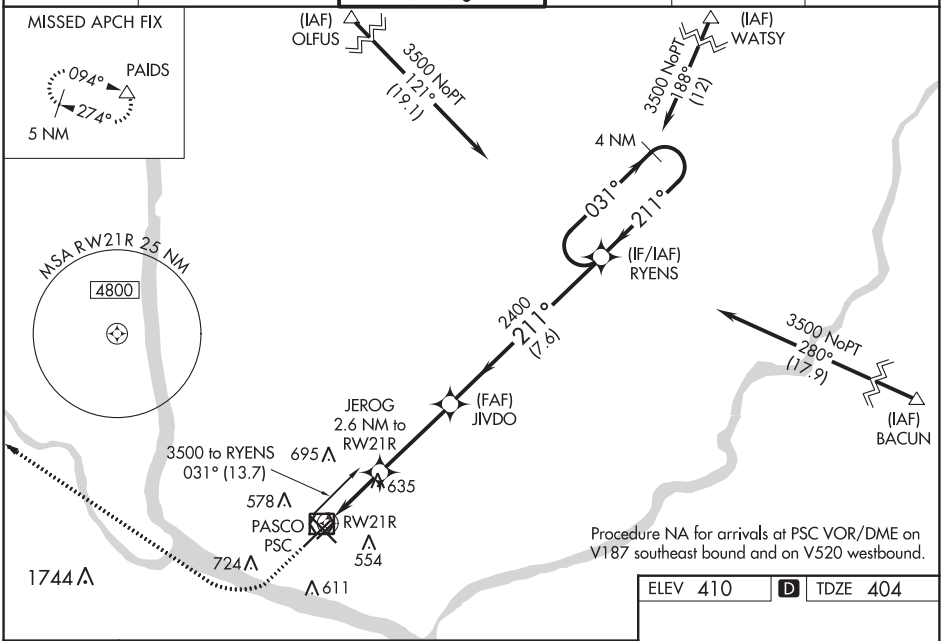
WAAS	APP CRS	Rwy Idg	7111
CH 40303	211°	TDZE	404
W21A		Apt Elev	410

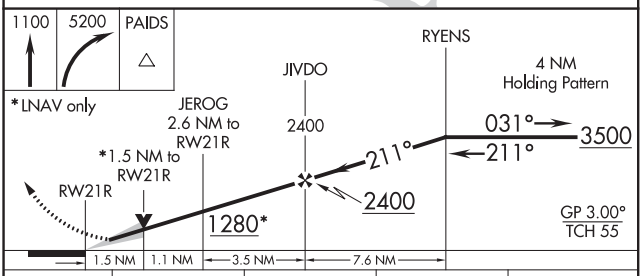
T A Baro-VNAV NA when using Hermiston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting and increase all 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.

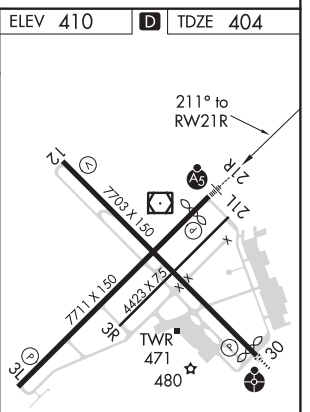
MALSR

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







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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PASCO, WASHINGTON AL-474 (FAA) 19339

WAAS CH 86605 W30A	APP CRS 301°	Rwy Idg 7503 / TDZE 405 / Apt Elev 410

RNAV (GPS) Y RWY 30

TRI-CITIES (PSC)

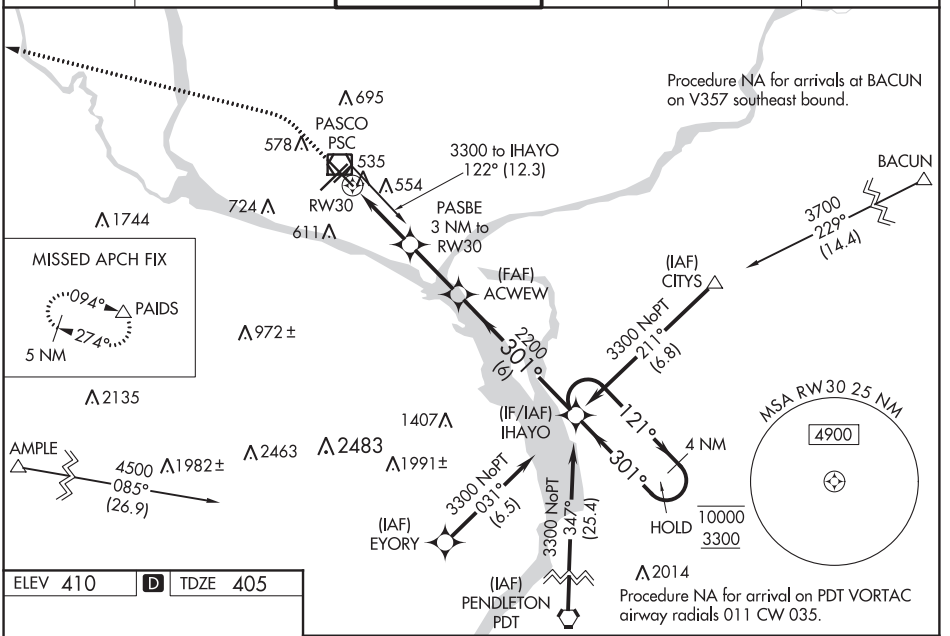
RNP APCH.

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.

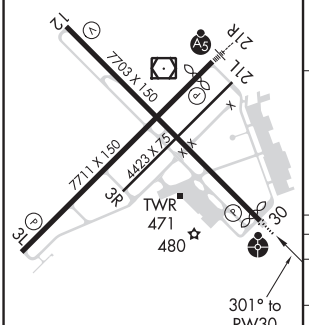
ATIS	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.3	121.8	120.0	122.95

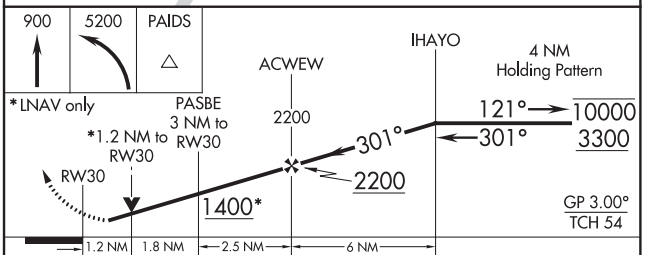


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 410 D TDZE 405





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)

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

VOR/DME PSC	APP CRS	Rwy Idg	7111
109.8	217°	TDZE	404
Chan 35		Apt Elev	410

VOR RWY 21R
TRI-CITIES (PSC)

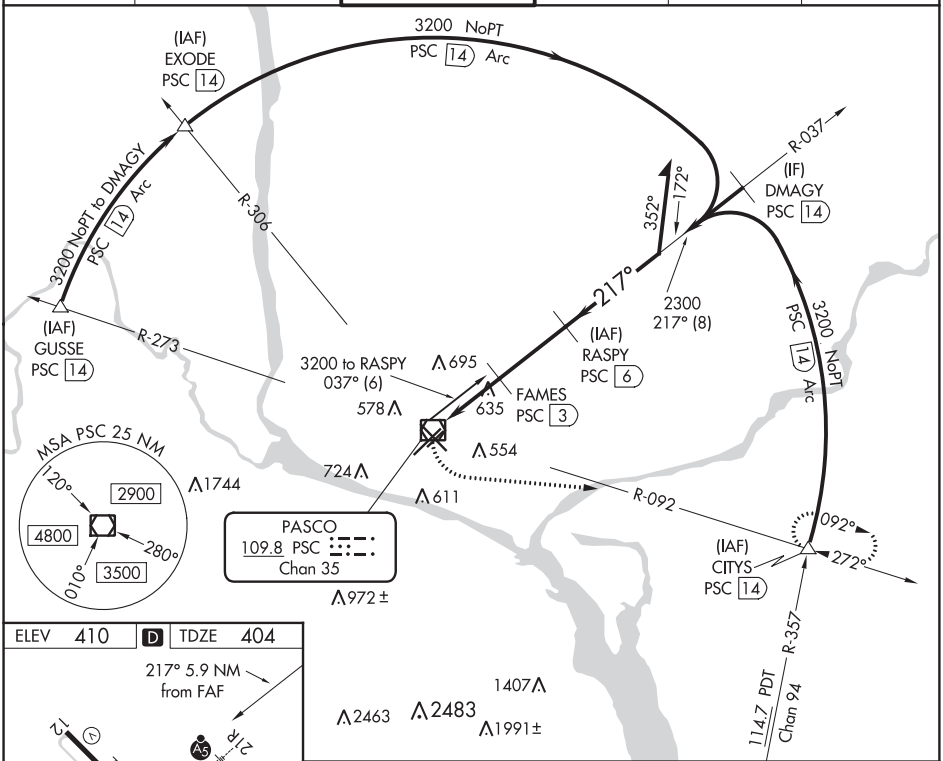
DME required.

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 visibility 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.

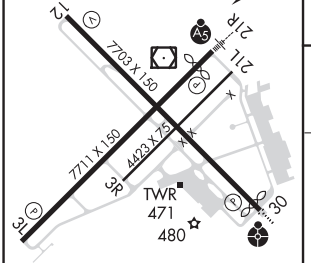
MALSR

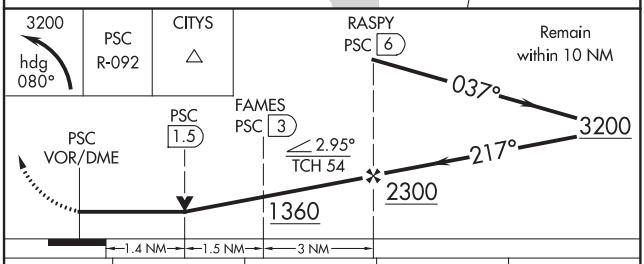
MISSED APPROACH: Climbing left turn to 3200 on heading 080° and PSC VOR/DME R-092 PSC VOR/DME to CITYS INT/PSC 14 DME and hold.

ATIS	CHINOOK APP CON★	TRI-CITIES TOWER★	GND CON	CLNC DEL	UNICOM
125.65	128.75 377.2	135.3 (CTAF) L 323.6	121.8	120.0	122.95



ELEV 410 D TDZE 404





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PASCO, WASHINGTON | AL-474 (FAA) | 19339

VOR RWY 30

TRI-CITIES (PSC)

VOR/DME PSC	APP CRS	Rwy Idg	7503
109.8	307°	TDZE	405
Chan 35		Apt Elev	410

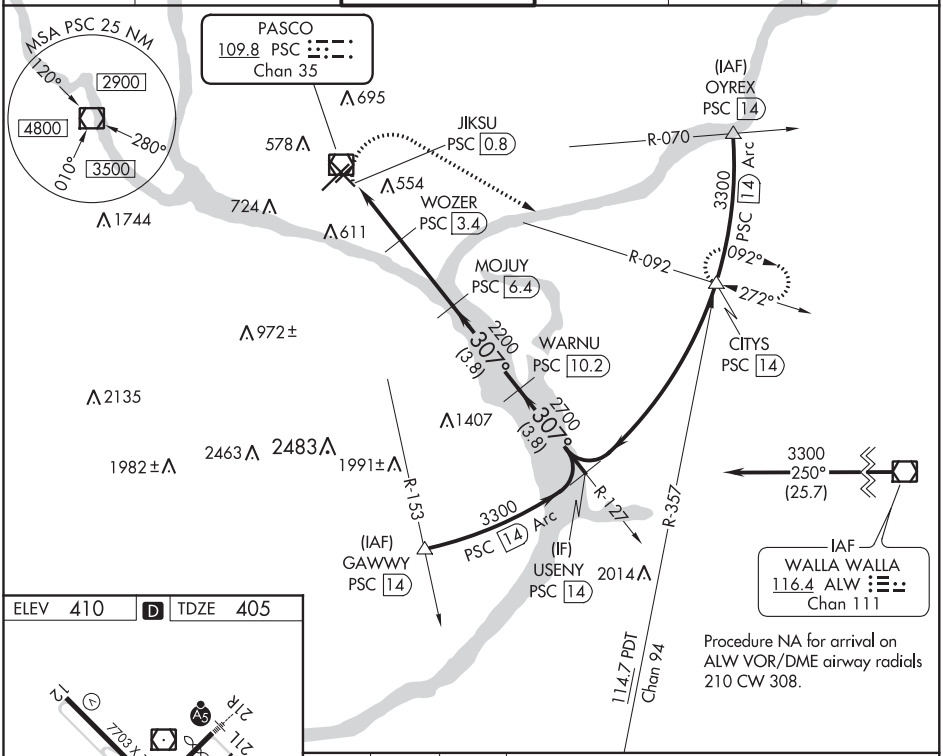
DME required.

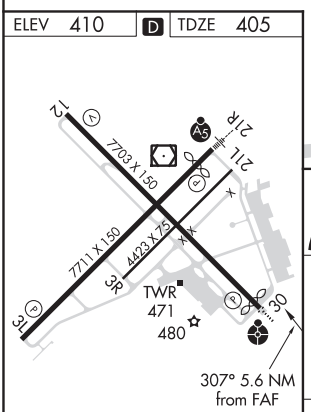
Rwy 30 helicopter visibility reduction below ¾ SM not authorized.
VDP NA when using Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 100 feet, increase S-30 visibility Cat C/D ⅜ SM and Circling Cat C/D visibility ¼ SM. For inoperative ALS, increase S-30 Cat C/D visibility to 1⅛ SM.

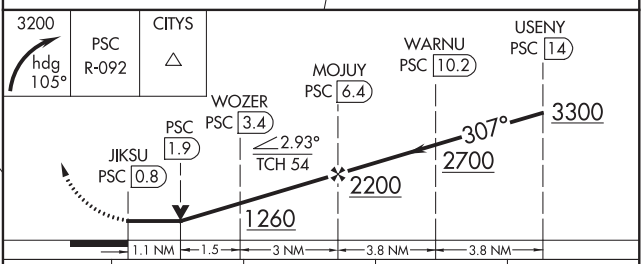
ODALS

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)

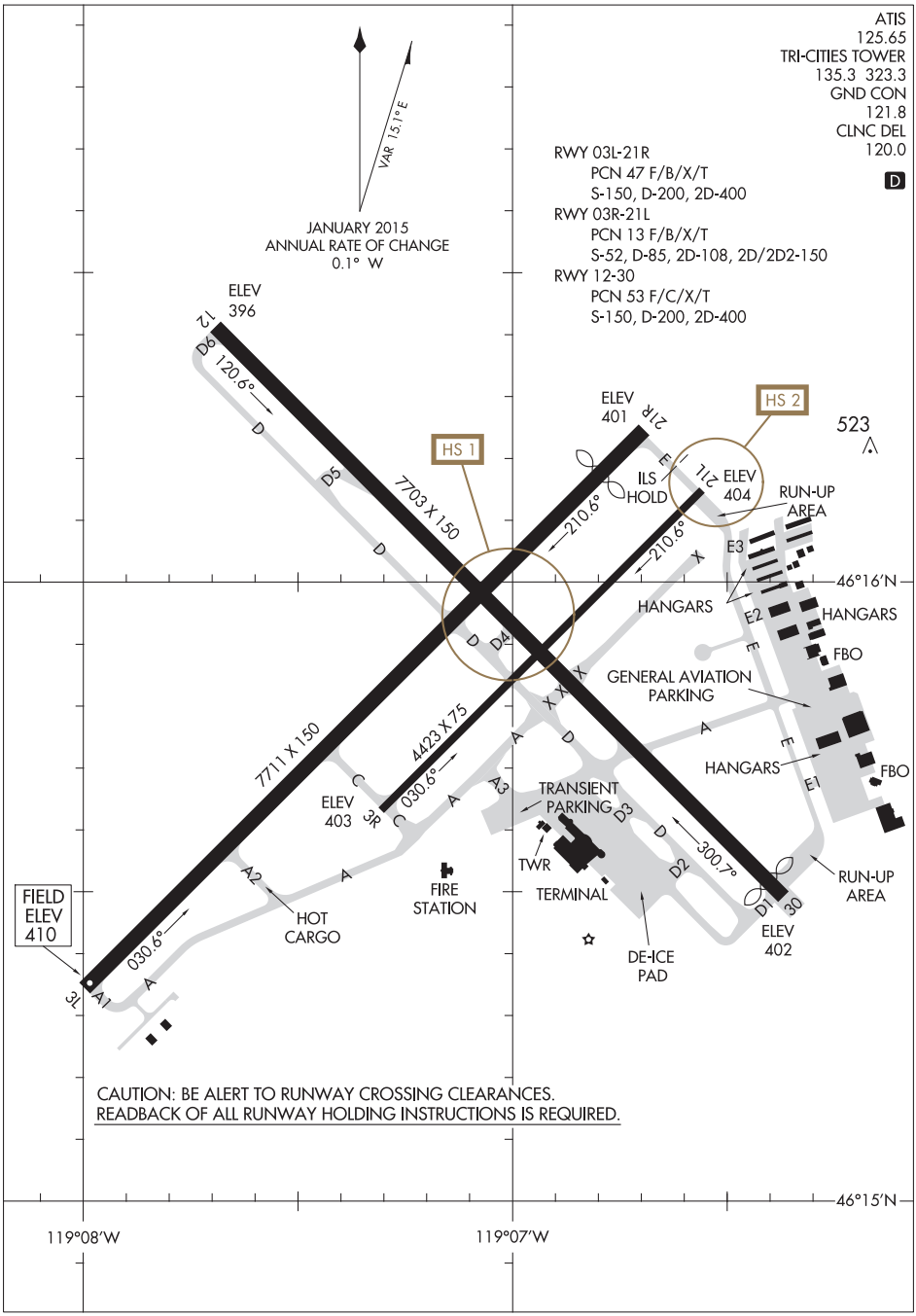
REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

PASCO, WASHINGTON
Amdt 5B 05DEC19

46°16'N-119°07'W

TRI-CITIES (PSC)
VOR RWY 30

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

17341

TRI-CITIES SEVEN DEPARTURE

AL-474 (FAA)

TRI-CITIES (PSC)
PASCO, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020

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

ELLENSBURG
117.9 ELN
Chan 126
N47°01.46′-W120°27.50′
L-13, H-1

PULLMAN
109.0 PUW
Chan 27
N46°40.45′-W117°13.41′
L-13

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

TAKEOFF MINIMUMS
Rwys 21L, 21R, 12, 30, 3L, 3R: Standard with minimum climb of 310′ per NM to 3500.

NOTE: RADAR required.

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

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 Idg	6301
110.3	254°	TDZE	1487
		Apt Elev	1497

ILS or LOC RWY 26

EASTERN OREGON RGNL AT PENDLETON (PDT)

DME required.

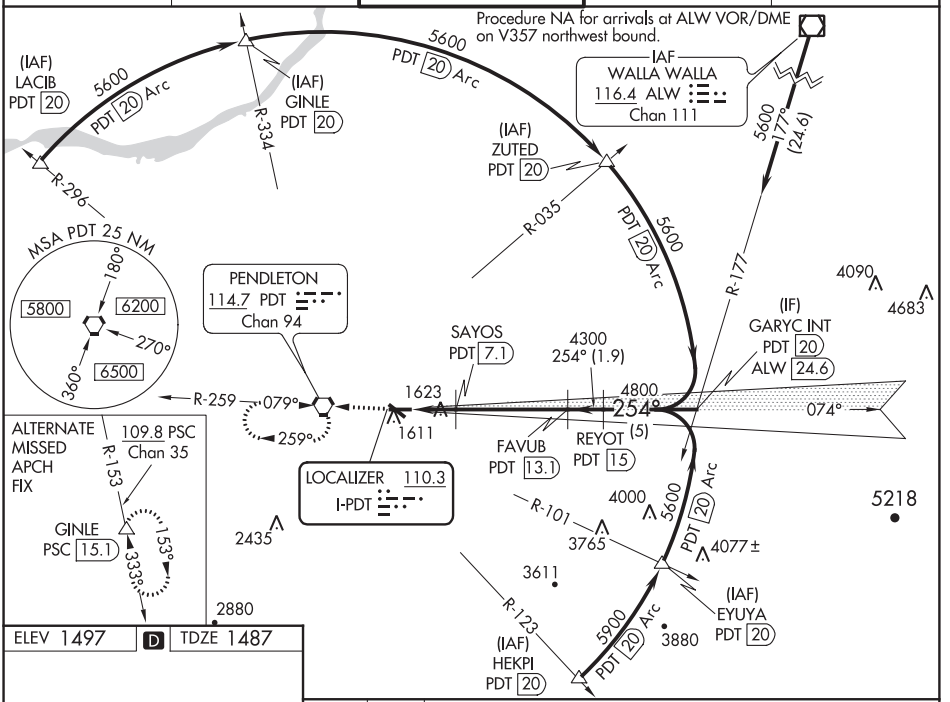
T A -22°C

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).

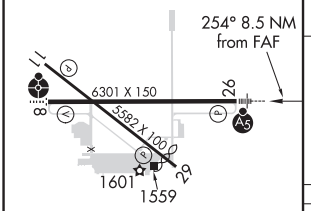
MALSR

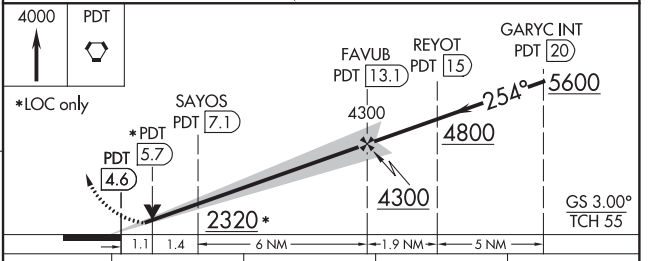
MISSED APPROACH: Climb to 4000 direct PDT VORTAC and hold, continue climb-in-hold to 4000.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 8

EASTERN OREGON RGNL AT PENDLETON (PDT)

WAAS	APP CRS	Rwy Idg	6301
CH 73012	074°	TDZE	1486
W08A		Apt Elev	1497

RNP APCH.

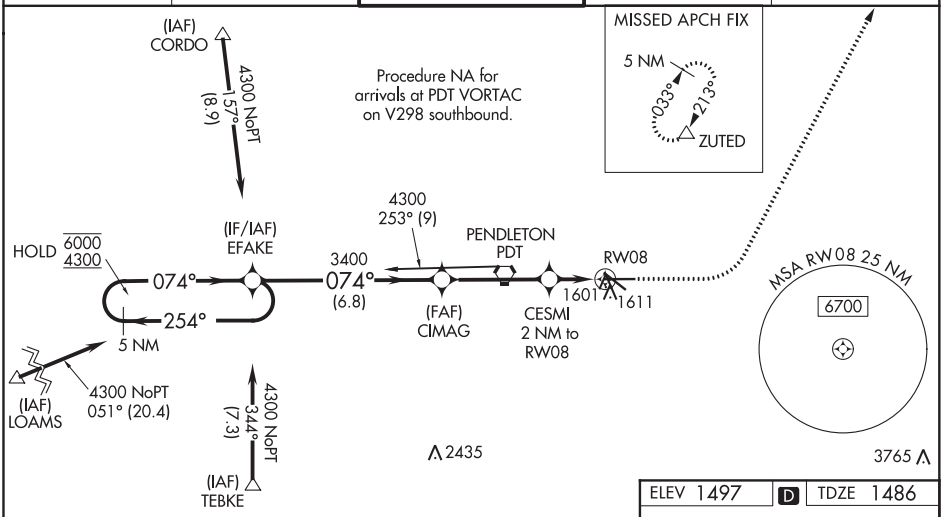
T A -22°C

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 all MDAs 140 feet; increase LPV and LNAV/VNAV all Cats visibility ¼ SM, LNAV visibility Cat C and D ¼ SM, and Circling visibility Cat C ¼ SM, 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.

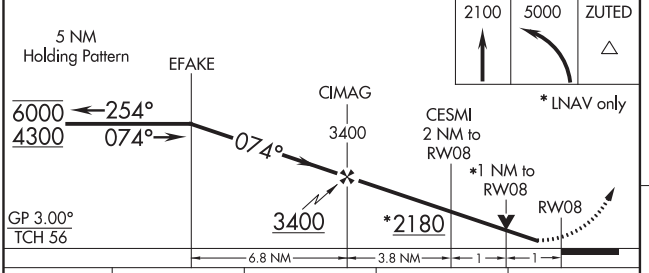
ODALS

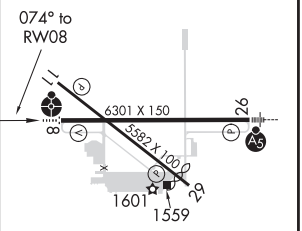
MISSED APPROACH: Climb to 2100 then climbing left turn 5000 to ZUTED and hold.

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	1762-¾ 276 (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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5126
CH 82712	112°	TDZE	1487
W11A		Apt Elev	1497

RNAV (GPS) RWY 11

EASTERN OREGON RGNL AT PENDLETON (PDT)

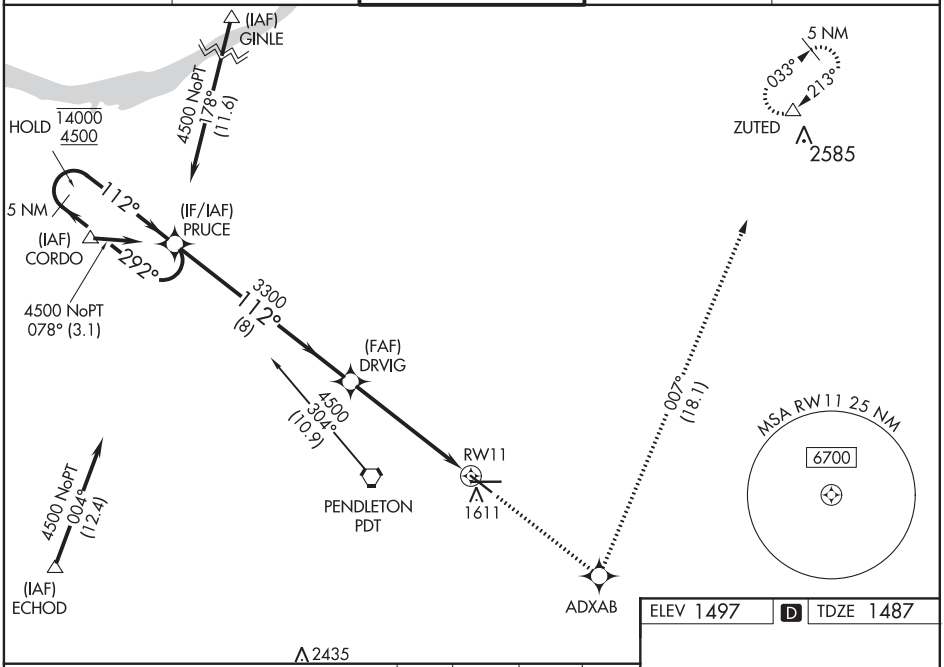
RNP APCH.

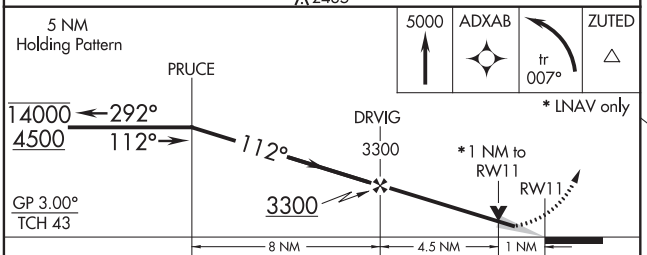
Baro-VNAV and VDP NA when using Walla Walla altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet; VNAV all Cats visibility ⅛ SM, LNAV Cat C visibility ⅜ SM and Cat D visibility ⅛ SM, Circling Cat C visiblity ¼ SM and Circling Cat D visiblity ½ SM.

-22°C

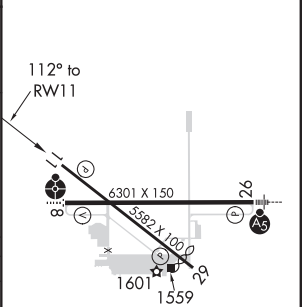
MISSED APPROACH: Climb to 5000 direct ADXAB and on track 007° to ZUTED and hold.

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





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PENDLETON, OREGON | AL-316 (FAA) | 19339

WAAS	APP CRS	Rwy Idg	6301
CH 78412	254°	TDZE	1487
W26A		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, LNAV/VNAV DA to 1922 and all MDA 140 feet; increase LPV all Cats visibility to RVR 2600, LNAV/VNAV all Cats to RVR 4000, 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 and LNAV Cat C/D visibility to 1½ SM.

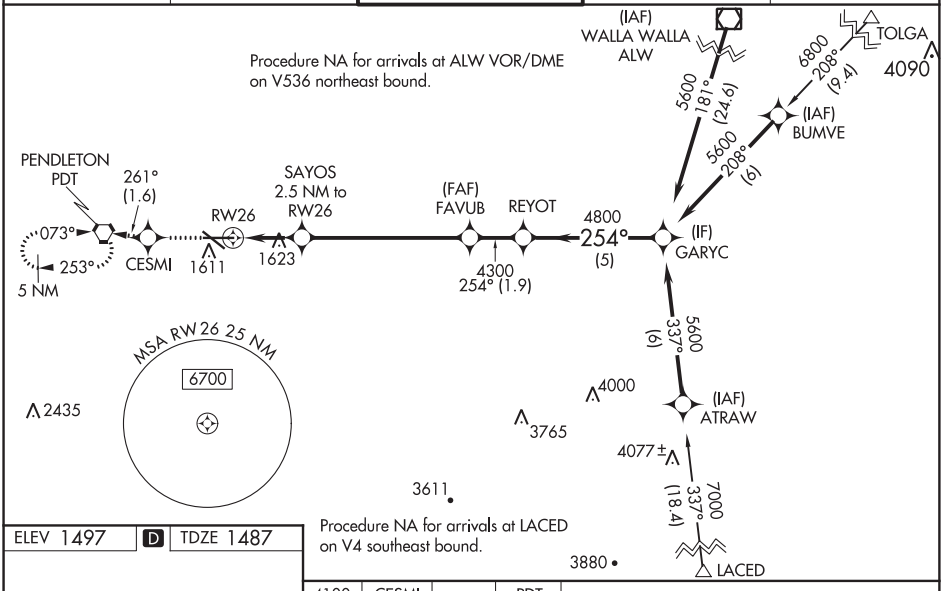
-22°C

RVR 1800 authorized with the use of FD or AP or HUD to DA(NA when using Walla Walla altimeter setting).

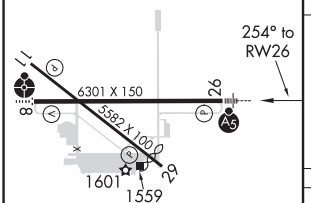
MALSR

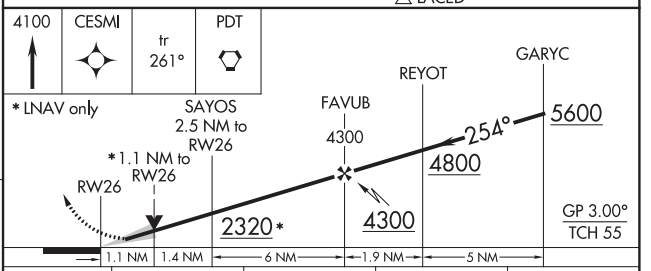
MISSED APPROACH: Climb to 4100 direct CESMI and on track 261° to PDT VORTAC and hold, continue climb-in-hold to 4100.

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

PENDLETON, OREGON
Orig-D 05DEC19

EASTERN OREGON RGNL AT PENDLETON (PDT)
45°42'N-118°51'W
RNAV (GPS) RWY 26

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5126
CH 42513	292°	TDZE	1496
W29A		Apt Elev	1497

RNAV (GPS) RWY 29

EASTERN OREGON RGNL AT PENDLETON (PDT)

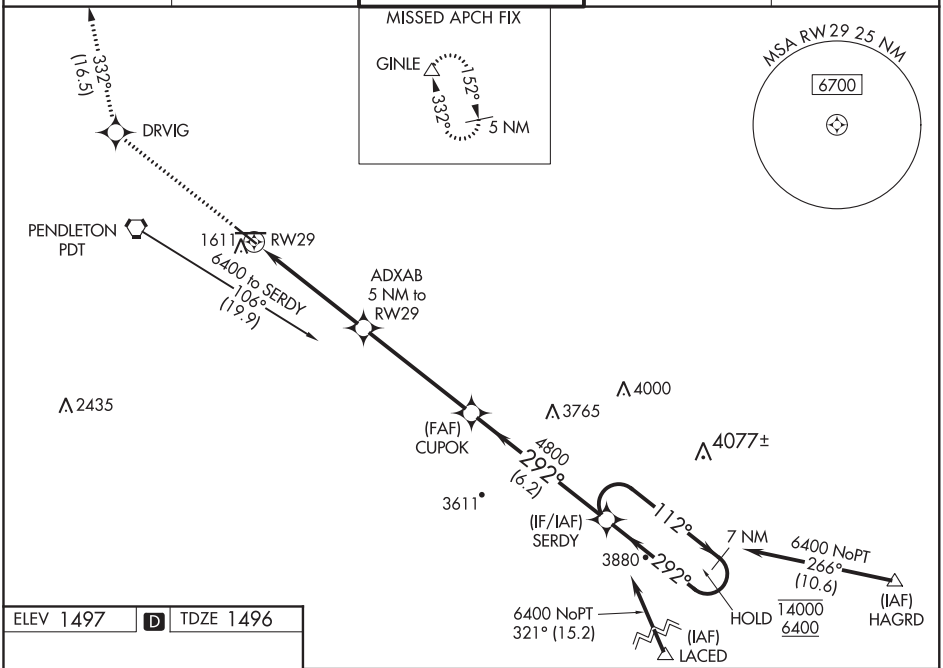
RNP APCH.

T A -22°C

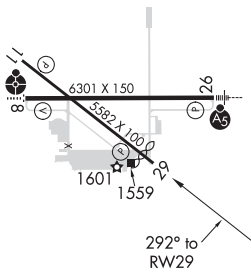
Baro-VNAV and VDP NA when using Walla Walla altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet, LNAV/VNAV all Cats visibility ¼ SM, LNAV Cat C visibility ¼ SM, Cat D visibility ⅛ SM, Circling Cat C visibility ¼ SM and Circling Cat D visibility ½ SM.

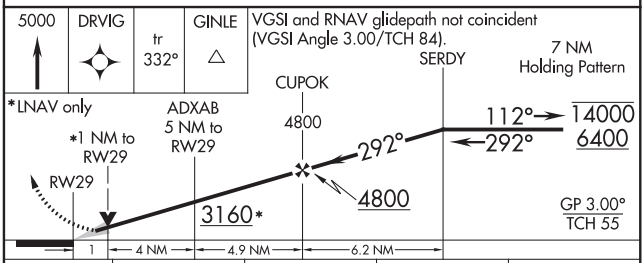
MISSED APPROACH: Climb to 5000 direct DRVIG and on track 332° to GINLE and hold.

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





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)

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC PDT	APP CRS	Rwy Idg	6301
114.7	079°	TDZE	1486
Chan 94		Apt Elev	1497

VOR RWY 8

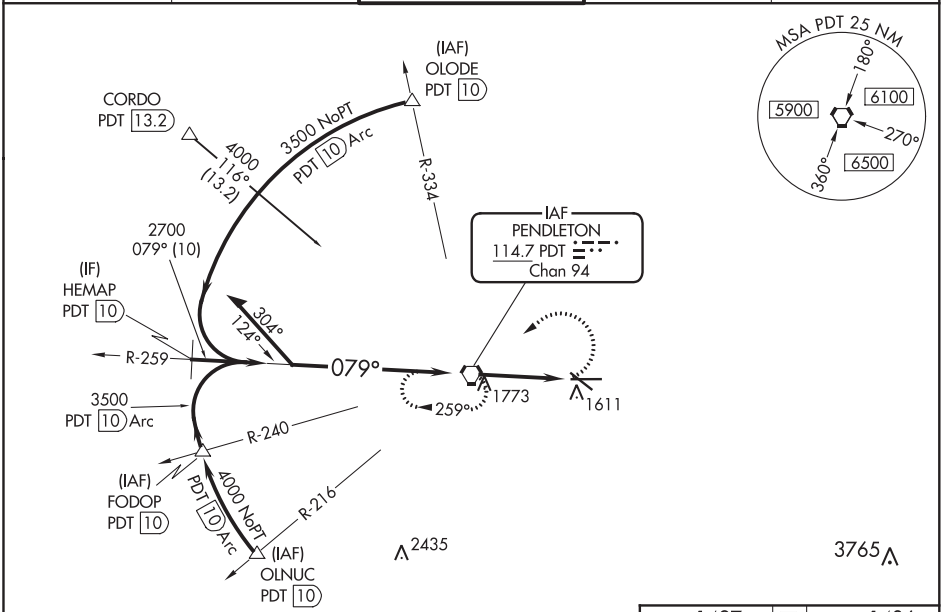
EASTERN OREGON RGNL AT PENDLETON (PDT)

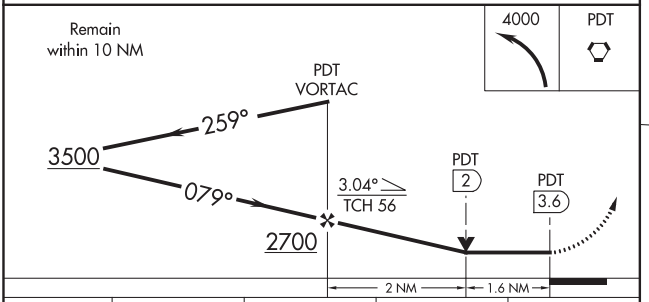
Circling to Rwy 11 NA at night. Rwy 8 helicopter visibility reduction below ¾ SM NA. VDP NA when using Walla Walla altimeter setting. When local altimeter setting not received, use Walla Walla altimeter setting and increase all MDA 140 feet, increase S-8 Cat C/D visibility to 1⅞ SM, Circling Cat C visibility 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

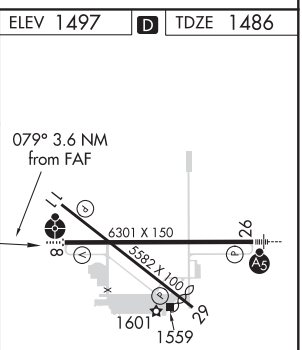
ODALS

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







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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PINEDALE, WYOMING | AL-6884 (FAA) | 19227

WAAS	APP CRS		
CH 58326	110°	Rwy Idg	8900
W11A		TDZE	7096
		Apt Elev	7096

RNAV (GPS) RWY 11

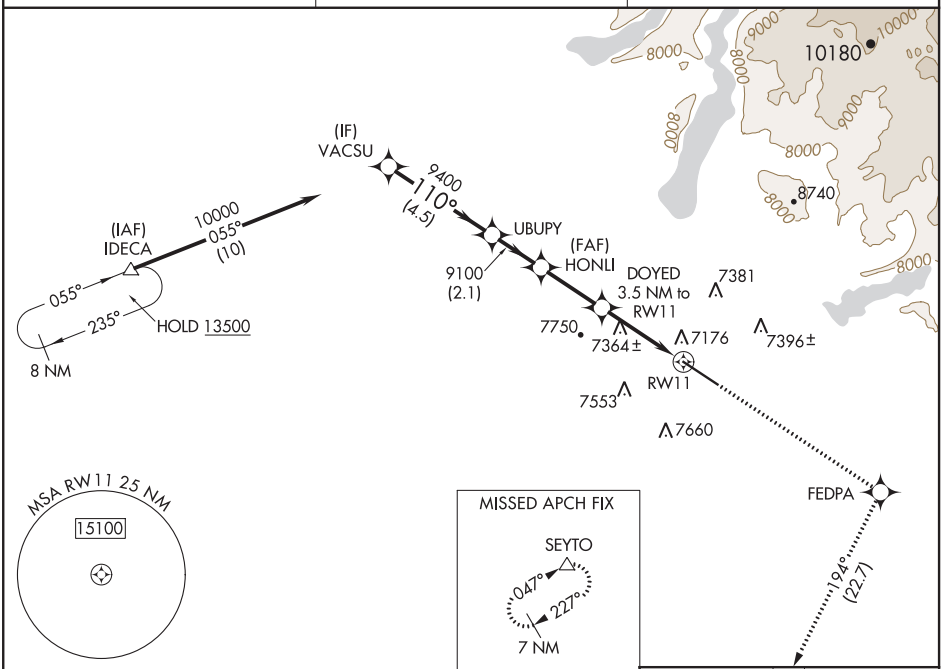
RALPH WENZ FIELD (PNA)

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.

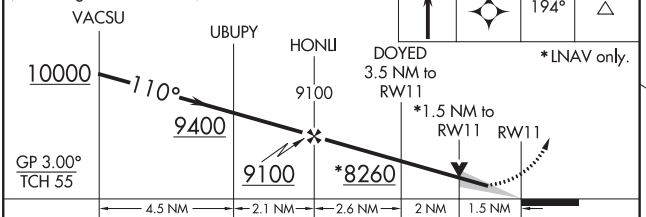
ODALS

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

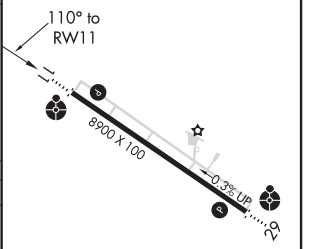


VGSI and RNAV glidepath not coincident (VGSI Angle 2.83/TCH 40).



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)

ELEV 7096 | TDZE 7096



MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

PINEDALE, WYOMING
Amdt 2A 24JUL14

42°48′N-109°49′W

RALPH WENZ FIELD (PNA)

RNAV (GPS) RWY 11

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 40426 W29A	APP CRS 291°	Rwy Idg 8900 TDZE 7078 Apt Elev 7096

RNAV (GPS) RWY 29

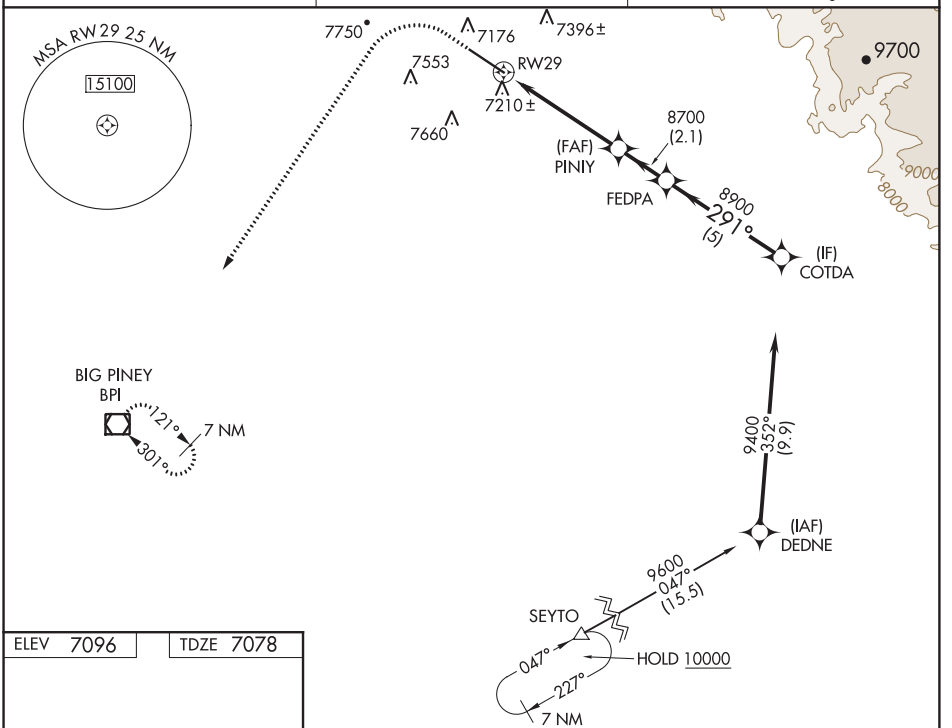
RALPH WENZ FIELD (PNA)

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 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.

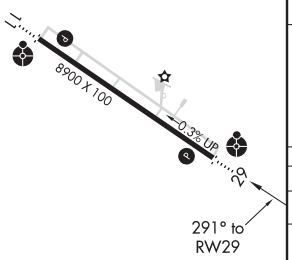
ODALS

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

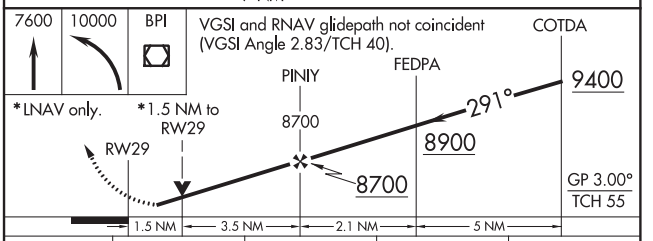


ELEV 7096 TDZE 7078



MIRL Rwy 11-29 L

REIL Rwys 11 and 29 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020

PINEDALE, WYOMING

AL-6884 (FAA)

19227

NDB-A

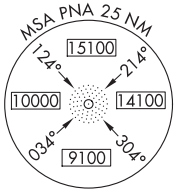
RALPH WENZ FIELD (PNA)

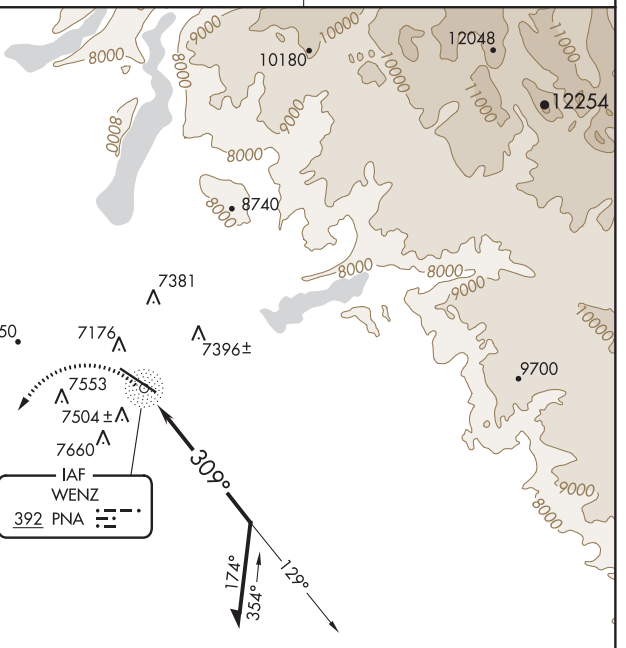
NDB PNA	APP CRS	Rwy Idg	N/A
392	309°	TDZE	N/A
		Apt Elev	7102

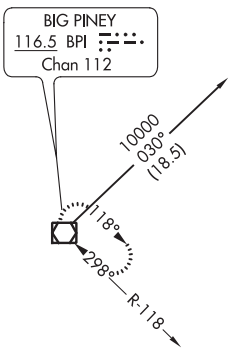
When local altimeter setting not received, use Miley Memorial Field altimeter setting and increase all MDA 60 feet and visibility Cat C/D ¼ mile.

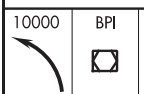
MISSED APPROACH: Climbing left turn to 10000 direct BPI VOR/DME and hold.

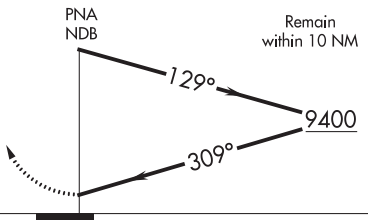
AWOS-3	SALT LAKE CENTER	UNICOM
118.325	128.35 239.25	122.8 (CTAF) L

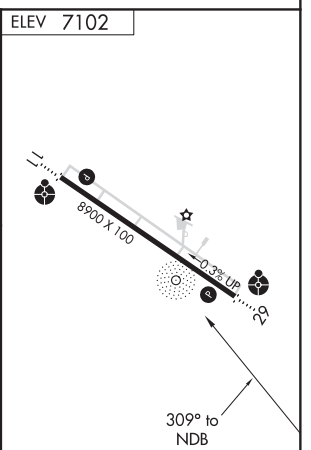












CATEGORY	A	B	C	D
CIRCLING	7940-1¼	838 (900-1¼)	7940-2½	7940-2¾
			838 (900-2½)	838 (900-2¾)

MIRL Rwy 11-29 L

REIL Rwys 11 and 29 L

PINEDALE, WYOMING

Orig-A 31MAR16

42°48′N-109°49′W

RALPH WENZ FIELD (PNA)

NDB-A

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 12

SHER-WOOD (PWD)

WAAS	APP CRS	Rwy Idg	3900
CH 97729	122°	TDZE	2252
W12A		Apt Elev	2264

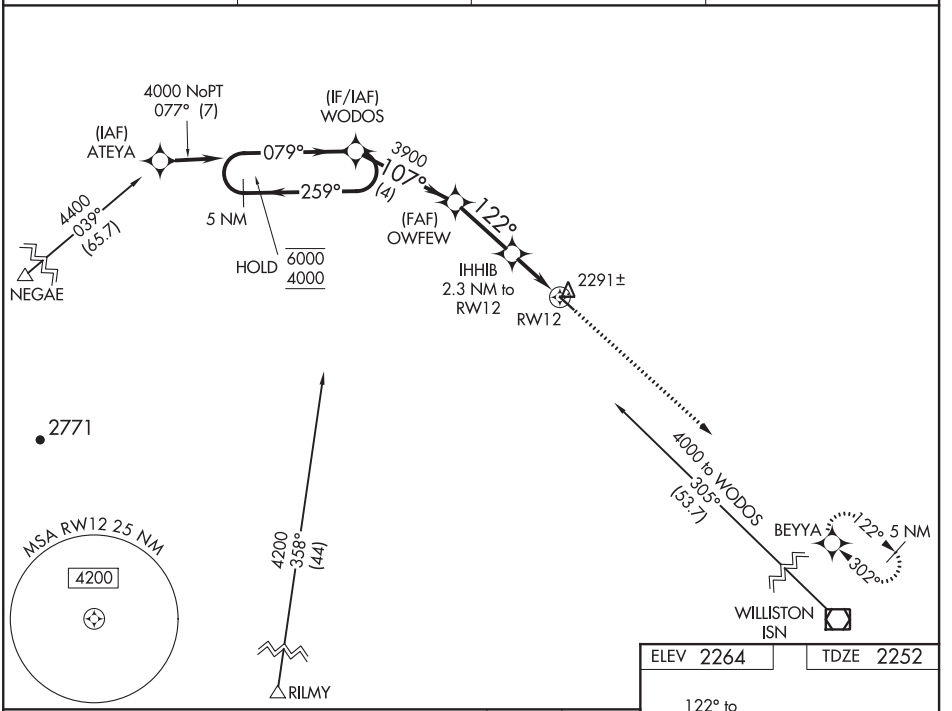
RNP APCH.

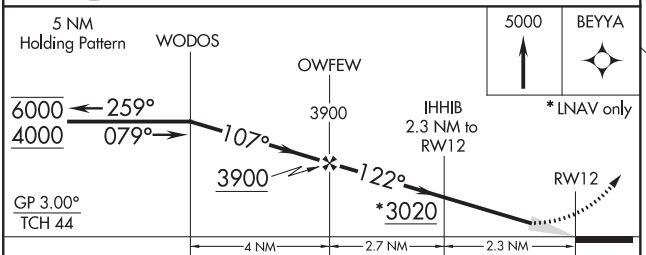
T NA

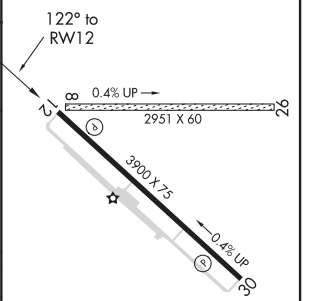
Baro-VNAV NA. Circling Rwy 8, 26 NA at night.
Use Williston Basin Intl altimeter setting.

MISSED APPROACH: Climb to 5000 direct BEYYA and hold.

AWOS-3	XWA ASOS	SALT LAKE CENTER	UNICOM
135.025	125.925	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)

MIRL Rwy 12-30 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PLENTYWOOD, MONTANA | AL-10315 (FAA) | 20030

RNAV (GPS) RWY 30

SHER-WOOD (PWD)

WAAS	APP CRS	Rwy Idg	3900
CH 50529	302°	TDZE	2247
W30A		Apt Elev	2264

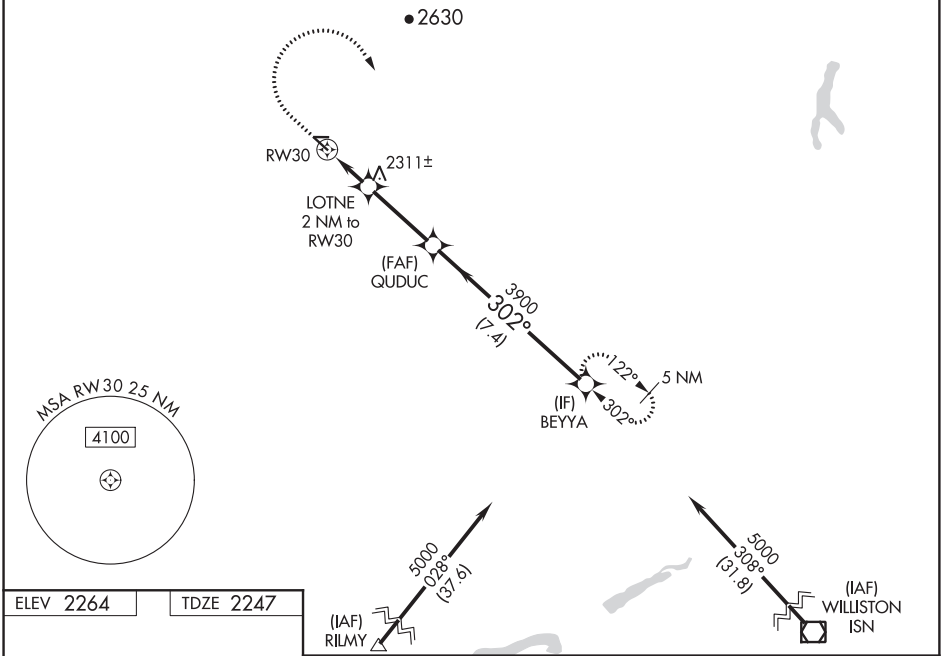
RNP APCH.

T
NA

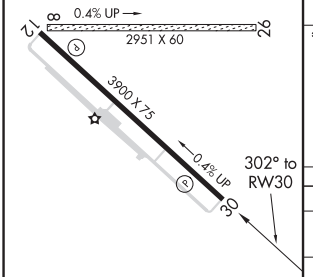
Circling Rwy 8, 26 NA at night. Baro-VNAV NA. Use Williston Basin Intl altimeter setting.

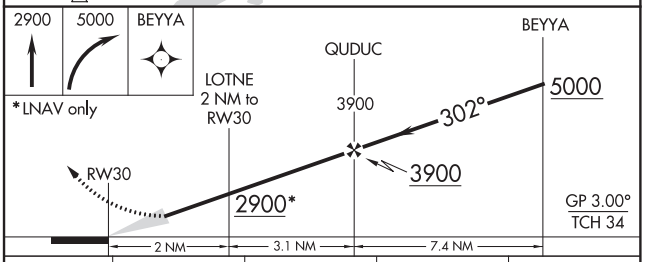
MISSED APPROACH: Climb to 2900 then climbing right turn to 5000 direct BEYYA and hold.

AWOS-3	XWA ASOS	SALT LAKE CENTER	UNICOM
135.025	125.925	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 21

POCATELLO RGNL (PIH)

LOC/DME I-PIH	APP CRS	Rwy Idg	9060
110.3	211°	TDZE	4452
Chan 40		Apt Elev	4452

T A 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.

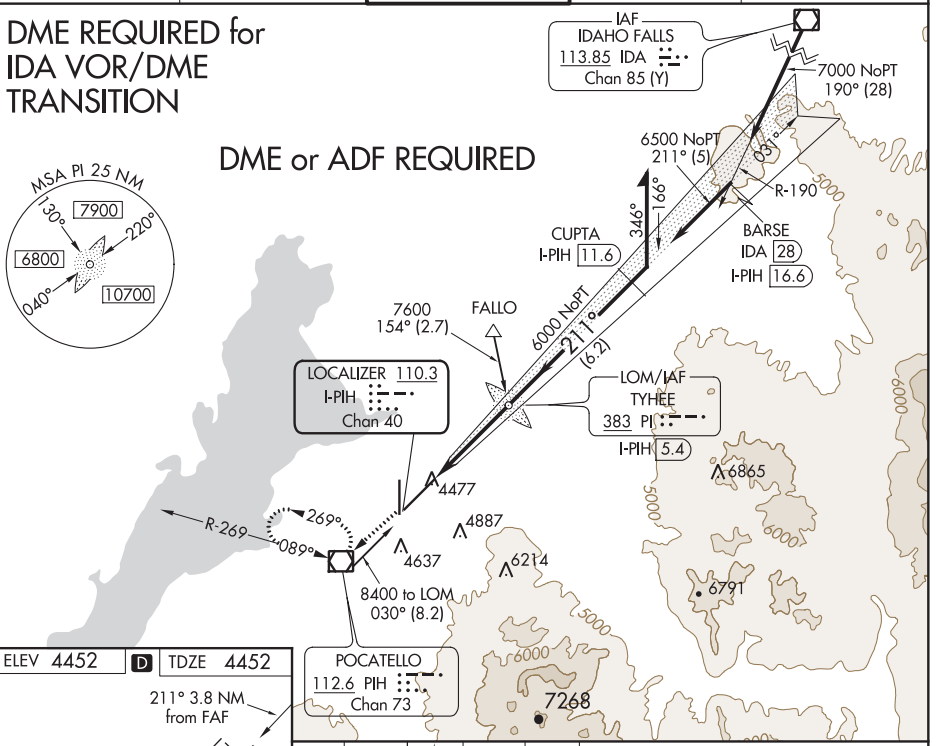
MALSR

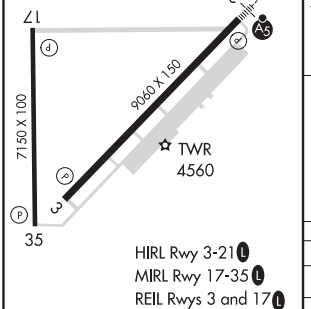
MISSED APPROACH: Climb to 7400 direct PIH VOR/DME, continue climb via PIH VOR/DME R-269, then right turn direct PIH VOR/DME and hold.

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

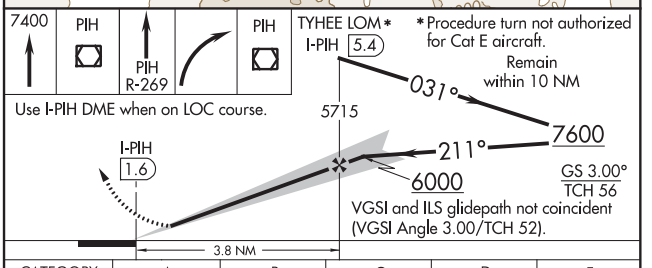
DME REQUIRED for IDA VOR/DME TRANSITION

DME or ADF REQUIRED





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 97502 W03A	APP CRS 031°	Rwy Idg 9060 TDZE 4444 Apt Elev 4452

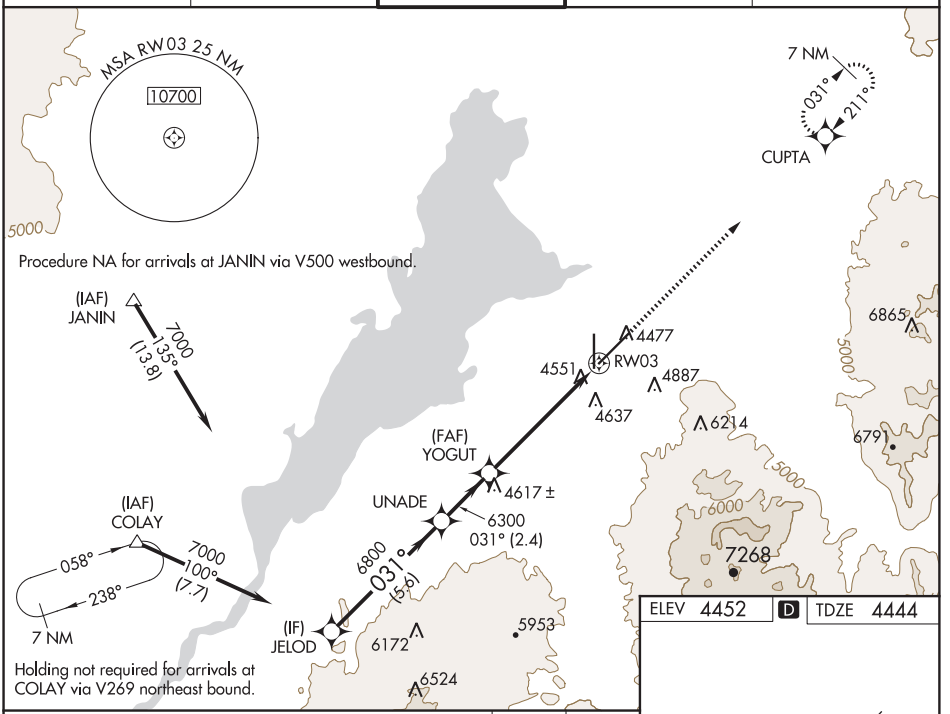
RNAV (GPS) RWY 3

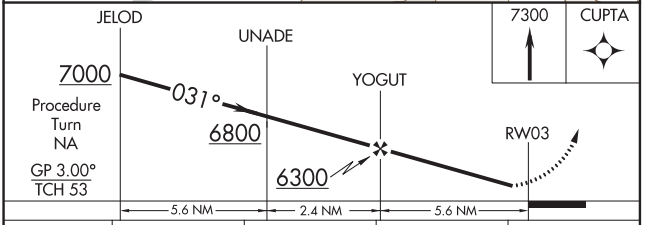
POCATELLO RGNL (PIH)

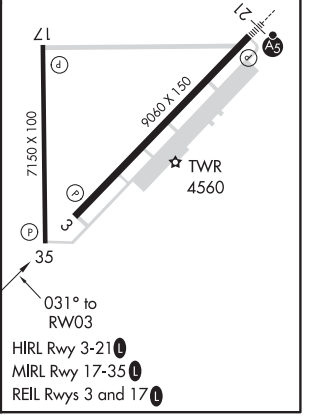
Circling NA southeast of Rwy 3-21. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (9°F) or above 40°C (104°F). If local altimeter setting not received, use Idaho Falls Rgnl altimeter setting and increase all DAs/MDAs 140 feet. 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, 30 JAN 2020 to 26 MAR 2020

WAAS CH 78212 W21A	APP CRS 211°	Rwy Idg 9060 / TDZE 4452 / Apt Elev 4452

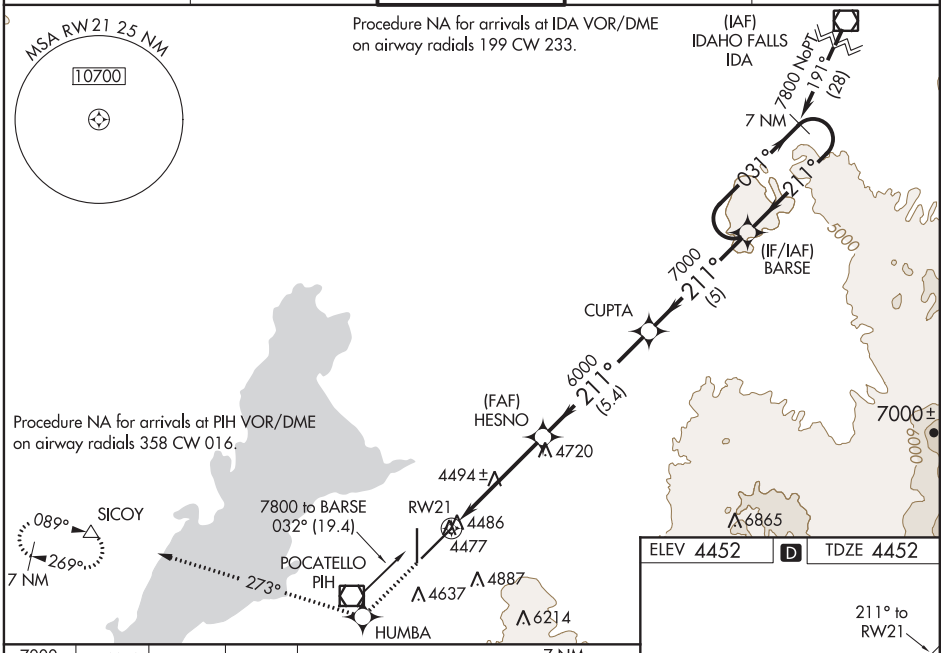
RNAV (GPS) RWY 21
POCATELLO RGNL (PIH)

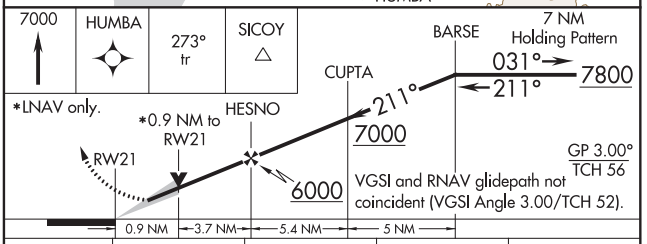
T Inoperative table does not apply to LNAV Cat D. For inoperative MALSR when using Idaho Falls altimeter setting, increase LPV all Cats visibility to 1¼ mile.
A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 39°C (102°F). DME/DME RNP-0.3 NA. When local altimeter setting 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

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





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

POCATELLO, IDAHO | AL-327 (FAA) | 19115

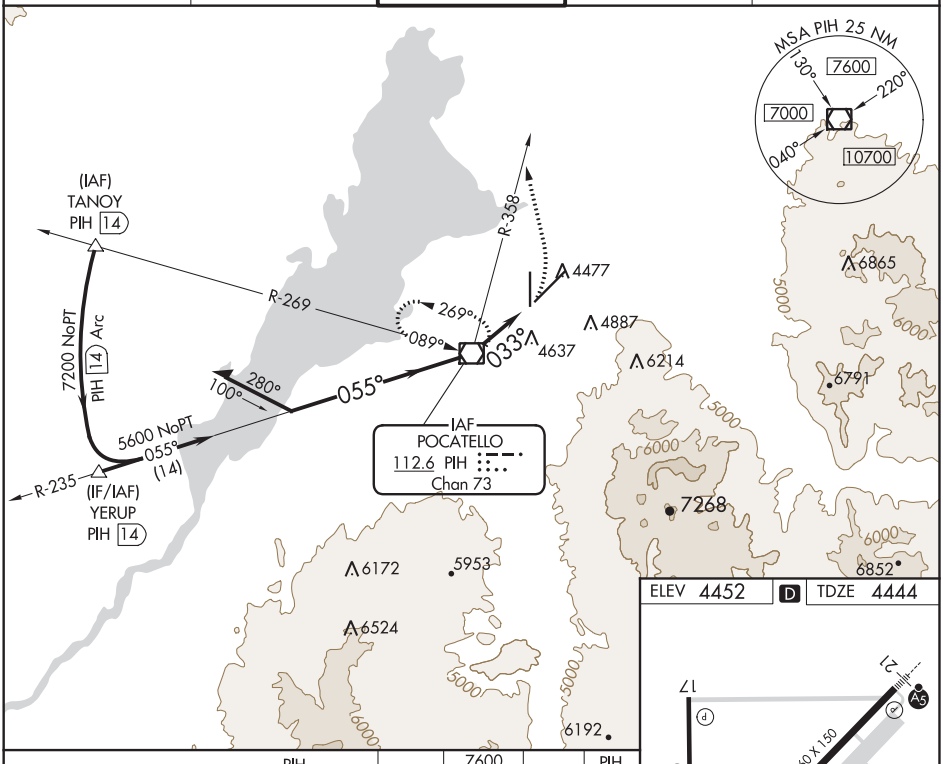
VOR/DME PIH	APP CRS	Rwy Idg	9060
112.6	033°	TDZE	4444
Chan 73		Apt Elev	4452

VOR RWY 3
POCATELLO RGNL (PIH)

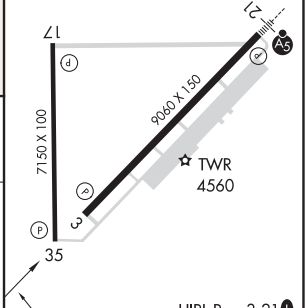
T A Circling to Rwy 35 NA at night. When VGSI inop, Straight-In/Circling Rwy 3 procedure NA at night. Circling NA southeast of Rwy 3-21. Visibility reduction by helicopters NA. When local altimeter setting not received, use Idaho Falls altimeter setting and increase all MDA 140 feet, and increase visibility S-3 Cat C ½ mile and Circling Cat C ¼ mile.

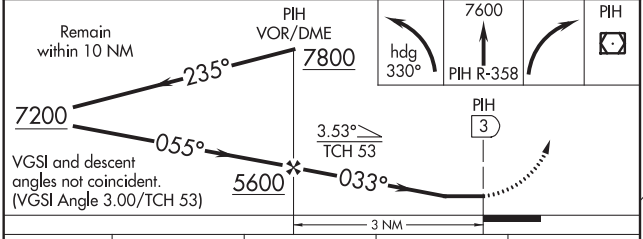
MISSED APPROACH: Climbing left turn on heading 330° and PIH VOR/DME R-358 to 7600 then right turn direct PIH VOR/DME and hold.

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



ELEV 4452	D	TDZE 4444





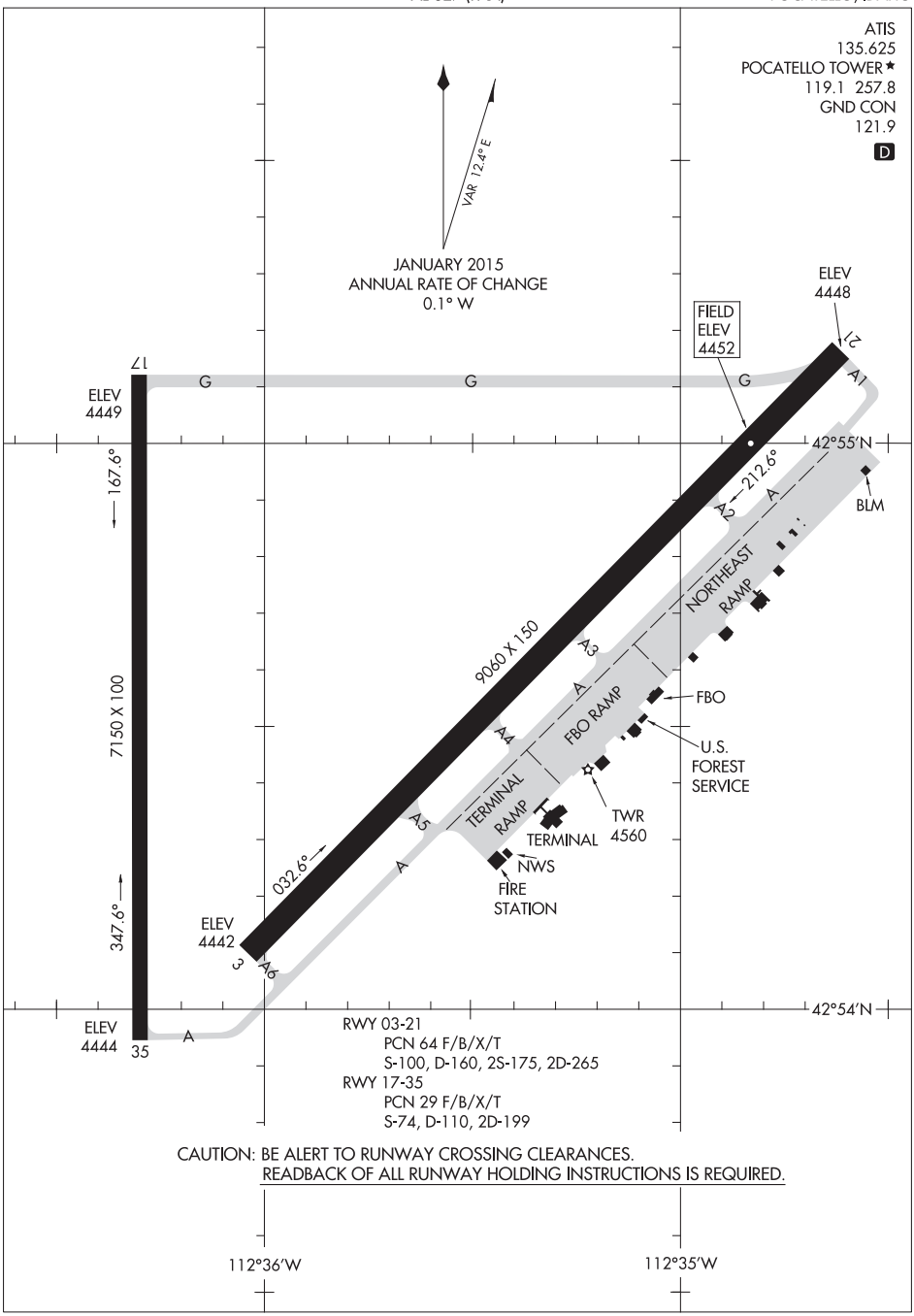
033° 3 NM from FAF

HIRL Rwy 3-21 L
MIRL Rwy 17-35 L
REIL Rwys 3 and 17 L

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

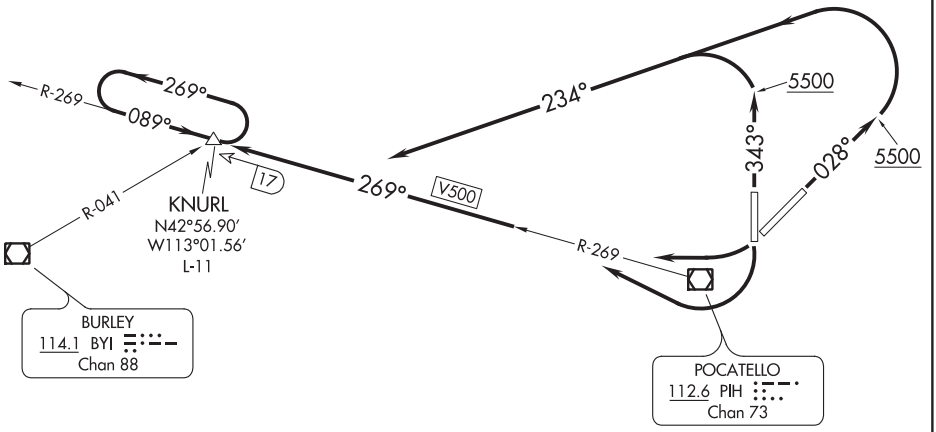
(KNURL1.KNURL) 16147

KNURL ONE DEPARTURE (OBSTACLE)

SL-327 (FAA)

POCATELLO RGNL (PIH)
POCATELLO, IDAHO

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 18

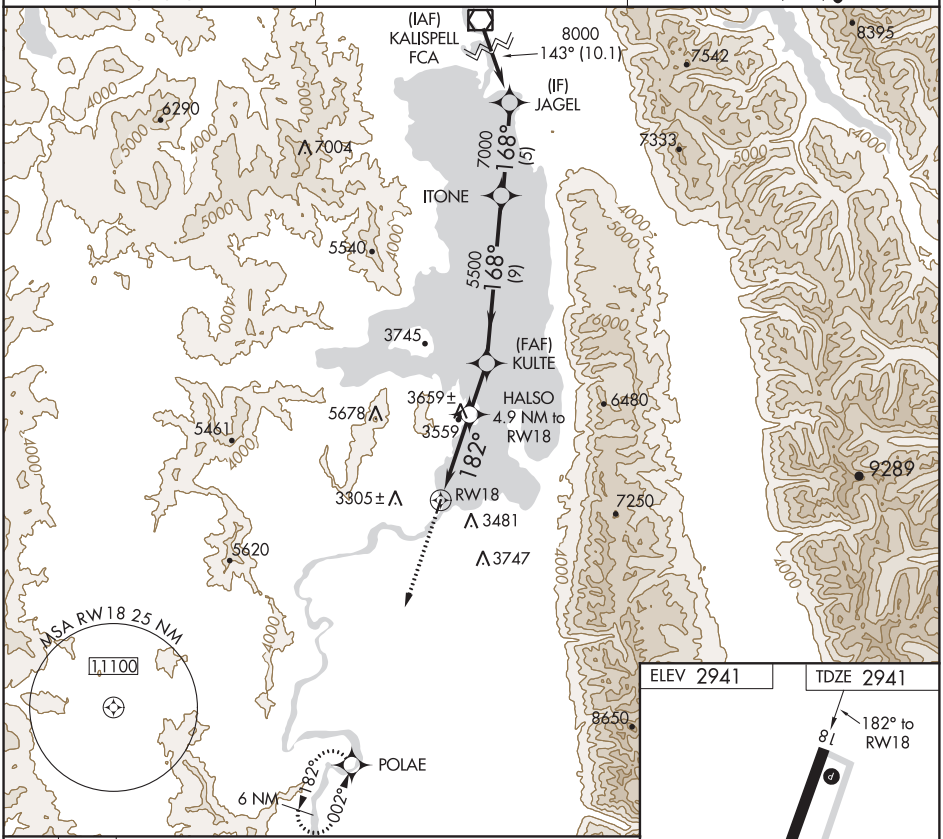
POLSON (8S1)

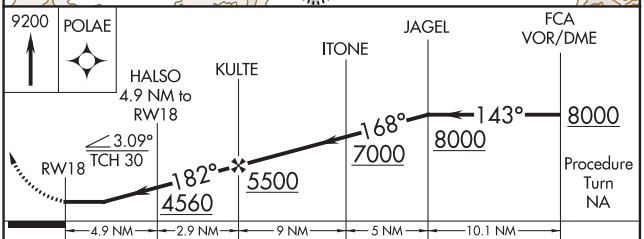
APP CRS	Rwy Idg	4195
182°	TDZE	2941
	Apt Elev	2941

Procedure NA at night. DME/DME RNP-0.3 NA.
Use Glacier Park Intl altimeter setting.
Helicopter visibility reduction below 1 SM NA.

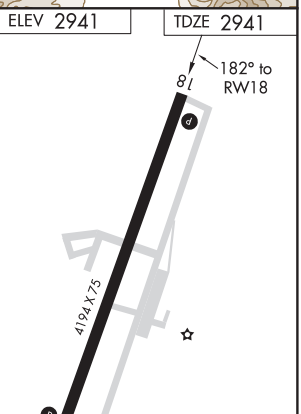
MISSED APPROACH: Climb to 9200 direct POLAE and hold.

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 1539 (1600-1¼)	4480-1½ 1539 (1600-1½)	NA	
CIRCLING	4480-1¼ 1539 (1600-1¼)	4480-1½ 1539 (1600-1½)	NA	



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

POLSON, MONTANA | AL-9529 (FAA) | 19339

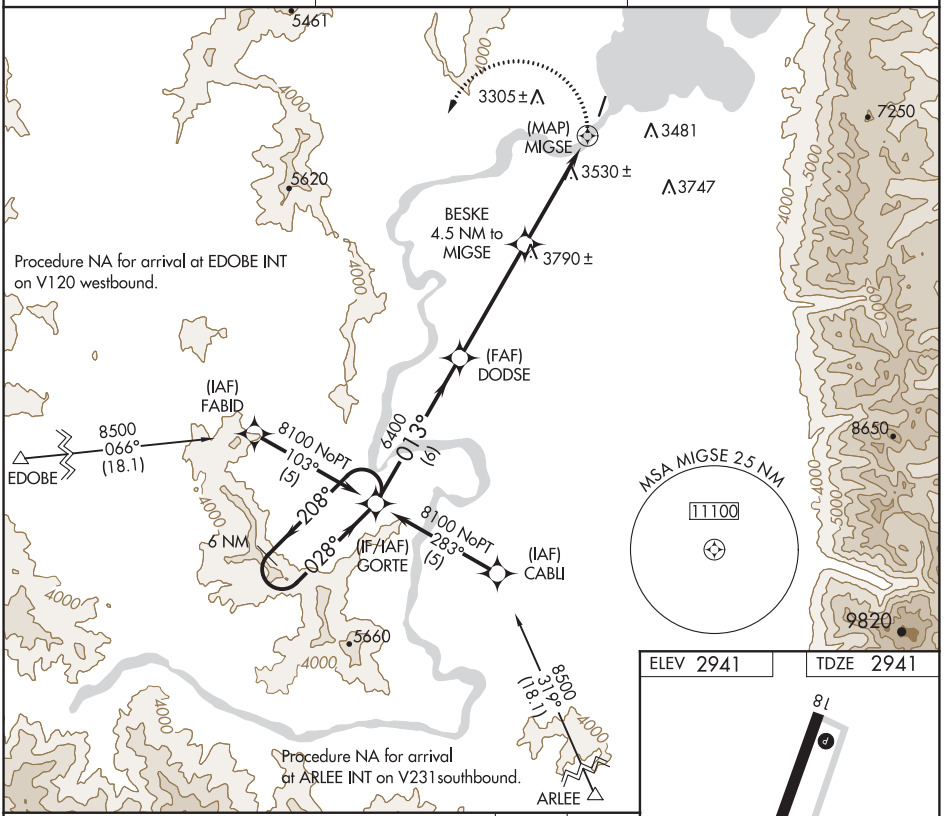
APP CRS	Rwy Idg	4195
013°	TDZE	2941
	Apt Elev	2941

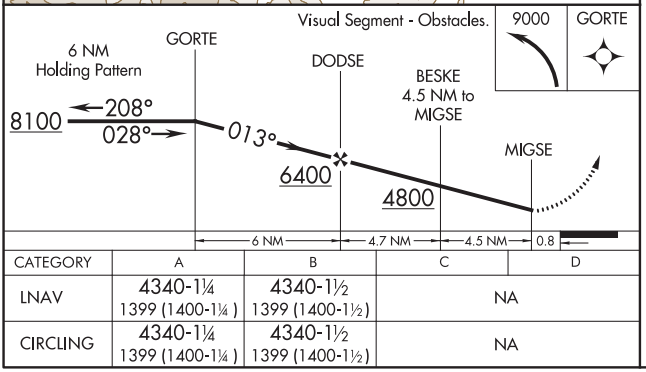
RNAV (GPS) RWY 36
POLSON (8S1)

NA
Procedure NA at night. DME/DME RNP-0.3 NA.
Use Glacier Park Intl altimeter setting.
Helicopter visibility reduction below 1 SM NA.

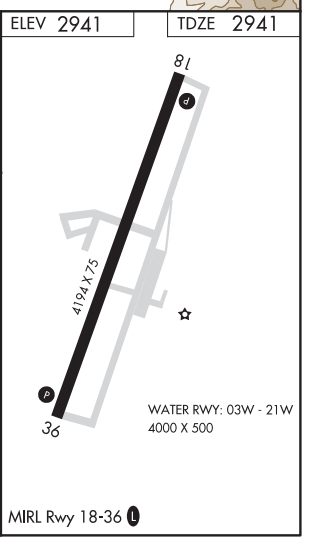
MISSED APPROACH: Climbing left turn to 9000 direct GORTE WP and hold.

GPI ASOS	SALT LAKE CENTER	UNICOM
132.625	133.4 285.4	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV	4340-1¼ 1399 (1400-1¼)	4340-1½ 1399 (1400-1½)	NA	
CIRCLING	4340-1¼ 1399 (1400-1¼)	4340-1½ 1399 (1400-1½)	NA	



POLSON, MONTANA
Orig-B 26MAY16

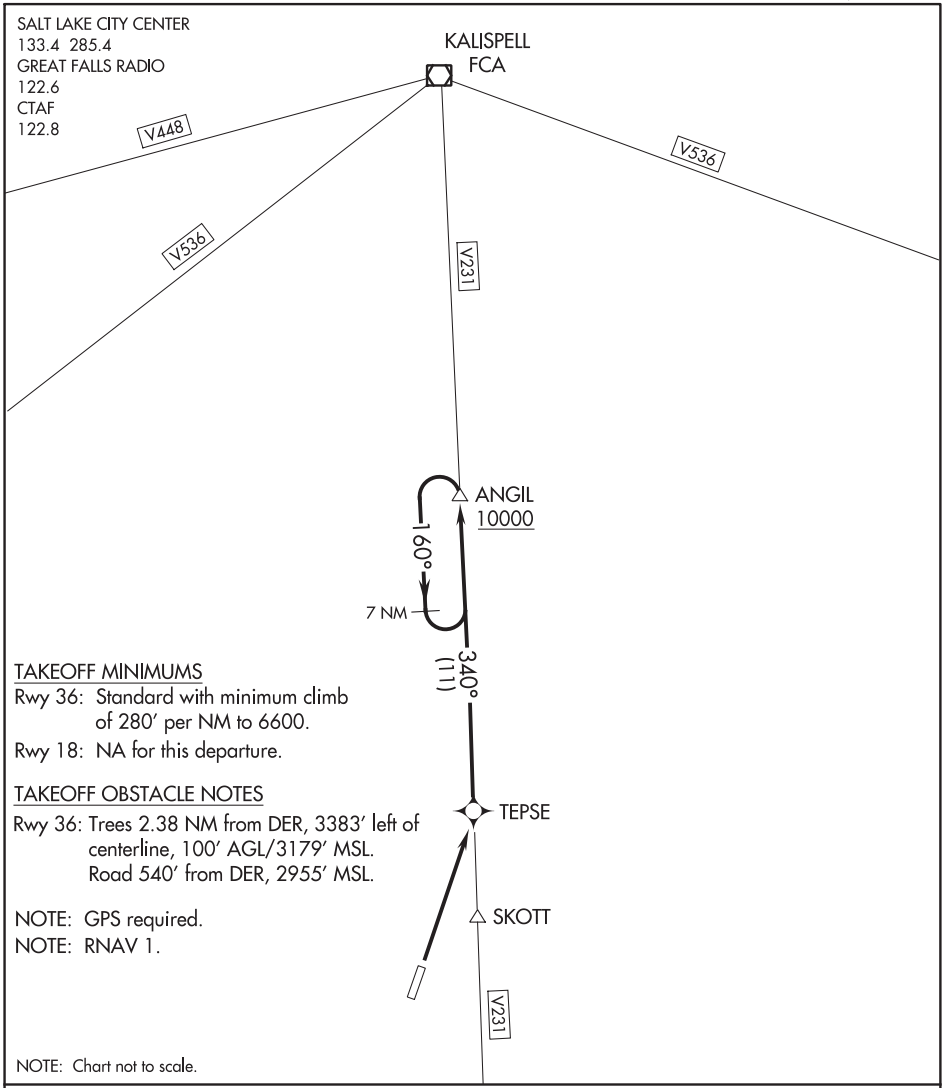
47°42'N-114°11'W

POLSON (8S1)
RNAV (GPS) RWY 36

NW-1, 30 JAN 2020 to 26 MAR 2020

ANGIL ONE DEPARTURE (OBSTACLE) (RNAV)

SL-9529 (FAA)



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.

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, 30 JAN 2020 to 26 MAR 2020

POPLAR, MONTANA

AL-10424 (FAA)

17061

RNAV (GPS) RWY 9

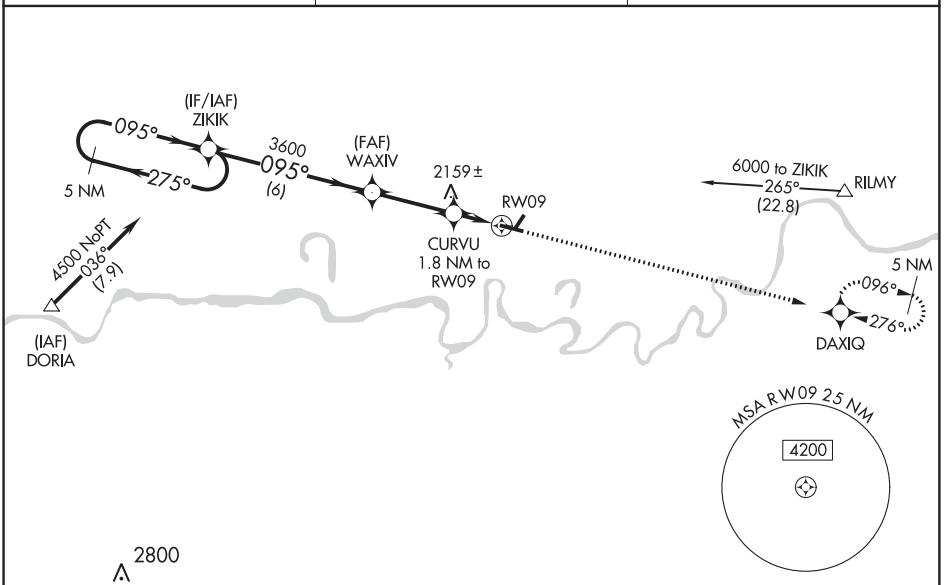
POPLAR MUNI (P01)

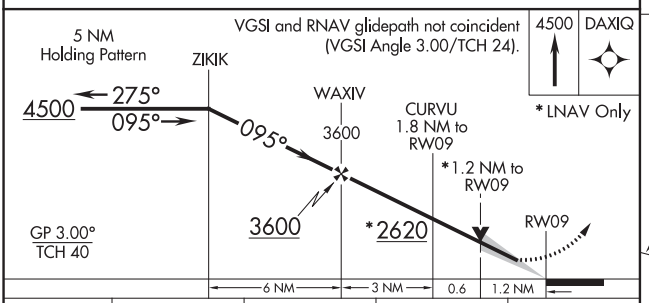
WAAS	APP CRS	Rwy Idg	4403
CH 66031	095°	TDZE	2033
W09A		Apt Elev	2037

T NA 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.

MISSED APPROACH: Climb to 4500 direct DAXIQ and hold.

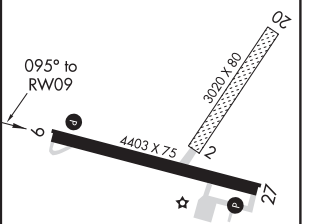
AWOS-AV	SALT LAKE CITY APP CON	UNICOM
135.325	126.85 305.2	122.8 (CTAF) L





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)

ELEV 2037 TDZE 2033



MIRL Rwy 9-27 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 27

POPLAR MUNI (P01)

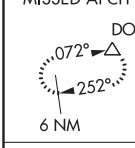
WAAS	APP CRS	Rwy Idg	4403
CH 69531	276°	TDZE	2036
W27A		Apt Elev	2037

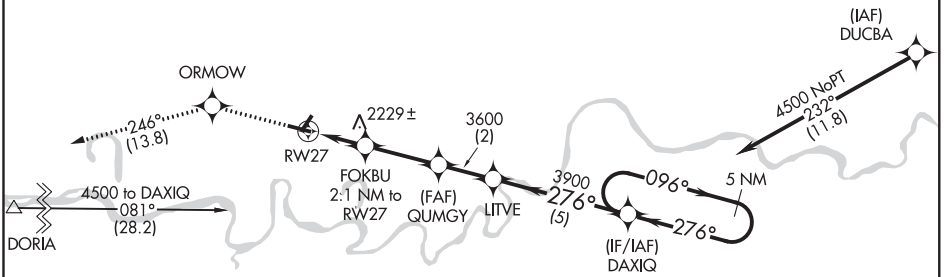
T A NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Wolf Point altimeter setting and increase all DA 46 feet and all MDA 60 feet and increase LNAV/VNAV all Cats visibility ⅛ mile and increase 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.

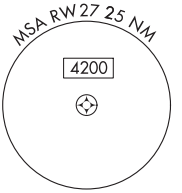
MISSED APPROACH: Climb to 6000 direct ORMOW and on track 246° to DORIA and hold, continue climb-in-hold to 6000.

AWOS-AV	SALT LAKE CITY APP CON	UNICOM
135.325	126.85 305.2	122.8 (CTAF) L

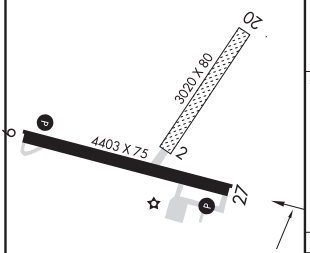
MISSED APCH FIX



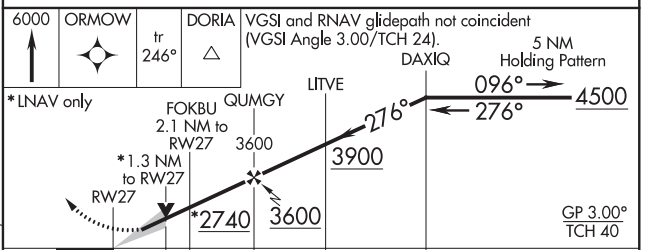




ELEV 2037 TDZE 2036



2590



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORT ANGELES, WASHINGTON | AL-653 (FAA) | 19115

COPTER RNAV (GPS) RWY 26

PORT ANGELES CGAS (NOW)

APP CRS	Rwy Idg	4500
257°	TDZE	9
	Apt Elev	13

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 RW 26 25 NM
9200

CANADA
UNITED STATES

Limit all segments airspeed to 90 KIAS.

RW26
(FAF)
GOLTE
4 NM
077°
257°
1600
257° (3)
(IF/IAF)
KACNE

1244±
488
174
424
886
580
694±
2796
1000
3000
5600
6454
5000
6779
7218
6280
2580
2337
3480
2240
4116

ELEV 13 | TDZE 9

4500 X 150
26
257° to RW26

1900
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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

NDB NOW	APP CRS	Rwy Idg N/A
338	242°	TDZE N/A
		Apt Elev 13

COPTER NDB 242°

PORT ANGELES CGAS (NOW)

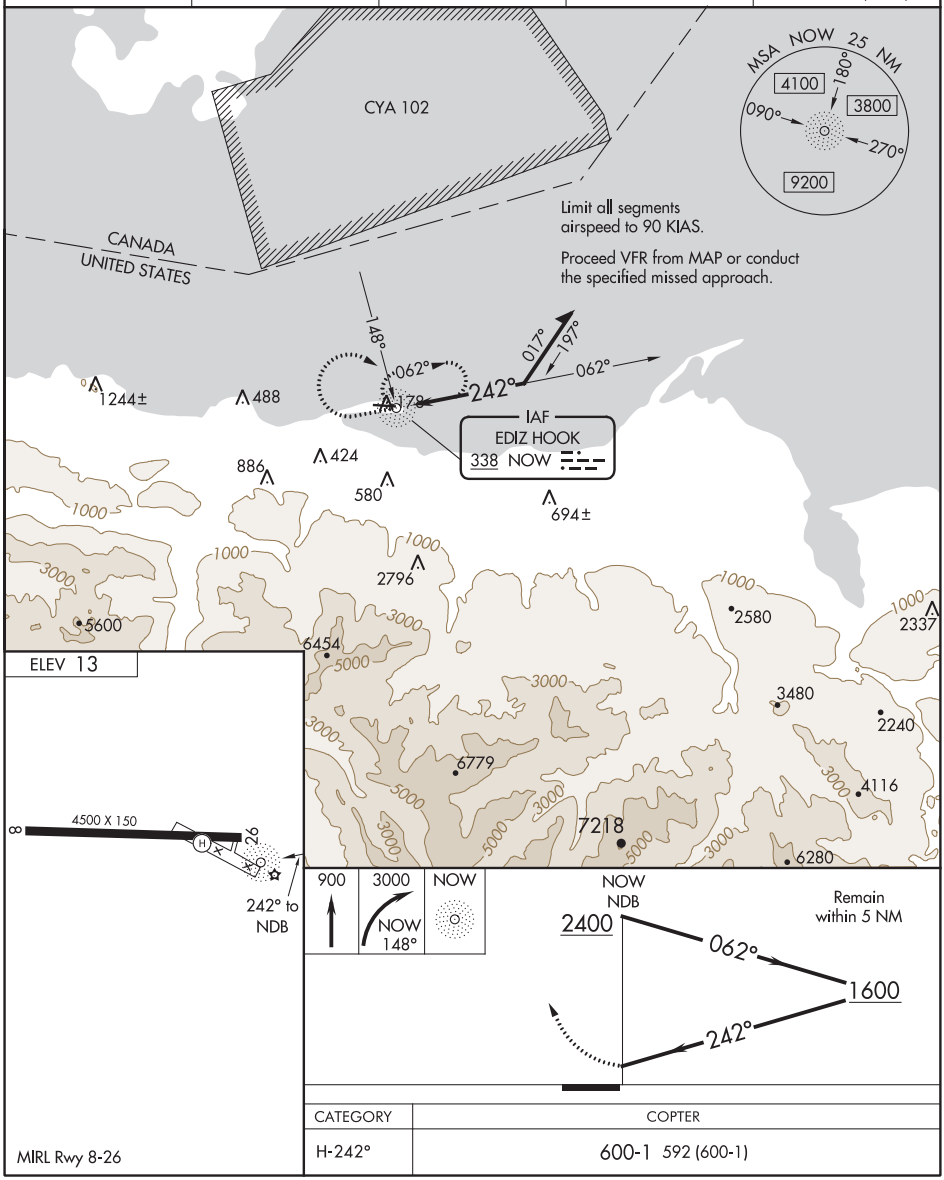
RADAR required for procedure entry

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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORT ANGELES, WASHINGTON | AL-886 (FAA) | 20030

ILS or LOC RWY 8

WILLIAM R FAIRCHILD INTL (CLM)

LOC I-CLM	APP CRS	Rwy Idg	6347
108.9	089°	TDZE	285
		Apt Elev	291

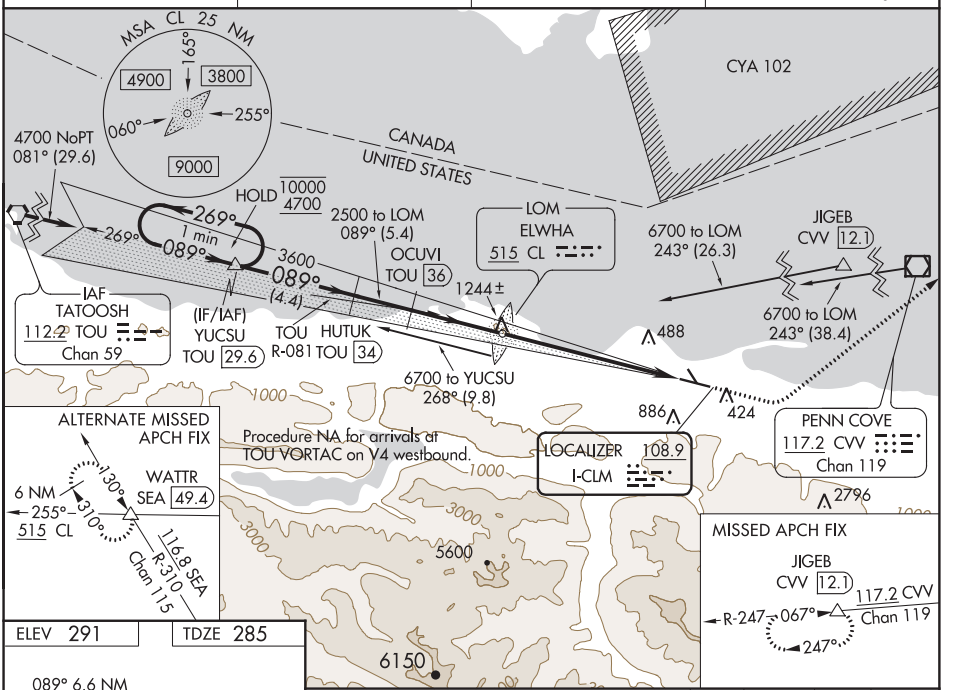
DME required.

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.

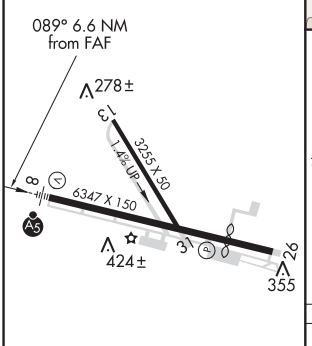
ASOS	WHIDBEY APP CON	CLNC DEL	UNICOM
135.175	118.2 285.65	124.15	122.975 (CTAF) L



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

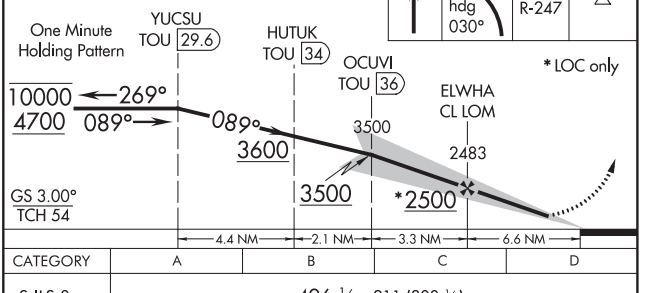
ELEV 291 | TDZE 285



MIRL Rwy 8-26 L
REIL Rwy 26 L

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)

FAF to MAP 6.6 NM

Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

WAAS CH 77703 W08A	APP CRS 088°	Rwy Idg 6347 TDZE 285 Apt Elev 291

RNAV (GPS) RWY 8

WILLIAM R FAIRCHILD INTL (CLM)

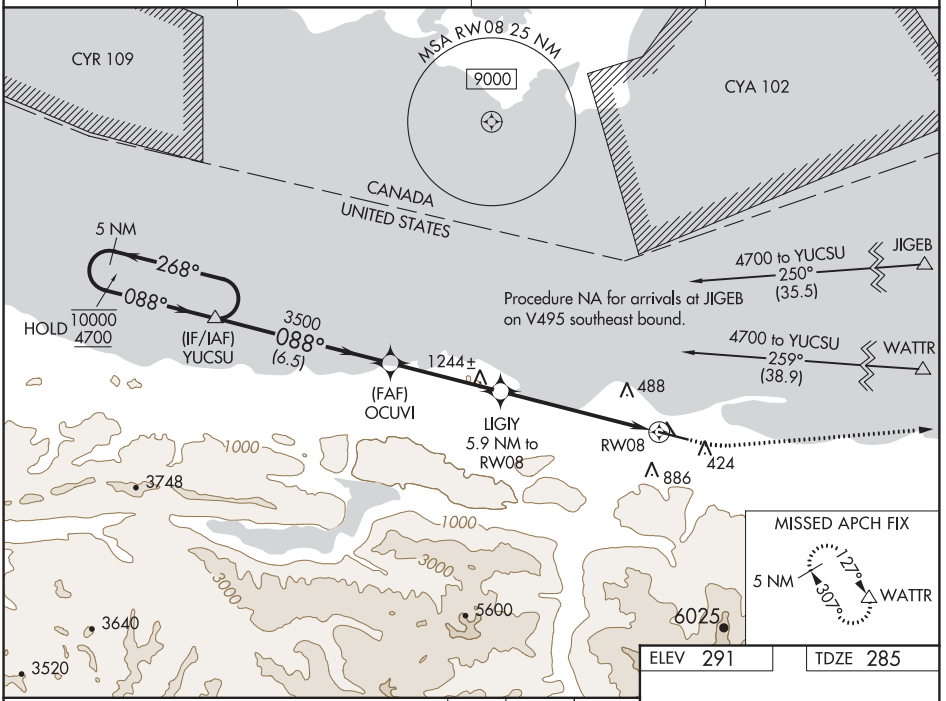
RNP APCH.

T A 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.

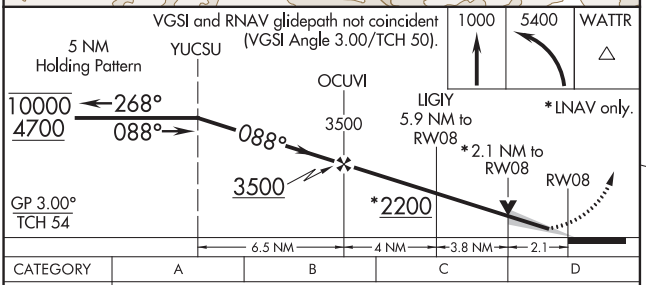
MALSR (A5)

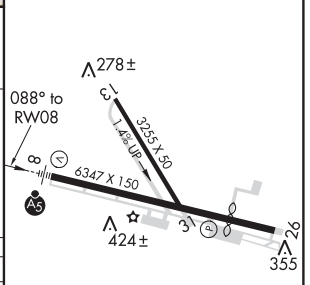
MISSED APPROACH: Climb to 1000 then climbing left turn to 5400 direct WATTR and hold, continue climb-in-hold to 5400.

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 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORT ANGELES, WASHINGTON | AL-886 (FAA) | 20030

RNAV (GPS) RWY 26

WILLIAM R FAIRCHILD INTL (CLM)

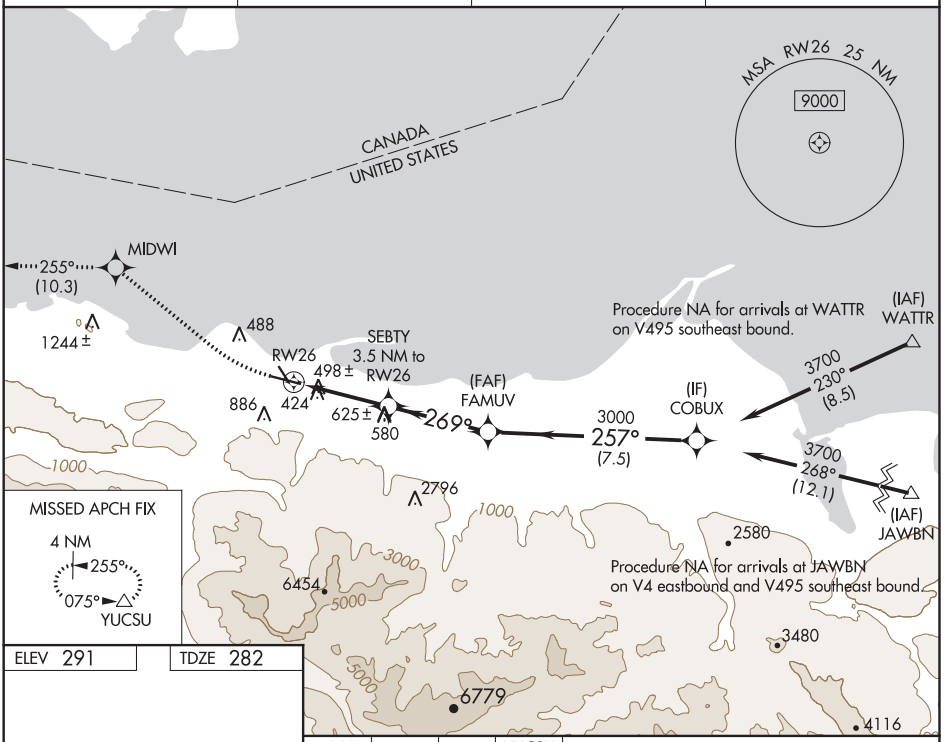
WAAS	APP CRS	Rwy Idg	4993
CH 90338	269°	TDZE	282
W26A		Apt Elev	291

RNP APCH.

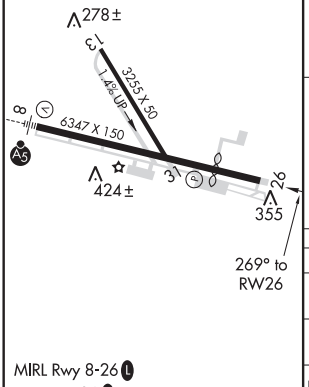
Circling NA south of Rwy 8-26.
Circling Rwy 13, 31 NA at night.
Rwy 26 helicopter visibility reduction below ¾ SM NA.

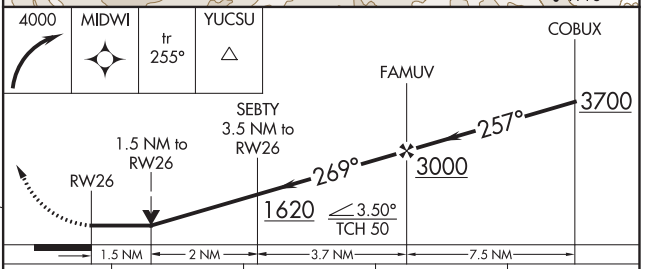
MISSED APPROACH: Climbing right turn to 4000 direct MIDWI and on track 255° to YUCSU and hold.

ASOS	WHIDBEY APP CON	CLNC DEL	UNICOM
135.175	118.2 285.65	124.15	122.975 (CTAF) L



ELEV 291 | TDZE 282



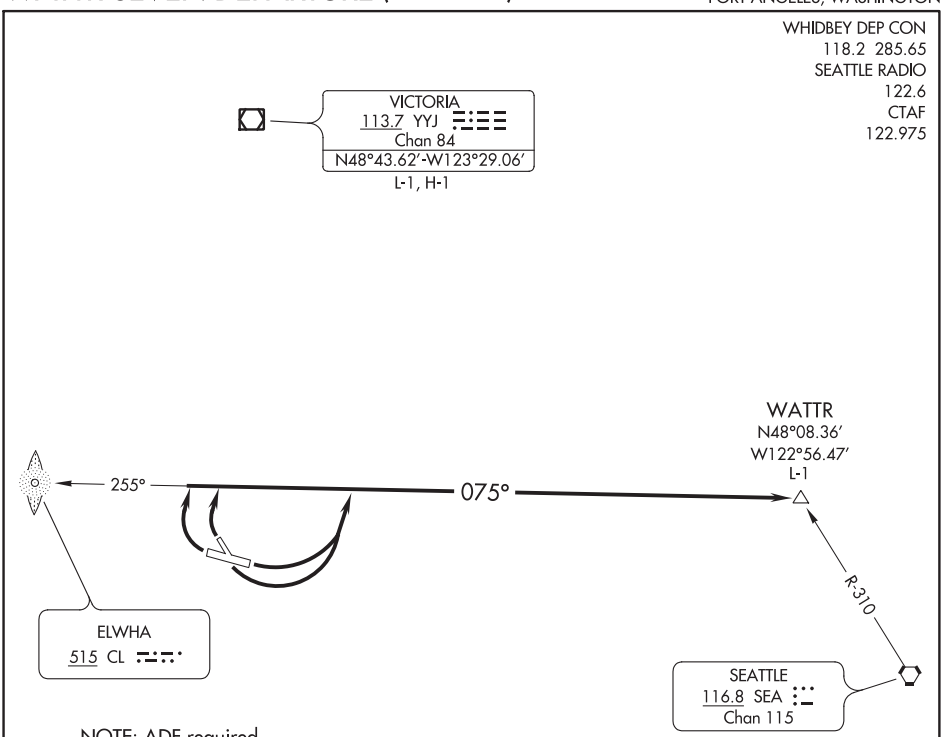


CATEGORY	A	B	C	D
LP MDA	760-1	478 (500-1)	760-1⅜	478 (500-1⅜)
LNAV MDA	920-1	638 (700-1)	920-1¾	638 (700-1¾)
C CIRCLING	920-1	629 (700-1)	920-1¾ 629 (700-1¾)	1000-2¼ 709 (800-2¼)

MIRL Rwy 8-26 L
REIL Rwy 26 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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, 30 JAN 2020 to 26 MAR 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.

RNAV (GPS)-A

JEFFERSON COUNTY INTL (ØS9)

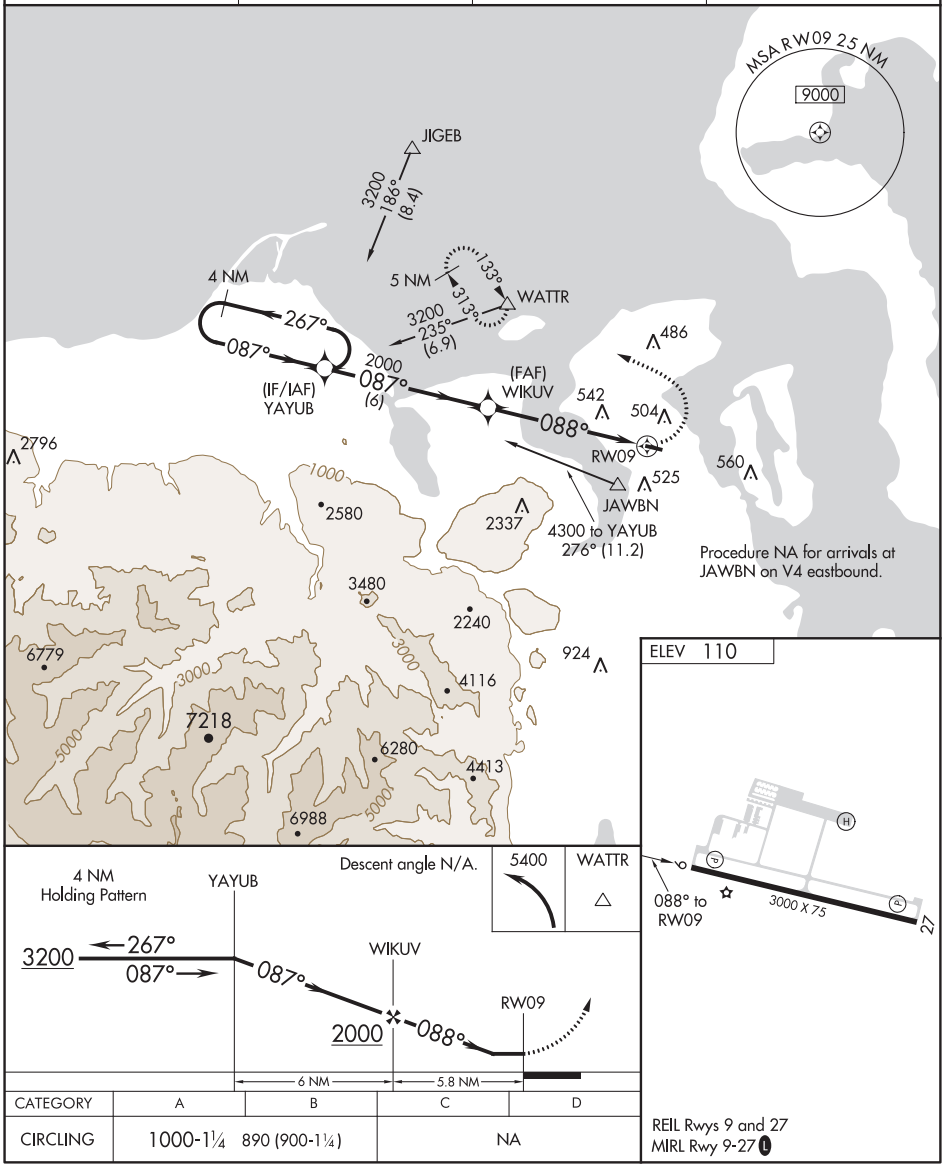
APP CRS	Rwy Idg	N/A
088°	TDZE	N/A
	Apt Elev	110

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



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON | AL-330 (FAA) | 20030

ILS or LOC RWY 10L

PORTLAND INTL (PDX)

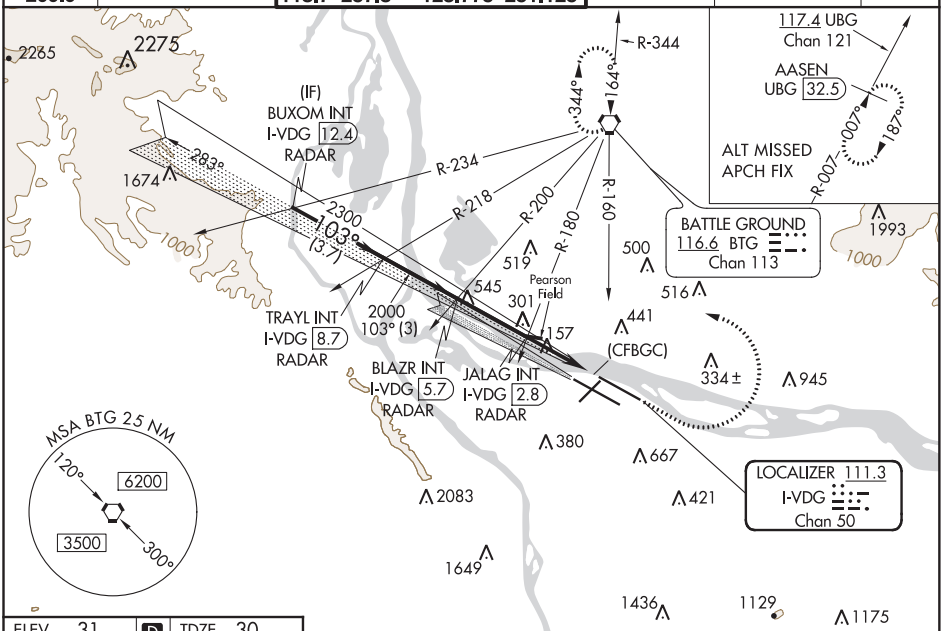
LOC/DME I-VDG	APP CRS	Rwy Idg	8535
111.3	103°	TDZE	30
Chan 50		Apt Elev	31

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.

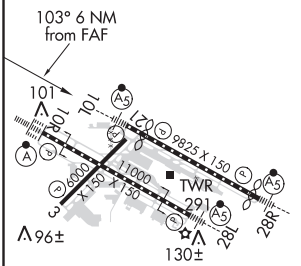
MALSR

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	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 30

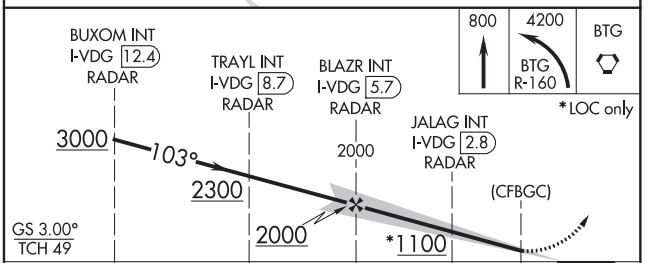


REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwys 3-21
HIRL Rwys 10L-28R and 10R-28L

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)		
CIRCLING	720-1 689 (700-1)	740-1 709 (800-1)	760-2 729 (800-2)	980-3 949 (1000-3)	1140-3 1109 (1200-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 10R

PORTLAND INTL (PDX)

LOC/DME I-PDX	APP CRS		10R	10L
110.5	103°	Rwy Idg	11000	8535
Chan 42		TDZE	24	30
		Apt Elev	31	31

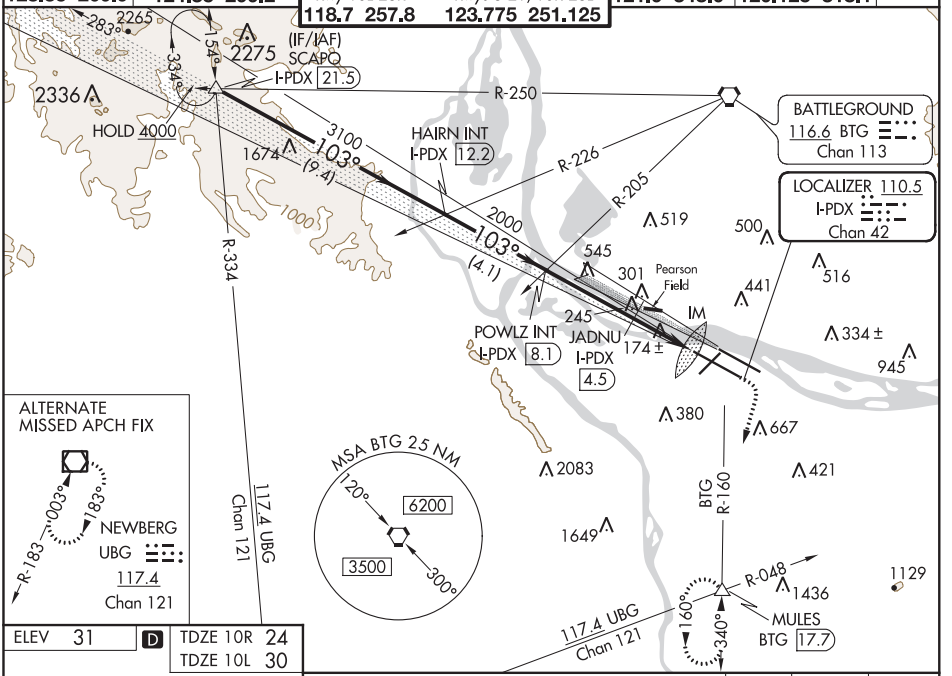
T For inop ALSF-2 increase S-ILS 10R visibility all Cats to RVR 4000.
A For inop ALSF-2 increase S-LOC 10R Cats C-E visibility to 2½.
For inop ALSF-2 increase JADNU fix minimums S-LOC 10R Cat C-E visibility to RVR 6000. Sidestep NA until passing JADNU.
Inop table does not apply to Sidestep LOC. Simultaneous approach authorized with Rwy 10L

ALSF-2 Rwy 10R (A)

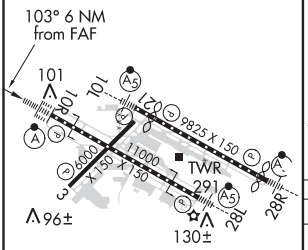
MALSR Rwy 10L (A5)

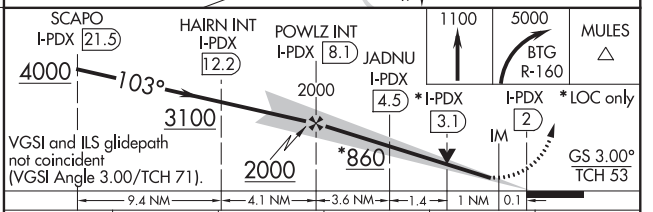
MISSED APPROACH: Climb to 1100 then climbing right turn to 5000 on BTG VORTAC R-160 to MULES INT/ BTG 17.7 DME and hold, continue climb-in-hold to 5000.

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)		
CIRCLING	860-1¼ 829 (900-1¼)		860-2½ 829 (900-2½)	980-3 949 (1000-3)	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)		800-3 770 (800-3)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON | AL-330 (FAA) | 20030

ILS or LOC RWY 28L

PORTLAND INTL (PDX)

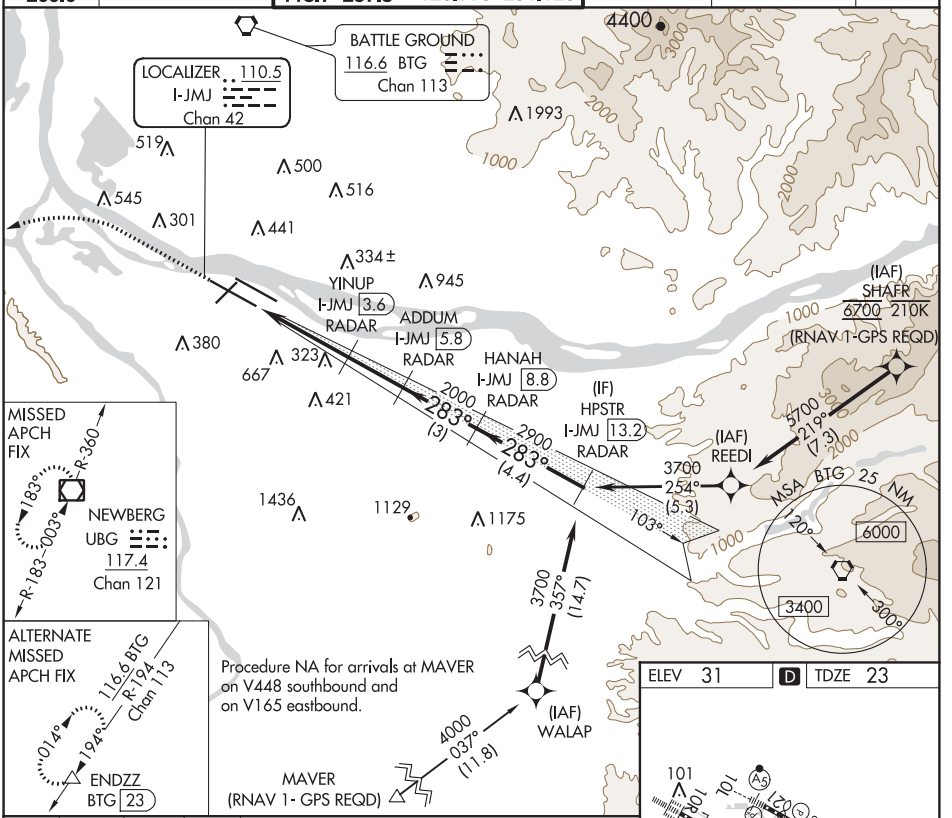
LOC/DME I-JMJ	APP CRS	Rwy ldg	11000
110.5	283°	TDZE	23
Chan 42		Apt Elev	31

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	



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)

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 28R

PORTLAND INTL (PDX)

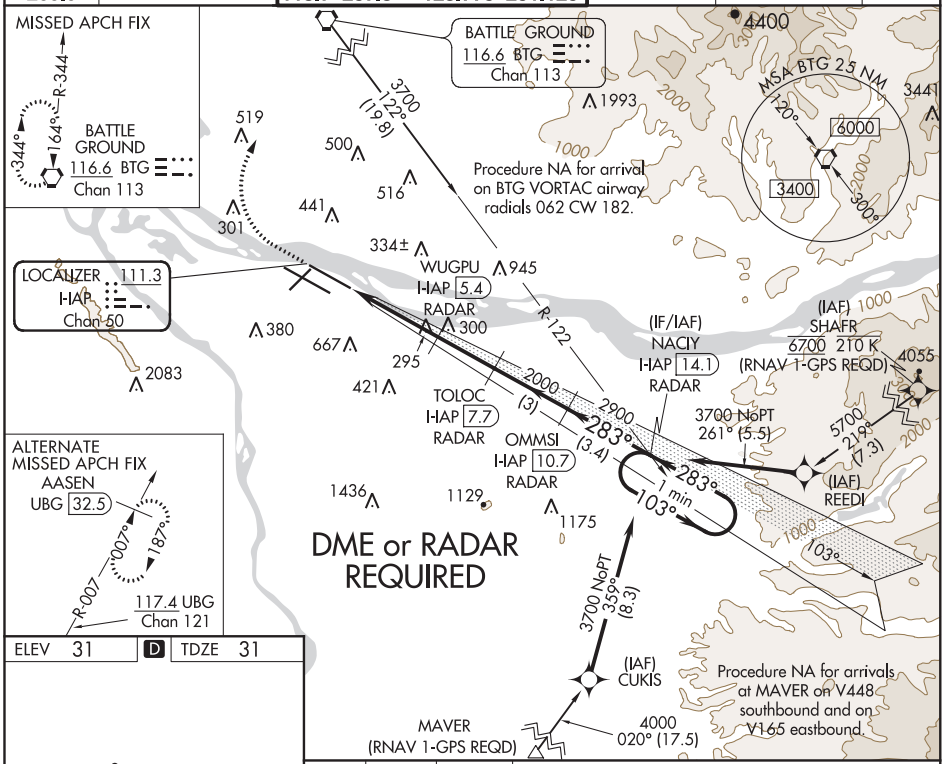
LOC/DME I-IAP	APP CRS	Rwy Idg	9290
111.3	283°	TDZE	31
Chan 50		Apt Elev	31

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

MISSED APPROACH: Climb to 600 then climbing right turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

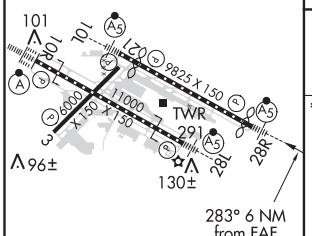
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
128.35 269.9	124.35 299.2	Rwy 10L-28R 118.7 257.8	Rwys 3-21, 10R-28L 123.775 251.125	121.9 348.6	120.125 318.1	



NW-1, 30 JAN 2020 to 26 MAR 2020

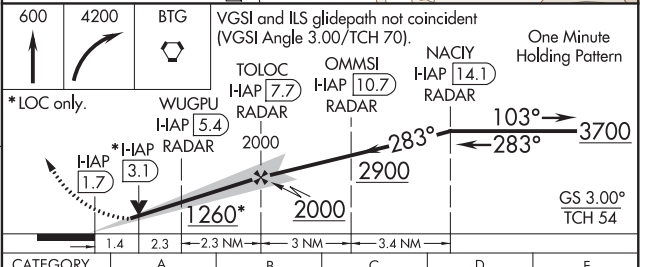
NW-1, 30 JAN 2020 to 26 MAR 2020

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)

PORTLAND, OREGON AL-330 (FAA) 20030

ILS RWY 10R (SA CAT I)

PORTLAND INTL (PDX)

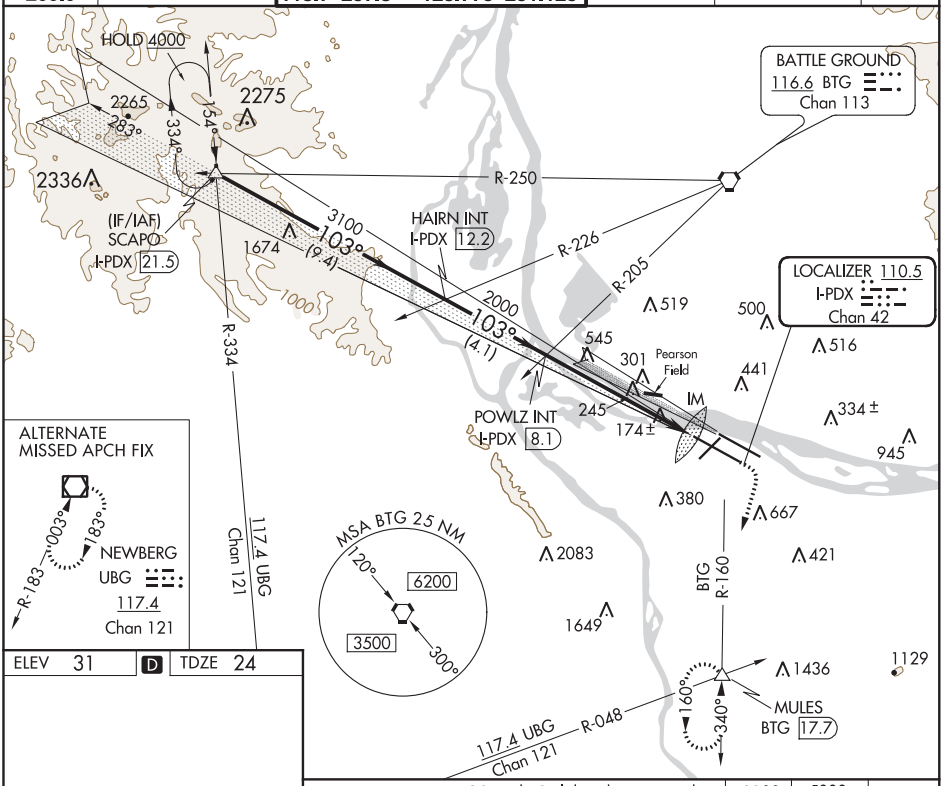
LOC/DME I-PDX	APP CRS	Rwy Idg	11000
110.5	103°	TDZE	24
Chan 42		Apt Elev	31

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. Simultaneous approach authorized with Rwy 10L.

ALSF-2

MISSED APPROACH: Climb to 1100 then climbing right turn to 5000 on BTG VORTAC R-160 to MULES INT/BTG 17.7 DME and hold, continue climb-in-hold to 5000.

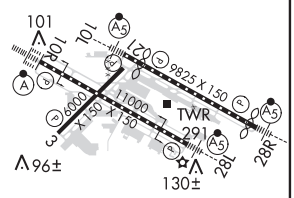
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
		Rwy 10L-28R	Rwys 3-21, 10R-28L			
128.35 269.9	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1	



NW-1, 30 JAN 2020 to 26 MAR 2020

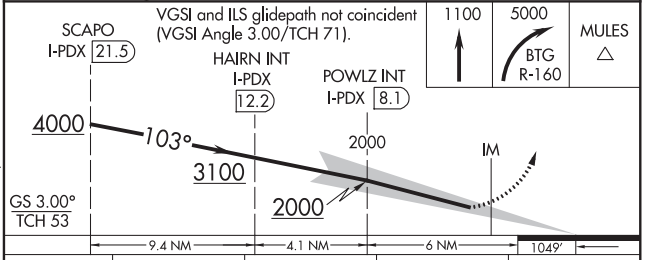
NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 31	D	TDZE 24



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

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			

SA CATEGORY I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

PORTLAND, OREGON
Amdt 34C 26JUN14

45°35'N-122°36'W

PORTLAND INTL (PDX)

ILS RWY 10R (SA CAT I)

ILS RWY 10R (CAT II & III)

PORTLAND INTL (PDX)

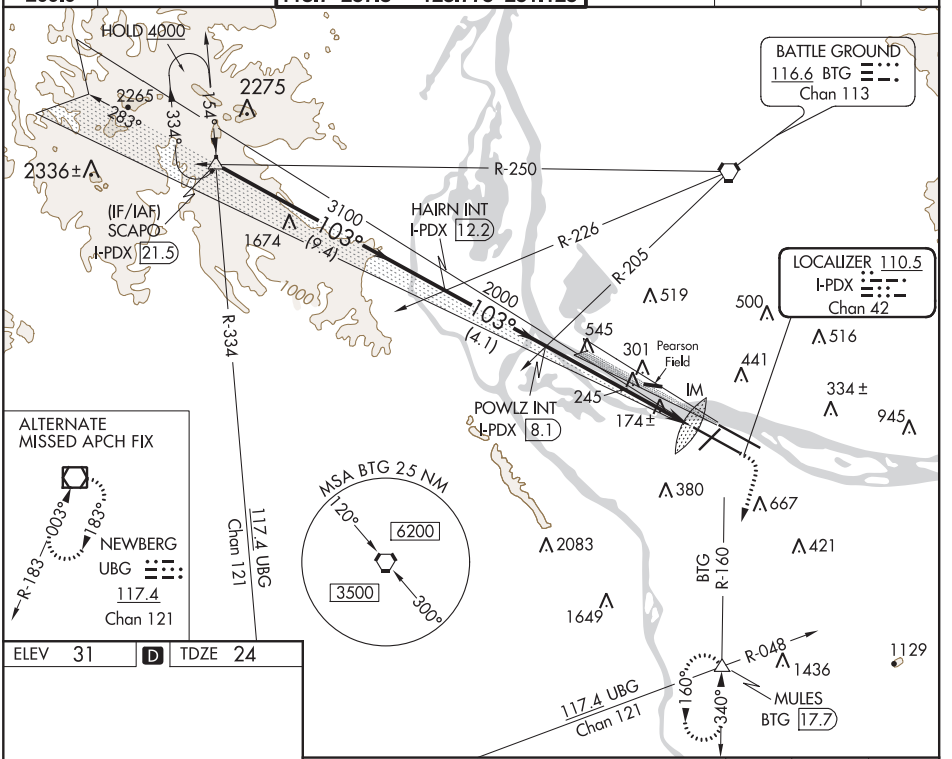
LOC/DME I-PDX	APP CRS	Rwy Idg	11000
110.5	103°	TDZE	24
Chan 42		Apt Elev	31

T A Simultaneous approach authorized with Rwy 10L. 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 INT/BTG 17.7 DME 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	



CATEGORY	A	B	C	D
S-ILS 10R	CAT II RA 107/12 100 DA 124			
S-ILS 10R	CAT III a RVR 07			
S-ILS 10R	CAT III b RVR 06			
S-ILS 10R	CAT III c NA			

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON | AL-330 (FAA) | 20030

APP CRS	Rwy Idg	11000
283°	TDZE	23
	Apt Elev	31

RNAV (RNP) Y RWY 28L

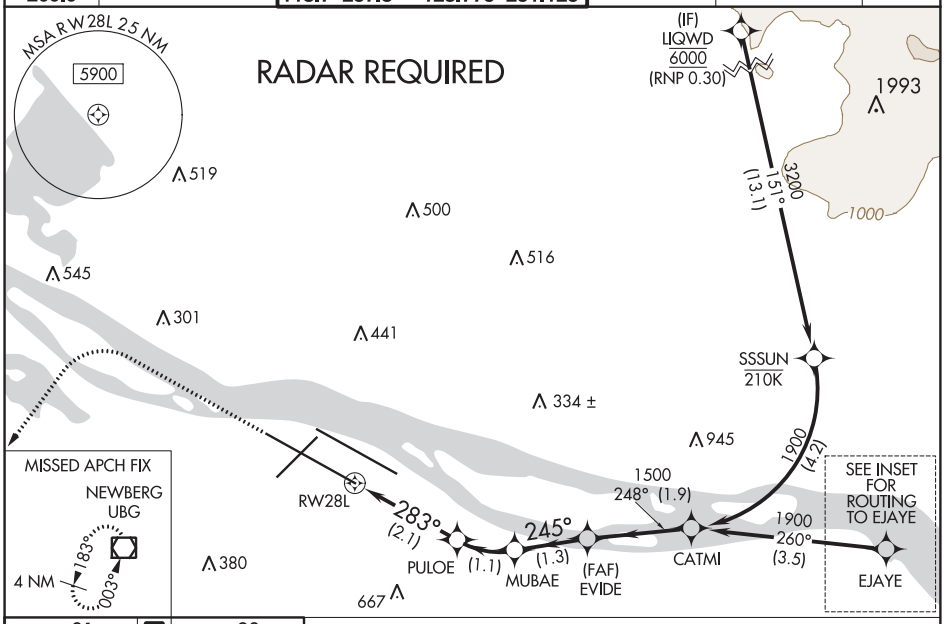
PORTLAND INTL (PDX)

T 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.

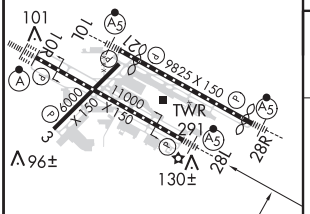
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
		Rwy 10L-28R	Rwys 3-21, 10R-28L			
128.35	124.35 299.2	118.7 257.8	123.775 251.125	121.9 348.6	120.125 318.1	
269.9						



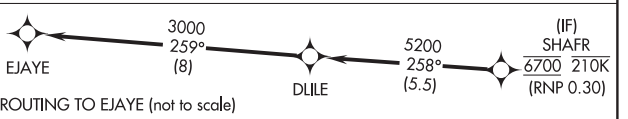
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

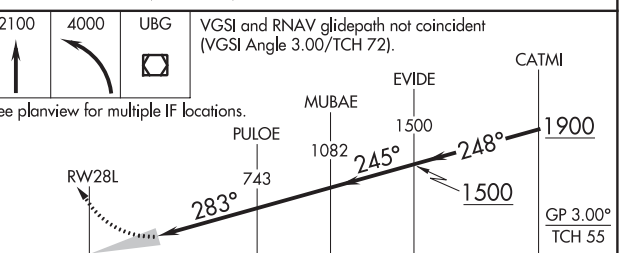
ELEV 31 | D | TDZE 23



MIRL Rwy 3-21
TDZ/CL Rwy 10R
REIL Rwys 3 and 21
HIRL Rwys 10L-28R and 10R-28L



ROUTING TO EJAYE (not to scale)



CATEGORY	A	B	C	D
RNP 0.23 DA	370/33	347 (400-5/8)		
RNP 0.30 DA	476/53	453 (500-1)		

AUTHORIZATION REQUIRED

PORTLAND, OREGON | PORTLAND INTL (PDX)

Amdt 2 25JUN15 | 45°35'N-122°36'W

RNAV (RNP) Y RWY 28L

APP CRS	Rwy Idg	9290
283°	TDZE	31
	Apt Elev	31

RNAV (RNP) Y RWY 28R

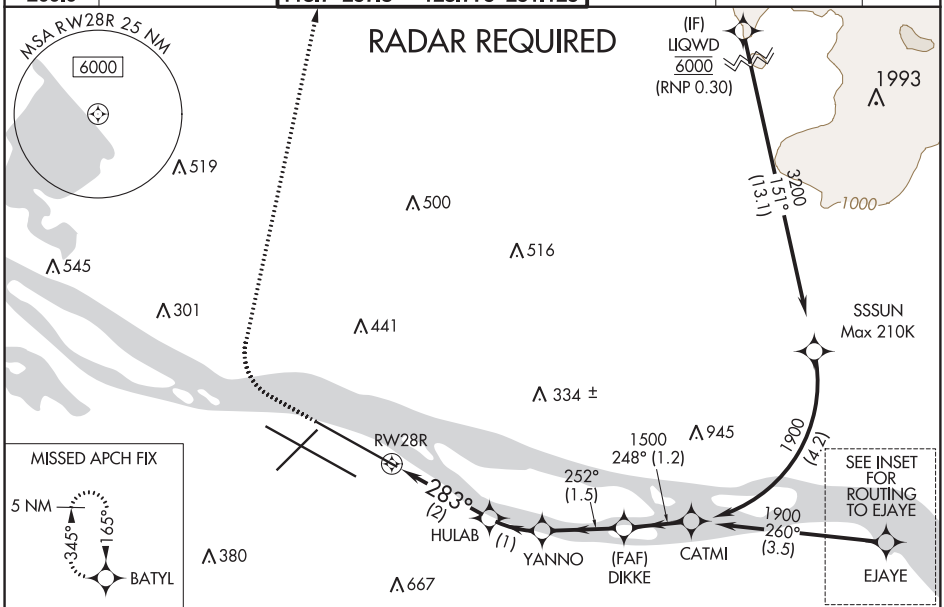
PORTLAND INTL (PDX)

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.

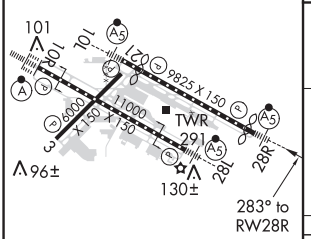
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
128.35 269.9	124.35 299.2	Rwy 10L-28R 118.7 257.8	Rwys 3-21, 10R-28L 123.775 251.125	121.9 348.6	120.125 318.1	



NW-1, 30 JAN 2020 to 26 MAR 2020

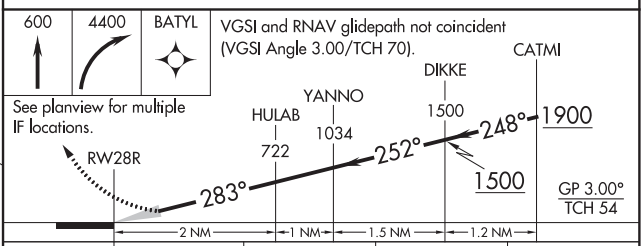
NW-1, 30 JAN 2020 to 26 MAR 2020

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

ROUTING TO EJAYE (not to scale)



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

PORTLAND, OREGON | AL-330 (FAA) | 20030

RNAV (RNP) Z RWY 10L

PORTLAND INTL (PDX)

APP CRS	Rwy Idg	8535
103°	TDZE	30
	Apt Elev	31

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		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	

RADAR REQUIRED

(IAF) VOODU 5000 Max 210K (RNP 0.40) (RF REQD)

5 NM 165° 345°

3500 204° (5)

BATYL

(IF) BUXOM (RNP 0.40)

(IF) RIPPP

3500 (3.5)

(IF) DAYSS

(IAF) CIZZL 5000 Max 210K (RNP 0.40) (RF REQD)

4500 283° (4)

2300 (4.5)

2300 103° (2)

2300 103° (3.7) TRAYL

TTIDE

545

Pearson 301 Field

103°

(6)

2300 (5.9)

2000 103° (1)

(FAF) BLAZR

45

RW10L

(IF) GAMBE

4000 328° (4.6)

(IAF) MYCRO 5000 Max 210K (RNP 0.40) (RF REQD)

MSA RW10L 25 NM 5800

2275 1674 1649 1436 2083 380 667 421 519 500 516 441 334± 945 1993 3480± 2223

BLAZR 2000 103° RW10L GP 3.00° TCH 49 6 NM

800	4400	BATYL

See Planview for multiple IF locations.

CATEGORY	A	B	C	D
RNP 0.30 DA	365/32 335 (400-⅝)			

AUTHORIZATION REQUIRED

ELEV 31 D TDZE 30

103° to RW10L

101 96± 130± 291 TWR 9825 X 150 11000 X 150 6000 X 150 10L 28R 10R 28L

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	11000
103°	TDZE	24
	Apt Elev	31

RNAV (RNP) Z RWY 10R

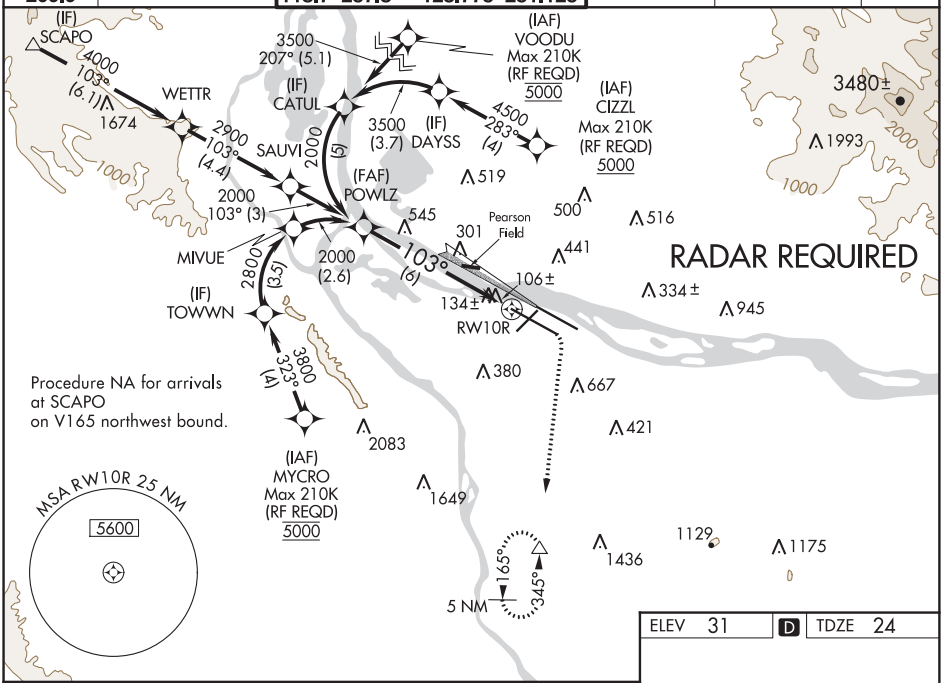
PORTLAND INTL (PDX)

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.

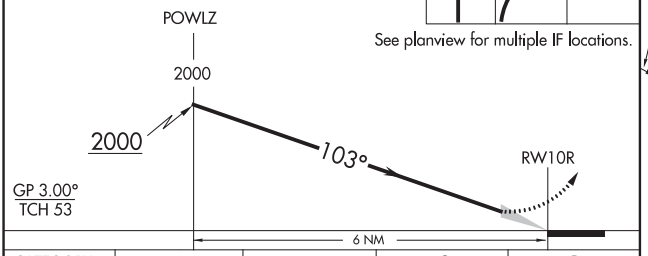
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
128.35 269.9	124.35 299.2	Rwy 10L-28R 118.7 257.8	Rwys 3-21, 10R-28L 123.775 251.125	121.9 348.6	120.125 318.1	



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).

440	5000	MULES
↑	↗	△

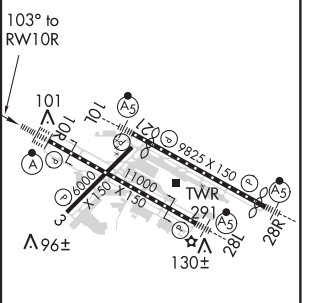
See planview for multiple IF locations.



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

ELEV 31 D TDZE 24



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON AL-330 (FAA) 20030

APP CRS	Rwy Idg	11000
283°	TDZE	23
	Apt Elev	31

RNAV (RNP) Z RWY 28L

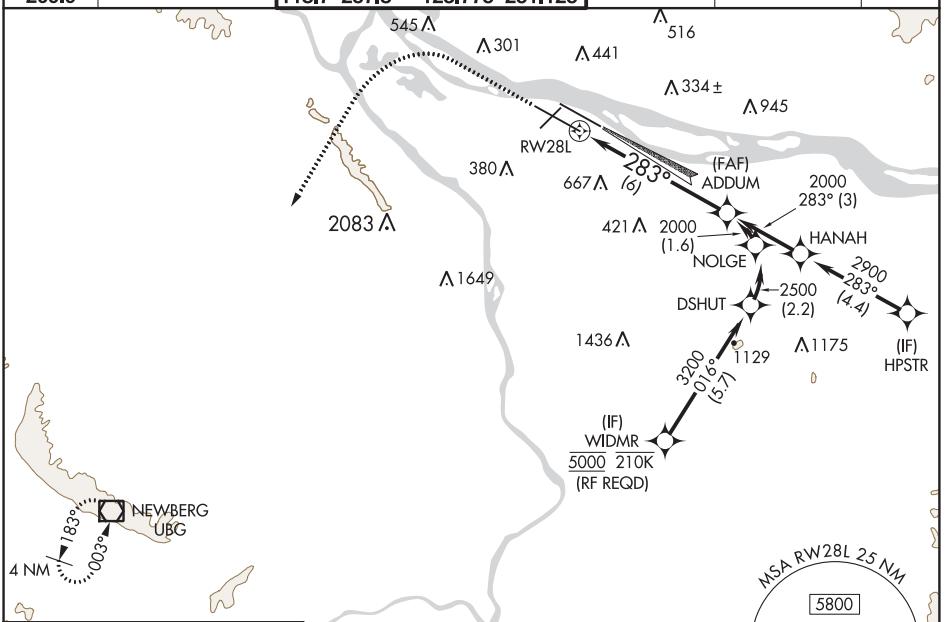
PORTLAND INTL (PDX)

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
		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	

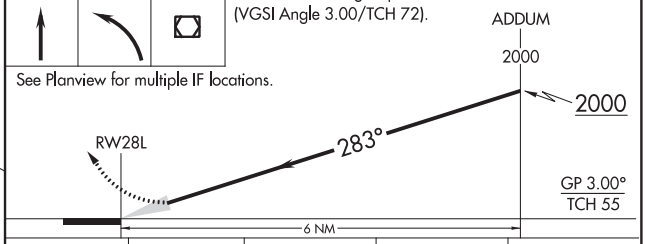


RADAR REQUIRED

2100	4000	UBG
↑	↱	⬡

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 72).

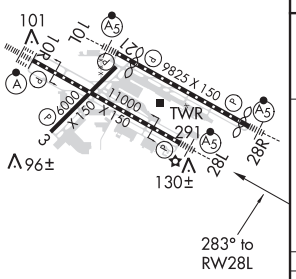
See Planview for multiple IF locations.



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

ELEV 31 D TDZE 23



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwys 3-21
HIRL Rwys 10L-28R and 10R-28L

PORTLAND, OREGON
Orig-A 26JUN14

45°35′N-122°36′W

PORTLAND INTL (PDX)

RNAV (RNP) Z RWY 28L

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 28R

PORTLAND INTL (PDX)

APP CRS	Rwy Idg	9290
283°	TDZE	31
	Apt Elev	31

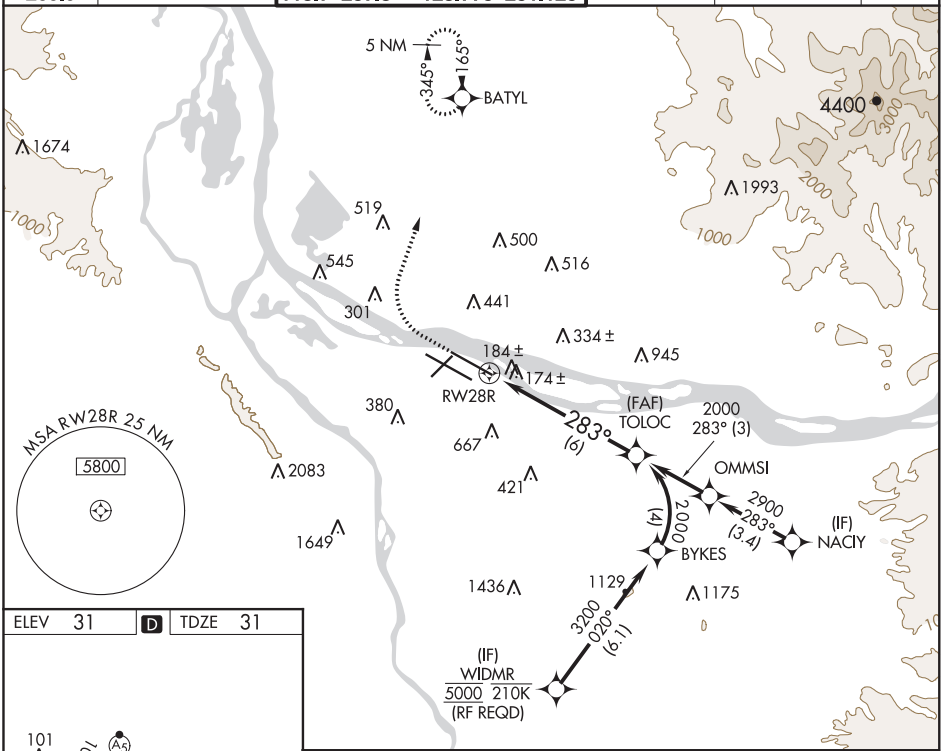
RNP AR APCH.

T 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.

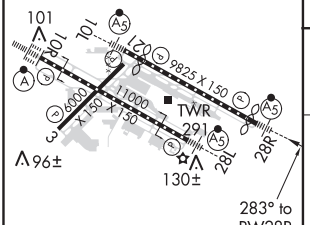
MALSR

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		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	

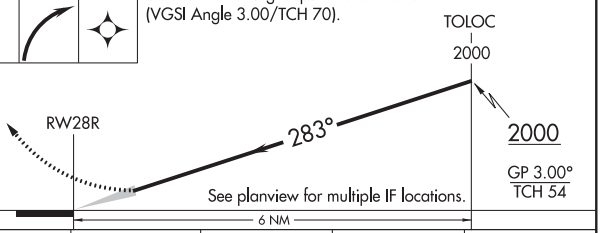


ELEV 31 D TDZE 31



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

600 4400 BATYL VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON | AL-330 (FAA) | 20030

WAAS	APP CRS	Rwy Idg	11000
CH 56205	283°	TDZE	23
W28B		Apt Elev	31

RNAV (GPS) X RWY 28L

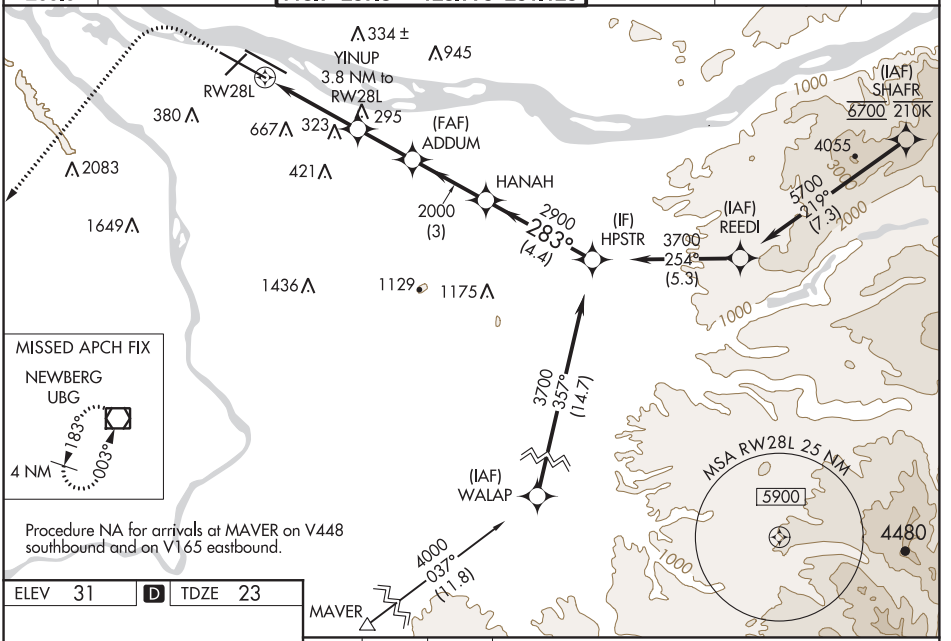
PORTLAND INTL (PDX)

T A 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.

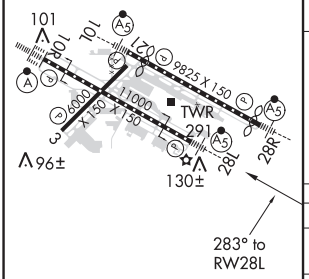
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
128.35 269.9	124.35 299.2	Rwy 10L-28R 118.7 257.8	Rwys 3-21, 10R-28L 123.775 251.125	121.9 348.6	120.125 318.1	



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 31 | D | TDZE 23



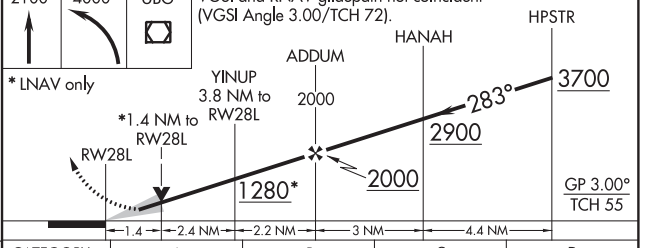
283° to RW28L

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

2100 | 4000 | UBG

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 72).

* LNAV only



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)	

WAAS	APP CRS		
CH **60905**	**283°**	Rwy Idg	**9290**
W28A		TDZE	**31**
		Apt Elev	**31**

RNAV (GPS) X RWY 28R

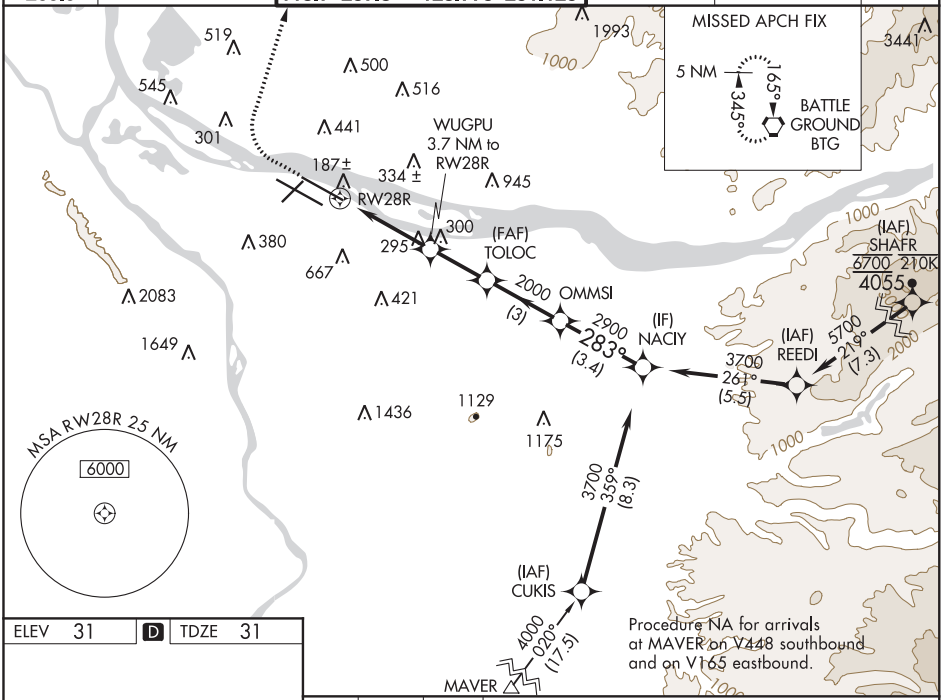
PORTLAND INTL (PDX)

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.

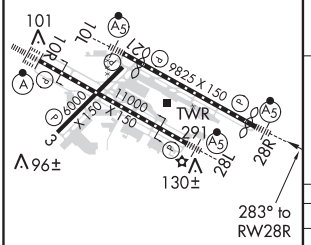
MALSR

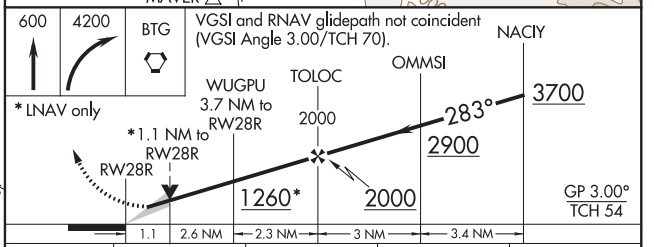
MISSED APPROACH: Climb to 600 then climbing right turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

D-ATIS	PORTLAND APP CON	PORTLAND TOWER	GND CON	CLNC DEL	CPDLC
128.35 **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 31





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON AL-330 (FAA) 20030

WAAS	APP CRS	Rwy Idg	8535
CH 81804	103°	TDZE	30
W10B		Apt Elev	31

RNAV (GPS) Y RWY 10L

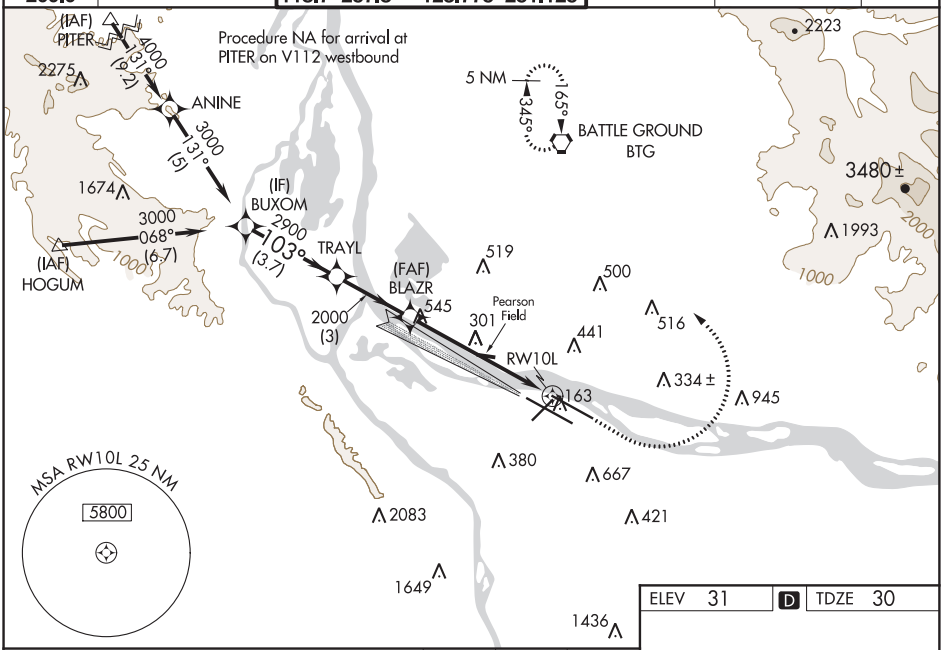
PORTLAND INTL (PDX)

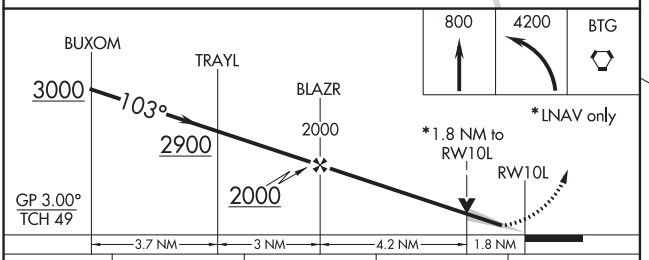
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized with Rwy 10R. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. For inoperative 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

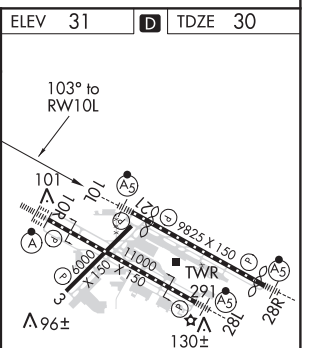
MISSED APPROACH: Climb to 800 then climbing left turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
		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	





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)	
CIRCLING	720-1 689 (700-1)	740-1 709 (800-1)	760-2 729 (800-2)	980-3 949 (1000-3)



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 10R

PORTLAND INTL (PDX)

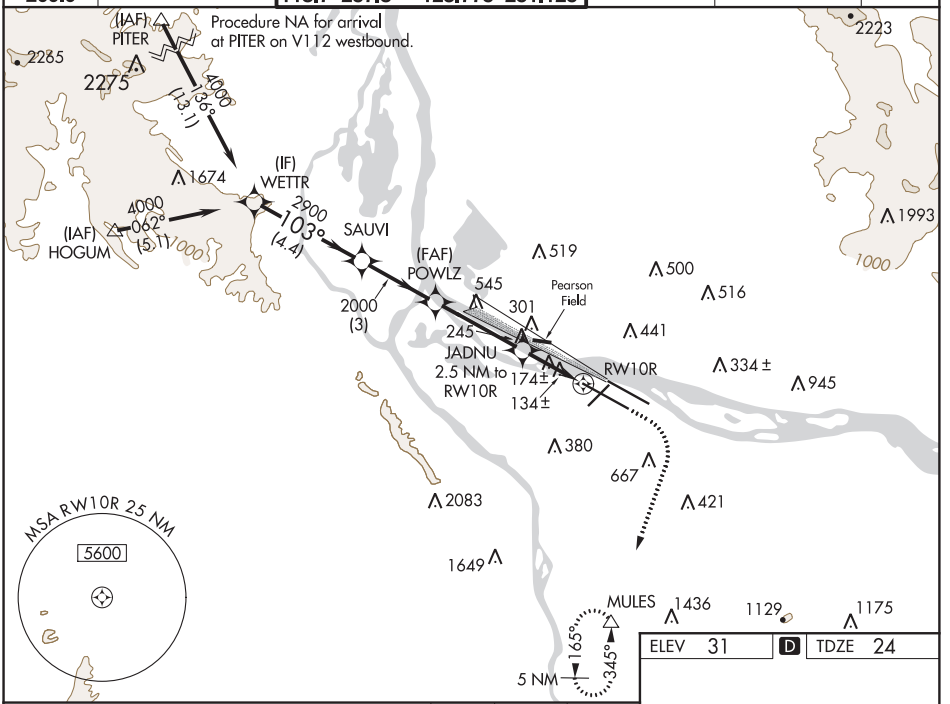
WAAS	APP CRS		
CH **40004**	**103°**	Rwy Idg	**11000**
W10A		TDZE	**24**
		Apt Elev	**31**

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.

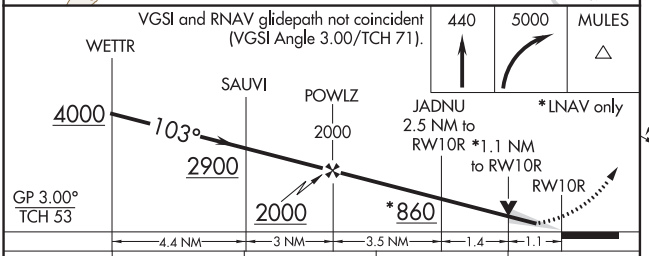
ALSF-2

MISSED APPROACH: Climb to 440 then climbing right turn to 5000 direct MULES and hold.

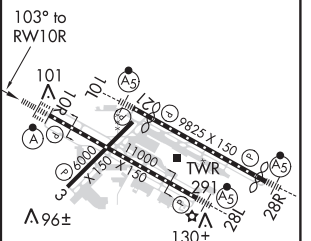
D-ATIS	PORTLAND APP CON	PORTLAND TOWER		GND CON	CLNC DEL	CPDLC
128.35	**124.35 299.2**	Rwy 10L-28R	Rwys 3-21, 10R-28L	**121.9 348.6**	**120.125 318.1**	
269.9		**118.7 257.8**	**123.775 251.125**			



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)
CIRCLING	720-1 689 (700-1)	740-1 709 (800-1)	760-2 729 (800-2)	980-3 949 (1000-3)



REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON | AL-330 (FAA) | 20030

LOC/DME RWY 21

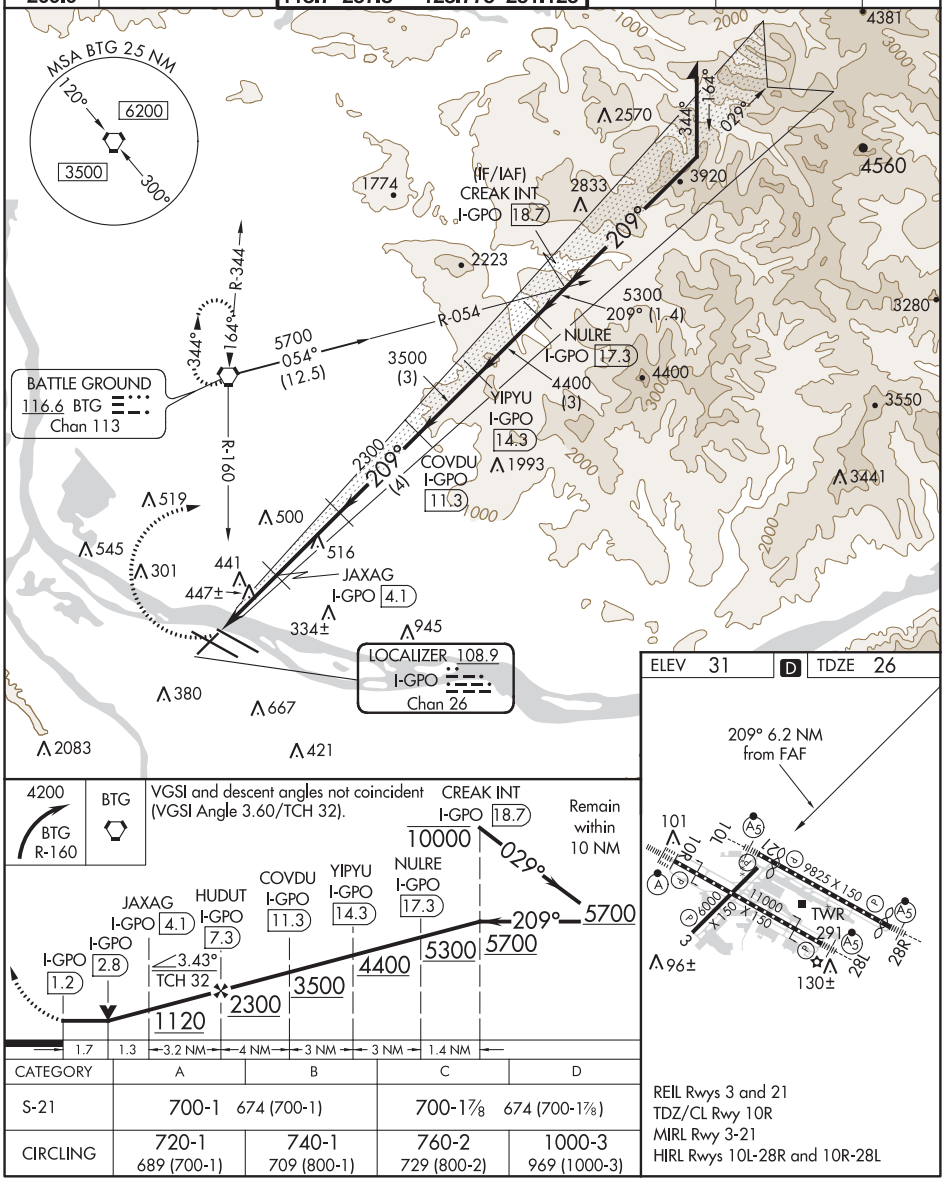
PORTLAND INTL (PDX)

LOC/DME I-GPO	APP CRS	Rwy Idg	6000
108.9	209°	TDZE	26
Chan 26		Apt Elev	31

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	



CATEGORY	A	B	C	D
S-21	700-1 674 (700-1)		700-1⅞ 674 (700-1⅞)	
CIRCLING	720-1 689 (700-1)	740-1 709 (800-1)	760-2 729 (800-2)	1000-3 969 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

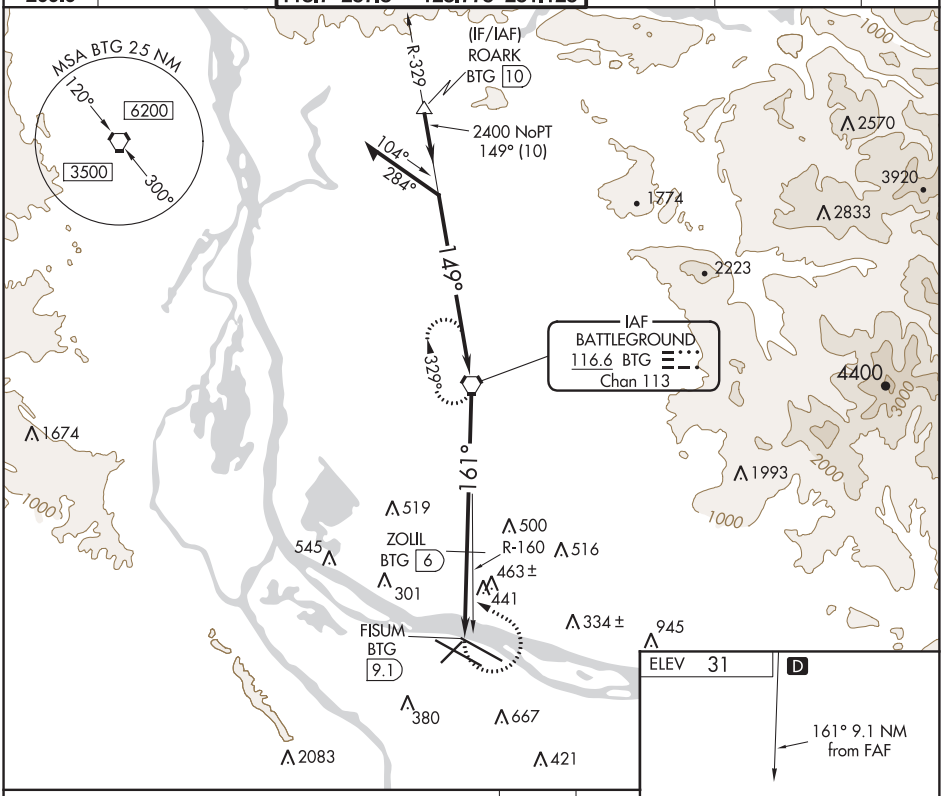
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

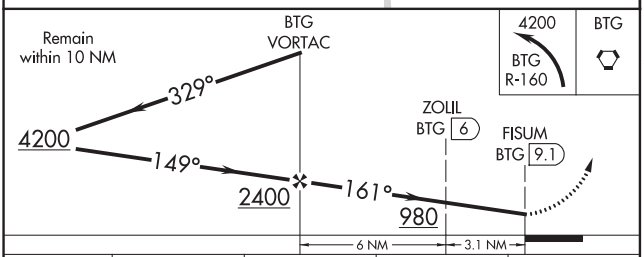
VORTAC BTG	APP CRS	Rwy Idg	N/A
116.6	161°	TDZE	N/A
Chan 113		Apt Elev	31

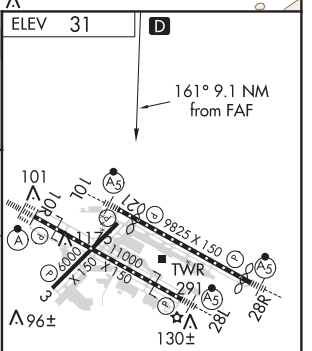
VOR-A
PORTLAND INTL (PDX)

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
		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	







CATEGORY	A	B	C	D
CIRCLING	980-1¼ 949 (1000-1¼)		980-2¾ 949 (1000-2¾)	1000-3 969 (1000-3)
ZOLIL FIX MINIMUMS				
CIRCLING	720-1 689 (700-1)	740-1 709 (800-1)	760-2 729 (800-2)	1000-3 969 (1000-3)

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18256

PORTLAND, OREGON

TACAN RWY 28L

PORTLAND INTL (KPDX)

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
CBU Chan 29	275°	11,000	23	31

AL-330 [USAF]

MALSR

*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.

† 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 123.775 251.125 Rwy 3-21, 10R-28L	121.9 348.6	120.125 318.1

ALTERNATE MISSED APPROACH FIX

BTG 10 — R-329 — 149° — 329° — BATTLE GROUND BTG 116.6 Chan 113 — AASEN BTG 5 — R-163

† ALTERNATE MISSED APPROACH: Climb to 4300 via BTG VORTAC R-163 to BTG then via BTG R-329 to AASEN INT and hold.

COLUMBIA Chan 29 CBU

CBU 20 — 1232 — 255° — 1015 — 075° — 1038 — R-255 — 643 — 386 — 932 — HAXOB CBU 3.2 /RADAR — ARLEH CBU 7 /RADAR — 1145 — BEAST CBU 10 — 1302 — 2049 — 377 — 664 — 275° — ROVTE CBU 13 /RADAR — R-095 — 735 — 1488 — 1168

MSA CBU 25 NM — 150° — 5600 — 3600 — 320°

4000 — 3000 — 4400

RADAR REQUIRED

4000 CBU R-255 — BEAST CBU 10 — HAXOB 3.2 /RADAR — ARLEH 7 /RADAR — ROVTE 13 /RADAR — 3000 — 2100 — 760 — 275° — VGSI and descent angles not coincident — ZAPLO 1.3 /RADAR — TACAN

1 NM — 1.9 NM — 3.8 NM

ELEV 31 — TDZE 23

424 ± — 101 — 84 — 10L — 21 — 10R — 8825 x 150 — 11,000 x 150 — 96 ± — TWR 291 — 28R — 28L — 96 ± — 127 ±

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

CATEGORY	A	B	C	D	E
S-28L*	600/24 577 (600-½)		600/50 577 (600-1)	600/60 577 (600-1¼)	600-1½ 577 (600-1½)
CIRCLING **	720-1 689 (700-1)	740-1 709 (800-1)	760-2 729 (800-2)	1000-3 969 (1000-3)	1160-3 1129 (1200-3)

PORTLAND, OREGON — 45°35'N-122°36'W — PORTLAND INTL (KPDX)

Amdt 1 18OCT12

TACAN RWY 28L

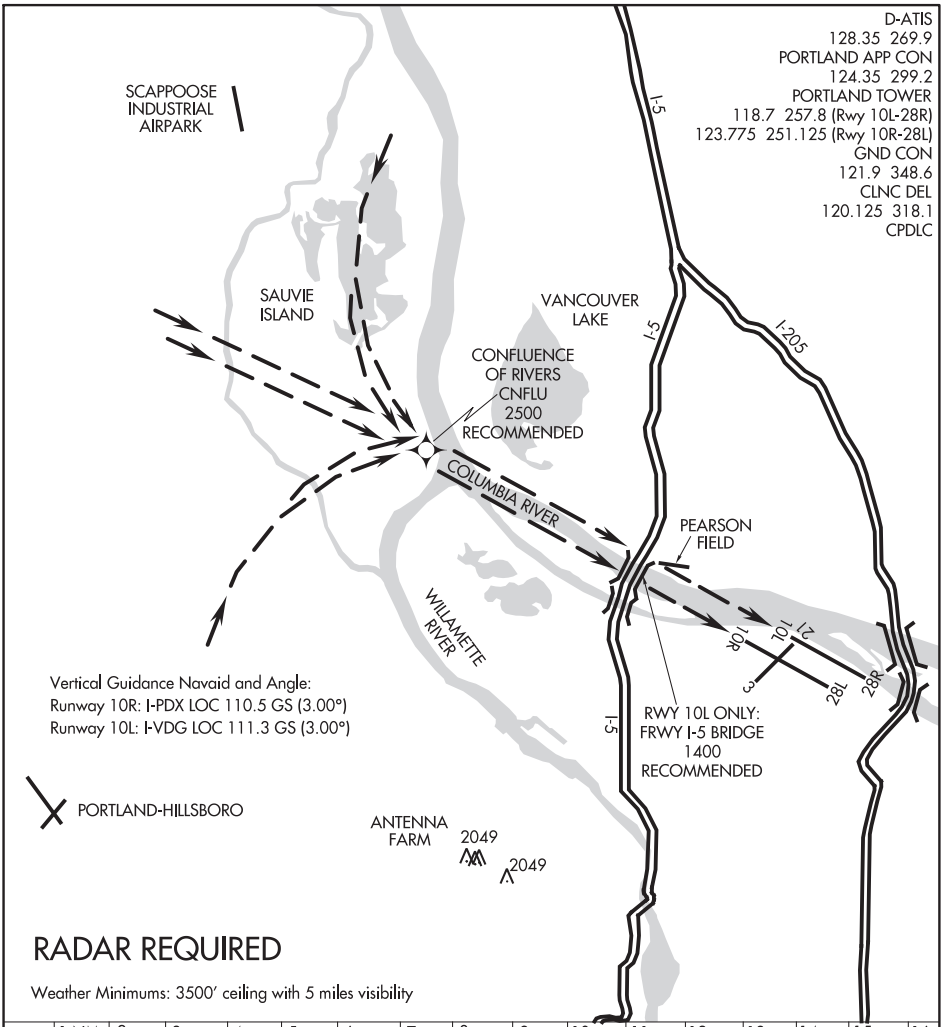
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

COLUMBIA VISUAL RWY 10L/R

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



NW-1, 30 JAN 2020 to 26 MAR 2020

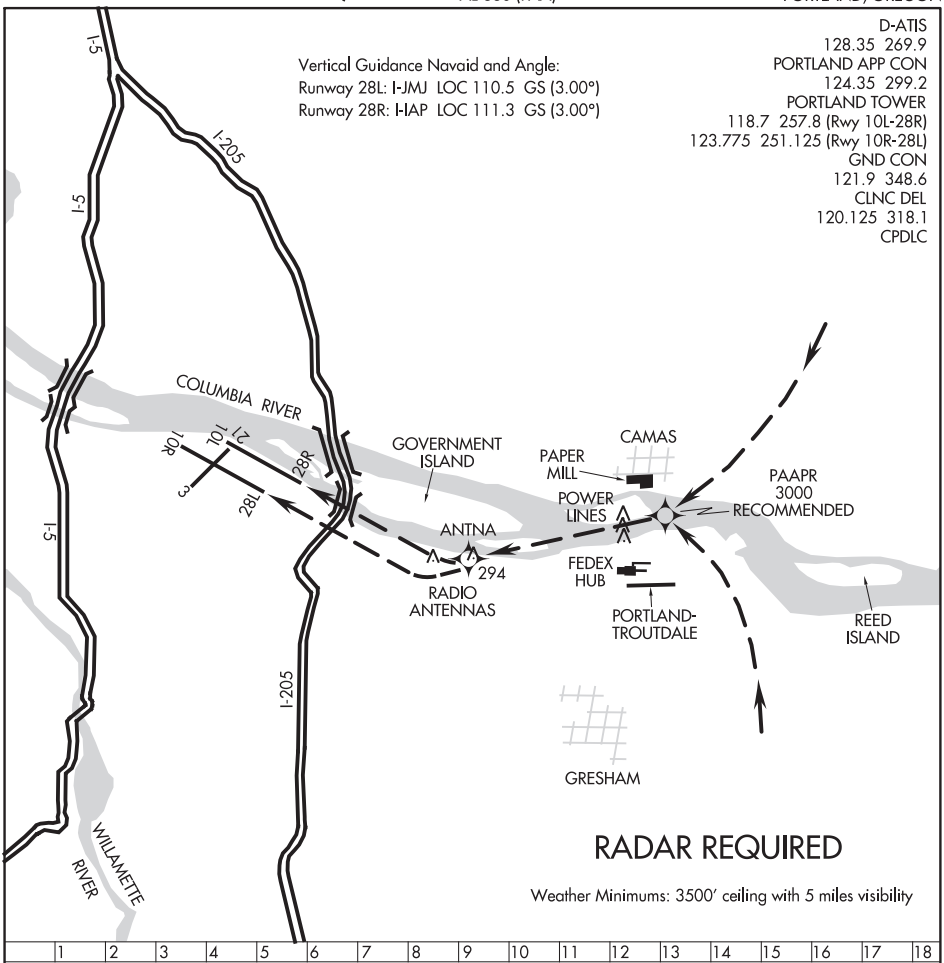
COLUMBIA VISUAL RWY 10L/R
PROCEDURE NOT AUTHORIZED AT NIGHT

17173

MILL VISUAL RWY 28L/R

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

D-ATIS 128.35 269.9
PORTLAND TOWER 123.775 251.125
RWY 03-21, 10R-28L 118.7 257.8
RWY 10L-28R GND CON 121.9 348.6
CLNC DEL 120.125 318.1
CPDLC
D
FIELD ELEV 31
VAR 15.7° E
JANUARY 2015
ANNUAL RATE OF CHANGE 0.1° W
ASSC in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.
HS 1
HS 2
HS 3
HS 4
9825 X 150
11000 X 150
6000 X 150
ADMINISTRATION AND TERMINAL
TWR 291
NORTH RAMP
GA TERMINAL & PARKING
U.S. CUSTOMS
SOUTHEAST RAMP
OREGON ANG
RESERVE RAMP
OR ANG WEST RAMP
CENTRAL RAMP
SOUTH CENTRAL RAMP
SOUTH RAMP
SOUTHWEST RAMP
NORTHWEST RAMP
FIRE STATION
H BAK-12B
ILS HOLD
ELEV 30
ELEV 26
ELEV 23
ELEV 22
ELEV 23
283.3°
103.3°
209.3°
029.3°
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
RWY 03-21
PCN 82 F/D/X/T
S-120, D-250, 2D-380
RWY 10L-28R
PCN 133 F/D/W/T
S-200, D-200, 2D-400
RWY 10R-28L
PCN 89 R/D/W/T
S-200, D-200, 2D-360
45°36'N
45°35'N
122°36'W
122°35'W
122°34'W
122°37'W

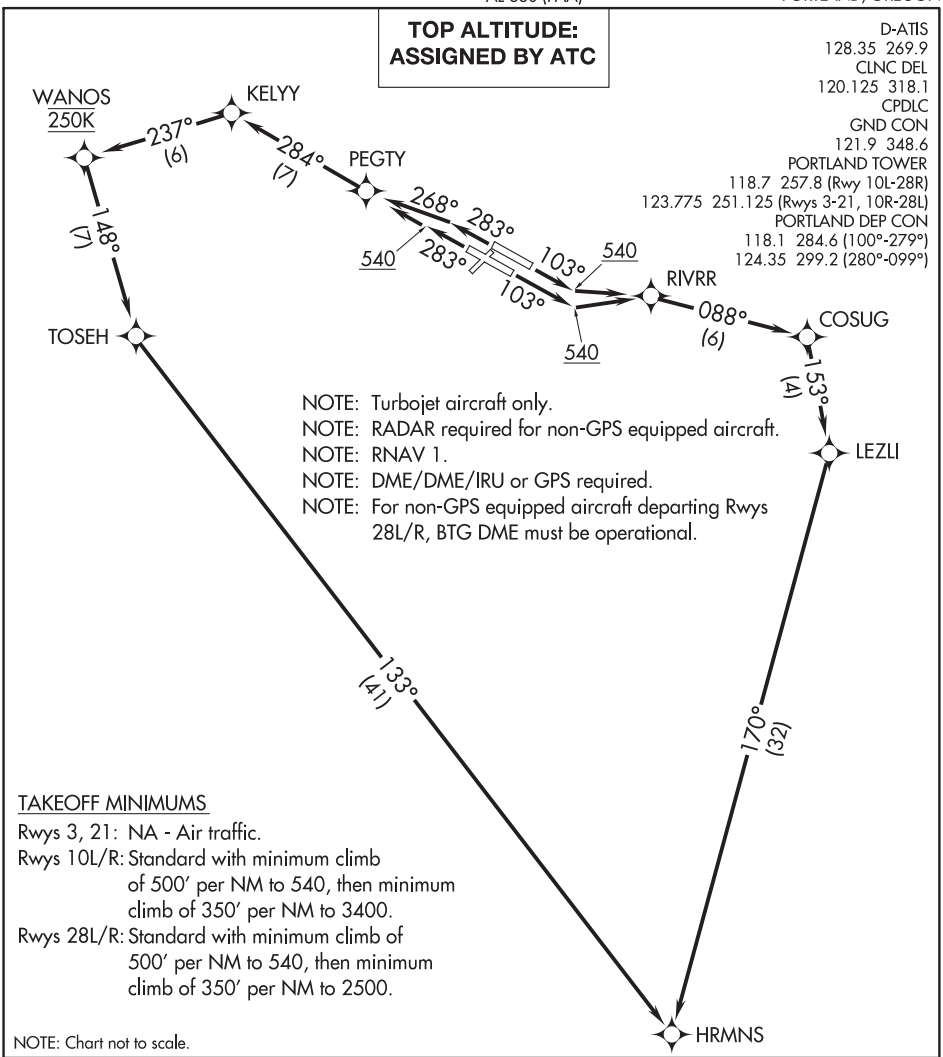
(CASCD2.CHISM) 17341

CASCADE TWO DEPARTURE (RNAV)

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON

CASCADE TWO DEPARTURE (RNAV)
(CASCD2.CHISM) 13NOV14
PORTLAND, OREGON
PORTLAND INTL (PDX)
NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 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.

LAVAA SIX DEPARTURE (RNAV)

(LAVAA6.LAVAA) 08JAN15

PORTLAND, OREGON
PORTLAND INTL (PDX)

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.

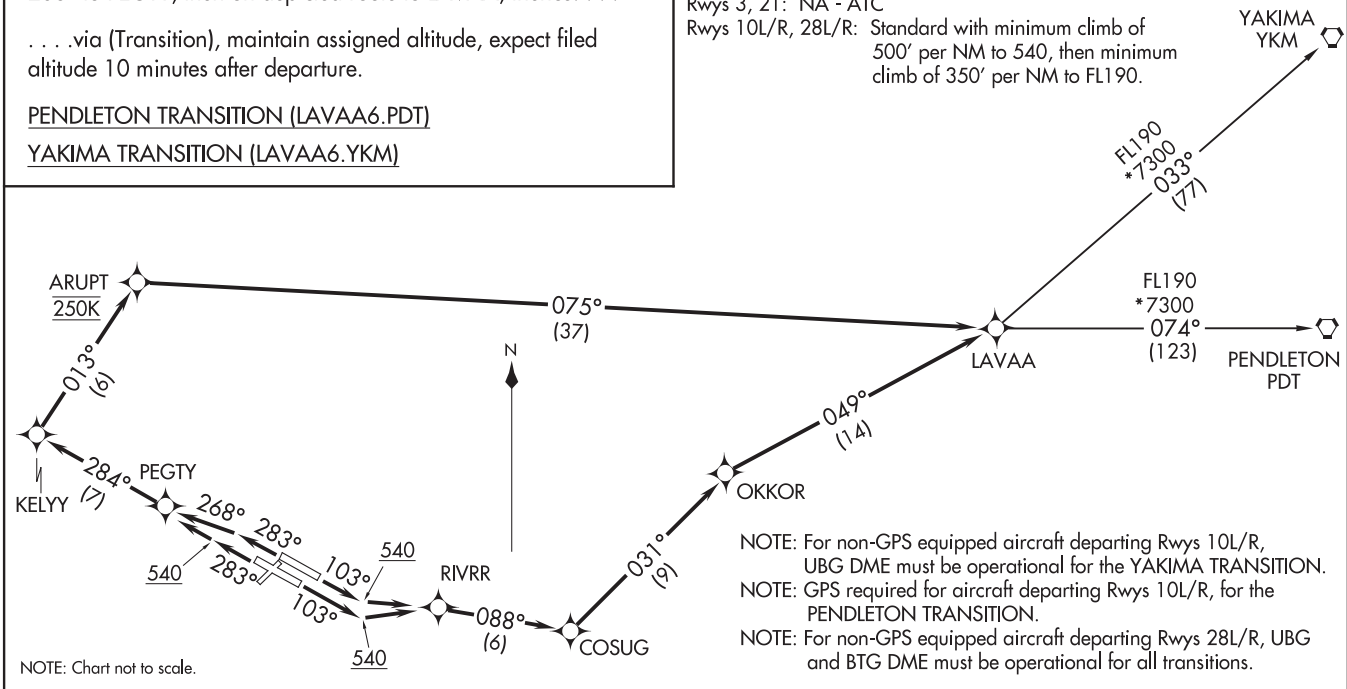
PENDLETON TRANSITION (LAVAA6.PDT)

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.

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.

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



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.

(LAVAA6.LAVAA) 17341

LAVAA SIX DEPARTURE (RNAV)

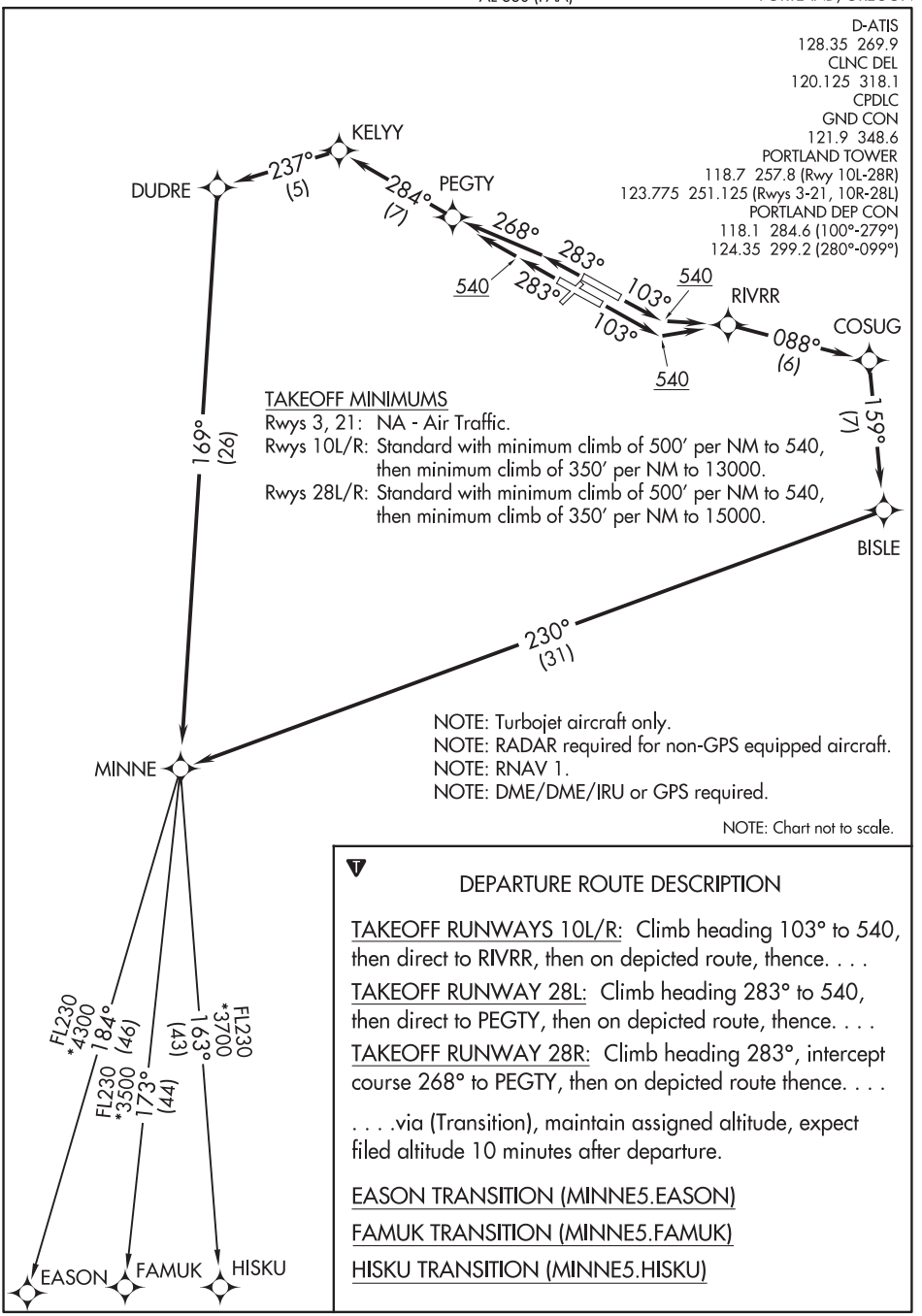
AL-330 (FAA)

PORTLAND INTL (PDX)

PORTLAND, OREGON

608

NW-1, 30 JAN 2020 to 26 MAR 2020



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)

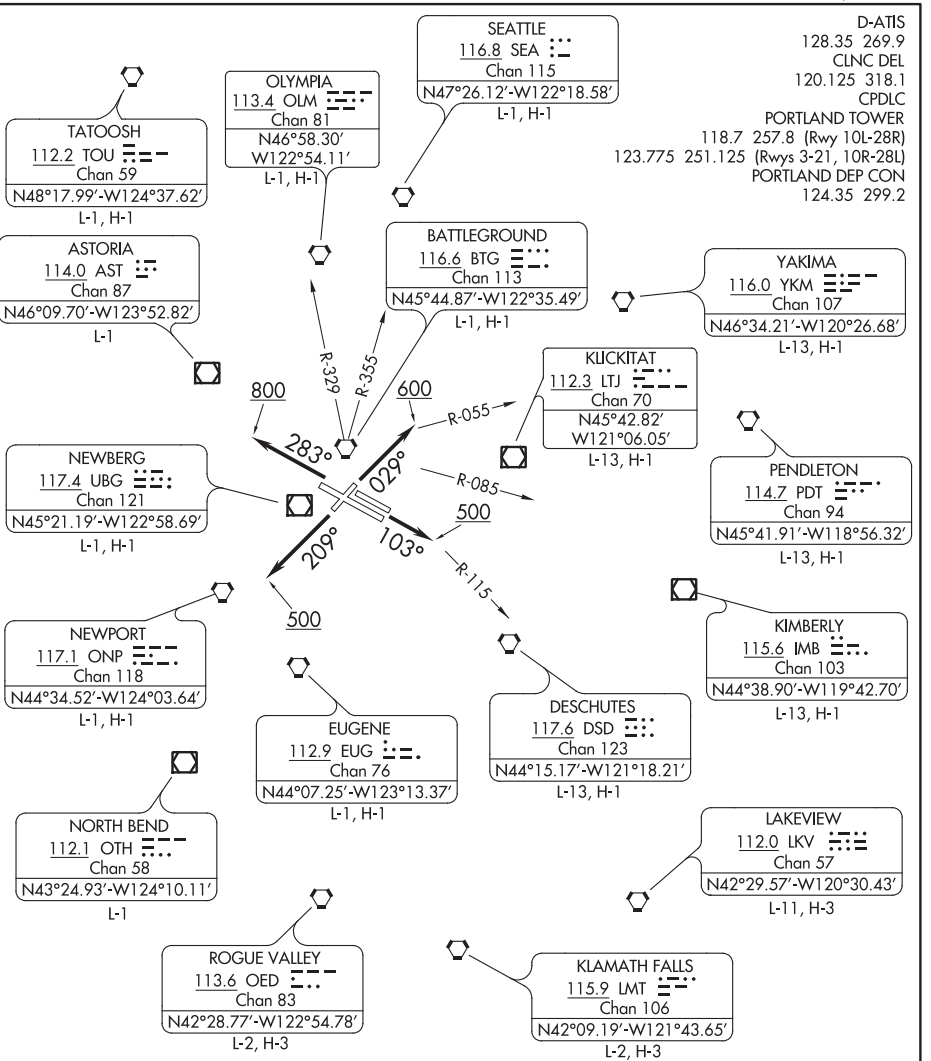
HISKU TRANSITION (MINNE5.HISKU)

(PTLD1.BTG) 17341

PORTLAND ONE DEPARTURE

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON



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)

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

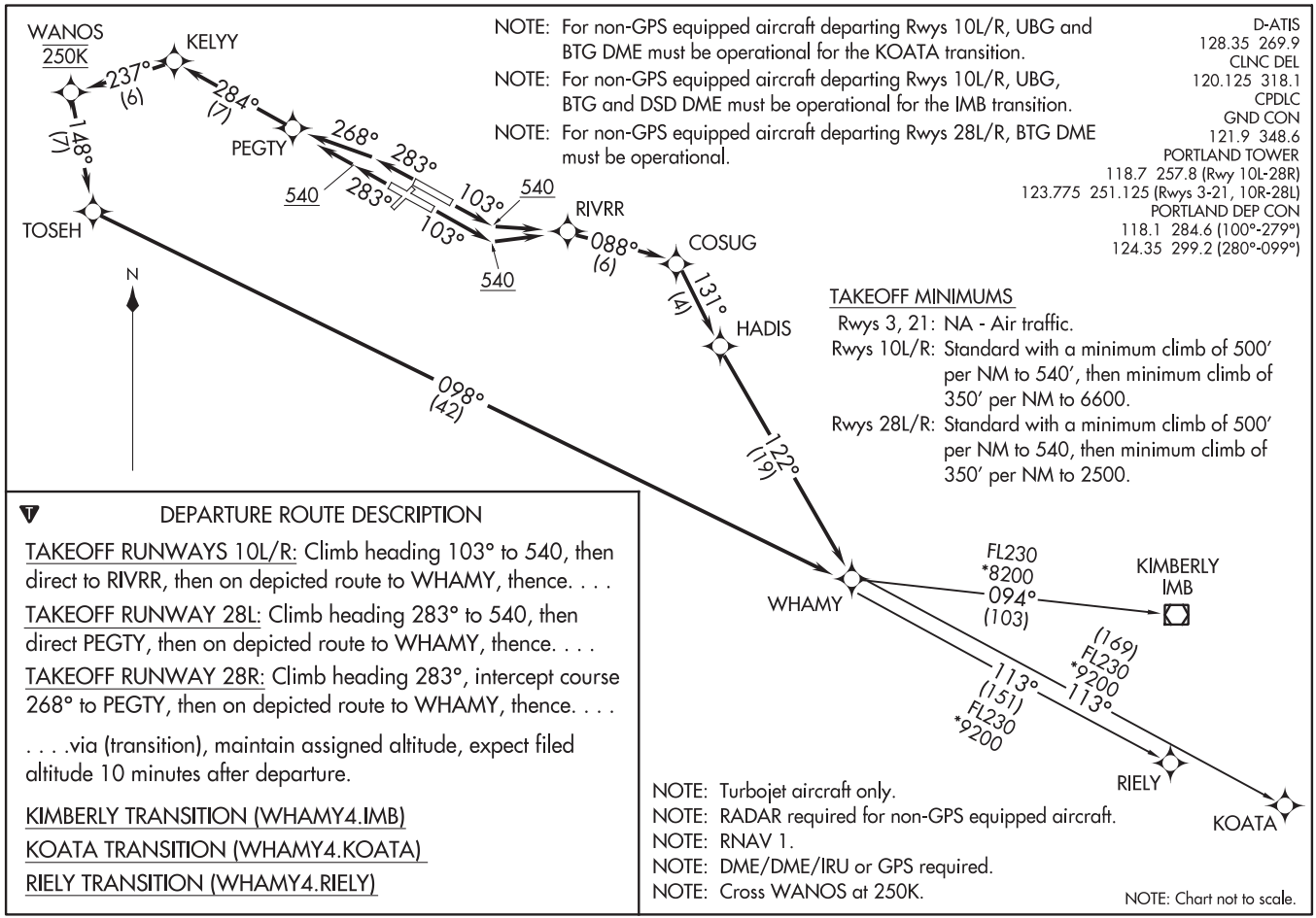
LOST COMMUNICATIONS: If no contact with ATC within 10 NM of airport, continue climb to assigned altitude and proceed direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC BTG R-355 CW R-055 or R-085 CW R-115 at or above 5000 feet. Continue climb on course.

NW-1, 30 JAN 2020 to 26 MAR 2020

WHAMY FOUR DEPARTURE (RNAV)

(WHAMY4.WHAMY) 13NOV14

PORTLAND, OREGON
PORTLAND INTL (PDX)



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 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 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.

(WHAMY4.WHAMY) 17341

WHAMY FOUR DEPARTURE (RNAV)

PORTLAND INTL (PDX)
PORTLAND, OREGON

AL-330 (FAA)

612

LOC I-HIO	APP CRS	Rwy Idg	6600
110.7	128°	TDZE	203
		Apt Elev	208

ILS or LOC RWY 13R

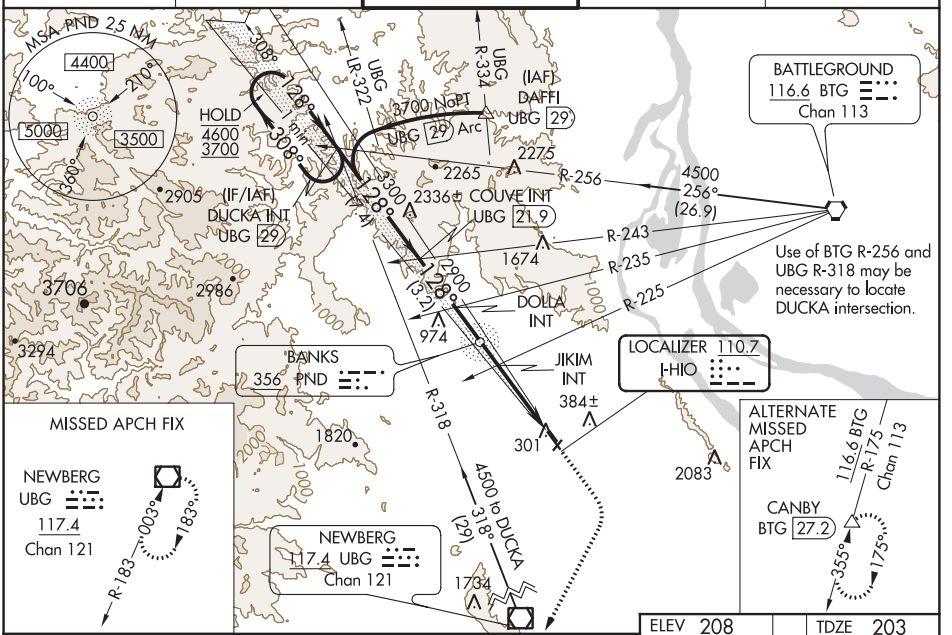
PORTLAND-HILLSBORO (HIO)

T A Inop table does not apply to S-LOC 13R Cats A and B. For inop ALS when using Portland Intl altimeter setting, increase S-ILS 13R all Cats visibility to RVR 4500. When local altimeter setting not received, use Portland Intl altimeter setting and increase all DA/MDA 60 feet, increase JIKIM fix minimums S-LOC 13R Cats C and D visibility to 1⅜ SM. #RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Portland Intl altimeter setting.

MALSR

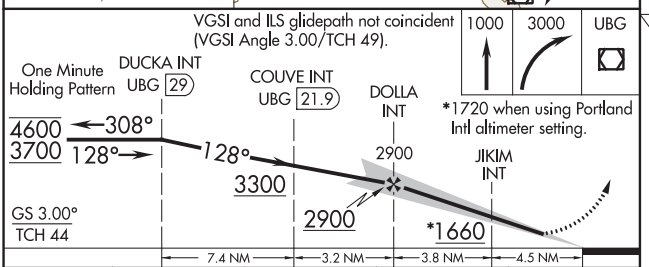
MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct UBG VOR/DME and hold.

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

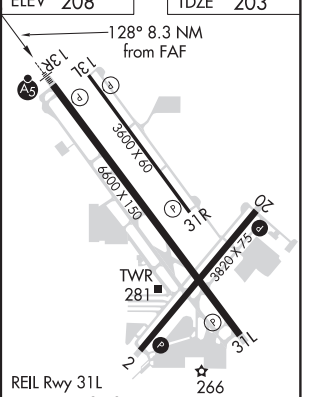


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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)



REIL Rwy 31L
HIRL Rwy 13R-31L
MIRL Rwys 2-20 and 13L-31R

FAF to MAP 8.3 NM

Knots	60	90	120	150	180
Min:Sec	8:18	5:32	4:09	3:19	2:46

PORTLAND, OREGON

AL-5063 (FAA)

20030

RNAV (GPS) RWY 13R

PORTLAND-HILLSBORO (HIO)

WAAS	APP CRS	Rwy Idg	6600
CH 69502	127°	TDZE	203
W13A		Apt Elev	208

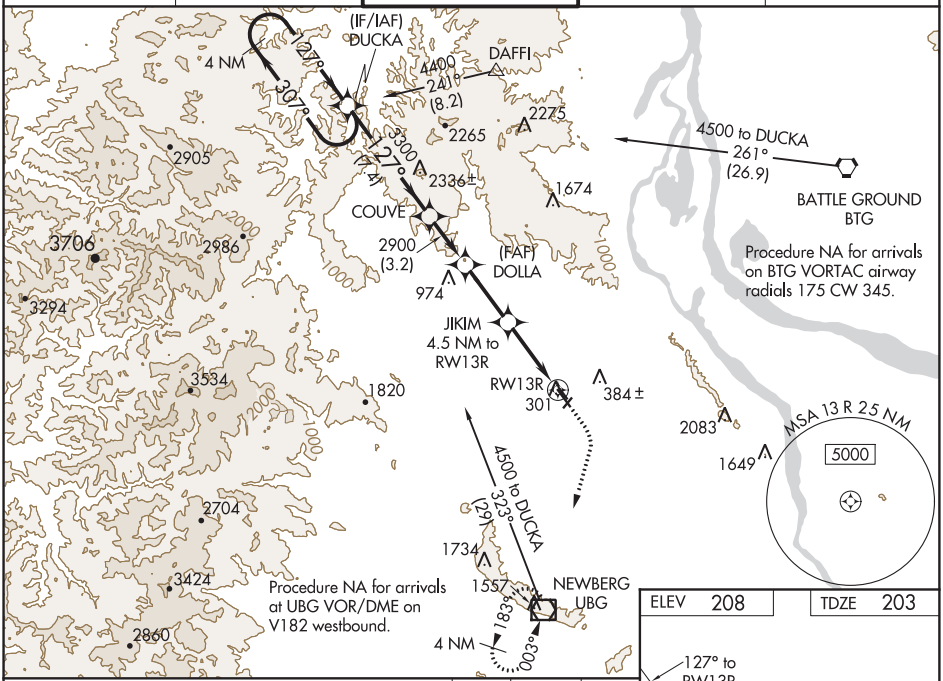
T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Portland Intl altimeter setting and increase all DA/MDA 60 feet, increase LNAV/VNAV and LNAV all Cats visibility ¼ mile. For inop MALSR when using Portland Intl altimeter setting, increase LPV all Cats visibility to RVR 4500, increase LNAV Cats C/D visibility to RVR 5500. VDP and Baro-VNAV NA when using Portland Intl altimeter setting. #RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Portland Intl altimeter setting.

A

MALSR

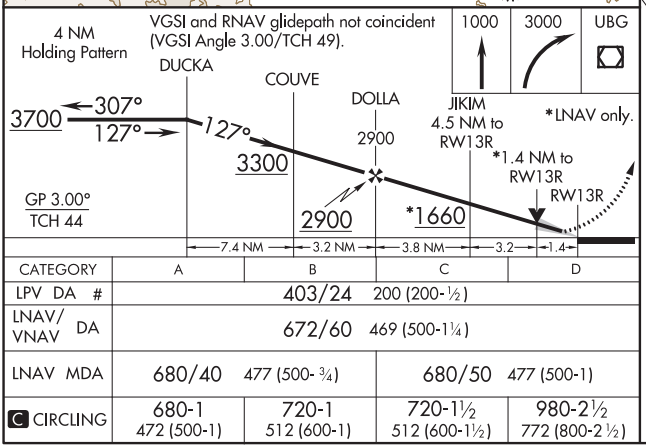
MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct UBG VOR /DME and hold.

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



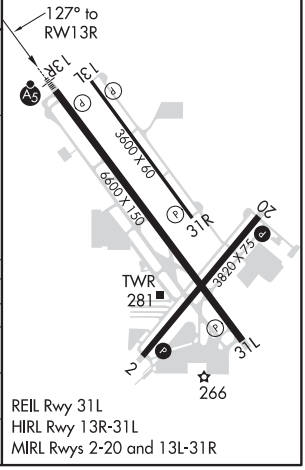
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



CATEGORY	A	B	C	D
LPV DA #	403/24 200 (200-½)			
LNAV/VNAV DA	672/60 469 (500-1¼)			
LNAV MDA	680/40 477 (500-¾)		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)

ELEV 208 | TDZE 203



PORTLAND, OREGON

Amdt 2B 01FEB18

45°33'N-122°57'W

PORTLAND-HILLSBORO (HIO)

RNAV (GPS) RWY 13R

WAAS CH 69417 W31A	APP CRS 308°	Rwy Idg 6600 TDZE 204 Apt Elev 208

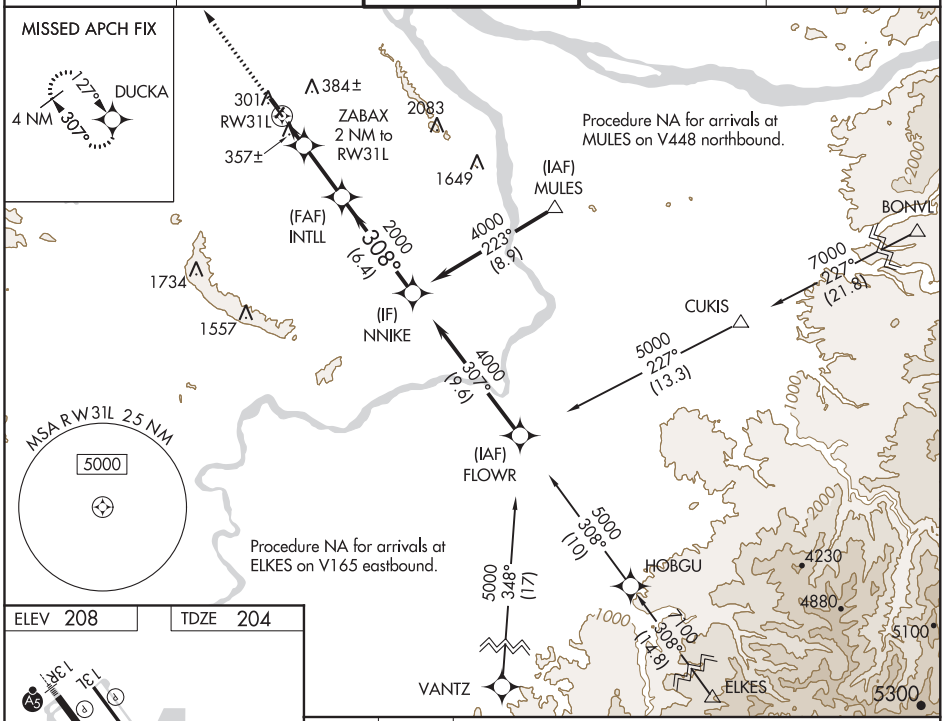
RNAV (GPS) RWY 31L

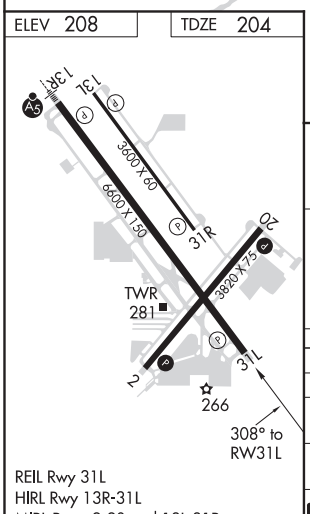
PORTLAND-HILLSBORO (HIO)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Portland Intl altimeter setting and increase all DA/MDA 60 feet and increase LPV, LNAV/VNAV and Circling Cat D visibility ¼ mile. VDP and Baro-VNAV NA when using Portland Intl altimeter setting. Helicopter visibility reduction below ¾ SM NA.

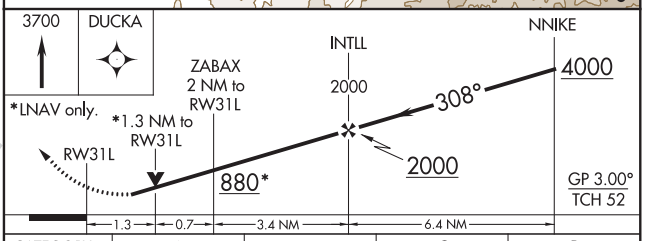
MISSED APPROACH: Climb to 3700 direct DUCKA and hold.

ATIS	PORTLAND APP CON	HILLSBORO TOWER ★	GND CON	UNICOM
127.65	126.0 269.175	119.3 (CTAF) Ⓛ 239.3	121.7	122.95





REIL Rwy 31L
HIRL Rwy 13R-31L
MIRL Rwys 2-20 and 13L-31R



CATEGORY	A	B	C	D
LPV DA	583-1¼ 379 (400-1¼)			
LNAV/VNAV DA	644-1½ 440 (500-1½)			
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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME UBG	APP CRS	Rwy Idg	N/A
117.4	345°	TDZE	N/A
Chan 121		Apt Elev	208

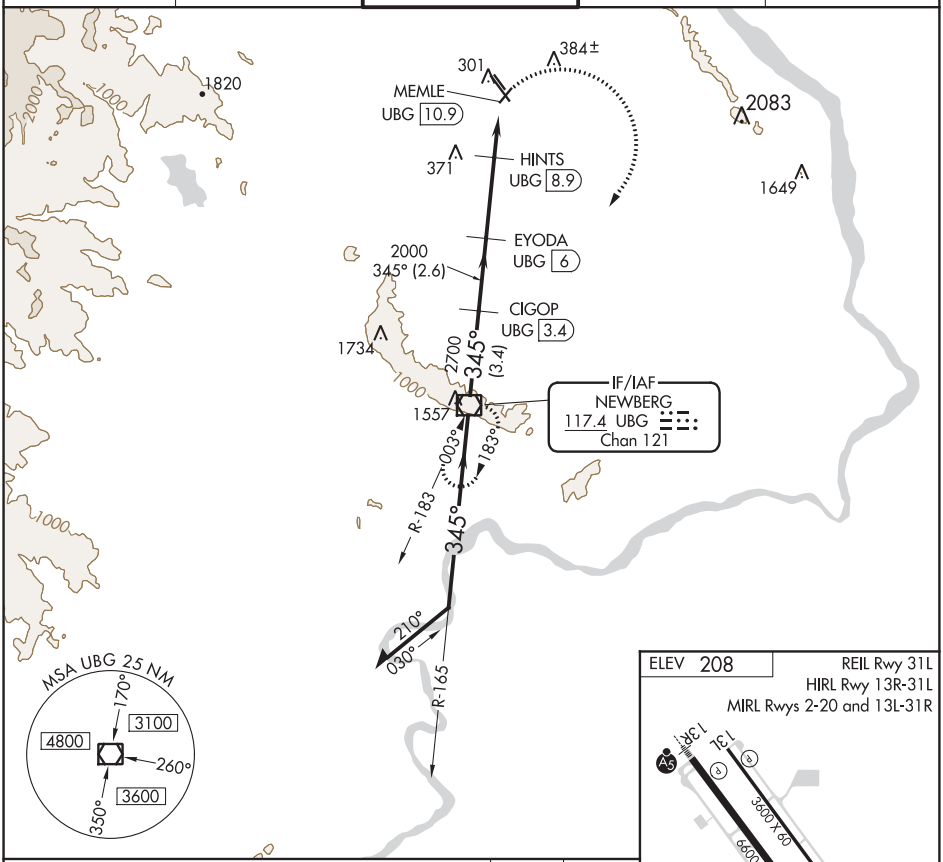
VOR/DME-C

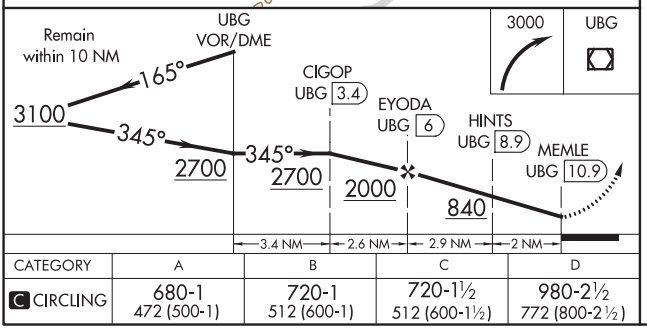
PORTLAND-HILLSBORO (HIO)

When local altimeter setting not received, use Portland Intl altimeter setting and increase all MDA 60 feet; increase Circling Cat D visibility ¼ mile.

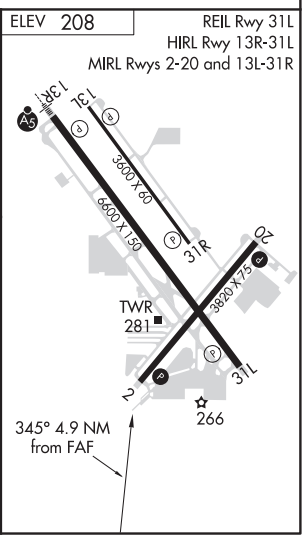
MISSED APPROACH: Climbing right turn to 3000 direct UBG VOR/DME and hold.

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





CATEGORY	A	B	C	D
C CIRCLING	680-1 472 (500-1)	720-1 512 (600-1)	720-1½ 512 (600-1½)	980-2½ 772 (800-2½)



45°33′N-122°57′W

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

PND NDB 356	APP CRS 127°	Rwy Idg N/A TDZE N/A Apt Elev 208

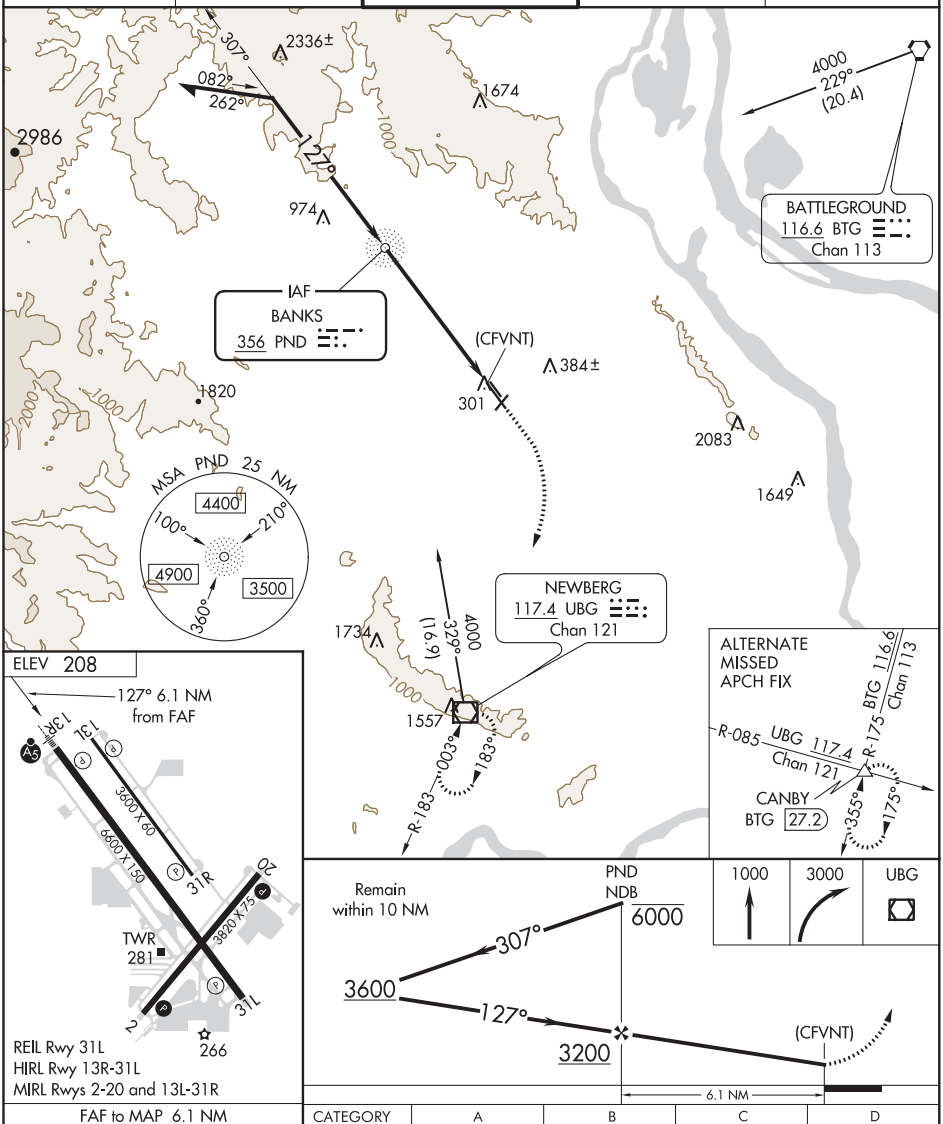
NDB-B

PORTLAND-HILLSBORO (HIO)

T NA When local altimeter setting not received, use Portland Intl altimeter setting: increase all MDA 60 feet and visibility Cats C and D ¼ mile.

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	900-1 692 (700-1)		900-2 692 (700-2)	980-2½ 772 (800-2½)

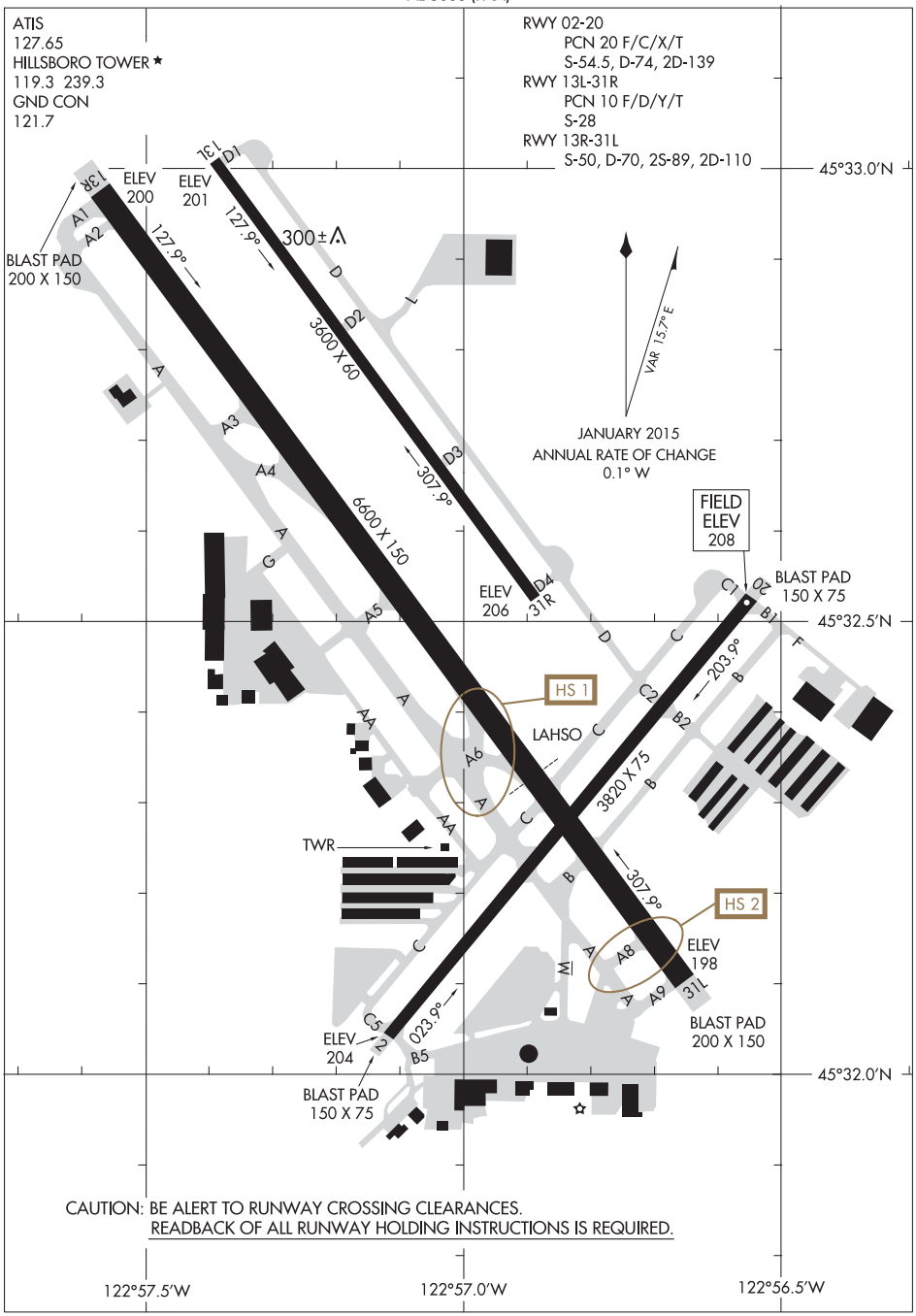
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

20030

AIRPORT DIAGRAM

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON

AL-5063 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

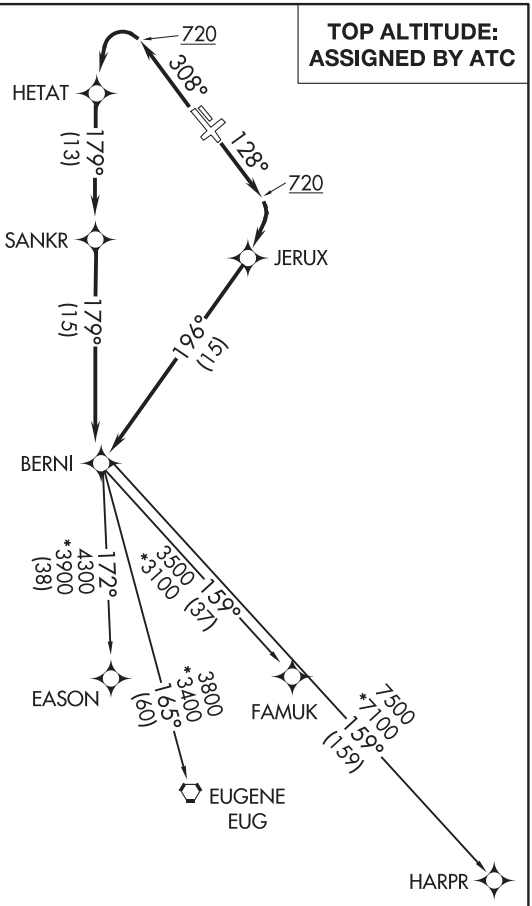
AIRPORT DIAGRAM
20030
PORTLAND, OREGON
PORTLAND-HILLSBORO (HIO)

BERNI THREE DEPARTURE (RNAV)

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



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.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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)

(CANBY2.CANBY) 18032

CANBY TWO DEPARTURE

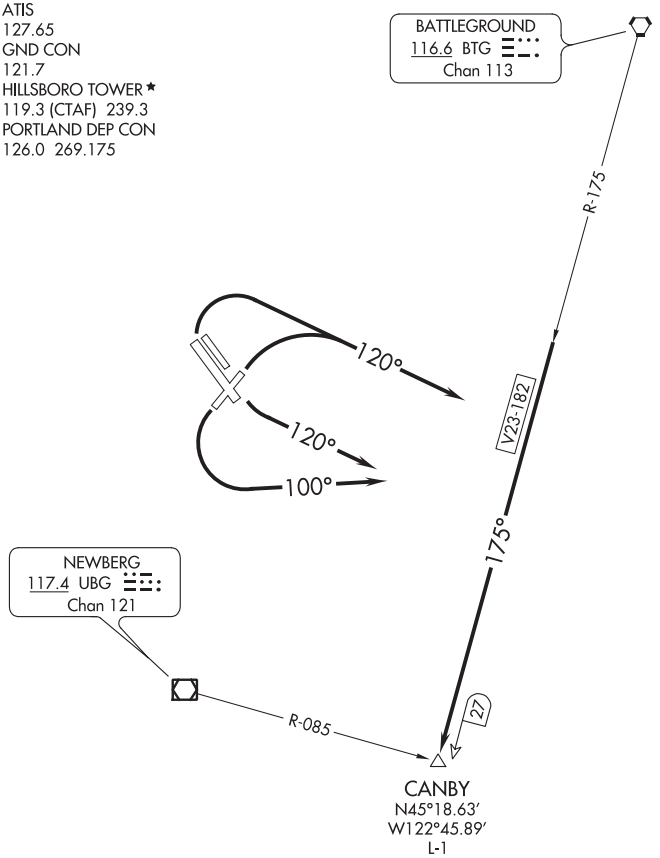
AL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON

NW-1, 30 JAN 2020 to 26 MAR 2020

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
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.

DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 13R: Climb heading 128° to 720, then climbing left turn direct GERDD, then on depicted route to CHISM, thence . . . .
TAKEOFF RUNWAY 31L: Climb heading 308° to 720, then climbing left turn direct HETAT, then on depicted route to CHISM, thence . . . .
. . . . on (Transition). Maintain assigned altitude. Expect filed altitude 10 minutes after departure.
DESCHUTES TRANSITION (CHISM4.DSD)
JOGEN TRANSITION (CHISM4.JOGEN)
KIMBERLY TRANSITION (CHISM4.IMB)
PAWLI TRANSITION (CHISM4.PAWLI)
RIELY TRANSITION (CHISM4.RIELY)
SMIGE TRANSITION (CHISM4.SMIGE)
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
HETAT
FORAS
EMELY
GERDD
CHISM
KIMBERLY IMB
DESCHUTES DSD
JOGEN
SMIGE
PAWLI
RIELY
N
720
308°
128°
157° (5)
108° (10)
108° (35)
112° (37)
8200 *8200 087° (107)
9600 *9600 108° (130)
12700 *12700 127° (61)
12700 *12700 138° (49)
12700 *12700 138° (81)
139° 12700 *12700 (125)
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.

(FARM7.UBG) 18032

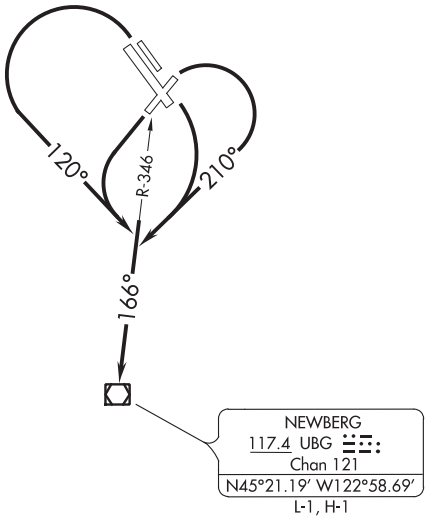
FARMINGTON SEVEN DEPARTURE

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



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 . . . .

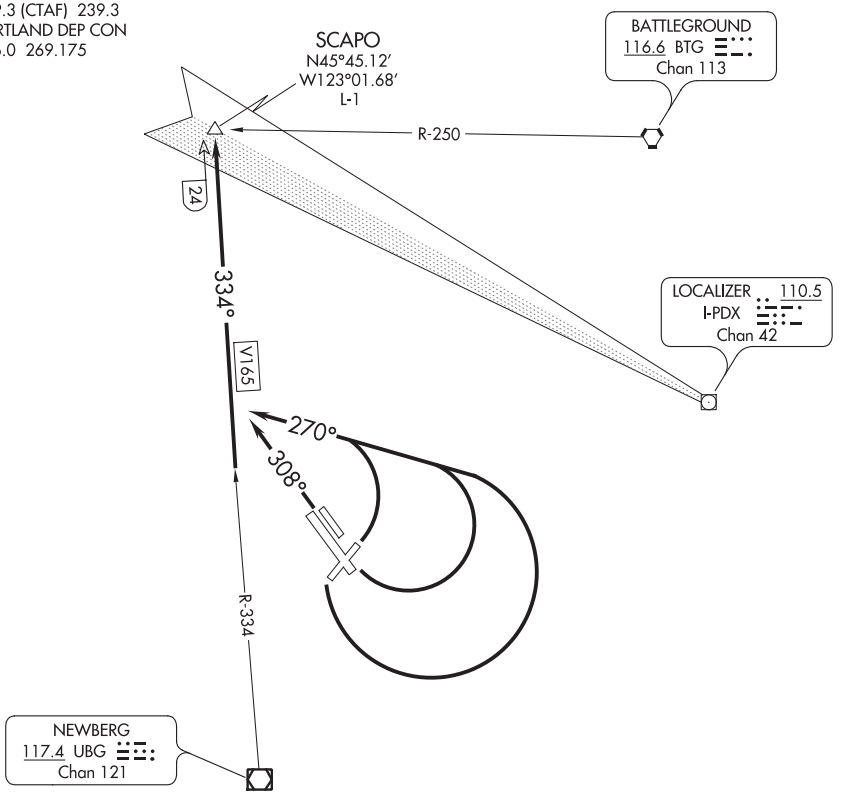
. . . . intercept UBG VOR/DME R-346 to UBG VOR/DME. Thence on assigned route.

Maintain ATC assigned altitude.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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 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, 30 JAN 2020 to 26 MAR 2020

PORTLAND, OREGON AL-649 (FAA) 19115

RNAV (GPS)-A

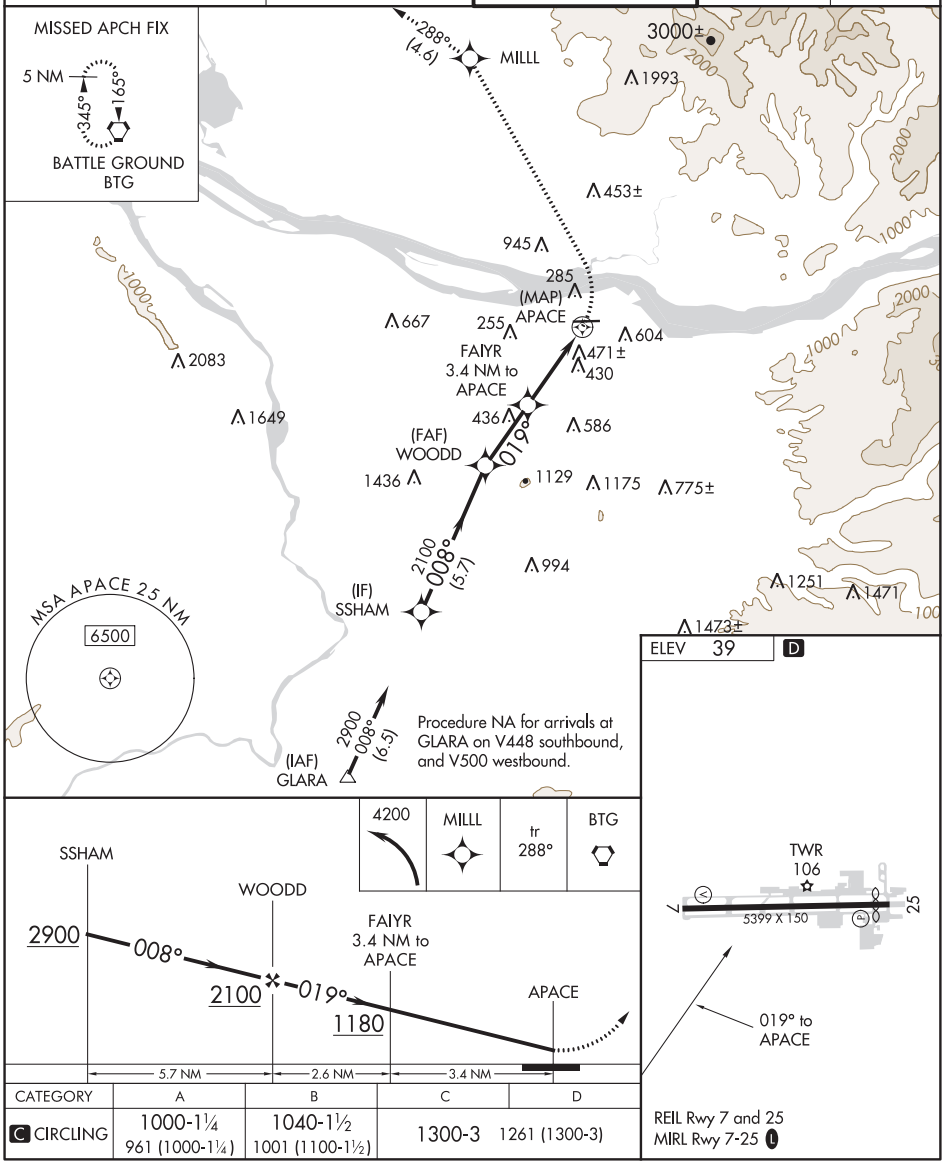
PORTLAND-TROUTDALE (TTD)

APP CRS	Rwy Idg	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

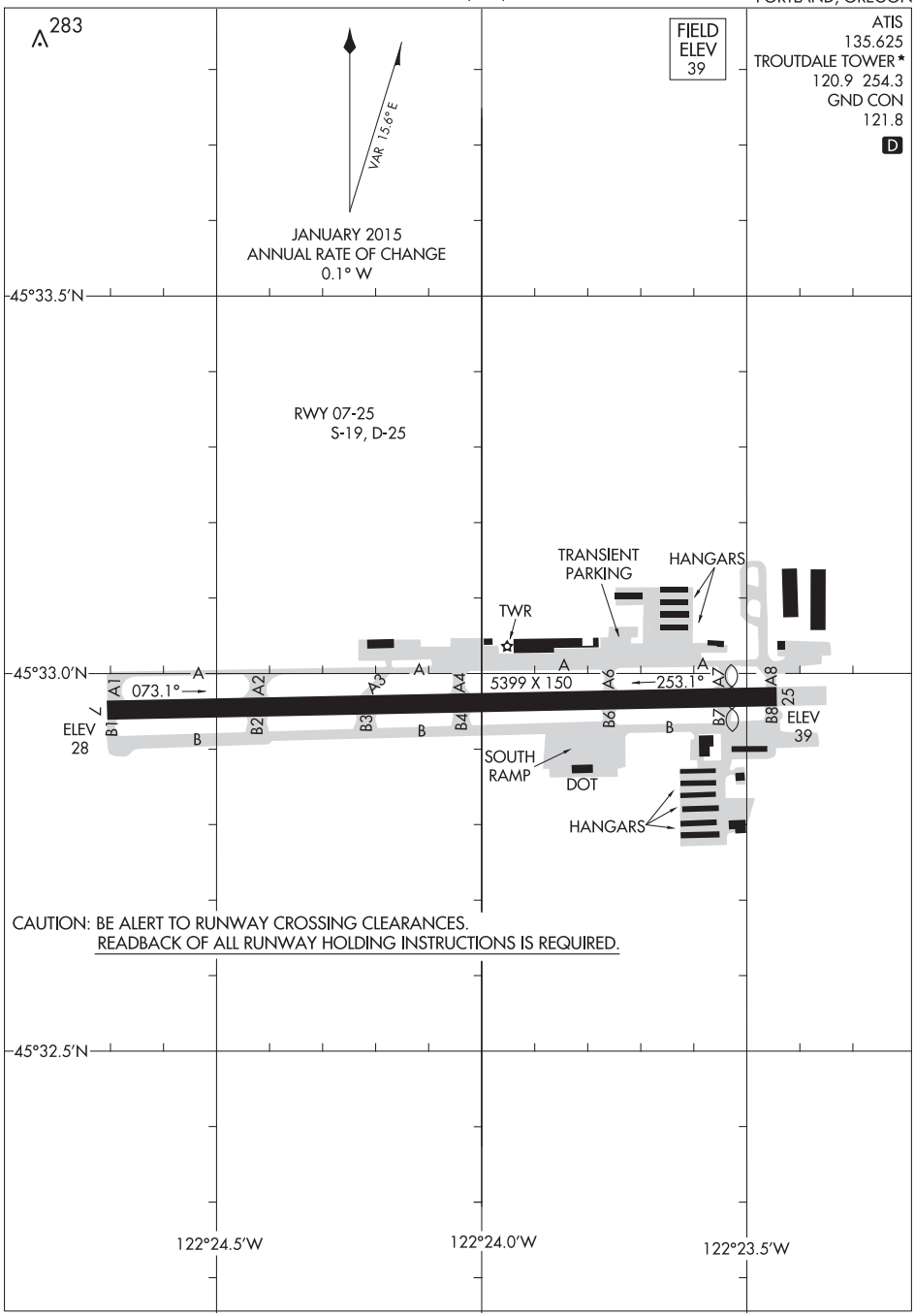


CATEGORY	A	B	C	D
C CIRCLING	1000-1¼ 961 (1000-1¼)	1040-1½ 1001 (1100-1½)	1300-3	1261 (1300-3)

REIL Rwy 7 and 25
MIRL Rwy 7-25 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

16147

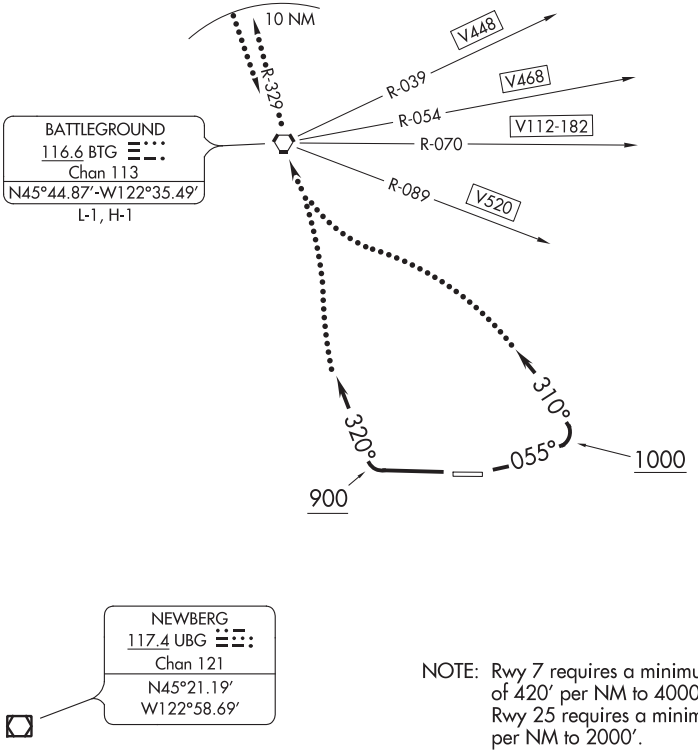
BLUE LAKE THREE DEPARTURE

AL-649 (FAA)

PORTLAND-TROUTDALE (TTD)
PORTLAND, OREGON

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

WAAS	APP CRS	Rwy Idg	6200
CH 90233	134°	TDZE	5046
W13A		Apt Elev	5096

RNAV (GPS) RWY 13

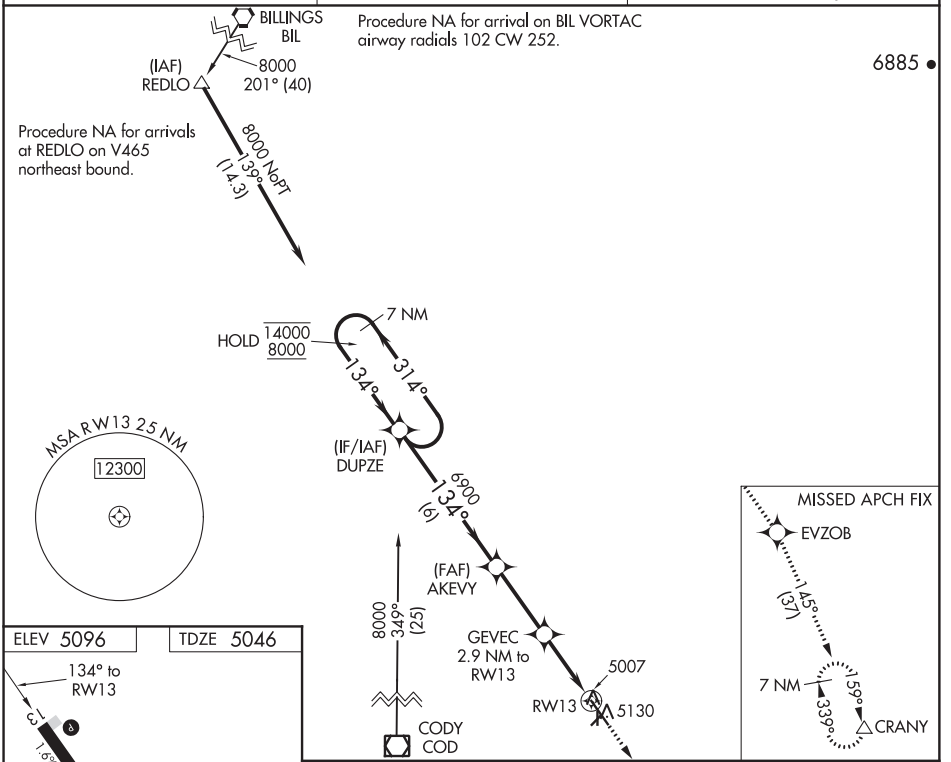
POWELL MUNI (POY)

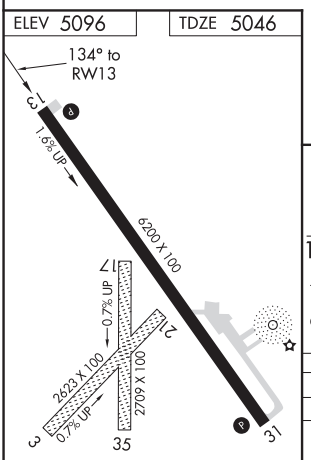
RNP APCH.

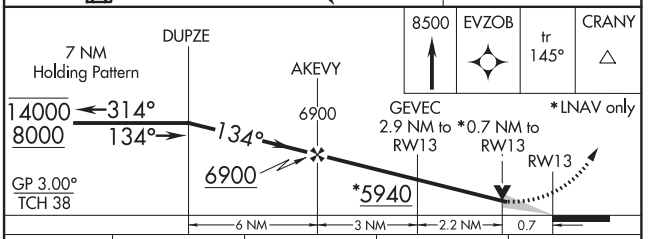
T NA — Circling NA to Rwys 3, 17, 21 and 35. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C or above 51°C. Baro-VNAV and VDP NA when using Cody altimeter setting. When local altimeter setting not received, use Cody altimeter setting and increase all DA 54 feet and all MDA 60 feet.

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, 30 JAN 2020 to 26 MAR 2020

POWELL, WYOMING | AL-686 (FAA) | 20030

RNAV (GPS) RWY 31

POWELL MUNI (POY)

WAAS CH 50233 W31A	APP CRS 314°	Rwy Idg 6200 TDZE 5096 Apt Elev 5096

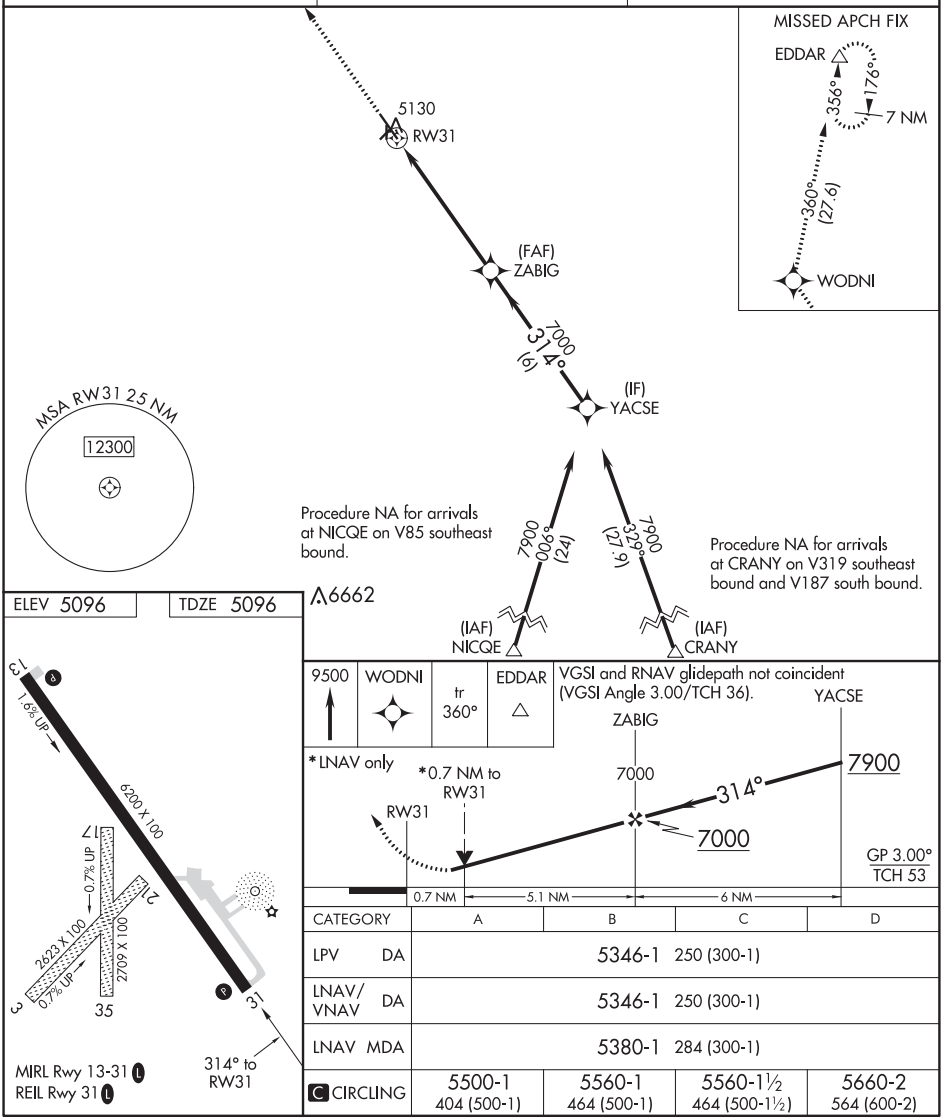
RNP APCH.

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.

NA

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NDB RWY 31

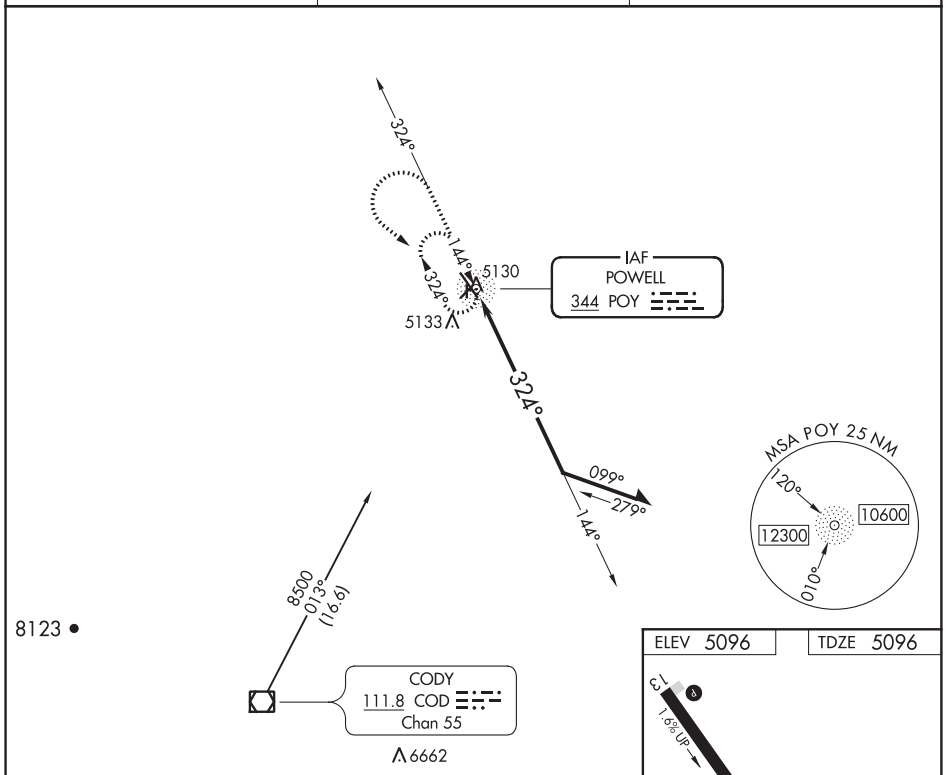
POWELL MUNI (POY)

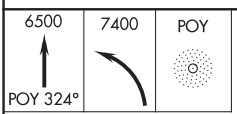
NDB POY 344	APP CRS 324°	Rwy Idg 6200 TDZE 5096 Apt Elev 5096

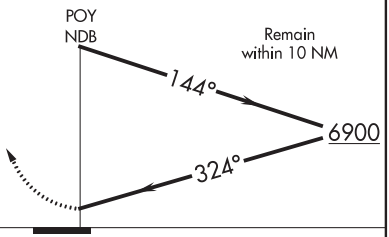
Circling NA to Rwys 3, 17, 21 and 35. Rwy 31 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Cody altimeter setting and increase all MDA 60 feet and S-31 Cat C and D visibilities ¼ mile.

MISSED APPROACH: Climb to 6500 on bearing 324° to POY NDB then climbing left turn to 7400 direct POY NDB and hold.

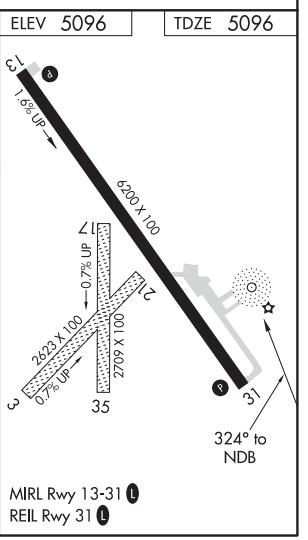
AWOS-3	SALT LAKE CENTER	UNICOM
119.275	127.75 351.9	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-31	5500-1	404 (500-1)	5500-1⅛	404 (500-1⅛)
C CIRCLING	5500-1 404 (500-1)	5560-1 464 (500-1)	5560-1½ 464 (500-1½)	5660-2 564 (600-2)



MIRL Rwy 13-31 L
REIL Rwy 31 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PRINEVILLE, OREGON | AL-9340 (FAA) | 19227

WAAS	APP CRS	Rwy Idg	5751
CH 60936	092°	TDZE	3246
W10A		Apt Elev	3251

RNAV (GPS) RWY 10

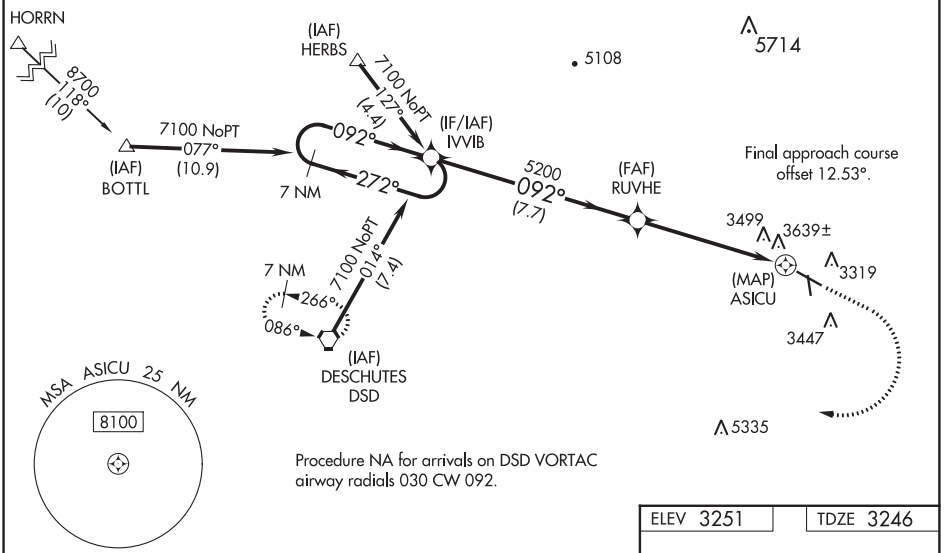
PRINEVILLE (S39)

T A

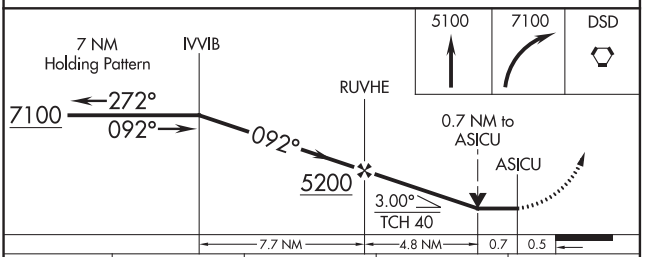
Circling NA for Cat D southwest of Rwy 10-28.
DME/DME RNP-0.3 NA.
Rwy 10 helicopter visibility reduction below ¾ SM NA.

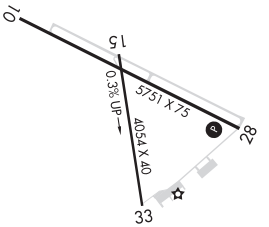
MISSED APPROACH: Climb to 5100 then climbing right turn to 7100 direct DSD VORTAC and hold.
*Missed approach requires minimum climb of 215 feet per NM to 5400.

AWOS-3PT	SEATTLE CENTER	UNICOM
118.325	126.15 269.475	122.8 (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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 28

PRINEVILLE (S39)

WAAS	APP CRS	Rwy Idg	5751
CH 56235	284°	TDZE	3239
W28A		Apt Elev	3251

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	122.8 (CTAF) L

Procedure NA for arrivals at GASHE on V25 northbound.
Procedure NA for arrivals at ROAMS on V536 northeast bound.

Procedure NA for arrivals on IMB VOR/DME airway radials 231 CW 298.

Procedure NA for arrivals at NAXZY on V269 eastbound.

MISSED APCH FIX
7 NM
266°
086°
DESCHUTES DSD

ELEV 3251 TDZE 3239

MIRL Rwy 10-28 L
LIRL Rwy 15-33 L

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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(DSD2.DSD) 19171

DESCHUTES TWO DEPARTURE (RNAV)

AL-9340 (FAA)

PRINEVILLE (S39)
PRINEVILLE, OREGON

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.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

DESCHUTES TWO DEPARTURE (RNAV)
(DSD2.DSD) 12DEC13

PRINEVILLE, OREGON
PRINEVILLE (S39)

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-PUW	APP CRS	Rwy Idg	7101
110.35	050°	TDZE	2567
Chan 40(Y)		Apt Elev	2567

ILS or LOC RWY 5

PULLMAN/MOSCOW RGNL (PUW)

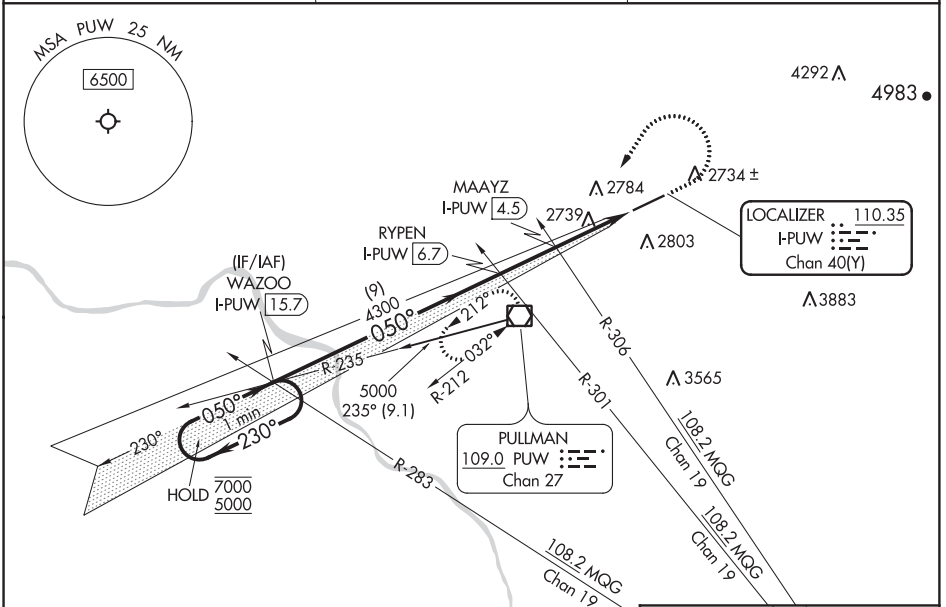
DME required.

T A 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.

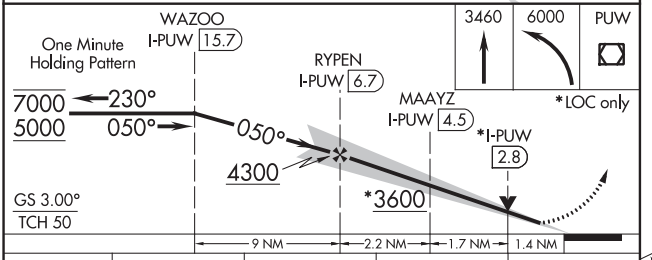
MALSR

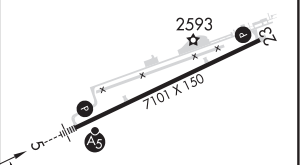
MISSED APPROACH: Climb to 3460 then climbing left turn to 6000 direct PUW VOR/DME, continue climb-in-hold to 6000.
Missed approach requires minimum climb of 222 feet per NM to 4180.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

PULLMAN/MOSCOW, WASHINGTON AL-798 (FAA) 20030

RNAV (RNP) Z RWY 23

PULLMAN/MOSCOW RGNL (PUW)

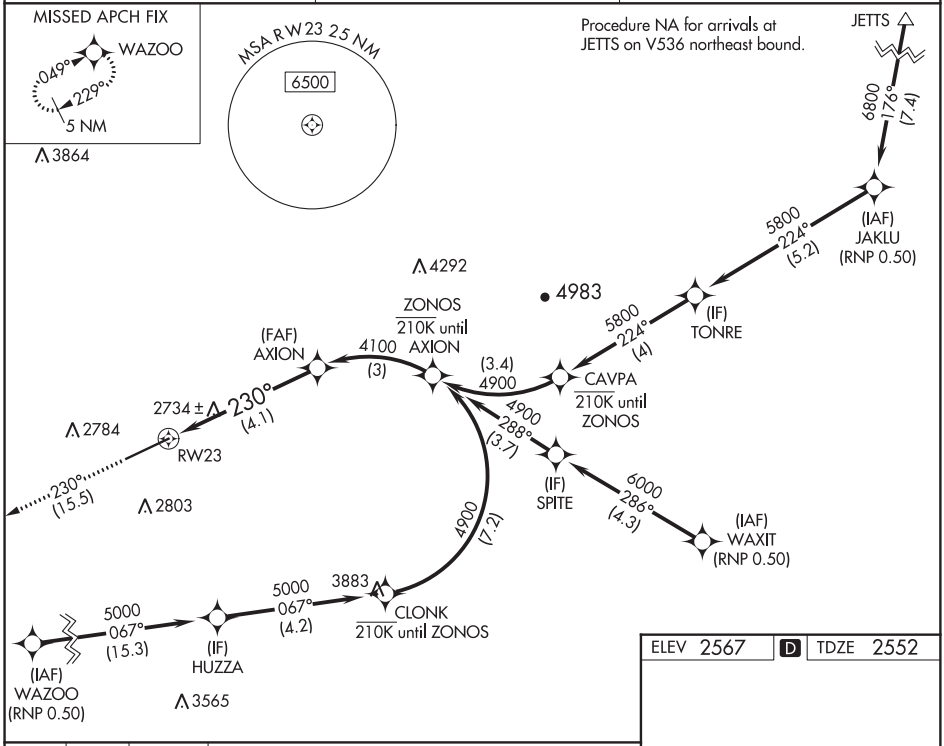
APP CRS	Rwy Idg	7101
230°	TDZE	2552
	Apt Elev	2567

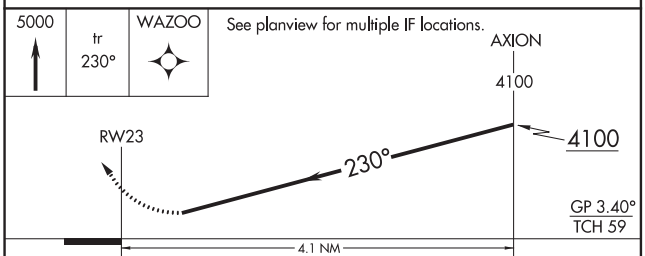
RNP AR APCH. RF required.

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.

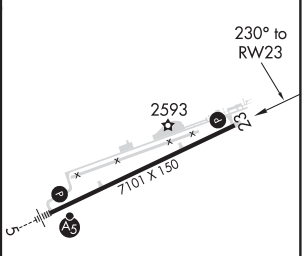
ASOS	SEATTLE CENTER	UNICOM
135.675	123.95 290.55	122.8 (CTAF) L





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



PULLMAN/MOSCOW, WASHINGTON
Orig 10OCT19

46°45'N-117°07'W

PULLMAN/MOSCOW RGNL (PUW)
RNAV (RNP) Z RWY 23

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH **40243** **W05B**	APP CRS **049°**	Rwy Idg **7101** TDZE **2567** Apt Elev **2567**

RNAV (GPS) RWY 5

PULLMAN/MOSCOW RGNL (PUW)

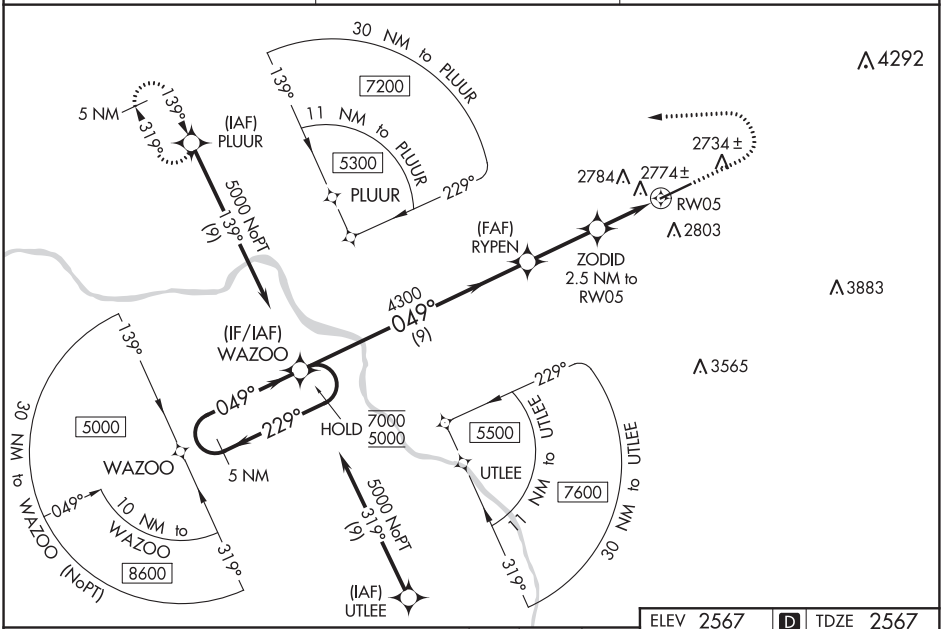
RNP APCH.

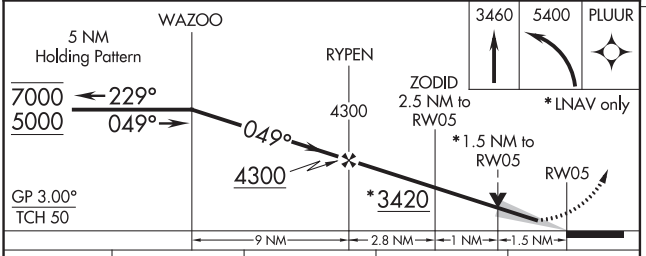
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20° C or above 54° C. For inop ALS, increase LPV all Cats visibility to RVR 4500 and LNAV Cat C/D visibility to 1⅜ SM.
†RVR 1800 authorized with use of FD or AP or HUD to DA.

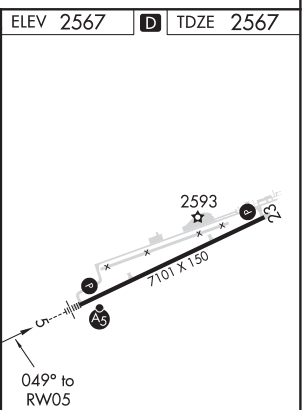
MALSR

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)

REIL Rwy 23 L
HIRL Rwy 5-23 L

NW-1, 30 JAN 2020 to 26 MAR 2020

PULLMAN/MOSCOW, WASHINGTON | AL-798 (FAA) | 20030

RNAV (GPS) Y RWY 23

PULLMAN/MOSCOW RGNL (PUW)

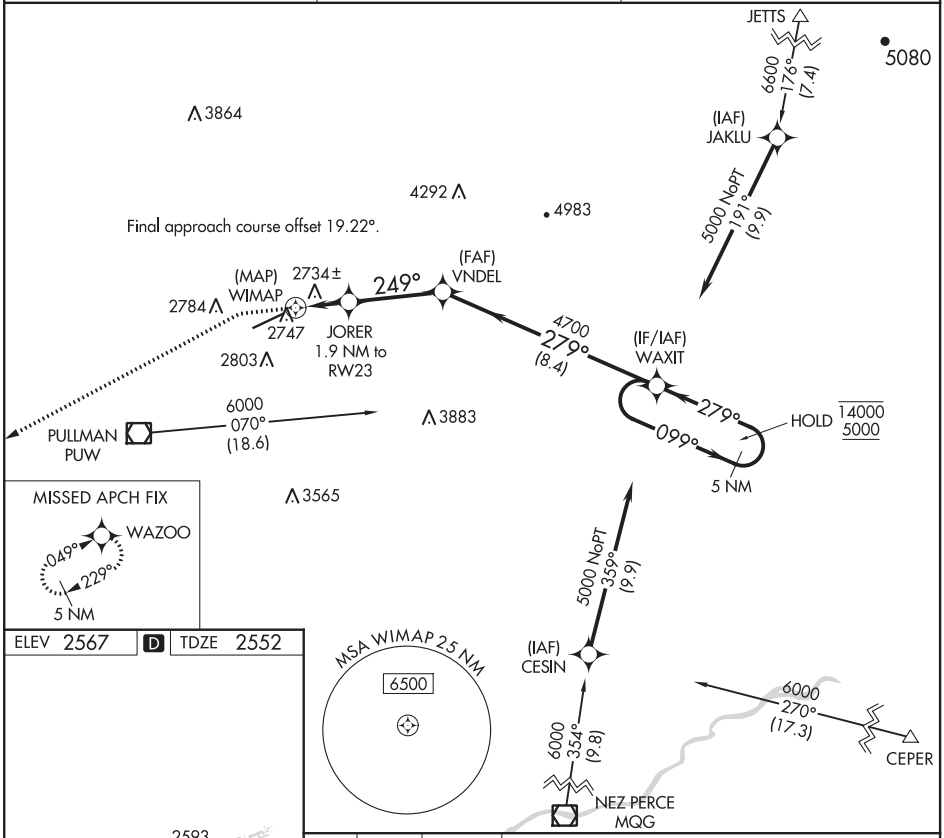
APP CRS	Rwy Idg	7101
249°	TDZE	2552
	Apt Elev	2567

RNP APCH.

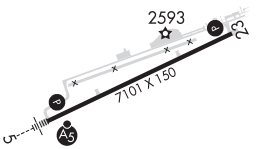
Procedure NA at night.
Rwy 23 helicopter visibility reduction below 1 SM NA.

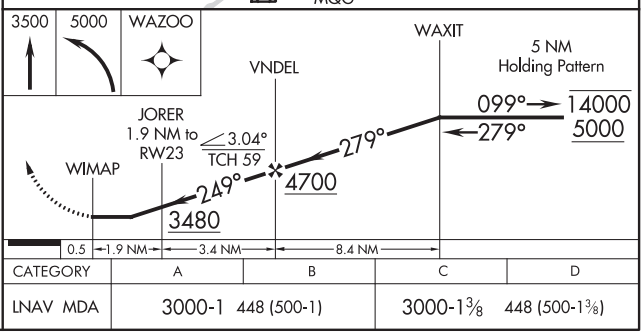
MISSED APPROACH: Climb to 3500 then climbing left turn to 5000 direct WAZOO and hold.

ASOS	SEATTLE CENTER	UNICOM
135.675	123.95 290.55	122.8 (CTAF) L



ELEV 2567 | D | TDZE 2552





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME PUW	APP CRS	Rwy Idg	7101
109.0	027°	TDZE	2567
Chan 27		Apt Elev	2567

VOR RWY 5

PULLMAN/MOSCOW RGNL (PUW)

DME required.

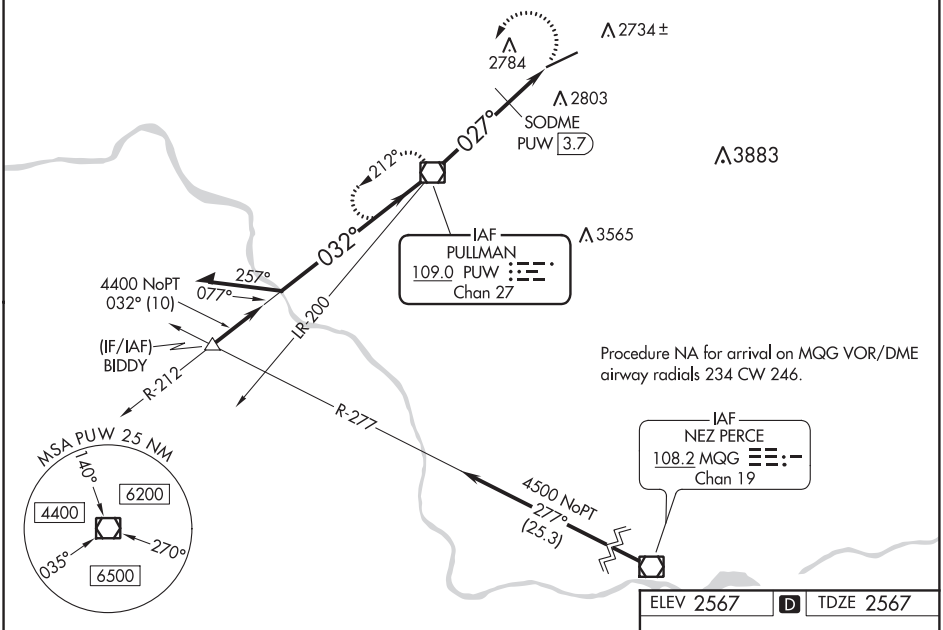
T Procedure NA at night.

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.

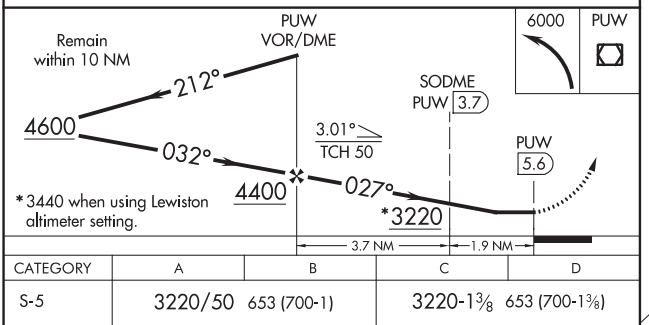
MALSR

MISSED APPROACH: Climbing left turn to 6000 direct PUW VOR/DME and hold, continue climb-in-hold to 6000.

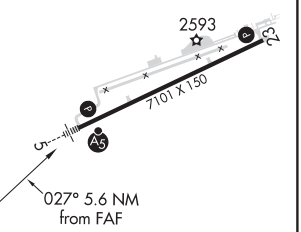
ASOS	SEATTLE CENTER	UNICOM
135.675	123.95 290.55	122.8 (CTAF) L



ELEV 2567 D TDZE 2567



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)



REIL Rwy 23 L

HIRL Rwy 5-23 L

FAF to MAP 5.6 NM						
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

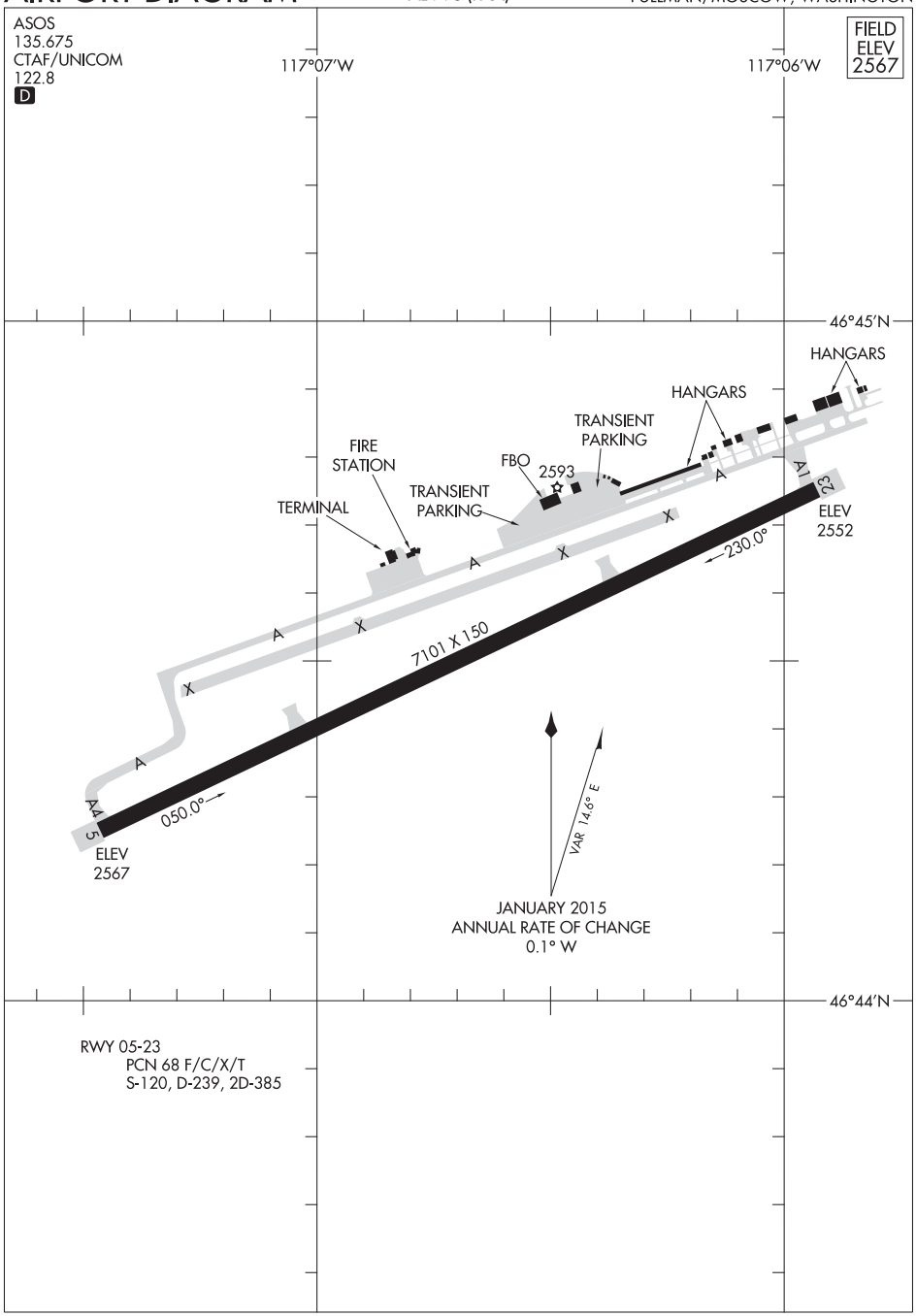
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

20030

AIRPORT DIAGRAM

AL-798 (FAA)

PULLMAN/MOSCOW RGNL (PUW)
PULLMAN/MOSCOW, WASHINGTON



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
20030
PULLMAN/MOSCOW, WASHINGTON
PULLMAN/MOSCOW RGNL (PUW)

RNAV (GPS) RWY 35

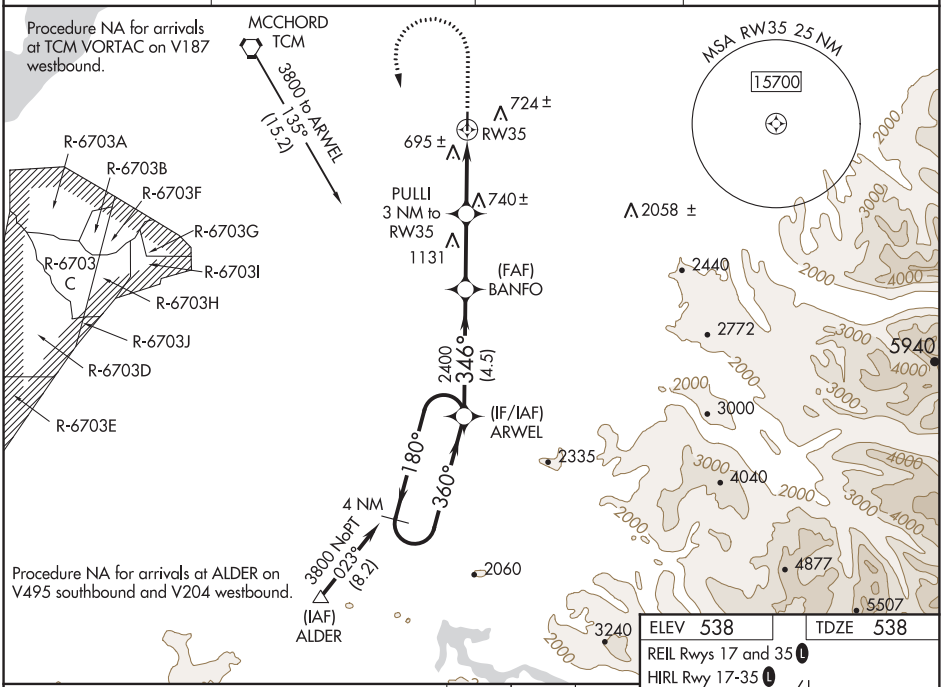
PIERCE COUNTY-THUN FIELD (PLU)

WAAS	APP CRS		
CH 57938	346°	Rwy Idg	3651
W35A		TDZE	538
		Apt Elev	538

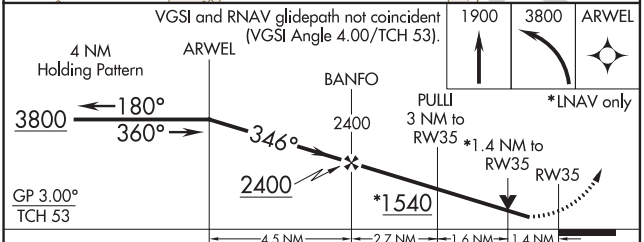
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA with McChord Field altimeter setting. When local altimeter not received, use McChord Field altimeter setting and increase all DA 49 feet and increase LPV and LNAV/VNAV visibilities ¼ mile; increase all MDA 60 feet.

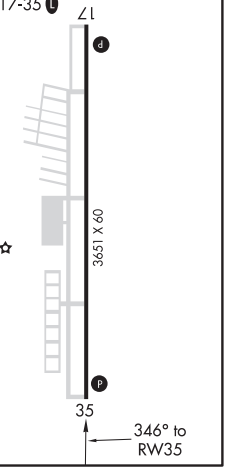
MISSED APPROACH: Climb to 1900 then climbing left turn to 3800 direct ARWEL and hold.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RAWLINS, WYOMING | AL-687 (FAA) | 19227

WAAS	APP CRS	Rwy Idg	7008
CH **93716**	**224°**	TDZE	**6817**
W22A		Apt Elev	**6817**

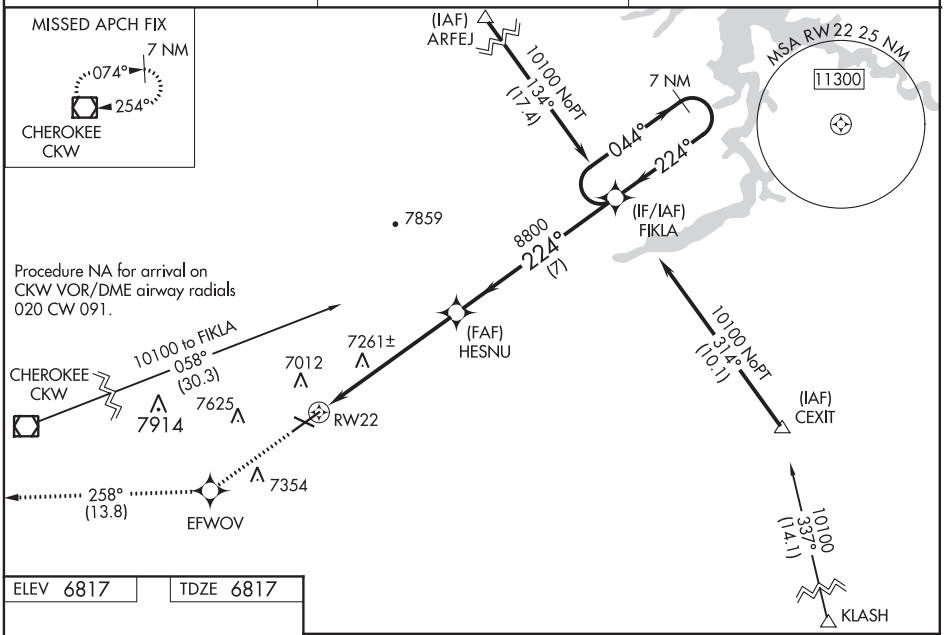
RNAV (GPS) RWY 22

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.

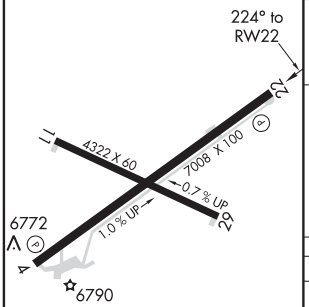
ASOS	DENVER CENTER	UNICOM
118.525	**132.1 254.35**	**123.0** (CTAF) L



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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	7540-1	7660-2½	7900-3
	703 (800-1)	723 (800-1)	843 (900-2½)	1083 (1100-3)

REIL Rwys 22 and 29 L
MIRL Rwys 4-22 and 11-29 L

LOC/DME I-RDM	APP CRS	Rwy Idg	7031
109.1	226°	TDZE	3065
Chan 28		Apt Elev	3080

ILS or LOC RWY 23

ROBERTS FIELD (RDM)

T A NA

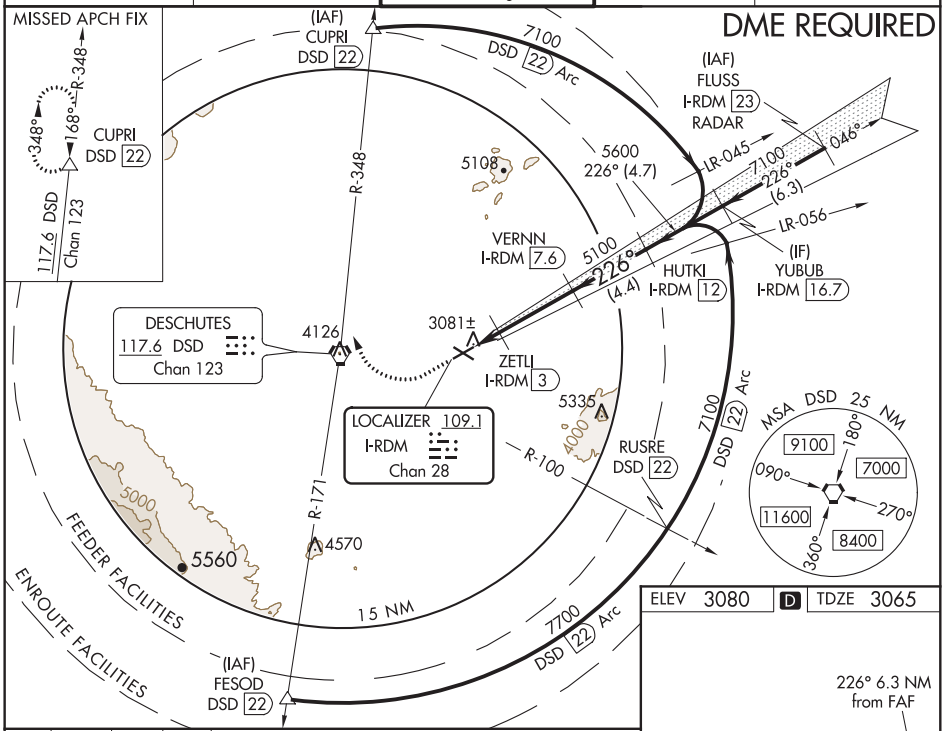
Autopilot coupled approach NA below 4370. DME required. When local altimeter setting not received, use Bend altimeter setting: increase DA to 3341 feet; increase all MDAs 80 feet and all Cat C, D and E visibilities ½ mile. For inop MALSR, increase S-ILS-23 Cat E visibility to ¾ mile and S-LOC-23 Cats 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

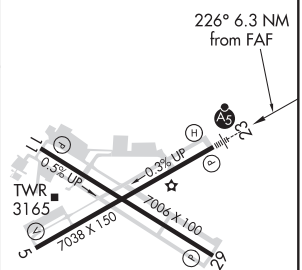
MISSED APPROACH: Climb to 3700 then climbing right turn to 7000 on heading 320° and DSD VORTAC R-348 to CUPRI/DSD 22 DME and hold.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	126.15 269.475	124.5 (CTAF) L 256.8	121.8	122.95

DME REQUIRED



ELEV 3080	D	TDZE 3065

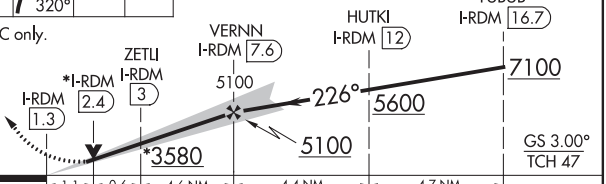


3700	7000 hdg 320°	DSD R-348	CUPRI △

Use I-RDM DME when on the localizer course.

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 51). Procedure Turn NA.

*LOC only.



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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

REDMOND, OREGON | AL-345 (FAA) | 19283

RNAV (RNP) Z RWY 5

ROBERTS FIELD (RDM)

APP CRS	Rwy Idg	7038
046°	TDZE	3075
	Apt Elev	3080

For uncompensated Baro-VNAV systems, procedure NA below -20°C (-4°F) or above 53°C (127°F). RF and GPS required.

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

(IAF) WISSL (RNP 0.70) 7000 163° (14)

Procedure NA for arrivals at WISSL on T304 northwest bound.

(IF) JURDY 180K 6000 047° (7.6)

6900 221° (2) (IF) VUCUV

CESUK 180K 6000 (3.6)

(IAF) EENIE (RNP 0.70) 6500 094° (8.1) LOYCE 5800 094° (5) WONEK

Procedure NA for arrivals at EENIE on V269-536 westbound.

4126 JUGVU 5200 (2.5) 4300 (2.9) (FAF) WEGBO 046° (3.7) RW05

(IF) SIKZY 180K 5200 095° (2.7) DOYEP 4300 (2)

4900 003° (3.2) (IF) NISVE 180K 4900 (6.3) HUXOT 180K

5800 006° (2.2) YUNNU

4570 5900 006° (6.6)

6182

(IAF) OCTAD 9000 354° (7)

Procedure NA for arrivals at FESOD on V25 southbound.

FESOD

5108 (IAF) ARNOY (RNP 0.70) 7400 221° (19.3)

Procedure NA for arrivals at ARNOY on V536 northeast bound.

MSA RW 05 25 NM 11700

RARBE (16.8) 046° (6.7)

(IF) POWEL 6200 227° (4.4) 7500 273° (4.5) 5335

(IAF) SAKKO 7600 273° (9.2) ZUVGO

Procedure NA for arrivals at SAKKO on V269 eastbound.

MISSED APCH FIX FROM RARBE (8.9) (1) HITGU 175° (4) 096° / 7 NM SAKKO 276°

ELEV 3080 D TDZE 3075

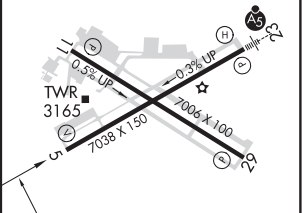
See planview for multiple IF locations.

9500	RARBE		HITGU	tr 175°	SAKKO
tr 046°					

WEGBO 4300 4300 GP 3.00° TCH 50 046° RW05 3.7 NM

CATEGORY	A	B	C	D
RNP 0.10 DA	3350-7/8	276 (300-7/8)		
RNP 0.30 DA	3573-1 5/8	499 (500-1 5/8)		

AUTHORIZATION REQUIRED



REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 23

ROBERTS FIELD (RDM)

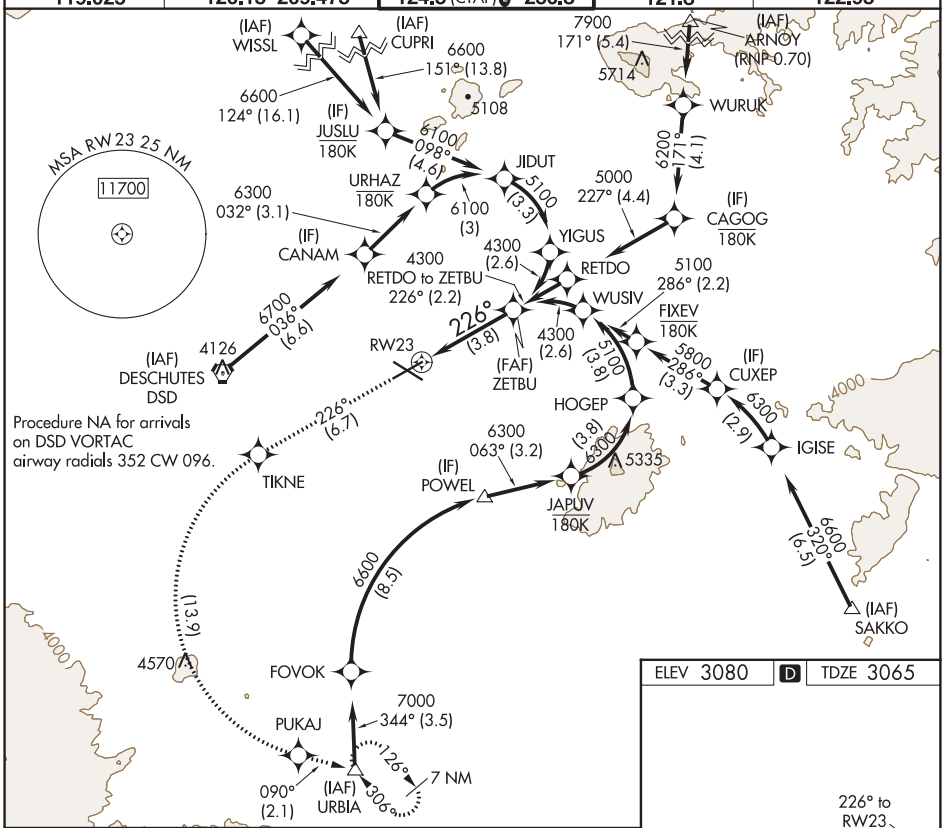
APP CRS	Rwy Idg	7031
226°	TDZE	3065
	Apt Elev	3080

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.

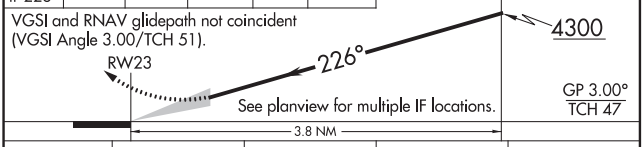
MALSR

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

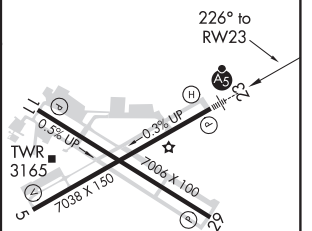


VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 51).

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

ELEV 3080 D TDZE 3065



REIL Rwys 5, 11, and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

REDMOND, OREGON AL-345 (FAA) 20030

WAAS	APP CRS	Rwy Idg	7006
CH 53514	108°	TDZE	3068
W11A		Apt Elev	3082

RNAV (GPS) RWY 11

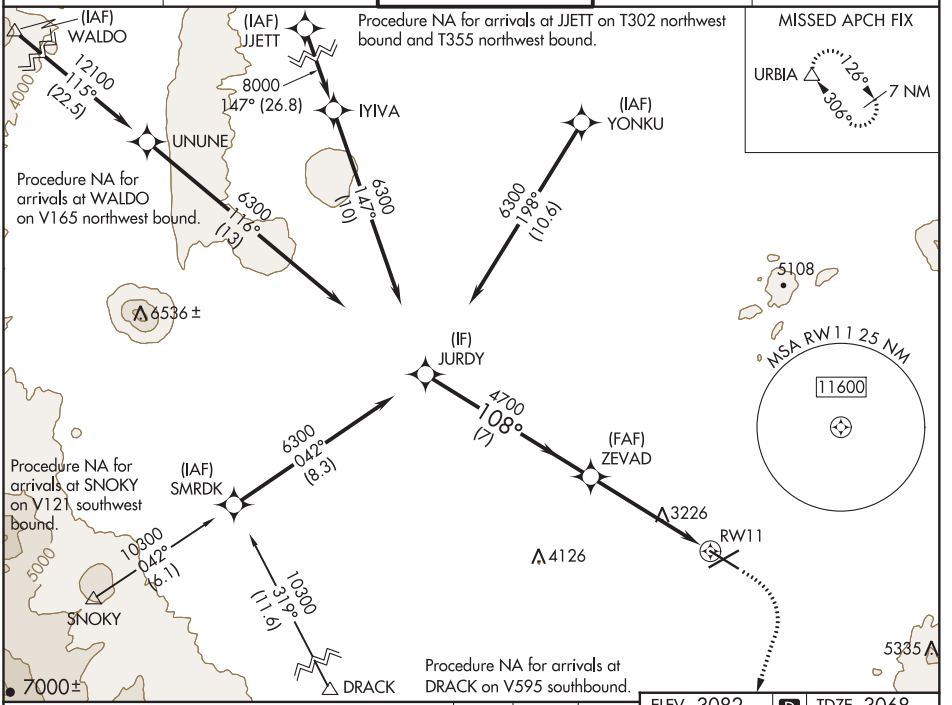
ROBERTS FIELD (RDM)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 54°C.

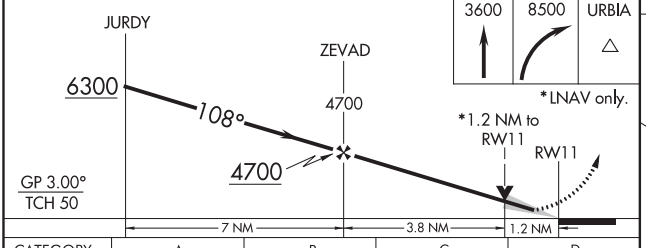
MISSED APPROACH: Climb to 3600 then climbing right turn to 8500 direct URBIA and hold, continue climb-in-hold to 8500.

ATIS	SEATTLE CENTER	REDMOND TOWER *	GND CON	UNICOM
119.025	126.15 269.475	124.5 (CTAF) L 256.8	121.8	122.95



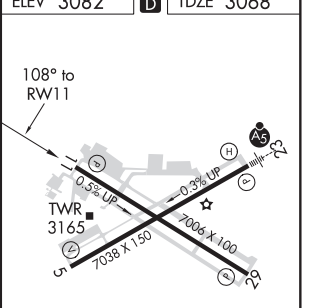
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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)

ELEV 3082 D TDZE 3068



REDMOND, OREGON
Amdt 3 30JAN20

44°15'N-121°09'W

ROBERTS FIELD (RDM)

RNAV (GPS) RWY 11

WAAS	APP CRS	Rwy Idg	7038
CH 70514	046°	TDZE	3075
W05A		Apt Elev	3082

RNAV (GPS) Y RWY 5

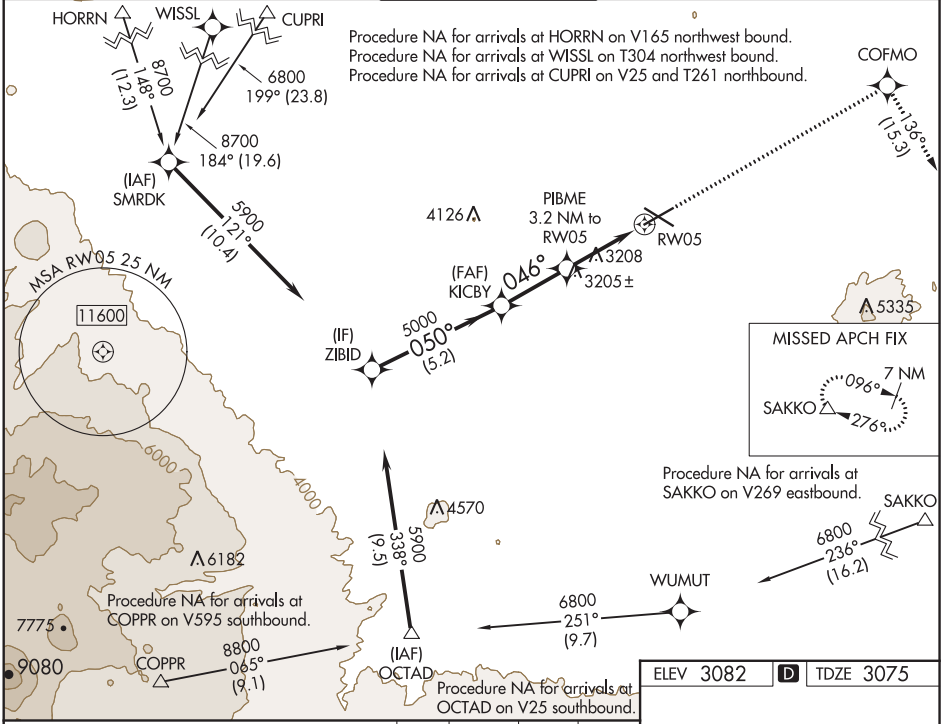
ROBERTS FIELD (RDM)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 54°C.

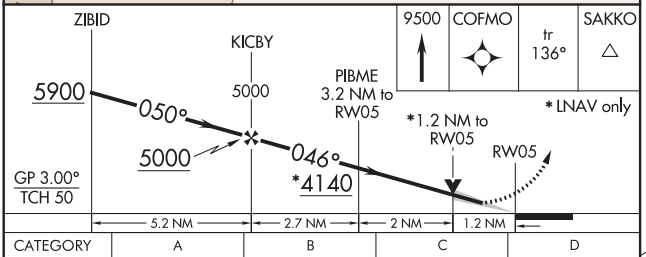
MISSED APPROACH: Climb to 9500 direct COFMO and on track 136° to SAKKO and hold, continue climb-in-hold to 9500.

ATIS	SEATTLE CENTER	REDMOND TOWER ★	GND CON	UNICOM
119.025	126.15 269.475	124.5 (CTAF) L 256.8	121.8	122.95

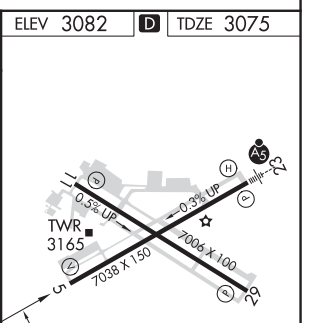


NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



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

REDMOND, OREGON | AL-345 (FAA) | 19283

WAAS	APP CRS	Rwy Idg	7031
CH 82514	226°	TDZE	3067
W23A		Apt Elev	3080

RNAV (GPS) Y RWY 23

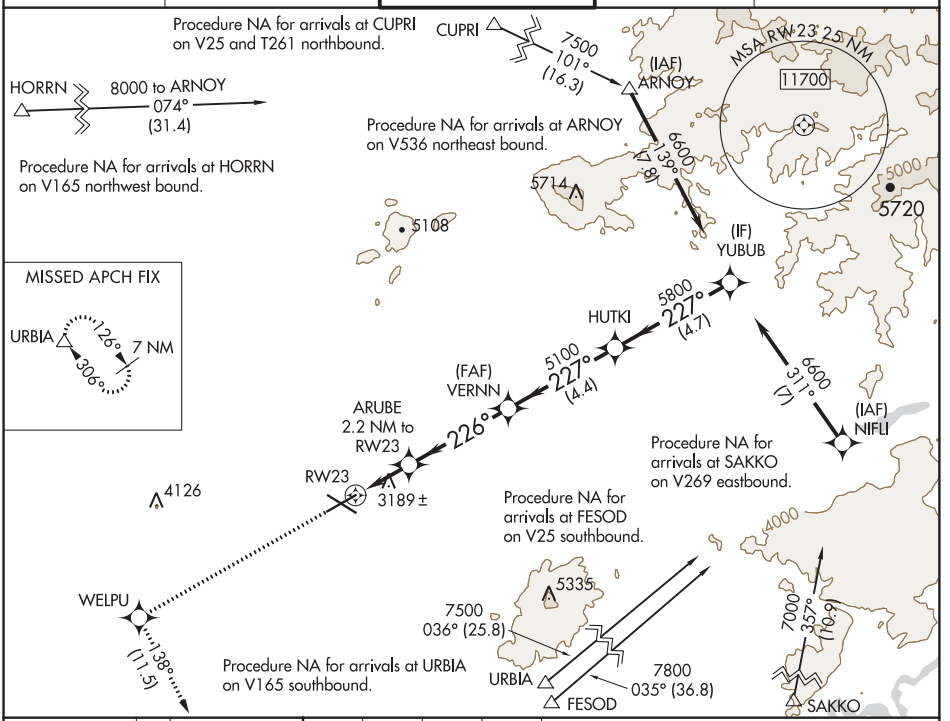
ROBERTS FIELD (RDM)

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.

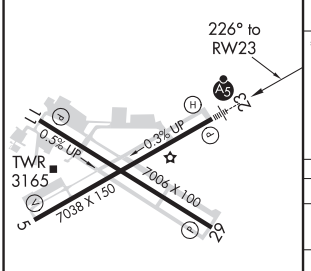
ATIS	SEATTLE CENTER	REDMOND TOWER ★	GND CON	UNICOM
119.025	126.15 269.475	124.5 (CTAF) L 256.8	121.8	122.95



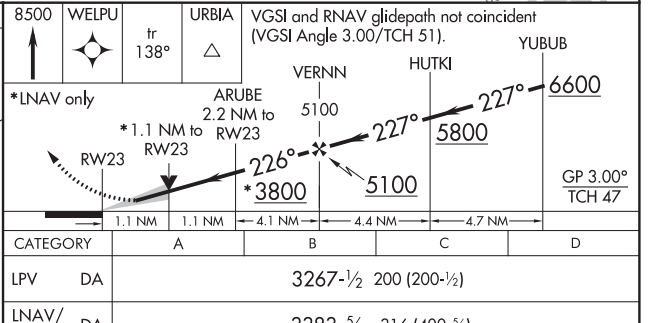
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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)

REDMOND, OREGON
Amdt 1A 01FEB18

44°15′N-121°09′W

ROBERTS FIELD (RDM)
RNAV (GPS) Y RWY 23

RNAV (GPS) Y RWY 29

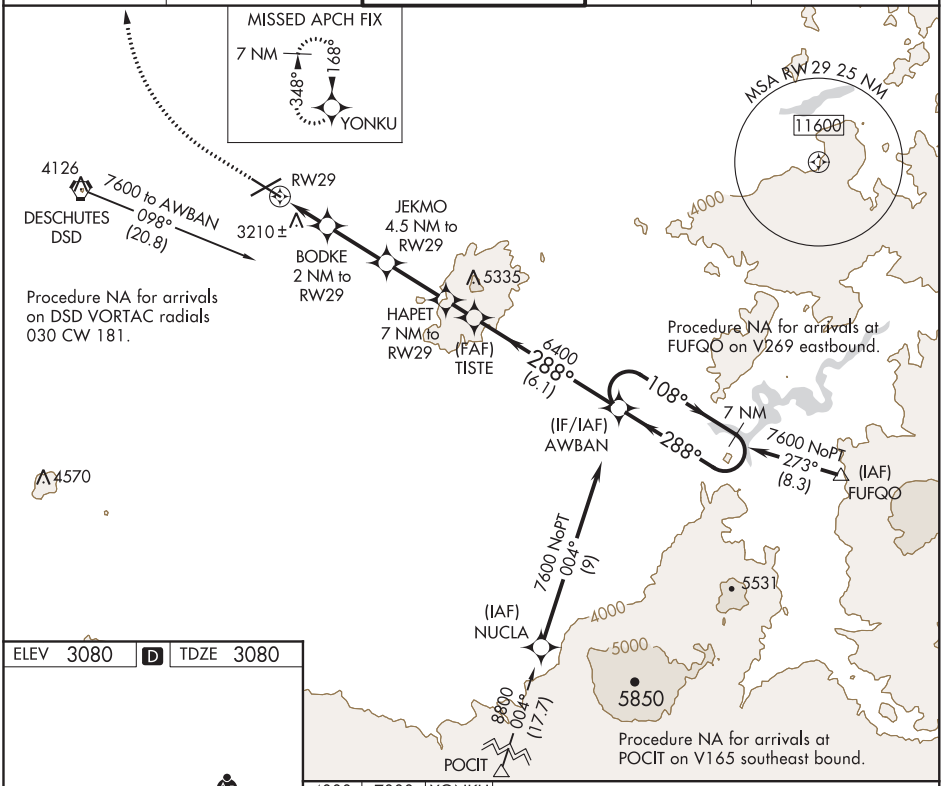
ROBERTS FIELD (RDM)

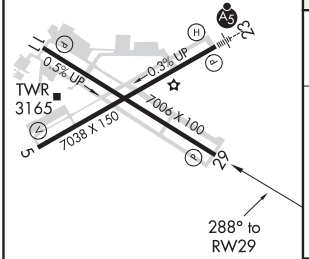
APP CRS	Rwy Idg	7006
288°	TDZE	3080
	Apt Elev	3080

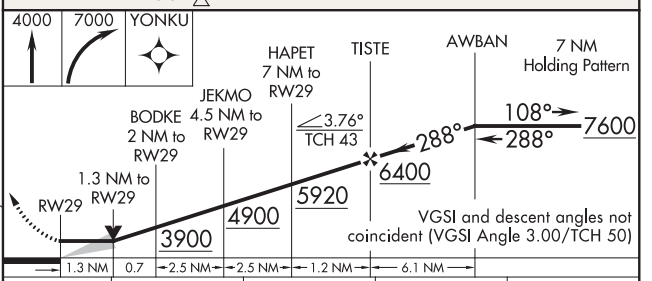
RNP APCH.

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







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

REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

REDMOND, OREGON | AL-345 (FAA) | 19283

RNAV (GPS) Z RWY 29

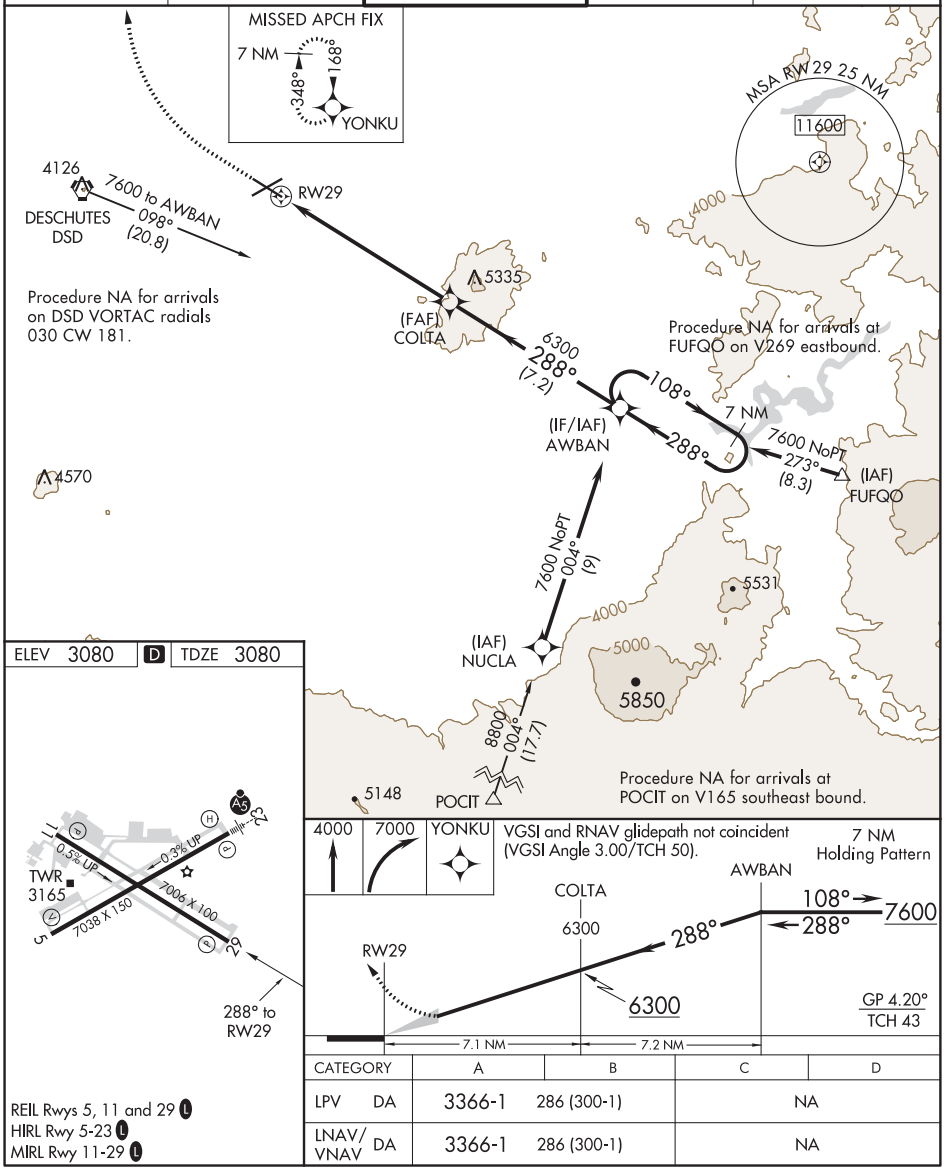
ROBERTS FIELD (RDM)

WAAS	APP CRS	Rwy Idg	7006
CH 90214	288°	TDZE	3080
W29A		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



CATEGORY		A	B	C	D
LPV	DA	3366-1	286 (300-1)	NA	
LNAV/VNAV	DA	3366-1	286 (300-1)	NA	

REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

REDMOND, OREGON
Amdt 1A 01FEB18

ROBERTS FIELD (RDM)

44°15'N-121°09'W

RNAV (GPS) Z RWY 29

NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC DSD	APP CRS	Rwy Idg	7031
117.6	249°	TDZE	3065
Chan 123		Apt Elev	3080

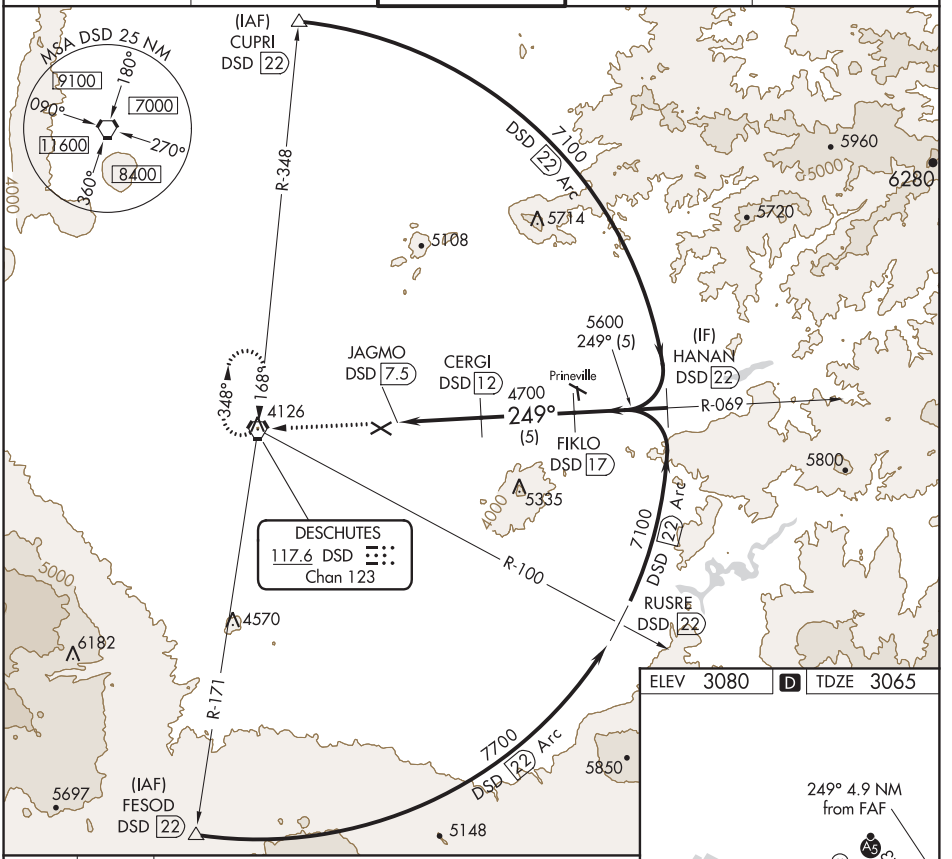
VOR/DME RWY 23

ROBERTS FIELD (RDM)

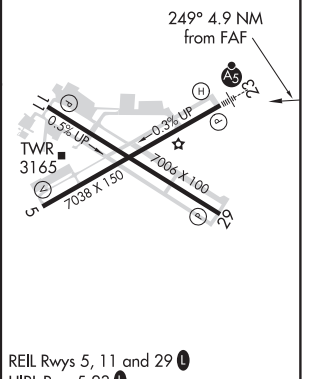
T A — Inop table does not apply. When local altimeter setting not received, use Bend altimeter setting and increase all MDAs 80 feet and visibility Cats B, C, D, and E ½ mile. VDP NA when using Bend altimeter.

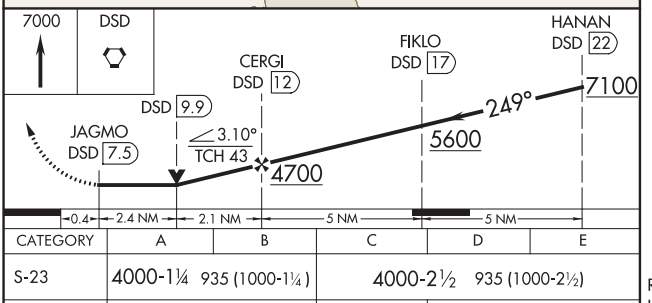
MALSR — MISSED APPROACH: Climb to 7000 direct DSD VORTAC and hold, continue climb-in-hold to 7000.

ATIS	SEATTLE CENTER	REDMOND TOWER★	GND CON	UNICOM
119.025	126.15 269.475	124.5 (CTAF) L 256.8	121.8	122.95



ELEV 3080 D TDZE 3065





CATEGORY	A	B	C	D	E
S-23	4000-1¼ 935 (1000-1¼)		4000-2½ 935 (1000-2½)		
C CIRCLING	4000-1¼ 920 (1000-1¼)		4000-2¾ 920 (1000-2¾)	4000-3 920 (1000-3)	

REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC DSD 117.6 Chan 123	APP CRS 071°	Rwy Idg N/A TDZE N/A Apt Elev 3080

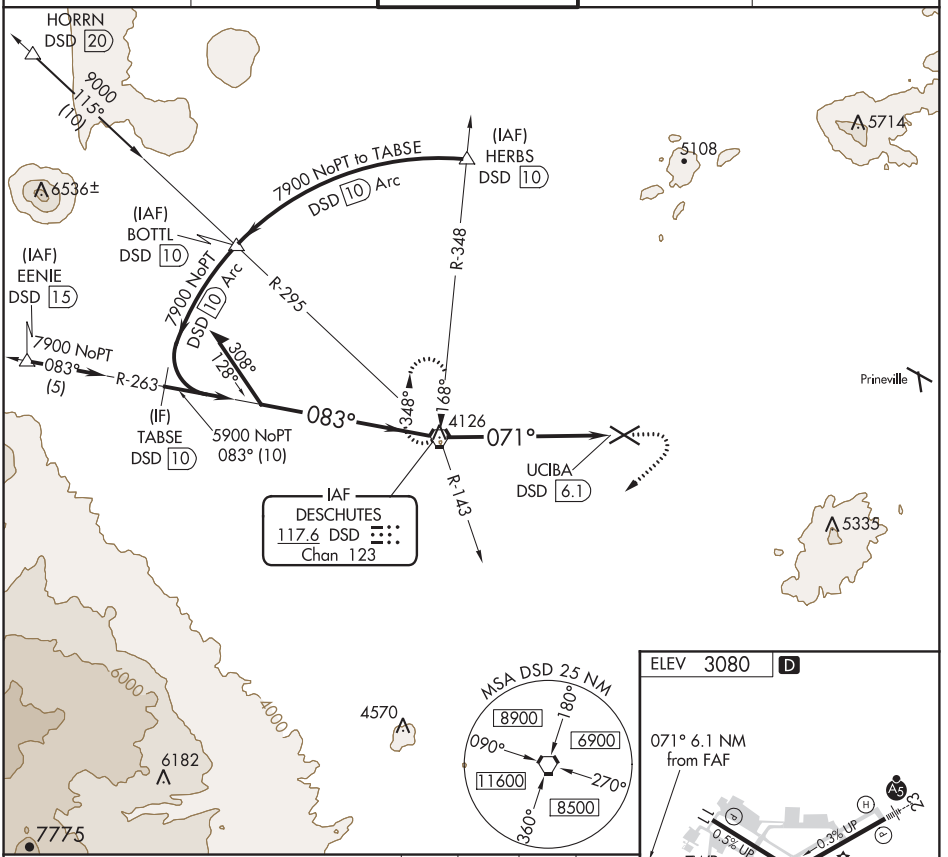
VOR-A

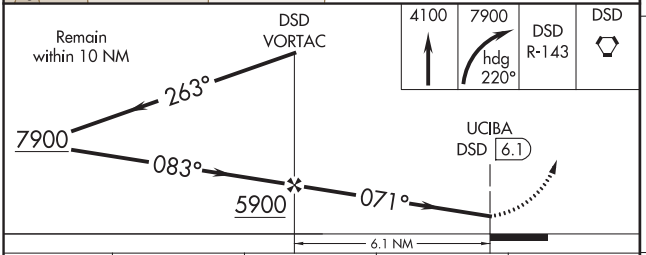
ROBERTS FIELD (RDM)

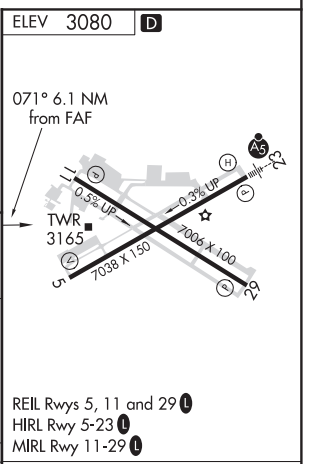
When local altimeter setting not received, use Bend altimeter setting and increase all MDA 80 feet and visibility Cats C and D ¼ mile.

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







REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

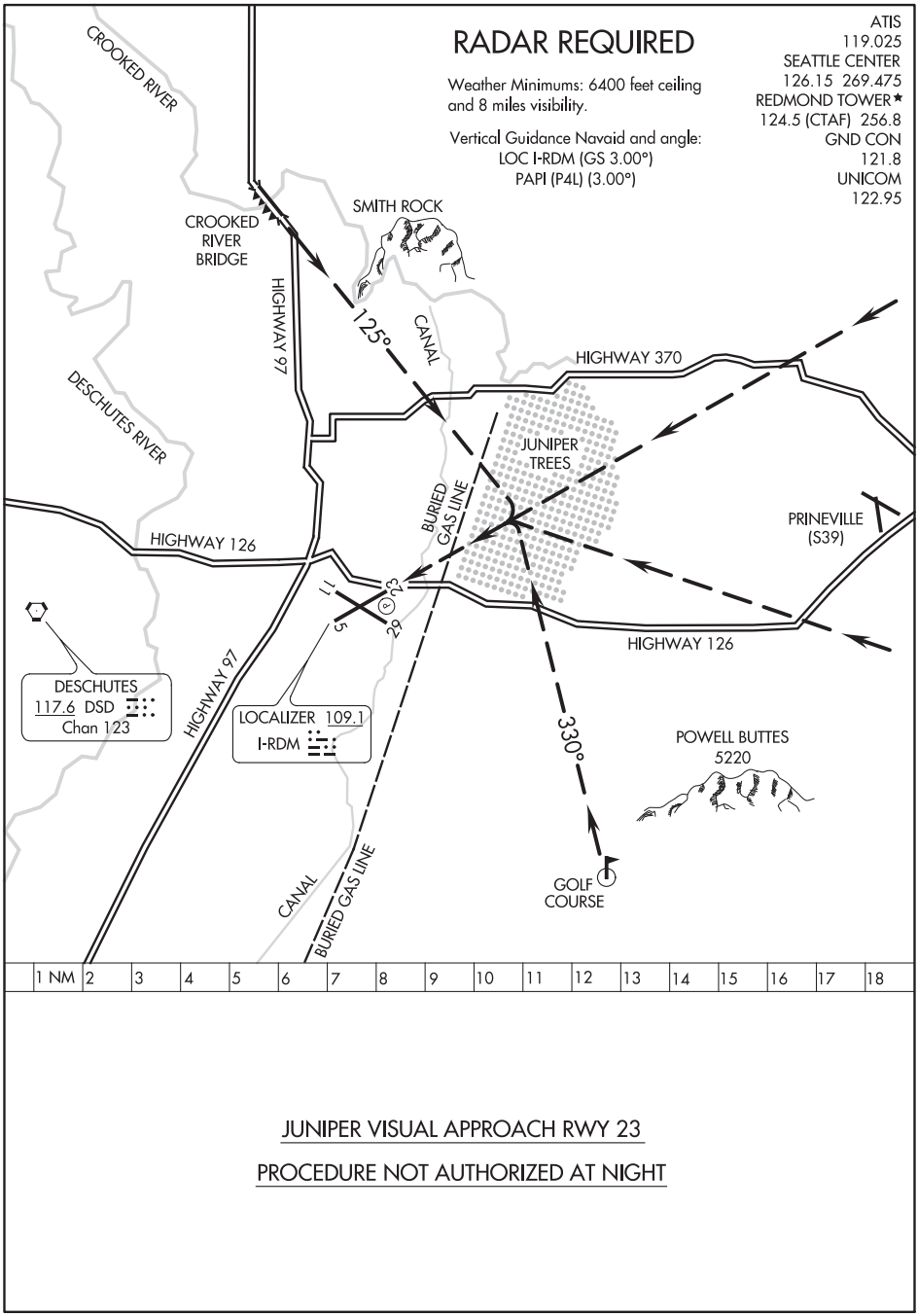
CATEGORY	A	B	C	D
C CIRCLING	3660-1	580 (600-1)	3660-1½ 580 (600-1½)	3760-2¼ 680 (700-2¼)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

JUNIPER VISUAL RWY 23

ROBERTS FIELD (RDM)
REDMOND, OREGON



JUNIPER VISUAL APPROACH RWY 23

PROCEDURE NOT AUTHORIZED AT NIGHT

NW-1, 30 JAN 2020 to 26 MAR 2020

19283

AIRPORT DIAGRAM

ROBERTS FIELD (RDM)

REDMOND, OREGON

AL-345 (FAA)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
19283

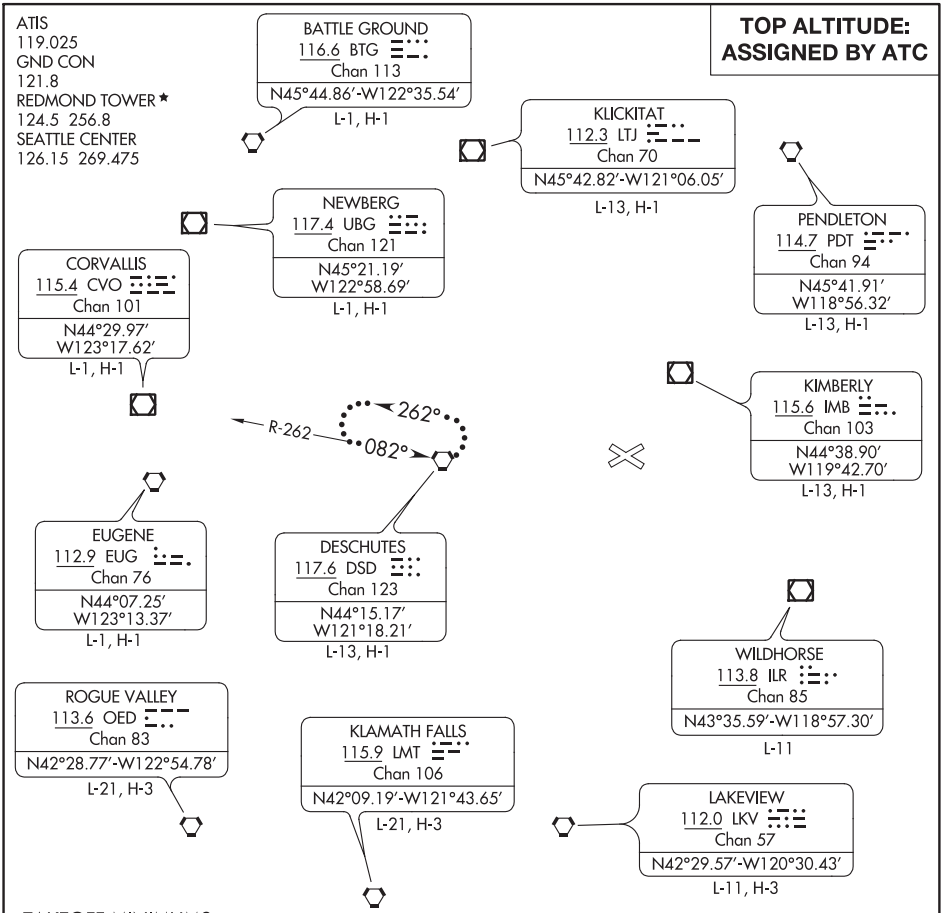
REDMOND, OREGON
ROBERTS FIELD (RDM)

REDMOND THREE DEPARTURE

AL-345 (FAA)

ROBERTS FIELD (RDM)
REDMOND, OREGON

NW-1, 30 JAN 2020 to 26 MAR 2020



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.

RENTON, WASHINGTON AL-5396 (FAA) 19339

APP CRS	Rwy Idg	4742
337°	TDZE	30
	Apt Elev	32

RNAV (GPS) RWY 34

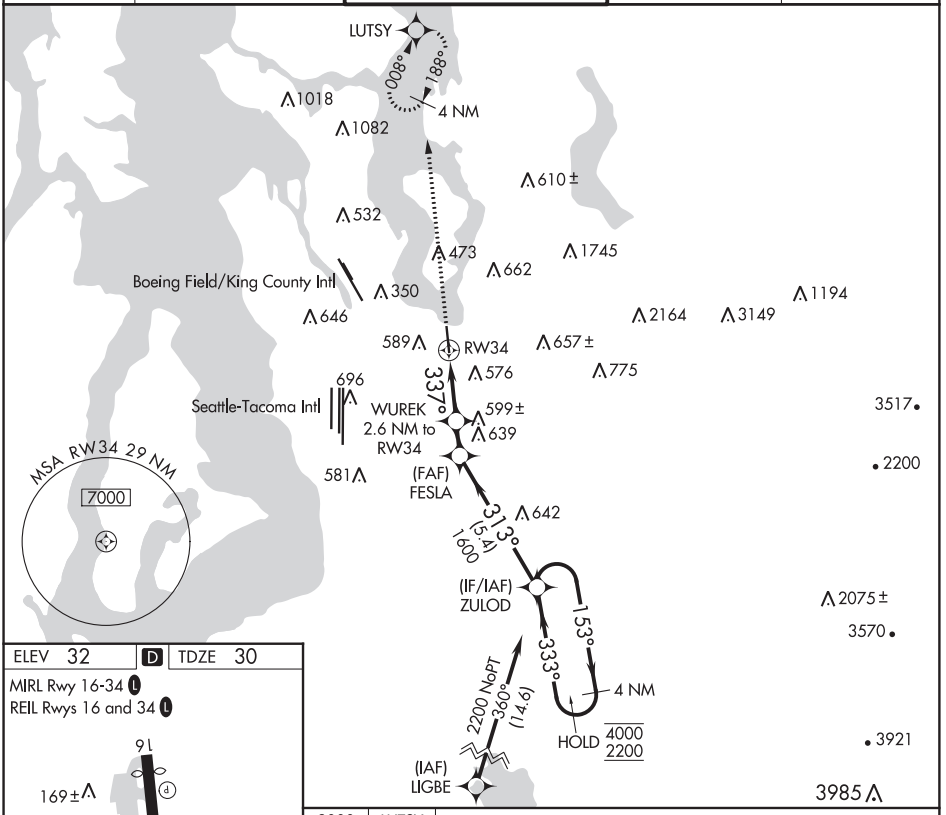
RENTON MUNI (RNT)

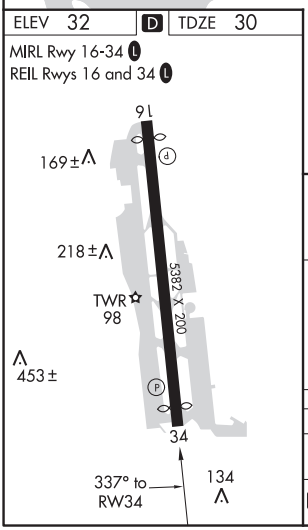
RNP APCH.

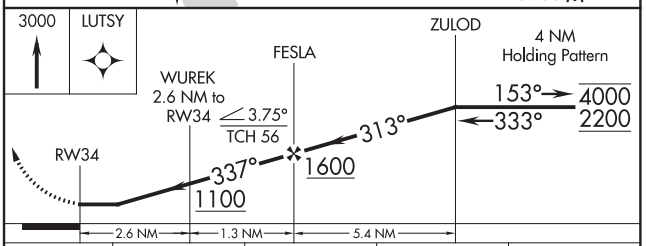
Circling NA west of Rwy 16-34. Rwy 34 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 34 at night, Circling Rwy 34 at night, operational VGSI required, remain on or above VGSI glidepath until threshhold.

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	860-1 830 (900-1)	860-1¼ 830 (900-1¼)	880-2½ 850 (900-2½)	NA
C CIRCLING	860-1¼ 828 (900-1¼)	920-1¼ 888 (900-1¼)	1000-3 968 (1000-3)	NA

RENTON, WASHINGTON
Orig 05DEC19

47°30'N-122°13'W

RENTON MUNI (RNT)

RNAV (GPS) RWY 34

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 16

RENTON MUNI (RNT)

APP CRS	Rwy Idg	4742
157°	TDZE	26
	Apt Elev	32

Circling NA west of Rwy 16-34. Circling Rwy 34 NA at night.
Rwy 16 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 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

Procedure NA for arrival on PAE VOR/DME airway radials 163 CW 236.

(IAF) PAINE PAE
2100 NoPT
158° (14.6)
(IAF) WUNVA
2100 NoPT
231° (8.6)
(IF/IAF) LUTSY
231°
051°
4 NM
1600
157° (5.9)
1018
1082
(FAF) BLEIR
610±
532
ZULAV 2.3 NM to TOYOL
473
514±
662
1745
350
(MAP) TOYOL
646
589
657±
2164
3149
1194
576
775
696
639
581
ZEBKU
642
130°
310°
4 NM
2200
2075±
3570

MSA TOYOL 25 NM
7000

ELEV 32 D TDZE 26

16
169±
218±
TWR 98
5382 X 200
453±
34
134

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

4 NM Holding Pattern
LUTSY
BLEIR
ZULAV 2.3 NM to TOYOL
2100
051°
231°
157°
1600
3.00°
TCH 50
TOYOL
920
2400
ZEBKU
5.9 NM
2.1 NM
2.3 NM
0.4

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)	1640-3 1608 (1700-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RENTON, WASHINGTON | AL-5396 (FAA) | 19339

WAAS	APP CRS	Rwy Idg	4742
CH 93610	157°	TDZE	26
W16A		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

Procedure NA for arrival on PAE VOR/DME airway radials 163 CW 236.

(IAF) PAINE PAE

2100 NoPT 158° (14.6)

(IAF) WUNVA

2100 NoPT 231° (8.6)

(IF/IAF) LUTSY

231° 051° 4 NM

1018 1082 2000 157° (6.4)

610± 532 (FAF) WIBAT 473 662 1745 350 1194 646 RW16 2164 3149 589 657± 576 775 3508 696 639 581 2200

MSA RW16 25 NM 7000

ZEBKU 642 130° 310° 4 NM

ELEV 32 D TDZE 26

157° to RW16

9L 169± 4 218± TWR 98 5382 X 200 453± P 34 134

MIRL Rwy 16-34 L

REIL Rwys 16 and 34 L

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 50).

2400 ZEBKU

4 NM Holding Pattern

LUTSY WIBAT RW16

2100 051° 231° 157° 2000 2000

GP 4.20° TCH 50

6.4 NM 4.3 NM

CATEGORY		A	B	C	D
LPV	DA	526-1⅜	500 (500-1⅜)	NA	
LNAV/VNAV	DA	668-1⅞	642 (700-1⅞)	NA	

RENTON, WASHINGTON
Amdt 3 17AUG17

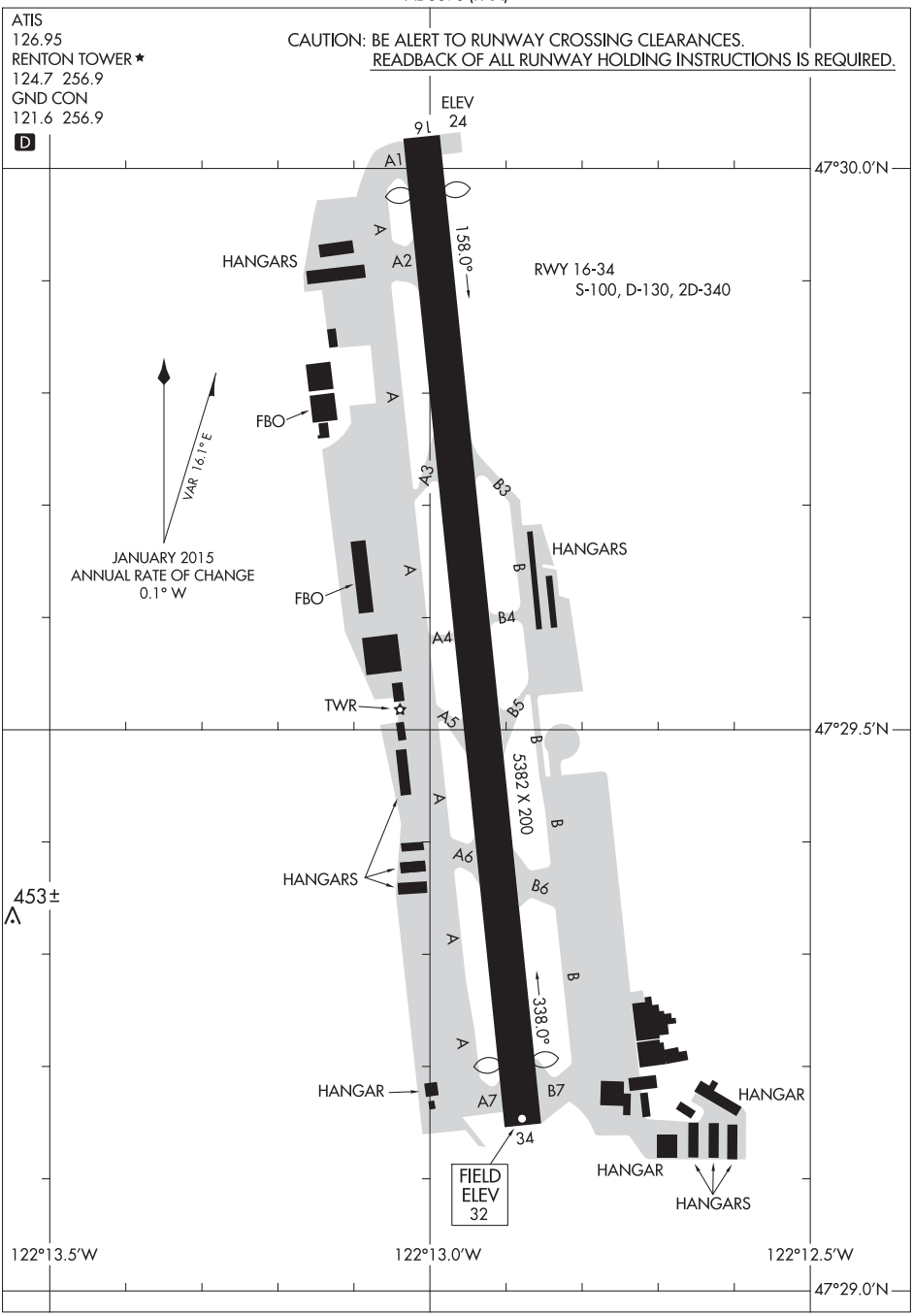
47°30'N-122°13'W

RENTON MUNI (RNT)

RNAV (GPS) Z RWY 16

NW-1, 30 JAN 2020 to 26 MAR 2020

AL-5396 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

(BELVU4.BELVU) 18256

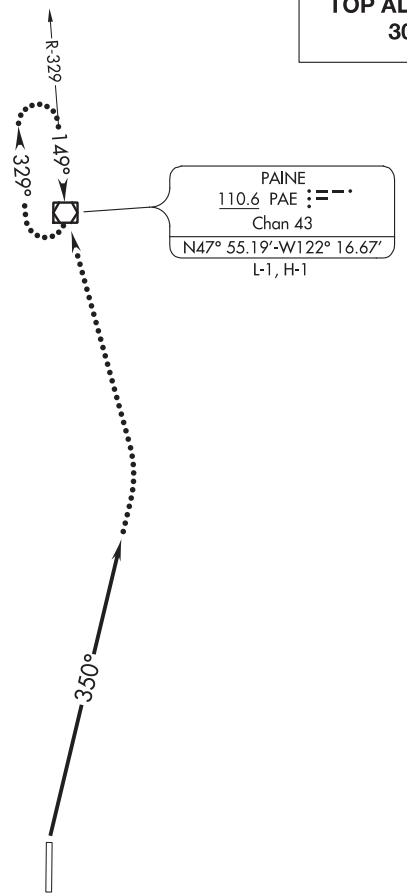
BELLEVUE FOUR DEPARTURE

AL-5396 (FAA)

RENTON MUNI (RNT)
RENTON, WASHINGTON

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

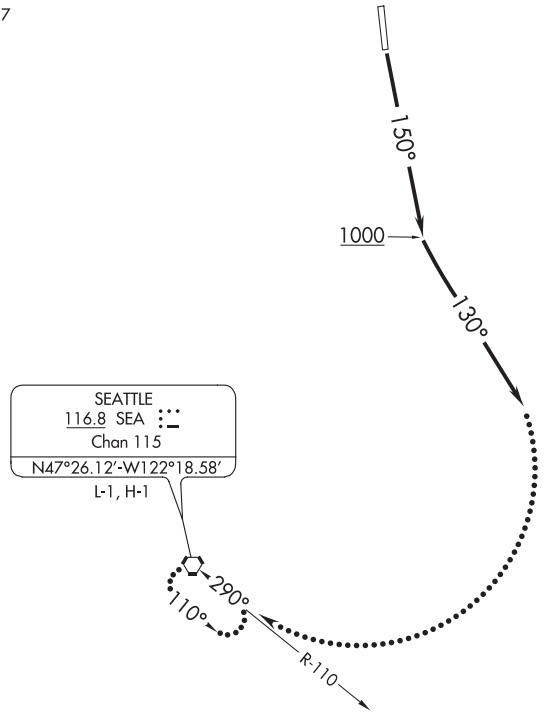
TAKEOFF RUNWAY 34: Climb heading 350°, maintain 3000, for RADAR vectors, expect filed altitude within 5 minutes after departure.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

REXBURG, IDAHO | AL-5977 (FAA) | 20002

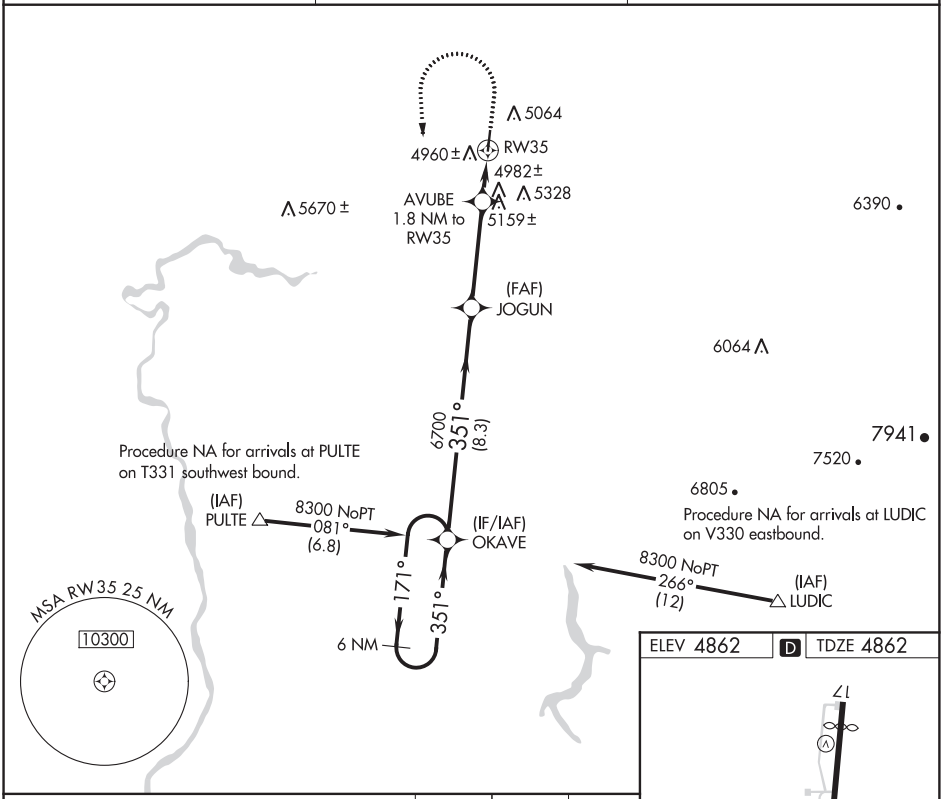
APP CRS	Rwy Idg	3900
351°	TDZE	4862
	Apt Elev	4862

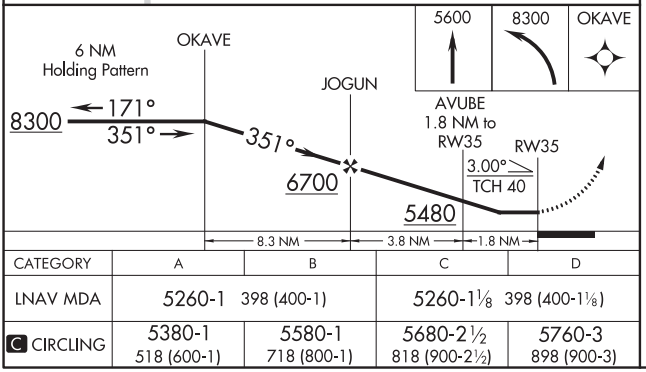
RNAV (GPS) RWY 35
REXBURG-MADISON COUNTY (RXE)

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.

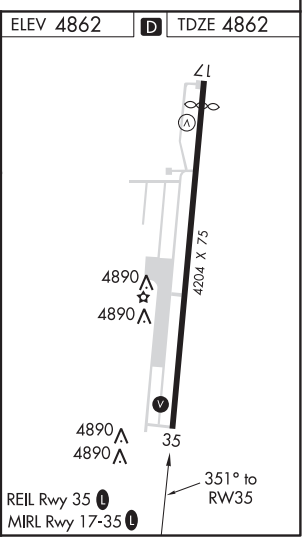
MISSED APPROACH: Climb to 5600 then climbing left turn to 8300 direct OKAVE and hold.

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)



REXBURG, IDAHO
Amdt 1D 02JAN20

43°50′N-111°48′W

REXBURG-MADISON COUNTY (RXE)
RNAV (GPS) RWY 35

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME IDA	APP CRS	Rwy Idg	3900
113.85	016°	TDZE	4862
Chan 85 (Y)		Apt Elev	4862

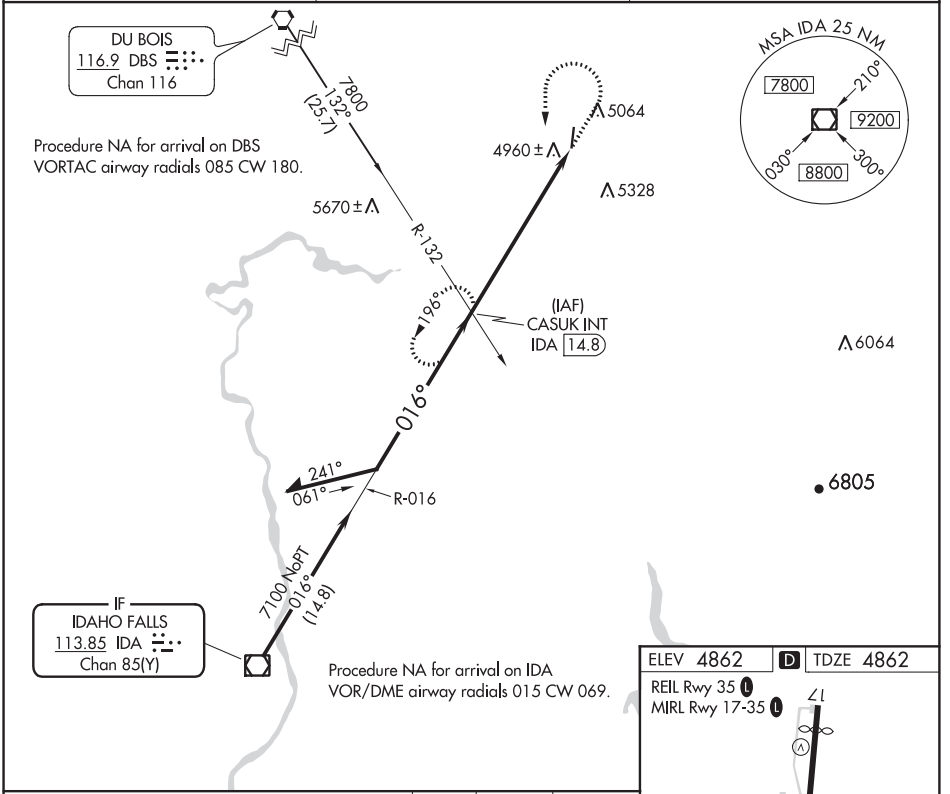
VOR RWY 35

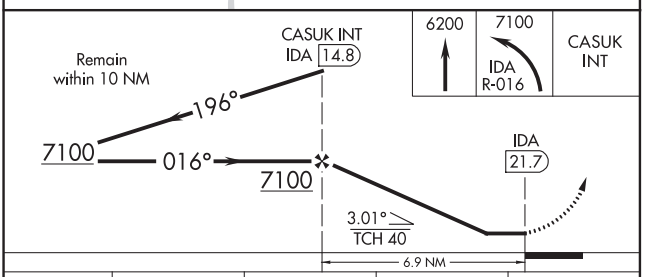
REXBURG-MADISON COUNTY (RXE)

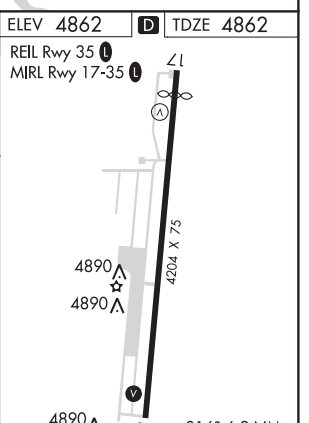
▼ Rwy 35 helicopter visibility reduction below 1 SM NA.
▲ Straight-in Rwy 35 NA at night, Circling Rwy 35 NA at night.

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)

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RICHLAND, WASHINGTON AL-5966 (FAA) 19227

RNAV (GPS) RWY 26

RICHLAND (RLD)

WAAS	APP CRS	Rwy Idg	4001
CH 77903	259°	TDZE	389
W26A		Apt Elev	394

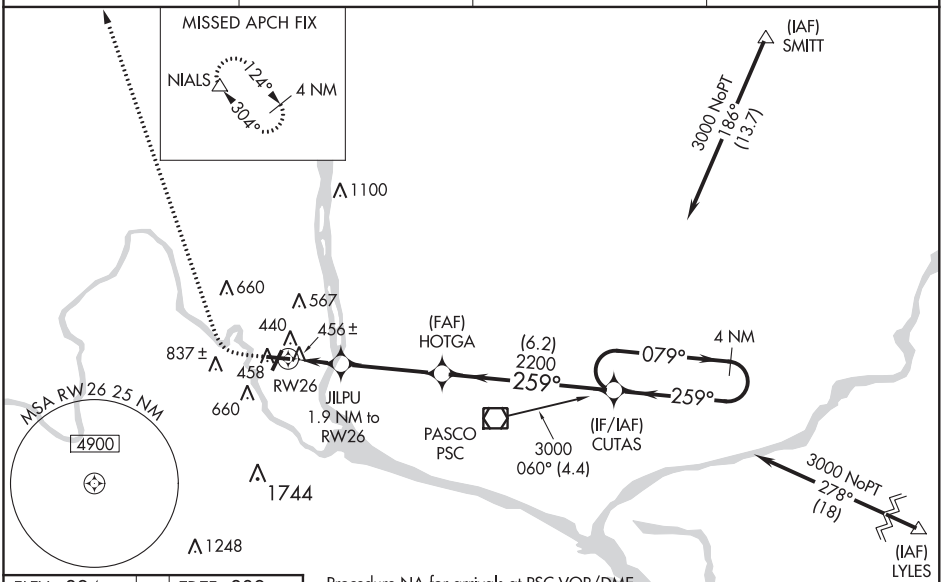
RNP APCH.

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.

NA

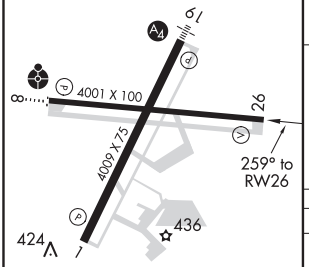
MISSED APPROACH: Climb to 900 then climbing right turn to 3500 direct NIALS and hold.

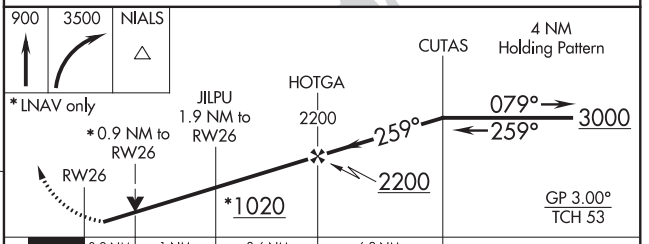
AWOS-3PT	CHINOOK APP CON *	CLNC DEL	UNICOM
132.675	128.75 377.2	122.4	122.7 (CTAF) L



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	4009
189°	TDZE	390
	Apt Elev	394

RNAV (GPS) Y RWY 19

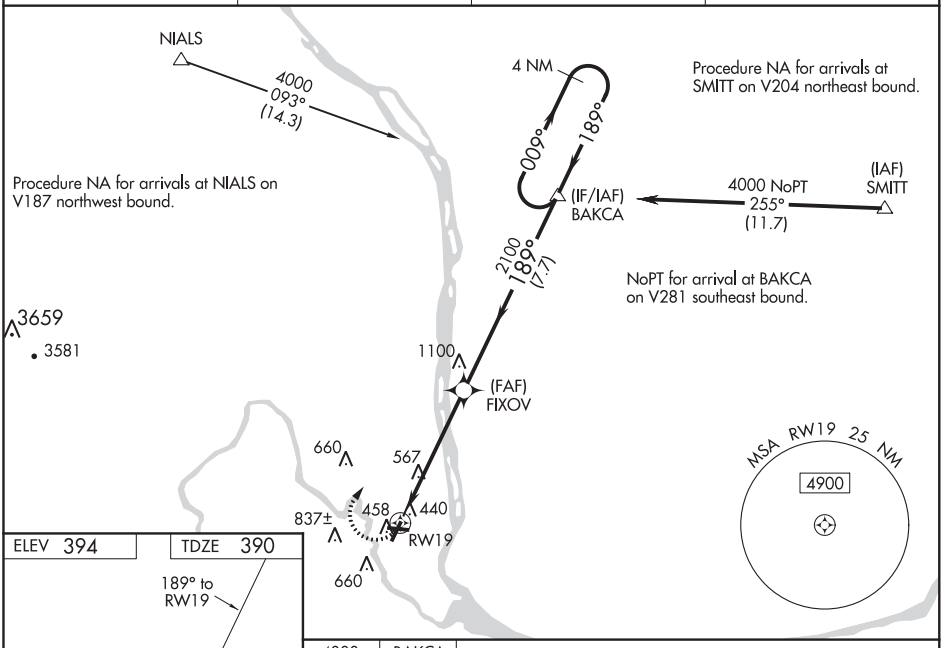
RICHLAND (RLD)

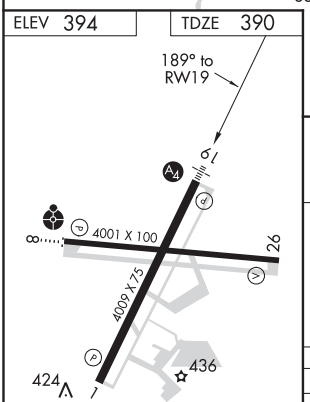
T NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (4°F) or above 41°C (106°F). DME/DME-RNP- 0.3 NA. When local altimeter setting not received, use Pasco altimeter setting and increase all DA 21 feet and all MDA 40 feet and increase LNAV Cat A visibility ¼ mile, Cat C and D ½ mile, 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.

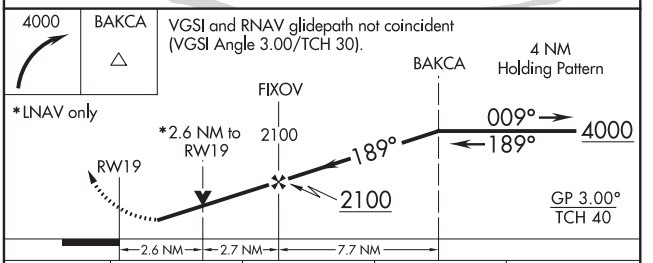
MALS

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RICHLAND, WASHINGTON

AL-5966 (FAA)

19227

RNAV (GPS) Z RWY 19

RICHLAND (RLD)

APP CRS	Rwy Idg	4009
189°	TDZE	390
	Apt Elev	394

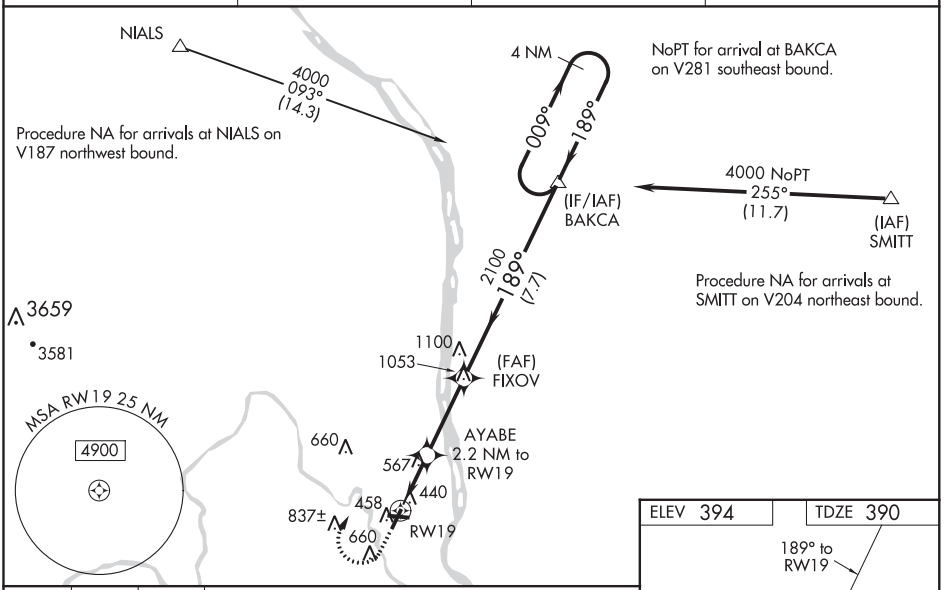
V A NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (4°F) or above 41°C (106°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pasco altimeter setting and increase all DA 21 feet and all MDA 40 feet. Increase LNAV Cats C and D visibility ⅛ mile and Circling Cat 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.

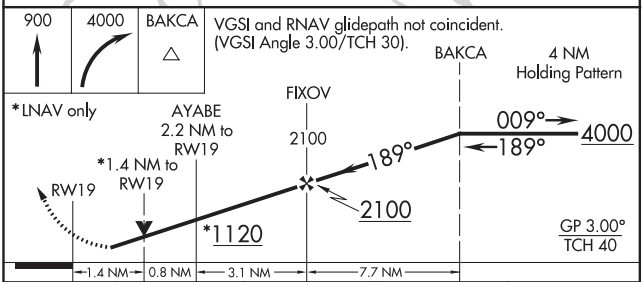
Missed approach requires minimum climb of 340 feet per NM to 2000; if unable to meet climb gradient see RNAV (GPS) Y Rwy 19.

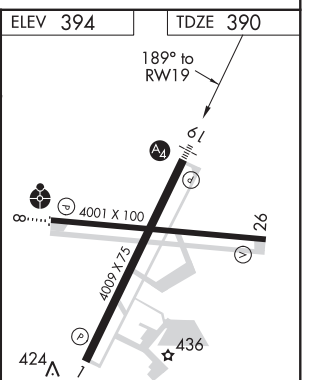
MALS

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LOC RWY 19

RICHLAND (RLD)

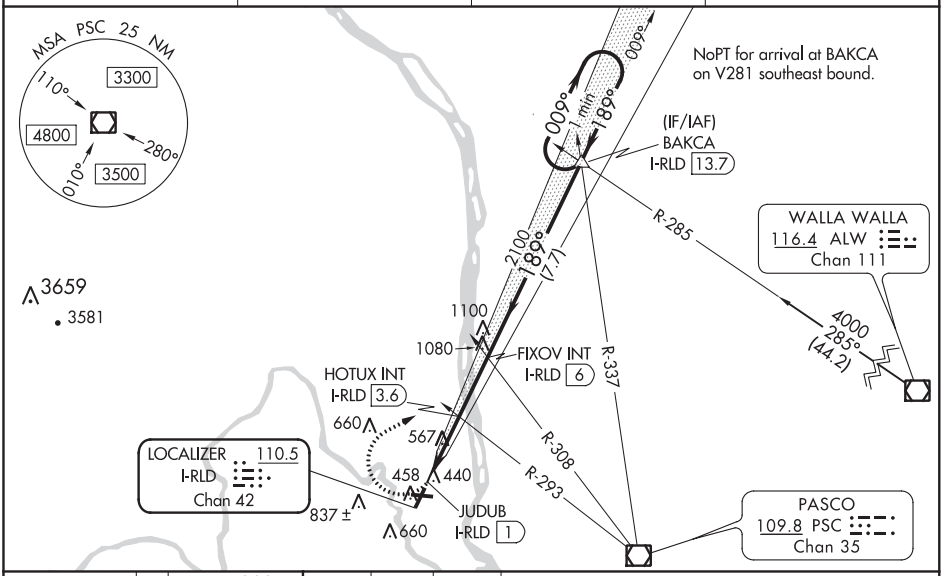
LOC/DME I-RLD	APP CRS	Rwy Idg	4009
110.5	189°	TDZE	390
Chan 42		Apt Elev	394

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.

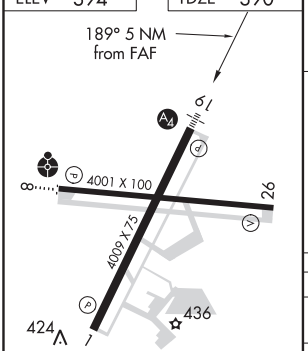
MALS

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



ELEV 394	TDZE 390

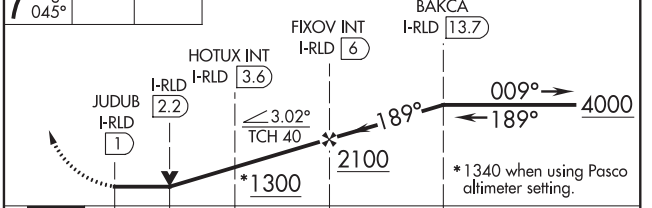


FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RICHLAND, WASHINGTON AL-5966 (FAA) 19227

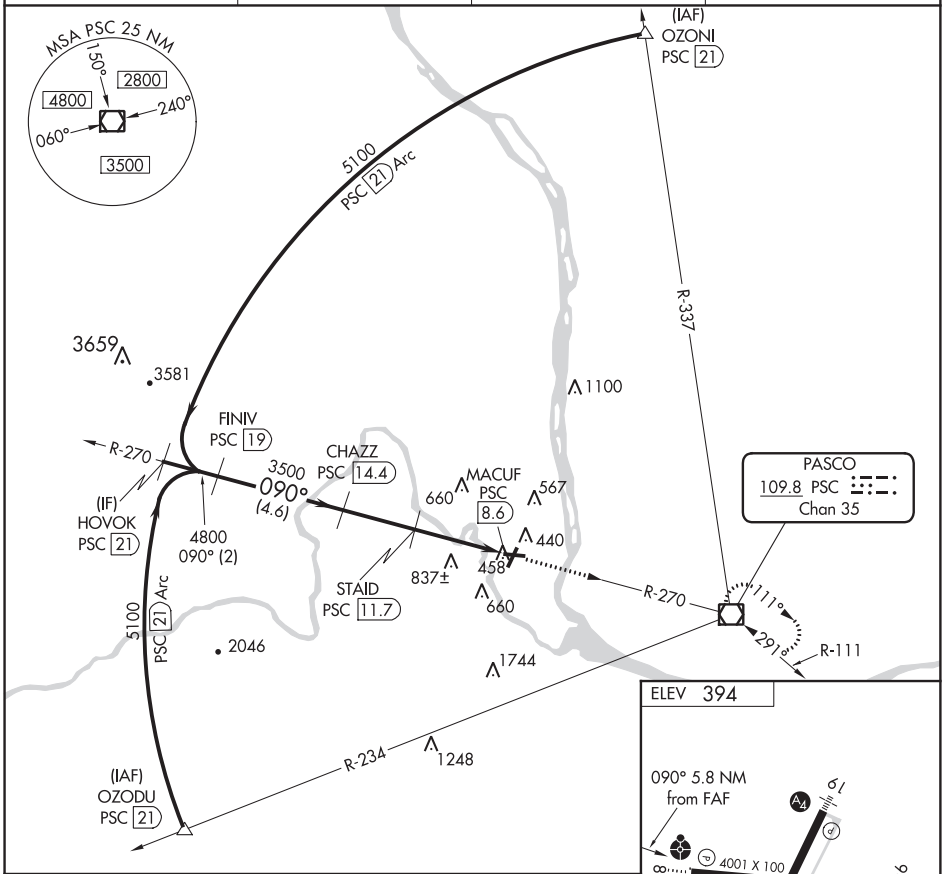
VOR/DME PSC	APP CRS	Rwy Idg	N/A
109.8	090°	TDZE	N/A
Chan 35		Apt Elev	394

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	1940-3
			806 (900-2¼)	1546 (1600-3)

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 28

RIVERTON RGNL (RIW)

LOC I-RIW	APP CRS	Rwy Idg	8204
110.5	284°	TDZE	5459
		Apt Elev	5528

T 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

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

ALTERNATE MISSED APCH FIX
FETIK
BOY 10.8
117.8 BOY R-180 Chan 125
360° 180°

(IAF) FETIK RIW 14

BOYSEN RESERVOIR
117.8 BOY
Chan 125

R-006 117.8 BOY Chan 125 R-164

LOCALIZER 110.5
I-RIW

5724
R-281
101°
5679
281°

8600 to DONVY
105° (14)

LIMNY INT
RIW 7.5

R-153 9700 153° (30.3) R IW 14 Arc 8600 NoPT

MSA RIW 25 NM
9700
076° 256°
11900 8700
346°

RIVERTON
108.8 RIW
Chan 25

7700
284°
(6.5)
LR-096
104°
1 min
284°
104°
LR-113

R-170

(IF/IAF)
DONVY INT
RIW 14

(IAF)
HONOX
RIW 14

8600 NoPT
RIW 14 Arc

ELEV 5528 D TDZE 5459

284° 6.9 NM from FAF

1.1% DOWN
8204 X 150
0.7% UP
4800 X 75
0.4% UP
5544
5513
A5

6800	7700	RIW

LIMNY INT
RIW 7.5

DONVY INT
RIW 14

One Minute Holding Pattern

*LOC only
*RIW
RIW 1.8
RIW 0.6
7700
104°
284°
284°
8600
7700
GS 3.00°
TCH 50

1.2 5.7 NM 6.5 NM

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 10

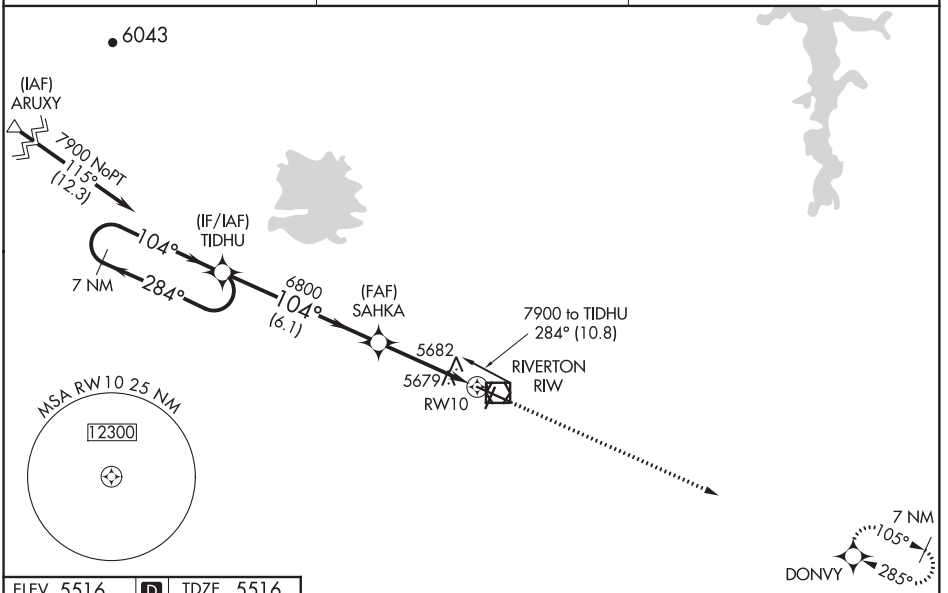
RIVERTON RGNL (RIW)

WAAS	APP CRS	Rwy Idg	8204
CH 42899	104°	TDZE	5516
W10A		Apt Elev	5516

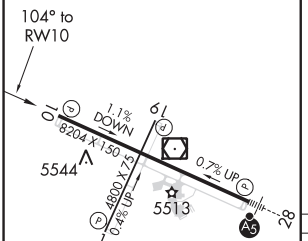
T A DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lander altimeter setting and increase all DA 54 feet and all MDA 60 feet, and increase LPV and LNAV/VNAV all Cats visibility ¼ mile and increase LNAV Cat C/D visibility ⅛ mile. Baro-VNAV and VDP NA when using Lander altimeter setting. 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).

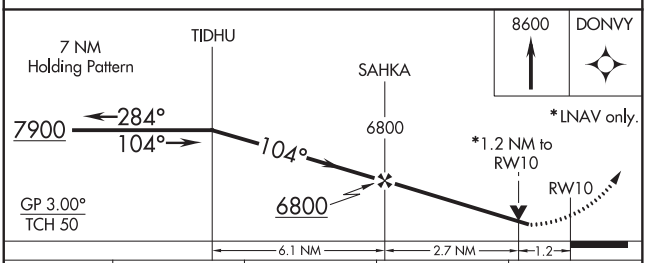
MISSED APPROACH: Climb to 8600 direct DONVY and hold.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 61115 W28A	APP CRS 284°	Rwy Idg 8204 TDZE 5459 Apt Elev 5528

RNAV (GPS) RWY 28

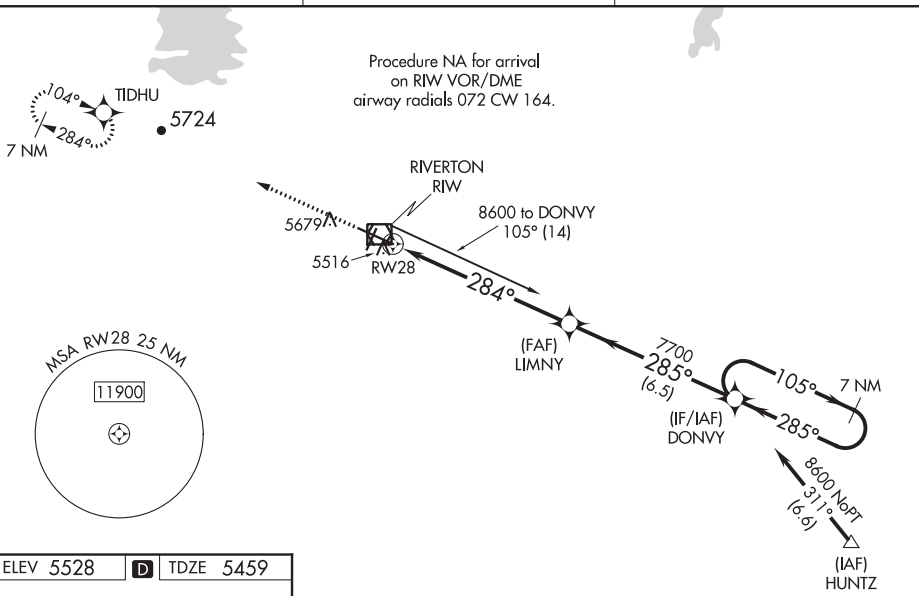
RIVERTON RGNL (RIW)

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.

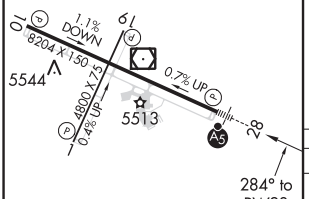
MALSR (A5)

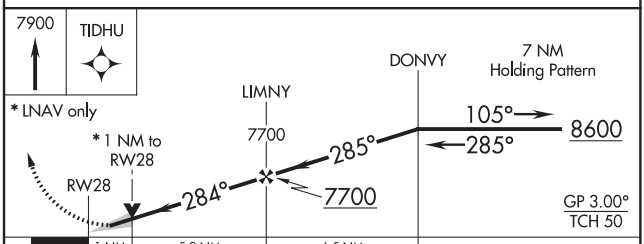
MISSED APPROACH: Climb to 7900 direct TIDHU and hold.

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

NW-1, 30 JAN 2020 to 26 MAR 2020

RIVERTON, WYOMING | AL-691 (FAA) | 17285

VOR/DME RIW	APP CRS	Rwy Idg	8204
108.8	101°	TDZE	5516
Chan 25		Apt Elev	5516

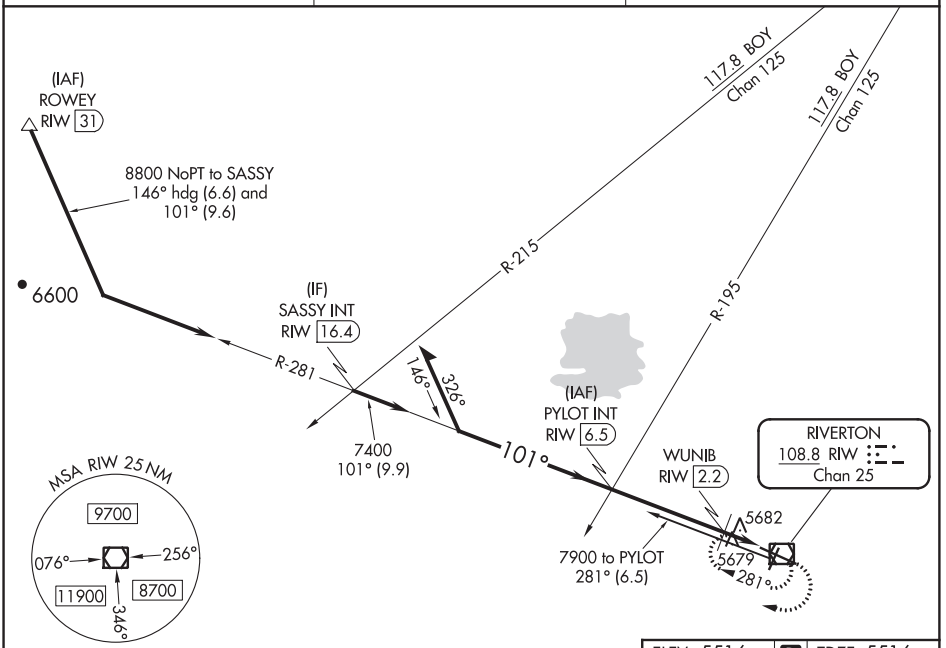
VOR RWY 10
RIVERTON RGNL (RIW)

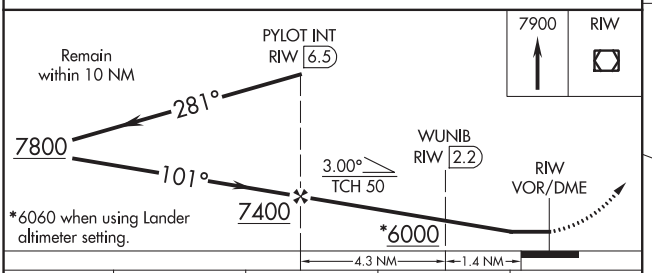
T When local altimeter setting not received, use Lander altimeter setting and increase all MDA 60 feet and increase S-10 Cat C and D visibility ¼ mile and Circling Cat C visibility ⅛ mile, increase WUNIB fix minimums Cat C and D visibility ⅛ mile. Rwy 10 helicopter visibility reduction below ¾ SM NA.

A

MISSED APPROACH: Climb to 7900 in RIW VOR/DME holding pattern.

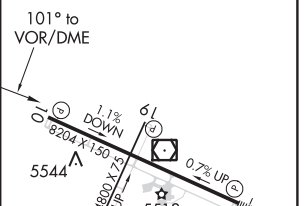
ASOS	SALT LAKE CENTER	UNICOM
121.425	133.25 285.6	122.8 (CTAF) L





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)

ELEV 5516 | D | TDZE 5516



REIL Rwys 1, 10, and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

RIVERTON, WYOMING
Amdt 10B 12OCT17

43°04'N-108°28'W

RIVERTON RGNL (RIW)
VOR RWY 10

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME RIW	APP CRS	Rwy Idg	8204
108.8	293°	TDZE	5459
Chan 25		Apt Elev	5528

VOR RWY 28

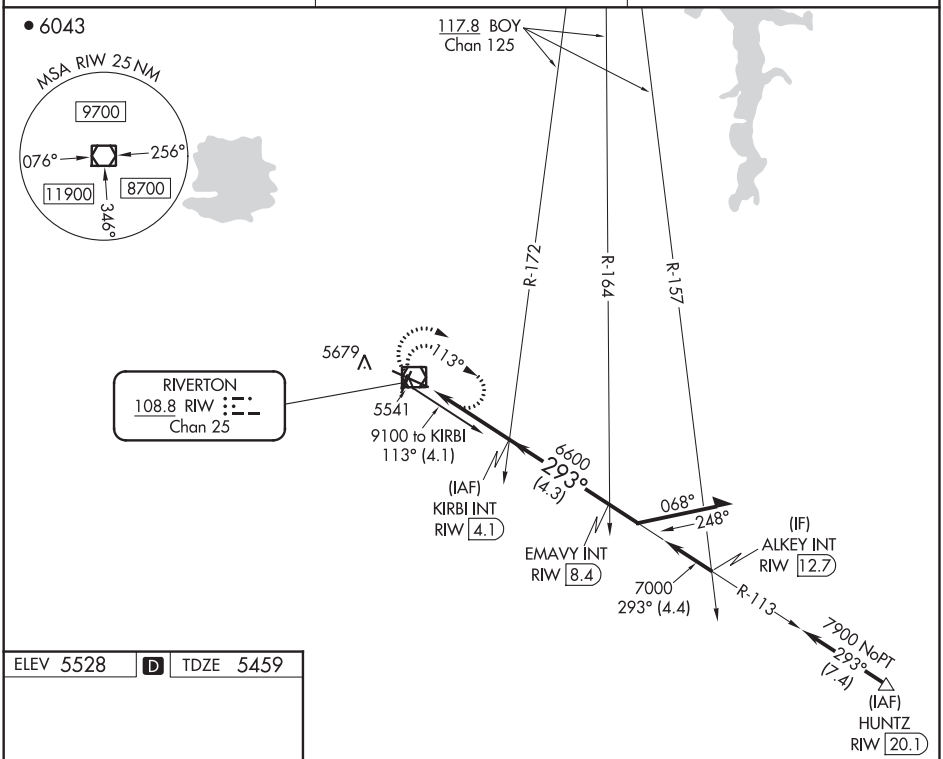
RIVERTON RGNL (RIW)

T When local altimeter setting not received, use Lander altimeter setting and
A 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.

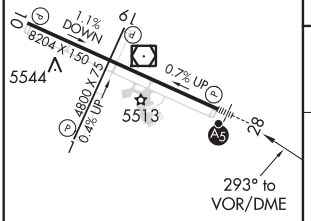
MALSR (A5)

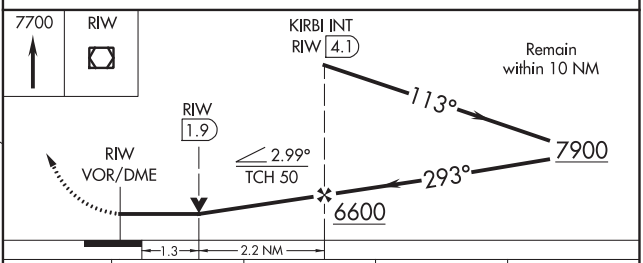
MISSED APPROACH: Climb to 7700 in RIW VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
121.425	133.25 285.6	122.8 (CTAF) L



ELEV 5528 D TDZE 5459





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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

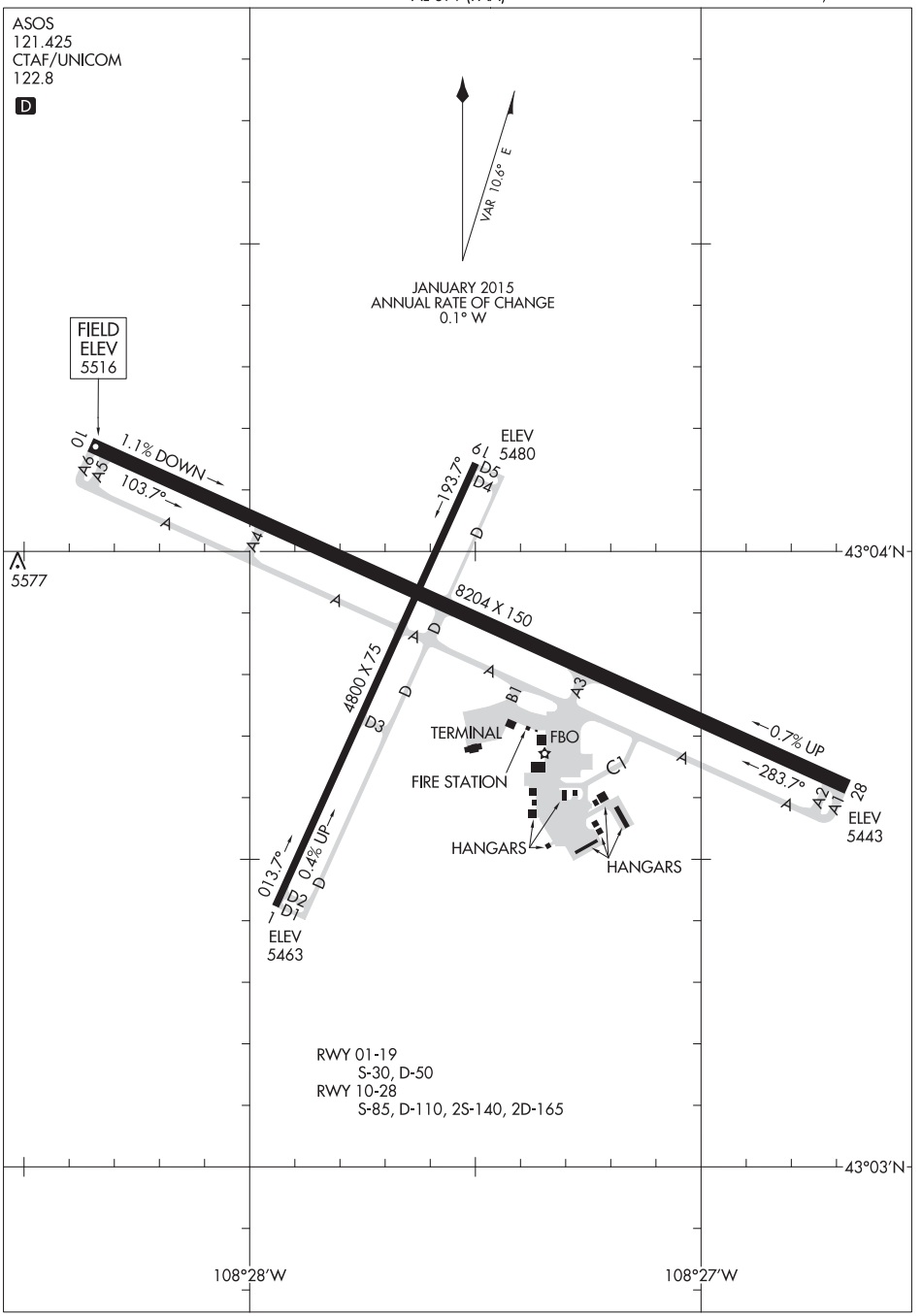
19283

AIRPORT DIAGRAM

RIVERTON RGNL (RIW)

RIVERTON, WYOMING

AL-691 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

19283

RIVERTON, WYOMING
RIVERTON RGNL (RIW)

LOC/DME I-RKS	APP CRS	Rwy Idg 10000
109.3	270°	TDZE 6765
Chan 30		Apt Elev 6765

ILS or LOC RWY 27

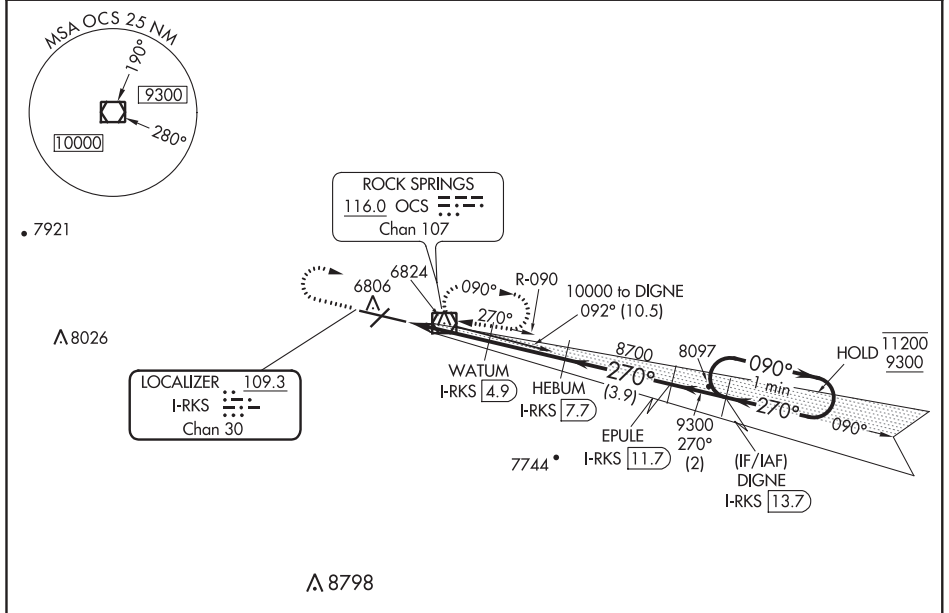
SOUTHWEST WYOMING RGNL (RKS)

DME required.

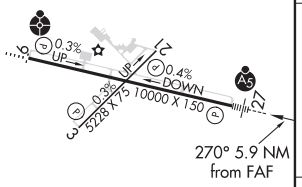
MALSR

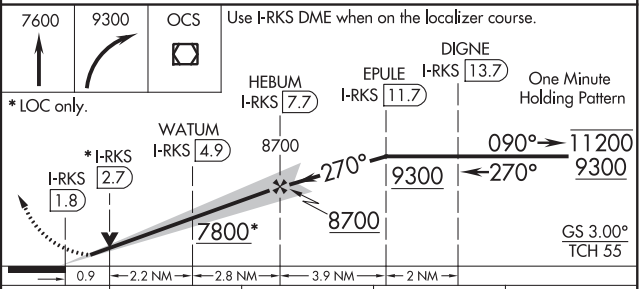
MISSED APPROACH: Climb to 7600 then climbing right turn to 9300 direct OCS VOR/DME and hold, continue climb-in-hold to 9300.

ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM
118.375	124.35 353.5	122.2	122.8 (CTAF) L



ELEV 6765 D TDZE 6765





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)

MIRL Rwy 3-21
HIRL Rwy 9-27 L
REIL Rwys 3 and 21 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ROCK SPRINGS, WYOMING | AL-353 (FAA) | 19339

WAAS	APP CRS	Rwy Idg	10000
CH 66016	090°	TDZE	6741
W09A		Apt Elev	6765

RNAV (GPS) RWY 9

SOUTHWEST WYOMING RGNL (RKS)

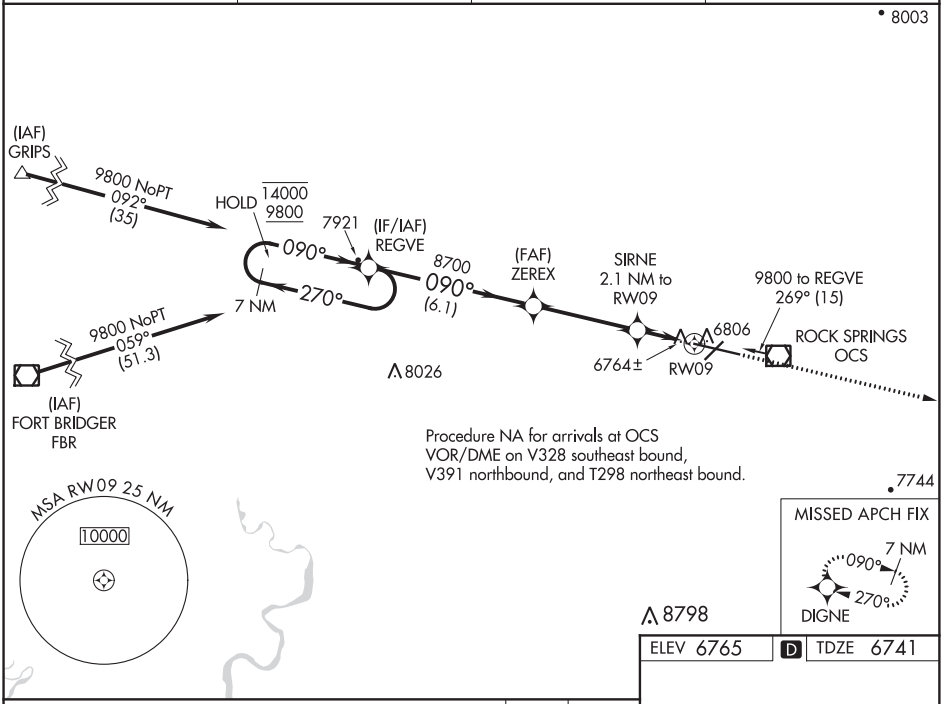
RNP APCH.

T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 45°C .

ODALS

MISSED APPROACH: Climb to 9600 direct DIGNE and hold.

ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM
118.375	124.35 353.5	122.2	122.8 (CTAF) L



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

ROCK SPRINGS, WYOMING
Orig-B 08NOV18

SOUTHWEST WYOMING RGNL (RKS)

41°36'N-109°04'W

RNAV (GPS) RWY 9

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	10000
CH 49216	270°	TDZE	6765
W27A		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.

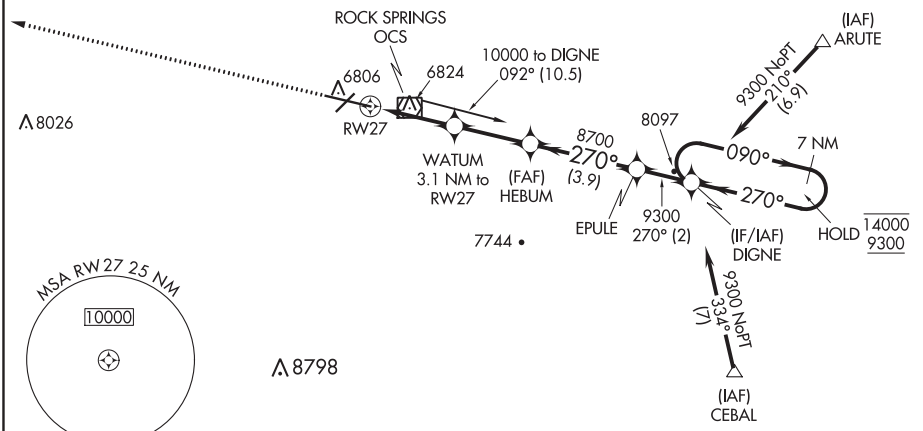
MALSR

MISSED APPROACH: Climb to 9800 direct REGVE and hold.

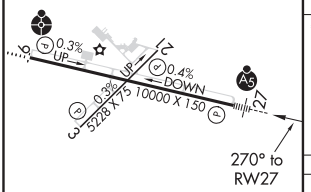
ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM
118.375	124.35 353.5	122.2	122.8 (CTAF) L

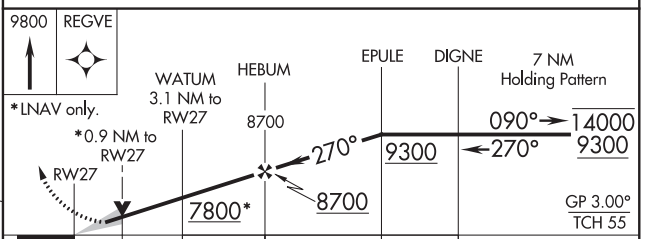
MISSED APCH FIX

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME OCS	APP CRS	Rwy Idg	10000
116.0	085°	TDZE	6741
Chan 107		Apt Elev	6765

VOR RWY 9

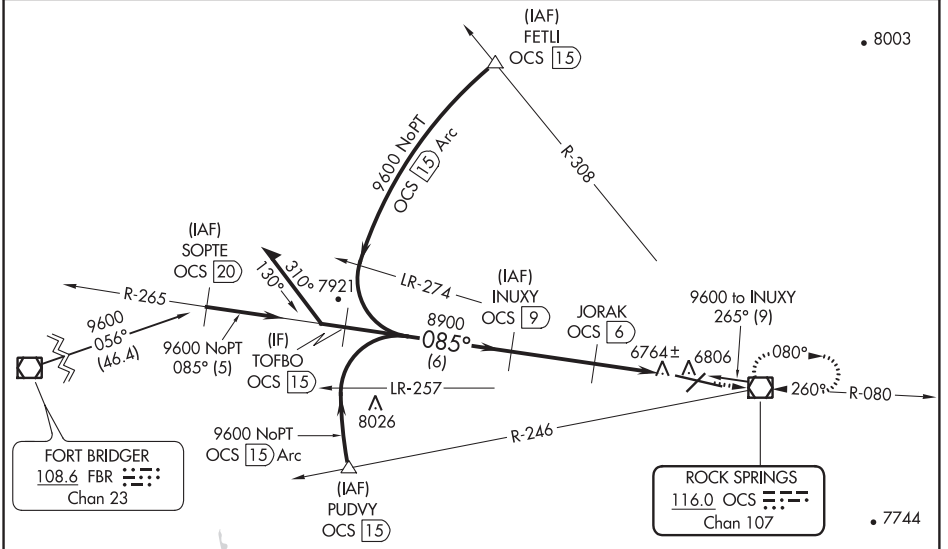
SOUTHWEST WYOMING RGNL (RKS)

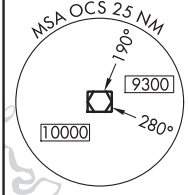
DME required.

ODALS

MISSED APPROACH: Climb to 9300 direct OCS VOR/DME and hold, continue climb-in-hold to 9300.

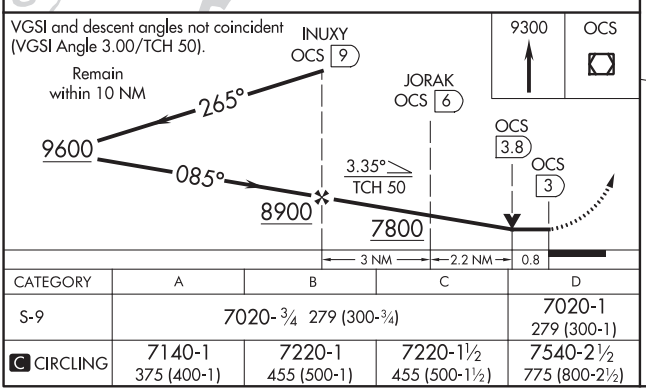
ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM
118.375	124.35 353.5	122.2	122.8 (CTAF) L

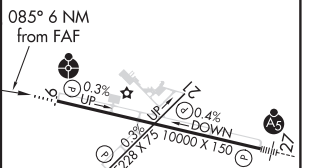




8798

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 L
REIL Rwys 3 and 21 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME OCS	APP CRS	Rwy Idg	10000
116.0	255°	TDZE	6760
Chan 107		Apt Elev	6765

VOR/DME RWY 27

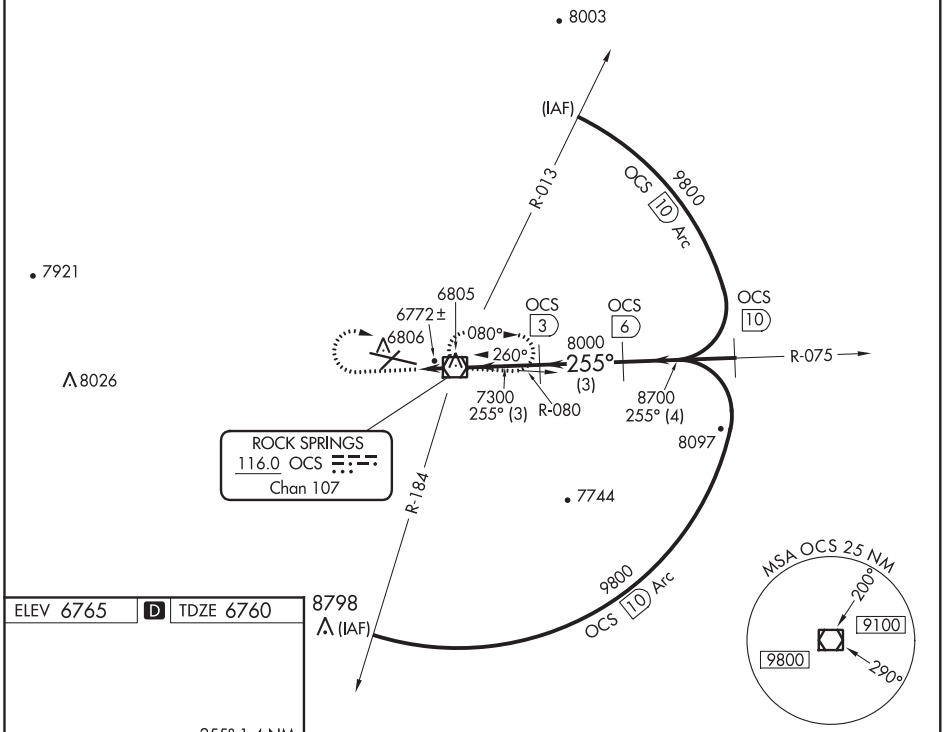
SOUTHWEST WYOMING RGNL (RKS)

Inoperative table does not apply to Cat D.

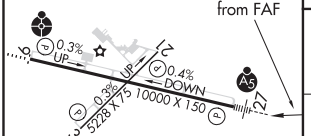
MALSR

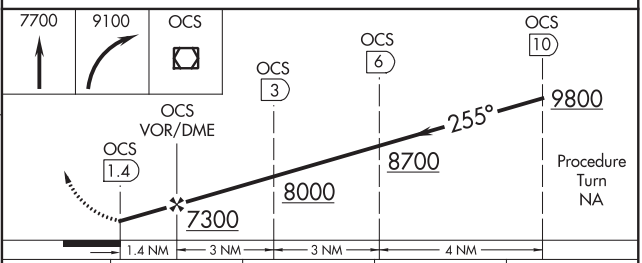
MISSED APPROACH: Climb to 7700, then climbing right turn to 9100 direct OCS VOR/DME and hold.

ASOS	SALT LAKE CENTER	CASPER RADIO	UNICOM
118.375	124.35 353.5	122.2	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

19339
AIRPORT DIAGRAM
SOUTHWEST WYOMING RGNL (RKS)
AL-353 (FAA)
ROCK SPRINGS, WYOMING

AIRPORT DIAGRAM
19339
ROCK SPRINGS, WYOMING
SOUTHWEST WYOMING RGNL (RKS)

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	4798
CH 45814	165°	TDZE	3086
W16A		Apt Elev	3086

RNAV (GPS) RWY 16

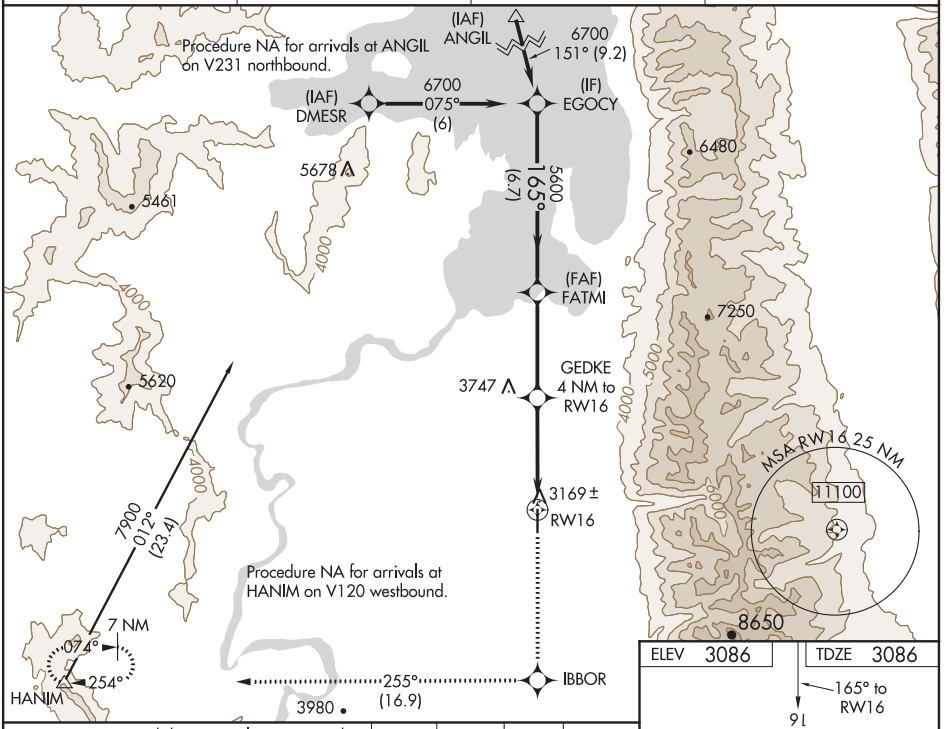
RONAN (7SØ)

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.

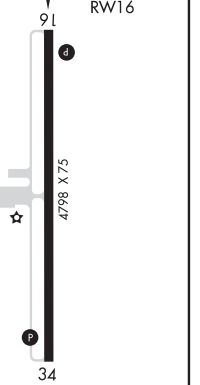
MISSED APPROACH: Climb to 13000 direct IBBOR and on track 255° to HANIM and hold, continue climb-in-hold to 13000.

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

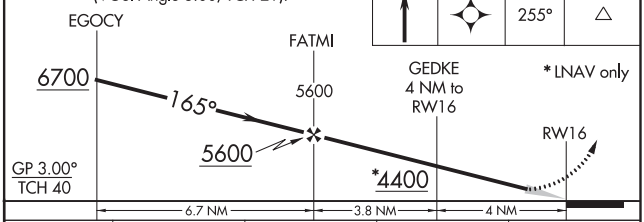
165° to RW16



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RONAN, MONTANA | AL-9978 (FAA) | 19283

RNAV (GPS) RWY 34

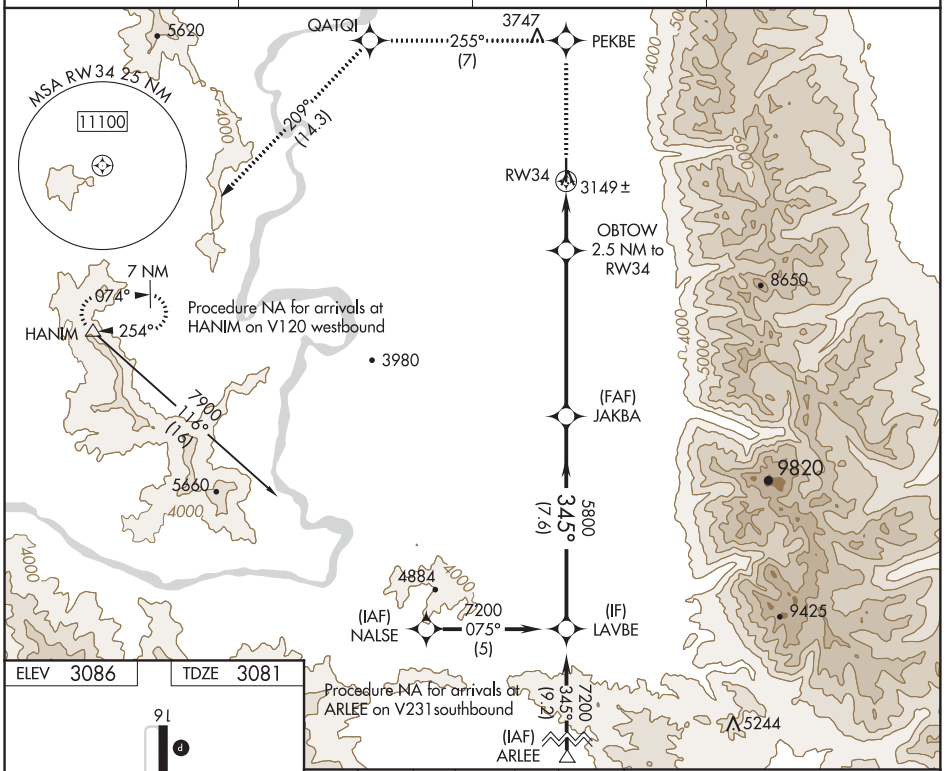
RONAN (7S∅)

WAAS	APP CRS	Rwy Idg	4798
CH 86614	345°	TDZE	3081
W34A		Apt Elev	3086

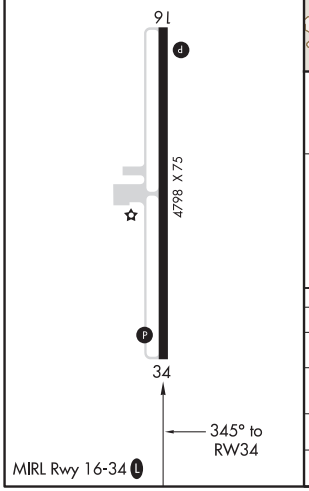
T A NA — Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Missoula altimeter setting; when not received, procedure NA. Circling NA east of Rwy 16-34.

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

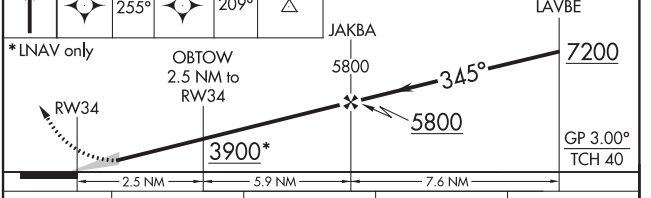


ELEV 3086	TDZE 3081



13000	PEKBE	tr 255°	QATQI	tr 209°	HANIM

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 22).

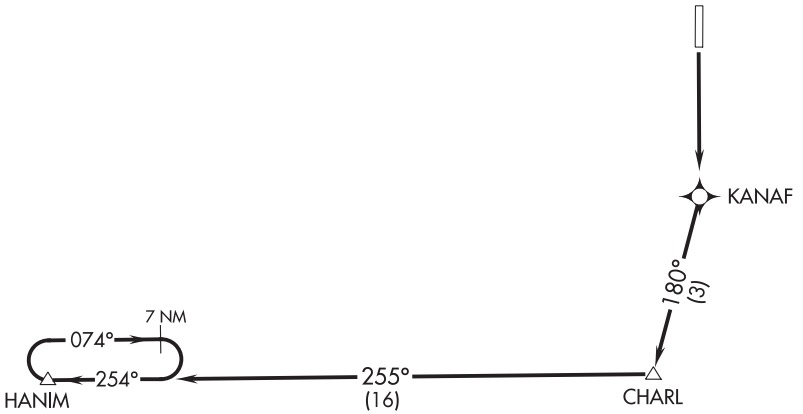


CATEGORY	A	B	C	D
LPV DA	3438-1¼ 357 (400-1¼)		NA	
LNAV/VNAV DA	3438-1¼ 357 (400-1¼)		NA	
LNAV MDA	3520-1 439 (500-1)		NA	
CIRCLING	3560-1 474 (500-1)		NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

(RONAN3.ANGIL) 17229

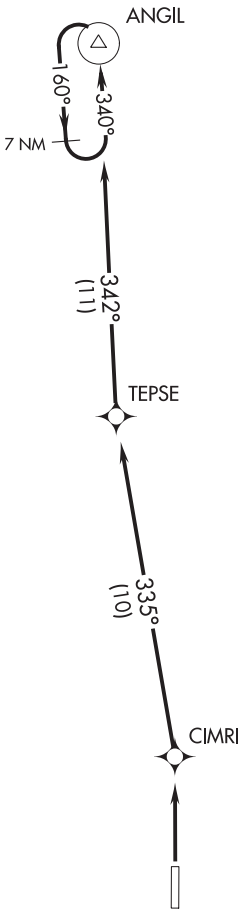
RONAN THREE DEPARTURE (RNAV)

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: 10000



NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 16: NA, see HANIM DEPARTURE
Rwy 34: Standard

NOTE: Chart not to scale.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

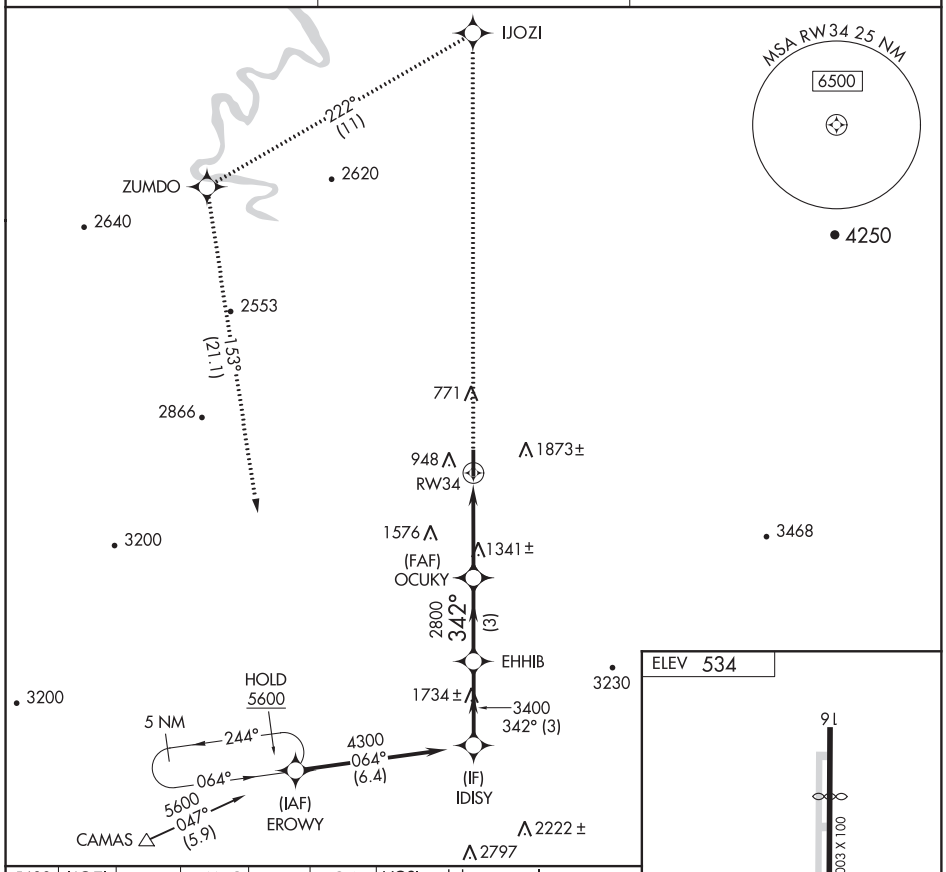
APP CRS	Rwy Idg	N/A
342°	TDZE	N/A
	Apt Elev	534

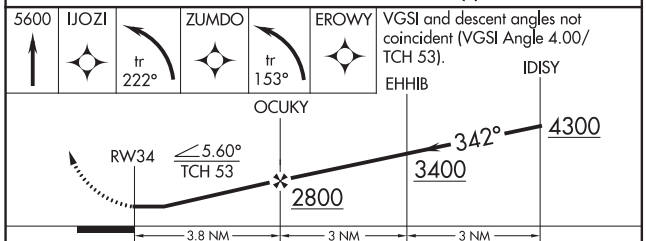
RNAV (GPS)-B
ROSEBURG RGNL (RBG)

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





CATEGORY	A	B	C	D
CIRCLING	1700-1¼ 1166 (1200-1¼)	1700-1½ 1166 (1200-1½)	1700-3 1166 (1200-3)	1920-3 1386 (1400-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ROSEBURG, OREGON | AL-888 (FAA) | 19171

VOR/DME RBG	APP CRS	Rwy Idg	N/A
108.2	337°	TDZE	N/A
Chan 19		Apt Elev	525

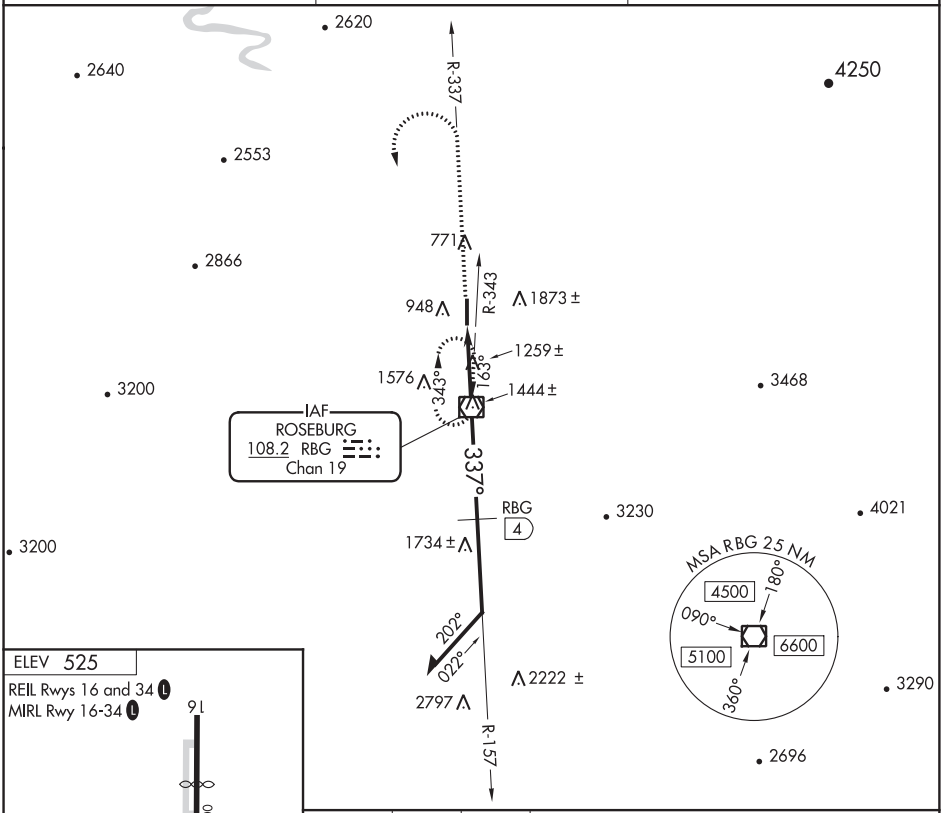
VOR-A

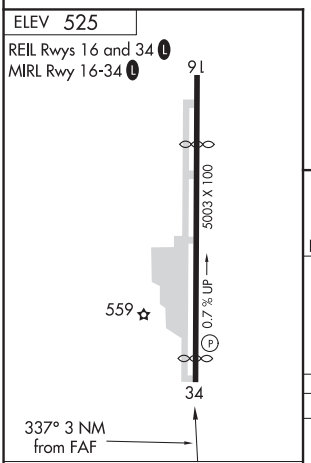
ROSEBURG RGNL (RBG)

Circling not authorized east of Rwy 16-34.
Procedure NA at night.
Rwy 34 helicopter visibility below 1 SM NA.

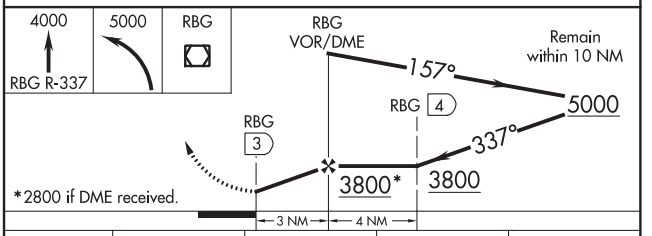
MISSED APPROACH: Climb to 4000 via RBG R-337 within 15 NM; then climbing left turn to 5000 direct RBG VOR/DME and hold.

ASOS	SEATTLE CENTER	UNICOM
135.475	127.55 239.0	122.8 (CTAF)





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5099
CH 56529	067°	TDZE	3490
W07A		Apt Elev	3490

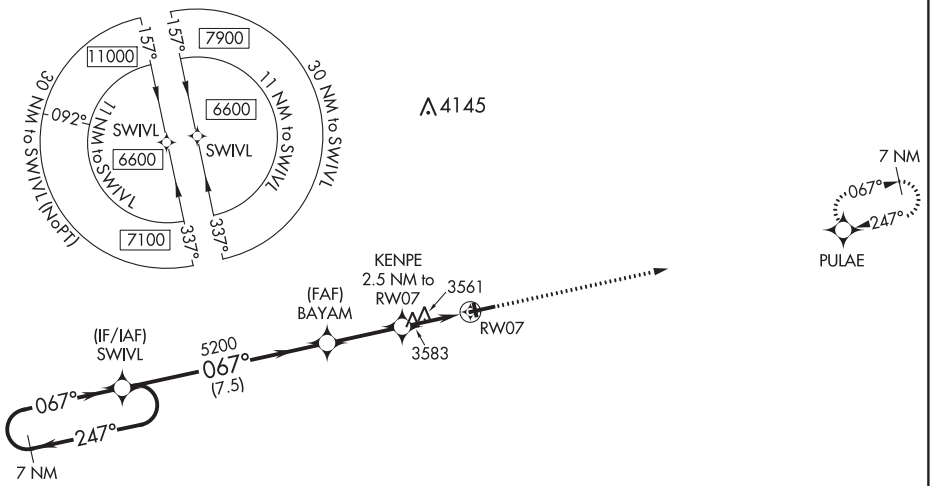
RNAV (GPS) RWY 7

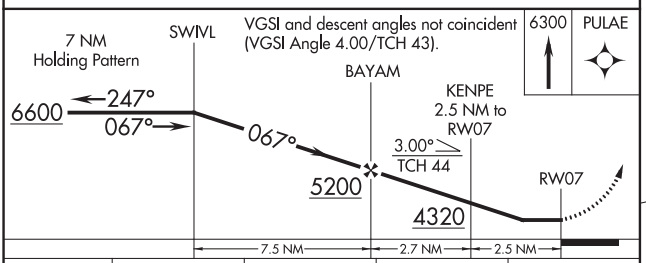
ROUNDUP (RPX)

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.

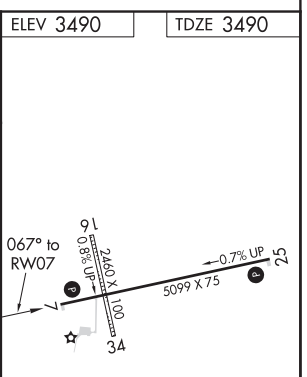
MISSED APPROACH: Climb to 6300 direct PULAE and hold.

BIL ASOS	SALT LAKE CENTER	UNICOM	
126.3	132.425 317.45	122.8 (CTAF)	122.7 L





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ROUNDUP, MONTANA AL-10287 (FAA) 20030

WAAS	APP CRS	Rwy Idg	5099
CH 61229	247°	TDZE	3453
W25A		Apt Elev	3490

RNAV (GPS) RWY 25

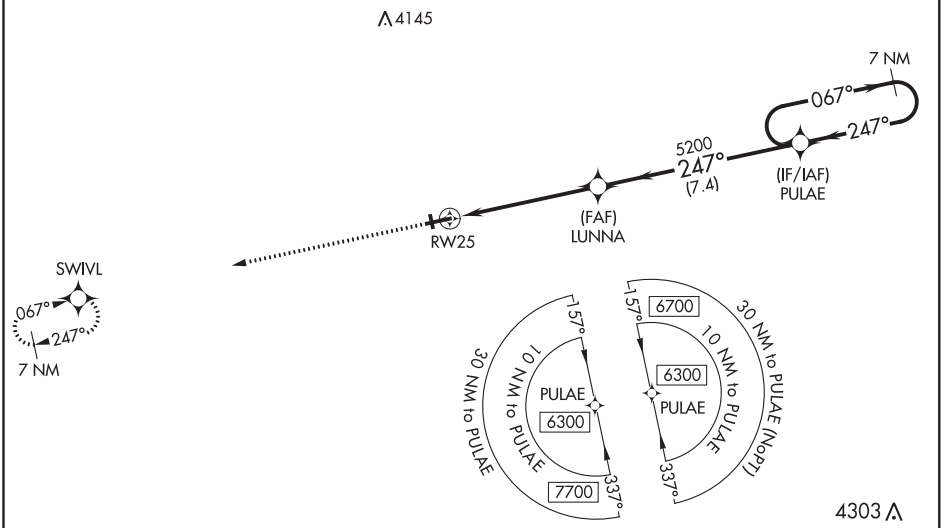
ROUNDUP (RPX)

NA

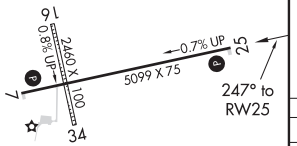
When VGSI inop, Circling to Rwy 7 NA at night. Baro-VNAV NA. Use Billings altimeter setting; when not received, procedure NA. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 6600 direct SWIVL and hold

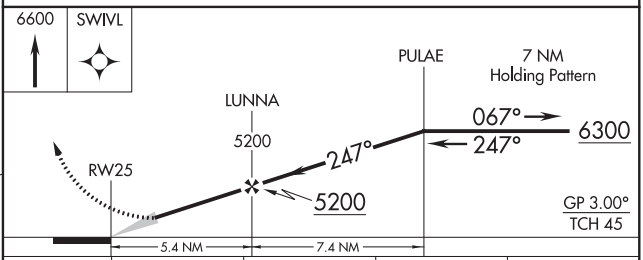
BIL ASOS	SALT LAKE CENTER	UNICOM	
126.3	132.425 317.45	122.8 (CTAF)	122.7 L



ELEV 3490 TDZE 3453



MIRL Rwy 7-25 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC Z RWY 31

MCNARY FIELD (SLE)

LOC/DME I-SLE	APP CRS	Rwy Idg	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

ALTERNATE MISSED APCH FIX
TURNO 266 SL

NEWBERG 117.4 UBG Chan 121

ARTTY INT I-SLE 5.6

3300 to LOTKE 133° (12.5)

LOCALIZER 110.3 I-SLE Chan 40

TURNO 266 SL

(IAF) LOTKE INT I-SLE 6.9

CORVALLIS 115.4 CVO Chan 101

SCIOS I-SLE 11.3

3400 NoPT 313° (7.3)

(IF/IAF) GLORR I-SLE 18.5

Procedure NA for arrivals at JAIME on V536 eastbound.

5600 NoPT 313° (16.1)

(IAF) JAIME I-SLE 34.6

Procedure NA for arrivals at GLORR on V448 southbound.

MSA SL 25 NM
3100 200° 110° 6300 4800 320°

ELEV 214 D TDZE 214
REIL Rwys 13, 16 and 34 L
MIRL Rwy 16-34 L
HIRL Rwy 13-31 L

TWR 270

0.3% UP
5811 X 150
5146 X 100
0.3% UP

313° 5.8 NM from FAF

4000 I-SLE NW crs ARTTY INT

* LOC only

LOTKE INT I-SLE 6.9

One Minute Holding Pattern

* I-SLE 3.5

I-SLE 1.1

2.4 NM 3.4 NM

GS 3.00° TCH 42

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)

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

SALEM, OREGON AL-361 (FAA) 19003

RNAV (GPS) RWY 13

MCNARY FIELD (SLE)

WAAS CH 97642 W13A	APP CRS 133°	Rwy Idg 5811 TDZE 204 Apt Elev 213

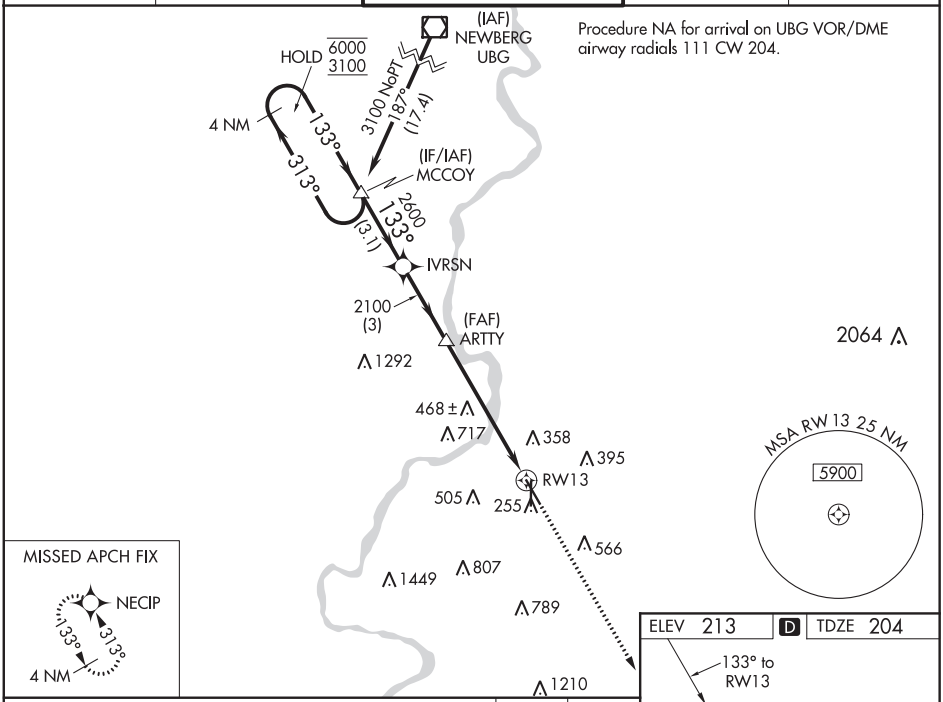
RNP APCH.

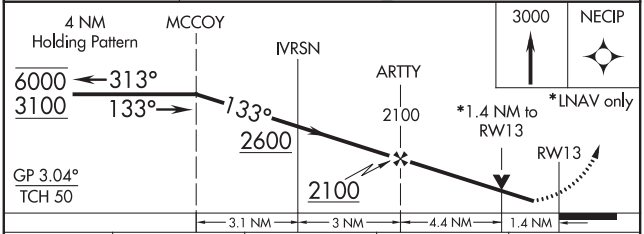
T A Circling Rwy 16, 34 NA at night. Rwy 13 helicopter visibility reduction below ¾ SM NA. Inop table does not apply to LNAV/VNAV all Cats. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

ODALS

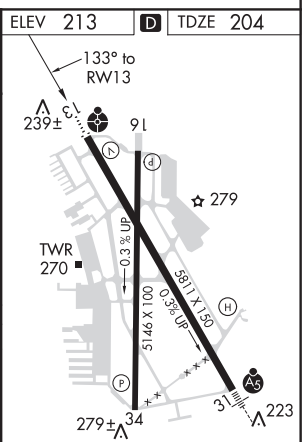
MISSED APPROACH: Climb to 3000 direct NECIP and hold.

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)



SALEM, OREGON
Orig 08NOV18

44°55'N-123°00'W

MCNARY FIELD (SLE)

RNAV (GPS) RWY 13

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 31

MCNARY FIELD (SLE)

WAAS	APP CRS	Rwy Idg	5811
CH 86202	313°	TDZE	214
W31A		Apt Elev	214

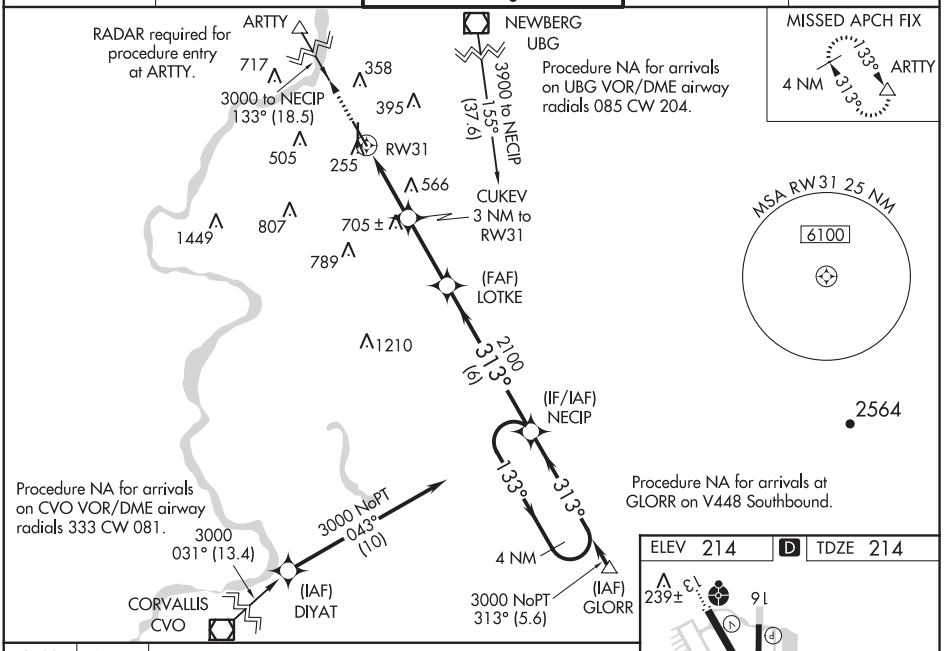
RNP APCH.

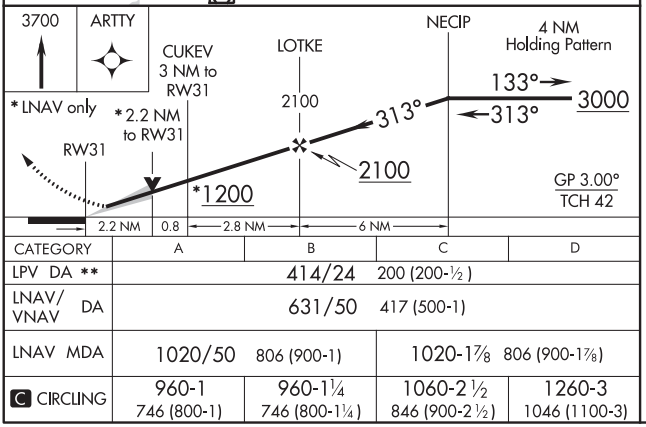
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. When local altimeter setting not received, use Mc Minnville altimeter setting and increase all DA 49 feet; increase all MDA 60 feet; increase LNAV/VNAV visibility all Cats to 1⅛ SM, LNAV Cat C and D visibility to 2 SM, and Circling Cat C visibility to 2 ¾ SM. Baro-VNAV and VDP NA when using Mc Minnville altimeter setting. For inop ALS increase LNAV/VNAV all Cats visibility to 1⅜ SM and increase LNAV Cat C and D visibility to 2 ½ SM. For inop MALSR when using Mc Minnville altimeter setting, increase LPV all Cats visibility to RVR 4500, increase LNAV Cat C/D visibility to 2 ½ miles. ** RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Mc Minnville altimeter setting.

MALSR

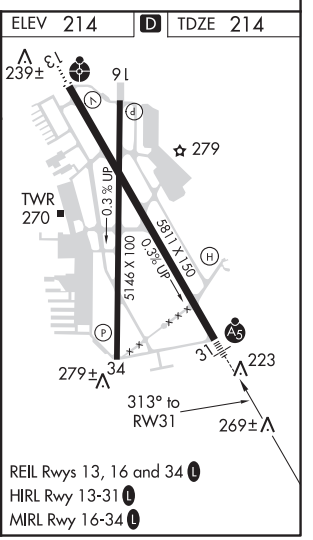
MISSED APPROACH: Climb to 3700 direct ARTTY and hold, continue climb-in-hold to 3700.

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		631/50	417 (500-1)	
LNAV MDA	1020/50	806 (900-1)	1020-1⅞	806 (900-1⅞)
C CIRCLING	960-1 746 (800-1)	960-1¼ 746 (800-1¼)	1060-2½ 846 (900-2½)	1260-3 1046 (1100-3)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SALEM, OREGON

19283

LOC Y RWY 31

MCNARY FIELD (SLE)

LOC/DME I-SLE	APP CRS	Rwy Idg 5811
110.3	313°	TDZE 214
Chan 40		Apt Elev 214

DME required. RADAR required.

T A When local altimeter setting not received, use Mc Minnville altimeter setting: increase all MDA 60 feet; increase S-LOC 31 Cat C and D visibility to 1⅜ SM, Circling Cat C visibility to 2 ½ 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 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

NEWBERG
117.4 UBG
Chan 121

313°/133°

ARTTY INT
I-SLE 5.6

3800 to NDB
157° (30.4)

3200 to NDB
179° (16.1)

GNNET
BTG 40.1

1292

2064

3300 ARTTY to NDB
133° (10.6)

LOCALIZER 110.3
I-SLE
Chan 40

717

358

395

ZEGNA
I-SLE 3.2

505±

255

IAF
TURNO
266 SL
I-SLE 5

566

1449

807

789

MSA SL 25 NM
3100
110°
200°
6300
4800
320°

ALTERNATE MISSED APCH FIX
TURNO
266 SL
133°
313°

115.4 CVO
R-359
Chan 101

HINER
I-SLE 9

1700 to NDB
313° (6.3)

1210

SCIOS
I-SLE 11.3

178°
358°

3500 NoPT
313°
(7.3)

(IF/IAF)
GLORR
I-SLE 18.5

5600 NoPT
313° (16.1)

Procedure NA for arrivals at GLORR on V448 southbound.

3800 to NDB
017°
(25.5)

CORVALLIS
115.4 CVO
Chan 101

Procedure NA for arrivals at JAIME on V536 eastbound.

133°

(IAF)
JAIME
I-SLE 34.6

ELEV 214 D TDZE 214

239±

91

279

TWR
270

0.3% UP

5811 X 150

5146 X 100

0.3% UP

279±

34

31

223

269±

313° 3.9 NM from FAF

REIL Rwys 13, 16 and 34 L
HIRL Rwy 13-31 L
MIRL Rwy 16-34 L

4000
I-SLE
NW crs

ARTTY INT

* 1080 when using Mc Minnville altimeter setting.

SL NDB
I-SLE 5

Remain within 10 NM

ZEGNA
I-SLE 3.2

HINER
I-SLE 9

133°
313°
3000
2400

I-SLE 1.1

I-SLE 2.5

3.50°
TCH 55

1020*

1700

1.4 NM 0.7 NM 1.8 NM 4 NM

CATEGORY	A	B	C	D
S-LOC 31	780/24	566 (600-½)	780-1¼	566 (600-1¼)
C CIRCLING	900-1 686 (700-1)	960-1 746 (800-1)	1060-2½ 846 (900-2½)	1260-3 1046 (1100-3)

SALEM, OREGON
Amdt 4A 10OCT19

44°55′N-123°00′W

MCNARY FIELD (SLE)

LOC Y RWY 31

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC BC RWY 13

MCNARY FIELD (SLE)

LOC/DME I-SLE	APP CRS	Rwy Idg 5811
110.3	133°	TDZE 204
Chan 40		Apt Elev 214

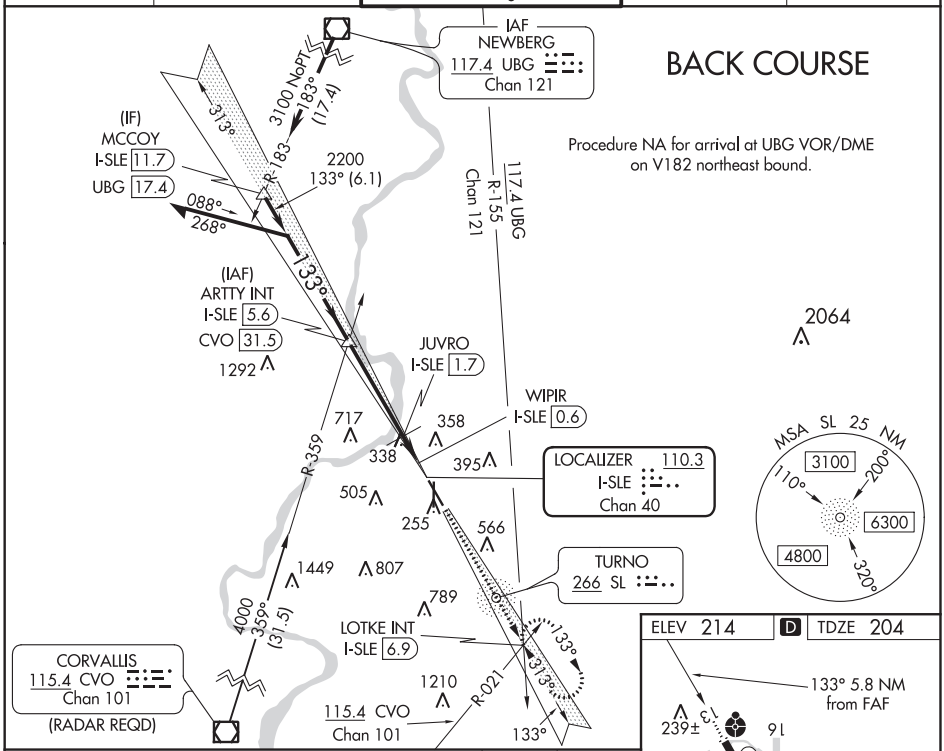
DME required.

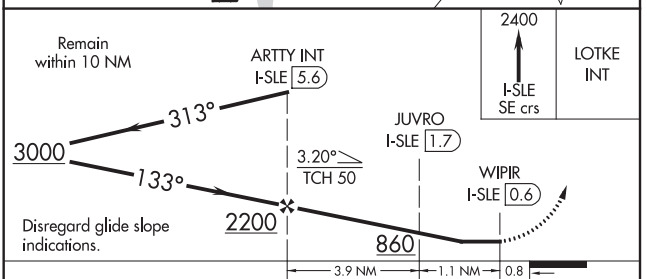
When local altimeter setting not received, use Mc Minnville altimeter setting: Increase all MDA 60 feet; increase S-13 Cat C/D visibility to 1⅛ SM and Circling Cat C visibility to 2½ SM. For inop ALS, increase S-13 Cat C and D visibility to 1⅛ SM. For inop ALS when using Mc Minnville altimeter setting, increase S-13 Cat D visibility to 1⅜ SM. Rwy 13 helicopter visibility reduction below ¾ SM NA.

ODALS

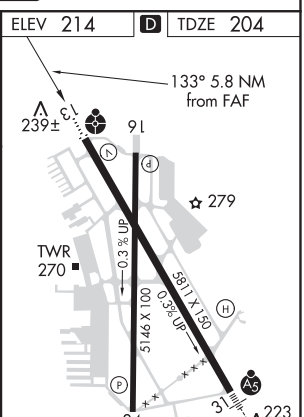
MISSED APPROACH: Climb to 2400 on I-SLE Localizer SE course to LOTKE INT/ I-SLE 6.9 DME and hold.

ATIS	SEATTLE CENTER	SALEM TOWER ★	GND CON	UNICOM
124.55	125.8 291.7	119.1 (CTAF) L 257.2	121.9	122.95





CATEGORY	A	B	C	D
S-13	600-¾ 396 (400-¾)		600-1 396 (400-1)	
C CIRCLING	900-1 686 (700-1)	960-1 746 (800-1)	1060-2½ 846 (900-2½)	1260-3 1046 (1100-3)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

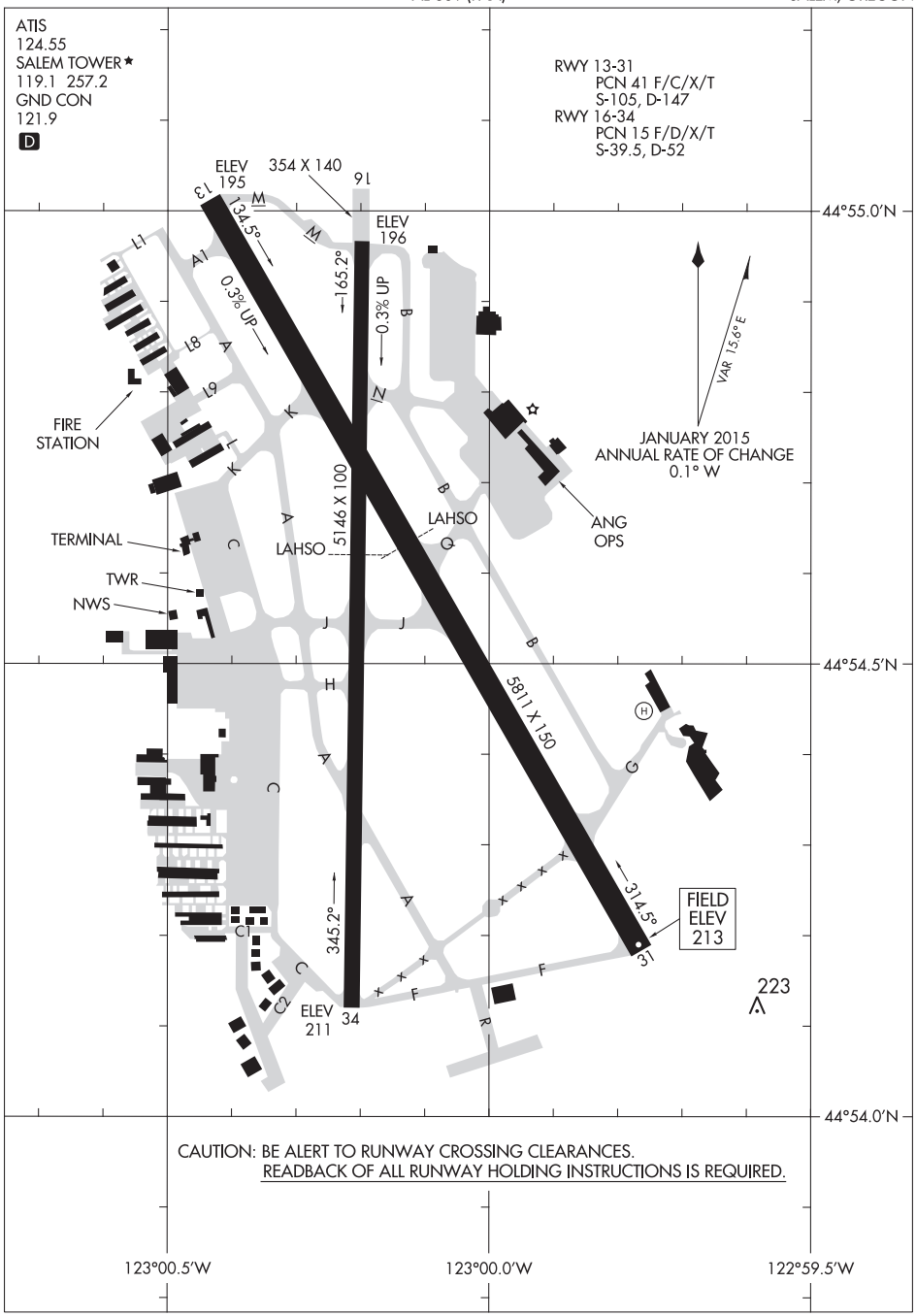
19003

AIRPORT DIAGRAM

MCNARY FIELD (SLE)

SALEM, OREGON

AL-361 (FAA)



NW-1, 30 JAN 2020 to 26 MAR 2020

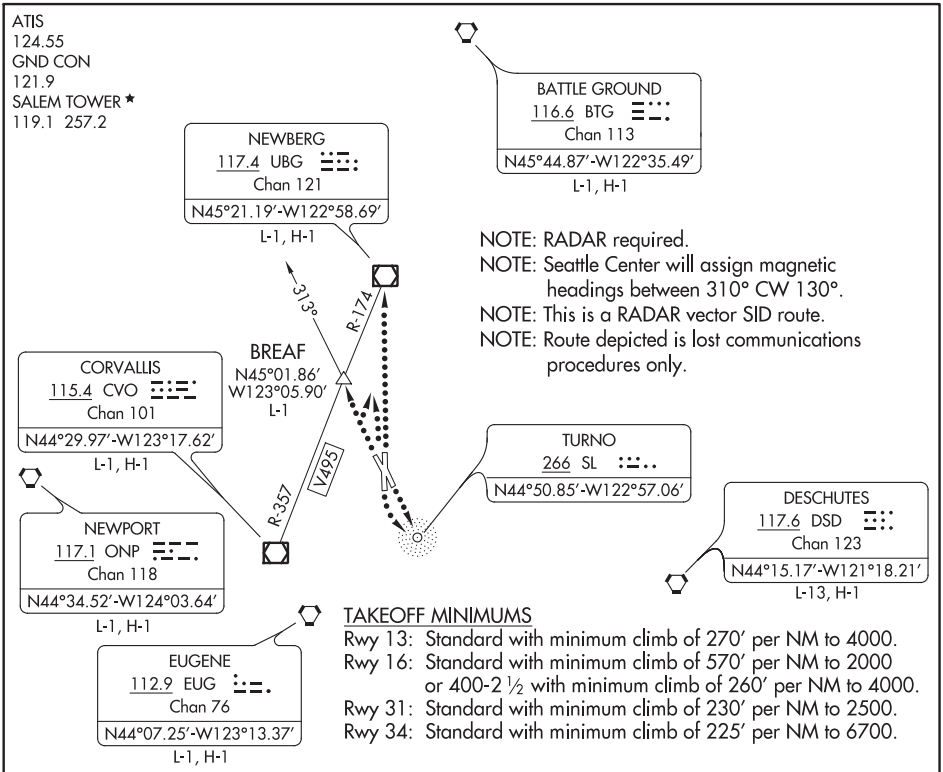
NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

19003

SALEM, OREGON

MCNARY FIELD (SLE)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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).

SALMON, IDAHO AL-9513 (FAA) 19171

APP CRS	Rwy Idg	5510
175°	TDZE	4041
	Apt Elev	4044

RNAV (GPS) RWY 17

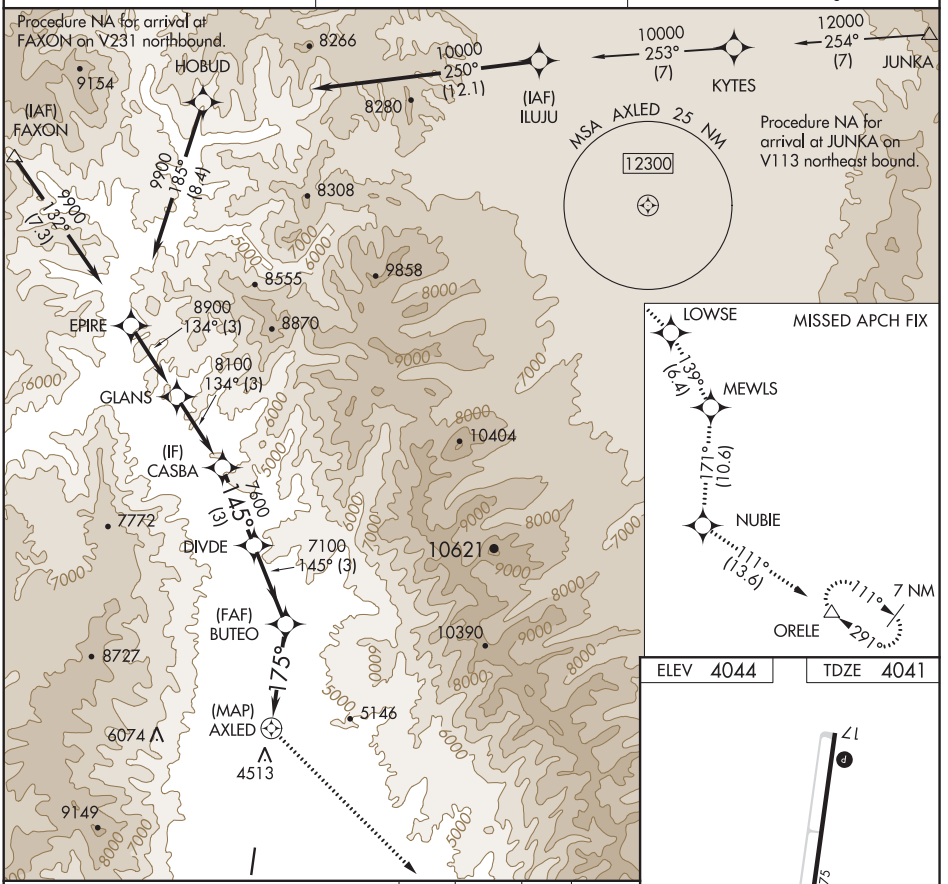
LEMHI COUNTY (SMN)

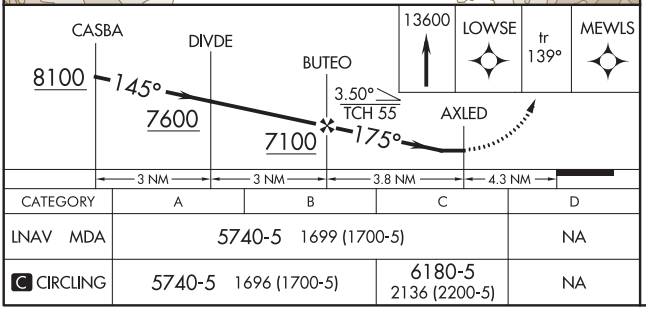
T NA -14°C

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.

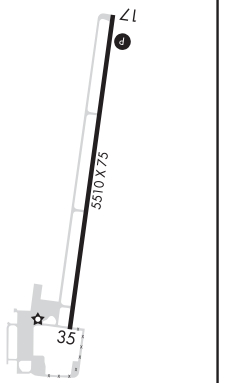
AWOS-3PT	SALT LAKE CENTER	UNICOM
135.075	132.4 338.3	122.8 (CTAF) L





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

ELEV 4044 TDZE 4041



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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SALMON, IDAHO
Orig 31MAR16

45°07'N-113°53'W

LEMHI COUNTY (SMN)
RNAV (GPS) RWY 17

RNAV (GPS)-D

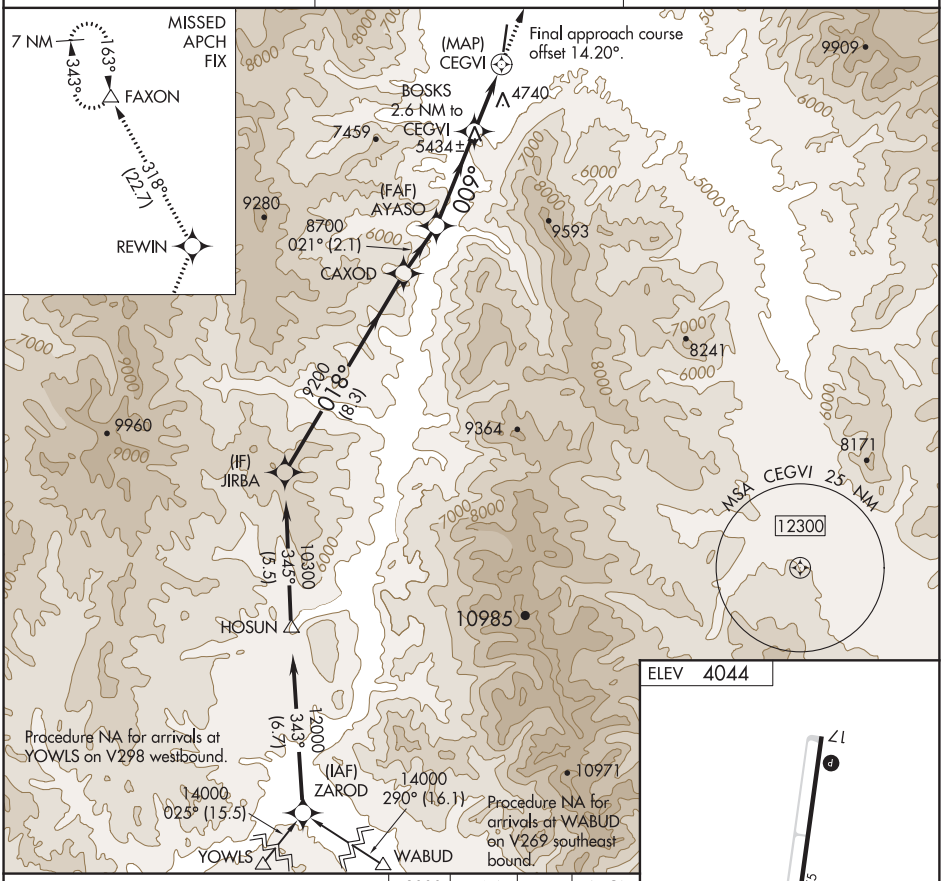
LEMHI COUNTY (SMN)

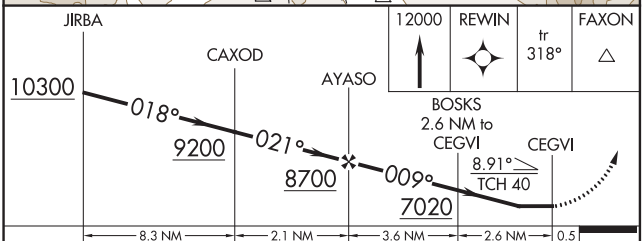
APP CRS	Rwy Idg	N/A
009°	TDZE	N/A
	Apt Elev	4044

Circling Rwy 35 NA at night.
NA
-14°C
DME/DME RNP-0.3 NA.
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

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

NW-1, 30 JAN 2020 to 26 MAR 2020

SALMON, IDAHO | AL-9513 (FAA) | 19171

VOR/DME-B

LEMHI COUNTY (SMN)

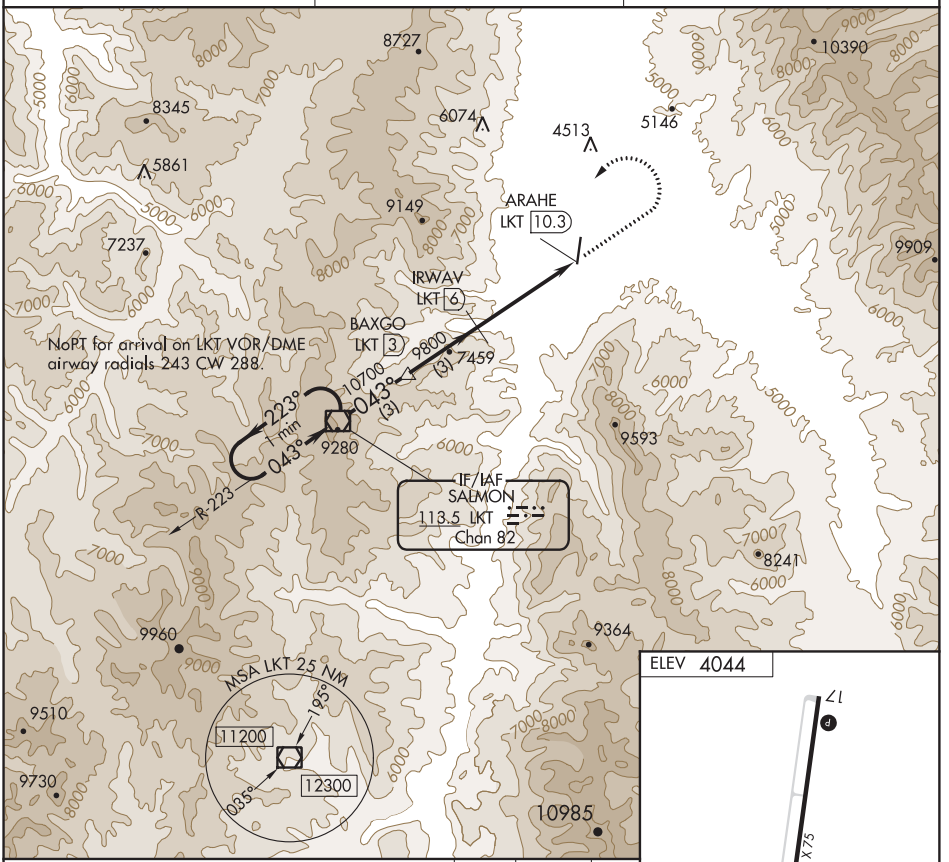
VOR/DME LKT	APP CRS	Rwy Idg	N/A
113.5	043°	TDZE	N/A
Chan 82		Apt Elev	4044

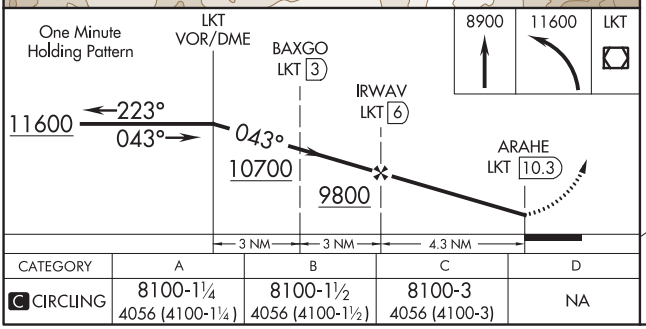
T
A NA
❄ -14°C

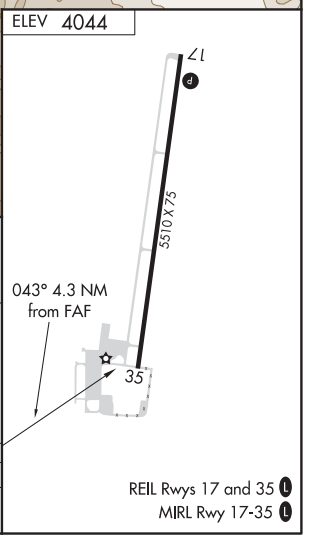
Circling NA for Cat C east of Rwy 17-35.
Night Landing: Rwy 35 NA.

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 4056 (4100-1¼)	8100-1½ 4056 (4100-1½)	8100-3 4056 (4100-3)	NA

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

NW-1, 30 JAN 2020 to 26 MAR 2020

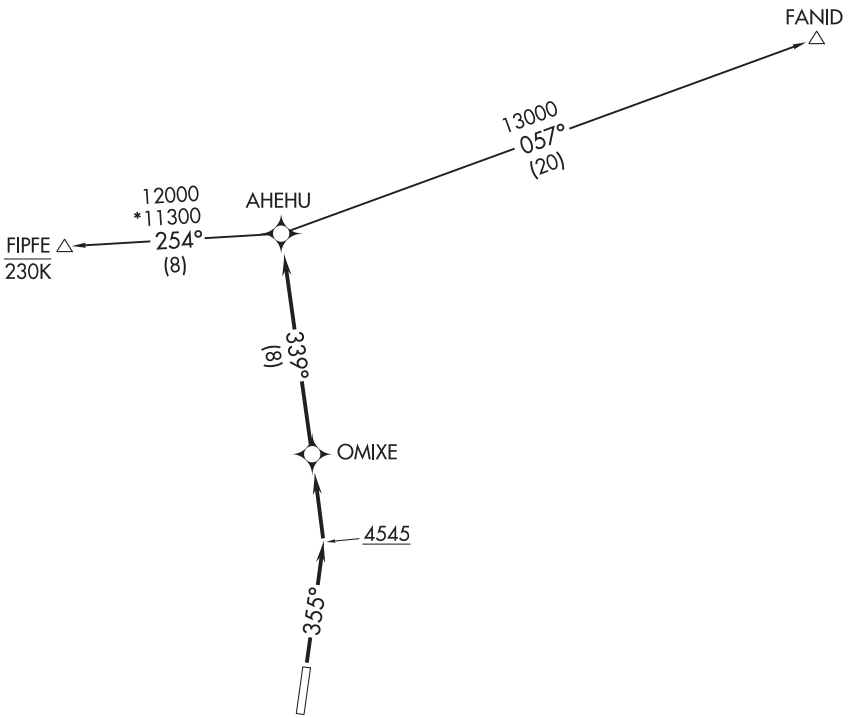
NW-1, 30 JAN 2020 to 26 MAR 2020

SALMON, IDAHO
Amdt 1 31MAR16

45°07'N-113°53'W

LEMHI COUNTY (SMN)
VOR/DME-B

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.

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)

NW-1, 30 JAN 2020 to 26 MAR 2020

SANDPOINT, IDAHO | AL-9140 (FAA) | 19059

RNAV (GPS) Y RWY 20

SANDPOINT (SZT)

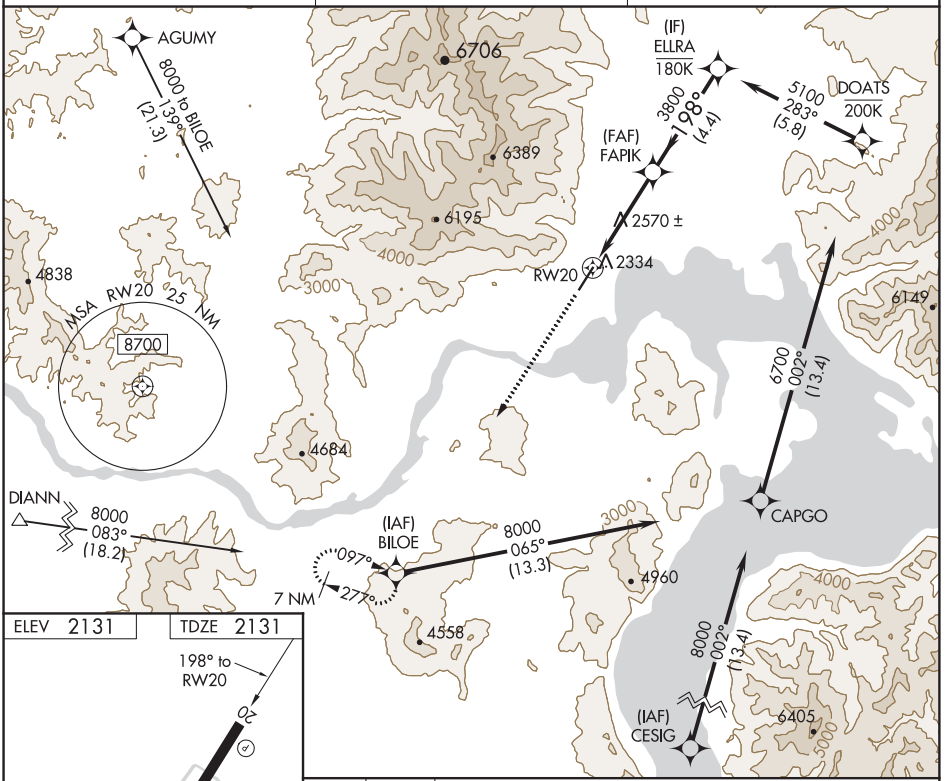
APP CRS	Rwy Idg	5501
198°	TDZE	2131
	Apt Elev	2131

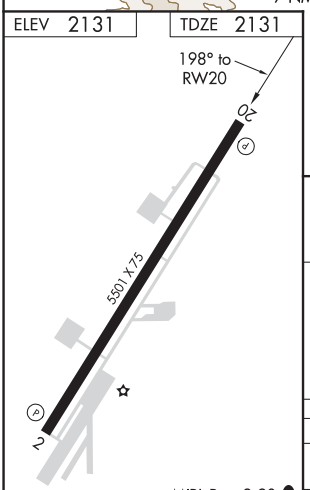
RNP APCH.

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.

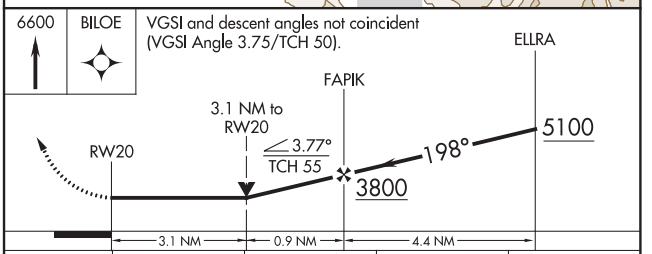
MISSED APPROACH: Climb to 6600 direct BILOE and hold, continue climb in hold to 6600.

AWOS-3	SEATTLE CENTER	UNICOM
135.425	123.95 290.55	122.7 (CTAF) L





MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L



CATEGORY	A	B	C	D
LNAV MDA	3400-1¼ 1269 (1300-1¼)	3400-1½ 1269 (1300-1½)	3400-3 1269 (1300-3)	NA
C CIRCLING	3400-1¼ 1269 (1300-1¼)	3400-1½ 1269 (1300-1½)	3400-3 1269 (1300-3)	NA

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Z RWY 20

SANDPOINT (SZT)

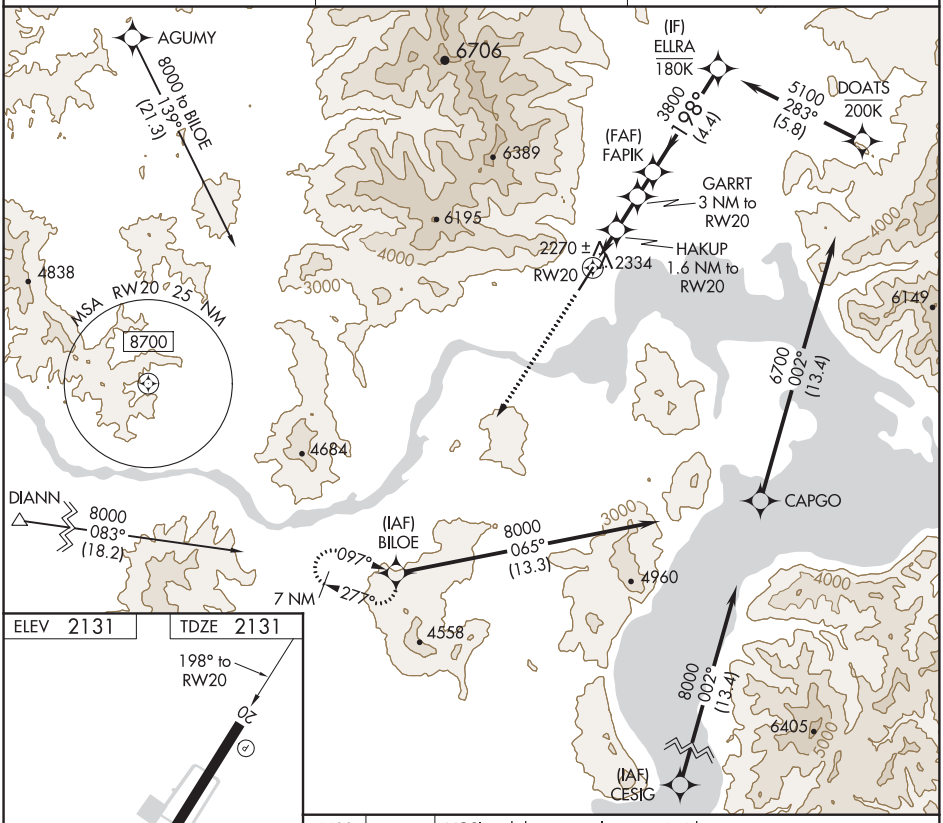
WAAS	APP CRS	Rwy Idg	5501
CH 99542	198°	TDZE	2131
W20A		Apt Elev	2131

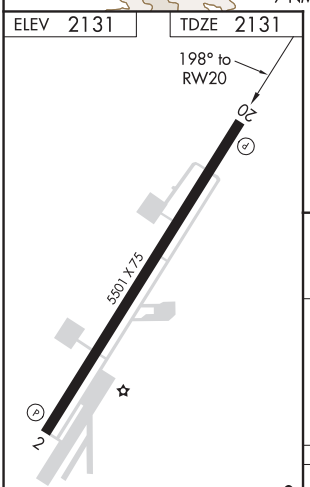
RNP APCH.

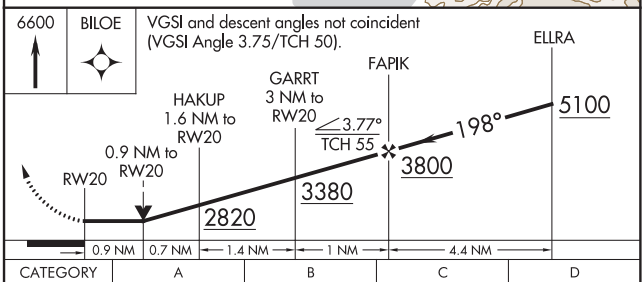
T A Rwy 20 helicopter visibility reduction below ¾ SM NA. When local altimeter not received, procedure NA.

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







CATEGORY	A	B	C	D
LP MDA*	2520-1 389 (400-1)		2520-1⅛ 389 (400-1⅛)	NA

MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SANDPOINT, IDAHO | AL-9140 (FAA) | 17341

RNAV (GPS)-B

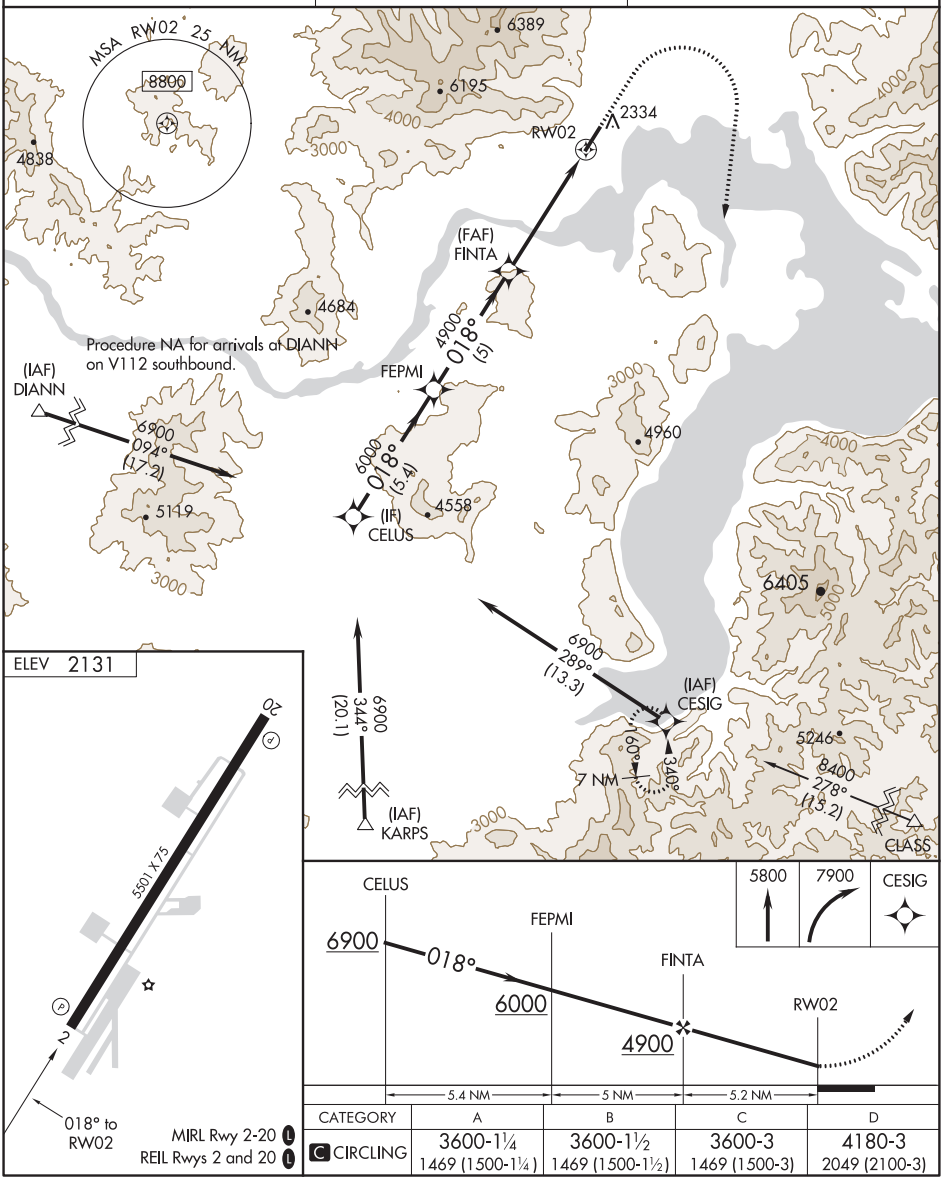
SANDPOINT (SZT)

APP CRS	Rwy Idg	N/A
018°	TDZE	N/A
	Apt Elev	2131

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 1469 (1500-1¼)	3600-1½ 1469 (1500-1½)	3600-3 1469 (1500-3)	4180-3 2049 (2100-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LOC-A

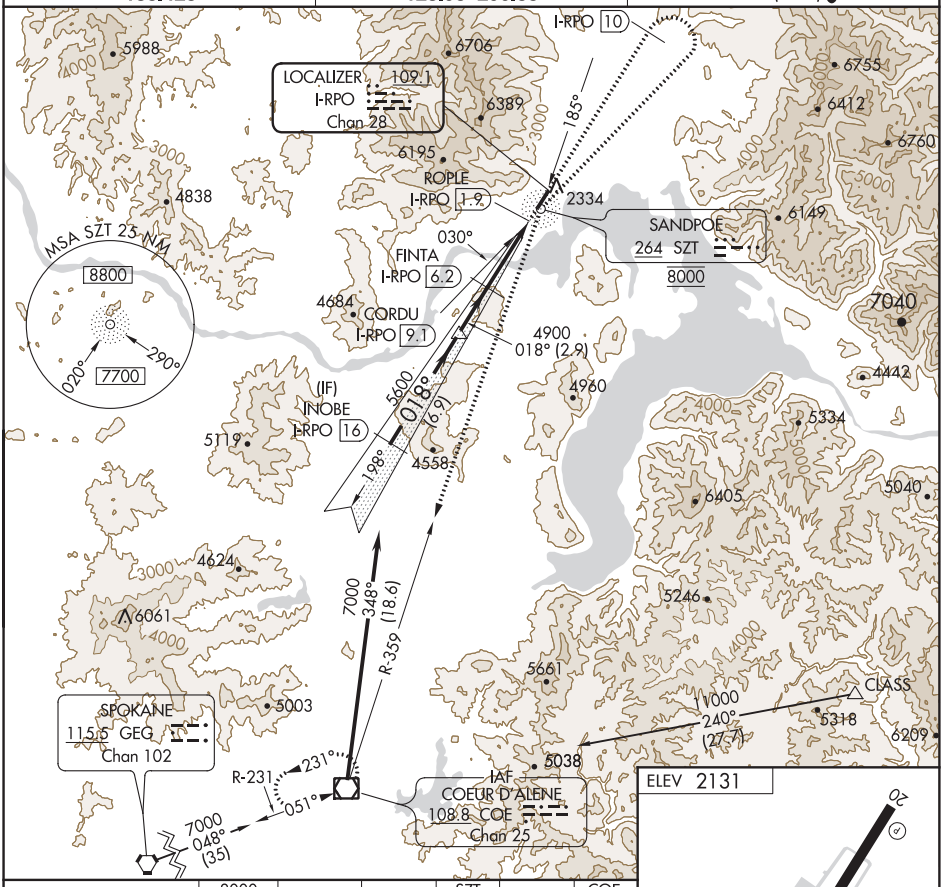
SANDPOINT (SZT)

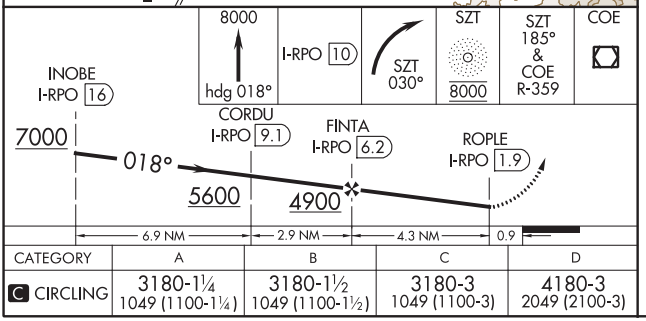
LOC/DME I-RPO	APP CRS	Rwy Idg	N/A
109.1	018°	TDZE	N/A
Chan 28		Apt Elev	2131

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 1049 (1100-1¼)	3180-1½ 1049 (1100-1½)	3180-3 1049 (1100-3)	4180-3 2049 (2100-3)

MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SARATOGA, WYOMING | AL-9074 (FAA) | 19283

RNAV (GPS) RWY 5

SHIVELY FIELD (SAA)

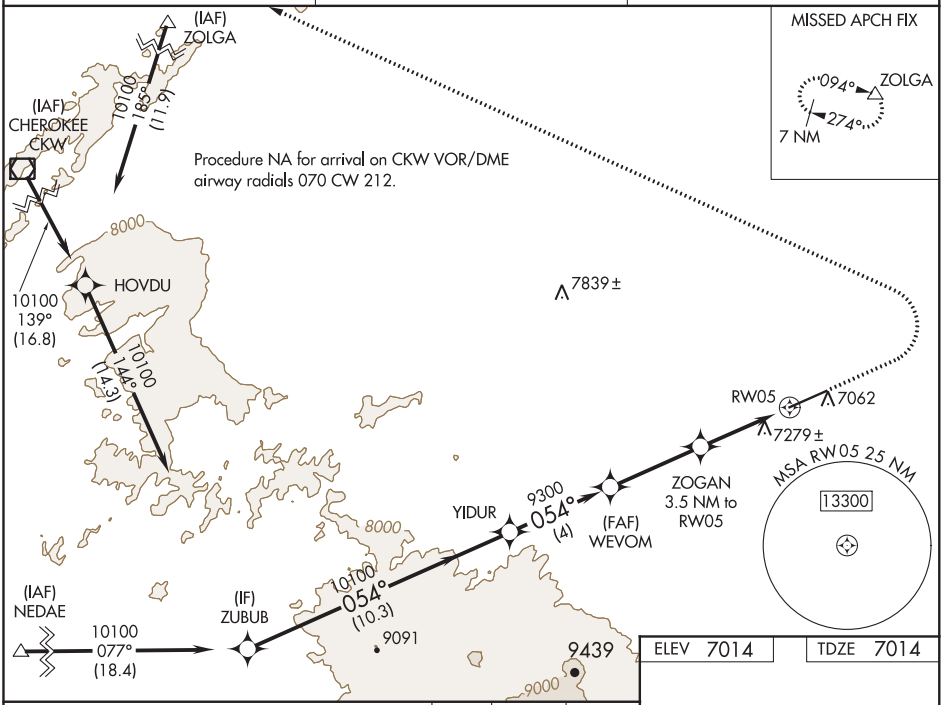
WAAS	APP CRS	Rwy Idg	8801
CH 65820	054°	TDZE	7014
W05A		Apt Elev	7014

RNP APCH.

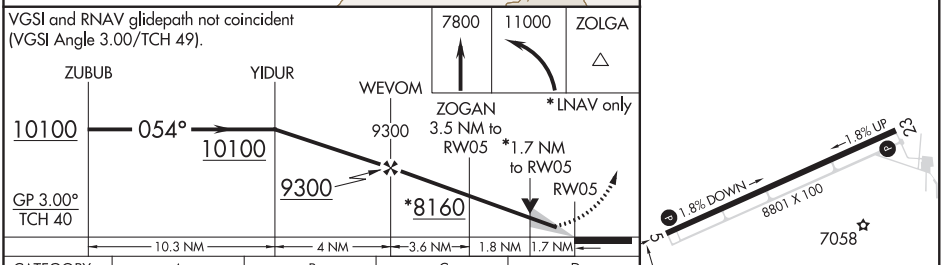
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 54°C.

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



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	N/A
151°	TDZE	N/A
	Apt Elev	7015

RNAV (GPS)-B

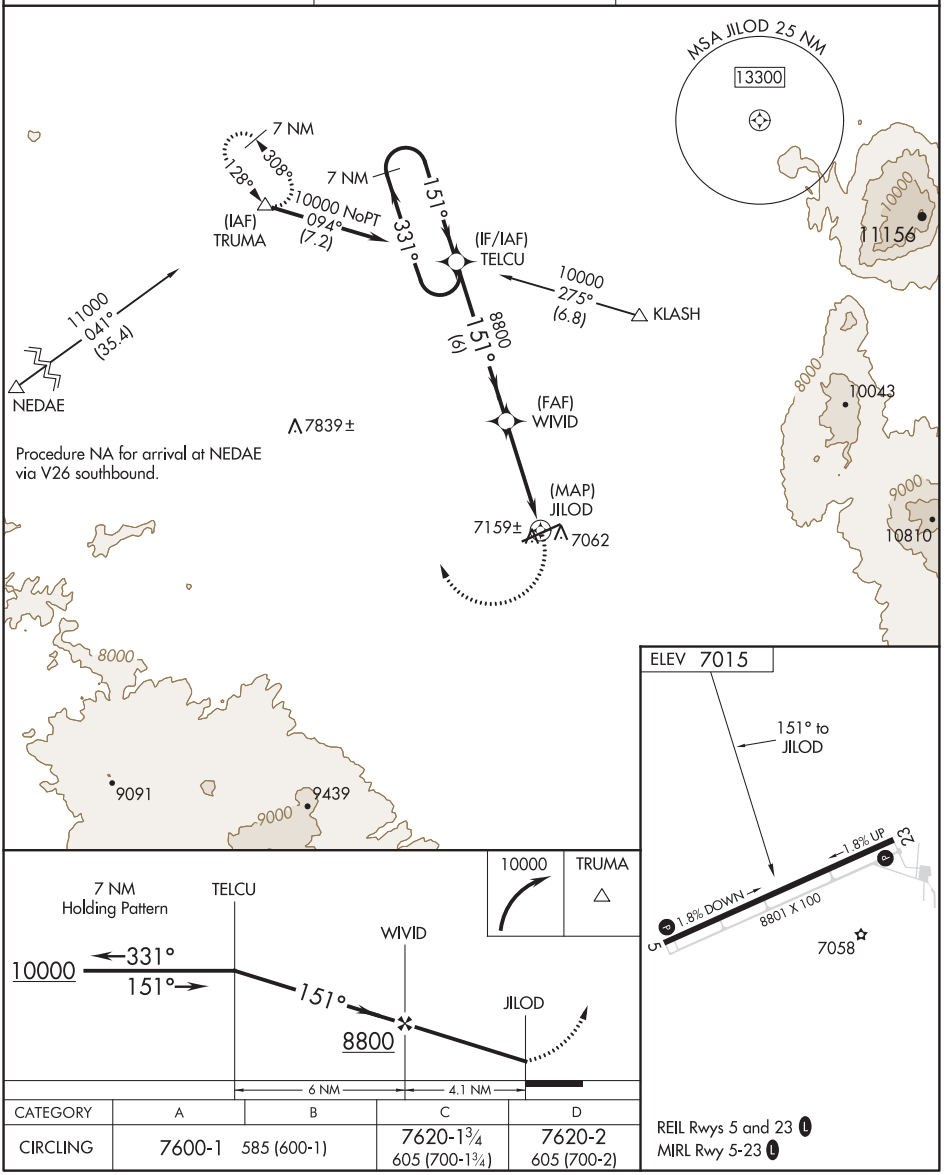
SHIVELY FIELD (SAA)

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, when authorized by ATC, climb-in-hold to 13000.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SARATOGA, WYOMING | AL-9074 (FAA) | 19283

NDB SAA	APP CRS	Rwy Idg	N/A
266	150°	TDZE	N/A
		Apt Elev	7015

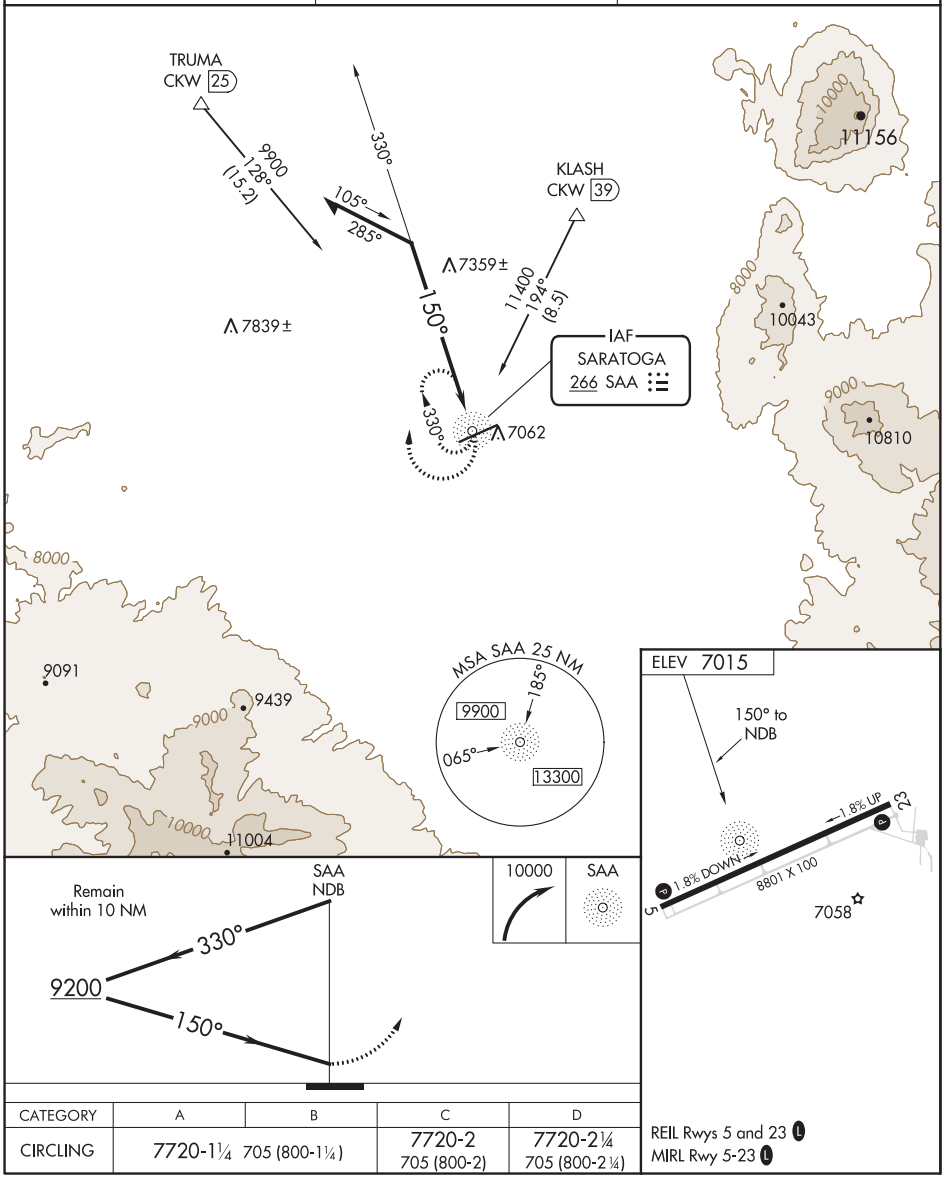
NDB-A
SHIVELY FIELD (SAA)

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	5100
CH 65720	152°	TDZE	58
W15A		Apt Elev	58

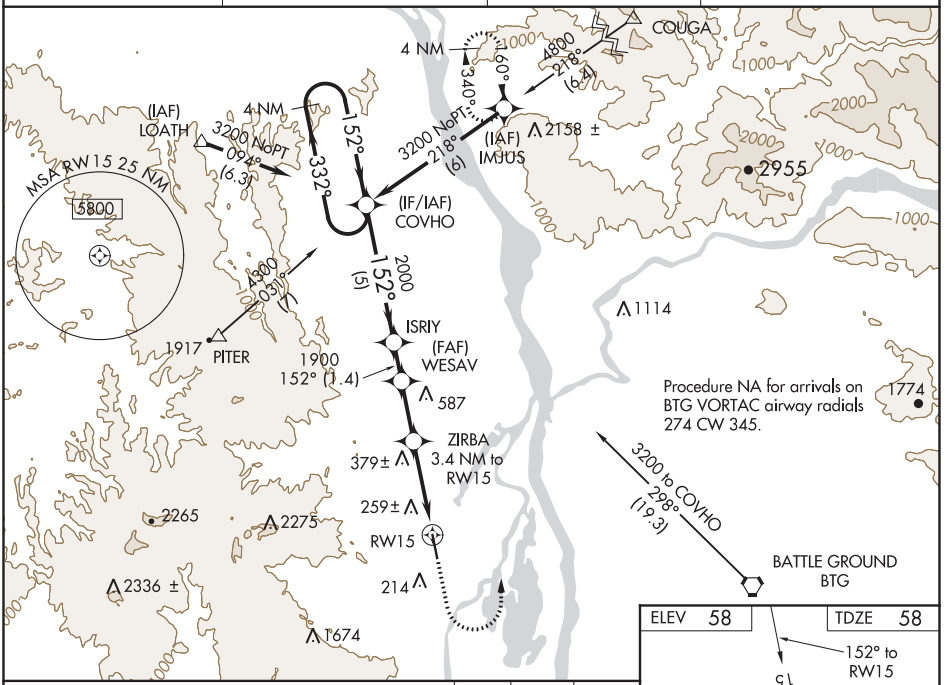
RNAV (GPS) RWY 15

SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

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).

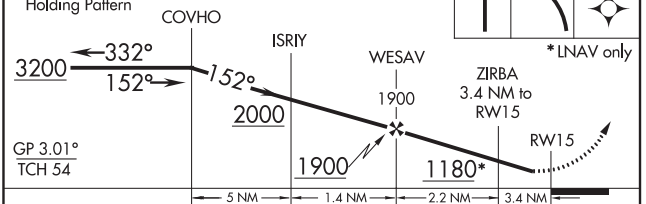
MISSED APPROACH: Climb to 700 then climbing left turn to 3600 direct IMJUS and hold.

ASOS	PORTLAND APP CON	CLNC DEL	UNICOM
135.875	124.35 299.2	121.65	122.8 (CTAF) L

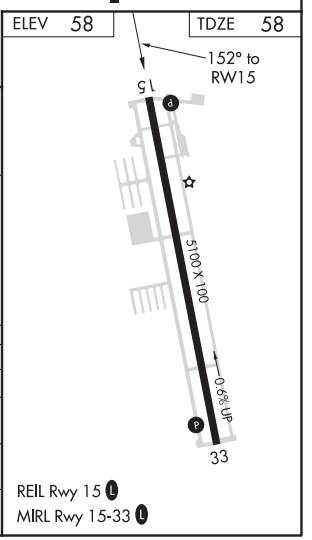


VGSI and RNAV glidepath not coincident. (VGSI Angle 3.73 / TCH 41).

*LNAV only



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)



REIL Rwy 15 L
MIRL Rwy 15-33 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SCAPPOOSE, OREGON

AL-6314 (FAA)

19115

LOC/DME RWY 15

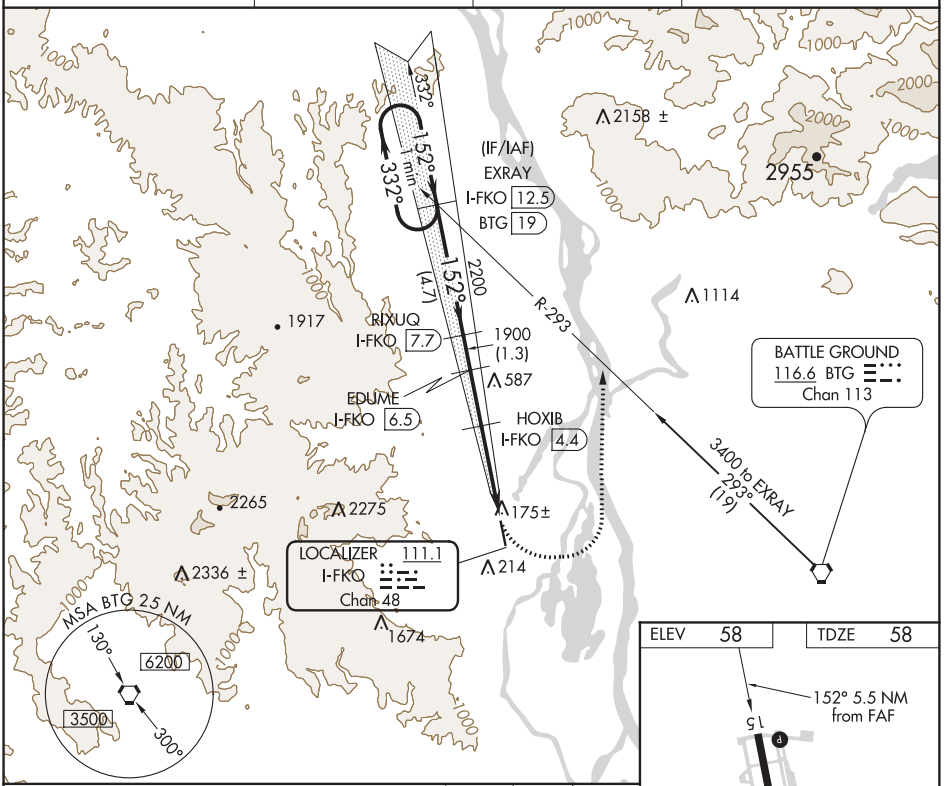
SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

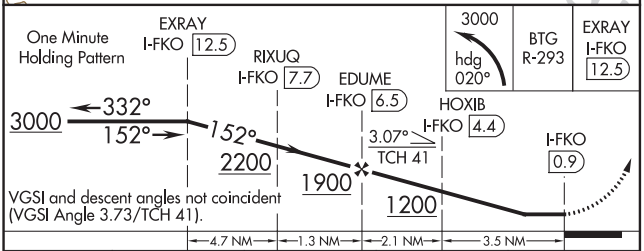
LOC/DME I-FKO	APP CRS	Rwy Idg 5100
111.1	152°	TDZE 58
Chan 48		Apt Elev 58

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.

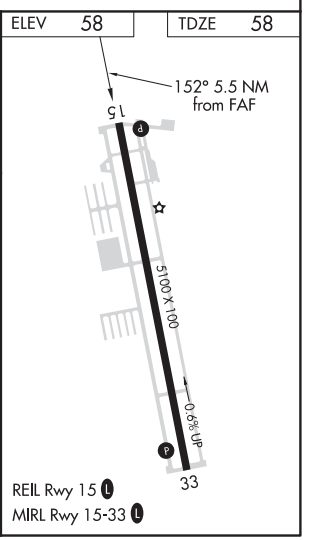
MISSED APPROACH: Climbing left turn to 3000 on heading 020° and on BTG VORTAC R-293 to EXRAY/I-FKO 12.5 DME and hold.

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)



SCAPPOOSE, OREGON

Amdt 3B 25JUN15

45°46′N-122°52′W

SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

LOC/DME RWY 15

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC BTG	APP CRS	Rwy Idg	N/A
116.6	255°	TDZE	N/A
Chan 113		Apt Elev	58

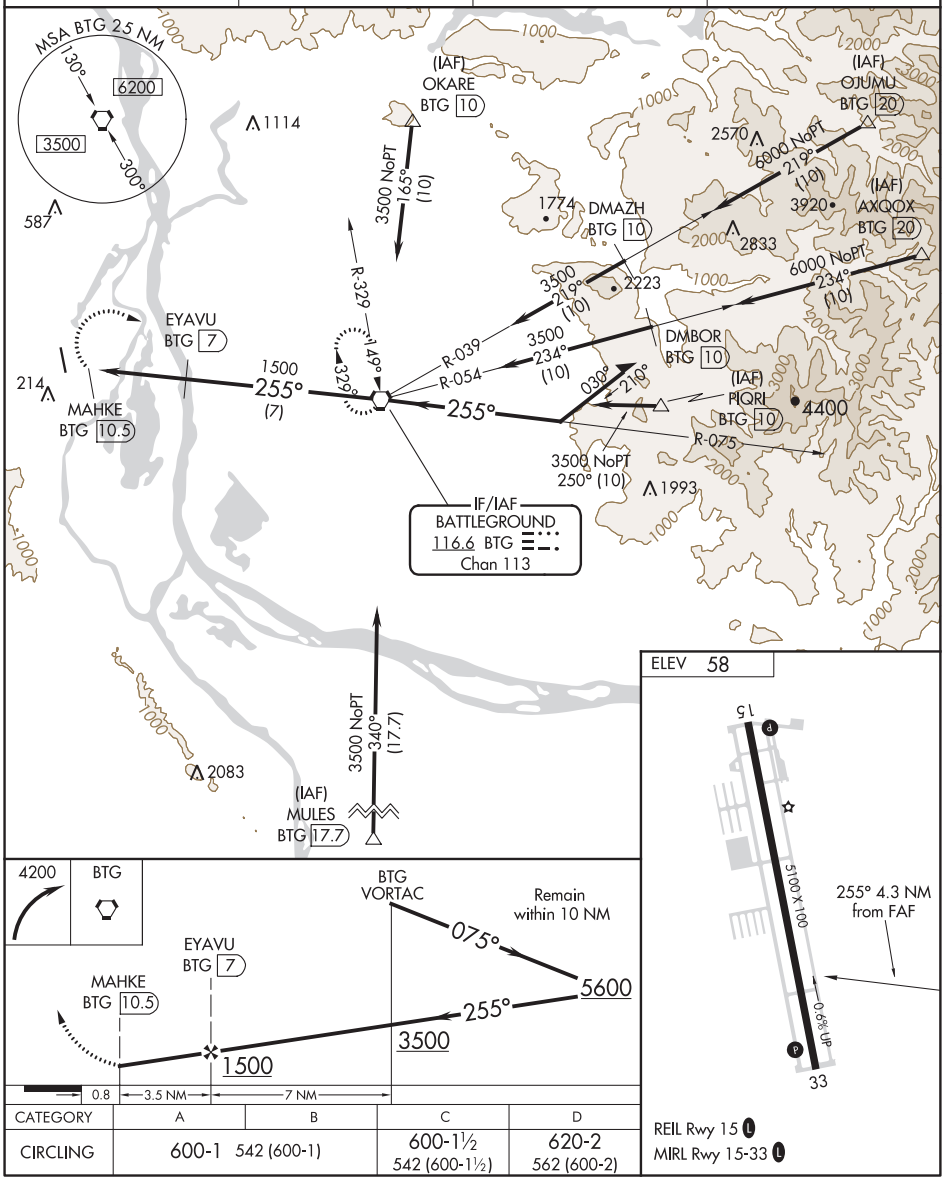
VOR/DME-A

SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

T A 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, 30 JAN 2020 to 26 MAR 2020

SCOBEY, MONTANA | AL-9500 (FAA) | 19283

RNAV (GPS) RWY 12

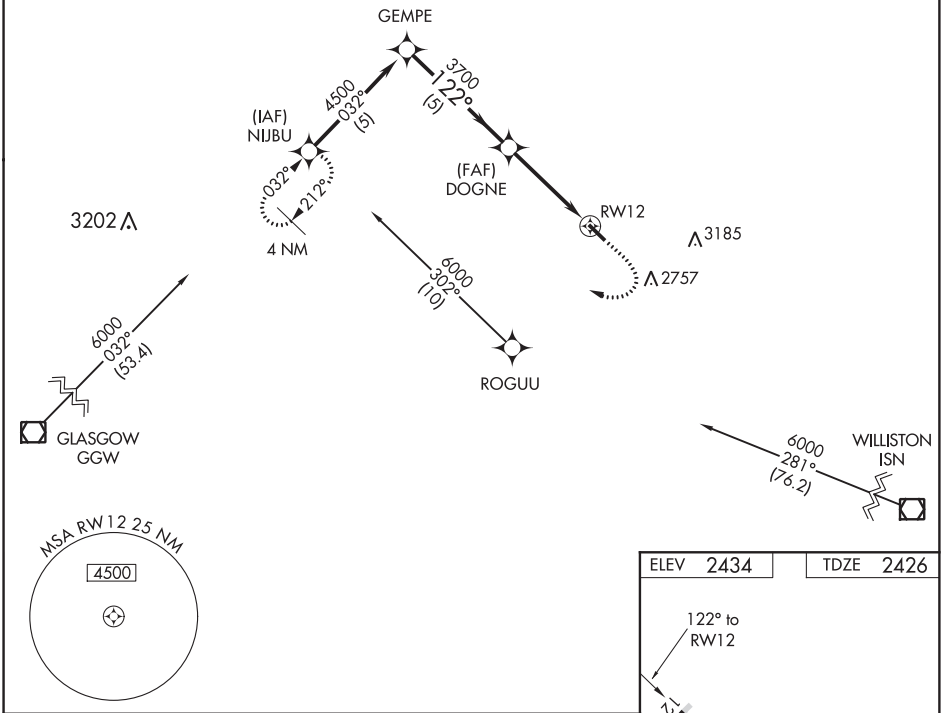
SCOBEY (9S2)

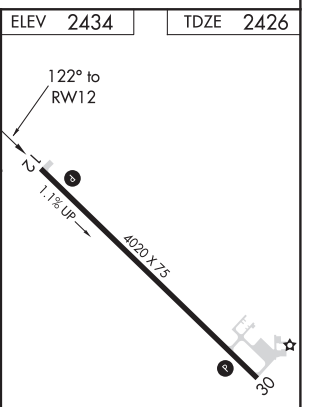
APP CRS	Rwy Idg	4020
122°	TDZE	2426
	Apt Elev	2434

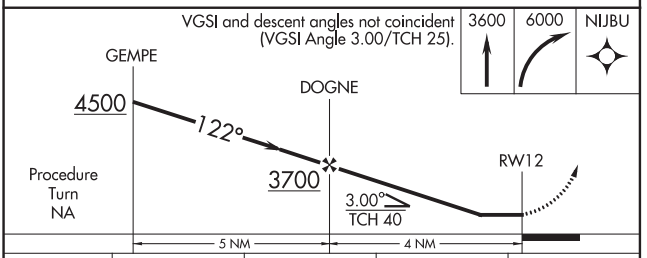
DME/DME RNP-0.3 NA. Use Wolf Point altimeter setting; when not received procedure not authorized. Helicopter visibility reduction below ¾ SM NA.

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	

SCOBEY, MONTANA
Orig-C 10DEC15

48°48'N - 105°26'W

SCOBEY (9S2)

RNAV (GPS) RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-BFI	APP CRS	Rwy Idg	9120
110.9	135°	TDZE	18
Chan 46		Apt Elev	22

ILS or LOC RWY 14R

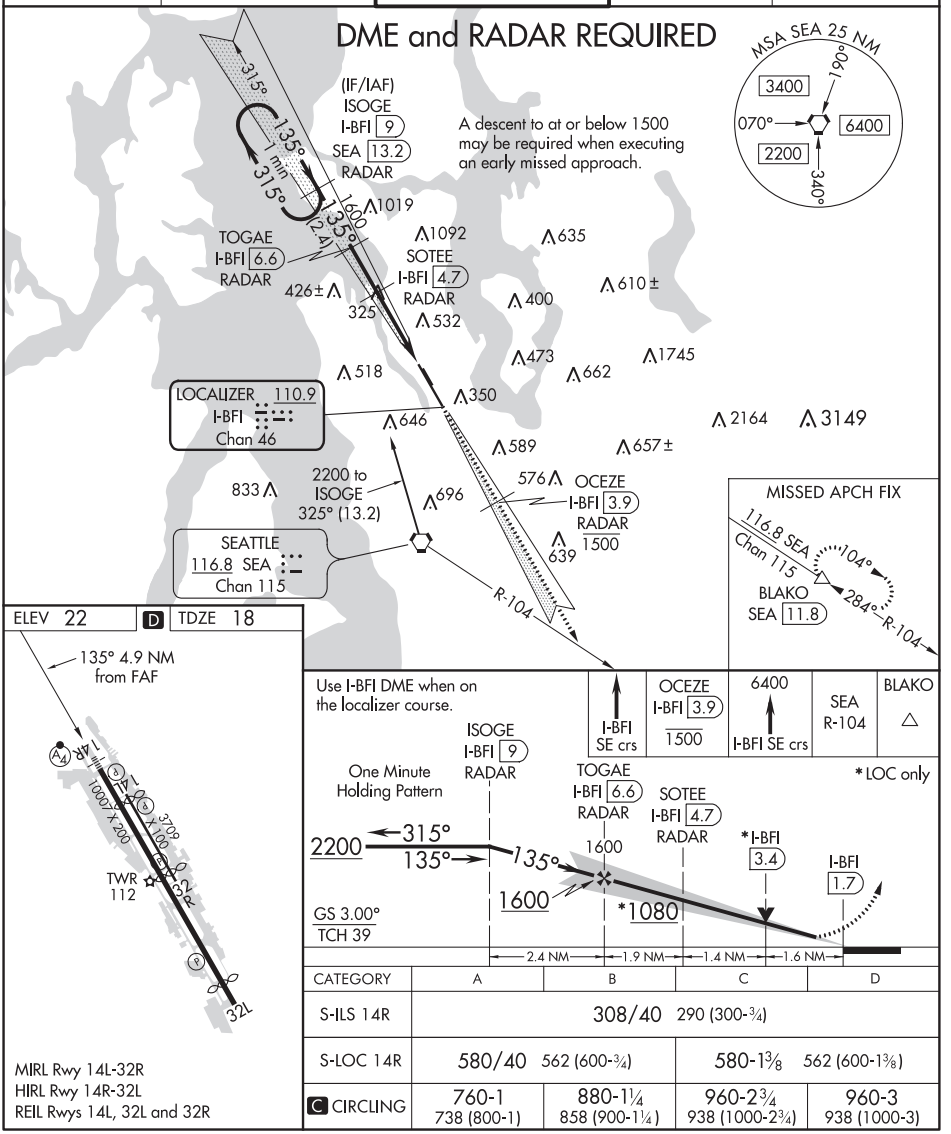
BOEING FIELD/KING COUNTY INTL (BFI)

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.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-384 (FAA) | 19283

ILS or LOC RWY 32L

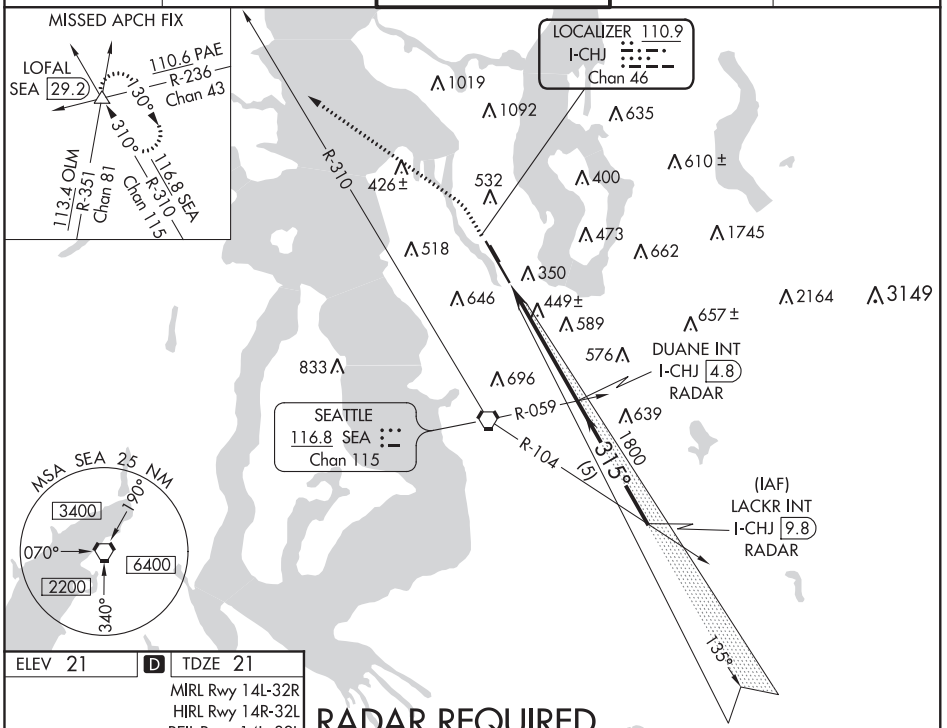
BOEING FIELD/KING COUNTY INTL (BFI)

LOC/DME I-CHJ	APP CRS	Rwy Idg	9120
110.9	315°	TDZE	21
Chan 46		Apt Elev	21

Helicopter visibility reduction below ¾ SM NA.

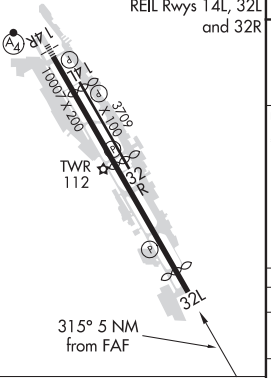
MISSED APPROACH: Climb to 700 then climbing left turn to 6000 on heading 290° and SEA R-310 to LOFAL INT/SEA 29.2 DME and hold, continue climb-in-hold to 6000.

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 21 | D | TDZE 21

MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R



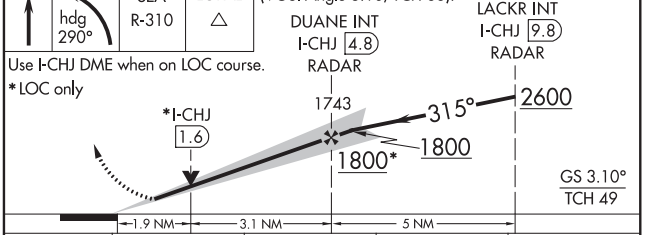
FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

RADAR REQUIRED

700 ↑	6000 hdg 290°	SEA R-310	LOFAL △

Use I-CHJ DME when on LOC course.
*LOC only

VGSI and ILS glidepath not coincident (VGSI Angle 3.10/TCH 66).



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)
CIRCLING	780-1 759 (800-1)	840-1¼ 819 (900-1¼)	860-2½ 839 (900-2½)	960-3 939 (1000-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 14R

BOEING FIELD/KING COUNTY INTL (BFI)

APP CRS	Rwy Idg	9120
135°	TDZE	18
	Apt Elev	22

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

Procedure NA for arrivals at LOFAL on V287 westbound and V4 northbound.

LOFAL

2900 to JUGOK 132° (113.9)

(IAF) ZUVEN

3400 202° (3.6)

FOGUL (RNP 0.50)

2100 (8.5)

(IAF) JUGOK (RNP 0.50)

2100 112° (2.9)

(IF) JAMRO

1700 105° (2.4)

(2.1)

(FAF) COMMB

426±

ORABE

135° (3)

RW14R

MSA RW14R 25 NM

6200

A descent to at or below 1500 may be required when executing an early missed approach.

1019 1092 635 610± 400 532 473 1745 662 350 2164 646 589 657± 576 833 696 639

135° (5.6)

OCEZE 1500

123° (10.7)

MISSED APCH FIX

103° 7 NM BLAKO 283°

2189±

518

ELEV 22 D TDZE 18

135° to RW14R

TWR 112

10007 X 200

3709 X 100

32L

MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R

JAMRO COMMB ORABE RW14R

2100 105° 1700 135° 1024

GP 3.00° TCH 50

OCEZE I-BFI 3.9 1500 tr 135°

6400 tr 123°

BLAKO

2.4 NM 2.1 NM 3 NM

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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-384 (FAA) | 19283

RNAV (GPS) Y RWY 14R

BOEING FIELD/KING COUNTY INTL (BFI)

APP CRS	Rwy Idg	9120
135°	TDZE	18
	Apt Elev	22

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

(IAF) LOFAL

2900 132° (13.9)

Procedure NA for arrivals at LOFAL on V4-495 northwest bound.

PAINE PAE

4000 203° (9.2)

Procedure NA for arrivals at PAE VOR/DME on airway radials 163 CW 236.

(IAF) ZUVEN

2900 184° (9)

MSA RW14R 25 NM

6200

A descent to at or below 1500 may be required when executing an early missed approach.

(IF) JUGOK

1700 106° (6)

1019 745 135° 1092 635

(FAF) FISEN

ZAGRO 3.4 NM to RW14R

426± 135° 532 421 400 610±

RW14R 518 473 662 1745

350

646 589 657± 2164 3149

576

833 696 OCEZE 1500 639 123° (10.7)

MISSED APCH FIX

BLAKO 103° 283° 7 NM

ELEV 22 | D | TDZE 18

135° to RW14R

TWR 112

10007 X 200 3709 X 100 32L

MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R

JUGOK 2900 106° 1700 FISEN 3.38° TCH 50 ZAGRO 3.4 NM to RW14R 1.7 NM to RW14R 135° 1280 RW14R

OCEZE 1500 | 6400 tr 123° | BLAKO

6 NM | 1.1 NM | 1.7 NM | 1.7 NM

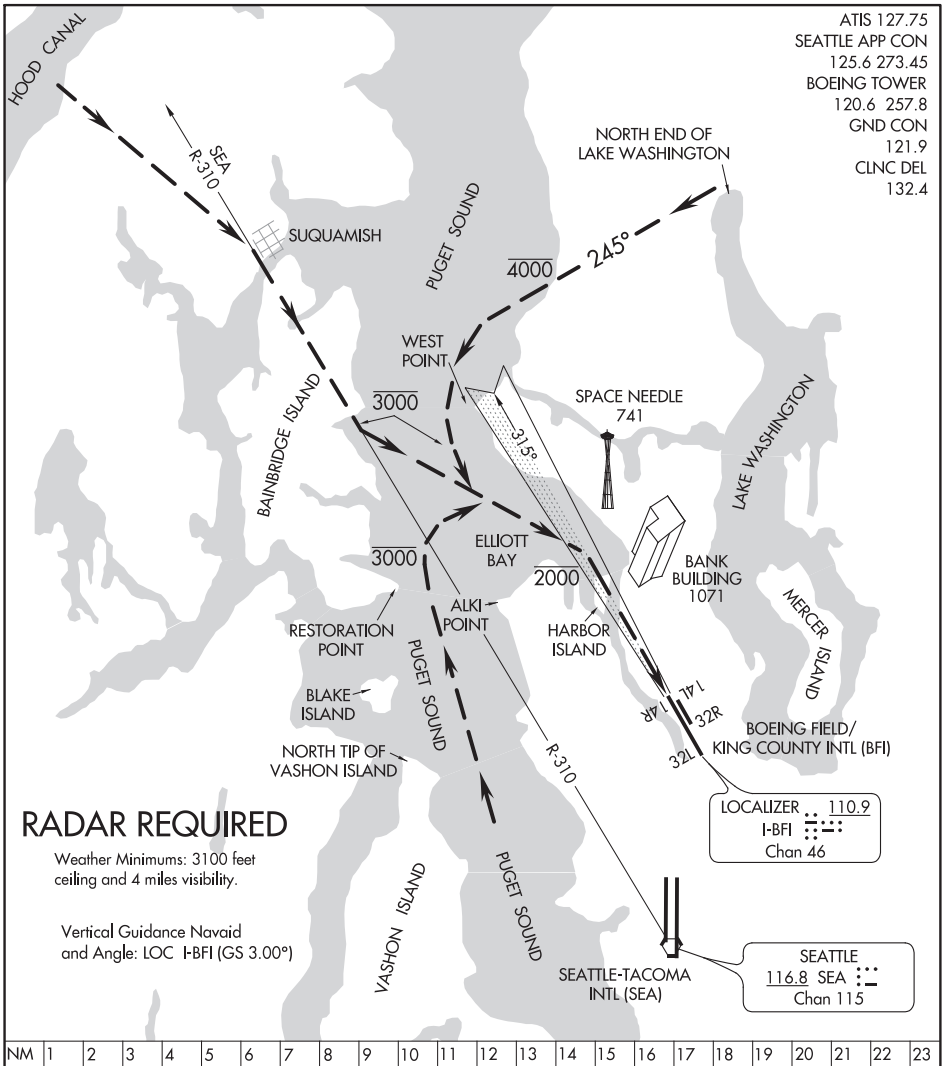
CATEGORY	A	B	C	D
LNAV MDA	680/40	662 (700-¾)	680-1¾	662 (700-1¾)
C CIRCLING	760-1 738 (800-1)	880-1¼ 858 (900-1¼)	960-2¾ 938 (1000-2¾)	960-3 938 (1000-3)

NW-1, 30 JAN 2020 to 26 MAR 2020

HARBOR VISUAL RWY 14R

AL-384 (FAA)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON



HARBOR VISUAL APPROACH RWY 14R

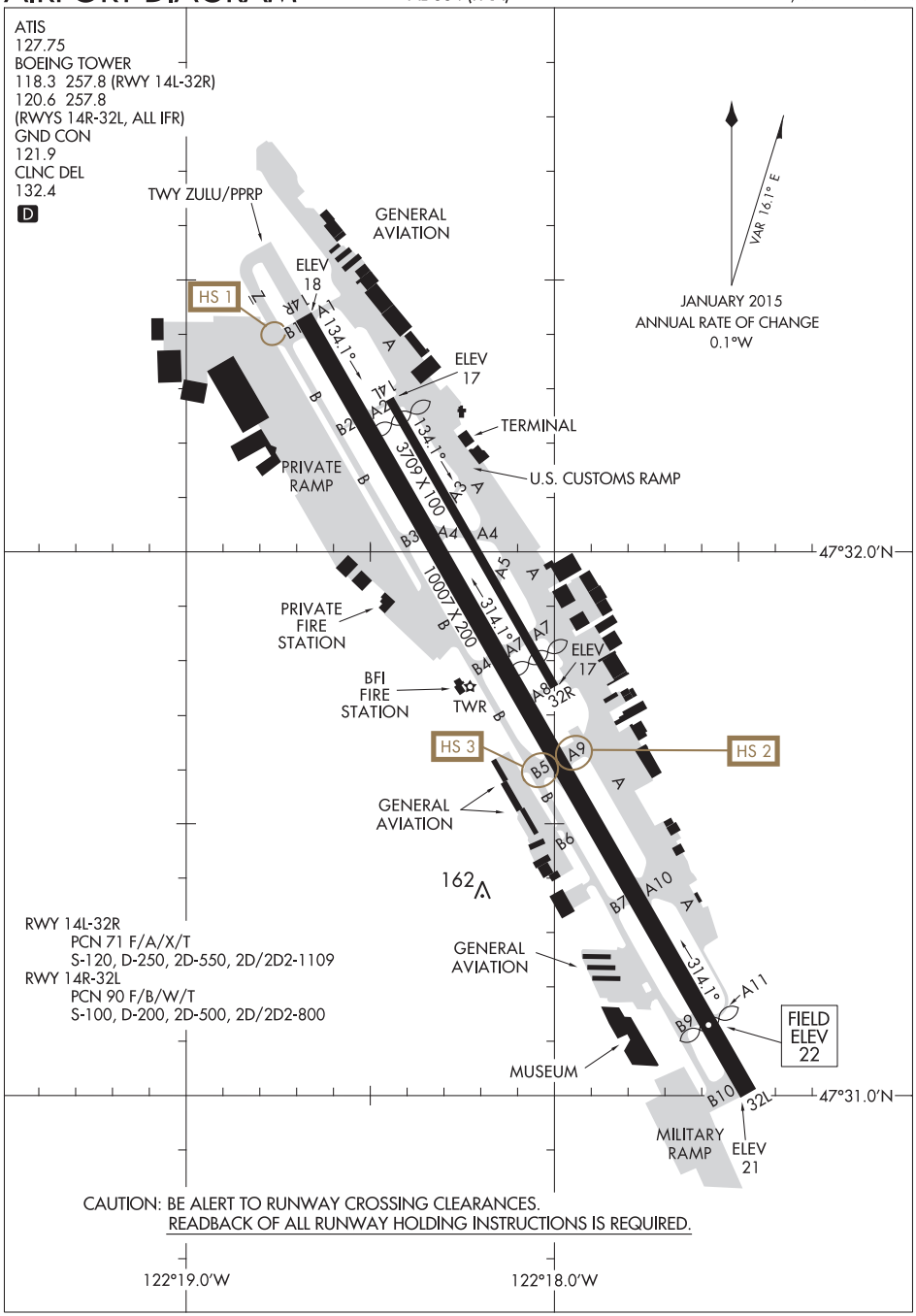
Expect radar vectors from the Northwest, over the Hood Canal on the SEA R-310; from the North and Northeast, to the north end of Lake Washington; from the Southwest, South and Southeast, to Puget Sound abeam the north tip of Vashon Island. When cleared for the Harbor Visual Approach Runway 14R, proceed 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.

19339

AIRPORT DIAGRAM

AL-384 (FAA)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON



RWY 14L-32R
PCN 71 F/A/X/T
S-120, D-250, 2D-550, 2D/2D2-1109
RWY 14R-32L
PCN 90 F/B/W/T
S-100, D-200, 2D-500, 2D/2D2-800

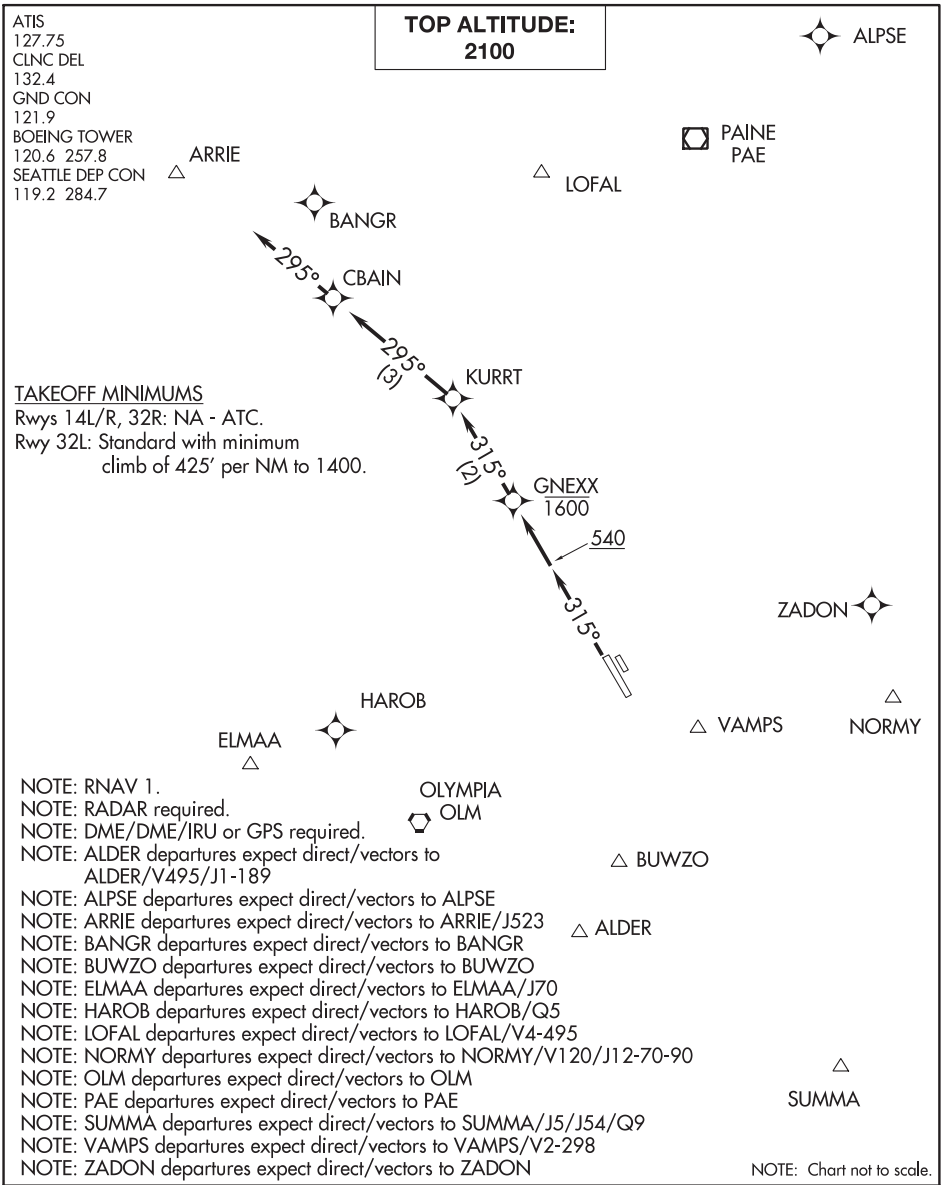
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
19339
SEATTLE, WASHINGTON
BOEING FIELD/KING COUNTY INTL (BFI)

CBAIN ONE DEPARTURE (RNAV)



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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

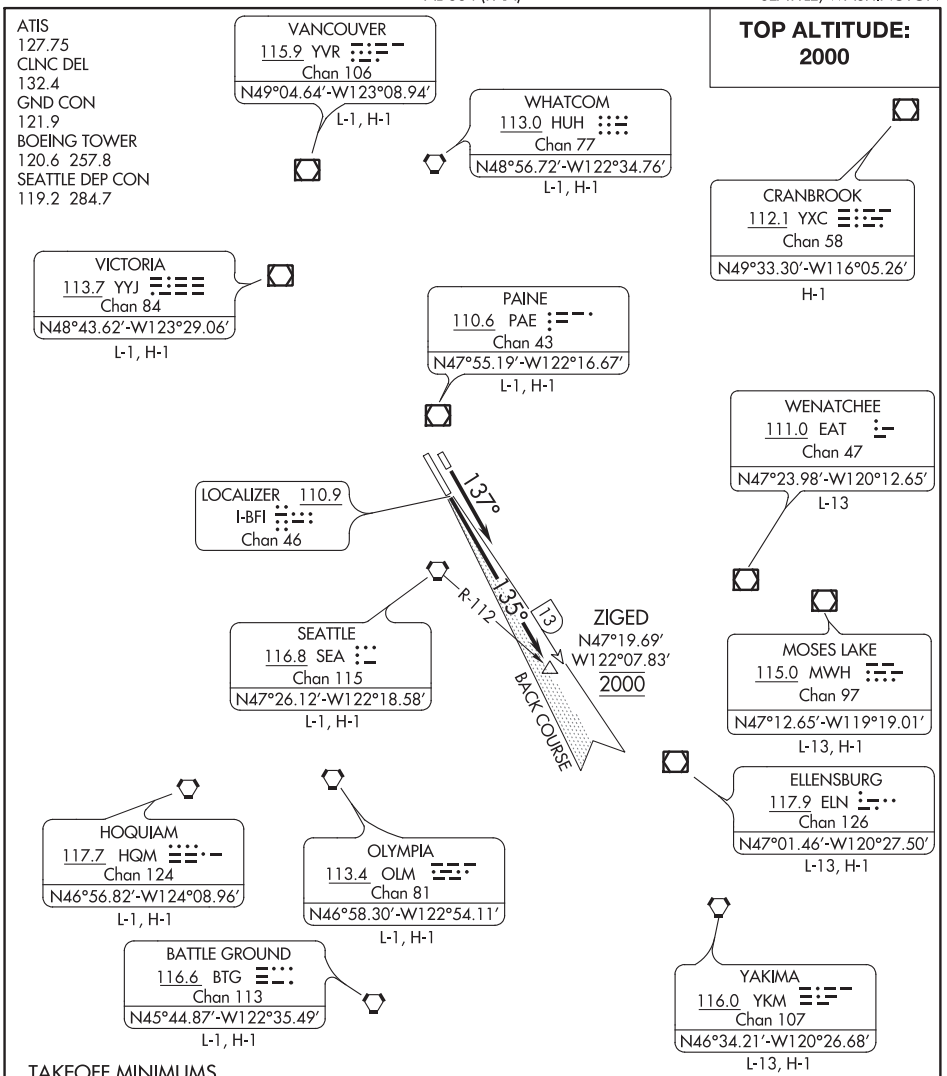
(KENT8.ZIGED) 17285

KENT EIGHT DEPARTURE

AL-384 (FAA)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020



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.

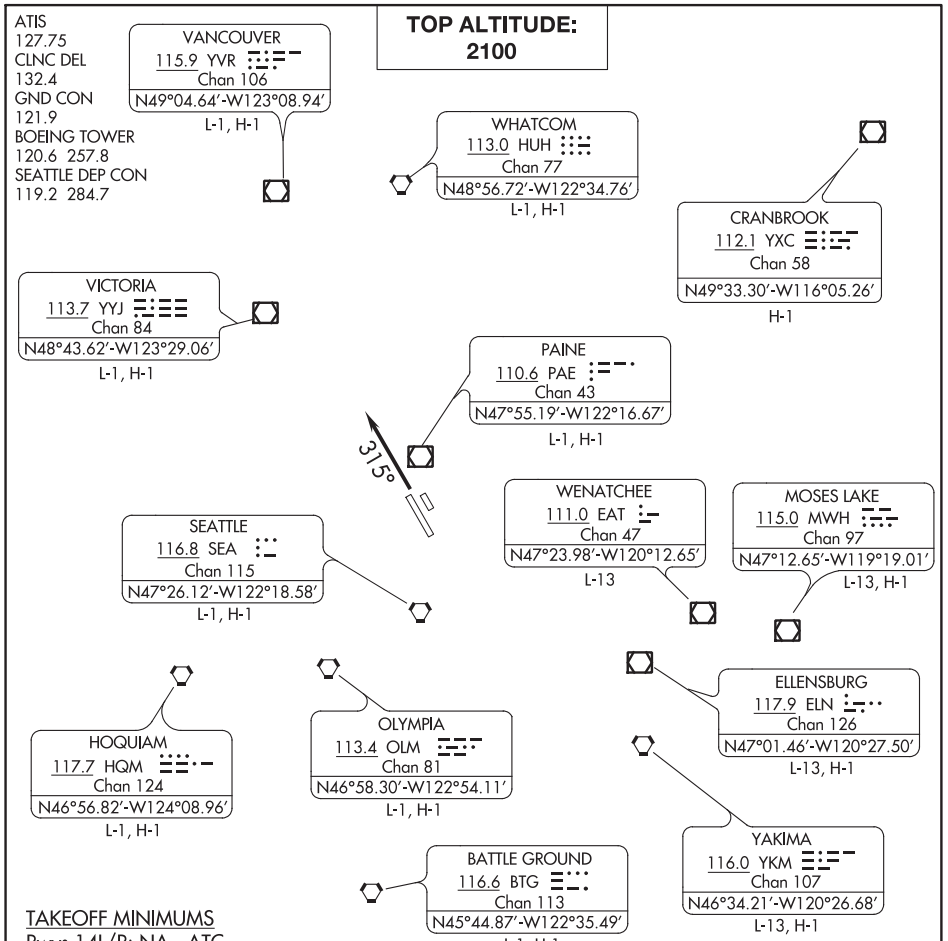
NW-1, 30 JAN 2020 to 26 MAR 2020

17285

NEEDLE ONE DEPARTURE

AL-384 (FAA)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON



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.

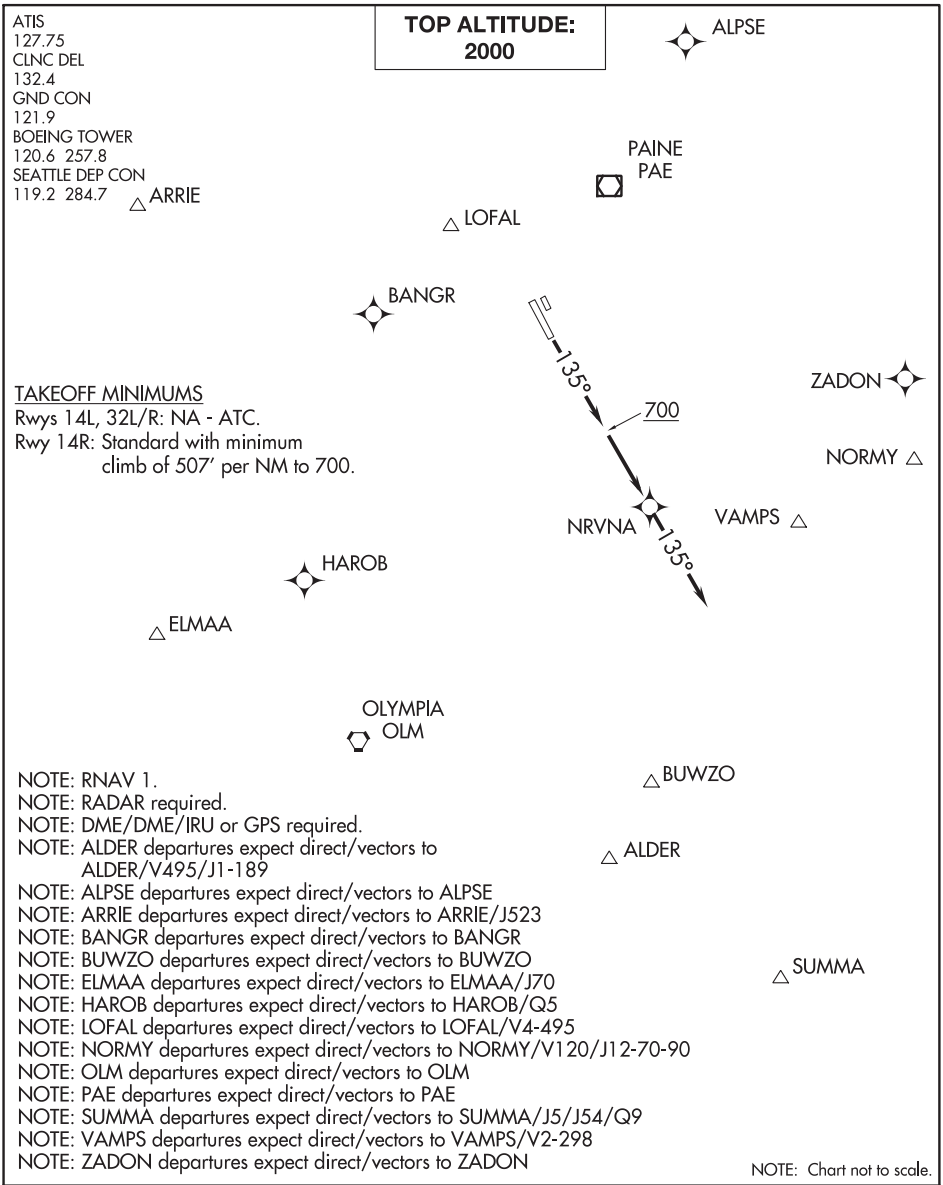
NOTE: Chart not to scale.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

NRVNA ONE DEPARTURE (RNAV)



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

ILS or LOC RWY 16C

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SZI	APP CRS		16C	16L
111.7	164°	Rwy Idg	9426	11900
Chan 54		TDZE	430	432
		Apt Elev	432	432

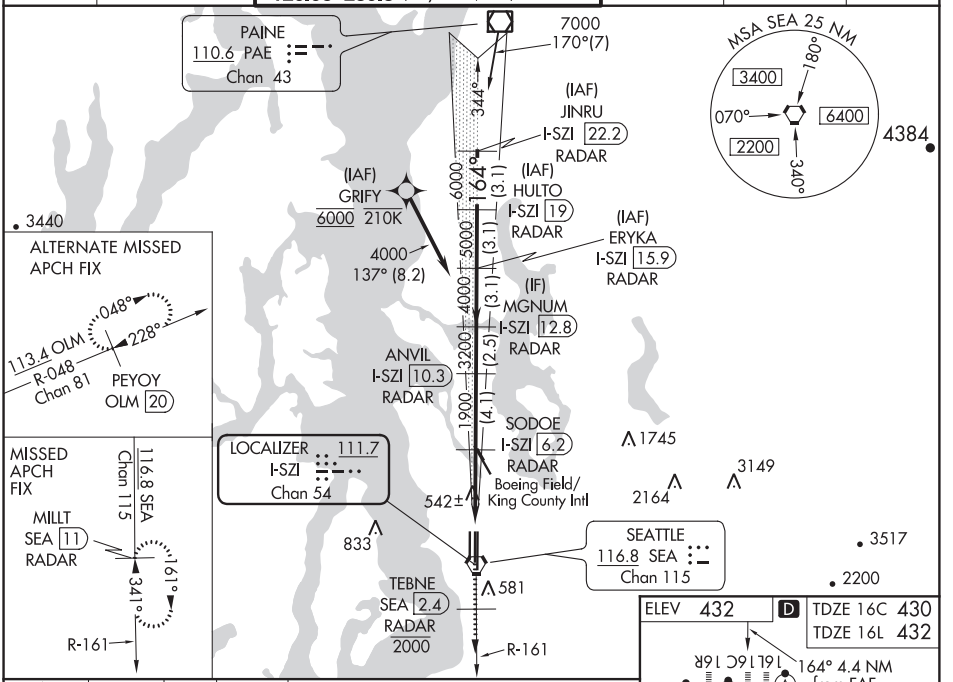
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

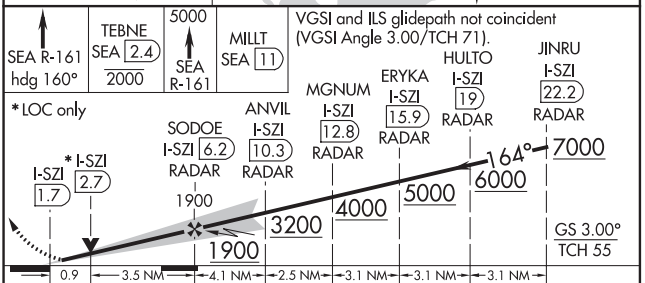
T Inop table does not apply to Sidstep 16L Cats A/B. Simultaneous approach authorized with Rwy 16R. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. For inop ALS, increase S-LOC 16C Cat C, D visibility to RVR 5500. See additional requirements on adjacent information page.

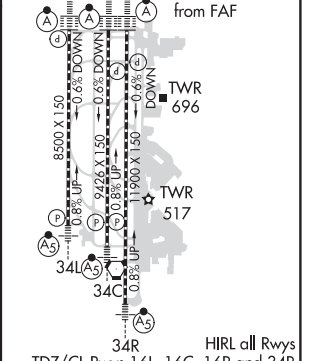
ALSF-2 Rwy 16C/L

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

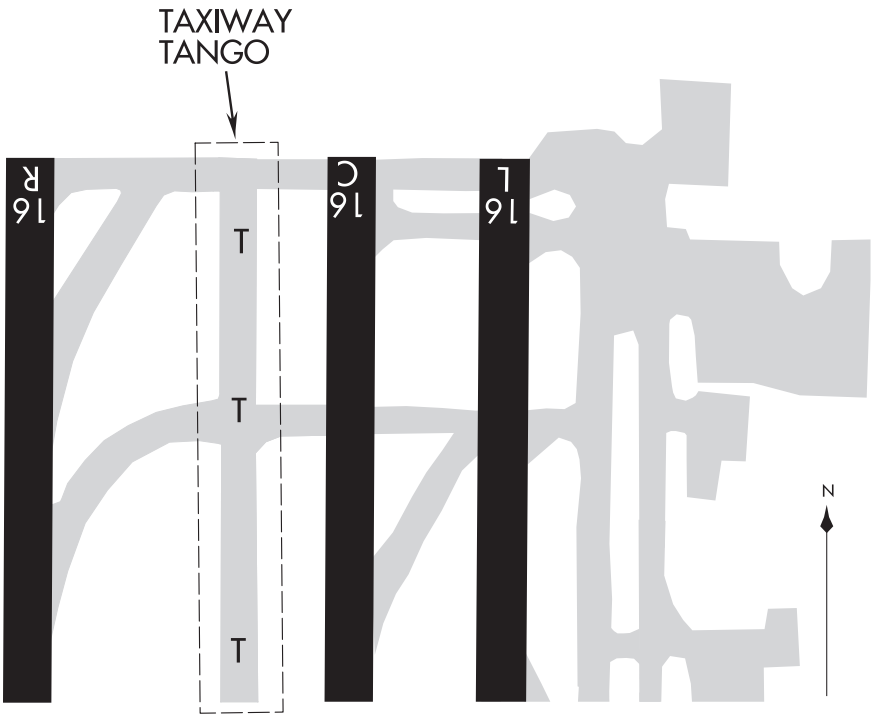
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

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.



SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

ILS or LOC RWY 16L

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SNQ	APP CRS	Rwy Idg	11900
110.3	164°	TDZE	432
Chan 40		Apt Elev	432

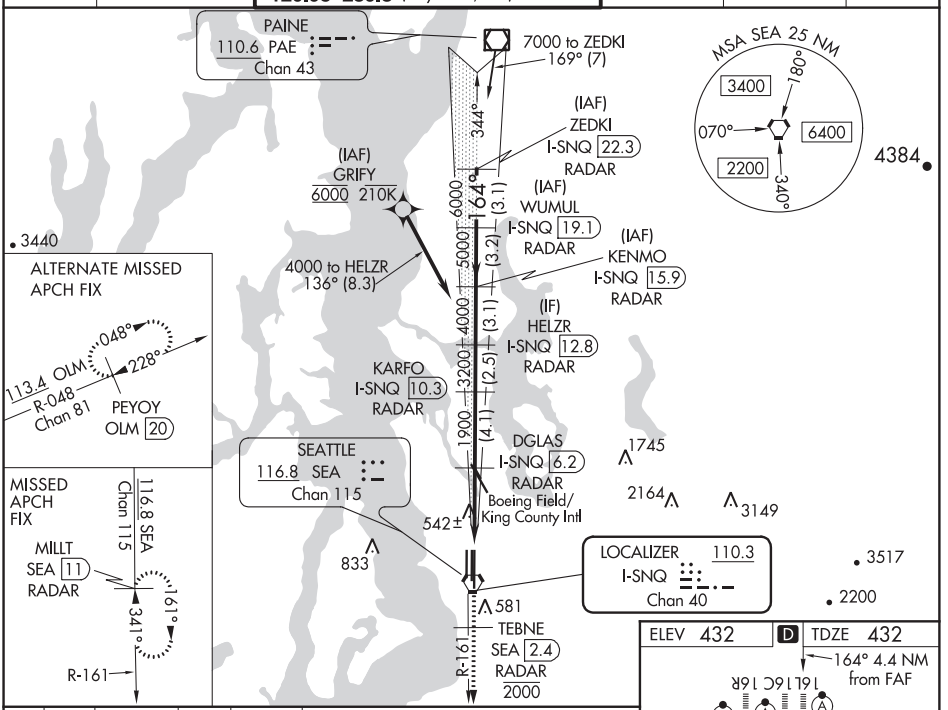
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T Simultaneous approach authorized with Rwy 16R.

ALSF-2

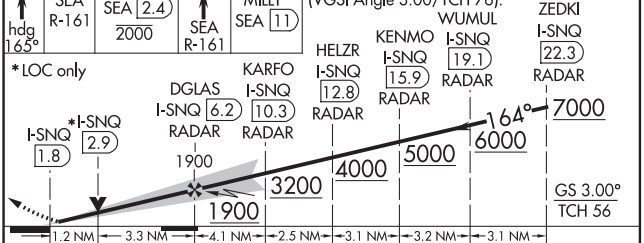
MISSED APPROACH: Climb to 900 on heading 165° then on SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

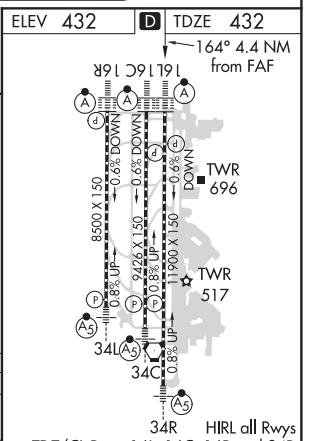
D-ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON	CLNC DEL	CPDLC
118.0	133.65 273.45	119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 16R

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-CJL	APP CRS	Rwy Idg	8500
110.75	164°	TDZE	415
Chan 44 (Y)		Apt Elev	432

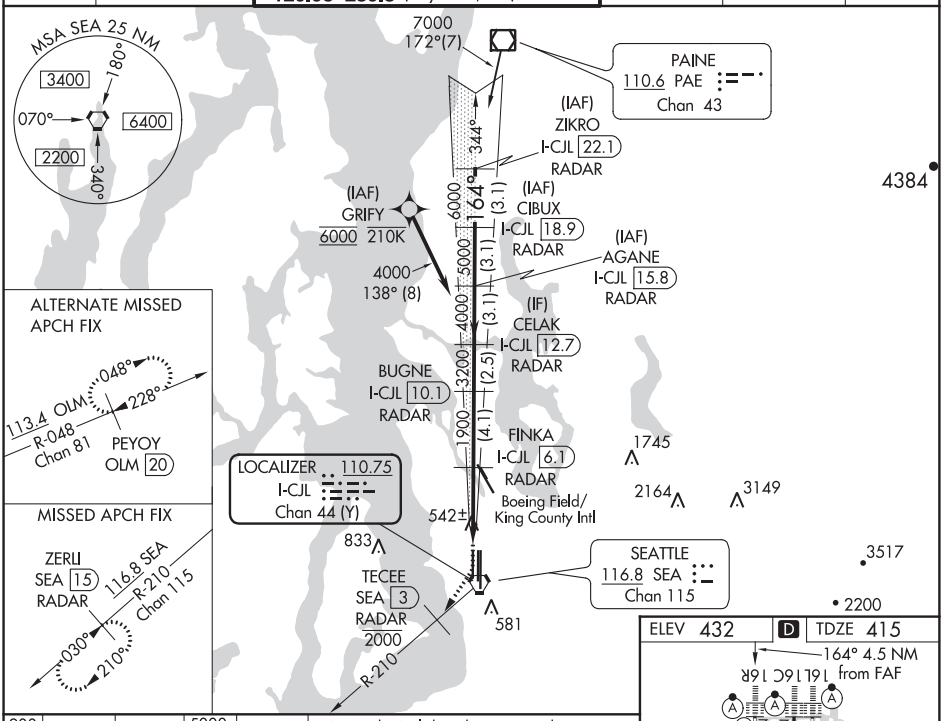
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

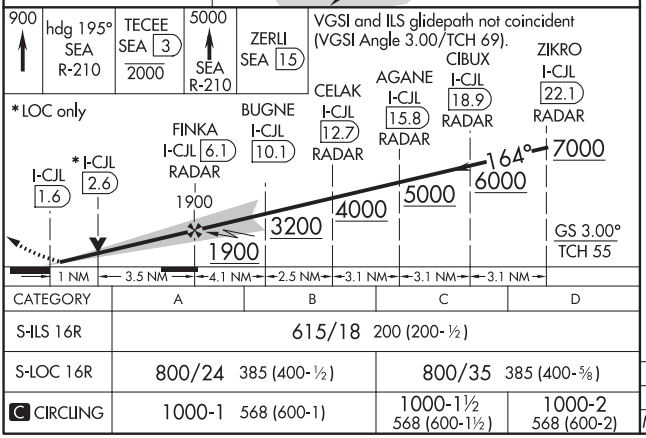
T Simultaneous approach authorized with Rwy 16L and 16C. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope.

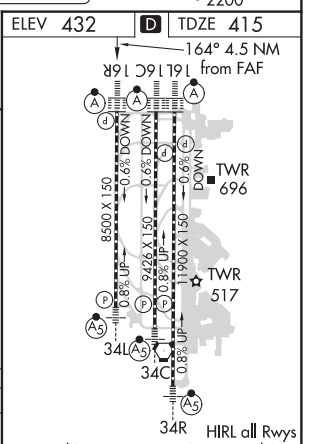
ALSF-2

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	







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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

ILS or LOC RWY 34C

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-TUC	APP CRS		34C	34R
111.7	344°	Rwy Idg	9426	11900
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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

MISSED APCH FIX
110.6 PAE Chan 43
R-341
161°
341°
MGNUM SEA 12.7 RADAR
R-164
116.8 SEA Chan 115

ALTERNATE MISSED APCH FIX
R-329
149°
329°
PAINE PAE 110.6 Chan 43

LOCALIZER 111.7 I-TUC Chan 54

R-341
COYLA SEA 4.7 RADAR 3000

1745
2164
3149
833
3517
2200
4140
3570
3921
3985
4382

SEATTLE 116.8 SEA Chan 115

507±
476±
577
UFMOP I-TUC 0.3 RADAR
RYBKA I-TUC 1.7 RADAR

TIFYS I-TUC 6.1 RADAR

2400
344°
(5)

ODBOE I-TUC 11.1 RADAR
4000
344° (3.1)

5000
002° (4.7)
(IF)
LORIE I-TUC 14.2 RADAR

(IAF)
SONDR
6000

MSA SEA 25 NM
080°
3400
070°
6400
2200
340°

Procedure NA for arrivals at CIDUG on V495 southbound.

5000 to LORIE
027° hdg (4) and
344° (8.6)

(IAF)
CIDUG
SEA 25.8
164°

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 73).

LORIE I-TUC 14.2 RADAR
ODBOE I-TUC 11.1 RADAR
TIFYS I-TUC 6.1 RADAR
hdg 345°
SEA R-341
COYLA SEA 4.7 3000
5000
SEA R-341
MGNUM SEA 12.7
RYBKA I-TUC 1.7 RADAR
*I-TUC 0.9
UFMOP I-TUC 0.3 RADAR
*LOC only

5000
344°
4000
2400
2400
*1000
GS 3.00°
TCH 56

3.1 NM | 5 NM | 4.3 NM | 0.9 NM | 0.5 | 0.5

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)

ELEV 432 D
TDZE 34C 387
TDZE 34R 372

16R 16C 16L
8500 X 150
9426 X 150
11900 X 150
0.6% DOWN
0.8% UP
TWR 696
TWR 517
34L
34C
34R
344° 6.2 NM from FAF

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 34L

SEATTLE-TACOMA INTL (SEA)

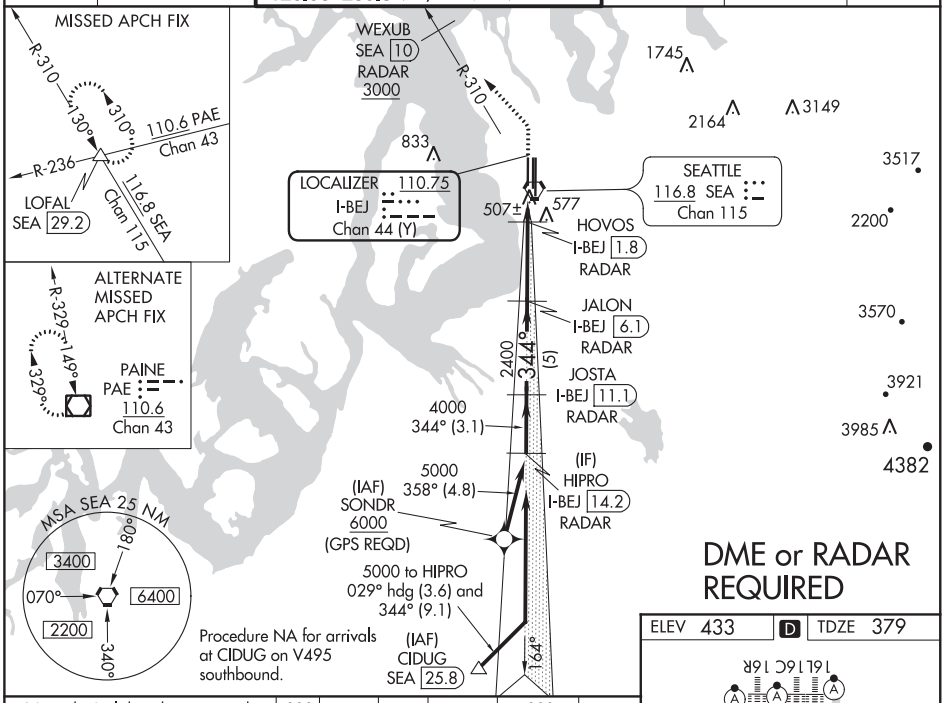
LOC/DME I-BEJ	APP CRS	Rwy Idg	8500
110.75	344°	TDZE	379
Chan 44 (Y)		Apt Elev	433

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

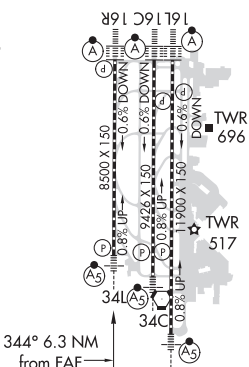
MISSED APPROACH: Climb to 900 then climbing left turn on heading 300° and on SEA VORTAC R-310 to cross WEXUB/10 DME/RADAR at or above 3000, then climb to 5000 on SEA VORTAC R-310 to LOFAL/SEA 29.2 DME and hold.

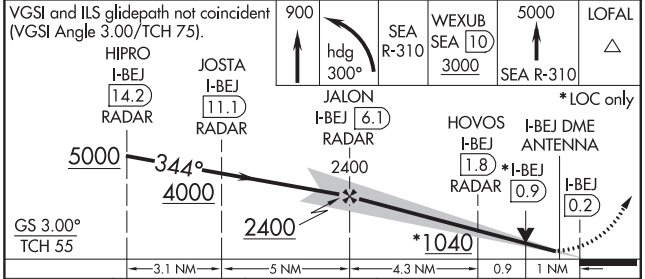
D-ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON	CLNC DEL	CPDLC
118.0	133.65 273.45	119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	



DME or RADAR REQUIRED

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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON

AL-582 (FAA)

19059

ILS or LOC RWY 34R

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SEA	APP CRS		34R	34C
110.3	344°	Rwy Idg	11900	9426
Chan 40		TDZE	372	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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

MISSED APCH FIX
R-341
161°
341°
MGNUM
SEA 12.7
RADAR
116.8 SEA
Chan 115

ALTERNATE MISSED APCH FIX
R-329
149°
329°
PAINE
PAE
110.6
Chan 43

MSA SEA 25 NM
080°
3400
070°
6400
2200
340°

LOCALIZER 110.3
I-SEA
Chan 40

R-341
COYLA
SEA 4.7
RADAR
3000

SEATTLE
116.8 SEA
Chan 115

JEVUN
I-SEA 0.6
RADAR

CNNTI
I-SEA 2.4
RADAR

BUCKK
I-SEA 6.3
RADAR

344°
(6.2)
2200

KLEWS
I-SEA 12.5
RADAR

(IF)
NEEAL
I-SEA 15.9
RADAR

(IAF)
SONDR
6000 230K

(IAF)
WAGTI
I-SEA 19.1
RADAR

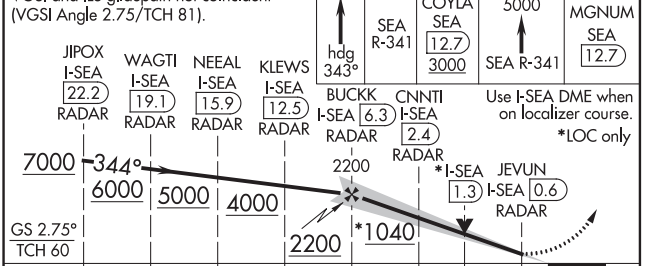
(IAF)
JIPOX
I-SEA 22.2
RADAR

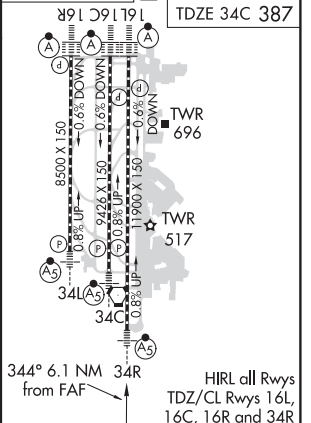
164°

1745
2164
3149
833
509 ±
491 ±
3517
2200
4140
3570
3921
3985
4382

4000
344° (3.4)
5000
014° (3.1)
5000
344° (3.1)
6000
344° (3.1)

VGSI and ILS glidepath not coincident
(VGSI Angle 2.75/TCH 81).





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 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)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-SZI	APP CRS	Rwy Idg 9426
111.7	164°	TDZE 430
Chan 54		Apt Elev 432

ILS RWY 16C (SA CAT I)

SEATTLE-TACOMA INTL (SEA)

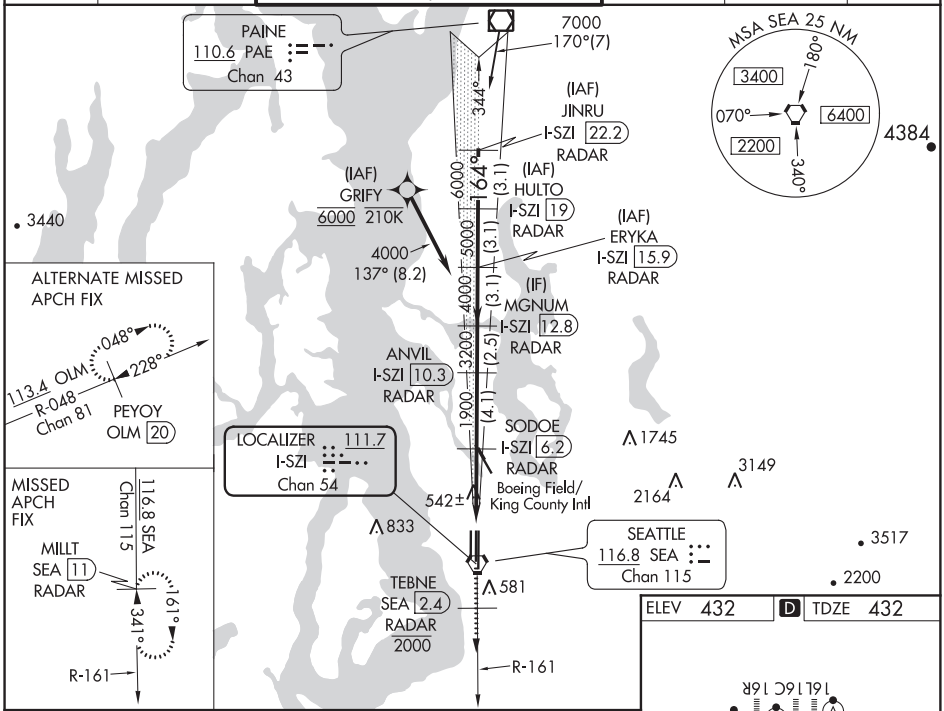
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

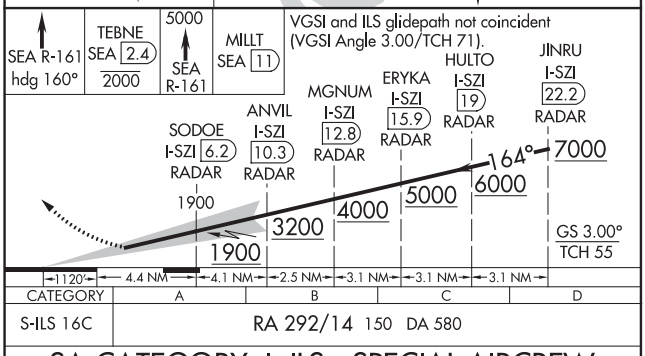
T Simultaneous approach authorized with Rwy 16R. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. Requires specific OPSPEC, MSPEC or LOA approval and use of HUD to DH.

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

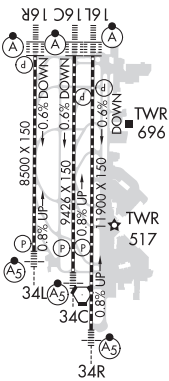




CATEGORY	A	B	C	D
S-ILS 16C	RA 292/14 150 DA 580			

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

ILS RWY 16L (SA CAT I)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SNQ	APP CRS	Rwy Idg	11900
110.3	164°	TDZE	432
Chan 40		Apt Elev	432

DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T 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	

PAINE 110.6 PAE Chan 43

7000 to ZEDKI 169° (7)

MSA SEA 25 NM: 3400 (180°–070°), 6400 (070°–180°), 2200 (180°–340°), 4384

(IAF) ZEDKI I-SNQ 22.3 RADAR

(IAF) GRIFY 6000 210K

(IAF) WUMUL I-SNQ 19.1 RADAR

(IAF) KENMO I-SNQ 15.9 RADAR

4000 to HELZR 136° (8.3)

(IF) HELZR I-SNQ 12.8 RADAR

KARFO I-SNQ 10.3 RADAR

DGLAS I-SNQ 6.2 RADAR

Boeing Field/ King County Intl

SEATTLE 116.8 SEA Chan 115

LOCALIZER 110.3 I-SNQ Chan 40

ALTERNATE MISSED APCH FIX: 113.4 OLM R-048 Chan 81 PEYOY OLM 20; 048°–228°

MISSED APCH FIX: MILLT SEA 11 RADAR; 116.8 SEA Chan 115; 161°–341°; R-161

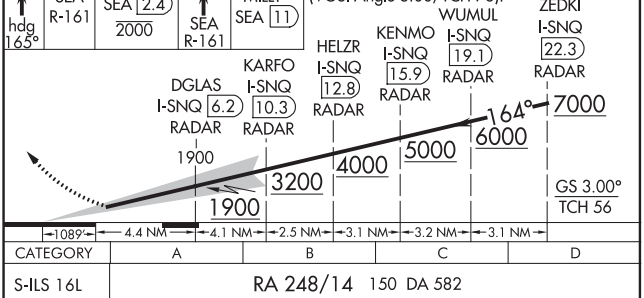
3440 4384 3517 2200 1745 2164 3149 833 542± 581

TEBNE SEA 2.4 RADAR 2000

ELEV 432 D TDZE 432

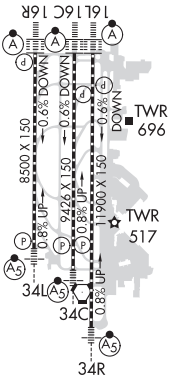
900 hdg 165° | SEA R-161 | TEBNE SEA 2.4 2000 | 5000 SEA R-161 | MILLT SEA 11

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



HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 16R (SA CAT I)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-CJL	APP CRS	Rwy Idg	8500
110.75	164°	TDZE	415
Chan 44 (Y)		Apt Elev	432

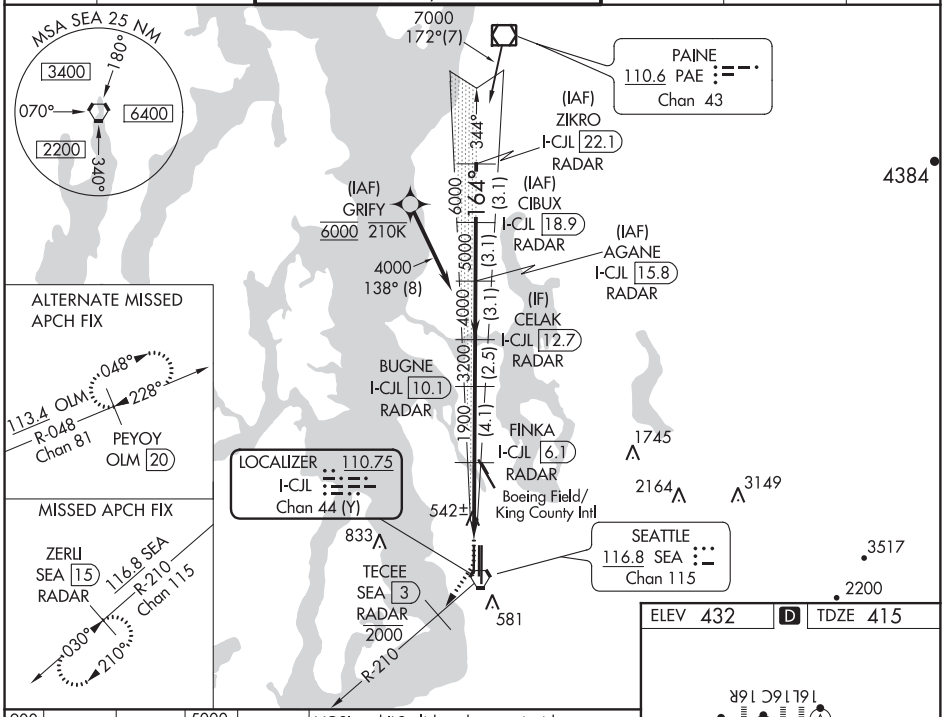
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

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.

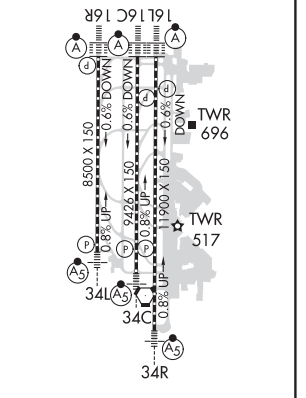
ALSF-2

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.

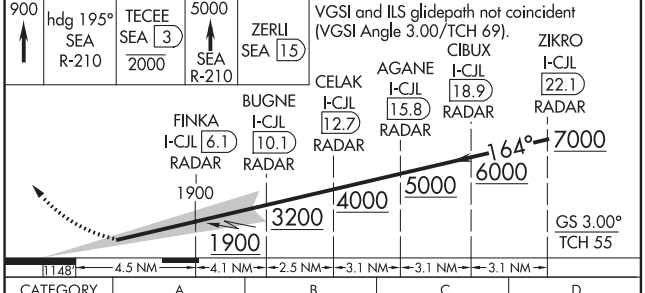
D-ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON	CLNC DEL	CPDLC
118.0	133.65 273.45	119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	



ELEV 432 D TDZE 415



HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R



CATEGORY	A	B	C	D
S-ILS 16R	RA 176/14 150 DA 565			

SA CAT I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

LOC/DME I-TUC	APP CRS	Rwy Idg	9426
111.7	344°	TDZE	387
Chan 54		Apt Elev	432

ILS RWY 34C (SA CAT I & II)

SEATTLE-TACOMA INTL (SEA)

DME or RADAR required. From SONDR: RNAV 1-GPS required.

T 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	

MISSED APCH FIX
R-341
110.6 PAE Chan 43
341°
161°
MGNUM SEA 12.7 RADAR
R-164
116.8 SEA Chan 115

ALTERNATE MISSED APCH FIX
R-329
149°
329°
PAINE PAE 110.6 Chan 43

LOCALIZER 111.7 I-TUC Chan 54

R-341
COYLA SEA 4.7 RADAR 3000

1745
2164
3149
833
507±
476±
577
SEATTLE 116.8 SEA Chan 115
3517
2200
4140
3570
3921
3985
4382

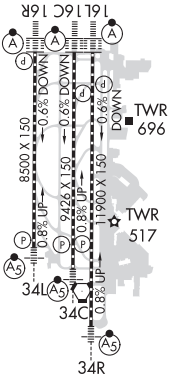
TIFYS I-TUC 6.1 RADAR
2400
344°
(5)
ODBOE I-TUC 11.1 RADAR
4000
344° (3.1)
5000
002° (4.7)
(IF) LORIE I-TUC 14.2 RADAR
(IAF) SONDR 6000

MSA SEA 25 NM
180°
3400
070°
6400
2200
340°

Procedure NA for arrivals at CIDUG on V495 southbound.

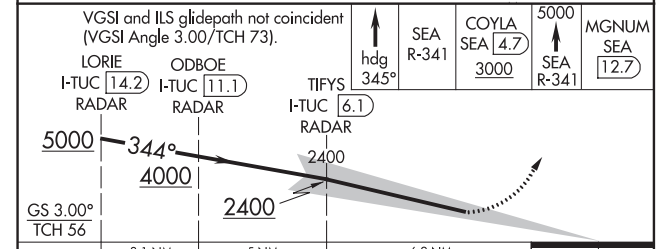
5000 to LORIE
027° hdg (4) and
344° (8.6)
(IAF) CIDUG SEA 25.8
164°

ELEV 432 | D | TDZE 387



HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

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

SEATTLE, WASHINGTON
Amdt 3E 21JUN18

47°27'N-122°19'W

SEATTLE-TACOMA INTL (SEA)

ILS RWY 34C (SA CAT I & II)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 34L (SA CAT I & II)

SEATTLE-TACOMA INTL (SEA)

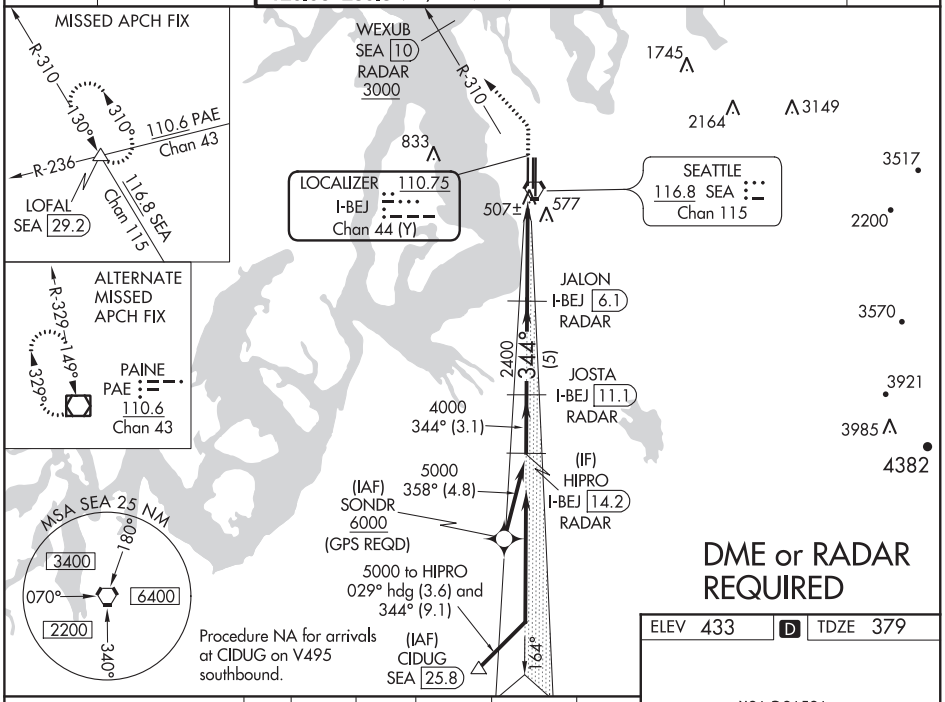
LOC/DME I-BEJ	APP CRS	Rwy Idg	8500
110.75	344°	TDZE	379
Chan 44 (Y)		Apt Elev	433

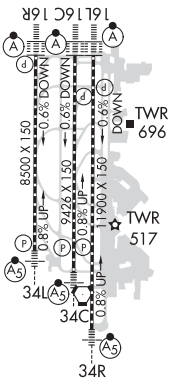
DME or RADAR required. Simultaneous approach authorized with Rwy 34R/C. SA CAT I: Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. SA CAT II: Reduced lighting, requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 34R (SA CAT I & II)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SEA	APP CRS	Rwy Idg	11900
110.3	344°	TDZE	372
Chan 40		Apt Elev	432

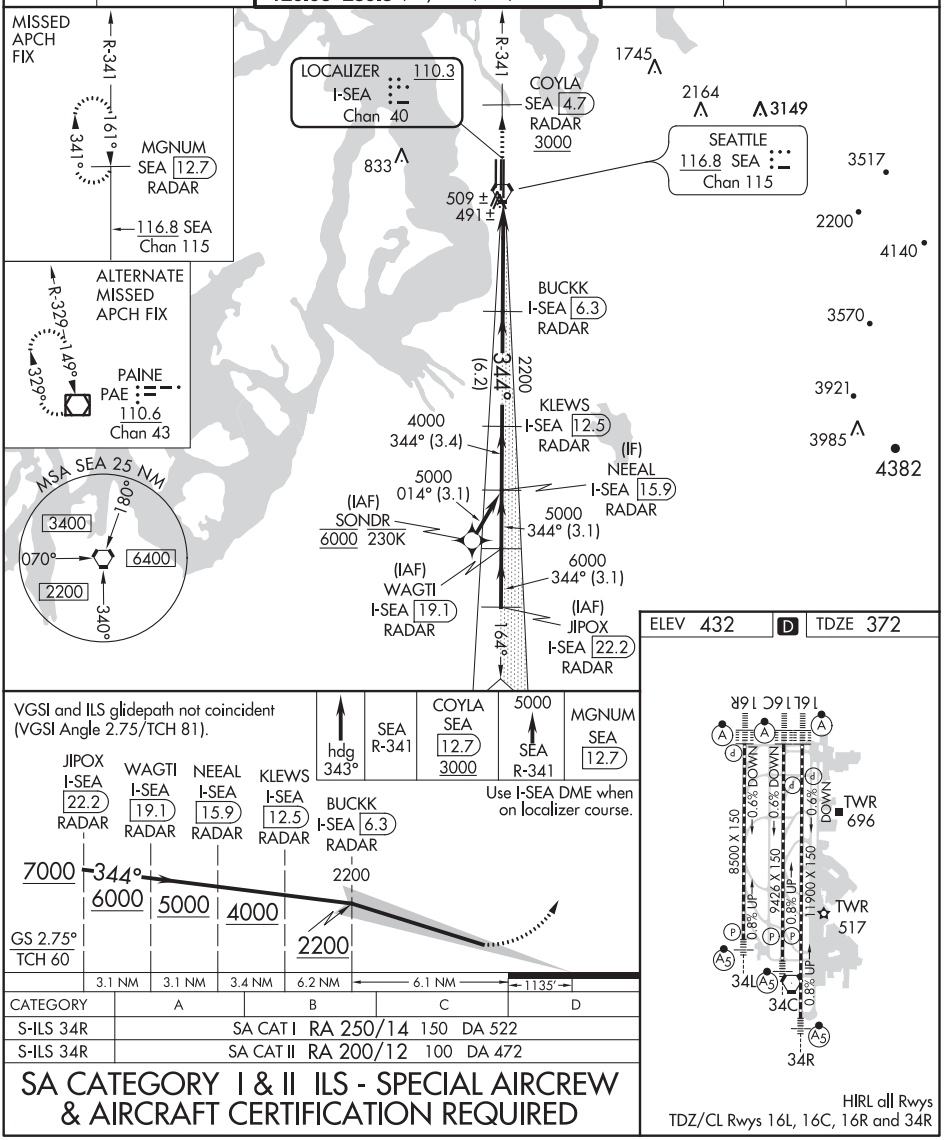
From SONDR: RNAV 1-GPS required. DME or RADAR required.

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	



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 16C (CAT II & III)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SZI	APP CRS	Rwy Idg	9426
111.7	164°	TDZE	430
Chan 54		Apt Elev	432

DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T 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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

PAINE 110.6 PAE Chan 43

7000 170°(7)

MSA SEA 25 NM 180° 3400 070° 6400 2200 340° 4384

(IAF) JINRU I-SZI 22.2 RADAR

(IAF) GRIFY 6000 210K

(IAF) HULTO I-SZI 19 RADAR

(IAF) ERYKA I-SZI 15.9 RADAR

(IF) MGNUM I-SZI 12.8 RADAR

ANVIL I-SZI 10.3 RADAR

SODOE I-SZI 6.2 RADAR

LOCALIZER 111.7 I-SZI Chan 54

SEATTLE 116.8 SEA Chan 115

TEBNE SEA 2.4 RADAR 2000

6000 164° (3.1) 5000 (3.1) 4000 (3.1) 3200 (2.5) 1900 (4.1)

4000 137° (8.2)

542±

3440 1745 3149 2164 833 581 3517 2200

ALTERNATE MISSED APCH FIX

113.4 OLM R-048 Chan 81 048° 228° PEYOY OLM 20

MISSED APCH FIX

MILLT SEA 11 RADAR 116.8 SEA Chan 115 161° 341° R-161

ELEV 432 D TDZE 430

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).

SEA R-161 hdg 160°

TEBNE SEA 2.4 2000

5000 SEA R-161

MILLT SEA 11

SODOE I-SZI 6.2 RADAR

ANVIL I-SZI 10.3 RADAR

MGNUM I-SZI 12.8 RADAR

ERYKA I-SZI 15.9 RADAR

HULTO I-SZI 19 RADAR

JINRU I-SZI 22.2 RADAR

1900 3200 4000 5000 6000 7000 164°

GS 3.00° TCH 55

1120' 4.4 NM 4.1 NM 2.5 NM 3.1 NM 3.1 NM 3.1 NM

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

16L 16C 16R

0.6% DOWN 0.6% DOWN 0.6% DOWN

8500 X 150 9426 X 150 11900 X 150

0.8% UP 0.8% UP 0.8% UP

TWR 696

TWR 517

34L 34C 34R

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

ILS RWY 16L (CAT II & III)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-SNQ	APP CRS	Rwy Idg	11900
110.3	164°	TDZE	432
Chan 40		Apt Elev	432

DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T 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	

PAINE 110.6 PAE Chan 43

7000 to ZEDKI 169° (7)

MSA SEA 25 NM: 3400 (180°–070°), 6400 (070°–180°), 2200 (180°–340°), 4384

(IAF) ZEDKI I-SNQ 22.3 RADAR

(IAF) GRIFY 6000 210K

(IAF) WUMUL I-SNQ 19.1 RADAR

(IAF) KENMO I-SNQ 15.9 RADAR

(IF) HELZR I-SNQ 12.8 RADAR

4000 to HELZR 136° (8.3)

KARFO I-SNQ 10.3 RADAR

DGLAS I-SNQ 6.2 RADAR

Boeing Field/ King County Intl

SEATTLE 116.8 SEA Chan 115

LOCALIZER 110.3 I-SNQ Chan 40

TEBNE SEA 2.4 RADAR 2000

R-161

3440

ALTERNATE MISSED APCH FIX

113.4 OLM R-048 Chan 81 PEYOY OLM 20

MISSED APCH FIX

MILLT SEA 11 RADAR

116.8 SEA Chan 115

1745 2164 3149 542± 833 581 3517 2200

ELEV 432 D TDZE 432

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).

1900 3200 4000 5000 6000 7000 164° GS 3.00° TCH 56

1089' 4.4 NM 4.1 NM 2.5 NM 3.1 NM 3.2 NM 3.1 NM

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

16L 16C 16R

8500 X 150 0.6% DOWN

9426 X 150 0.8% UP

11900 X 150 0.8% UP

0.6% DOWN

TWR 696

TWR 517

34L 34C 34R

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 16R (CAT II & III)

SEATTLE-TACOMA INTL (SEA)

LOC/DME I-CJL	APP CRS	Rwy Idg	8500
110.75	164°	TDZE	415
Chan 44 (Y)		Apt Elev	432

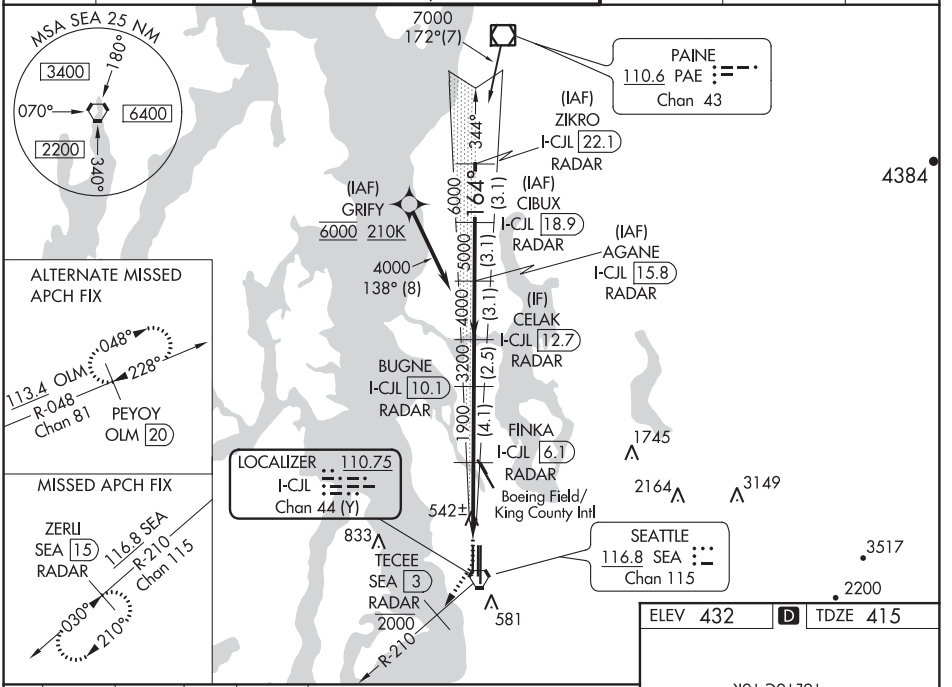
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T Simultaneous approach authorized with Rwy 16L and 16C. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. Cat II: RVR 1000 authorized with specific OPSPEC, MSPEC or LOA approval and use of Autoland or HUD to touchdown.

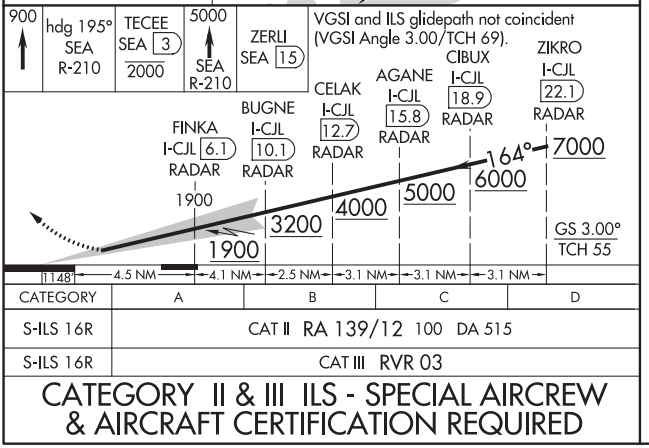
ALSF-2

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

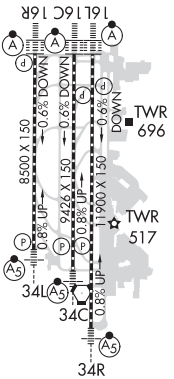


ELEV 432	D	TDZE 415



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



HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

RNAV (RNP) Z RWY 16C

SEATTLE-TACOMA INTL (SEA)

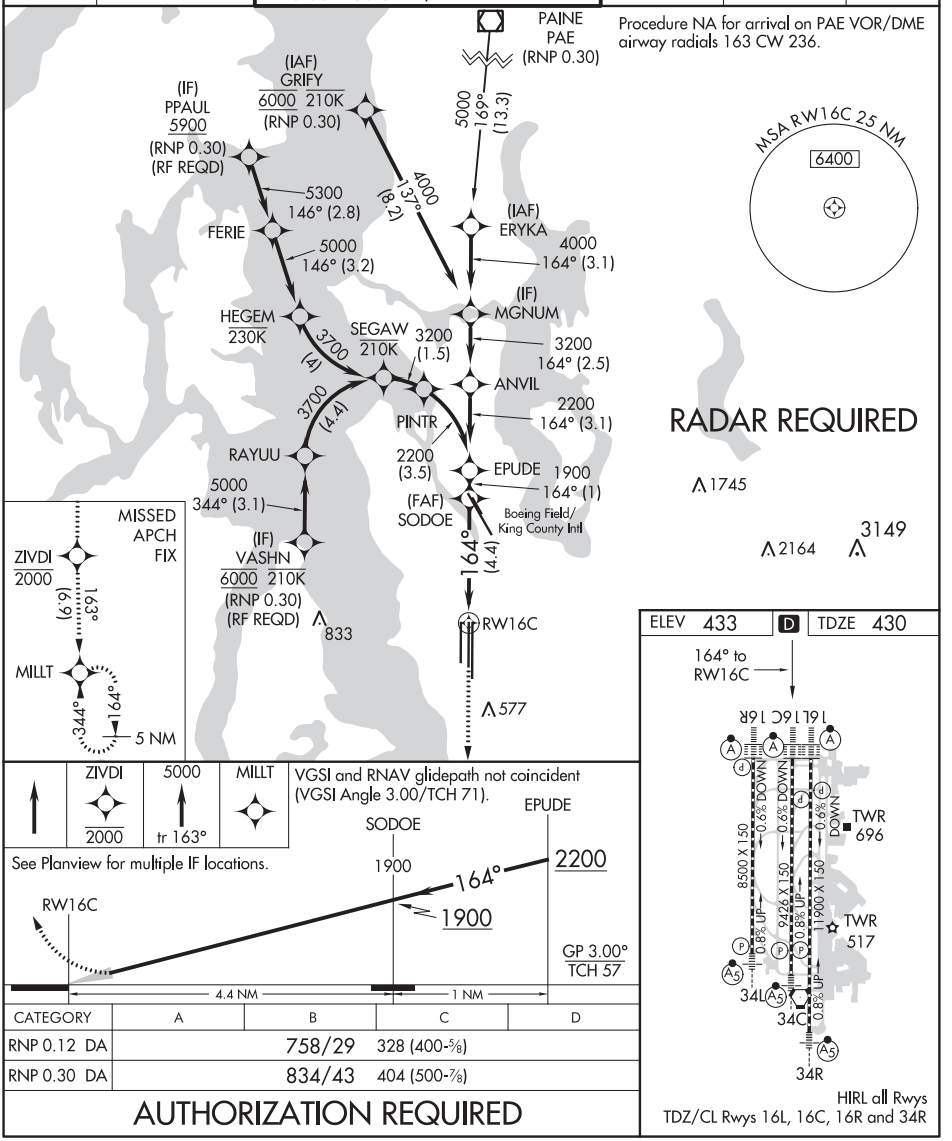
APP CRS	Rwy Idg	9426
164°	TDZE	430
	Apt Elev	433

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) 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

SEATTLE, WASHINGTON
Amdt 1A 12OCT17

47°27'N-122°19'W

SEATTLE-TACOMA INTL (SEA)

RNAV (RNP) Z RWY 16C

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

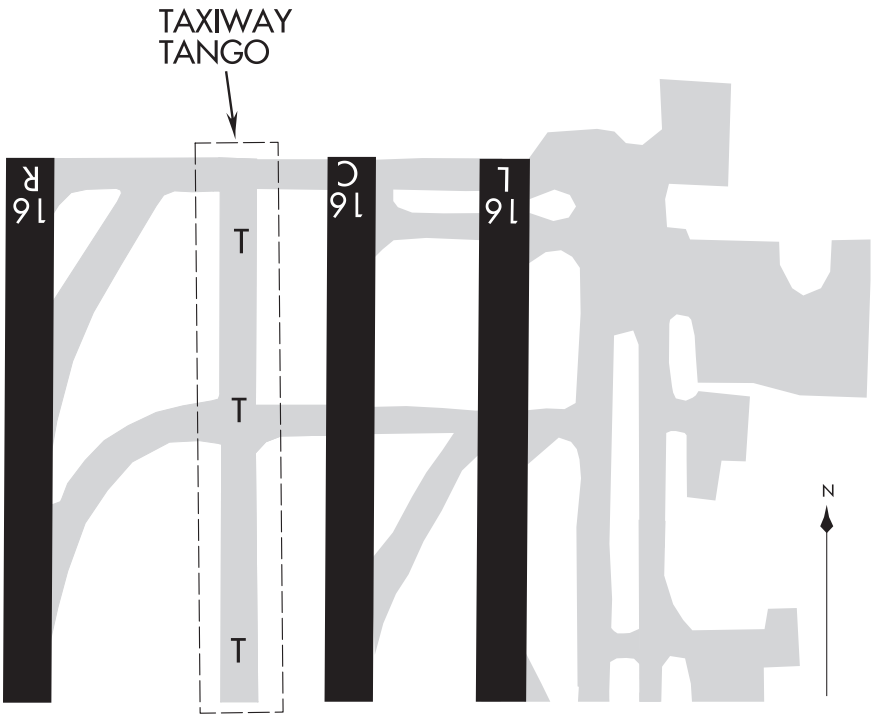
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

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.



NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

RNAV (RNP) Z RWY 16L

SEATTLE-TACOMA INTL (SEA)

APP CRS	Rwy Idg	11900
164°	TDZE	433
	Apt Elev	433

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

PAINE PAE (RNP 0.30)

Procedure NA for arrival on PAE VOR/DME airway radials 163 CW 236.

(IAF) GRIFY 6000 210K (RNP 0.30)

5000 169° (13.3)

4000 136° (8.3)

(IAF) KENMO

4000 164° (3.1)

(IF) HELZR

3200 164° (2.5)

KARFO

1900 164° (4.1)

(FAF) DGLAS

164° (4.4)

833^

550±

RW16L

(5.7) 164°

577^

RADAR REQUIRED

MSA RW16L 25 NM

6400

MISSED APCH FIX

YORUC 2000

164° (7)

MILLT

344°

164°

5 NM

1745^

ELEV 433 | D | TDZE 433

164° to RW16L

16L 16C 16R

TWR 696

TWR 517

8500 X 150

9426 X 150

11900 X 150

0.6% DOWN

0.8% UP

34L 34C 34R

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

tr 164° | YORUC 2000 | tr 164° 5000 | MILLT

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 76).

HELZR 4000

KARFO 3200

DGLAS 1900

RW16L

164°

1900

GP 3.00° TCH 55

4.4 NM | 4.1 NM | 2.5 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	842/45 409 (500-⅞)			

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 16R

SEATTLE-TACOMA INTL (SEA)

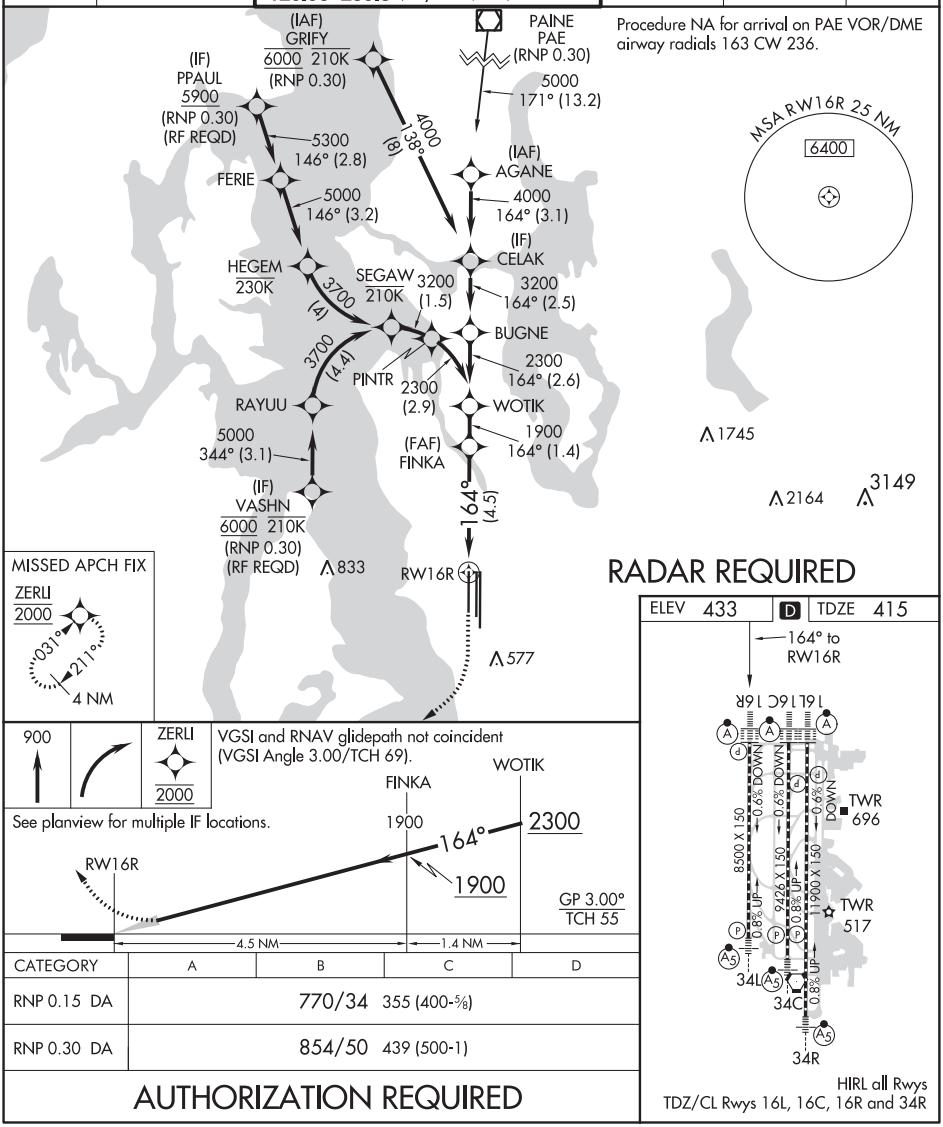
APP CRS	Rwy ldg	8500
164°	TDZE	415
	Apt Elev	433

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, when authorized by ATC, 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
RNP 0.15 DA	770/34 355 (400-⅝)			
RNP 0.30 DA	854/50 439 (500-1)			

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19171

RNAV (RNP) Z RWY 34C

SEATTLE-TACOMA INTL (SEA)

APP CRS	Rwy Idg	9426
344°	TDZE	387
	Apt Elev	432

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

MISSED APCH FIX

5 NM 344° 164° MGNUM

1745 2164 3149 833 577

344° (12.6)

RW34C

344° (6.2)

(IF) SHIPZ
7000 210K
(RNP 0.30)
(RF REQD)

6000
164° (3.1)

(FAF) TIFYS
2400
344° (1.6)

BELNE

2900 (1.3) ZINUB

FAWNA

5000 (3.1)

3300 (5.4)

LANGL

2900 to ZINUB
344° (6.6)

(IF) LORIE

MSA RW34C 25 NM
6400

5000
002° (4.7)

(IAF) SONDR
6000 230K
(RNP 0.30)

ELEV 432 | D | TDZE 387

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

16L 16C 16R

0.6% DOWN

8500 X 150

9426 X 150

11900 X 150

0.8% UP

TWR 696

TWR 517

34L 34C 34R

344° to RW34C

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 73).

5000 tr 344°

MGNUM

See planview for multiple IF locations.

ZINUB TIFYS RW34C

2900 344° 2400 2400

GP 3.00°
TCH 56

1.6 NM 6.2 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	829/50 442 (400-1)			

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 34L

SEATTLE-TACOMA INTL (SEA)

APP CRS	Rwy Idg	8500
344°	TDZE	379
	Apt Elev	433

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

MISSED APCH FIX

5 NM 144° 324° LOFAL

2164 3149

833

RW34L

577

(IF) SHIPZ
7000 210K
(RNP 0.30)
(RF REQD)

6000
164° (3.1)

344° (6.3)

(FAF) JALON

2400
344° (1.9)

BAKMN

BELNE

5000 (3.1)

LANGL

3000 (6.3)

3000 344° (6.3)

(IF) HIPRO

5000 358° (4.8)

(IAF) SONDR
6000 230K
(RNP 0.30)

RADAR REQUIRED

MSA RW34L 25 NM
6400

ELEV 433 D TDZE 379

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

16L 16C 16R

8500 X 150 0.6% DOWN
9426 X 150 0.8% UP
11900 X 150 0.6% DOWN 0.8% UP

TWR 696
TWR 517

34L 34C 34R

344° to RW34L

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 75).

900 5000 LOFAL

See planview for multiple IF locations.

BAKMN JALON RW34L

3000 344° 2400

GP 3.00°
TCH 55

2400

1.9 NM 6.3 NM

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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19171

RNAV (RNP) Z RWY 34R

SEATTLE-TACOMA INTL (SEA)

APP CRS	Rwy Idg	11900
344°	TDZE	372
	Apt Elev	432

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

MISSED APCH FIX

5 NM 344° 164° MGNUM

CASDA 343° (8) 344° (5)

RW34R

(FAF) BUCKK 344° (6.1)

2200 344° (2.7)

BEKKR 3000 344° (6.9)

(IF) NEEAL

(IAF) SONDR 6000 230K (RNP 0.30) 5000 014° (3.1)

1745 2164 3149 833 331 577

MSA RW34R 25 NM 6400

ELEV 432 | D | TDZE 372

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R

16L 16C 16R

TWR 696

TWR 517

8500 X 150 0.6% DOWN 9226 X 150 0.8% UP 11900 X 150 0.6% DOWN 0.8% UP

34L 34C 34R

344° to RW34R

VGSI and RNAV glidepath not coincident (VGSI Angle 2.75/TCH 81).

5000 tr 344° CASDA tr 343° MGNUM

NEEAL 5000 344° BEKKR 3000 BUCKK 2200 RW34R 2200

GP 2.75° TCH 60

6.9 NM 2.7 NM 6.1 NM

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 16C

SEATTLE-TACOMA INTL (SEA)

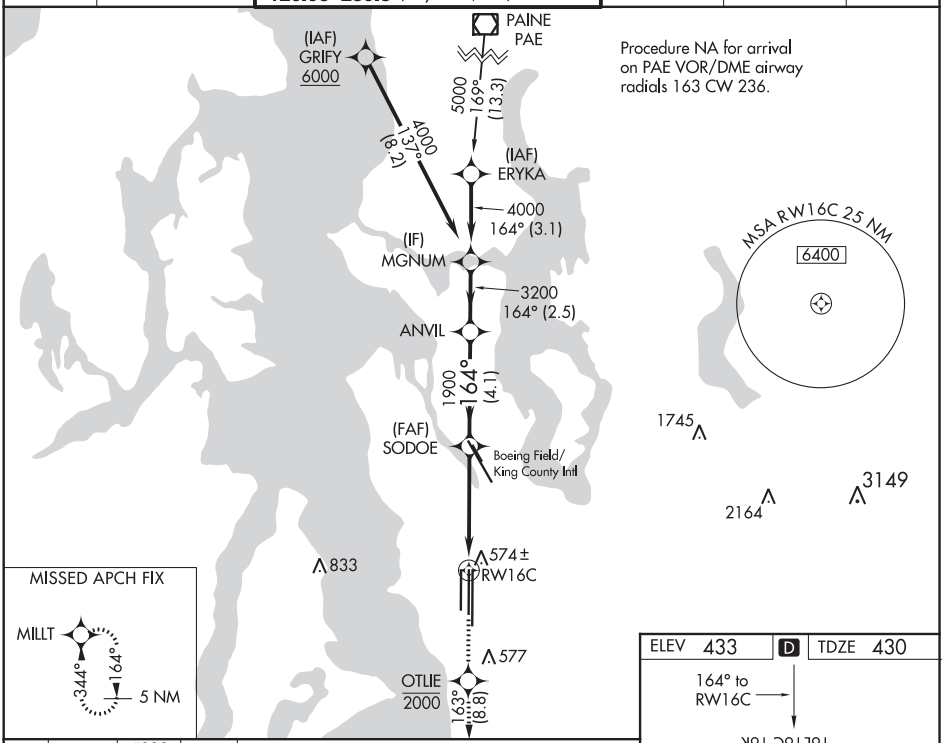
WAAS	APP CRS	Rwy Idg	9426
CH 61010	164°	TDZE	430
W16B		Apt Elev	433

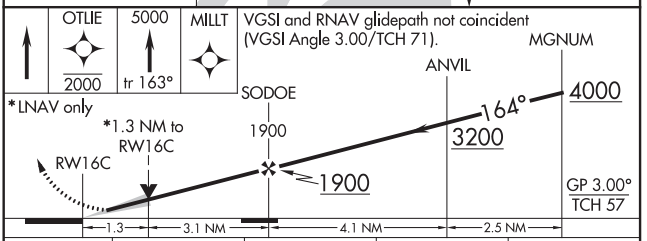
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV Cats C/D visibility to 1⅜ . See additional requirements on adjacent information page.

ALSF-2

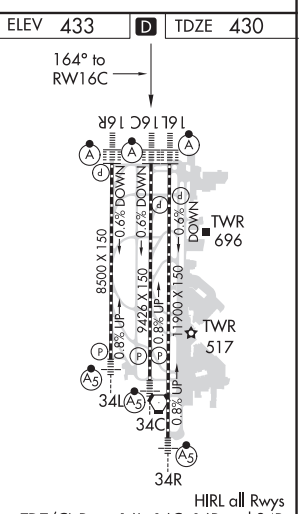
MISSED APPROACH: Climb direct OTLIE to cross OTLIE at or below 2000, then climb to 5000 on track 163° to MILLT and hold, continue climb-in-hold to 5000.

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	





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)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

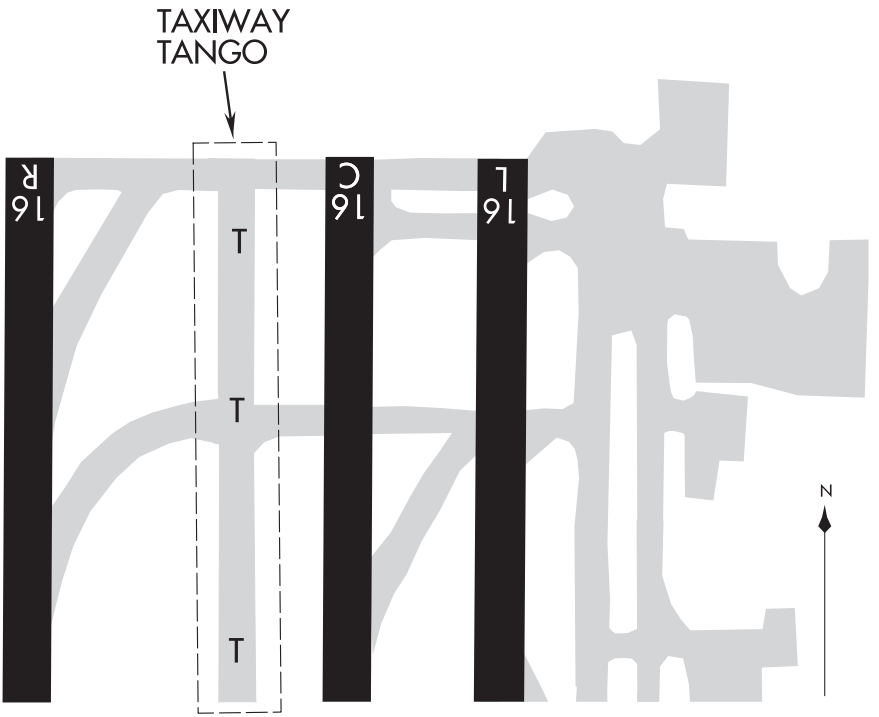
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

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.



WAAS CH 63202 W16A	APP CRS 164°	Rwy Idg 11900 TDZE 432 Apt Elev 432

RNAV (GPS) Y RWY 16L

SEATTLE-TACOMA INTL (SEA)

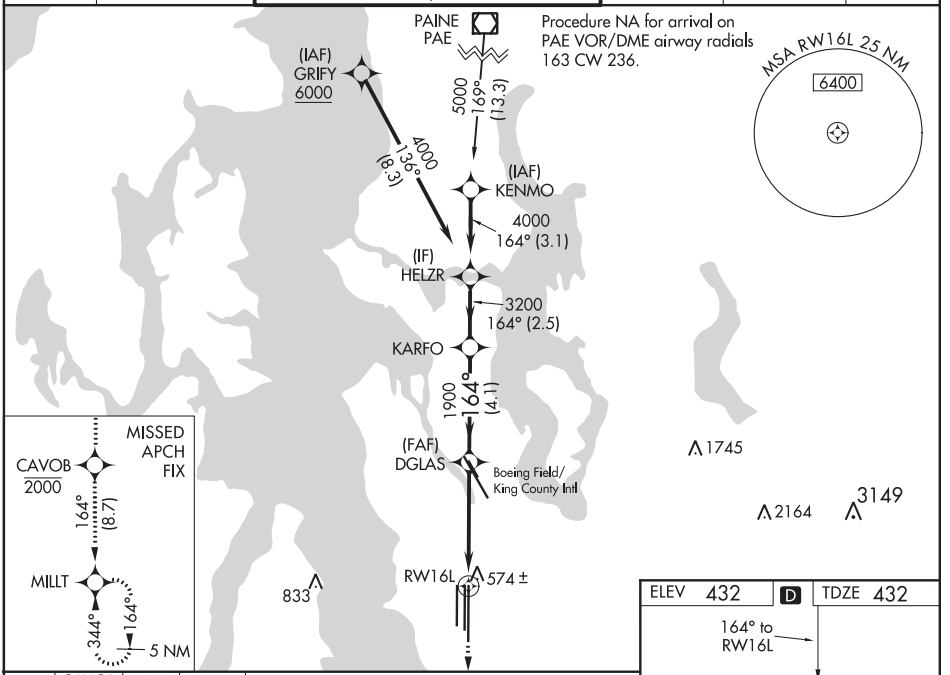
RNP APCH.

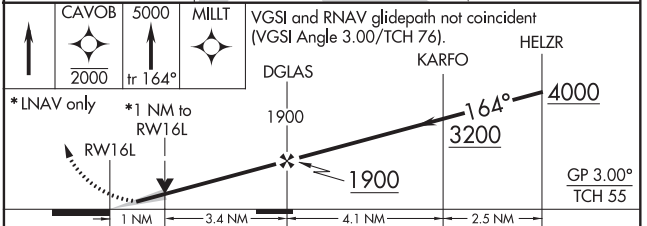
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 16R. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. For inop ALS, increase LPV all Cats visibility to RVR 4500, and increase LNAV Cats C/D visibility to RVR 6000.

ALSF-2

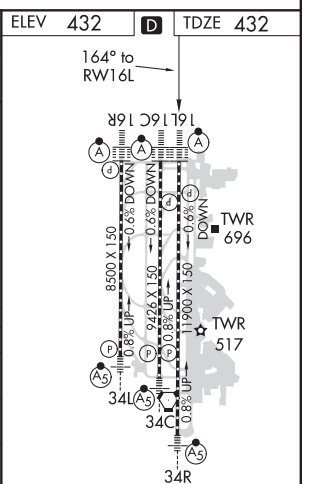
MISSED APPROACH: Climb direct CAVOB to cross CAVOB at or below 2000 then climb to 5000 on track 164° to MILLT and hold, continue climb-in-hold to 5000.

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) 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 19059

RNAV (GPS) Y RWY 16R

SEATTLE-TACOMA INTL (SEA)

WAAS	APP CRS	Rwy Idg	8500
CH 86910	164°	TDZE	415
W16D		Apt Elev	433

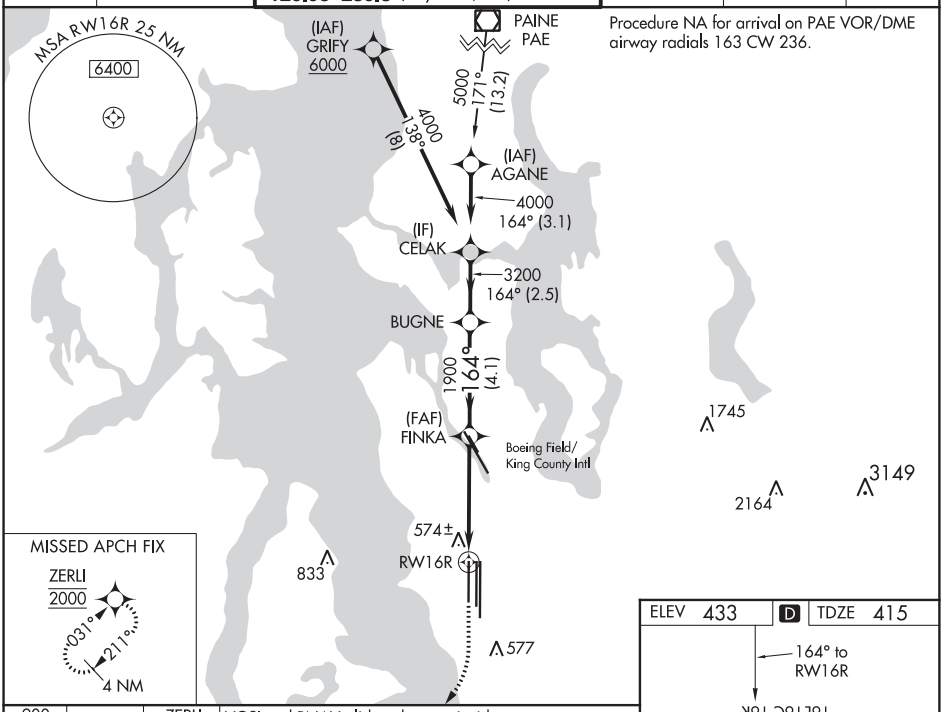
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 16L. DME/DME RNP-0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

ALSF-2

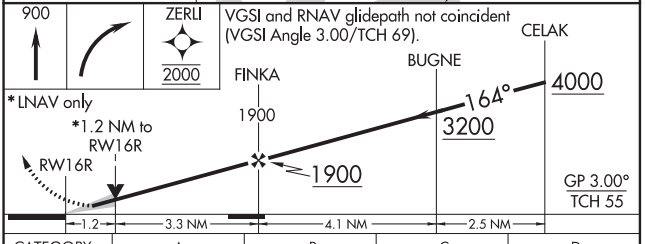
MISSED APPROACH: Climb to 900 then climbing right turn direct ZERLI to cross ZERLI at 2000 and hold. When authorized by ATC, climb-in-hold to 5000.

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 arrival on PAE VOR/DME airway radials 163 CW 236.

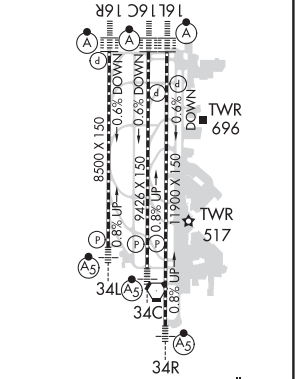


MISSED APCH FIX



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	9426
CH 77710	344°	TDZE	387
W34B		Apt Elev	432

RNAV (GPS) Y RWY 34C

SEATTLE-TACOMA INTL (SEA)

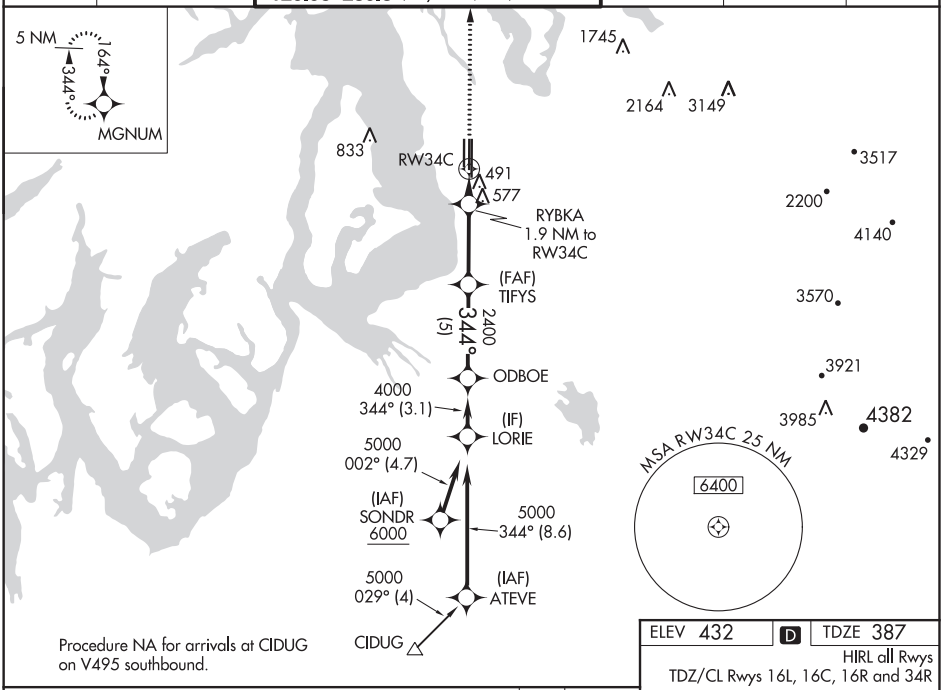
RNP APCH.

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

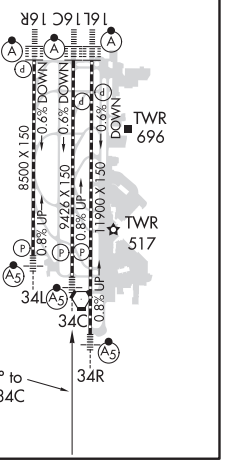


Procedure NA for arrivals at CIDUG on V495 southbound.

ELEV 432	D	TDZE 387

HIRL all Rwys

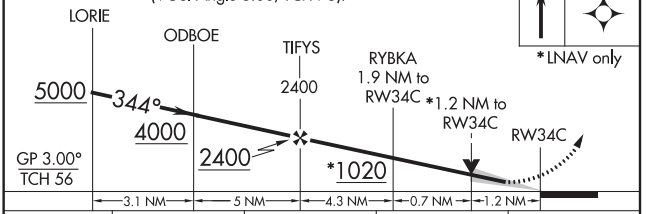
TDZ/CL Rwys 16L, 16C, 16R and 34R



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
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RNAV (GPS) Y RWY 34L

SEATTLE-TACOMA INTL (SEA)

WAAS	APP CRS	Rwy Idg	8500
CH 45810	344°	TDZE	379
W34A		Apt Elev	433

T 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.

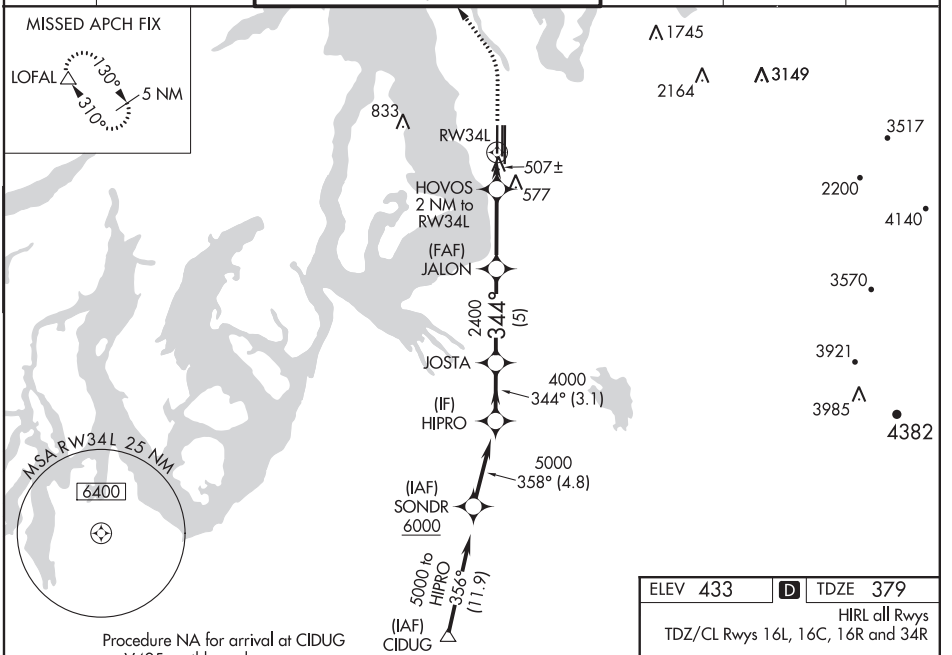
MALSR

MISSED APPROACH: Climb to 900 then climbing left turn to 5000 direct LOFAL and hold.

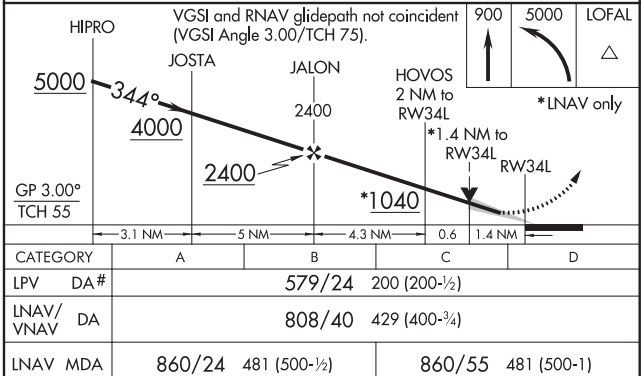
D-ATIS	SEATTLE APP CON	SEATTLE TOWER	GND CON	CLNC DEL	CPDLC
118.0	133.65 273.45	119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	

MISSED APCH FIX

LOFAL 130° 310° 5 NM



Procedure NA for arrival at CIDUG on V495 southbound.

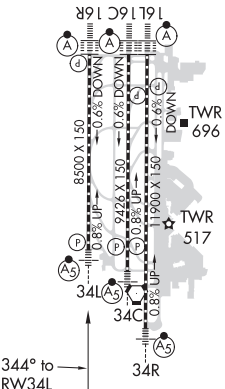


CATEGORY	A	B	C	D
LPV DA#	579/24 200 (200-½)			
LNAV/VNAV DA	808/40 429 (400-¾)			
LNAV MDA	860/24 481 (500-½)		860/55 481 (500-1)	
CIRCLING	1000-1 567 (600-1)		1000-1½ 567 (600-1½)	1000-2 567 (600-2)

ELEV 433 D TDZE 379

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R



47°27′N-122°19′W

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 34R

SEATTLE-TACOMA INTL (SEA)

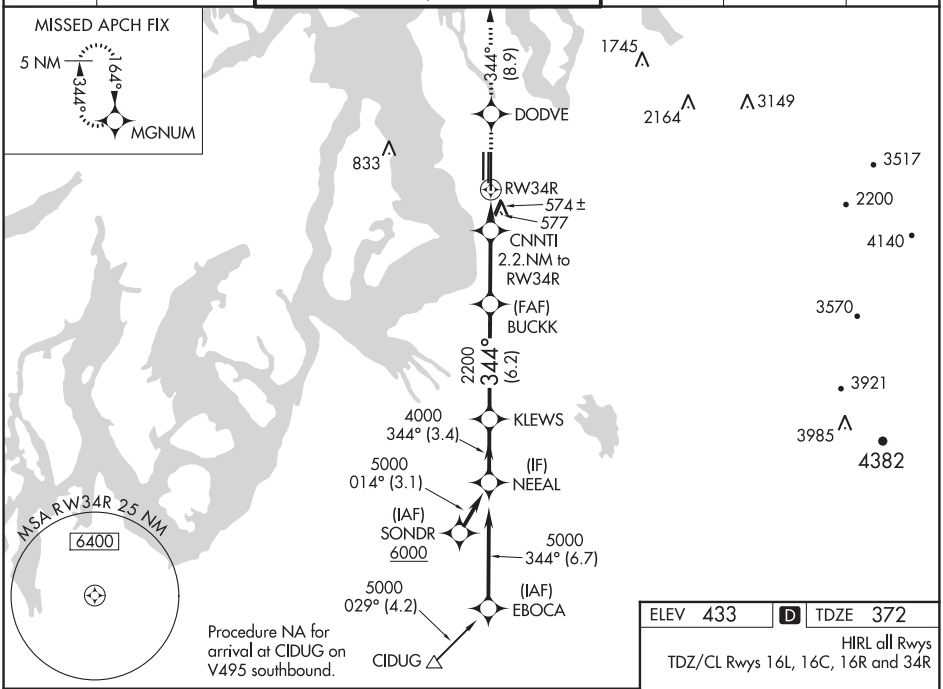
WAAS CH 42710 W34D	APP CRS 344°	Rwy Idg 11900 TDZE 372 Apt Elev 433

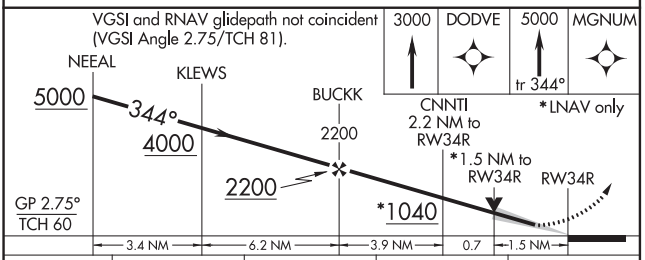
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Simultaneous approach authorized with Rwy 34L. For inoperative 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

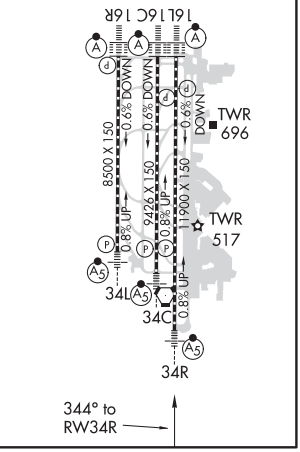
MISSED APPROACH: Climb to 3000 direct DODVE then climb to 5000 on track 344° to MGNUM and hold, continue climb-in-hold to 5000.

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) 120.95 239.3 (Rwys 16R, 34L)	121.7	128.0	





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)



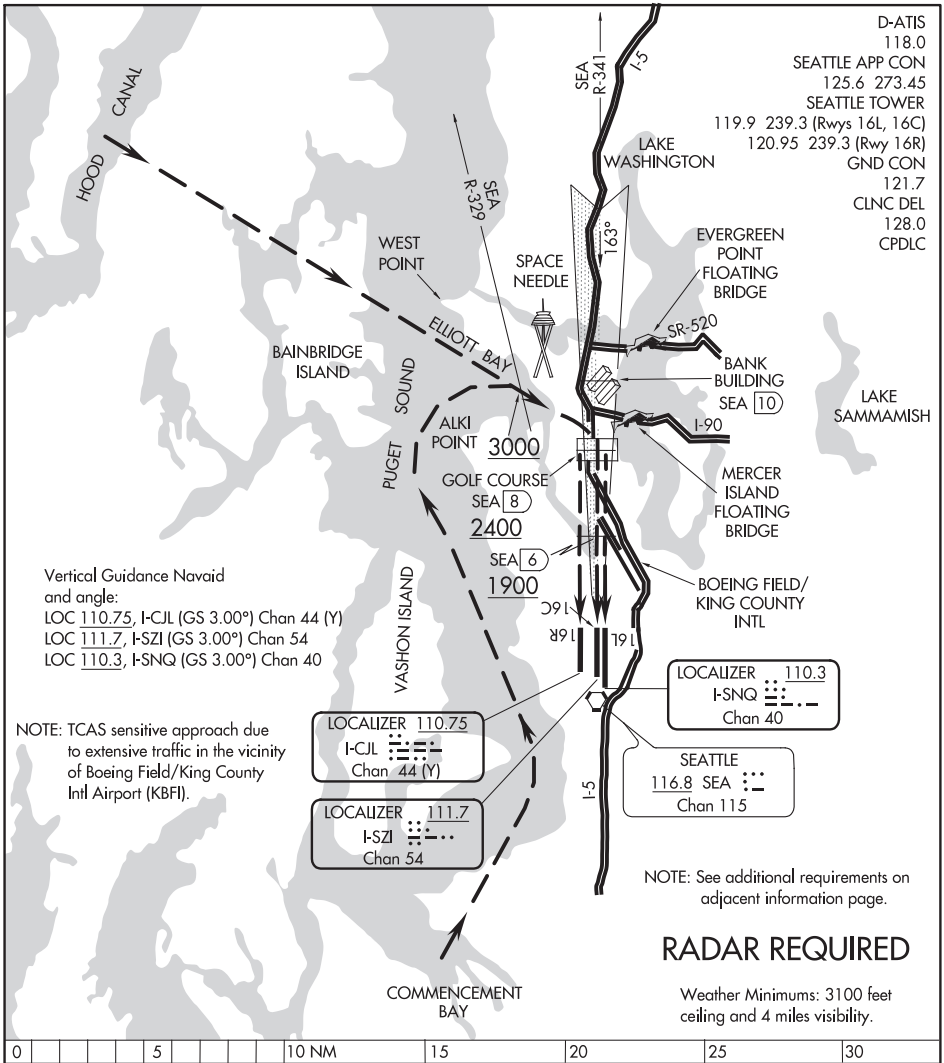
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

17173

BAY VISUAL RWY 16R/C/L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

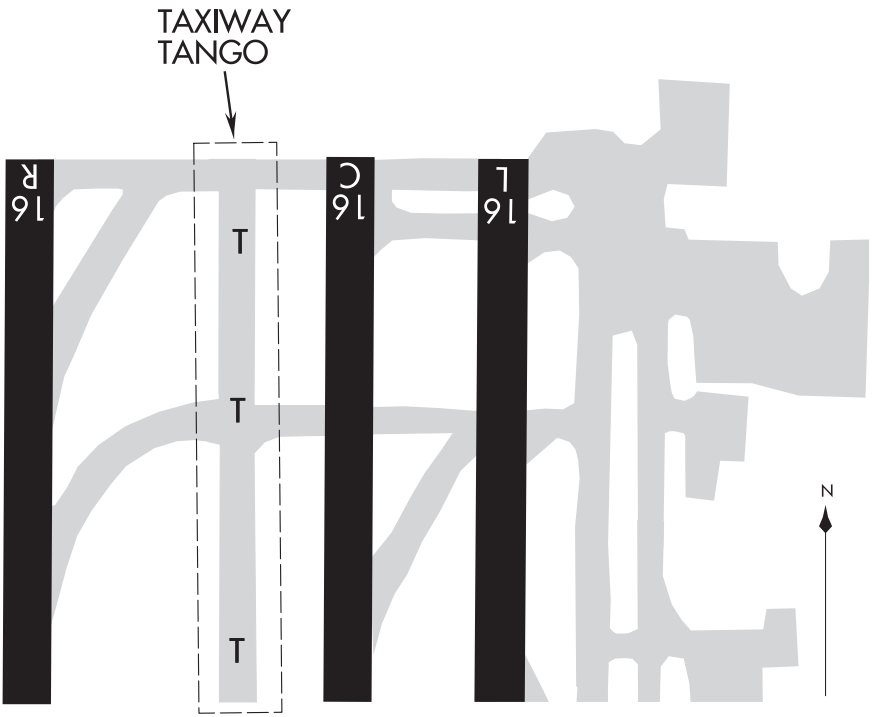
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

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.

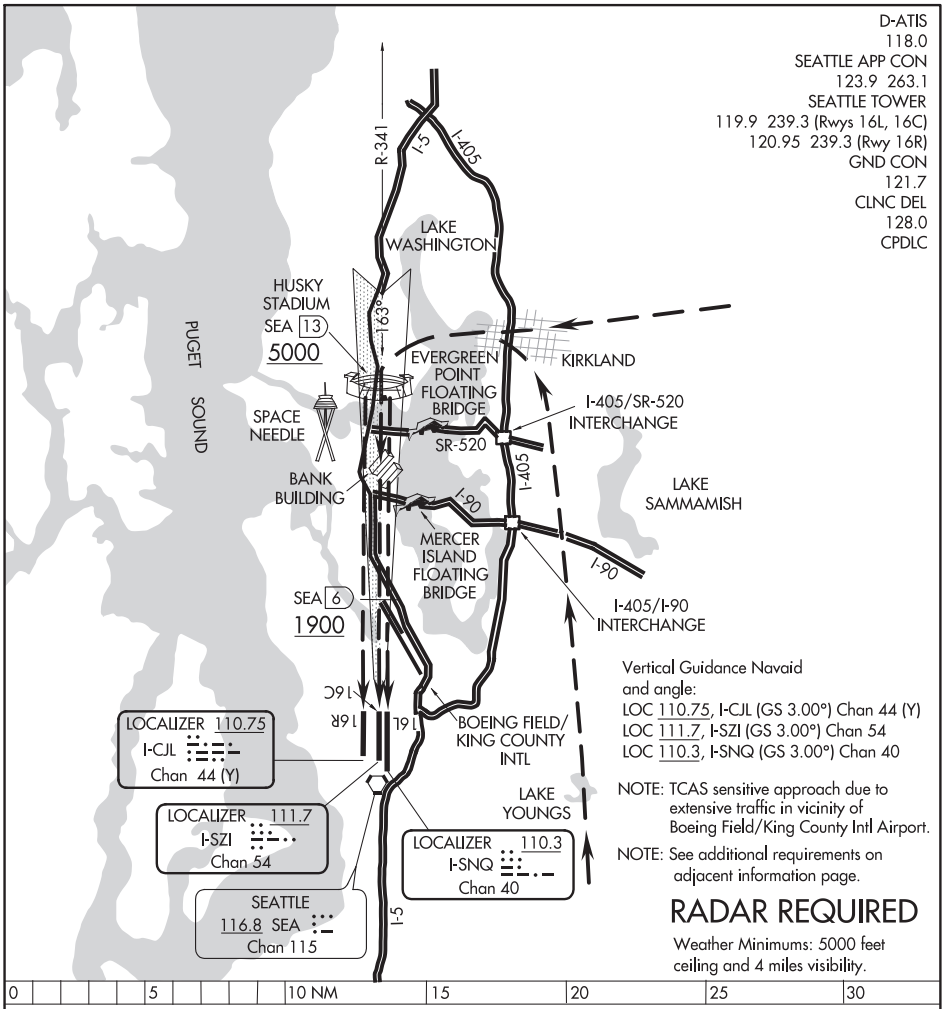


17173

HUSKY VISUAL RWY 16R/C/L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SEATTLE-TACOMA INTL AIRPORT

ALERT NOTICE

ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:

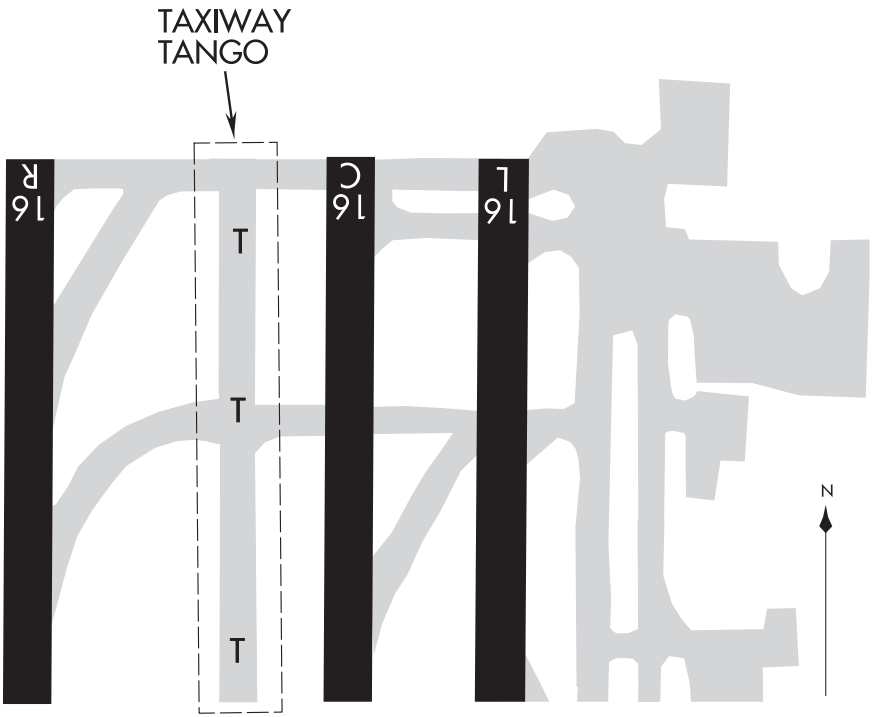
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

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.

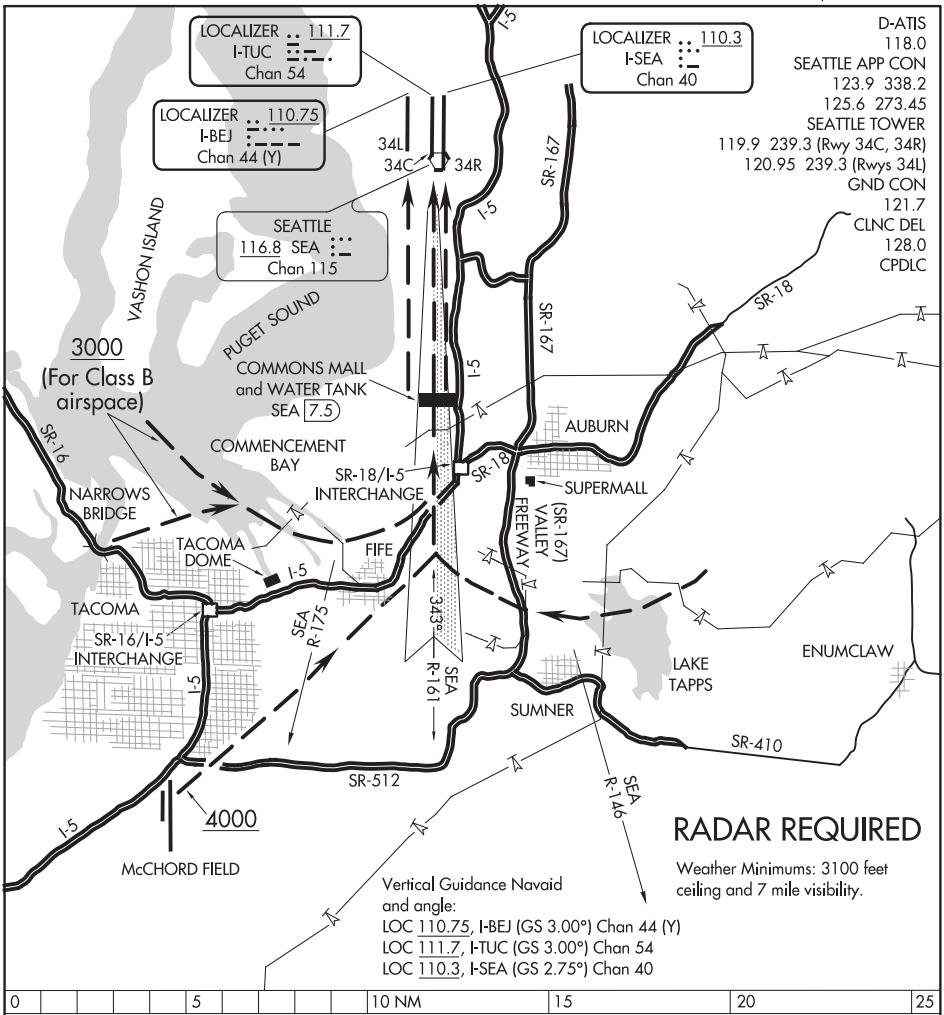


17173

MALL VISUAL RWY 34R/C/L

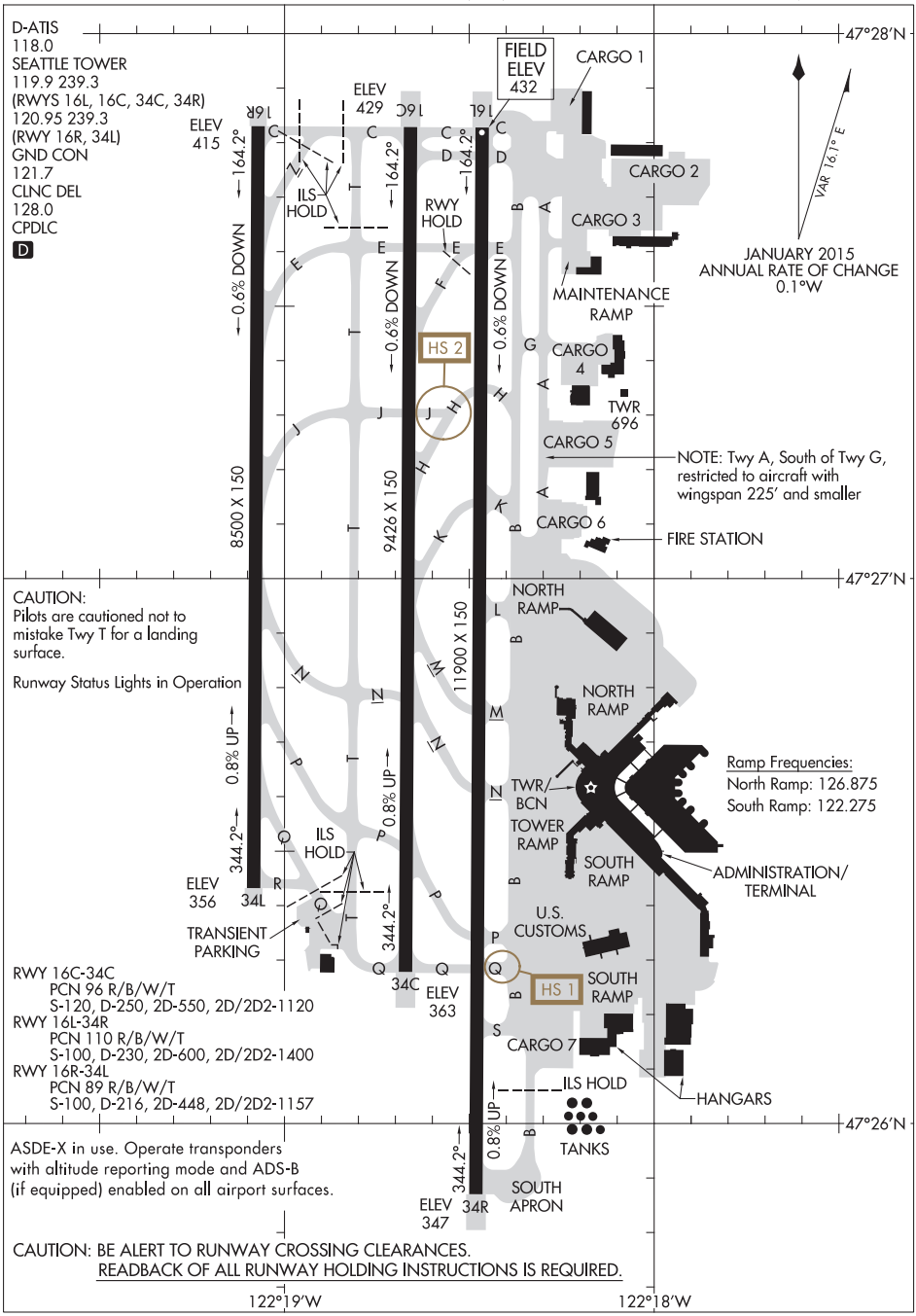
AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



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.


D-ATIS
118.0
SEATTLE TOWER
119.9 239.3
(RWYS 16L, 16C, 34C, 34R)
120.95 239.3
(RWY 16R, 34L)
GND CON
121.7
CLNC DEL
128.0
CPDLC
D
47°28'N
FIELD ELEV 432
CARGO 1
CARGO 2
CARGO 3
MAINTENANCE RAMP
CARGO 4
TWR 696
CARGO 5
CARGO 6
FIRE STATION
NOTE: Twy A, South of Twy G, restricted to aircraft with wingspan 225' and smaller
VAR 16.1° E
JANUARY 2015
ANNUAL RATE OF CHANGE
0.1°W
ELEV 415
ELEV 429
ILS HOLD
RWY HOLD
HS 2
164.2°
0.6% DOWN
8500 X 150
9426 X 150
11900 X 150
47°27'N
CAUTION:
Pilots are cautioned not to mistake Twy T for a landing surface.
Runway Status Lights in Operation
NORTH RAMP
NORTH RAMP
TWR/ BCN
TOWER RAMP
SOUTH RAMP
ADMINISTRATION/ TERMINAL
Ramp Frequencies:
North Ramp: 126.875
South Ramp: 122.275
0.8% UP
344.2°
ELEV 356
34L
TRANSIENT PARKING
U.S. CUSTOMS
HS 1
SOUTH RAMP
CARGO 7
ILS HOLD
HANGARS
TANKS
34C
ELEV 363
ELEV 347
34R
SOUTH APRON
RWY 16C-34C
PCN 96 R/B/W/T
S-120, D-250, 2D-550, 2D/2D2-1120
RWY 16L-34R
PCN 110 R/B/W/T
S-100, D-230, 2D-600, 2D/2D2-1400
RWY 16R-34L
PCN 89 R/B/W/T
S-100, D-216, 2D-448, 2D/2D2-1157
ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.
47°26'N
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
122°19'W
122°18'W

(BANGR9.BANGR) 17285

BANGR NINE DEPARTURE (RNAV)

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)

SEATTLE, WASHINGTON

BANGR NINE DEPARTURE (RNAV)

(BANGR9.BANGR) 12OCT17

SEATTLE, WASHINGTON
SEATTLE-TACOMA INTL (SEA)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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)

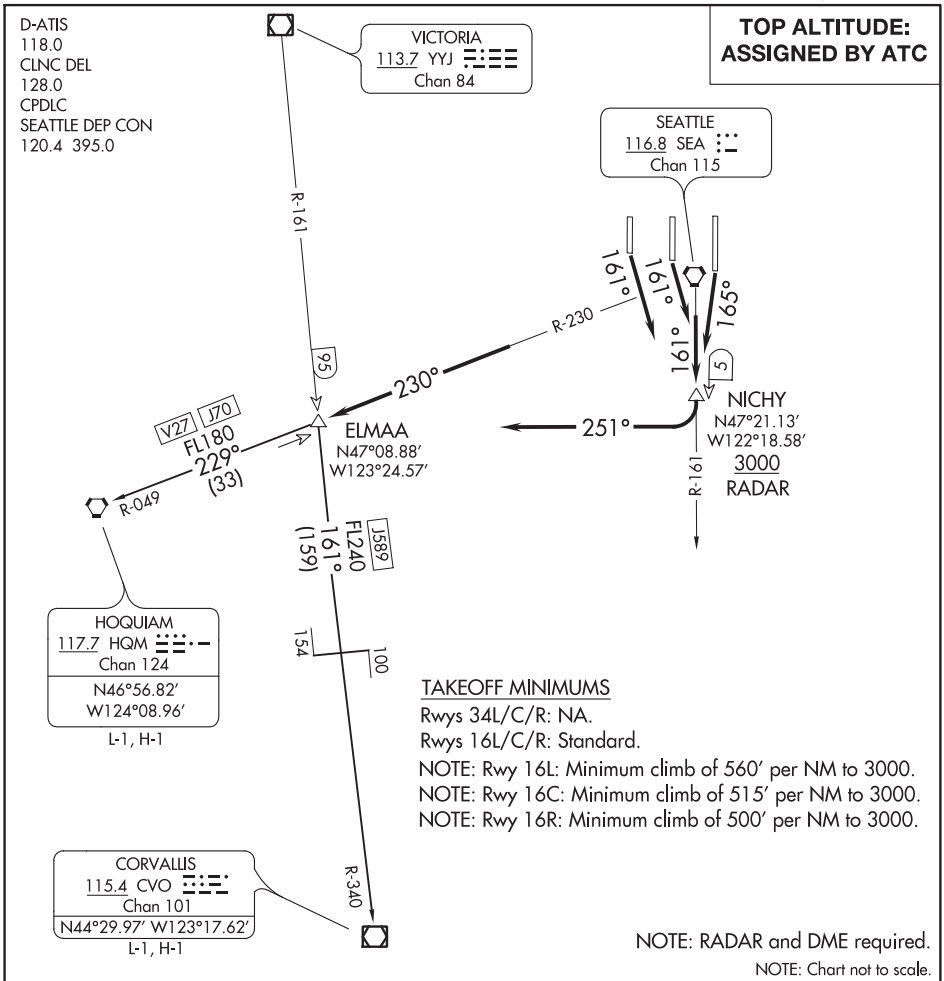
PANGL TRANSITION (BANGR9.PANGL)

(ELMAA3.ELMAA) 17285

ELMAA THREE DEPARTURE

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



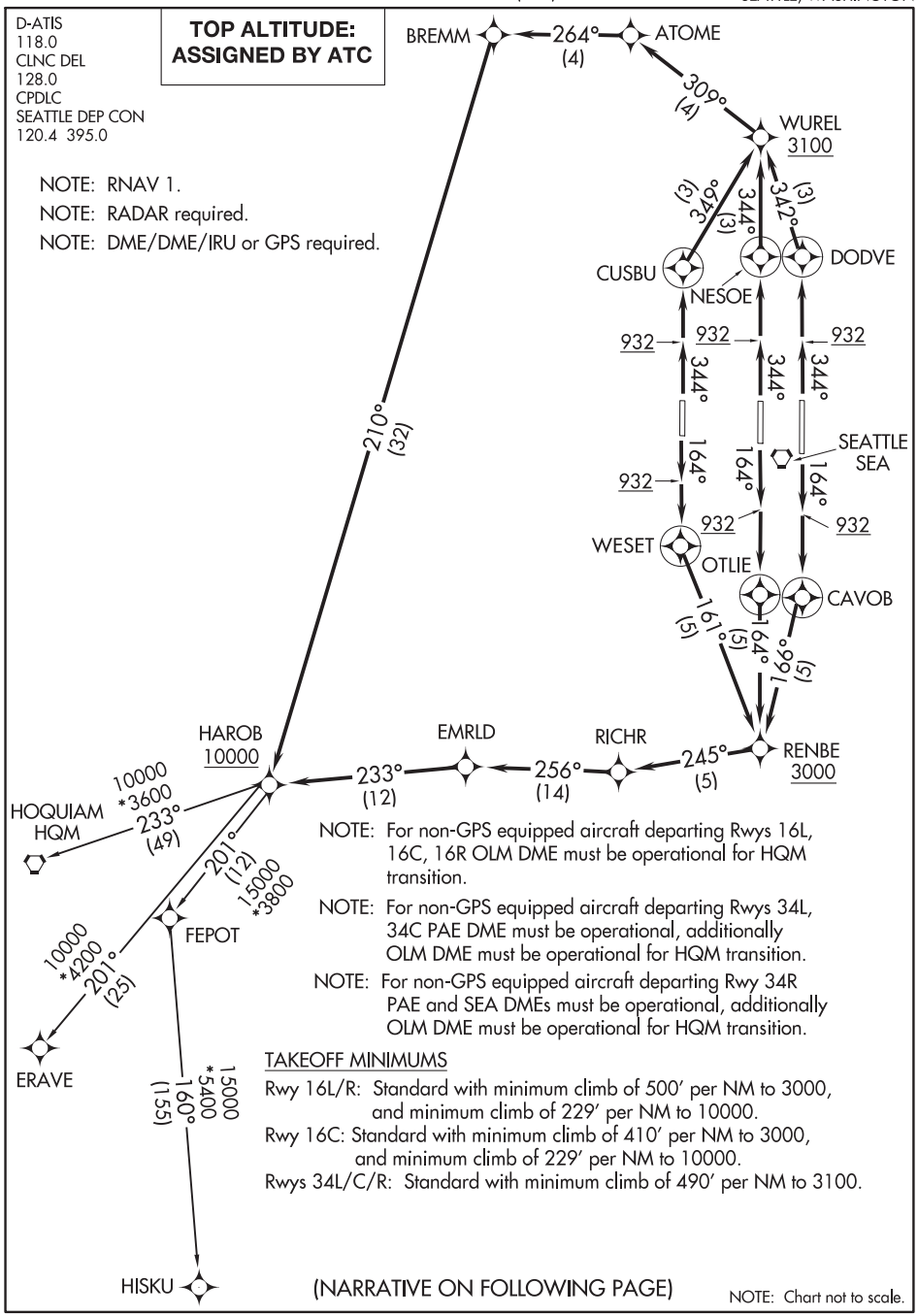
DEPARTURE ROUTE DESCRIPTION

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.

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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)

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.

(JEFPO1.JEFPO) 18200

JEFPO ONE DEPARTURE (RNAV)

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

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

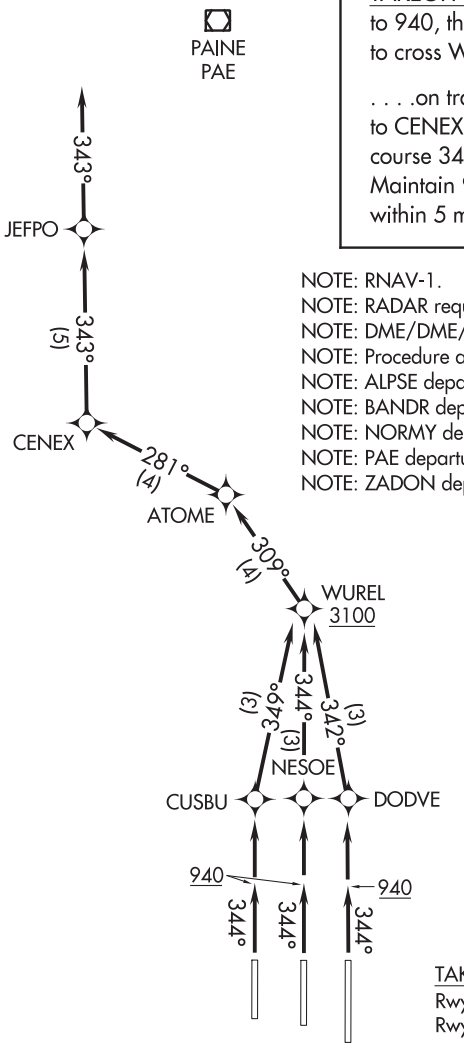
TAKEOFF RUNWAY 34C: Climb heading 344° to 940, then direct NESOE, then on track 344° to cross WUREL at or above 3100, thence. . . .

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.

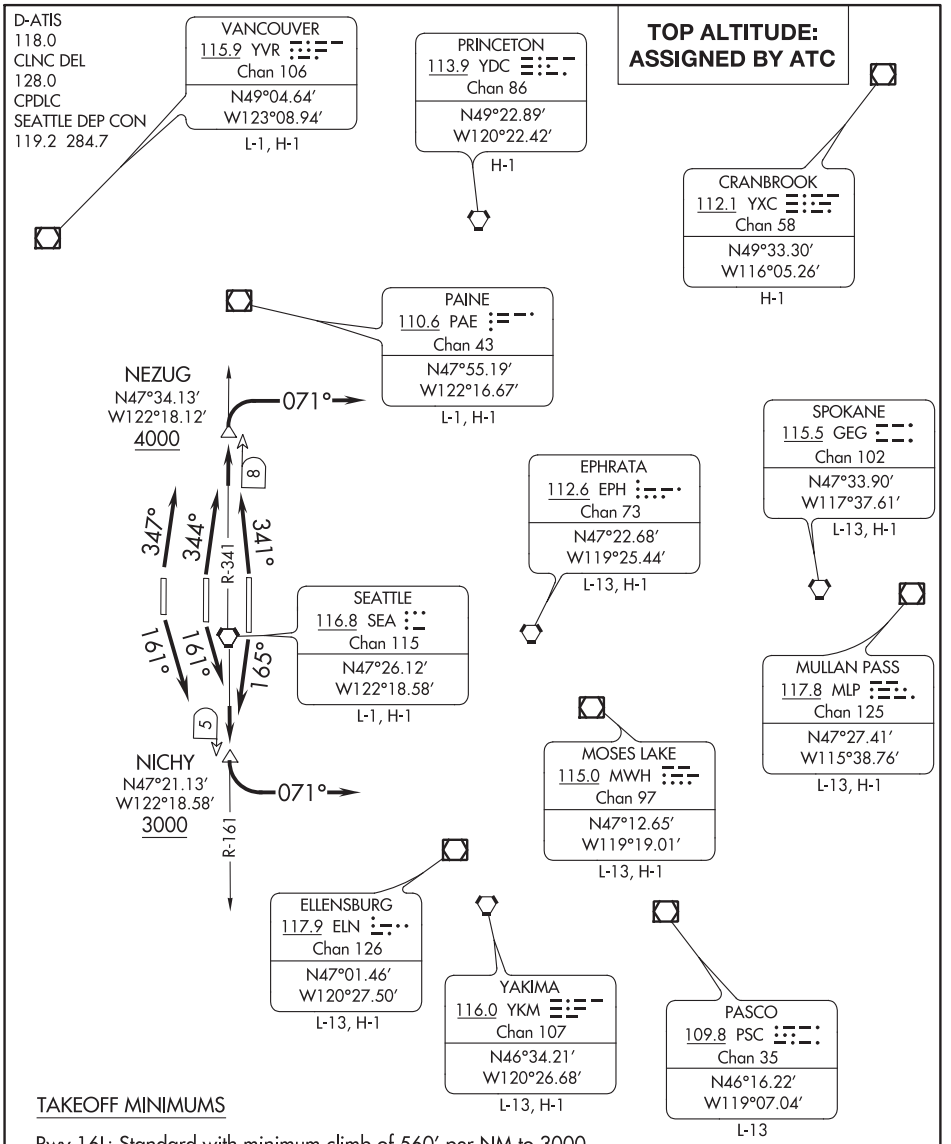
NOTE: RNAV-1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Procedure available from 2200 to 0600 local.
NOTE: ALPSE departures expect direct/vectors to ALPSE.
NOTE: BANDR departures expect direct/vectors to BANDR.
NOTE: NORMY departures expect direct/vectors to NORMY.
NOTE: PAE departures 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.

NW-1, 30 JAN 2020 to 26 MAR 2020



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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.

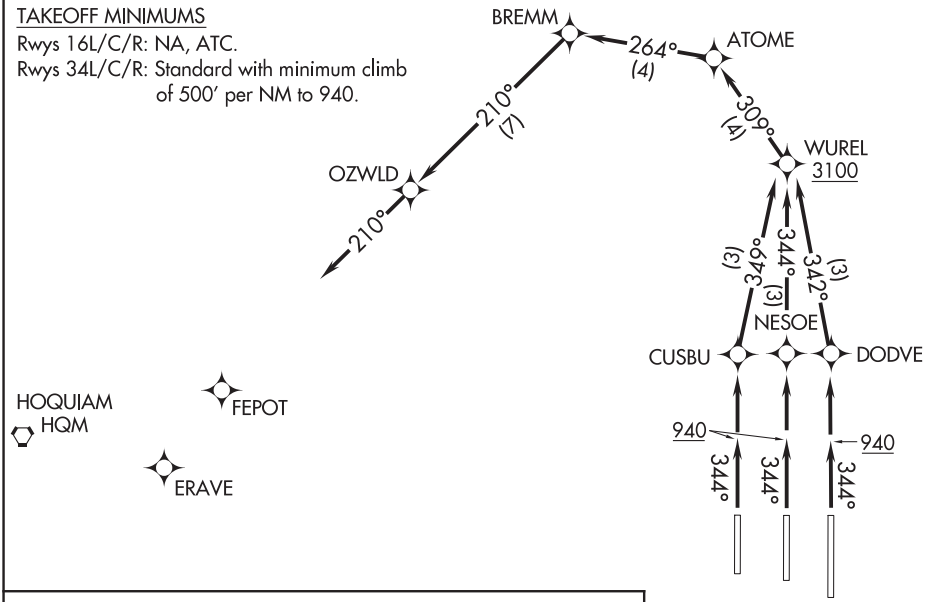
NW-1, 30 JAN 2020 to 26 MAR 2020

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.

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

TAKEOFF MINIMUMS
Rwys 16L/C/R: NA, ATC.
Rwys 34L/C/R: Standard with minimum climb of 500' per NM to 940.



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.

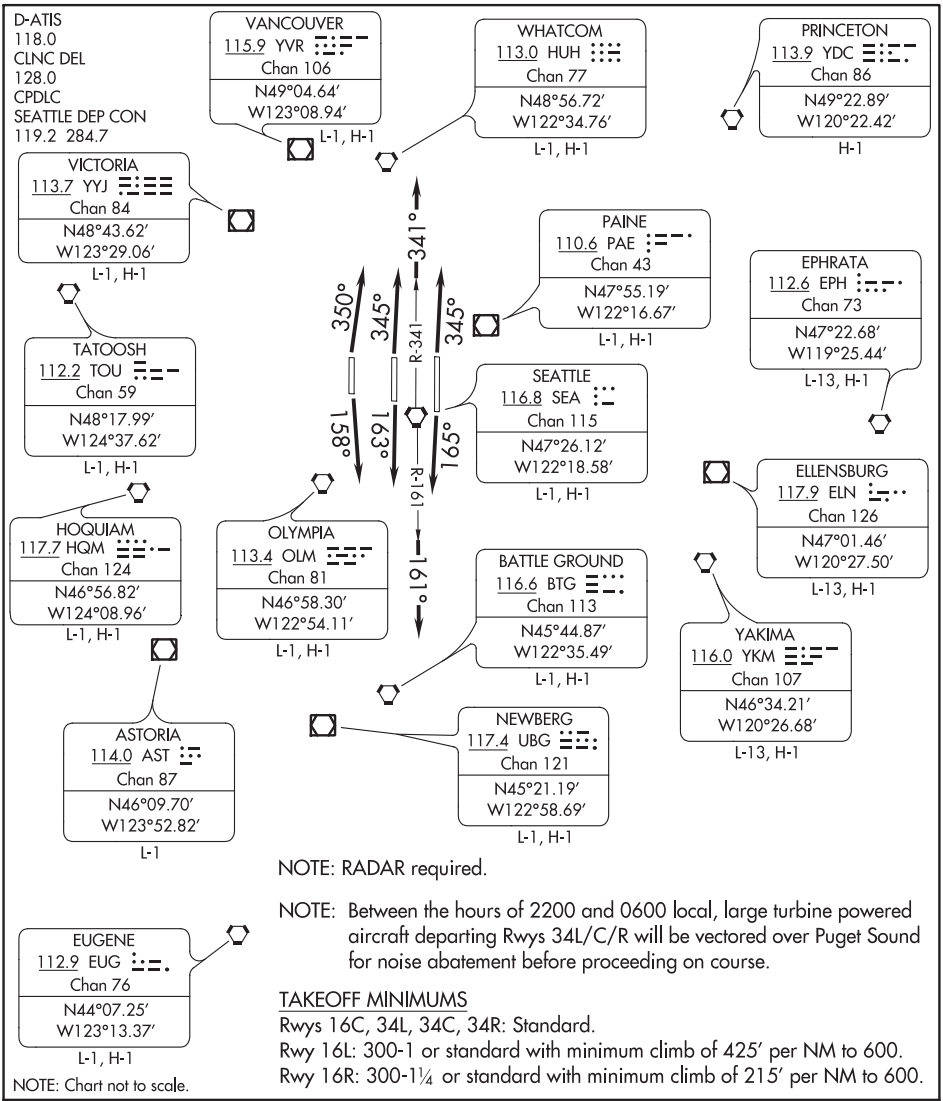
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

(SEA7.SEA) 18256

SEATTLE SEVEN DEPARTURE

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



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. . . .

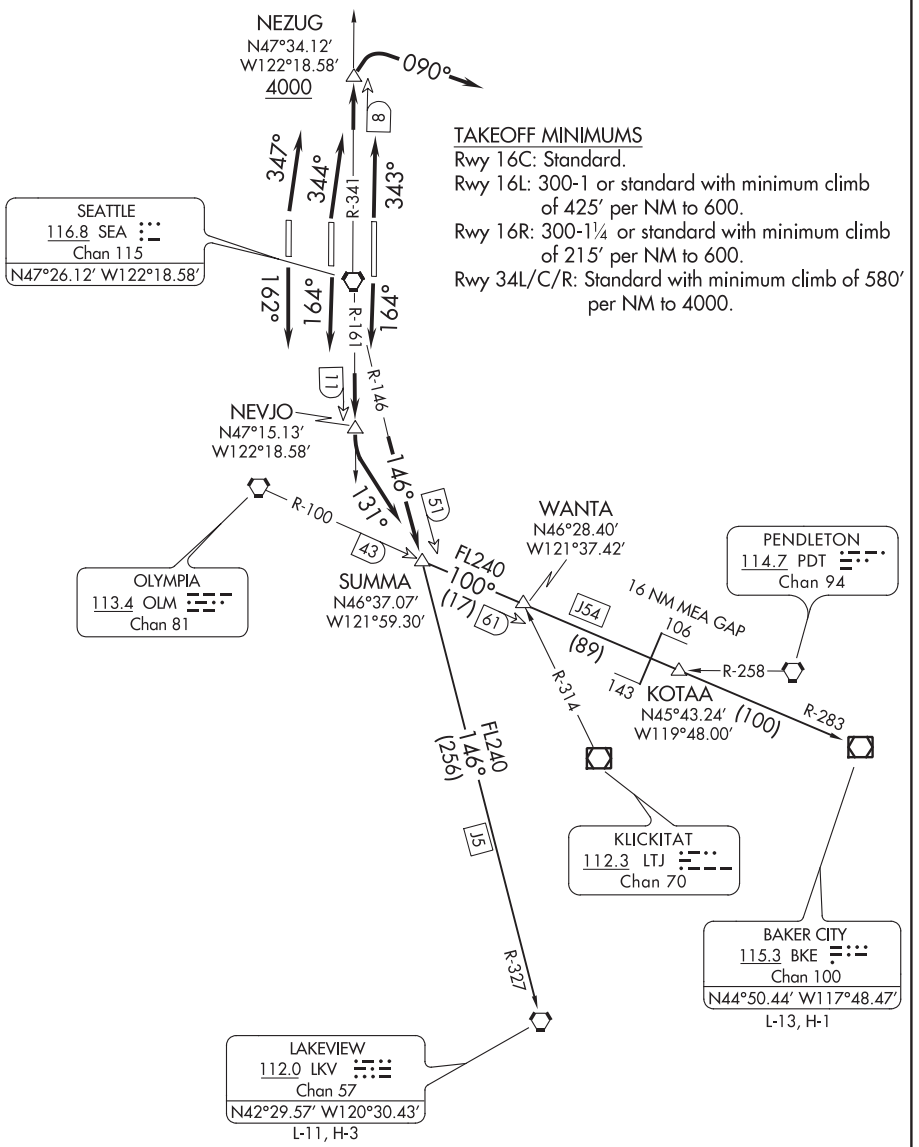
. . . .maintain assigned altitude, expect RADAR vectors to assigned route.

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 5

SHELBY (SBX)

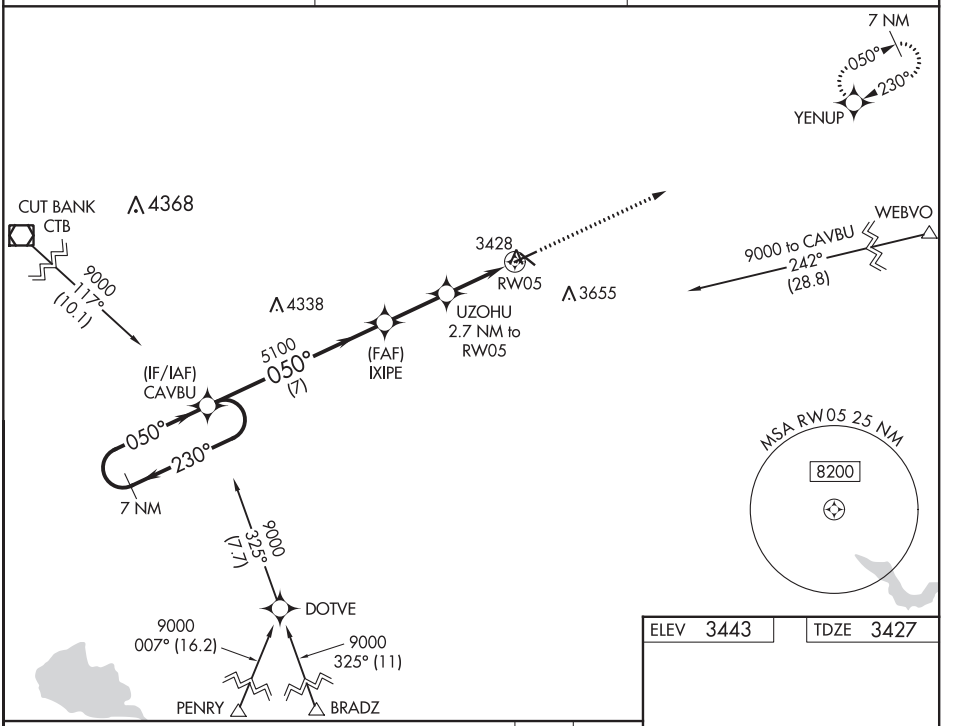
WAAS	APP CRS	Rwy Idg	5005
CH 69630	050°	TDZE	3427
W05A		Apt Elev	3443

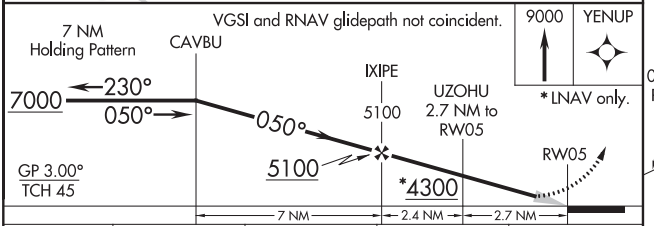
T
NA
-31°C

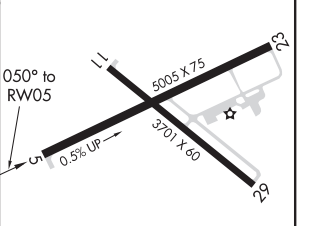
Night landing: Rwy 23 NA. Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Cut Bank altimeter setting, if not received use Great Falls altimeter setting and increase all DA 81 feet and all MDA 100 feet; increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ⅝ mile, LNAV Cats C/D and Circling Cat 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)

MIRL Rwys 5-23 and 11-29 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SHELBY, MONTANA AL-5372 (FAA) 19283

WAAS CH 78026 W23A	APP CRS 230°	Rwy Idg 5005 TDZE 3443 Apt Elev 3443

RNAV (GPS) RWY 23

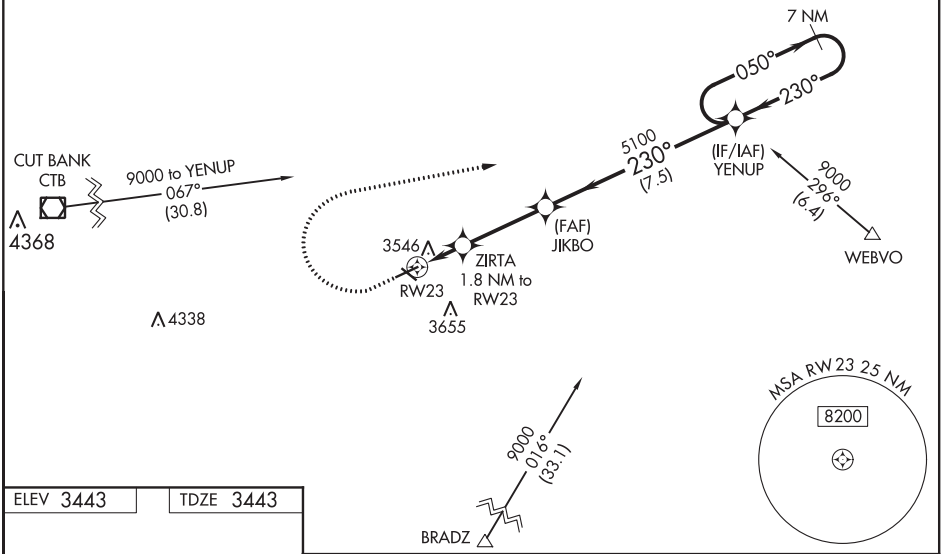
SHELBY (SBX)

T NA -31°C

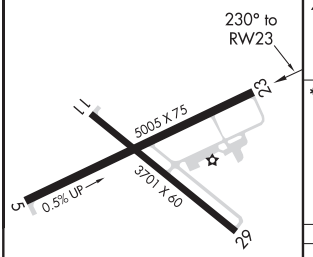
Baro-VNAV NA. Rwy 23 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Use Cut Bank altimeter setting, if not received use Great Falls altimeter setting and increase all DA 81 feet and all MDA 100 feet; increase LPV all Cats visibility ⅜ mile, LNAV/VNAV all Cats, LNAV Cats C/D, Circling 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.

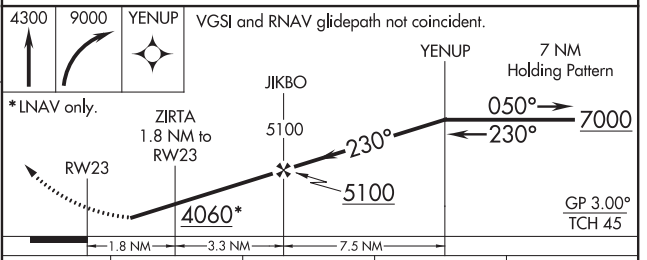
CTB ASOS	SALT LAKE CITY CENTER	UNICOM
119.025	133.4 285.4	122.8 (CTAF) L



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 5

SANDERSON FIELD (SHN)

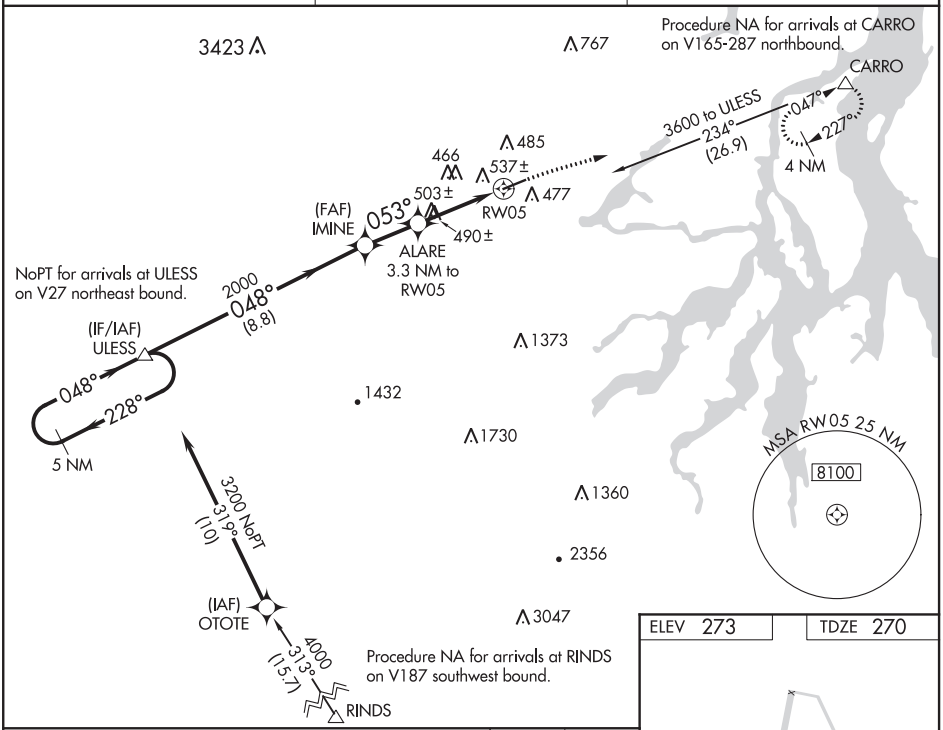
WAAS	APP CRS		
CH 61038	053°	Rwy Idg	5005
W05A		TDZE	270
		Apt Elev	273

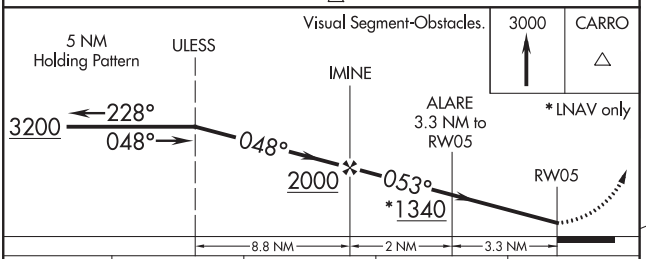
T A

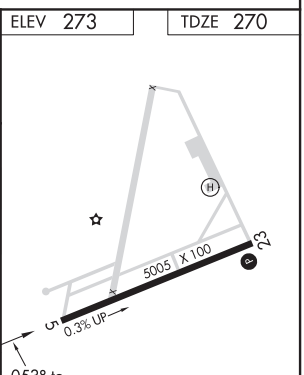
DME/DME RNP-0.3 NA. Circling NA for Cats C and D south of Rwy 5-23. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Olympia altimeter setting and increase all MDA by 60 feet, increase LP and LNAV visibility Cats C, D and Circling Cat C visibility ⅛ mile.

MISSED APPROACH: Climb to 3000 direct CARRO and hold.

ASOS	SEATTLE APP CON	UNICOM
119.275	121.1 290.9	122.8 (CTAF)







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)

REIL Rwy 23
MIRL Rwy 5-23

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SHELTON, WASHINGTON | AL-6643 (FAA) | 19227

RNAV (GPS) RWY 23

SANDERSON FIELD (SHN)

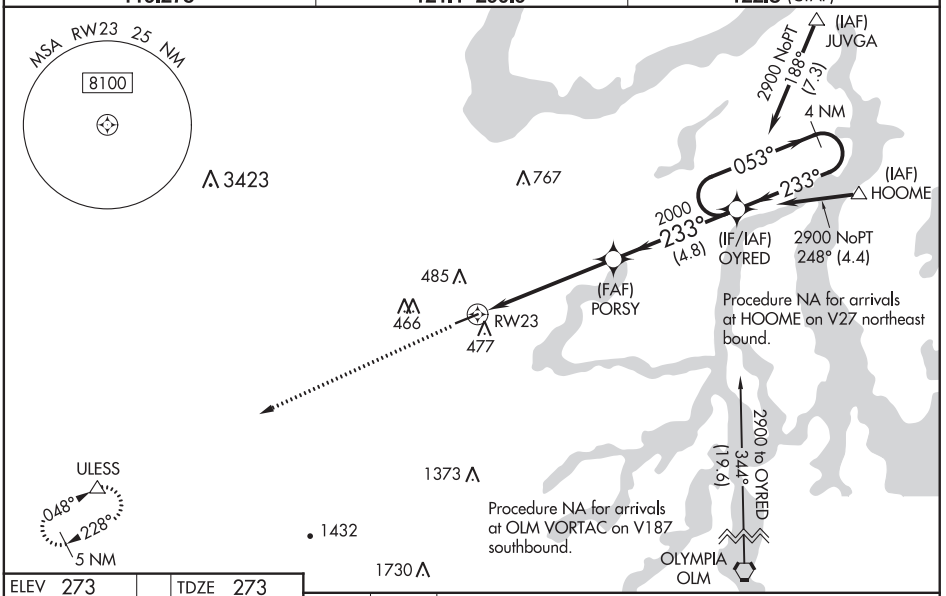
WAAS CH 58335 W23A	APP CRS 233°	Rwy Idg 5005 TDZE 273 Apt Elev 273

RNP APCH.

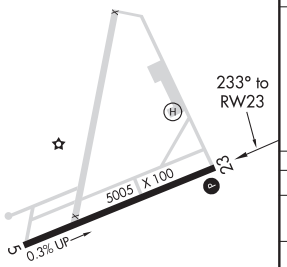
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C. Rwy 23 helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using Olympia altimeter setting. Circling NA for Cats C and D south of Rwy 5-23. When local altimeter setting not received, use Olympia altimeter 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.

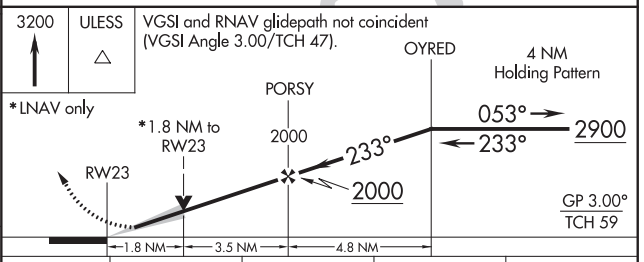
MISSED APPROACH: Climb to 3200 direct ULESS and hold.

ASOS	SEATTLE APP CON	UNICOM
119.275	121.1 290.9	122.8 (CTAF)



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
MIRL Rwy 5-23

SHELTON, WASHINGTON
Amdt 1A 20JUN19

47°14′N-123°09′W

SANDERSON FIELD (SHN)

RNAV (GPS) RWY 23

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC/DME RWY 33

SHERIDAN COUNTY (SHR)

LOC/DME I-SHR	APP CRS	Rwy Idg	8301
108.7	326°	TDZE	3985
Chan 24		Apt Elev	4021

T A -24°C

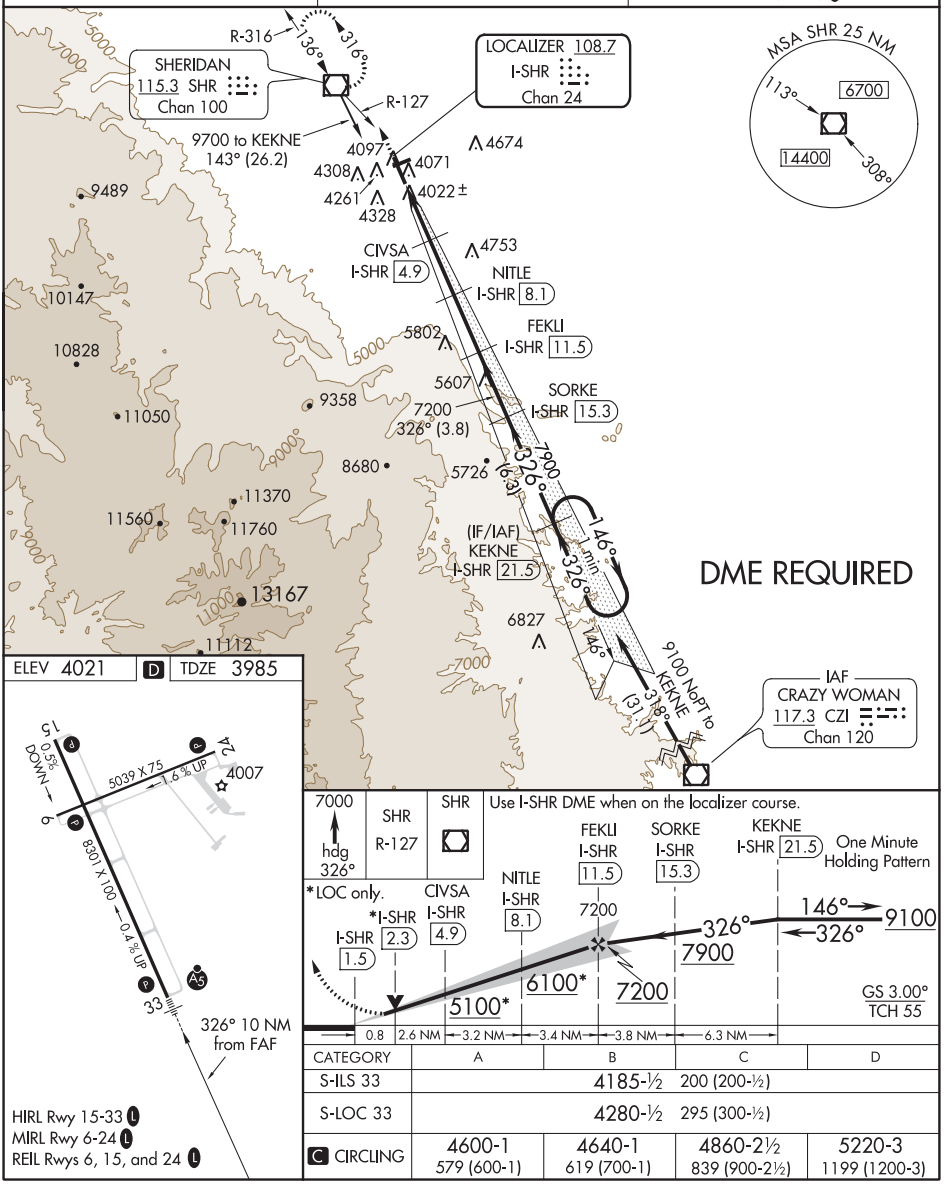
When local altimeter setting not received, procedure NA. Night landing: Rwy 24 NA. For inoperative MALSR, increase S-LOC 33 Cats C and D visibility to ⅞ mile.

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

NW-1, 30 JAN 2020 to 26 MAR 2020



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)

SHERIDAN, WYOMING | AL-388 (FAA) | 19227

WAAS	APP CRS	Rwy Idg	8301
CH **81899**	**146°**	TDZE	**4014**
W15A		Apt Elev	**4021**

RNAV (GPS) RWY 15

SHERIDAN COUNTY (SHR)

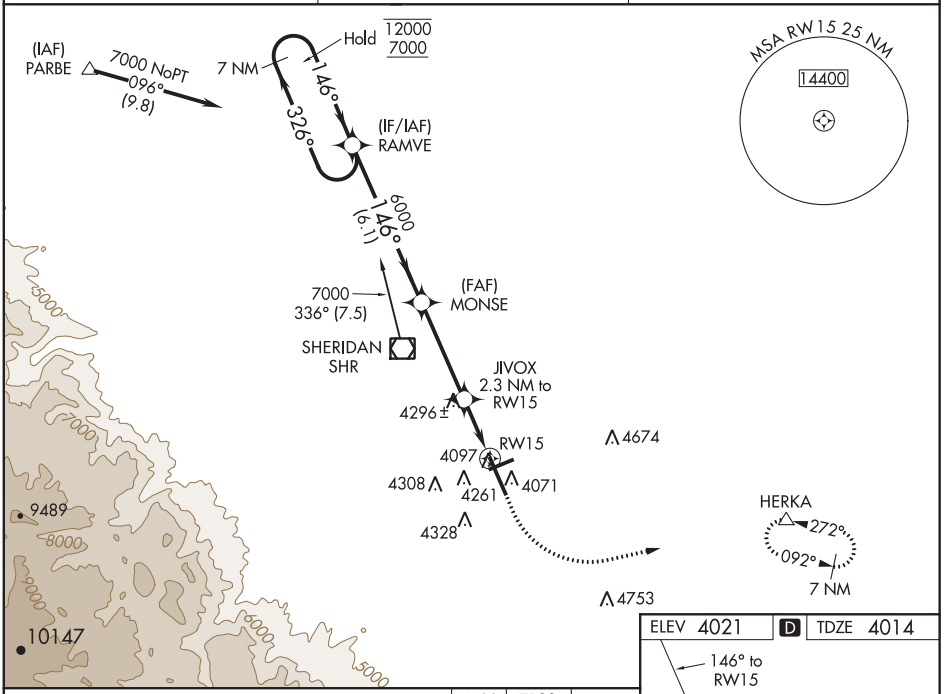
RNP APCH.

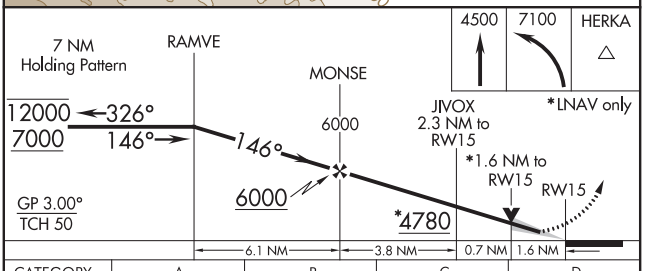
Circling to Rwy 24 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 51°C. When local altimeter setting not received, procedure NA.

-24°C

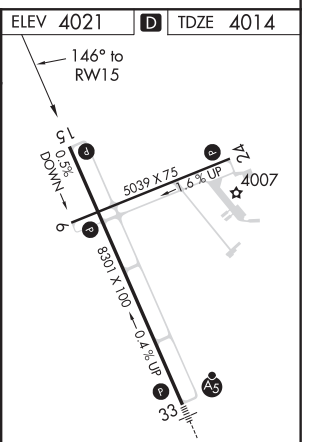
MISSED APPROACH: Climb to 4500 then climbing left turn to 7100 direct HERKA and hold, continue climb-in-hold to 7100.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS	APP CRS	Rwy Idg	8301
CH 65699	326°	TDZE	3985
W33A		Apt Elev	4021

RNAV (GPS) RWY 33

SHERIDAN COUNTY (SHR)

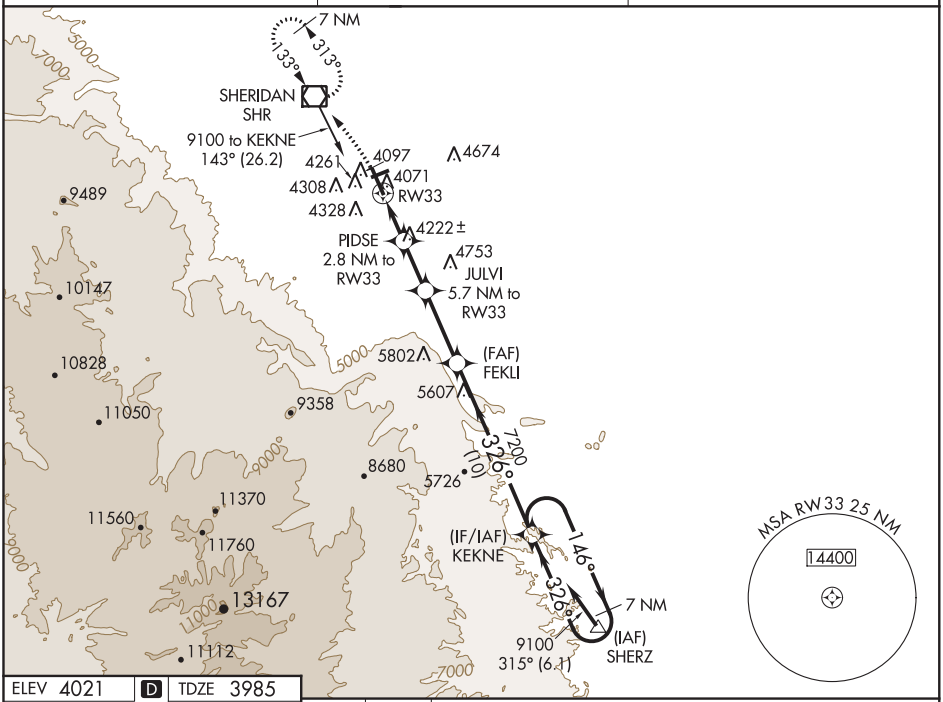
T A -24°C

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.

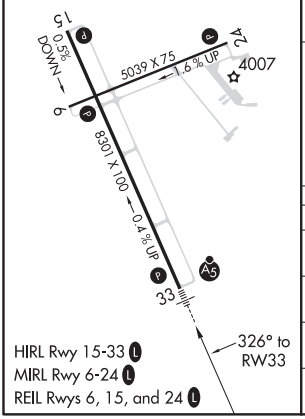
MALSR

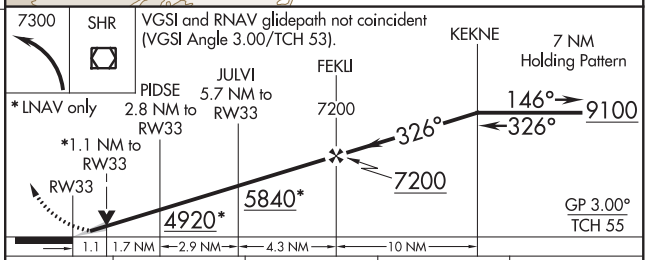
MISSED APPROACH: Climbing left turn to 7300 direct SHR VOR/DME and hold, continue climb-in-hold to 7300.

ASOS	SALT LAKE CENTER	UNICOM
135.175	127.75 351.9	123.0 (CTAF) L



ELEV 4021 D TDZ 3985





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SHERIDAN, WYOMING | AL-388 (FAA) | 17117

VOR RWY 15

SHERIDAN COUNTY (SHR)

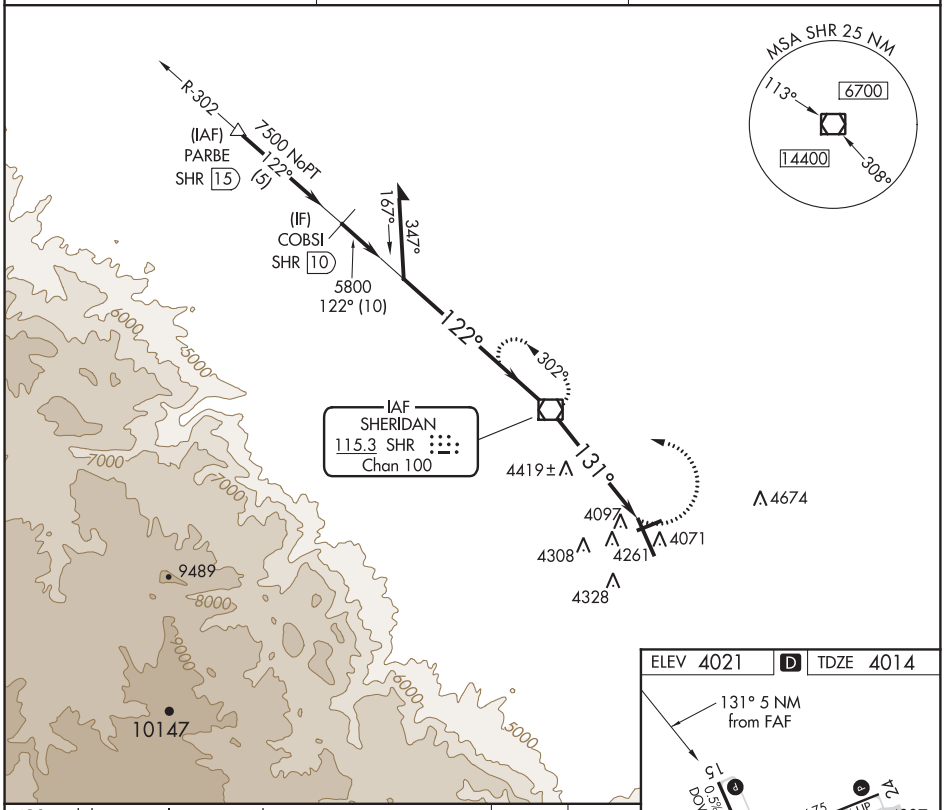
VOR/DME SHR	APP CRS	Rwy Idg	8301
115.3	131°	TDZE	4014
Chan 100		Apt Elev	4021

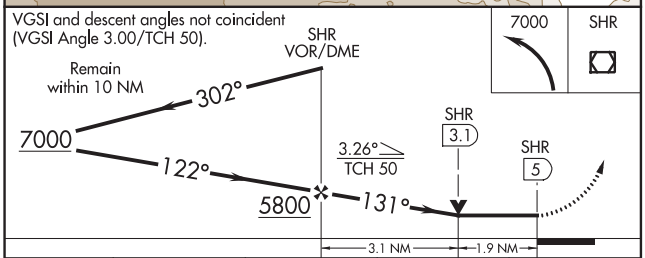
T
A
-24°C

When local altimeter setting not received, procedure NA. Night landing: Rwy 24 NA.

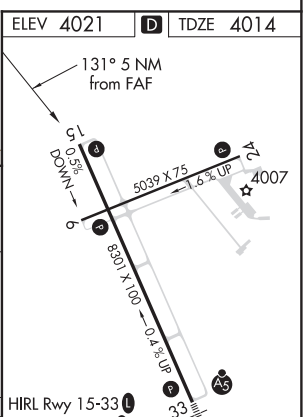
MISSED APPROACH: Climbing left turn to 7000 direct SHR VOR/DME and hold, continue climb-in-hold to 7000.

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)

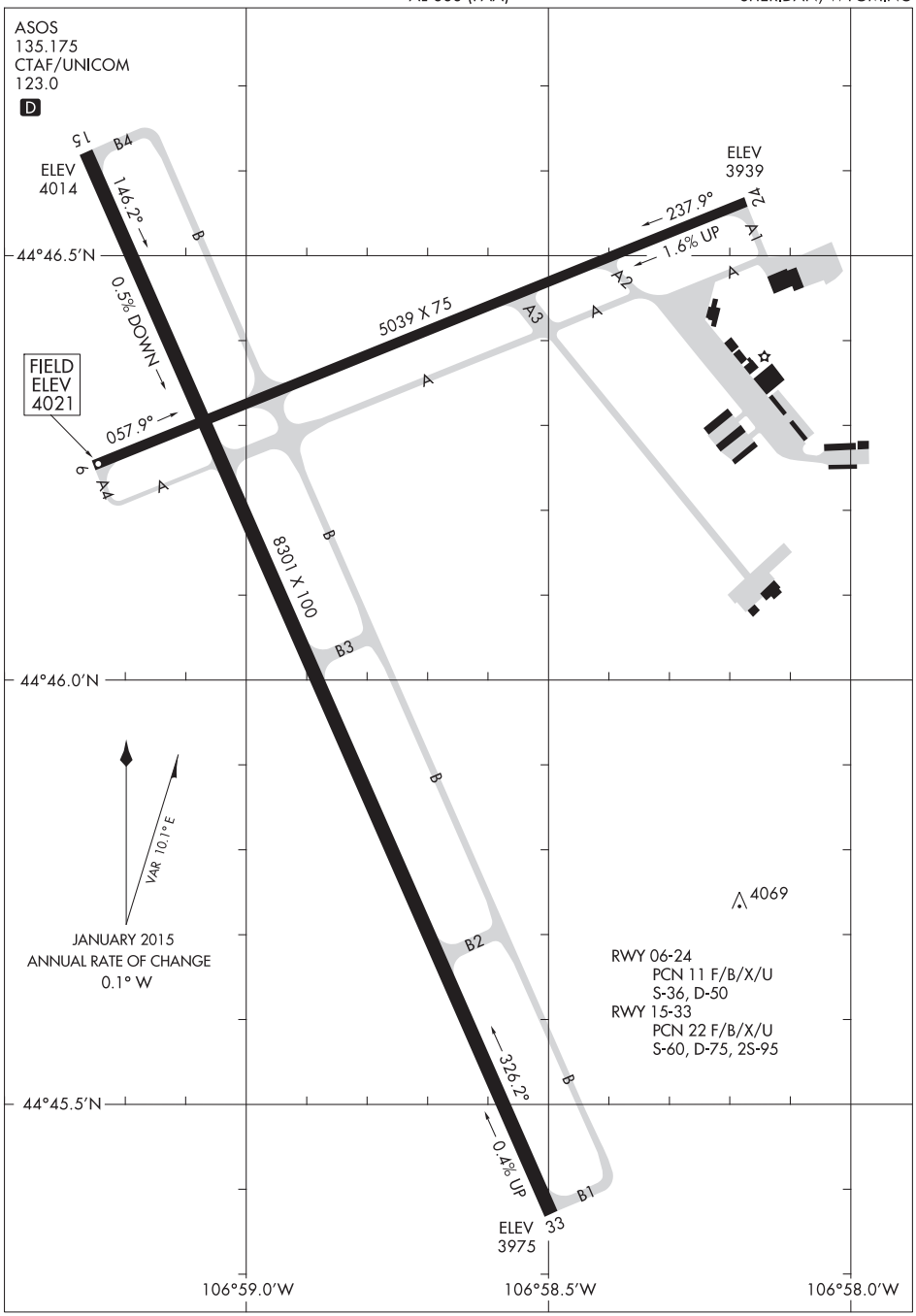


FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

SIDNEY, MONTANA AL-5303 (FAA) 20030

WAAS	APP CRS		
CH **62918**	**015°**	Rwy Idg	**5705**
W01A		TDZE	**1985**
		Apt Elev	**1985**

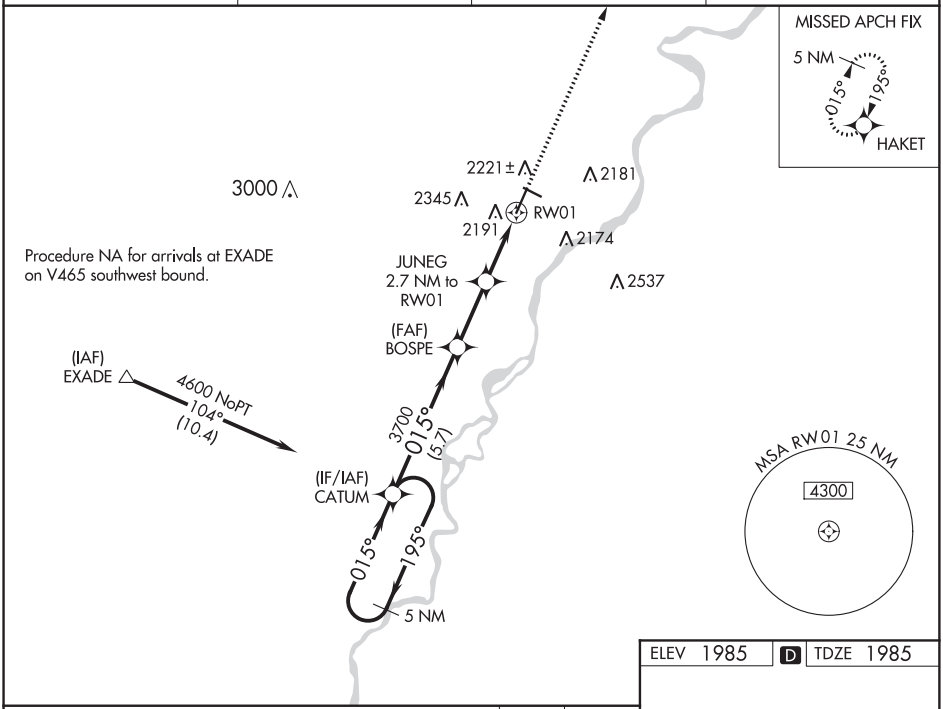
RNAV (GPS) RWY 1

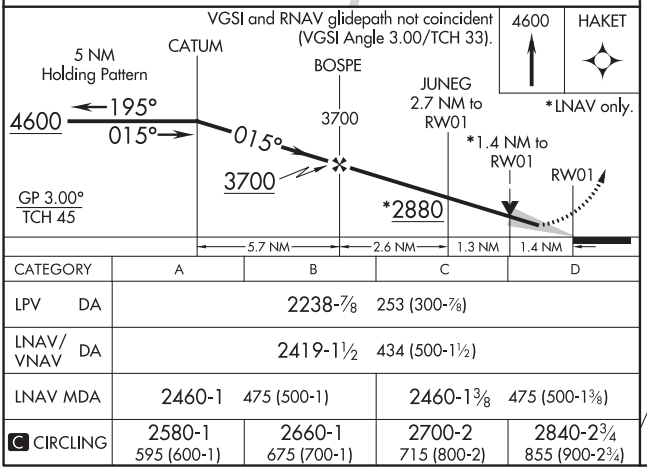
SIDNEY-RICHLAND RGNL (SDY)

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.

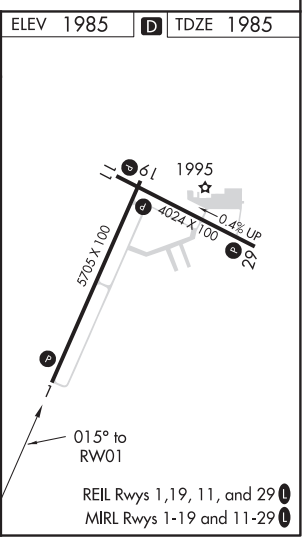
MISSED APPROACH: Climb to 4600 direct HAKET and hold.

AWOS-3PT	SALT LAKE CENTER	GREAT FALLS RADIO	UNICOM
119.275	**126.85 305.2**	**123.65**	**122.8** (CTAF) L





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)



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

SIDNEY, MONTANA
Amdt 2 17AUG17

47°42'N-104°12'W

SIDNEY-RICHLAND RGNL (SDY)
RNAV (GPS) RWY 1

RNAV (GPS) RWY 19

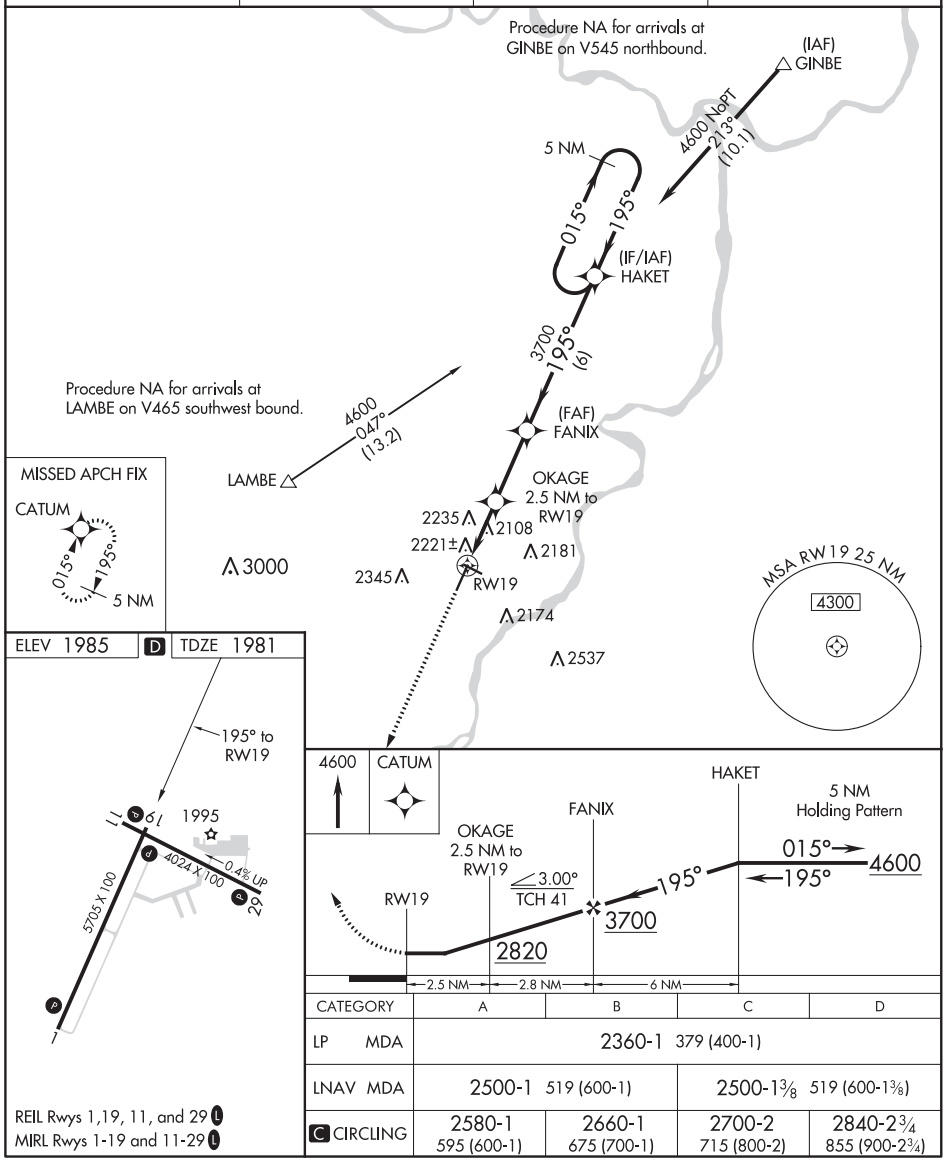
SIDNEY-RICHLAND RGNL (SDY)

WAAS	APP CRS	Rwy Idg	5705
CH 86818	195°	TDZE	1981
W19A		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	GREAT FALLS RADIO	UNICOM
119.275	126.85 305.2	123.65	122.8 (CTAF) L



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

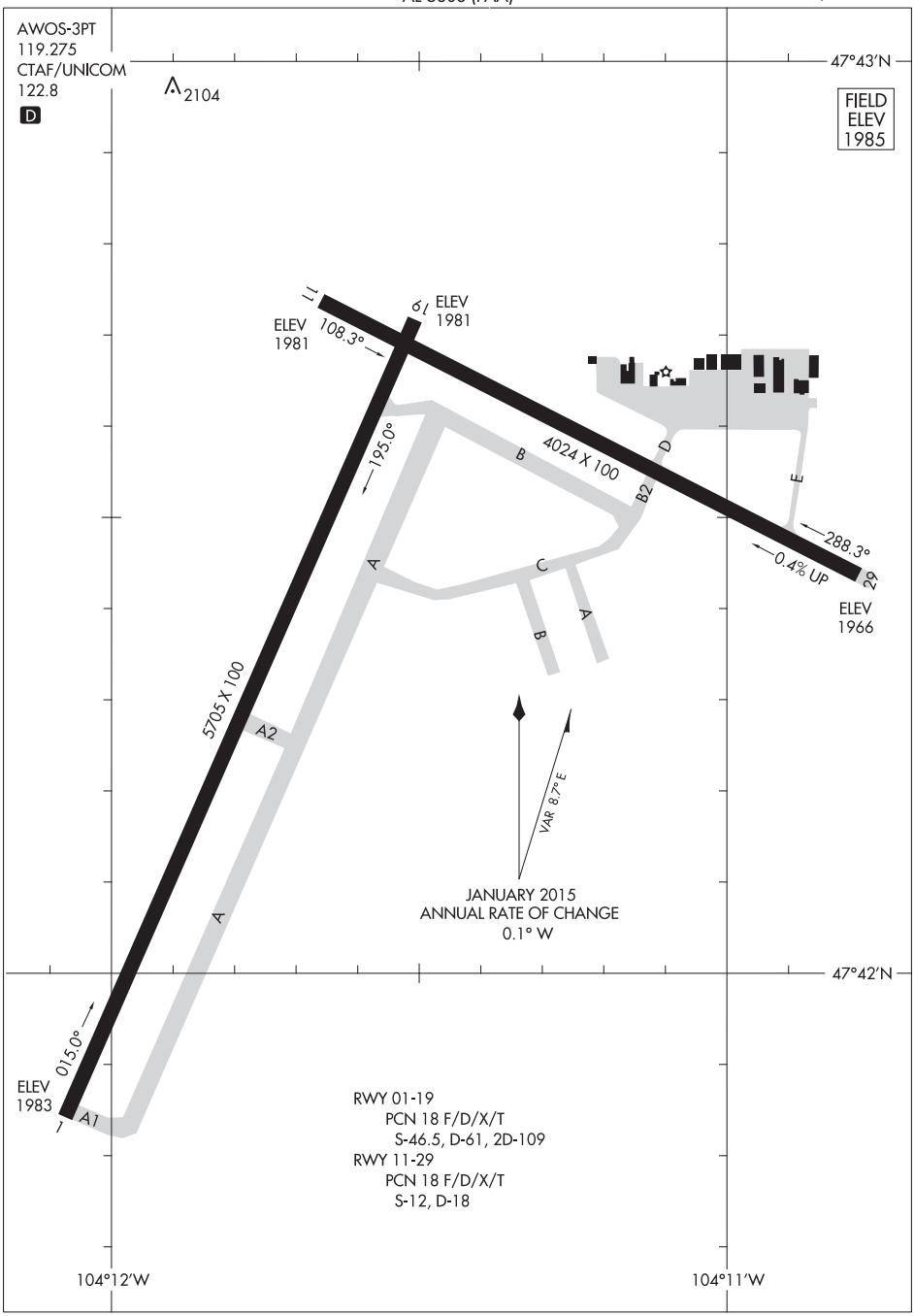
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

17229

AIRPORT DIAGRAM

AL-5303 (FAA)

SIDNEY-RICHLAND RGNL (SDY)
SIDNEY, MONTANA



AIRPORT DIAGRAM
17229

SIDNEY, MONTANA
SIDNEY-RICHLAND RGNL (SDY)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS)-A

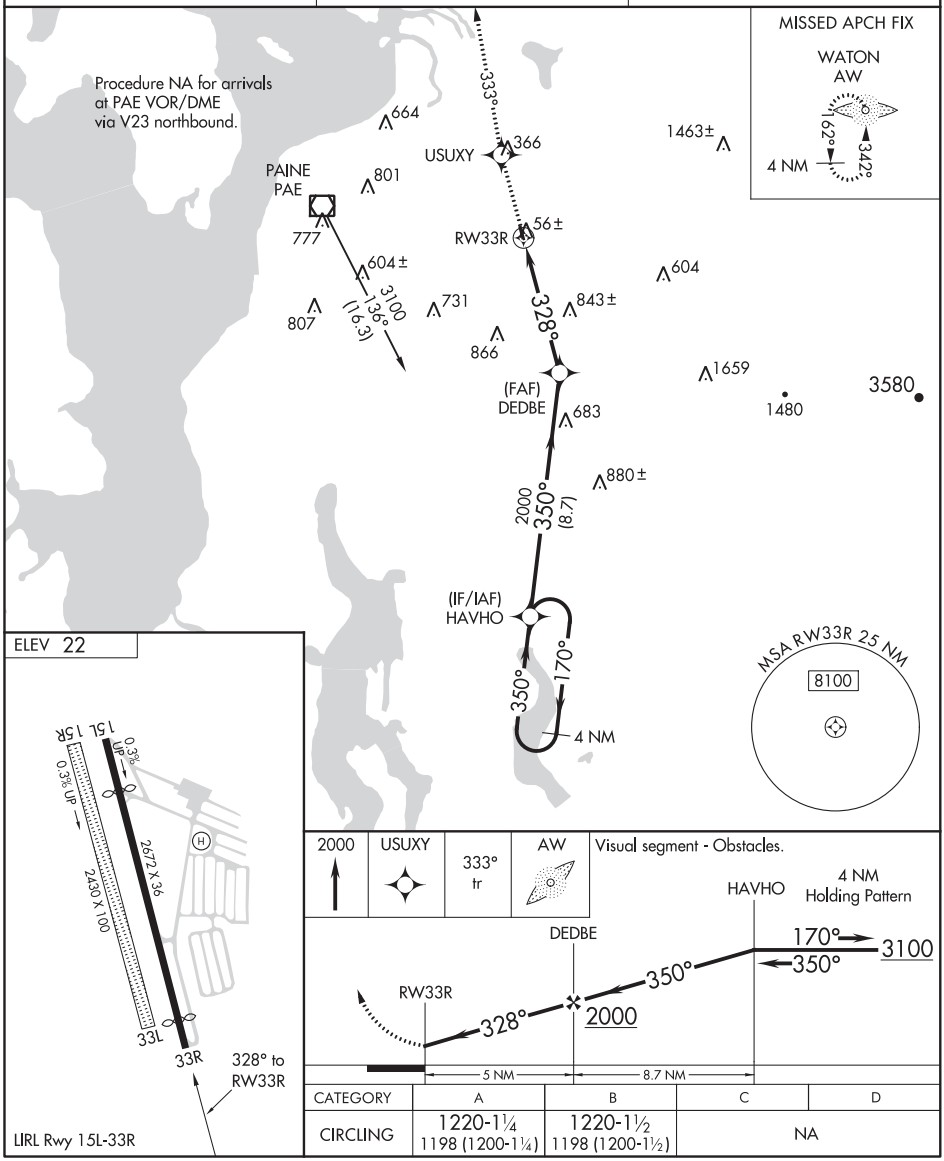
HARVEY FIELD (S43)

APP CRS		
328°	Rwy Idg	N/A
	TDZE	N/A
	Apt Elev	22

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 22R

FELTS FIELD (SFF)

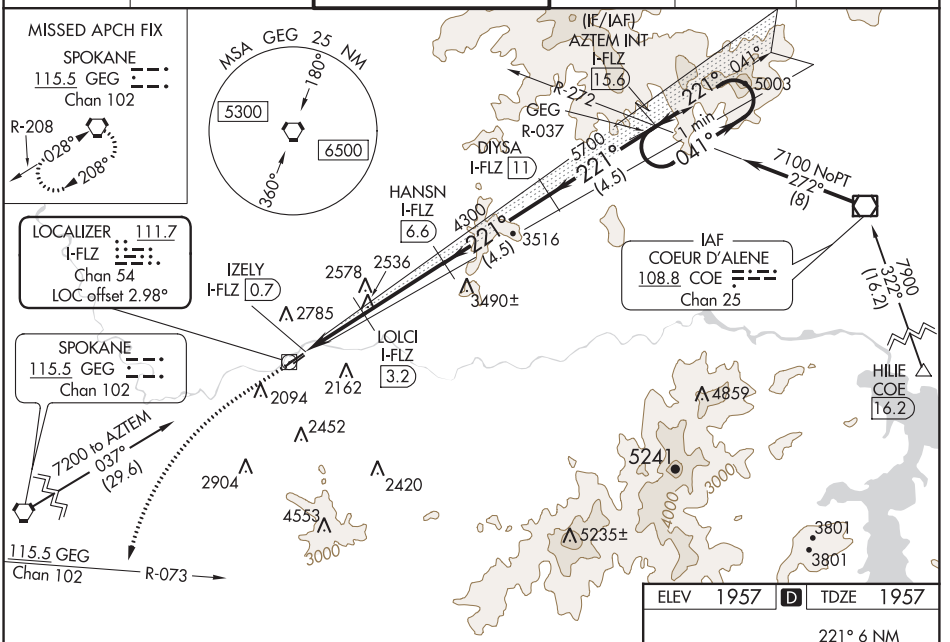
LOC/DME I-FLZ	APP CRS	Rwy ldg	4499
111.7	221°	TDZE	1957
Chan 54		Apt Elev	1957

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 2 ½.

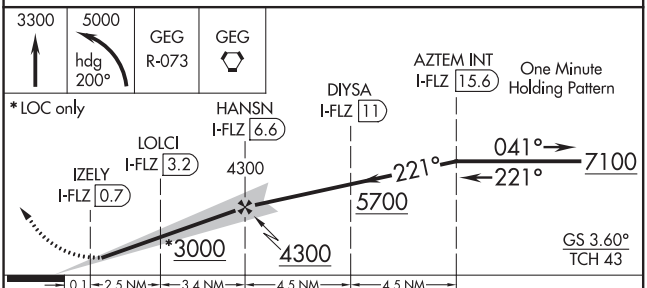
MALSR

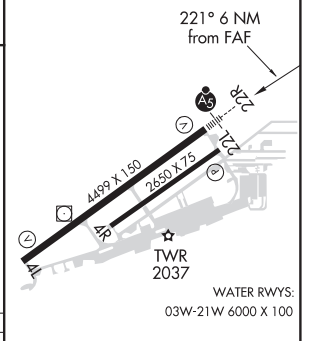
MISSED APPROACH: Climb to 3300 then climbing left turn to 5000 on heading 200° and on GEG VORTAC R-073 to GEG VORTAC and hold.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 4L

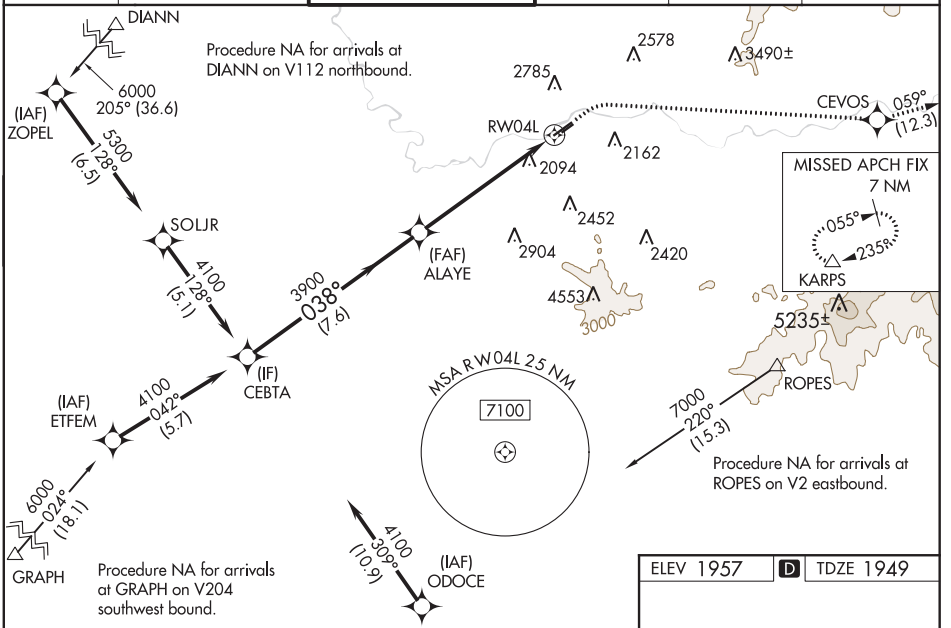
FELTS FIELD (SFF)

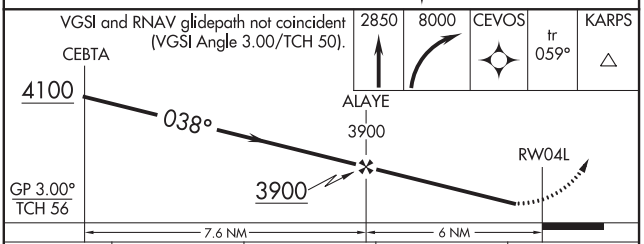
WAAS	APP CRS	Rwy Idg	4499
CH 65931	038°	TDZE	1949
W04A		Apt Elev	1957

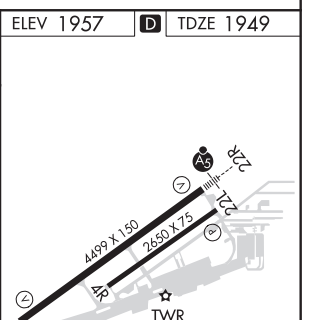
T Baro-VNAV NA when using Spokane Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (-1°F) or above 54°C (130°F). Circling NA northwest of Rwy 4L-22R. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all 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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON | AL-402 (FAA) | 19227

VOR RWY 4L

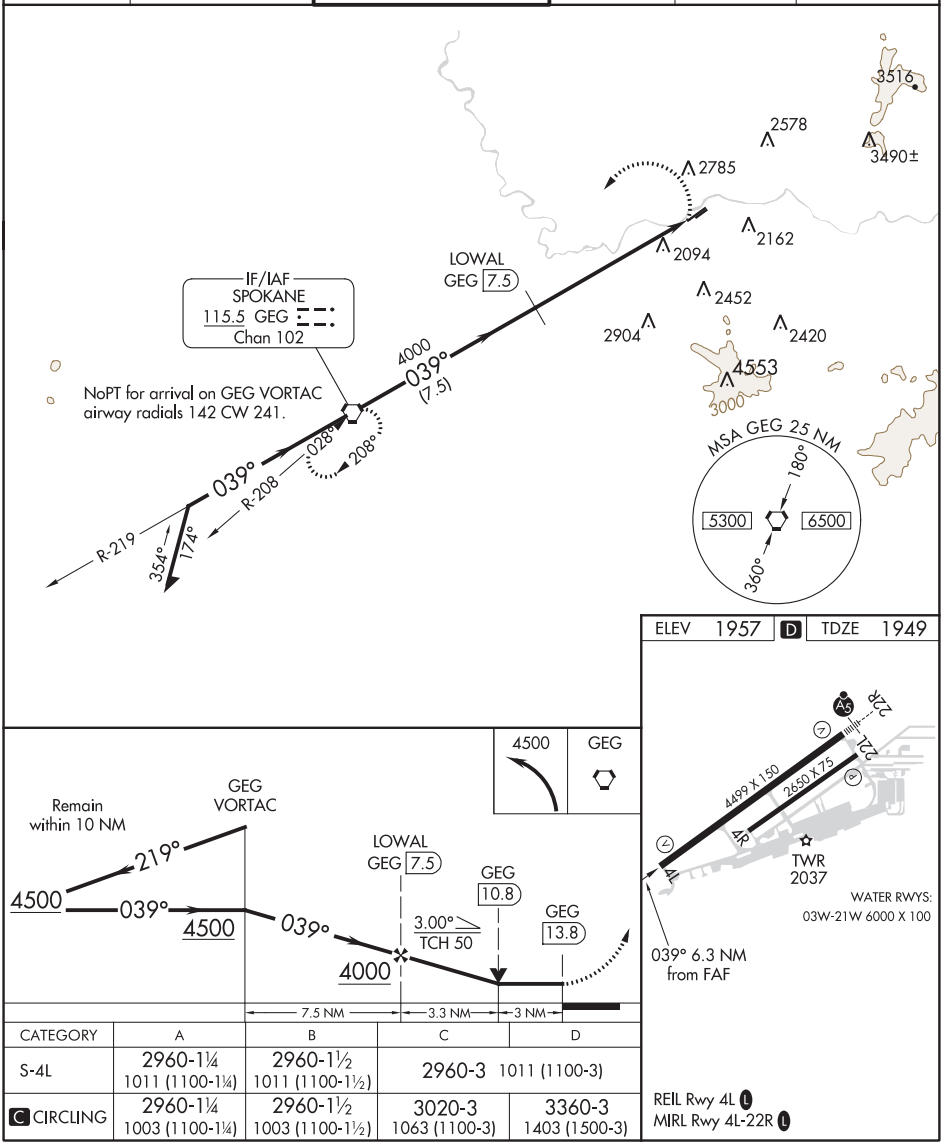
FELTS FIELD (SFF)

VORTAC GEG	APP CRS	Rwy Idg	4499
115.5	039°	TDZE	1949
Chan 102		Apt Elev	1957

TA 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



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

SPOKANE, WASHINGTON
Amdt 6 21JUL16

47°41′N-117°19′W

FELTS FIELD (SFF)
VOR RWY 4L

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 4L/R: Climb heading 038° to 5000. Expect RADAR vectors to assigned airway/route, thence. . . .

TAKEOFF RUNWAYS 22L/R: Climbing left turn heading 190° to 5500. Expect RADAR vectors to assigned airway/route, thence. . . .

. . . .maintain 12000 or assigned lower altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS: Climb direct GEG VORTAC before proceeding on course. Cross GEG VORTAC at or above: northeast bound V120-448 and eastbound V2 5200.

TOP ALTITUDE: 12000

ATIS 120.55
GND CON 121.7
FELTS TOWER★ 132.5 239.025
SPOKANE DEP CON 133.35 263.0

N

038°
5000
190°
5500
V120-448
R-052
R-073
V2

WHATCOM
113.0 HUH
Chan 77
N48°56.72′ W122°34.76′
L-1, H-1

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

COEUR D'ALENE
108.8 COE
Chan 25
N47°46.42′-W116°49.24′
L-13

MOSES LAKE
115.0 MWH
Chan 97
N47°12.65′-W119°19.01′
L-13, H-1

YAKIMA
116.0 YKM
Chan 107
N46°34.21′-W120°26.68′
L-13, H-1

PASCO
109.8 PSC
Chan 35
N46°16.22′ W119°07.04′
L-13

PULLMAN
109.0 PUW
Chan 27
N46°40.45′ W117°13.41′
L-13

MULLAN PASS
117.8 MLP
Chan 125
N47°27.41′-W115°38.76′
L-13, H-1

NEZ PERCE
108.2 MQG
Chan 19
N46°22.89′-W116°52.17′
L-13

PENDLETON
114.7 PDT
Chan 94
N45°41.91′-W118°56.32′
L-13, H-1

WALLA WALLA
116.4 ALW
Chan 111
N46°05.22′-W118°17.55′
L-13

TAKEOFF MINIMUMS

Rwys 4L/R: Standard with minimum climb of 400′ per NM to 5000.

Rwys 22L/R: Standard with minimum climb of 370′ per NM to 5500.

NOTE: RADAR required.

NOTE: Chart not to scale.

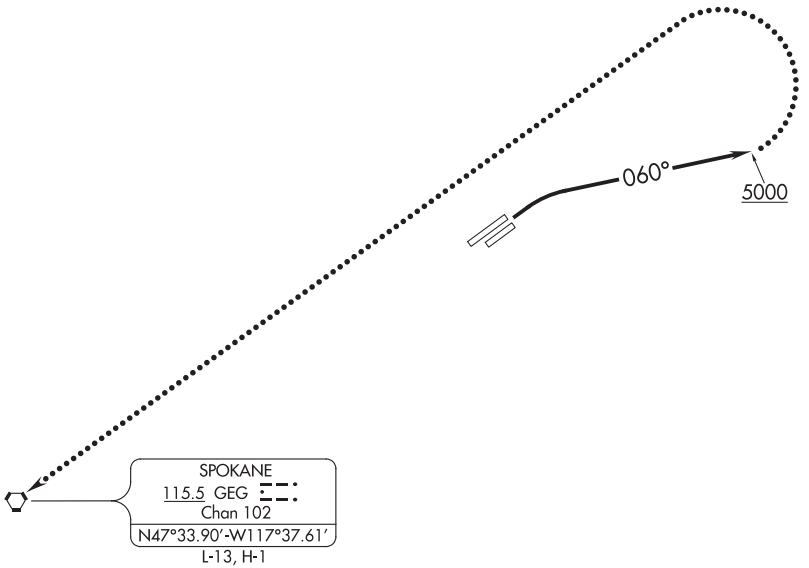
HAYDEN FOUR DEPARTURE

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.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON | AL-403 (FAA) | 19115

ILS or LOC RWY 3

SPOKANE INTL (GEG)

LOC/DME I-OLJ	APP CRS	Rwy Idg	11002
111.1	031°	TDZE	2385
Chan 48		Apt Elev	2385

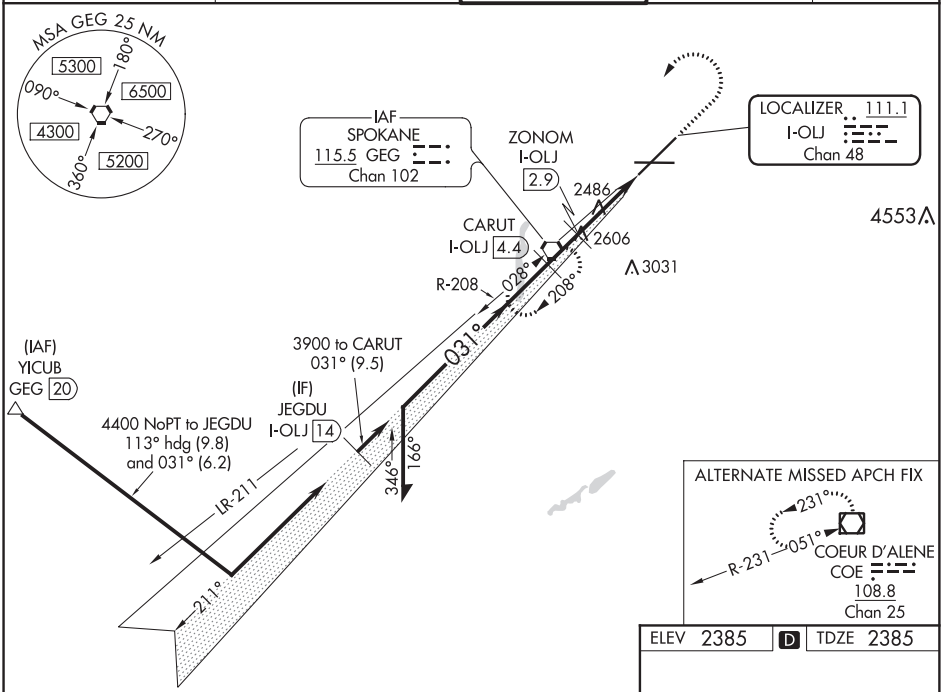
DME required for localizer only.

For inop ALS, increase S-LOC 3 Cat C/D visibility to RVR 5500.

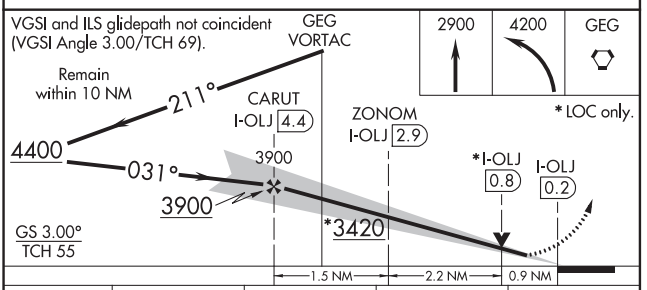
ALSF-2

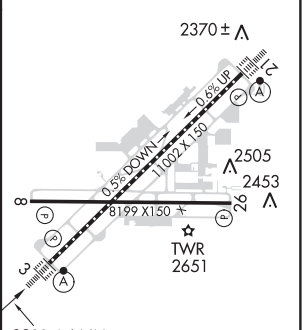
MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS or LOC RWY 21

SPOKANE INTL (GEG)

LOC/DME I-GEG	APP CRS	Rwy Idg	11002
111.1	212°	TDZE	2346
Chan 48		Apt Elev	2385

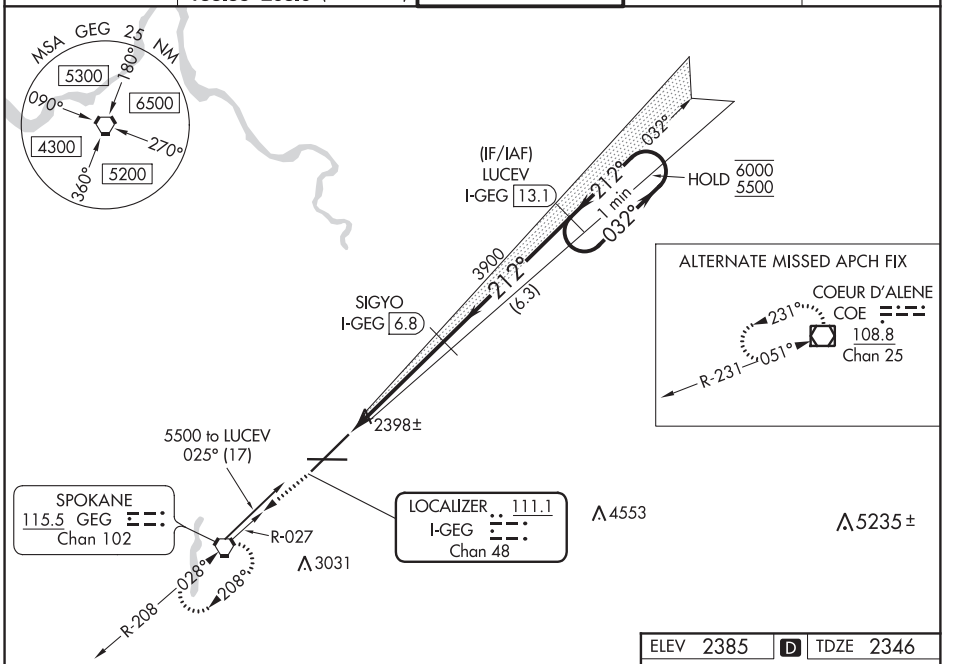
DME required.

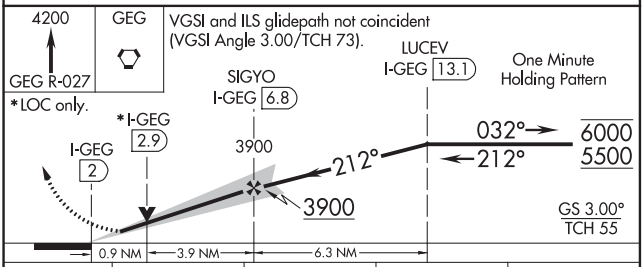
T
A

ALSF-2

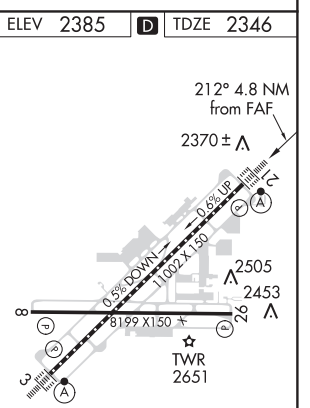
MISSED APPROACH: Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 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)



TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON | AL-403 (FAA) | 19115

ILS RWY 3 (SA CAT I)

SPOKANE INTL (GEG)

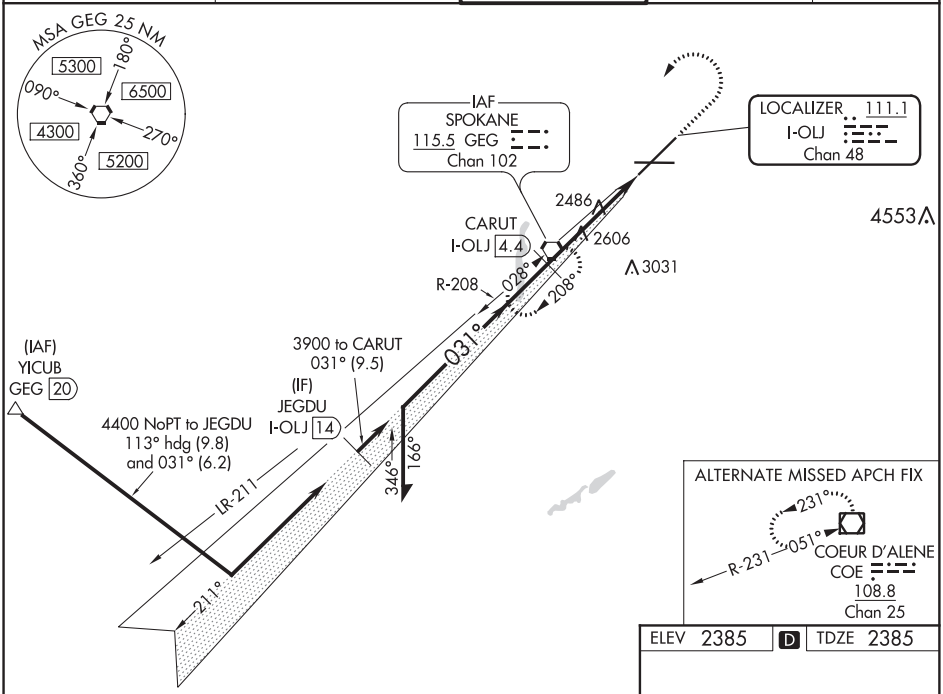
LOC/DME I-OLJ	APP CRS	Rwy Idg	11002
111.1	031°	TDZE	2385
Chan 48		Apt Elev	2385

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

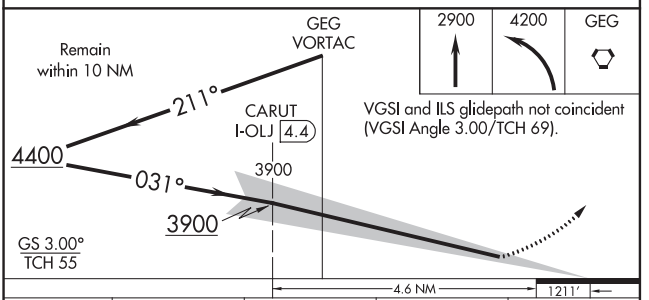
ALSF-2

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°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55

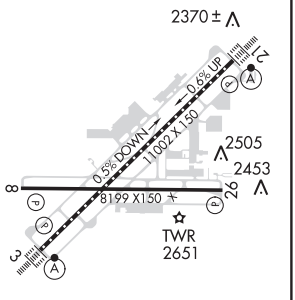


ELEV 2385	D	TDZE 2385



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

SPOKANE, WASHINGTON
Amdt 7A 25APR19

47°37'N-117°32'W

SPOKANE INTL (GEG)

ILS RWY 3 (SA CAT I)

NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 21 (SA CAT I)

SPOKANE INTL (GEG)

LOC/DME I-GEG	APP CRS	Rwy Idg	11002
111.1	212°	TDZE	2346
Chan 48		Apt Elev	2385

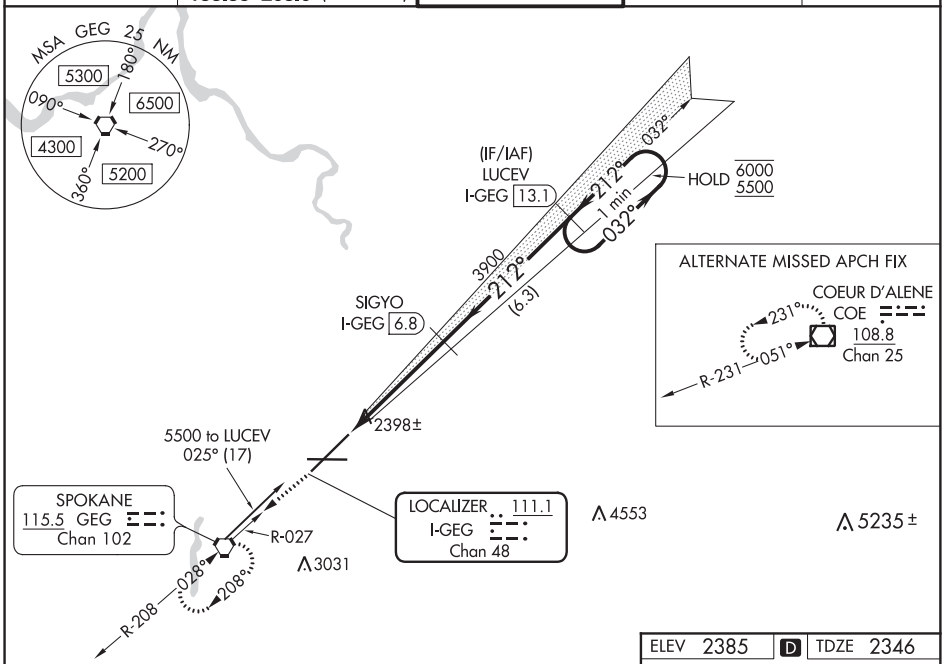
DME required.

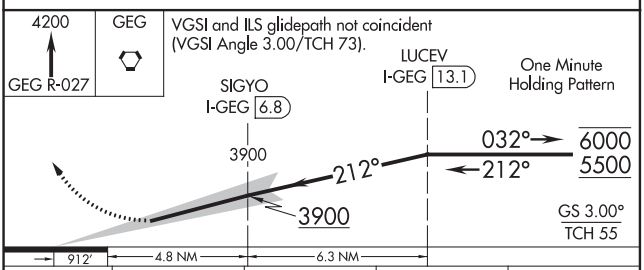
T A Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2

MISSED APPROACH: Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold.

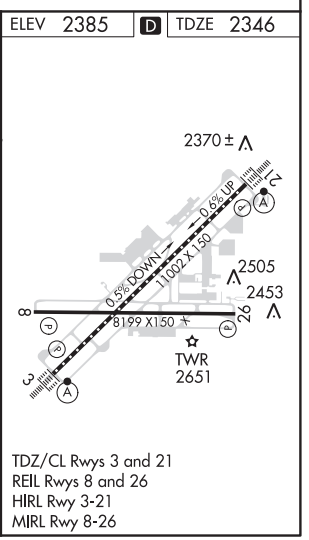
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

ILS RWY 3 (CAT II & III)

SPOKANE INTL (GEG)

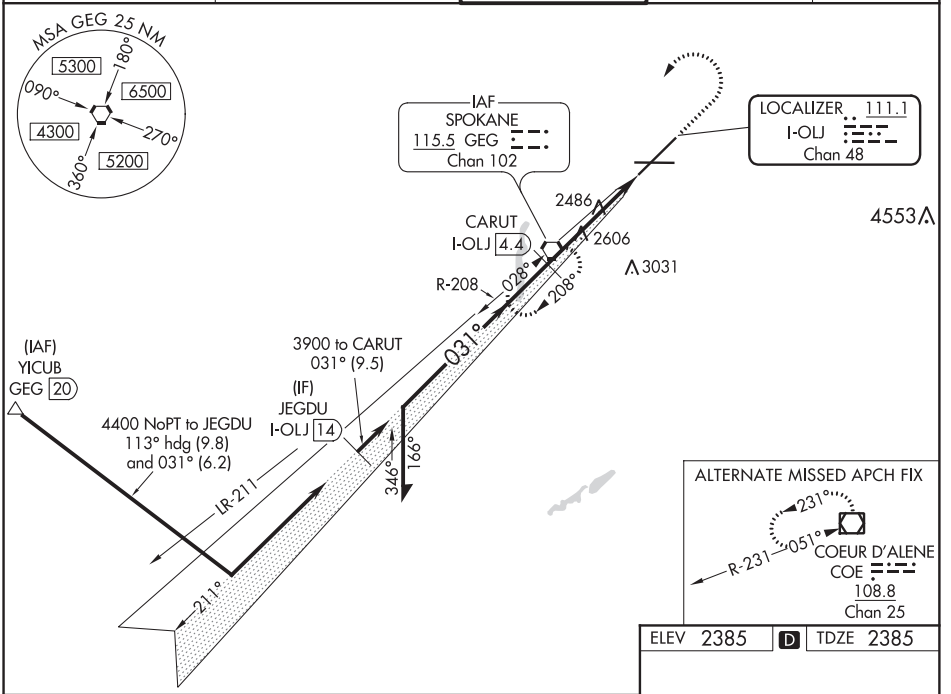
LOC/DME I-OLJ	APP CRS	Rwy Idg	11002
111.1	031°	TDZE	2385
Chan 48		Apt Elev	2385

CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

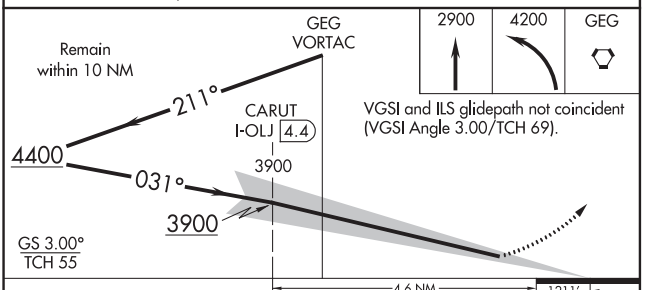
ALSF-2

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°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55

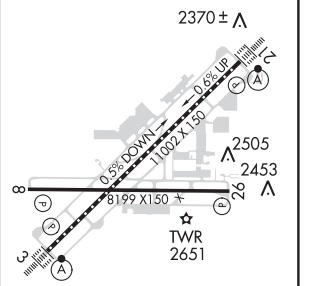


ELEV 2385	D	TDZE 2385



CATEGORY	A	B	C	D
S-ILS 3	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-GEG	APP CRS	Rwy Idg 11002
111.1	212°	TDZE 2346
Chan 48		Apt Elev 2385

ILS RWY 21 (CAT II & III)

SPOKANE INTL (GEG)

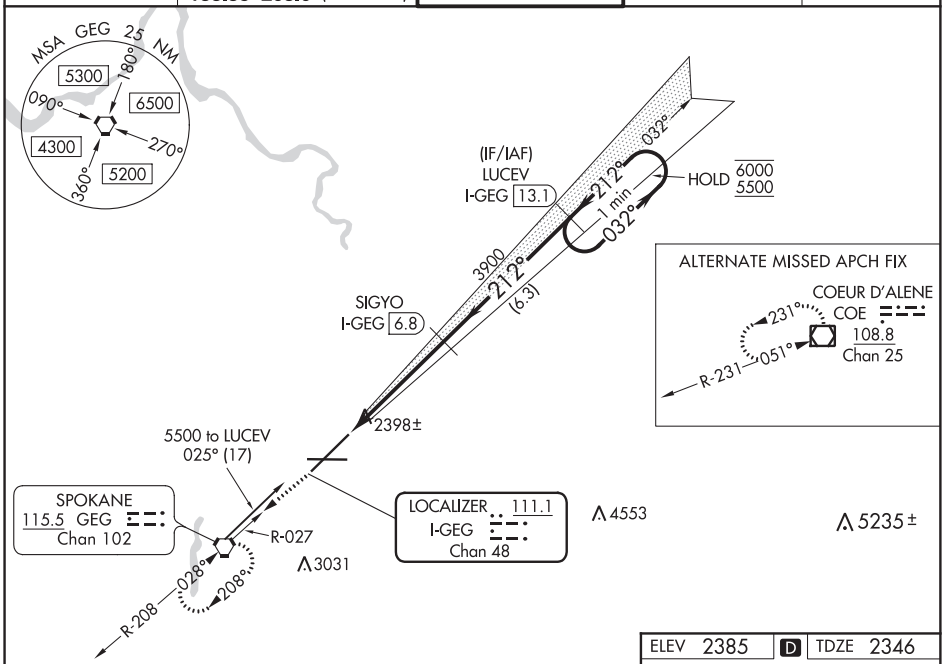
DME required.

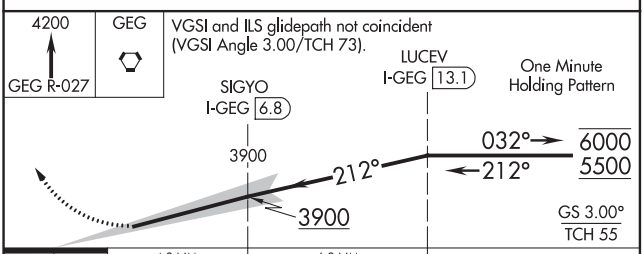
T A CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

ALSF-2

MISSED APPROACH: Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold.

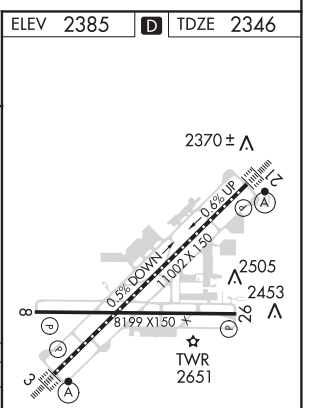
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55





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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SPOKANE, WASHINGTON | AL-403 (FAA) | 19199

RNAV (RNP) Z RWY 3

SPOKANE INTL (GEG)

APP CRS	Rwy Idg	11002
031°	TDZE	2385
	Apt Elev	2385

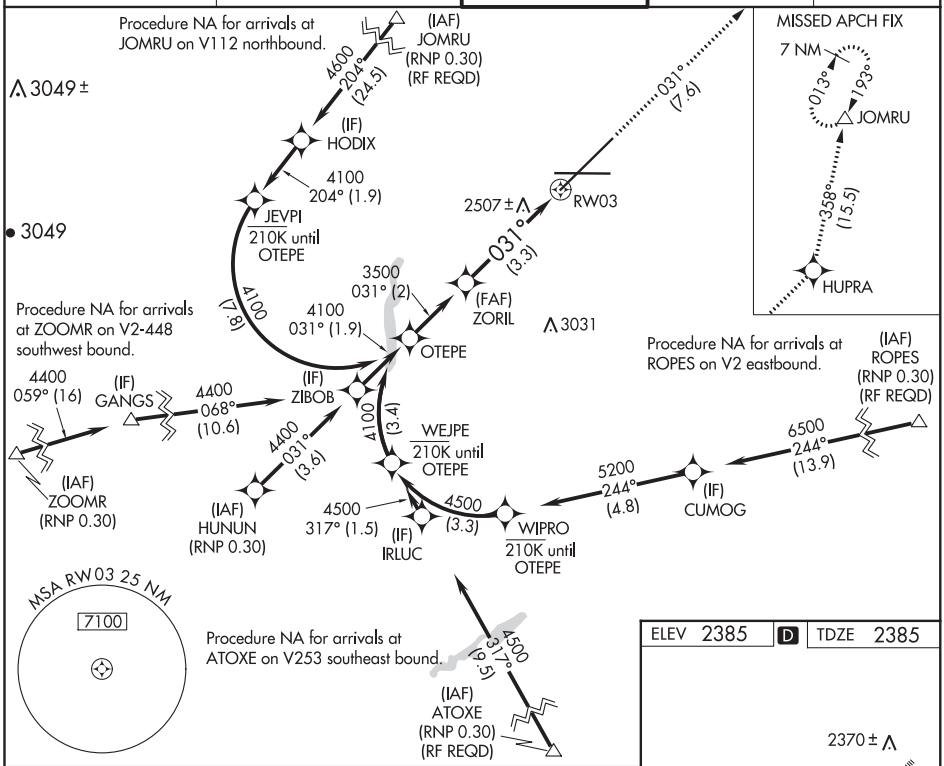
RNP AR APCH.

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.

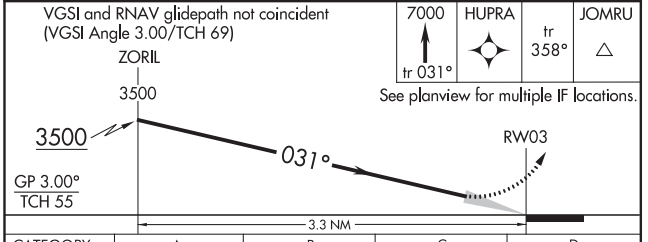
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

VGSI and RNAV glidepath not coincident
(VGSI Angle 3.00/TCH 69)



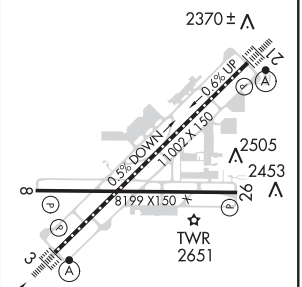
7000	HUPRA	tr 358°	JOMRU
tr 031°			

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

SPOKANE, WASHINGTON
Amdt 1B 20JUN19

47°37'N-117°32'W

SPOKANE INTL (GEG)

RNAV (RNP) Z RWY 3

APP CRS	Rwy Idg	8199
076°	TDZE	2376
	Apt Elev	2385

RNAV (RNP) Z RWY 8

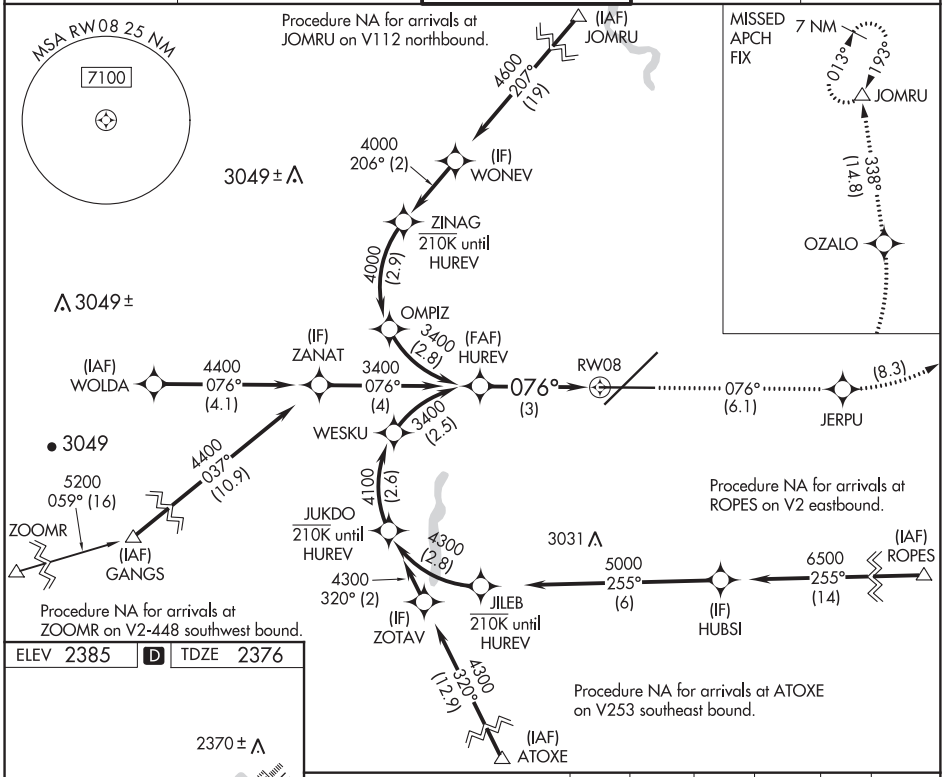
SPOKANE INTL (GEG)

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°) 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	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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (RNP) Z RWY 21

SPOKANE INTL (GEG)

APP CRS	Rwy Idg	11002
212°	TDZE	2346
	Apt Elev	2385

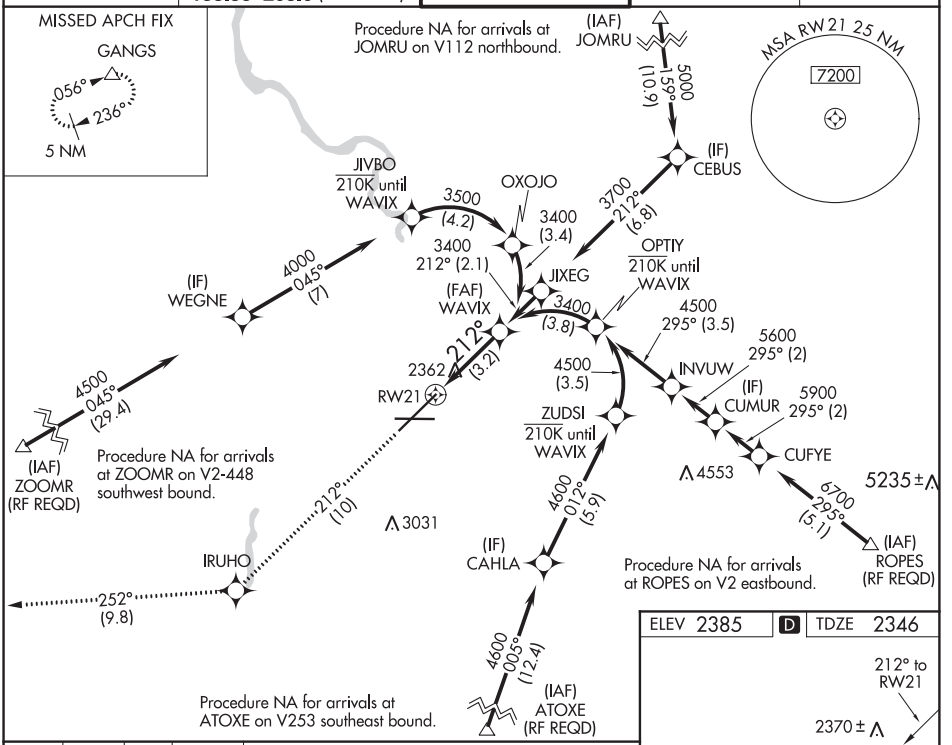
RNP AR APCH.

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°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55



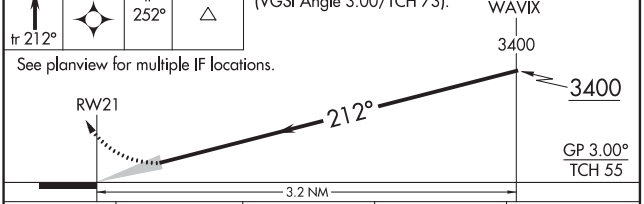
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

5000 tr 212°	IRUHO	tr 252°	GANGS

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 73).

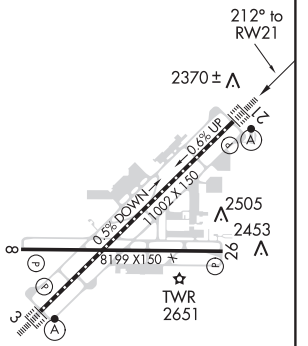
See planview for multiple IF locations.



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

RNAV (RNP) Z RWY 26

SPOKANE INTL (GEG)

APP CRS	Rwy Idg	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°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55

MISSED APCH FIX

GANGS 056° 236° 5 NM

Procedure NA for arrivals at JOMRU on V112 northbound.

(IAF) JOMRU (RF REQD) (RNP 0.30)

4100 172° (13)

(IF) IQITO

3400 149° (4)

YOCUG 210K until WARKI

3400 (5)

TEFXY 257° (7.5)

220° (11.6)

RW26 257° (3.1)

(FAF) WARKI

KAXYU 4000 257° (5.3)

(IF) HITVI

3400 257° (2.7)

3400 (8.9)

4553

5400 300° (6.4)

5235±

7500 260° (12.1)

HIPPR (RNP 0.30)

3031

HUKIG 210K until WARKI

3700 (3.1)

ZARFE 210K until WARKI

(IAF) ROPES (RNP 0.30)

4300 075° (14)

(IAF) GANGS (RF REQD) (RNP 0.30)

4100 075° (6)

(IF) WOSAX

3700 018° (5)

(IF) UNIYA

Procedure NA for arrivals at ROPES on V2 eastbound.

Procedure NA for arrivals at HIPPR on V2 eastbound.

Procedure NA for arrivals at GANGS on V2-448 southwest bound.

4100 008° (8.3)

(IAF) ATOXE (RF REQD) (RNP 0.30)

Procedure NA for arrivals at ATOXE on V253 southeast bound.

MSA RW26 25 NM 7200

5000 tr 257°	TEFXY	tr 220°	GANGS

WARKI 3400

RW26 257° 3400

See planview for multiple IF locations.

GP 3.00° TCH 48

3.1 NM

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

ELEV 2385 D TDZE 2372

2370±

0.6% UP

0.5% DOWN

11002 X 150

8199 X150

2505

2453

TWR 2651

257° to RW26

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

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RNAV (GPS) Y RWY 3

SPOKANE INTL (GEG)

WAAS	APP CRS	Rwy Idg	11002
CH 81920	031°	TDZE	2385
W03A		Apt Elev	2385

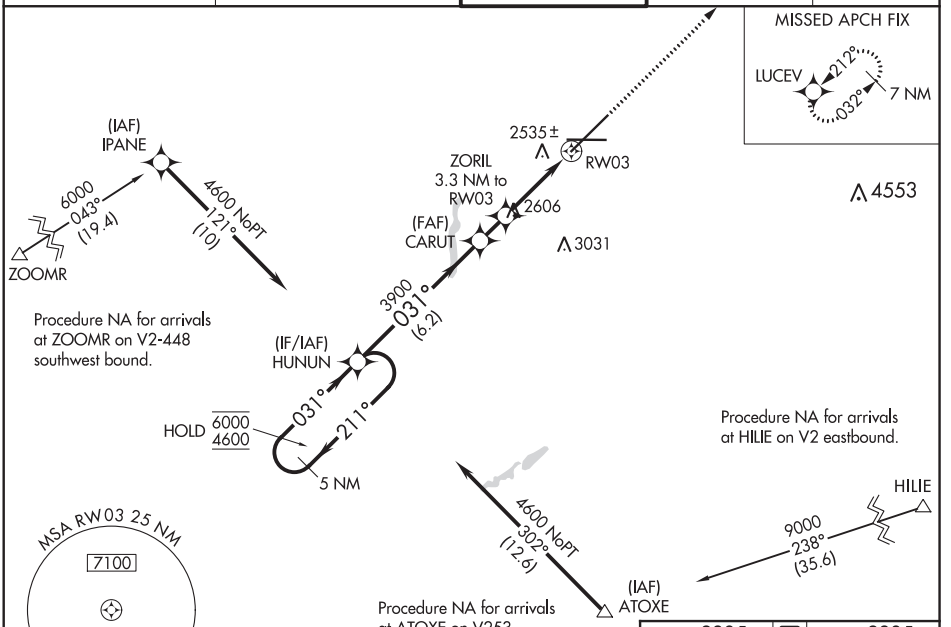
RNP APCH.

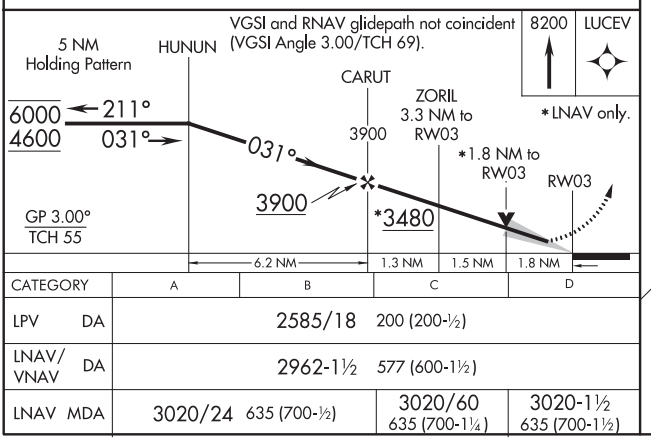
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 53°C. For inop ALS increase LNAV/VNAV all Cats visibility to 1⅝ SM and increase LNAV Cats C and D visibility to 1¾ SM.

ALSF-2

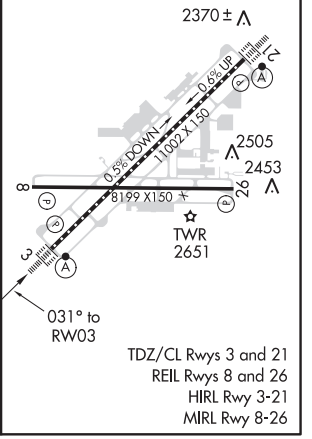
MISSED APPROACH: Climb to 8200 direct LUCEV and hold, continue climb-in-hold to 8200.

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





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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WAAS CH 48801 W08A	APP CRS 076°	Rwy Idg 8199 TDZE 2376 Apt Elev 2385

RNAV (GPS) Y RWY 8

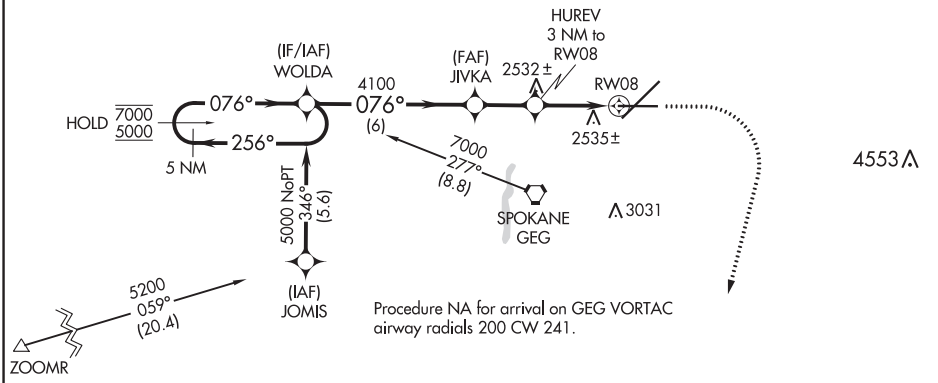
SPOKANE INTL (GEG)

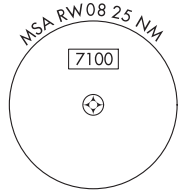
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 52°C.

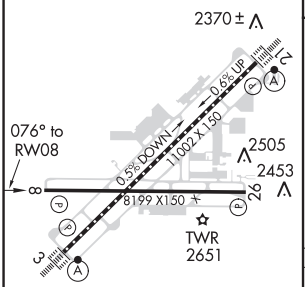
MISSED APPROACH: Climb to 2900, then climbing right turn to 6000 direct ATOXE and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55

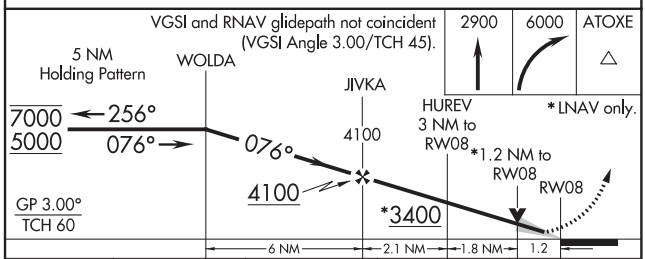




ELEV 2385 D TDZE 2376



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)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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RNAV (GPS) Y RWY 21

SPOKANE INTL (GEG)

WAAS CH 82619 W21A	APP CRS 212°	Rwy Idg 11002 TDZE 2346 Apt Elev 2385

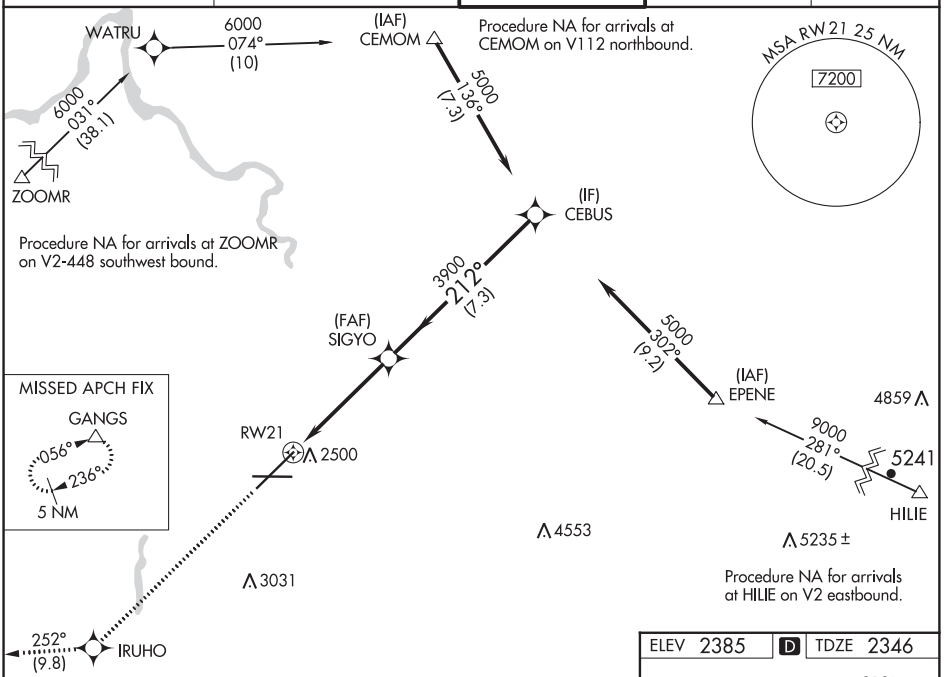
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 53°C.

ALSF-2

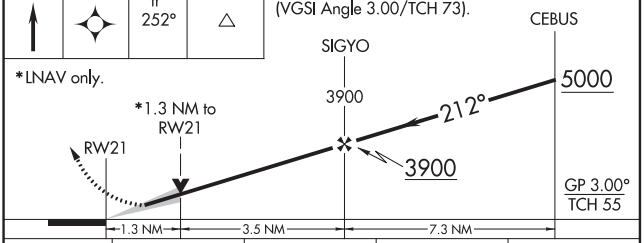
MISSED APPROACH: Climb to 5000 direct IRUHO and on track 252° to GANGS and hold.

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



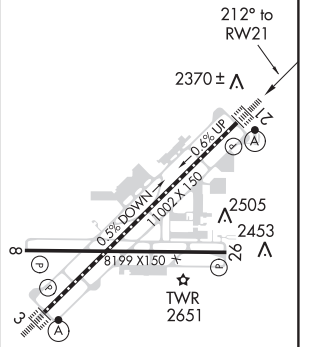
5000	IRUHO	tr 252°	GANGS

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 73).



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) Y RWY 26

SPOKANE INTL (GEG)

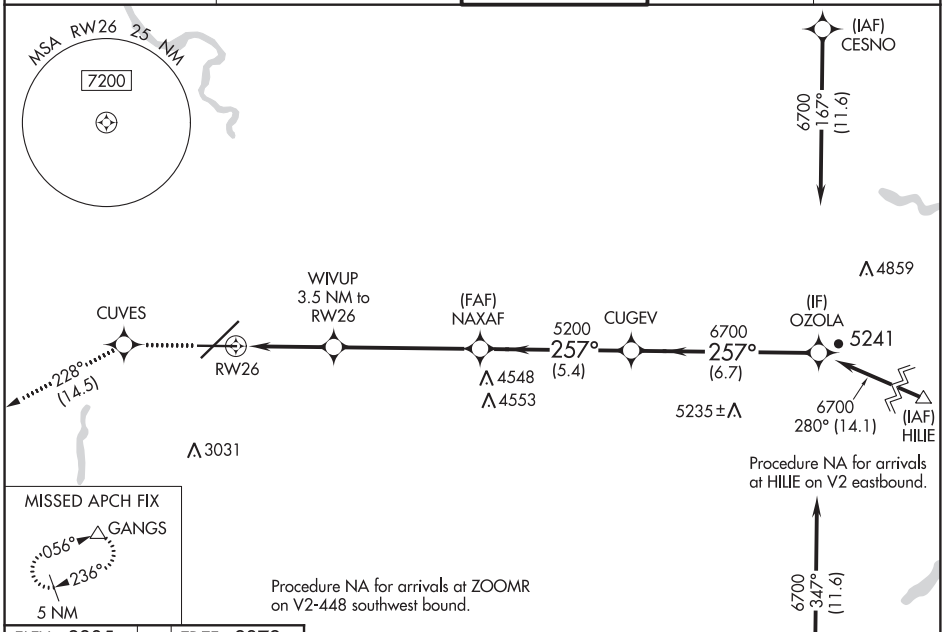
WAAS CH 93501 W26A	APP CRS 257°	Rwy Idg 8199 TDZE 2372 Apt Elev 2385

RNP APCH.

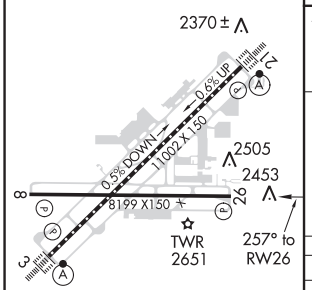
Rwy 26 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

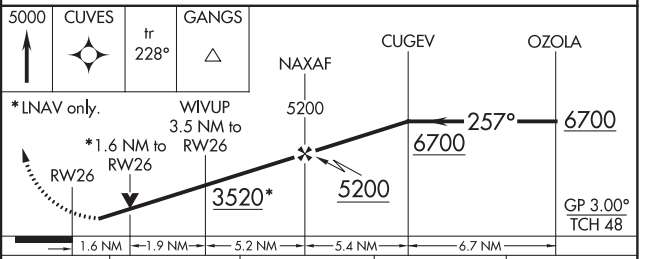
MISSED APPROACH: Climb to 5000 direct CUVES and on track 228° to GANGS and hold.

ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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VOR RWY 3

SPOKANE INTL (GEG)

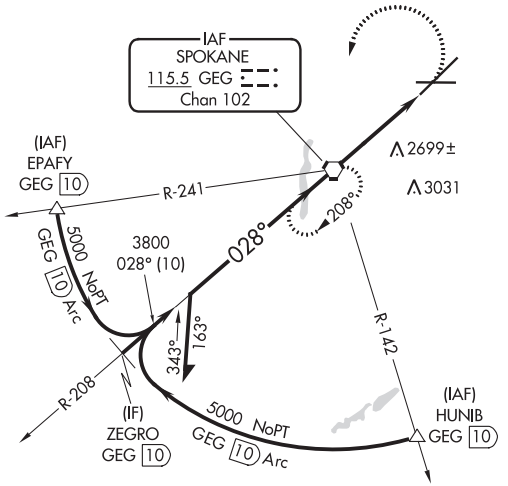
VORTAC GEG	APP CRS	Rwy Idg	11002
115.5	028°	TDZE	2385
Chan 102		Apt Elev	2385

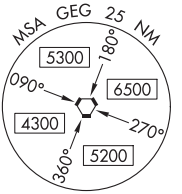
Circling NA for Cat E southeast of Rwy 3-21. For inop ALS, increase S-3 Cat C/D/E visibility to 1⅝ SM.

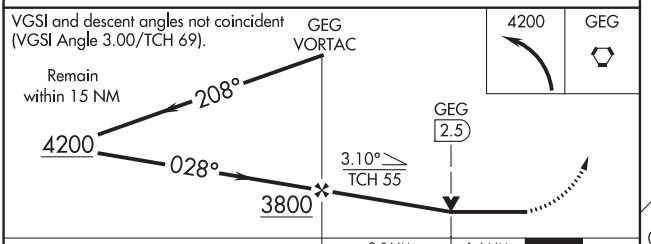
ALSF-2

MISSED APPROACH: Climbing left turn to 4200 direct GEG VORTAC and hold, continue climb-in-hold to 4200.

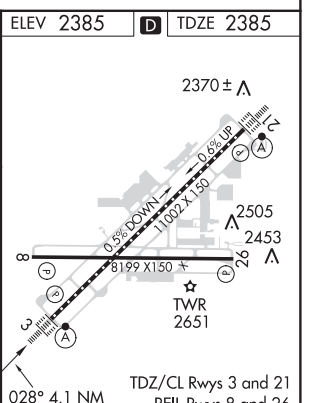
ATIS	SPOKANE APP CON	SPOKANE TOWER	GND CON	CLNC DEL
124.325 254.375	123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°)	118.3 278.3	121.9 348.6	127.55







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)	



TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

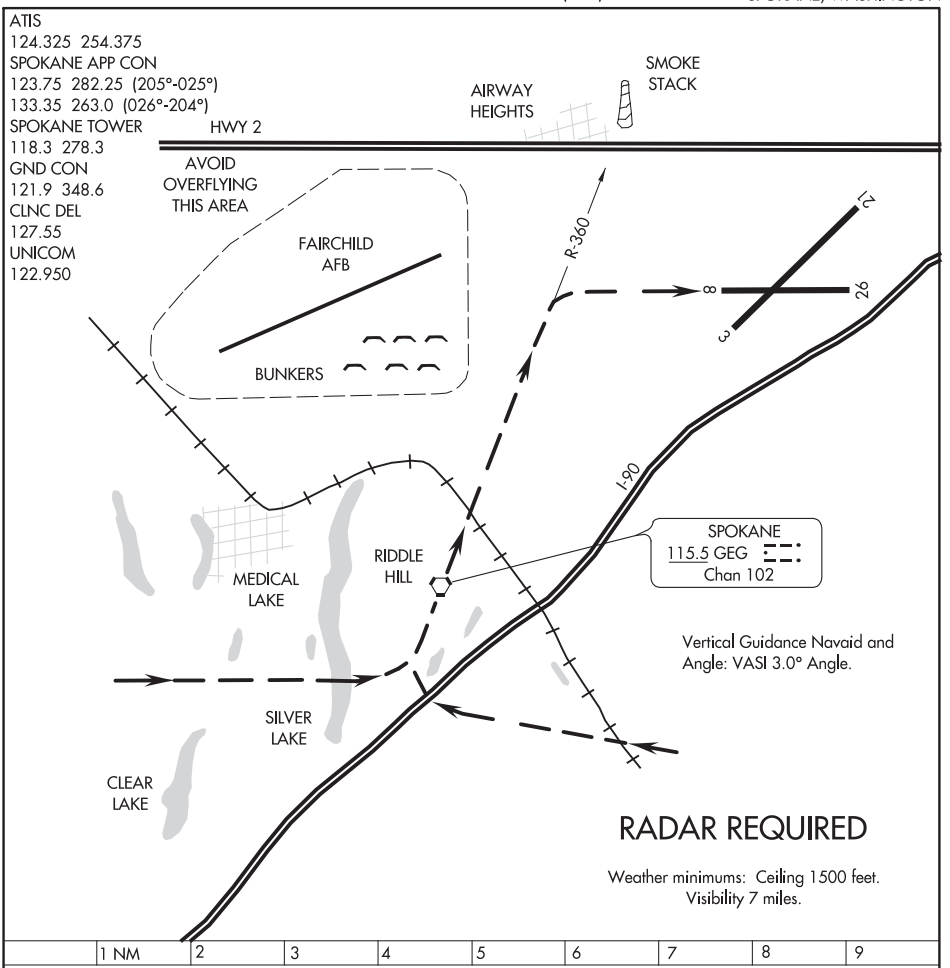
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RIDDLE HILL VISUAL RWY 8

AL-403 (FAA)

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020



RIDDLE HILL VISUAL APPROACH RWY 8

PROCEDURE NOT AUTHORIZED AT NIGHT.

AIRPORT DIAGRAM
19059

ATIS
124.325 254.375
SPOKANE TOWER
118.3 278.3
GND CON
121.9 348.6
CLNC DEL
127.55

D

VAR 15.0° E

JANUARY 2015
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

ILS HOLD
ELEV 2322
47°38′N
AIRPORT MAINTENANCE
TANKS
WEST AIR CARGO RAMP
WEST AIR CARGO
TERMINAL/ ADMINISTRATION
ILS HOLD
HANGAR
210.5°
0.6% UP
TRIANGLE RAMP
EAST AIR CARGO RAMP
NORTH PILOT RAMP
CENTRAL GA RAMP
U.S. CUSTOMS
TERMINAL RAMP
11002 X 150
FIRE STATION
SOUTH PILOT RAMP
ELEV 2376
075.5°
8199 X 150
47°37′N
255.5°
ELEV 2372
TWR
2651
666 X 144
SOUTH MAINTENANCE RAMP
HANGAR
030.5°
0.5% DOWN
ILS HOLD
FIELD ELEV 2385
ILS HOLD
117°33′W
117°32′W
117°31′W

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020

TOP ALTITUDE: 6000

ATIS 124.325 254.375
CLNC DEL 127.55
GND CON 121.9 348.6
SPOKANE TOWER 118.3 278.3

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.

10 NM
GEG R-025
030°
210°
210°
120°
V120-448
R-052
R-073
V2
GEG R-205

WHATCOM
113.0 HUH
Chan 77
N48°56.72′ - W122°34.76′
L-1, H-1

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
5200 (Lost Comm.)

COEUR D'ALENE
108.8 COE
Chan 25
N47°46.42′ - W116°49.24′
L-13

MOSES LAKE
115.0 MWH
Chan 97
N47°12.65′ - W119°19.01′
L-13, H-1

EAST DEPARTURE
133.35 263.0
(026°-204°)

MULLAN PASS
117.8 MLP
Chan 125
N47°27.41′ - W115°38.76′
L-13, H-1

PULLMAN
109.0 PUW
Chan 27
N46°40.45′
W117°13.41′
L-13

WEST DEPARTURE
123.75 282.25
(205°-025°)

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

PENDLETON
114.7 PDT
Chan 94
N45°41.91′ - W118°56.32′
L-13, H-1

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

19171

SPOKANE SIX DEPARTURE

AL-403 (FAA)

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 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.

RNAV (GPS)-A

STEVENSVILLE (32S)

APP CRS	Rwy Idg	N/A
162°	TDZE	N/A
	Apt Elev	3614

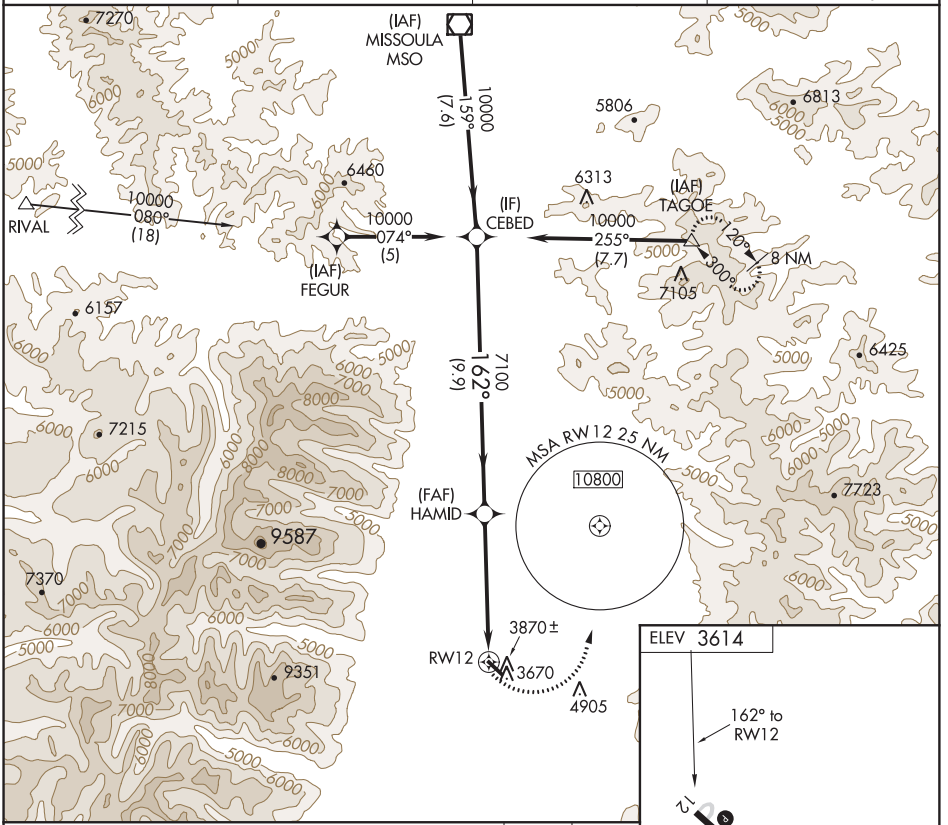
RNP APCH.

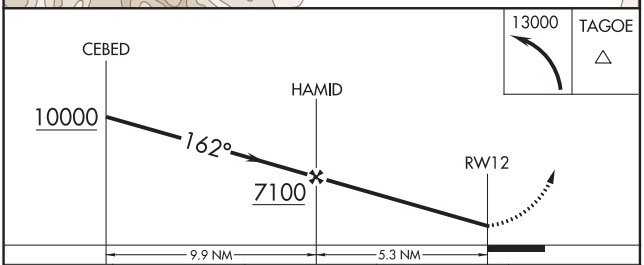
NA

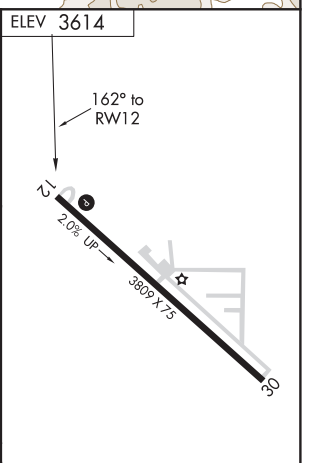
Use Missoula Intl altimeter setting.
Procedure NA at night.

MISSED APPROACH: Climbing left turn to 13000 direct TAGOE and hold, continue climb-in-hold to 13000.

MSO ASOS	SPOKANE APP CON ★	SALT LAKE CITY CENTER	UNICOM
126.65	124.9 298.95	133.4 285.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	6400-1¼ 2786 (2800-1¼)	6400-1½ 2786 (2800-1½)	NA	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

SUNRIVER, OREGON | AL-6978 (FAA) | 19339

RNAV (GPS) RWY 18

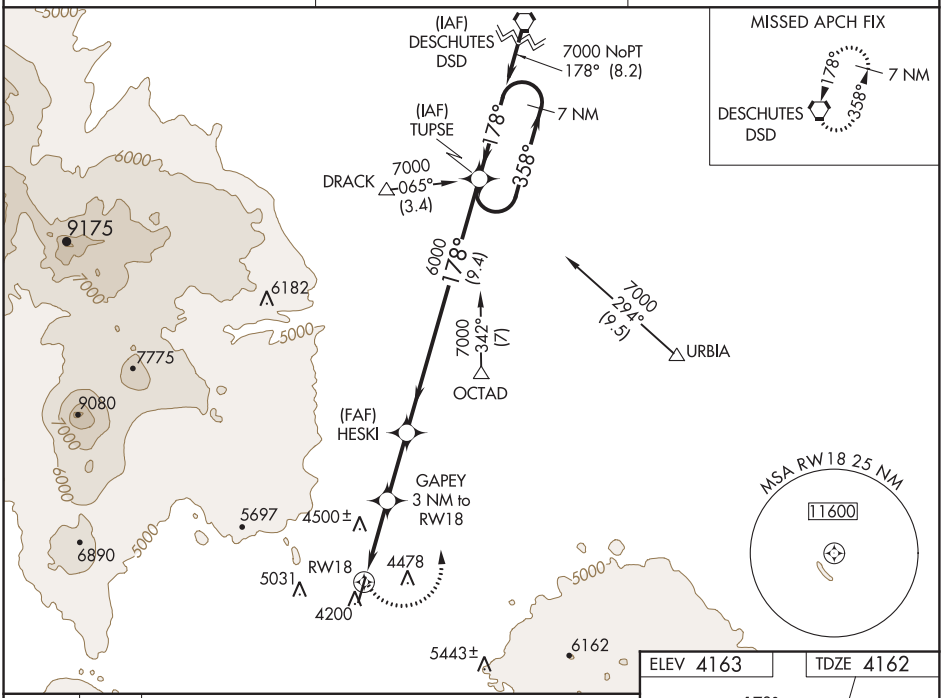
SUNRIVER (S21)

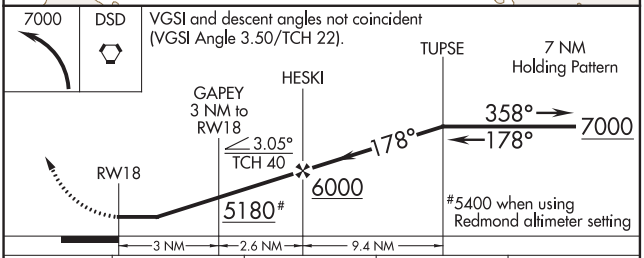
APP CRS	Rwy Idg	5461
178°	TDZE	4162
	Apt Elev	4163

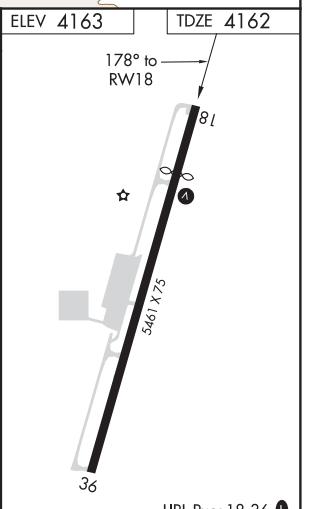
Obtain local altimeter setting on CTAF; when not received, use Redmond altimeter setting. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.

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)







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)

LIRL Rwy 18-36 (L)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 18

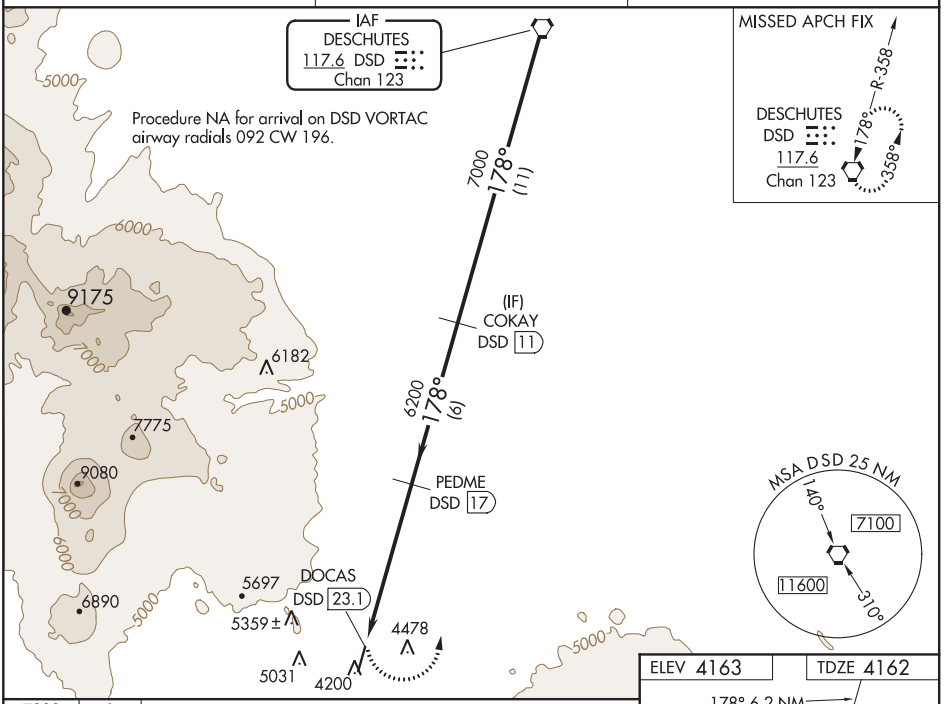
SUNRIVER (S21)

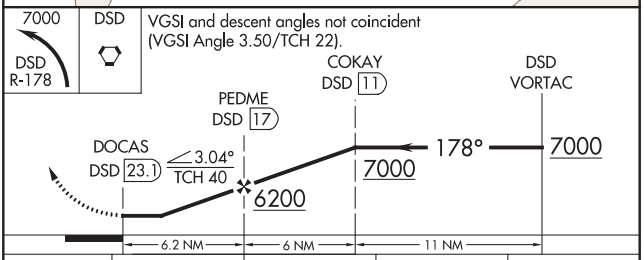
VORTAC DSD	APP CRS	Rwy Idg	5461
117.6	178°	TDZE	4162
Chan 123		Apt Elev	4163

T NA Rwy 18 helicopter visibility reduction below ¾ SM NA. DME required. Obtain local altimeter setting on CTAF; when not received, use Redmond altimeter setting.

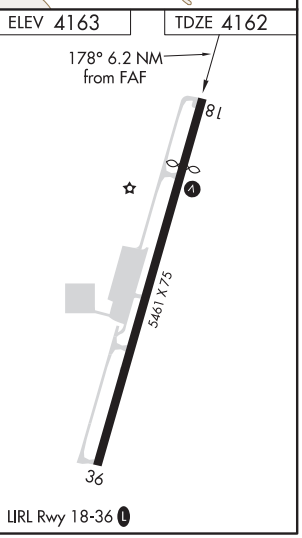
MISSED APPROACH: Climbing left turn to 7000 on DSD R-178 to DSD VORTAC and hold.

AWOS-3PT	SEATTLE CENTER	UNICOM
128.325	126.15 269.475	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-18	5440-1¼ 1278 (1300-1¼)	5440-1½ 1278 (1300-1½)	5440-3 1278 (1300-3)	
CIRCLING	5440-1¼ 1277 (1300-1¼)	5440-1½ 1277 (1300-1½)	5440-3 1277 (1300-3)	
REDMOND ALTIMETER SETTING MINIMUMS				
S-18	5660-1¼ 1498 (1500-1¼)	5660-1½ 1498 (1500-1½)	5660-3 1498 (1500-3)	
CIRCLING	5660-1¼ 1497 (1500-1¼)	5660-1½ 1497 (1500-1½)	5660-3 1497 (1500-3)	



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

AL-5186 (FAA)

19115

ILS or LOC RWY 17

TACOMA NARROWS (TIW)

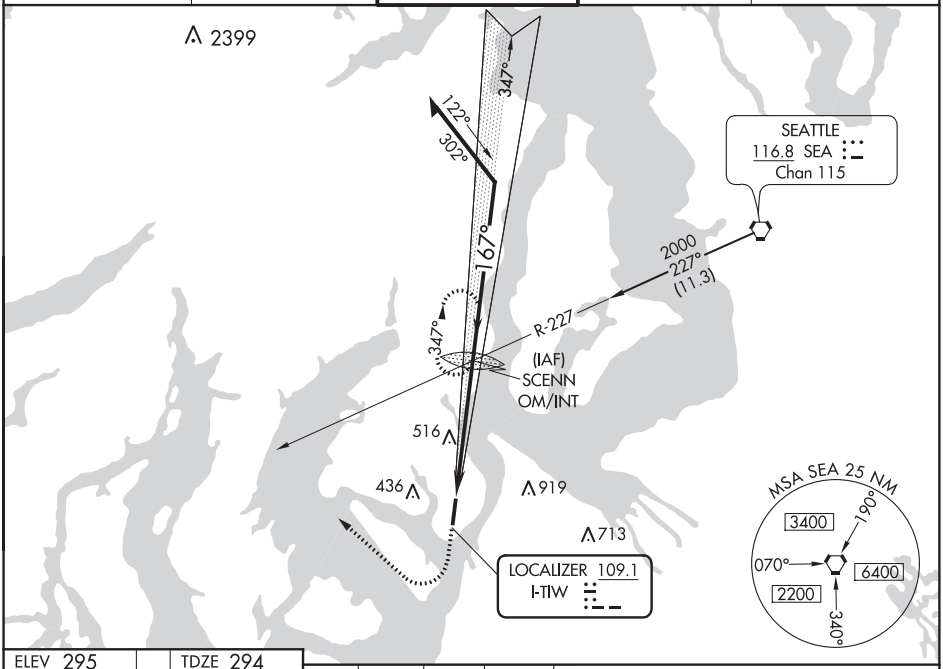
LOC I-TIW	APP CRS	Rwy Idg	5002
109.1	167°	TDZE	294
		Apt Elev	295

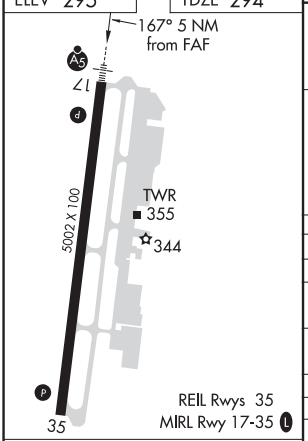
When control tower closed, obtain local altimeter setting on UNICOM, when not received, use McChord Field altimeter setting minimums. Circling not authorized east of Rwy 17-35.

MALSR

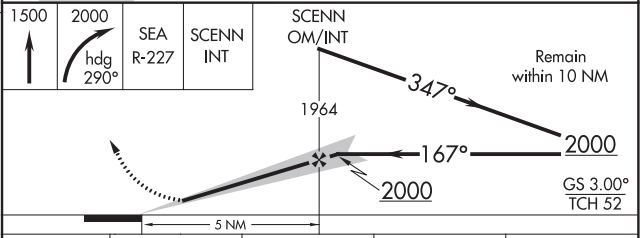
MISSED APPROACH: Climb to 1500, then climbing right turn to 2000 via heading 290° and SEA VORTAC R-227 to SCENN INT and hold.

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 17

TACOMA NARROWS (TIW)

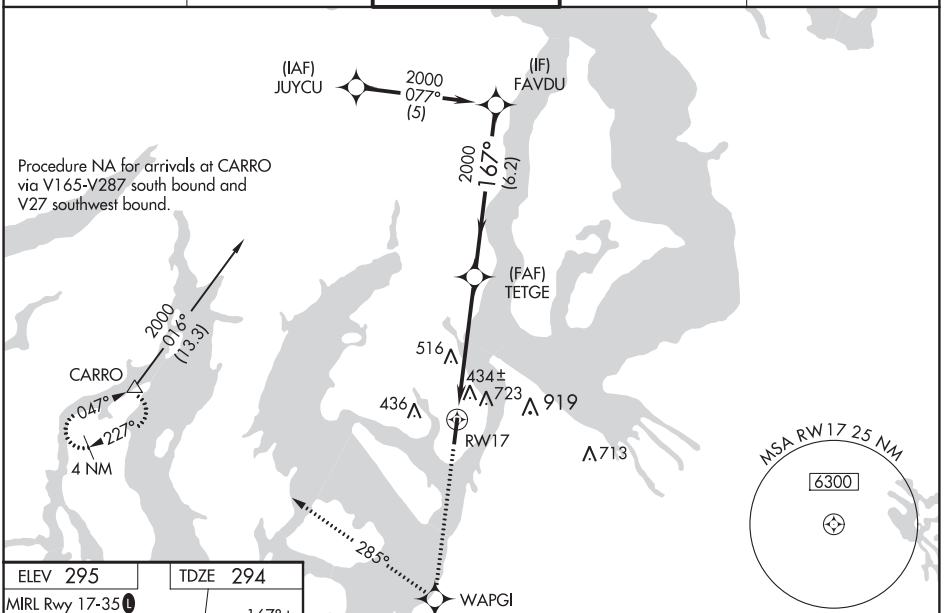
WAAS CH 82608 W17A	APP CRS 167°	Rwy Idg 5002 / TDZE 294 / Apt Elev 295

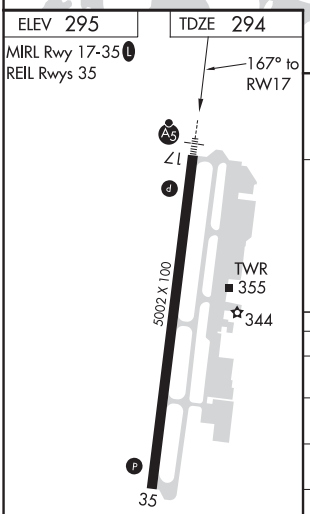
VDP NA with McChord Field altimeter setting. For inoperative MALSR, increase LPV all Cats visibility to 1⅛ mile. Circling NA east of Rwy 17/35. Baro-VNAV NA when using McChord Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. 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.

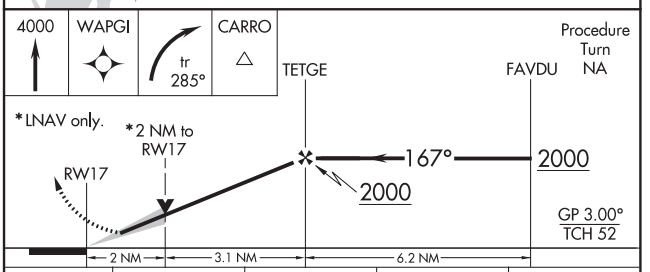
MALSR

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)	
CIRCLING	980-1 685 (700-1)		980-2 685 (700-2)	980-2¼ 685 (700-2¼)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TACOMA, WASHINGTON

AL-5186 (FAA)

19115

RNAV (GPS) RWY 35

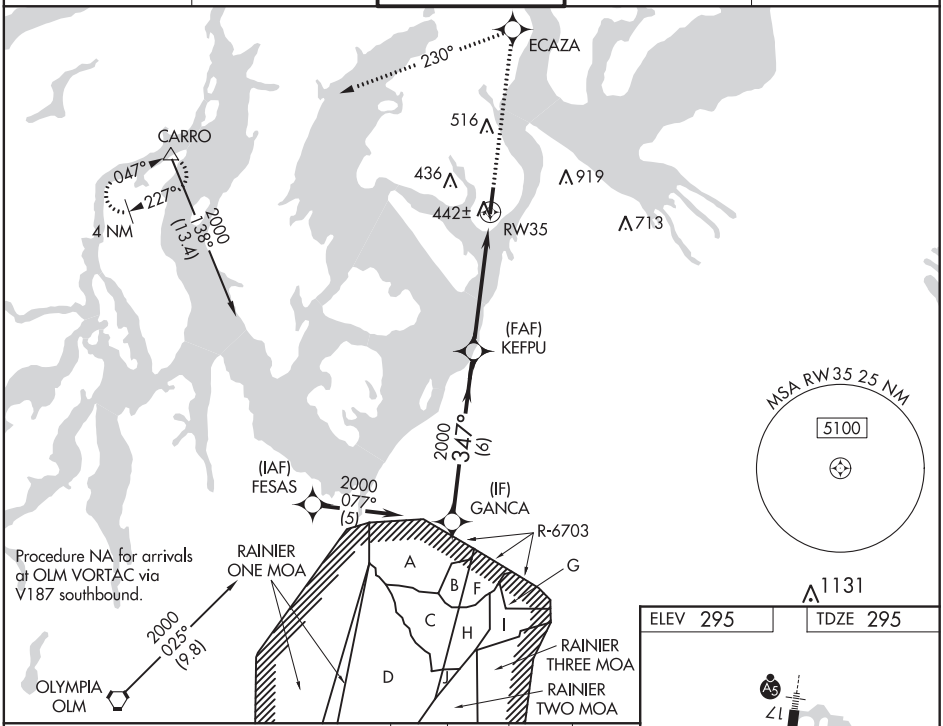
TACOMA NARROWS (TIW)

WAAS	APP CRS	Rwy Idg	5002
CH 50312	347°	TDZE	295
W35A		Apt Elev	295

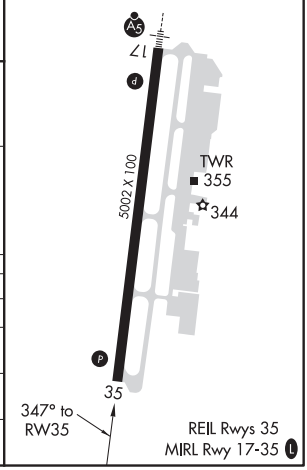
Baro-VNAV NA when using McChord Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP- 0.3 NA. Circling NA east of Rwy 17-35. When local altimeter setting not received, use McChord Field altimeter setting and increase all DA 25 feet and all MDA 40 feet.

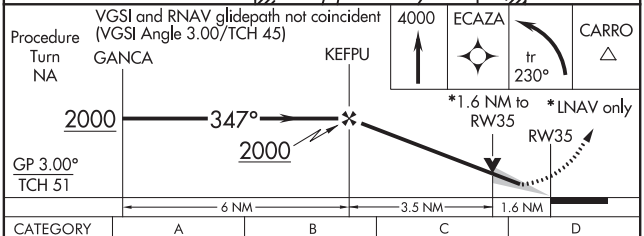
MISSED APPROACH: Climb to 4000 direct ECAZA and left turn via 230° track to CARRO and hold, continue climb-in-hold to 4000.

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



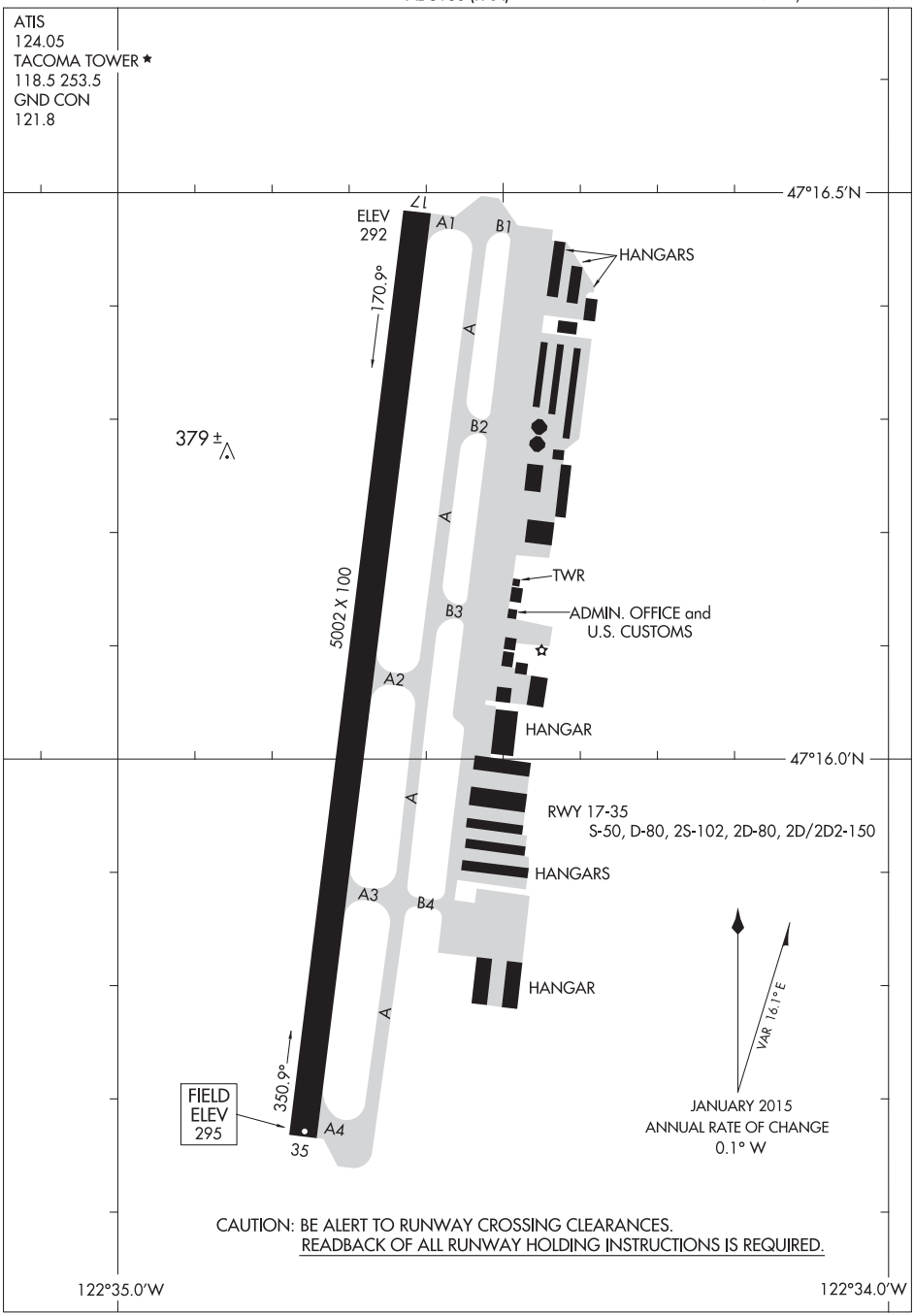
ELEV 295	TDZE 295





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)
CIRCLING	980-1 685 (700-1)		980-2 685 (700-2)	980-2¼ 685 (700-2¼)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

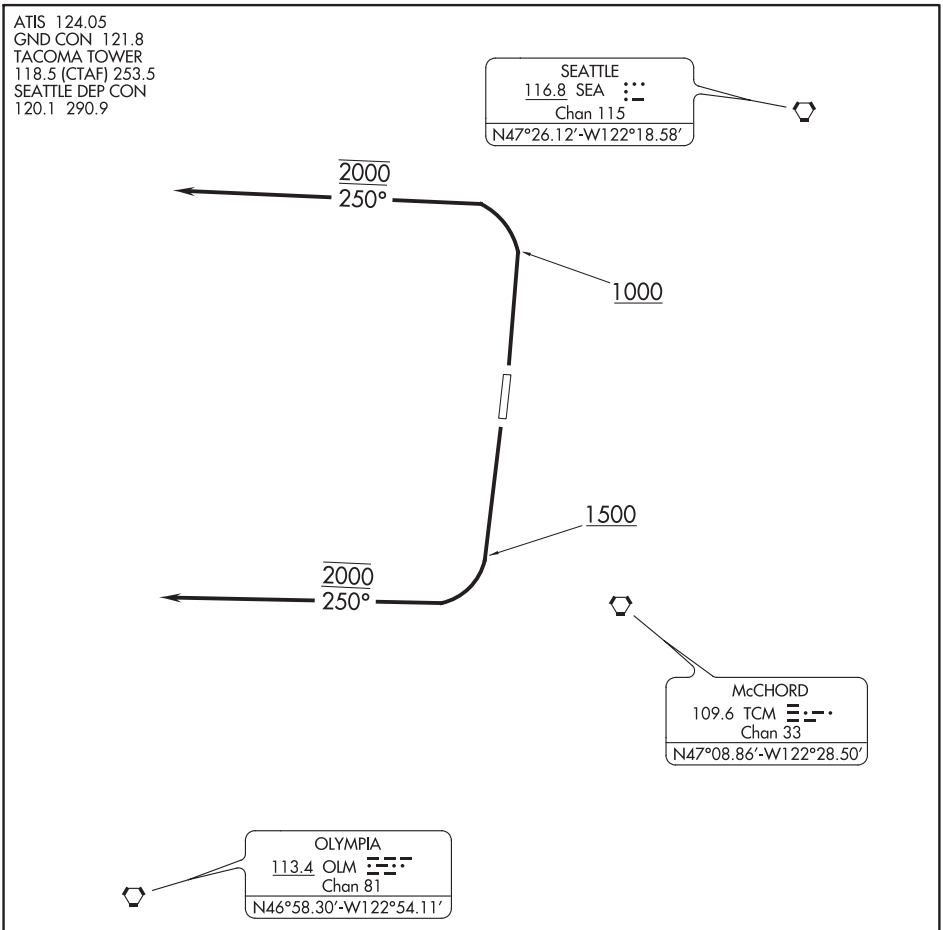


NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	N/A
339°	TDZE	N/A
	Apt Elev	247

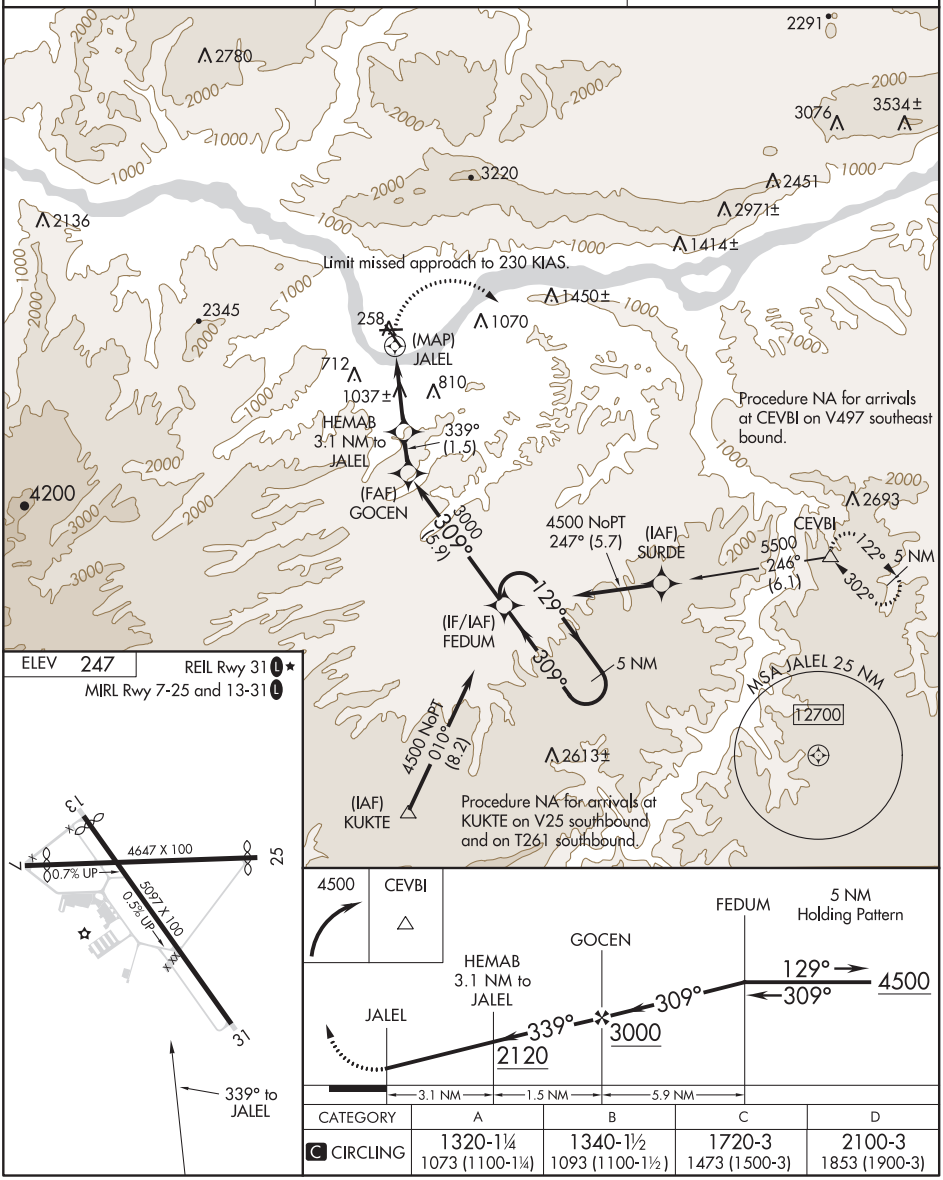
RNAV (GPS)-A

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)



ELEV 247

REIL Rwy 31 ★

MIRL Rwy 7-25 and 13-31

CATEGORY	A	B	C	D
C CIRCLING	1320-1¼ 1073 (1100-1¼)	1340-1½ 1093 (1100-1½)	1720-3 1473 (1500-3)	2100-3 1853 (1900-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

THE DALLES, OREGON | AL-530 (FAA) | 18144

LOC/DME I-DLS	APP CRS	Rwy Idg	4451
109.35	238°	TDZE	243
Chan 30 (Y)		Apt Elev	247

LDA/DME RWY 25

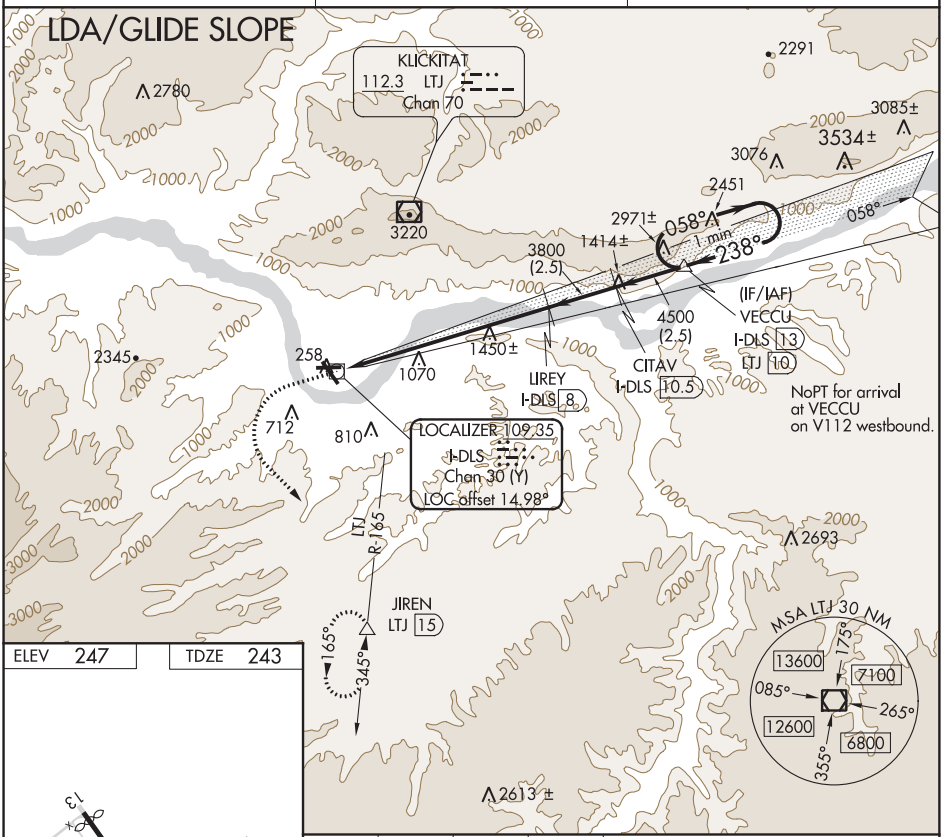
COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

T A NA — When local altimeter setting not received, procedure NA. Glide slope provided by standard glide slope equipment.

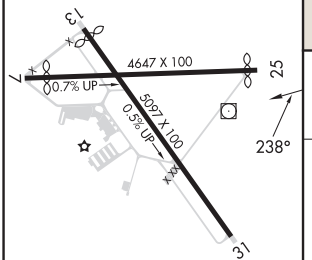
MISSED APPROACH: Climb to 1600 then climbing left turn to 7000 on heading 120° and LTJ VOR/DME R-165 to JIREN/LTJ 15 DME and hold, continue climb-in-hold to 7000.

ASOS	SEATTLE CENTER	UNICOM
135.175	119.65 257.6	123.0 (CTAF) L

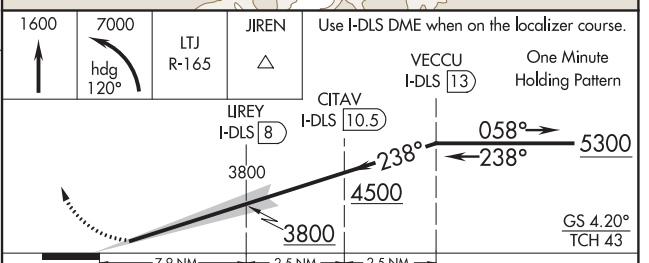
LDA/GLIDE SLOPE



ELEV	247	TDZE	243



REIL Rwy 31 L ★
MIRL Rwys 7-25 and 13-31 L



CATEGORY	A	B	C	D
S-LDA/GS 25	1368-3	1125 (1200-3)	NA	

THE DALLES, OREGON
Amdt 1A 28APR16

COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)
45°37'N-121°10'W
LDA/DME RWY 25

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-DLS	APP CRS	Rwy Idg	4451
109.35	238°	TDZE	243
Chan 30(Y)		Apt Elev	247

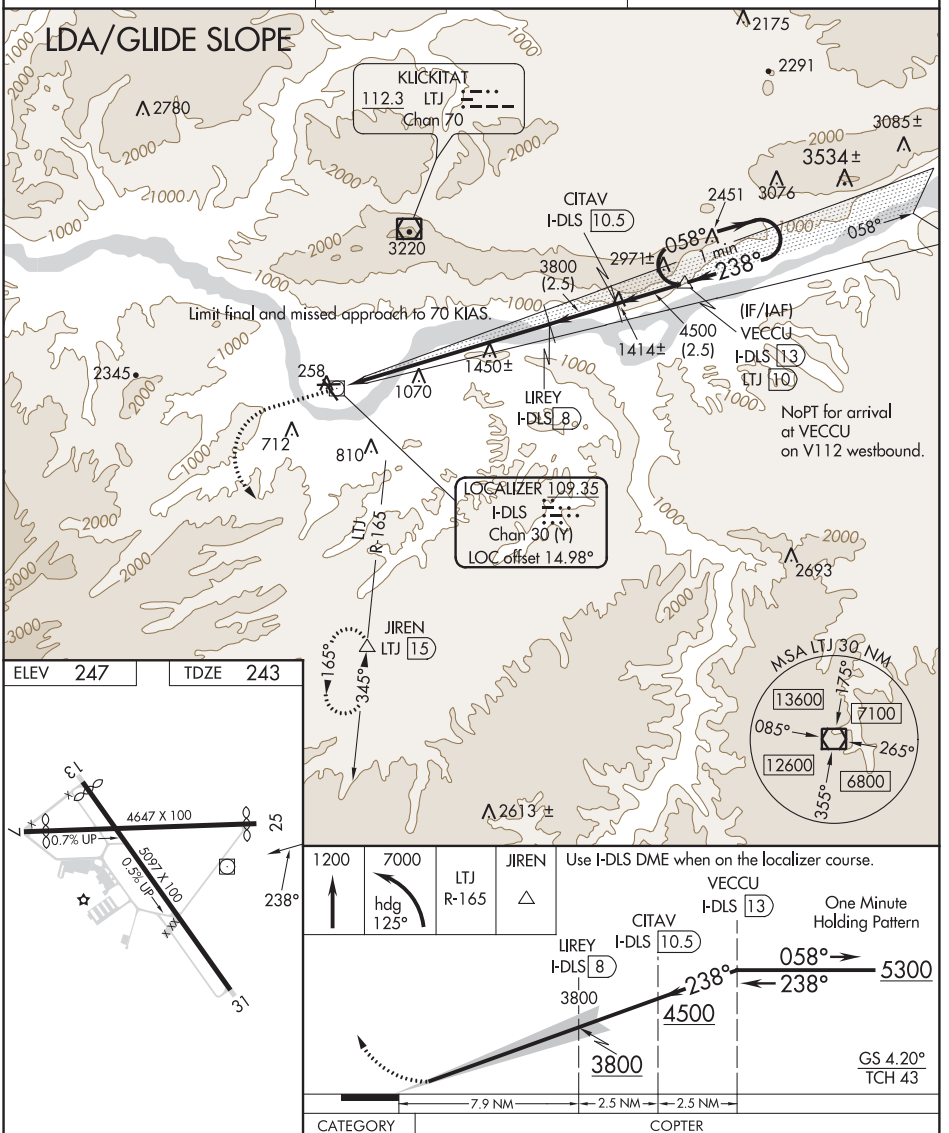
COPTER LDA/DME RWY 25

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 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



ELEV 247 | TDZE 243

1200	7000	LTJ	JIREN
↑	hdg 125°	R-165	△

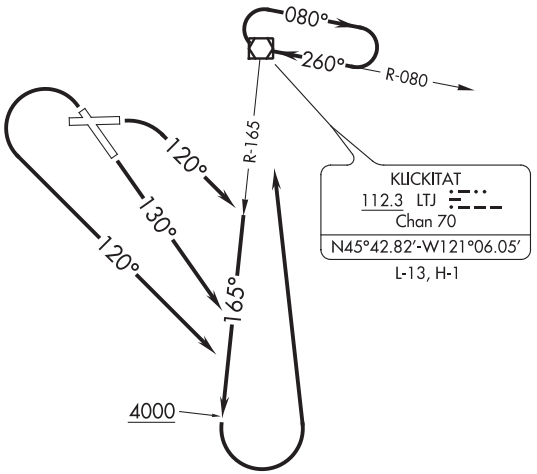
Use I-DLS DME when on the localizer course.

CATEGORY	COPTER
H-25	783-1½ 540 (600-1½)

REIL Rwy 31 L ★
MIRL Rwys 7-25 and 13-31 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 5

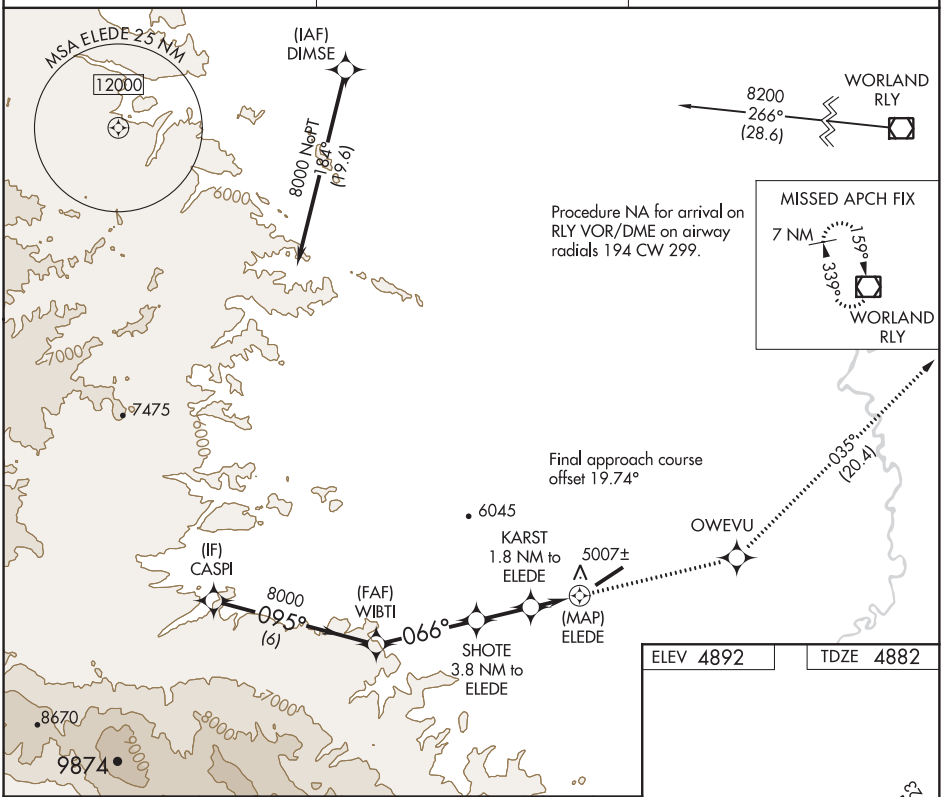
HOT SPRINGS COUNTY (HSG)

APP CRS	Rwy Idg	6370
066°	TDZE	4882
	Apt Elev	4892

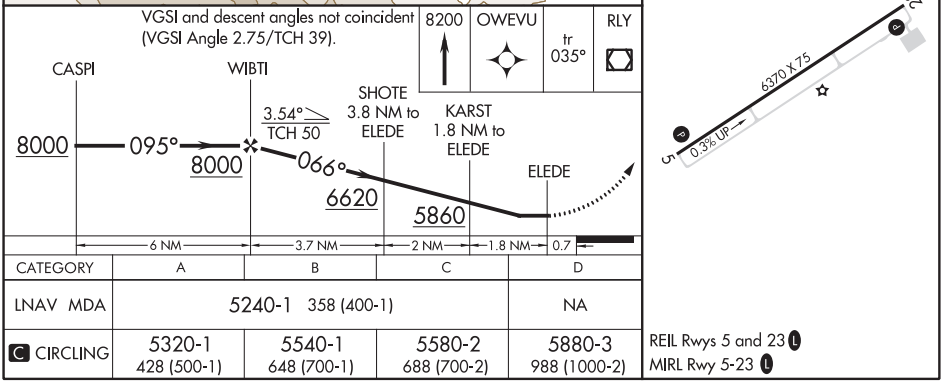
Circling NA northwest of Rwy 5-23.
DME/DME RNP-0.3 NA.
Rwy 5 helicopter visibility reduction below ¾ SM NA.
-36°C

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 TDZ 4882



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

THERMOPOLIS, WYOMING | AL-11427 (FAA) | 19171

RNAV (GPS) RWY 23

HOT SPRINGS COUNTY (HSG)

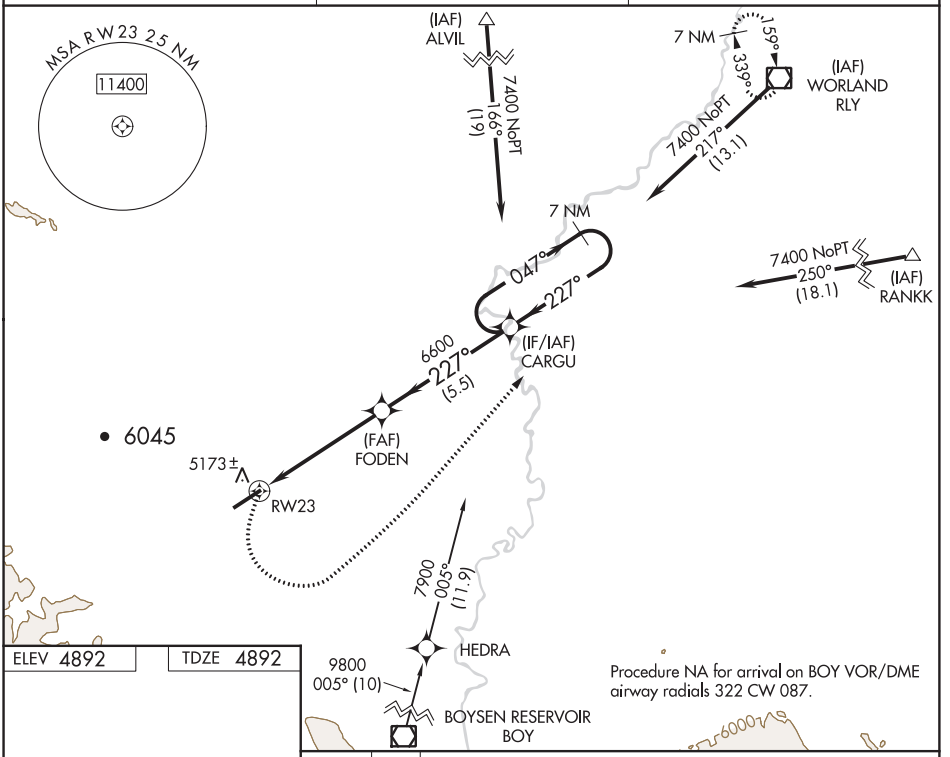
WAAS	APP CRS	Rwy Idg	6370
CH 53340	227°	TDZE	4892
W23A		Apt Elev	4892

T A -36°C

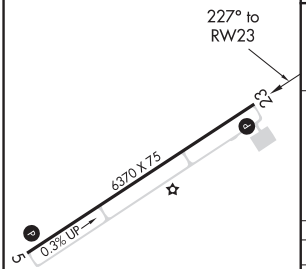
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Circling NA northwest of Rwy 5-23. DME/DME RNP-0.3 NA.

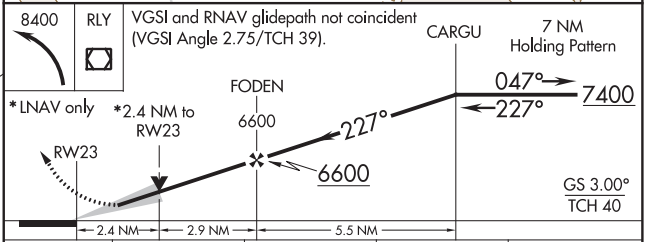
MISSED APPROACH: Climbing left turn to 8400 direct RLY VOR/DME and hold.

AWOS-3PT	SALT LAKE CENTER	UNICOM
121.125	133.25 285.6	122.8 (CTAF) L



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	5001
136°	TDZE	31
	Apt Elev	39

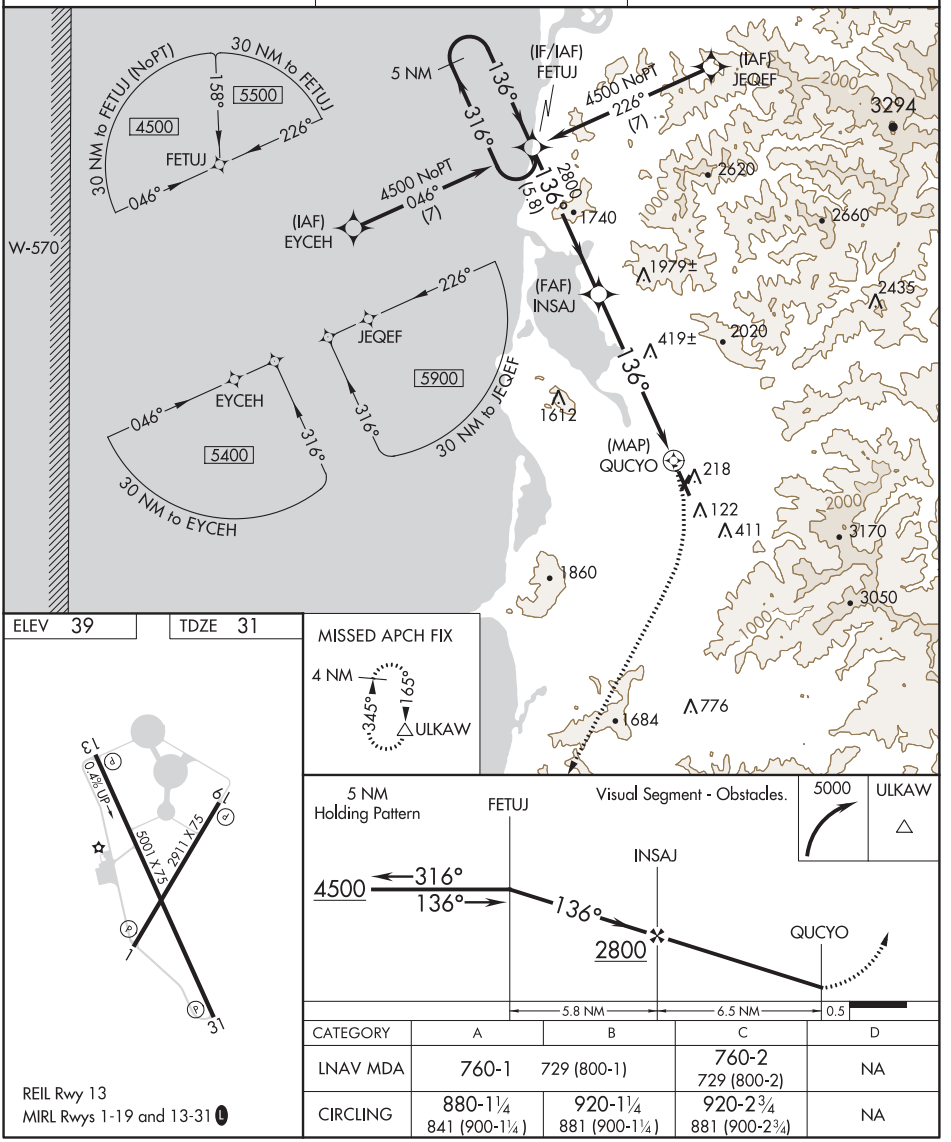
RNAV (GPS) RWY 13

TILLAMOOK (TMK)

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



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

REIL Rwy 13
MIRL Rwys 1-19 and 13-31 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

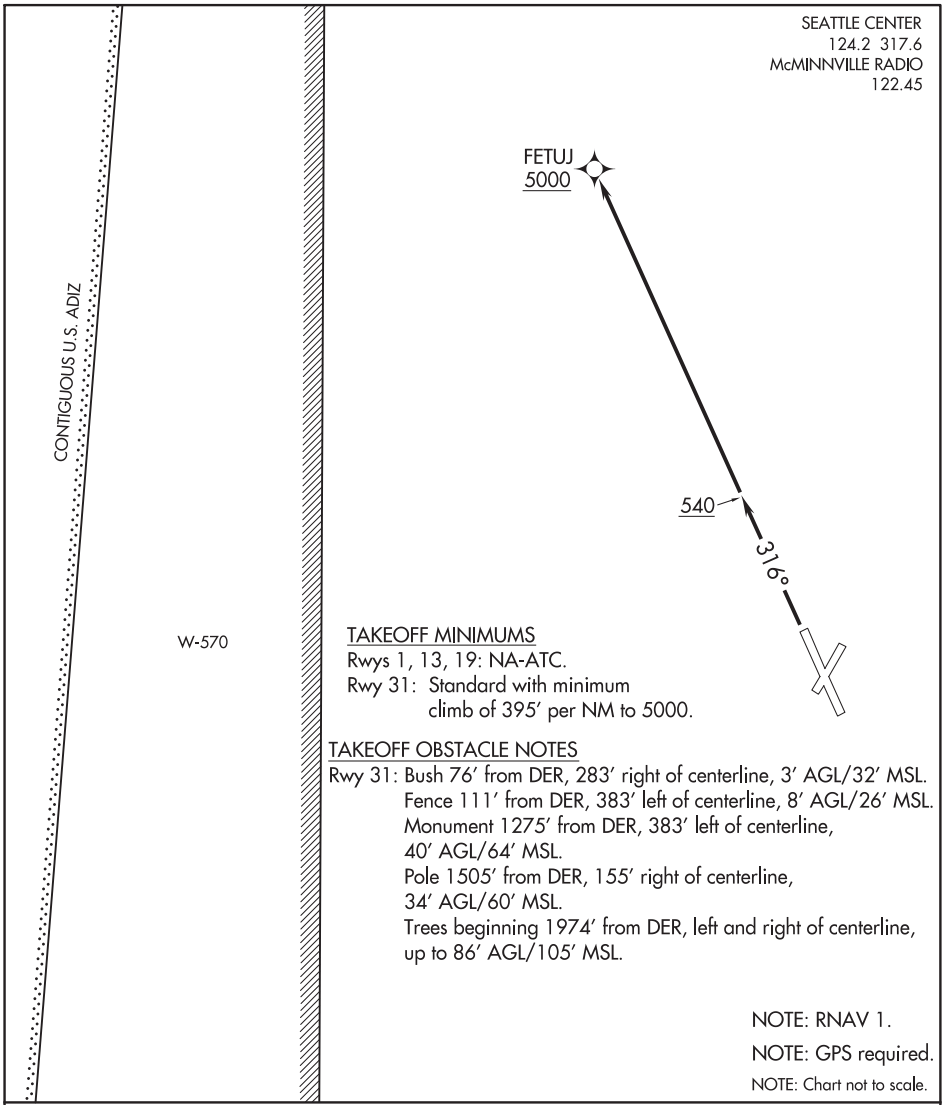
(FETUJ3.FETUJ) 18200

FETUJ THREE DEPARTURE (OBSTACLE) (RNAV)

AL-475 (FAA)

TILLAMOOK (TMK)
TILLAMOOK, OREGON

NW-1, 30 JAN 2020 to 26 MAR 2020



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.

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.

RNAV (GPS) RWY 6

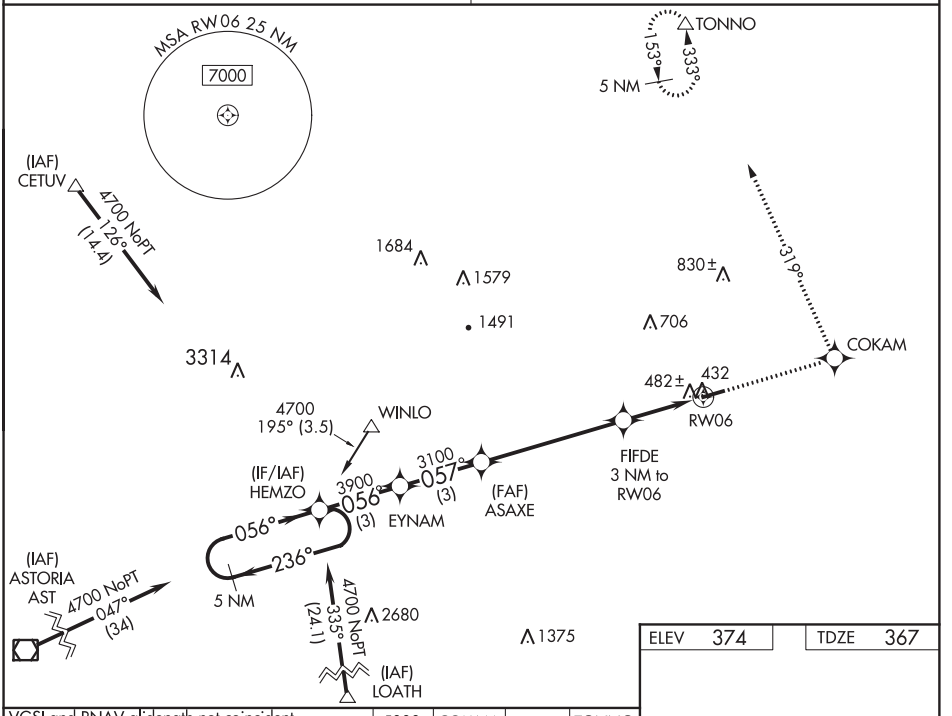
ED CARLSON MEMORIAL FIELD-SOUTH LEWIS COUNTY (TDO)

WAAS	APP CRS	Rwy Idg	4479
CH 58017	057°	TDZE	367
W06A		Apt Elev	374

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.

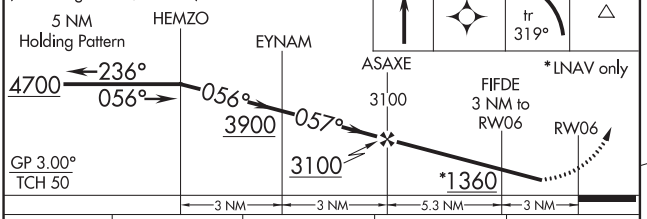
MISSED APPROACH: Climb to 5000 direct COKAM and left turn on track 319° to TONNO and hold, continue climb-in-hold to 5000.

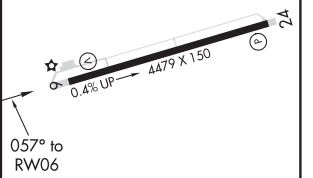
SEATTLE CENTER	CTAF
124.2 317.6	122.9 L



ELEV 374	TDZE 367

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 28).





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TOLEDO, WASHINGTON | AL-422 (FAA) | 15288

WAAS	APP CRS	Rwy Idg	4479
CH 72617	237°	TDZE	374
W24A		Apt Elev	374

RNAV (GPS) RWY 24

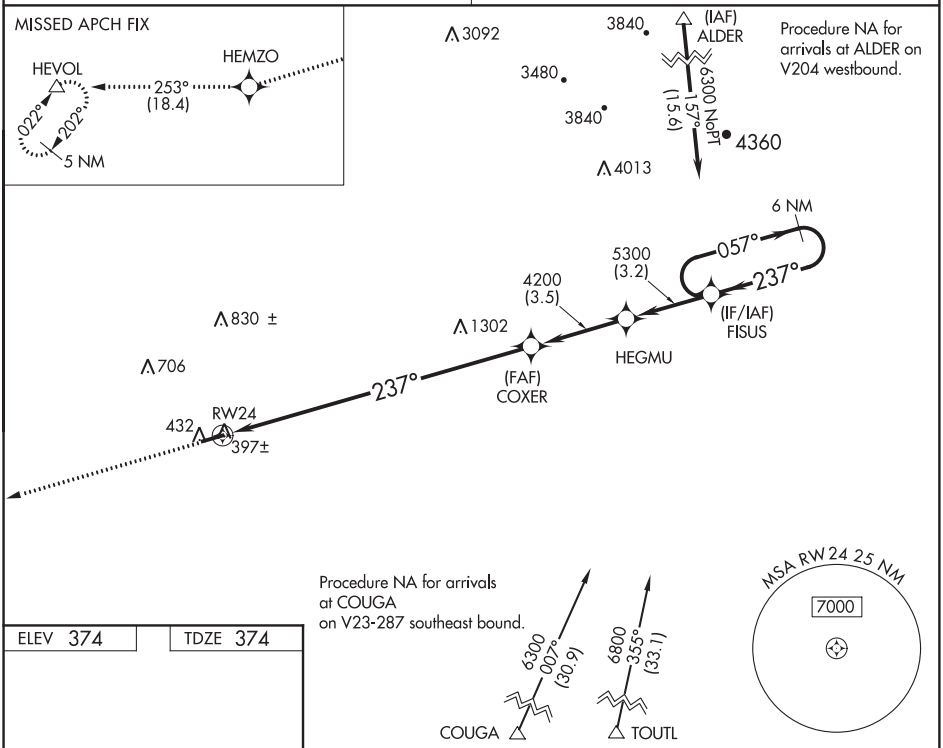
ED CARLSON MEMORIAL FIELD-SOUTH LEWIS COUNTY (TDO)

T NA

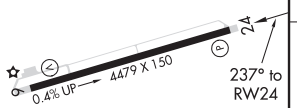
Baro-VNAV NA. DME/DME RNP- 0.3 NA. Helicopter visibility reduction below 1 SM not authorized. Use Chehalis altimeter setting, when not received use Kelso altimeter setting and increase all DA/MDA 40 feet and increase LPV visibility all Cats ¼ mile. Procedure NA at night.

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

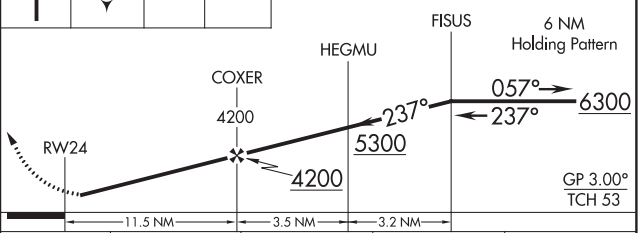


ELEV 374	TDZE 374



5000	HEMZO	tr 253°	HEVOL

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 44).



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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

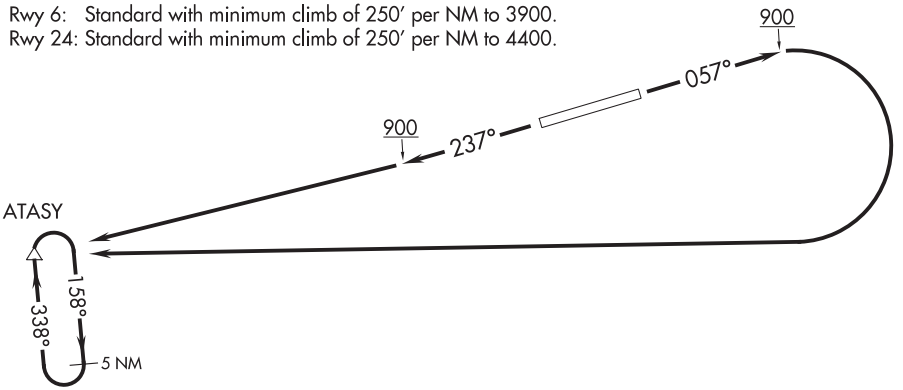
SEATTLE CENTER
124.2 317.6

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TORRINGTON, WYOMING AL-6845 (FAA) 19115

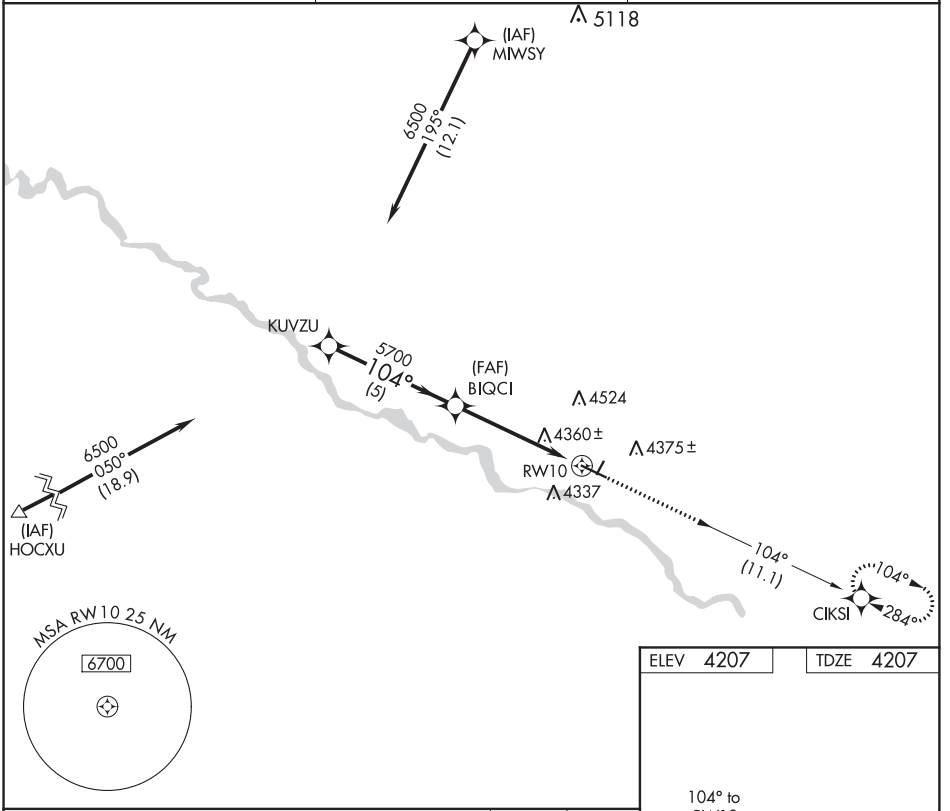
APP CRS	Rwy Idg	5703
104°	TDZE	4207
	Apt Elev	4207

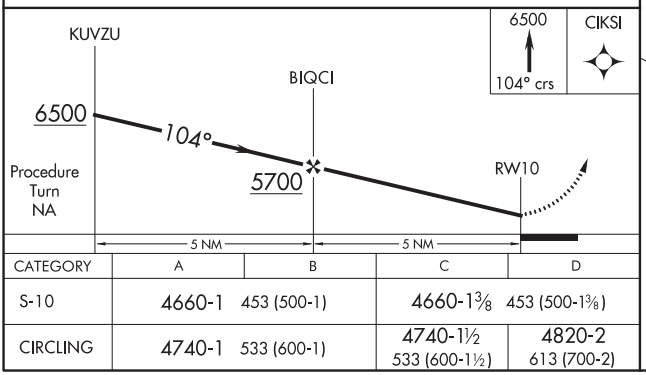
GPS RWY 10
TORRINGTON MUNI (TOR)

Procedure NA at night.
Helicopter visibility reduction below 1 SM NA.

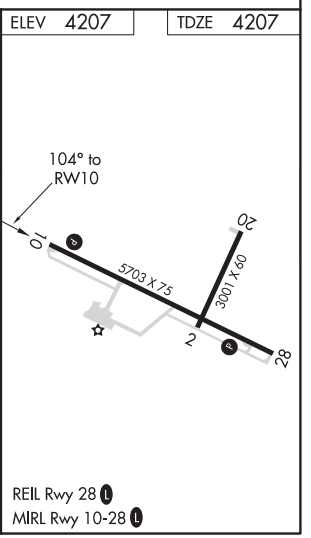
MISSED APPROACH: Climb to 6500 via 104° course to CIKSI WP and hold.

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, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	5703
284°	TDZE	4202
	Apt Elev	4207

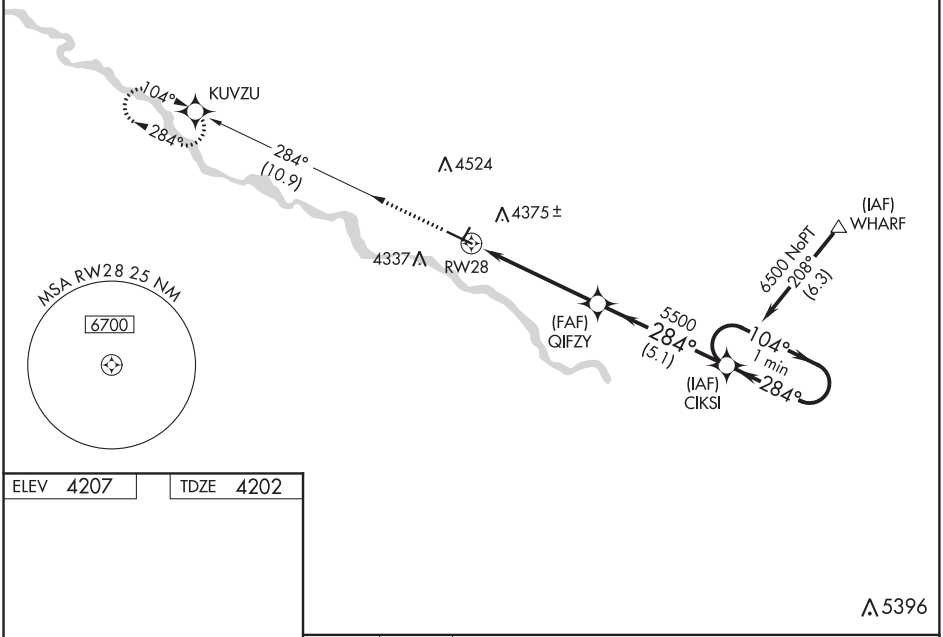
GPS RWY 28
TORRINGTON MUNI (TOR)

NA

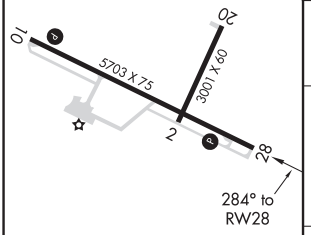
Procedure NA at night.
Helicopter visibility reduction below 1 SM NA.

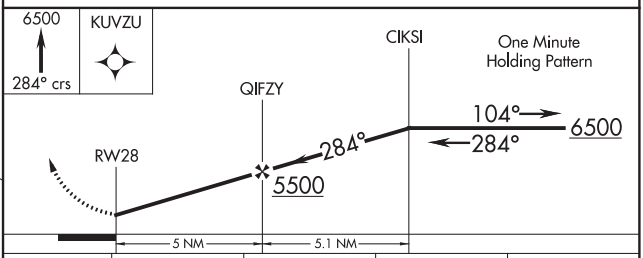
MISSED APPROACH: Climb to 6500 via 284° course to KUVZU WP and hold.

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 533 (600-1½)	4820-2 613 (700-2)

REIL Rwy 28 L
MIRL Rwy 10-28 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TORRINGTON, WYOMING AL-6845 (FAA) 19311

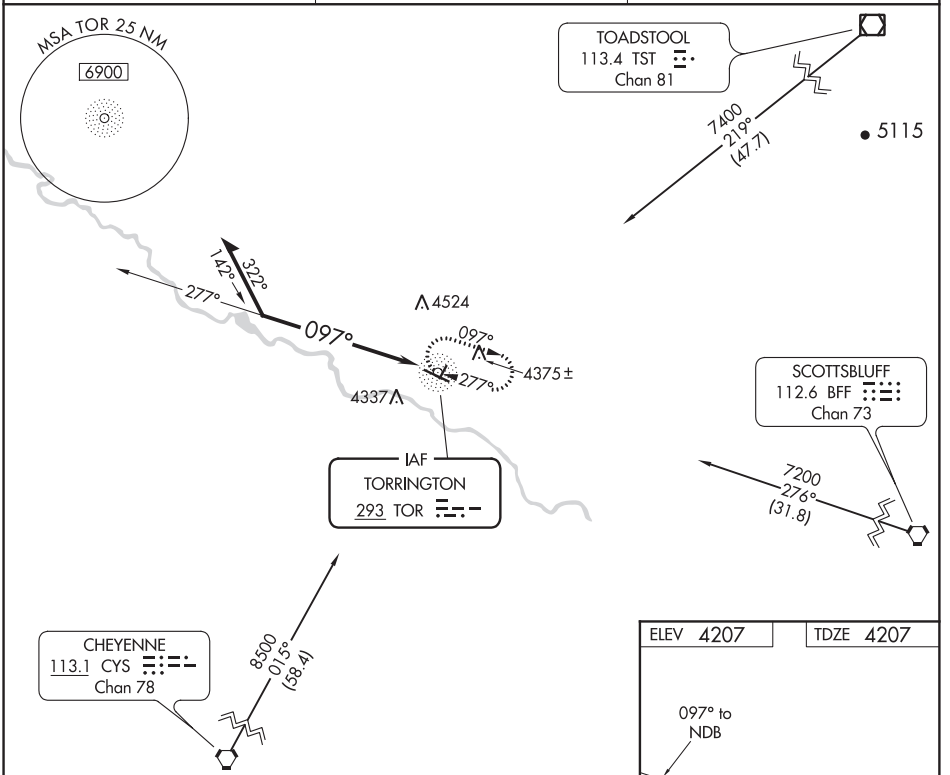
NDB TOR	APP CRS		
293	097°	Rwy Idg	5703
		TDZE	4207
		Apt Elev	4207

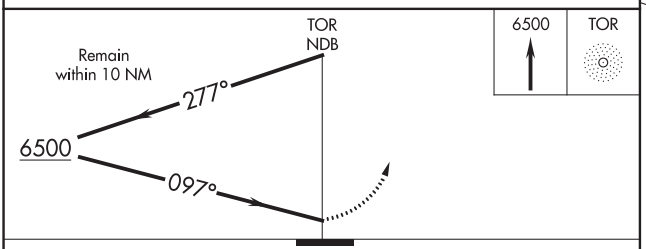
NDB RWY 10
TORRINGTON MUNI (TOR)

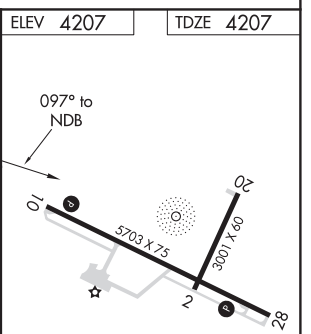
When local altimeter setting not received, use Scottsbluff altimeter setting and increase all MDA 100 feet; increase S-10 Cat A visibility ¼ mile; increase Circling Cat C and D visibility ¼ mile. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

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	5040-1 833 (900-1)	5040-1¼ 833 (900-1¼)	5040-2½	833 (900-2½)
CIRCLING	5040-1¼ 833 (900-1¼)		5040-2½ 833 (900-2½)	5040-2¾ 833 (900-2¾)

REIL Rwy 28 L
MIRL Rwy 10-28 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

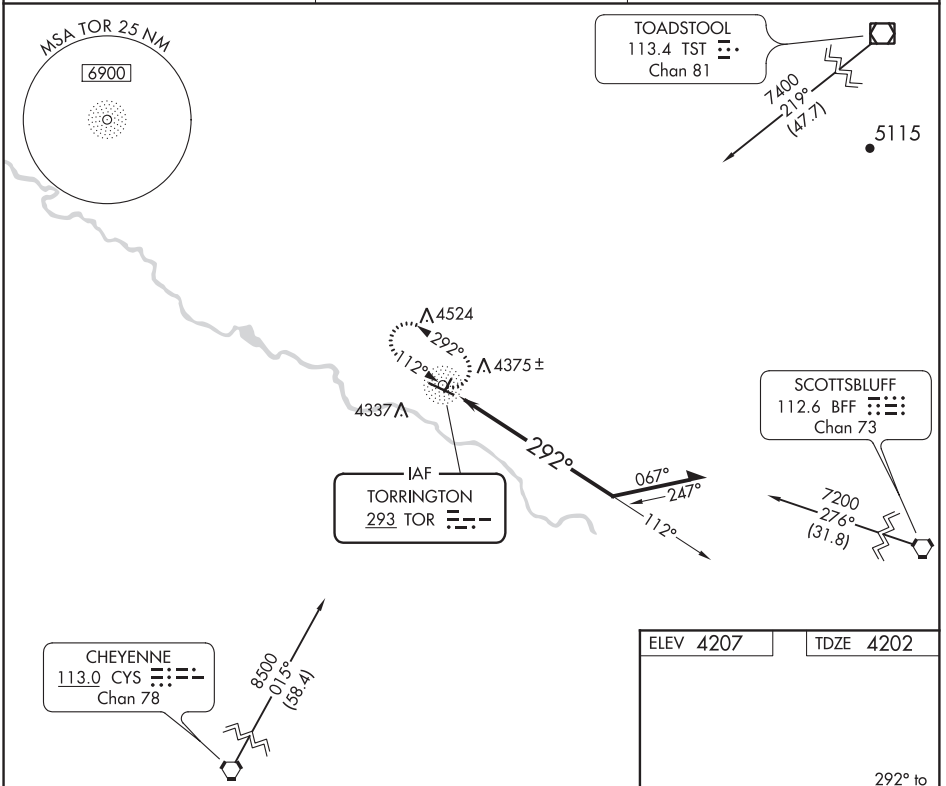
NDB TOR	APP CRS	Rwy Idg	5703
293	292°	TDZE	4202
		Apt Elev	4207

NDB RWY 28
TORRINGTON MUNI (TOR)

T 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



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)

REIL Rwy 28 L
MIRL Rwy 10-28 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TWIN BRIDGES, MONTANA | AL-10303 (FAA) | 19171

RNAV (GPS) RWY 17

TWIN BRIDGES (7S1)

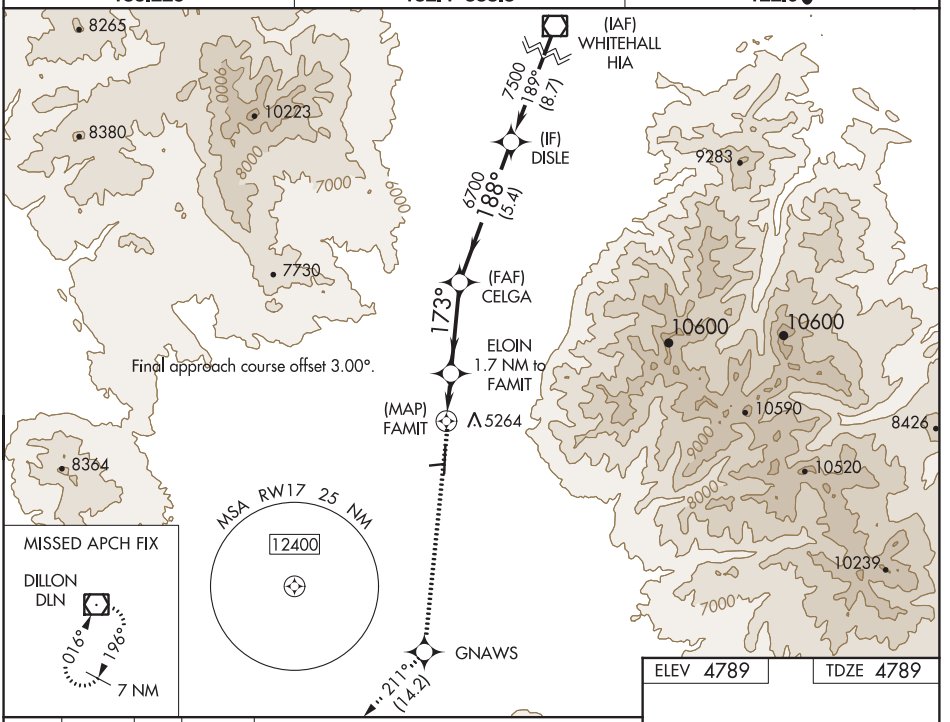
WAAS	APP CRS	Rwy Idg	6000
CH 93840	173°	TDZE	4789
W17A		Apt Elev	4789

RNP APCH.

T A NA — Circling NA to Rwys 7 and 25. Circling NA east of Rwy 17-35. Rwy 17 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA. Use Dillon altimeter setting; when not received, procedure NA.

MISSED APPROACH: Climb to 11100 direct GNAWS and on track 211° to DLN VOR/DME and hold, continue climb-in-hold to 11100.

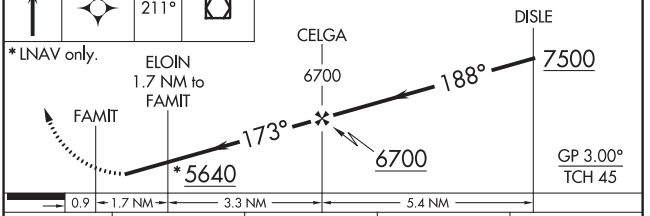
DILLON ASOS	SALT LAKE CENTER	CTAF
135.225	132.4 338.3	122.9 (L)



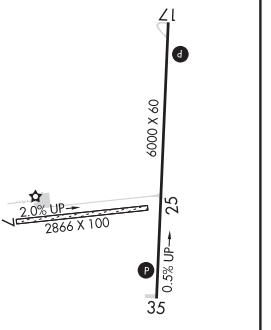
ELEV 4789 | TDZE 4789

11100	GNAWS	tr 211°	DLN

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 28).



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)

TWIN BRIDGES, MONTANA
Orig-A 20JUN19

45°32'N-112°18'W

TWIN BRIDGES (7S1)
RNAV (GPS) RWY 17

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 35

TWIN BRIDGES (7S1)

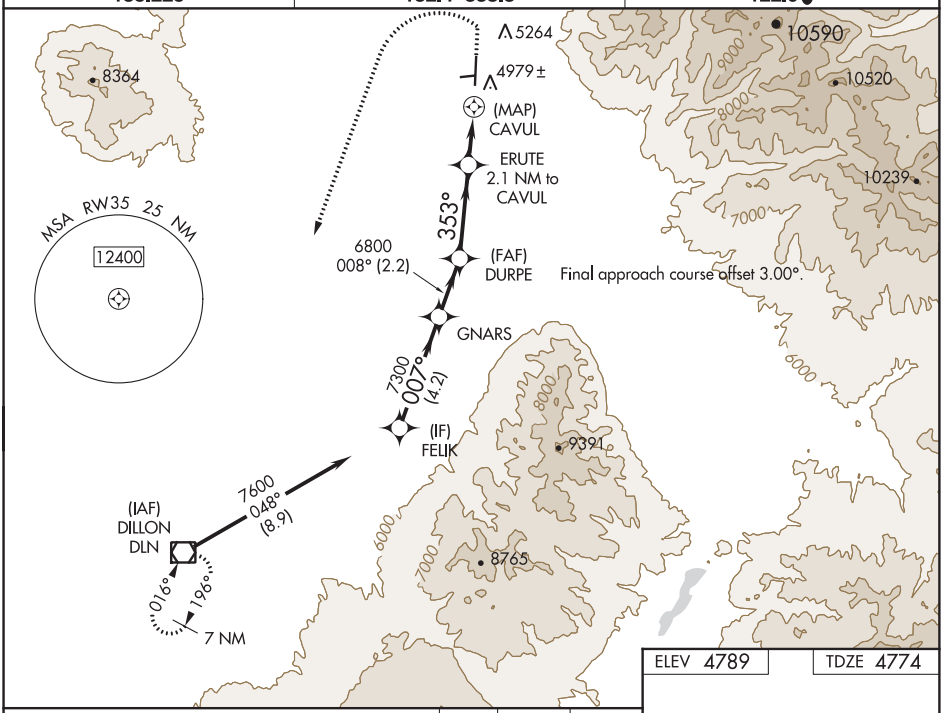
WAAS	APP CRS	Rwy Idg	6000
CH 42940	353°	TDZE	4774
W35A		Apt Elev	4789

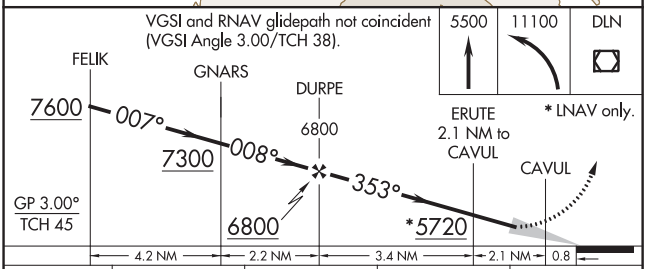
RNP APCH.

T A NA — Circling NA to Rwys 7 and 25. Circling NA east of Rwy 17-35. Baro-VNAV NA. Use Dillon altimeter setting; when not received, procedure NA.

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.

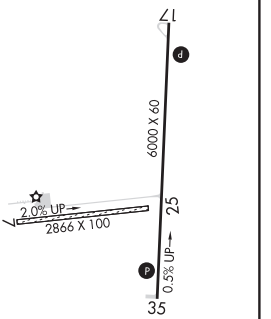
DILLON ASOS	SALT LAKE CENTER	CTAF
135.225	132.4 338.3	122.9 L





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)

ELEV 4789 TDZE 4774



MIRL Rwy 17-35 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

AL-10303 (FAA)

(7S11.HIA) 18032

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.

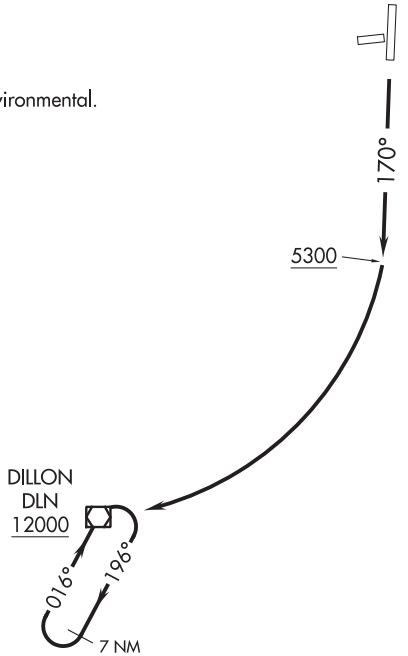
DEPARTURE ROUTE DESCRIPTION

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, 30 JAN 2020 to 26 MAR 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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

TWIN FALLS, IDAHO | AL-885 (FAA) | 18032

LOC I-TWF	APP CRS	Rwy Idg	8703
108.3	258°	TDZE	4154
		Apt Elev	4154

ILS or LOC RWY 26

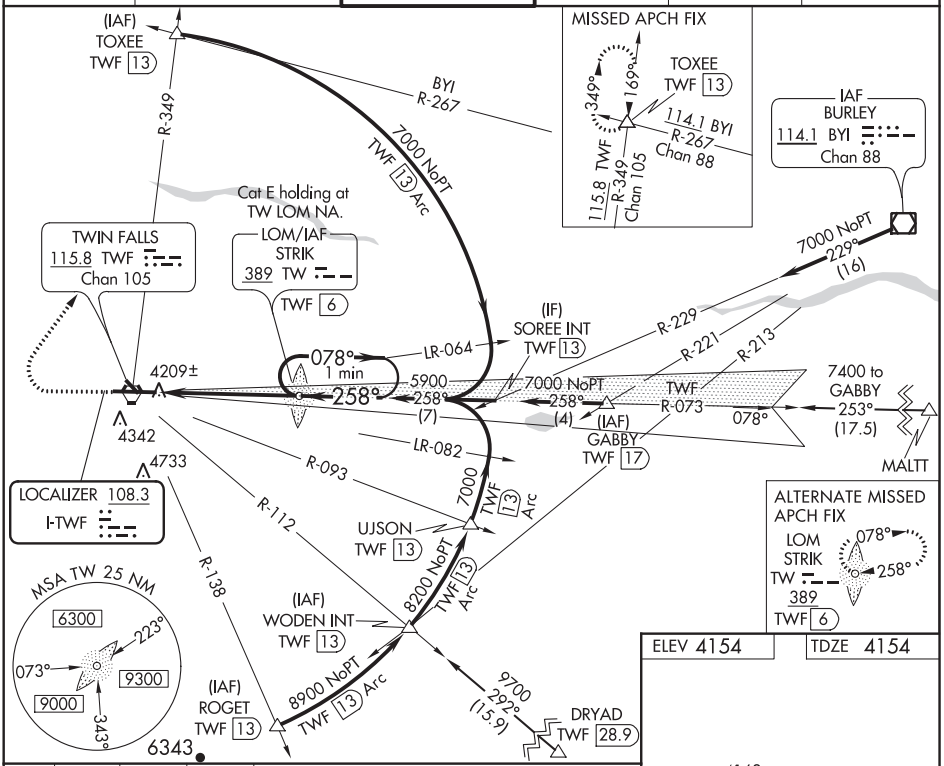
JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

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



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)	

REIL Rwy 8 L
HIRL Rwy 8-26 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, 30 JAN 2020 to 26 MAR 2020

WAAS CH **40211** **W08A** | APP CRS **078°** | Rwy Idg **8703** TDZE **4149** Apt Elev **4154**

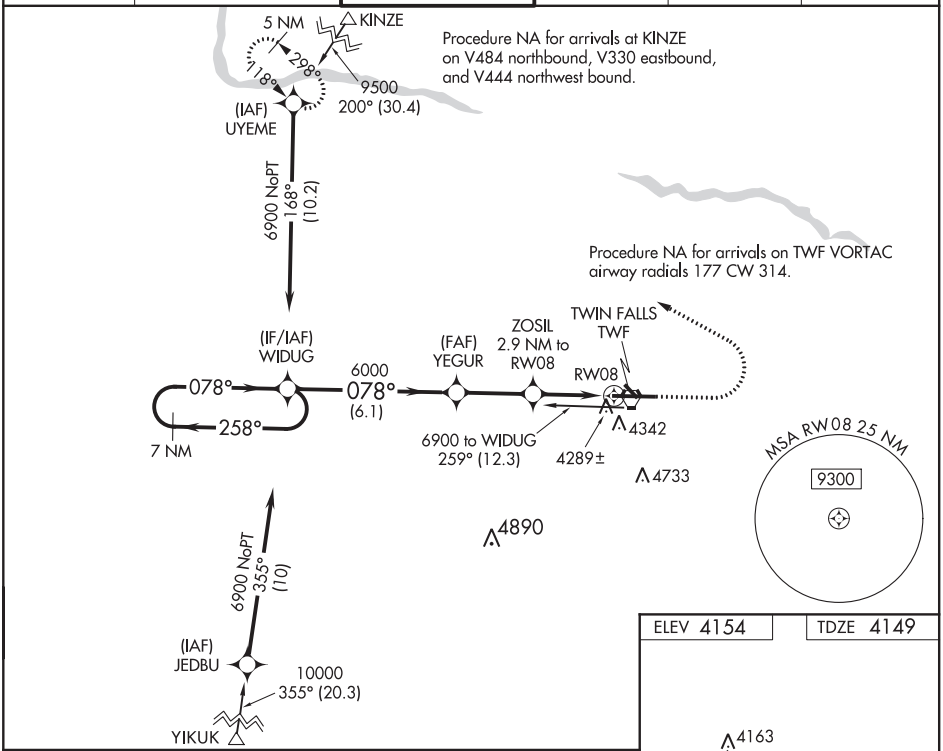
RNAV (GPS) RWY 8

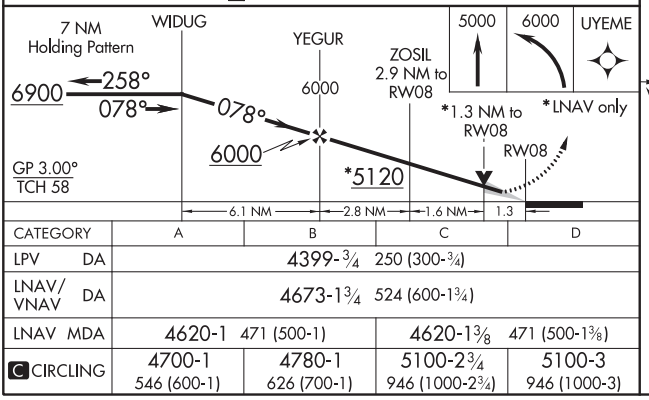
JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

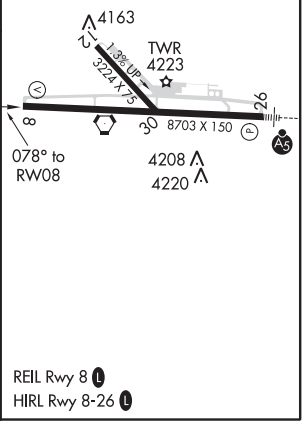
Night landing: Rwy 30 NA. Baro-VNAV NA when using Jerome altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (120°F). DME/DME RNP-0.3 NA. VDP NA with Jerome altimeter setting. When local altimeter setting not received, use Jerome altimeter setting and 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, 30 JAN 2020 to 26 MAR 2020

TWIN FALLS, IDAHO

AL-885 (FAA)

18032

RNAV (GPS) RWY 26

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

WAAS	APP CRS	Rwy Idg	8703
CH 56311	258°	TDZE	4154
W26A		Apt Elev	4154

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

MISSED APCH FIX

5 NM
298°
118°
UYEME

MSA RW 26 25 NM
9300

Procedure NA for arrival at KINZE on V444 northwest bound.

KINZE
7200
139°
(29.8)
(IAF)
HAZZL
7200 NoPT
196°
(11.4)

Procedure NA for arrivals at TWF VORTAC on airway radials 097 CW 138.

Procedure NA for arrivals at MALTT on V101 southeast bound.

TWIN FALLS
TWF
RW26
4342
258°
(FAF)
VUPCU
6100
259°
(6.2)
(IF/IAF)
SOREE
079°
7 NM
259°
GABBY
(IAF)
MALTT
8200 NoPT
259°
(17.5)
5010
4733
7200 to SOREE
078° (13)
7200
321°
(4.5)
7200 to SOREE
259° (4)
ZUROV
4890
8000
045°
(24.1)
SAMAN
8800 NoPT
321°
(16.1)
(IAF)
DRYAD

Procedure NA for arrivals at DRYAD on T331 southwest bound.

ELEV 4154 | TDZE 4154

4163
TWR
4223
3224 X 75
1.3% UP
258° to RW26
8703 X 150
4208
4220

4700 | 6000 | UYEME
* LNAV only
*1.5 NM to RW26
RW26
VUPCU
6100
SOREE
7 NM Holding Pattern
079°
259°
7200
259°
258°
6100
GP 3.00°
TCH 55
1.5 NM | 4.4 NM | 6.2 NM

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VORTAC TWF	APP CRS	Rwy Idg	8703
115.8	078°	TDZE	4149
Chan 105		Apt Elev	4154

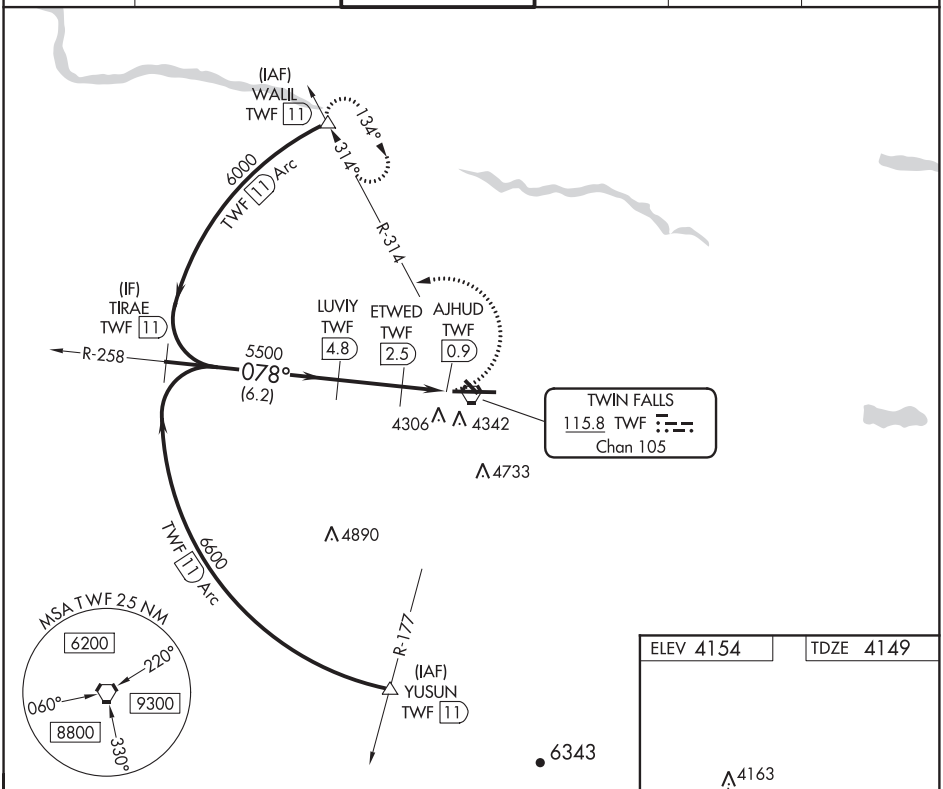
VOR/DME RWY 8

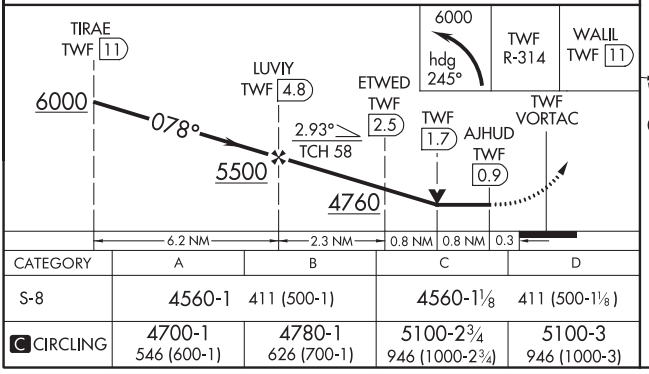
JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

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.

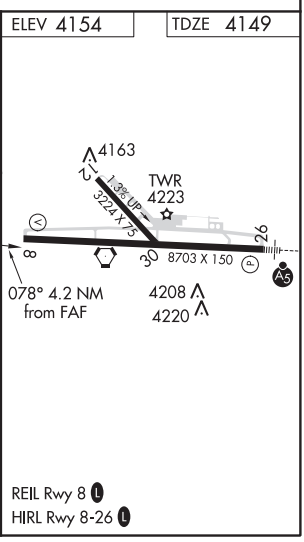
MISSED APPROACH: Climbing left turn to 6000 on heading 245° and TWF R-314 to WALIL/TWF 11 DME and hold.

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)



NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

TWIN FALLS, IDAHO | AL-885 (FAA) | 18032

VORTAC TWF	APP CRS	Rwy Idg	8703
115.8	077°	TDZE	4149
Chan 105		Apt Elev	4154

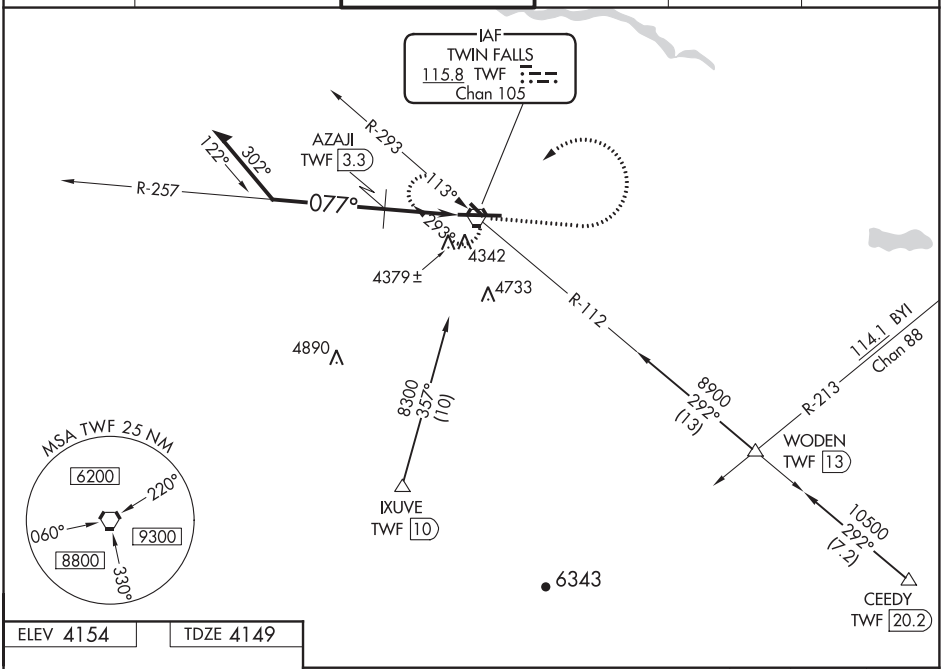
VOR RWY 8

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

T A 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.

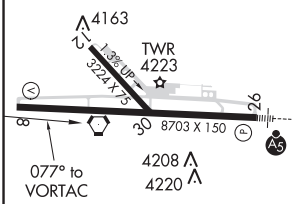
ASOS	TWIN FALLS APP CON*	TWIN FALLS TOWER*	GND CON	CLNC DEL	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	123.65	122.95



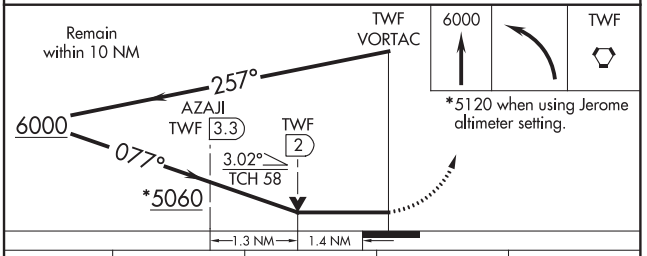
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 4154 | TDZE 4149



REIL Rwy 8 L
HIRL Rwy 8-26 L



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	5100-3
			946 (1000-2¾)	946 (1000-3)
AZAJI FIX MINIMUMS				
S-8	4640-1	491 (500-1)	4640-1⅜	491 (500-1⅜)
C CIRCLING	4700-1	4780-1	5100-2¾	5100-3
	546 (600-1)	626 (700-1)	946 (1000-2¾)	946 (1000-3)

TWIN FALLS, IDAHO
Amdt 5A 28APR16

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)
42°29'N-114°29'W
VOR RWY 8

VORTAC TWF	APP CRS	Rwy Idg	8703
115.8	248°	TDZE	4154
Chan 105		Apt Elev	4154

VOR RWY 26

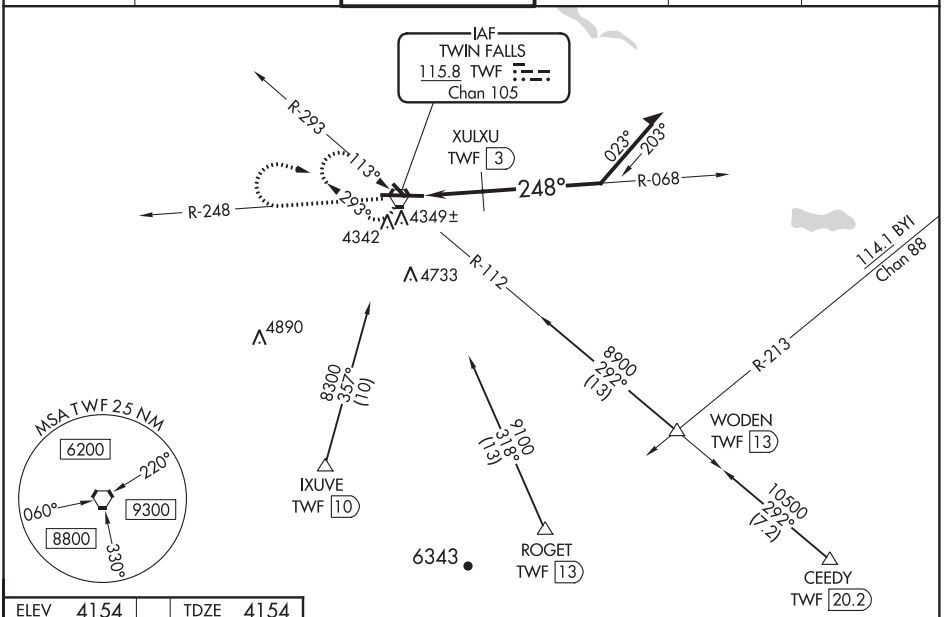
JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

T A 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.

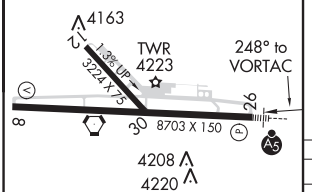
MALSR

MISSED APPROACH: Climb to 6000 on TWF VORTAC R-248 then right turn direct TWF VORTAC and hold.

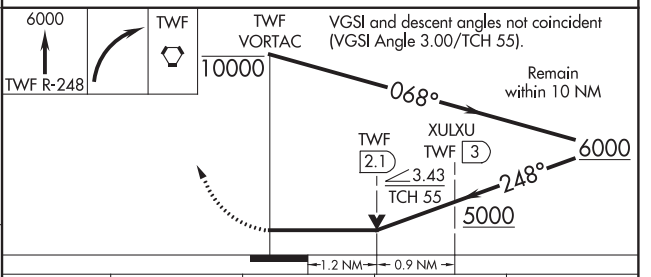
ASOS	TWIN FALLS APP CON★	TWIN FALLS TOWER★	GND CON	CLNC DEL	UNICOM
135.025	126.7 353.75	118.2 (CTAF) L 317.5	121.7	123.65	122.95



ELEV 4154	TDZE 4154



REIL Rwy 8 L
HIRL Rwy 8-26 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

18200

AIRPORT DIAGRAM

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

TWIN FALLS, IDAHO

AL-885 (FAA)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM

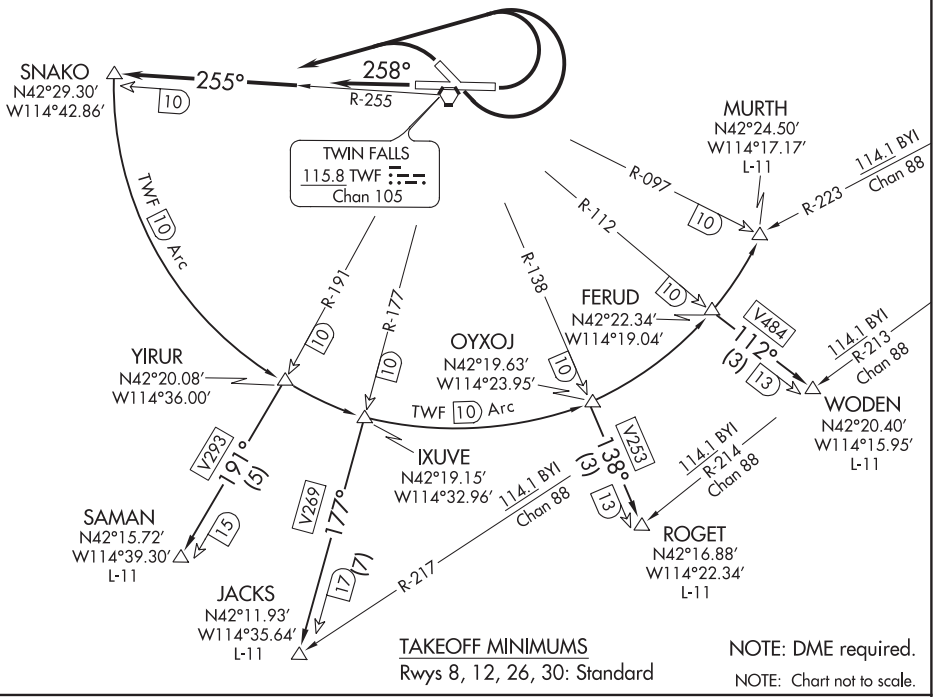
18200

TWIN FALLS, IDAHO

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

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′.



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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) | 19171

LDA-A

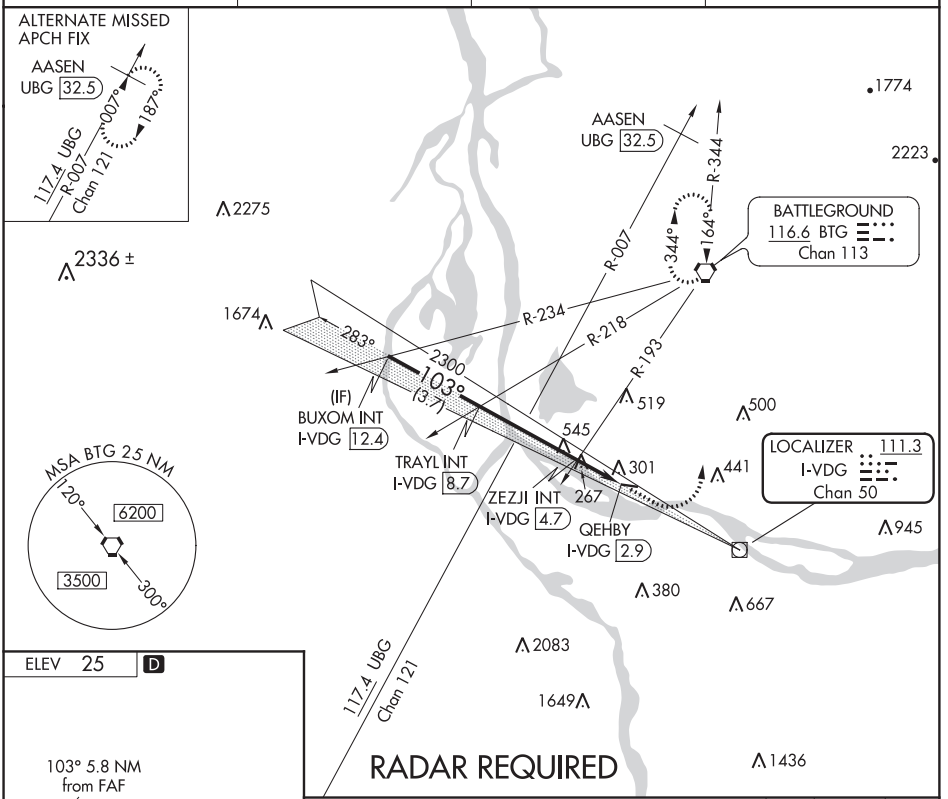
PEARSON FIELD (VUO)

LOC/DME I-VDG	APP CRS	Rwy Idg	N/A
111.3	103°	TDZE	N/A
Chan 50		Apt Elev	25

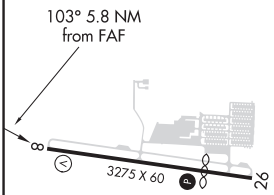
When local altimeter setting not received, use Portland Intl altimeter setting. Helicopter visibility reduction below 1 SM (or RVR 5000 as appropriate) not authorized.

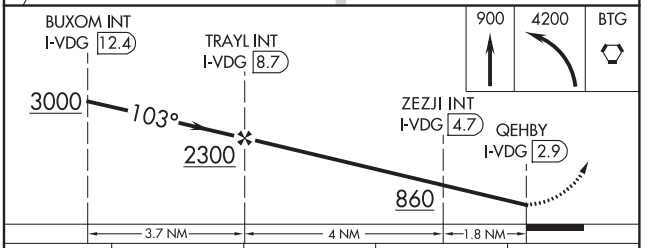
MISSED APPROACH: Climb to 900 then climbing left turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

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	

VANCOUVER, WASHINGTON
Amdt 2 15NOV12

45°37'N-122°39'W

PEARSON FIELD (VUO)
LDA-A

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC I-ALW	APP CRS	Rwy Idg	6527
111.7	196°	TDZE	1194
		Apt Elev	1194

ILS Y or LOC RWY 20

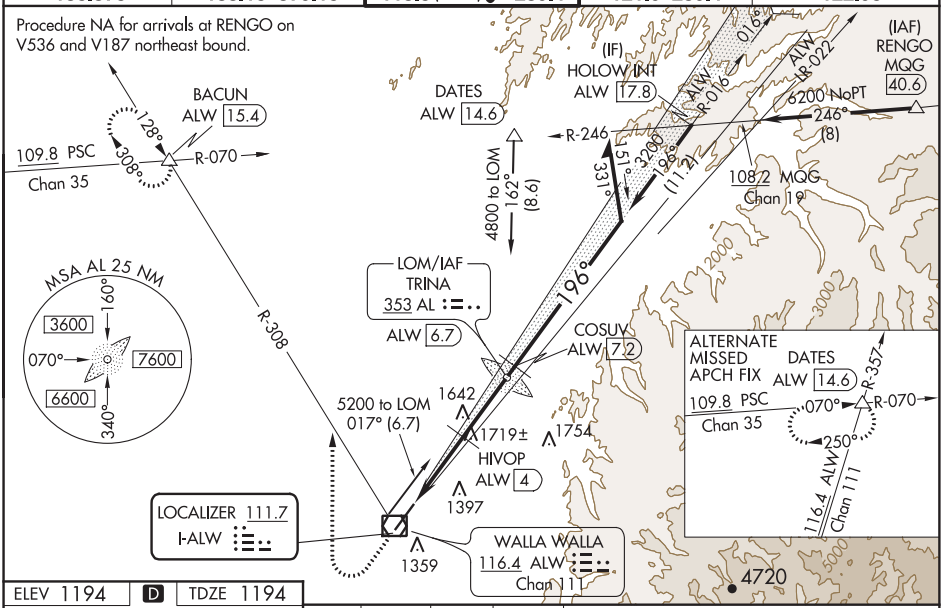
WALLA WALLA RGNL (ALW)

T 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.

A 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.

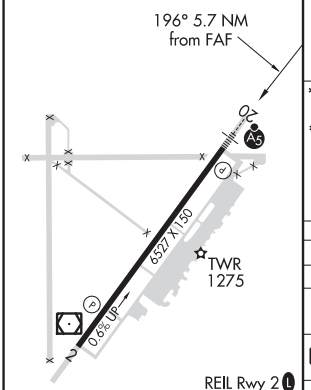
ASOS	CHINOOK APP CON ★	WALLA WALLA TOWER ★	GND CON	UNICOM
135.875	133.15 379.15	118.5 (CTAF) L 289.4	121.6 289.4	122.95



NW-1, 30 JAN 2020 to 26 MAR 2020

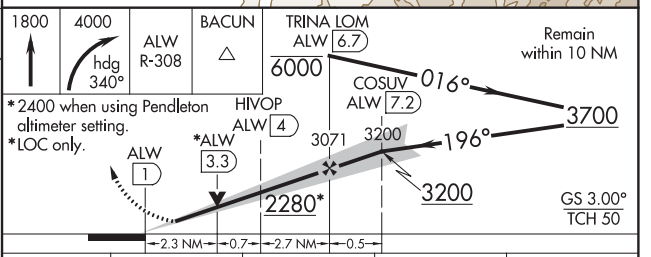
NW-1, 30 JAN 2020 to 26 MAR 2020

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)

WALLA WALLA, WASHINGTON | AL-440 (FAA) | 19171

ILS Z or LOC/DME RWY 20

WALLA WALLA RGNL (ALW)

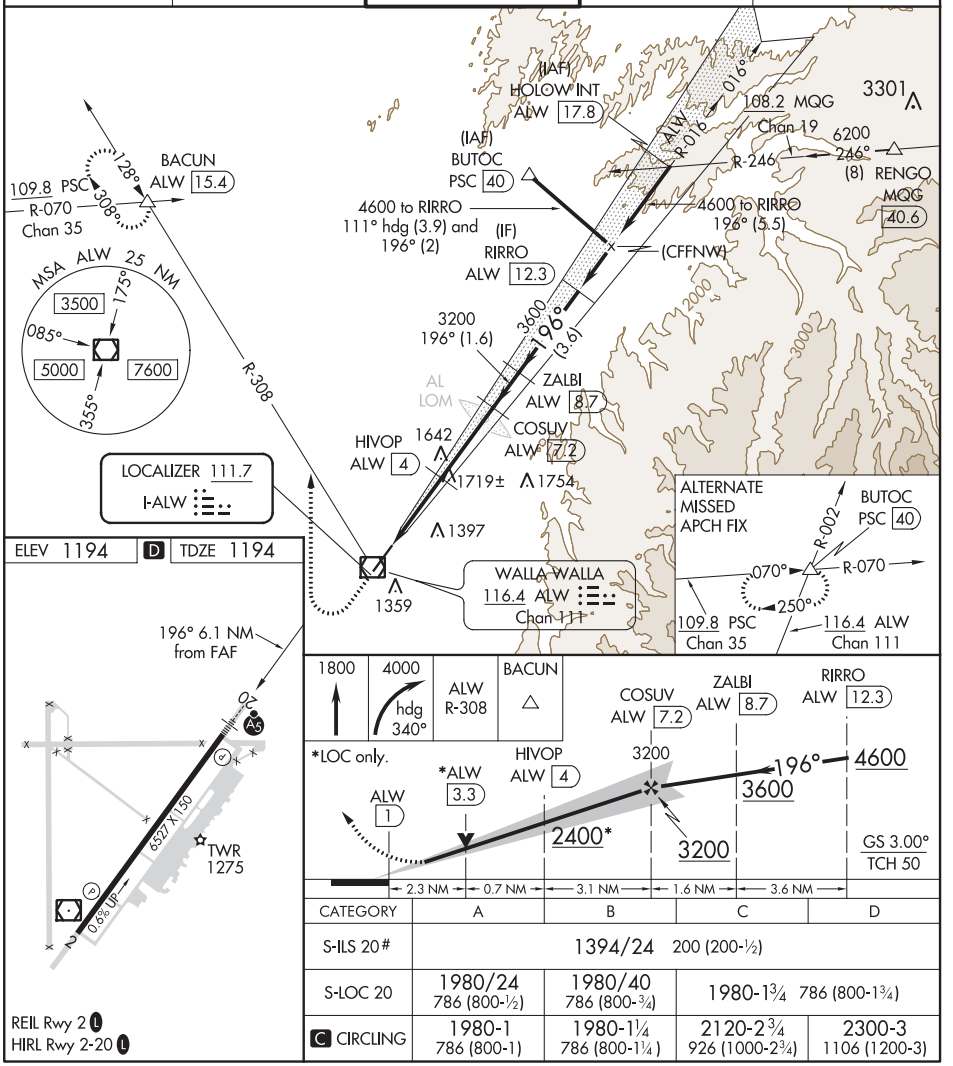
LOC I-ALW	APP CRS	Rwy Idg	6527
111.7	196°	TDZE	1194
		Apt Elev	1194

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



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

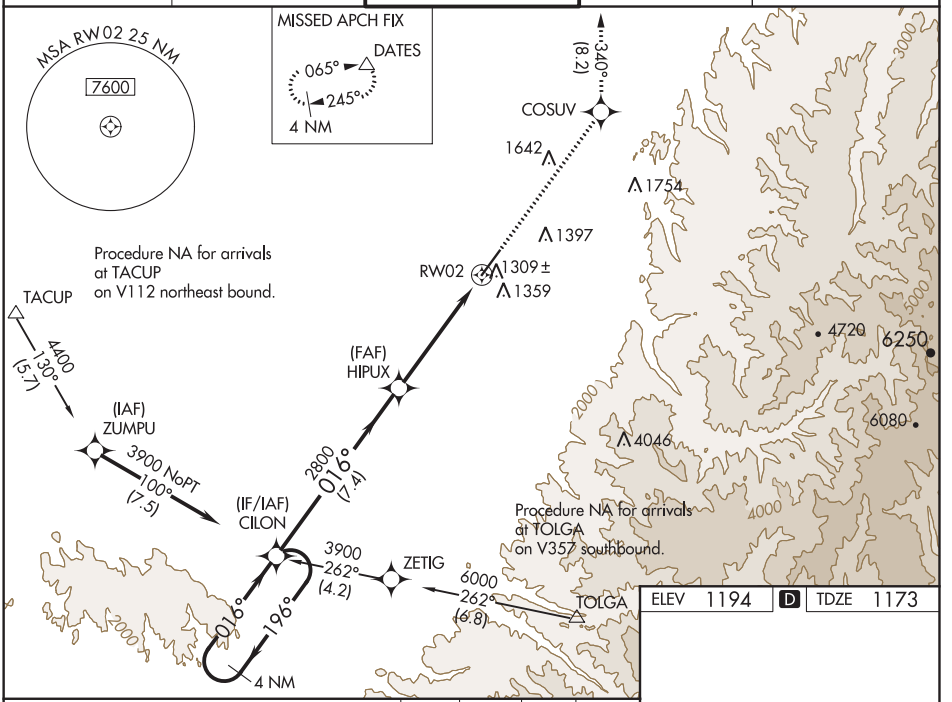
WAAS	APP CRS	Rwy Idg	6527
CH 72805	016°	TDZE	1173
W02A		Apt Elev	1194

RNAV (GPS) RWY 2
WALLA WALLA RGNL (ALW)

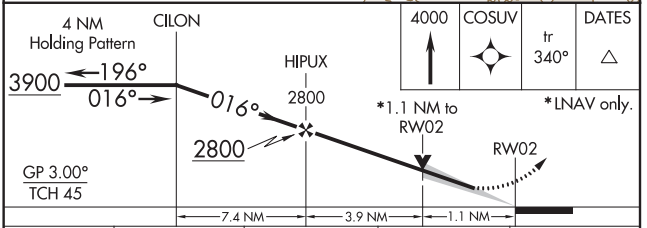
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pendleton altimeter setting and increase all DA/MDA 120 feet and LPV all visibilities ¼ mile, LNAV/VNAV all visibilities ⅜ mile, LNAV Cats C/D visibility ⅜ mile, and Circling Cat C visibility ¼ mile. VDP and Baro-VNAV NA when using Pendleton altimeter setting.

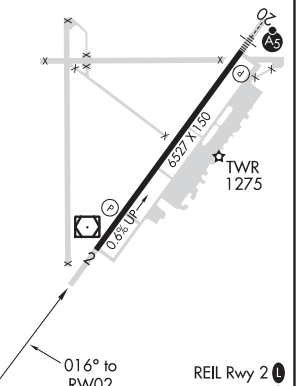
MISSED APPROACH: Climb to 4000 direct COSUV and on track 340° to DATES and hold.

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



ELEV 1194 D TDZE 1173





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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 20

WALLA WALLA RGNL (ALW)

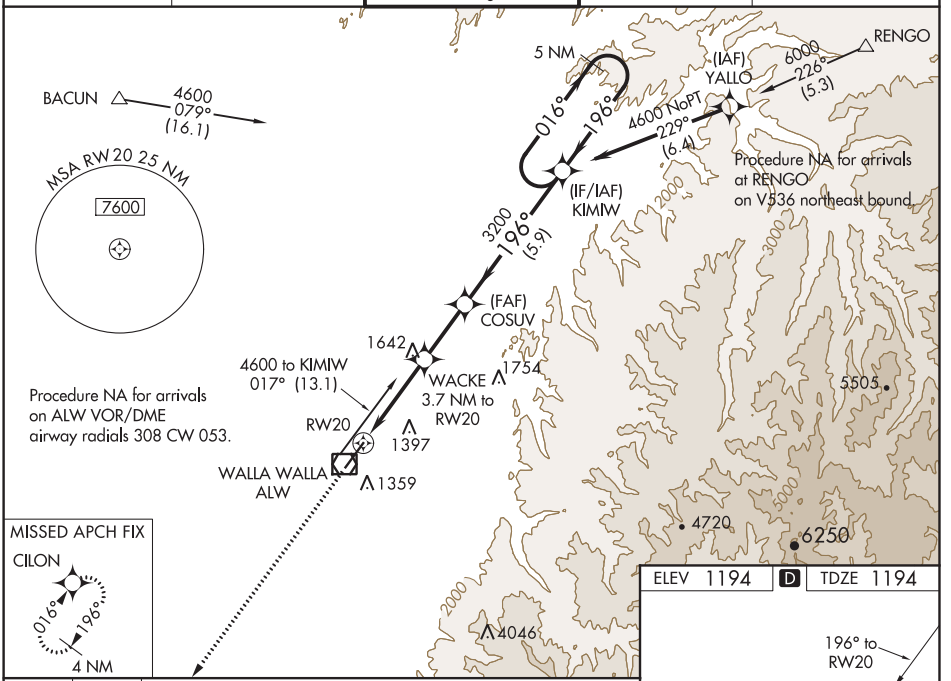
WAAS CH 90299 W20A	APP CRS 196°	Rwy Idg 6527 TDZE 1194 Apt Elev 1194

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

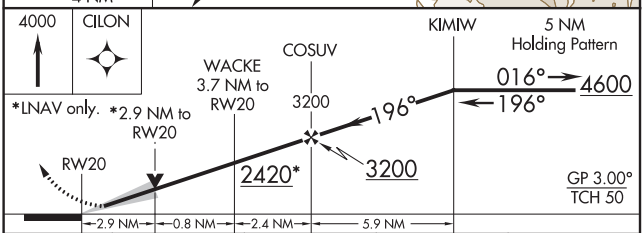
MISSED APPROACH: Climb to 4000 direct CILON and hold.

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



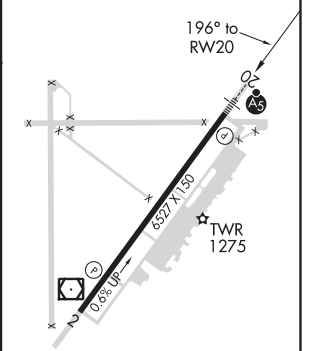
NW-1, 30 JAN 2020 to 26 MAR 2020

MISSED APCH FIX
CILON
016°
196°
4 NM



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)

ELEV 1194 D TDZE 1194



REIL Rwy 2 L
HIRL Rwy 2-20 L

46°06′N-118°17′W

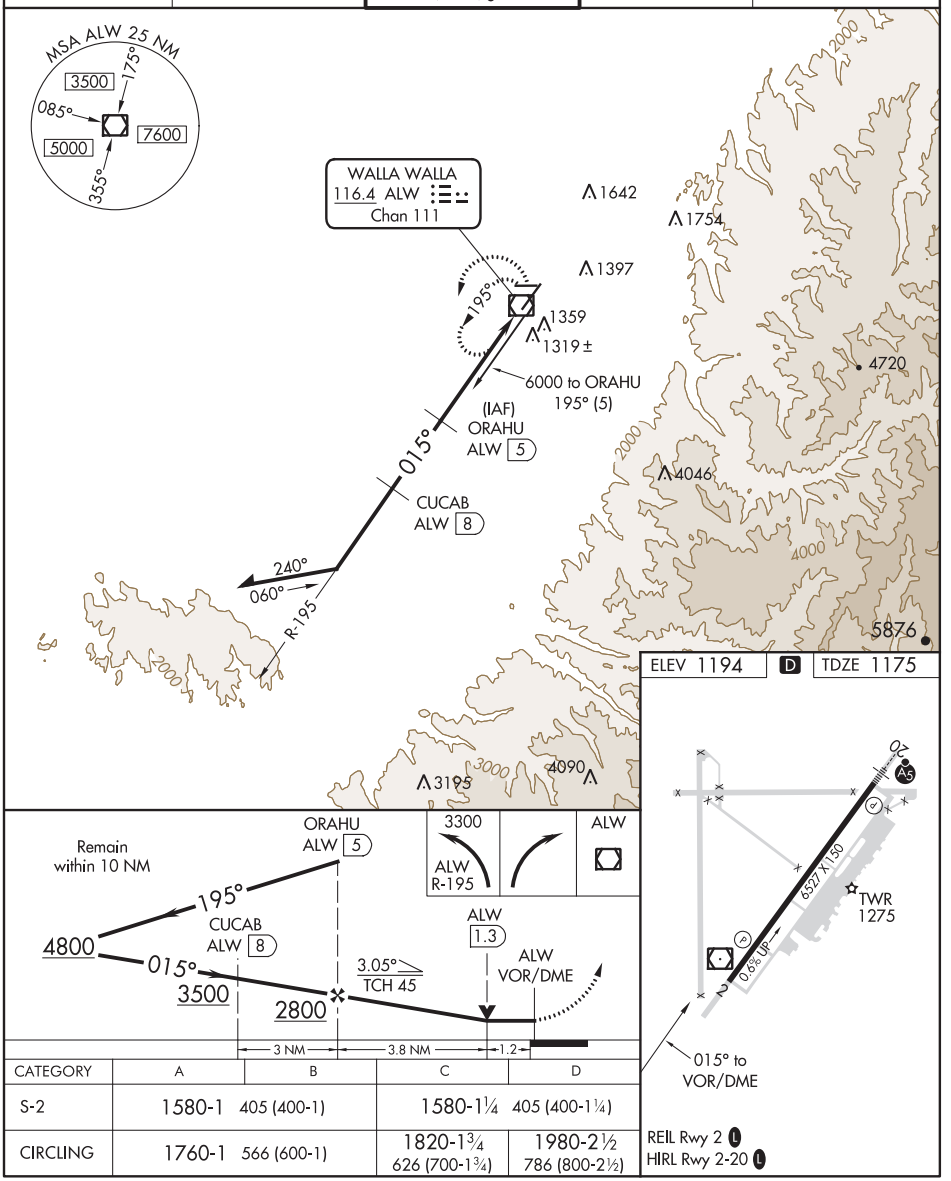
VOR/DME RWY 2

WALLA WALLA RGNL (ALW)

VOR/DME ALW	APP CRS	Rwy Idg	6527
116.4	015°	TDZE	1175
Chan 111		Apt Elev	1194

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



CATEGORY	A	B	C	D
S-2	1580-1 405 (400-1)		1580-1¼ 405 (400-1¼)	
CIRCLING	1760-1 566 (600-1)		1820-1¾ 626 (700-1¾)	1980-2½ 786 (800-2½)

REIL Rwy 2 L
HIRL Rwy 2-20 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 20

WALLA WALLA RGNL (ALW)

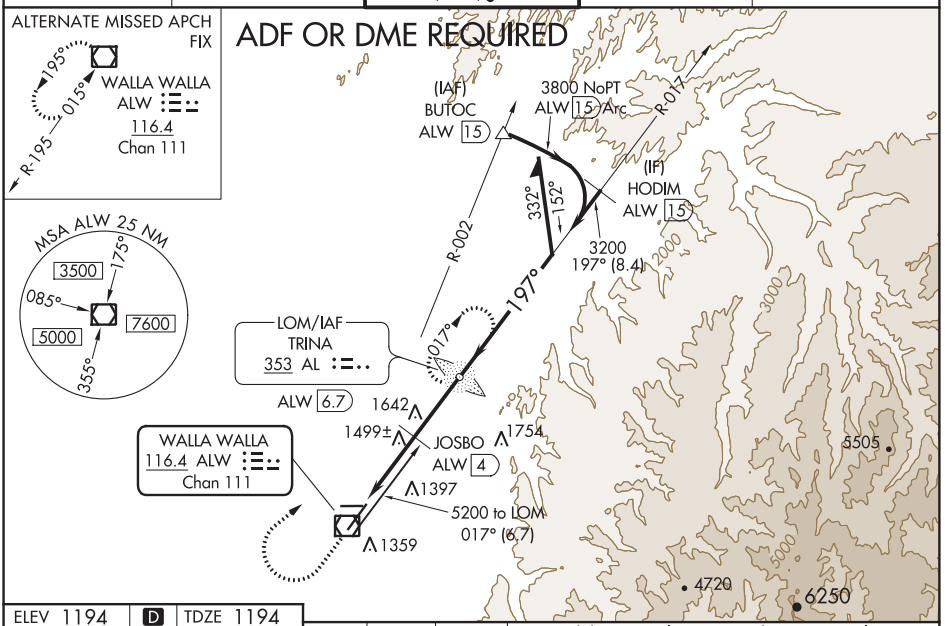
VOR/DME ALW	APP CRS	Rwy Idg	6527
116.4	197°	TDZE	1194
Chan 111		Apt Elev	1194

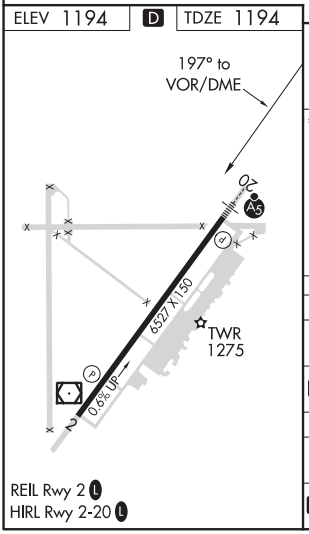
ADF required. VDP NA with Pendleton altimeter setting. When local altimeter setting not received, use Pendleton altimeter setting and increase all MDA 120 feet. Increase S-20 visibility Cat B ¼ mile, Cat C and D ½ mile. Increase JOSBO fix minimums S-20 visibility Cat C and D ¼ mile, Circling visibility Cat A and C ¼ mile, and Cat B ½ mile.

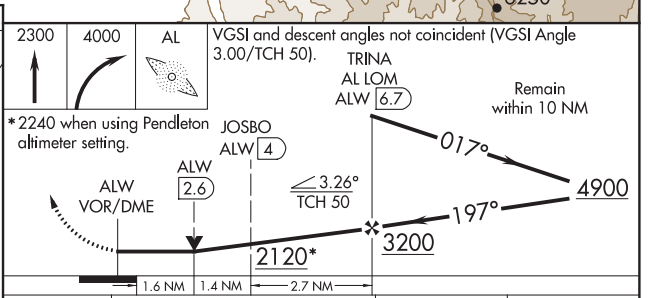
MALSR

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

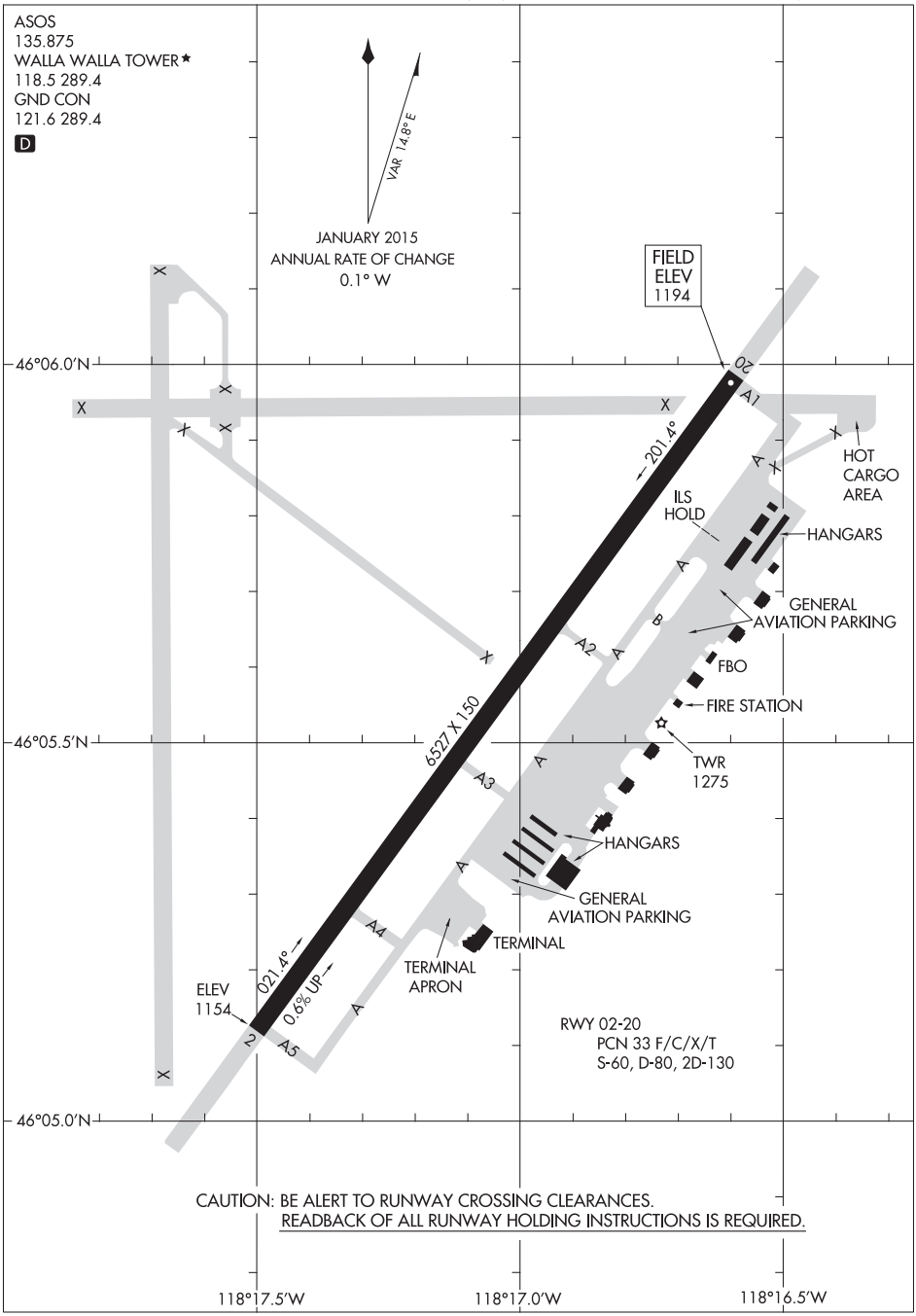






CATEGORY	A	B	C	D
S-20	2120/40	926 (1000-¾)	2120-2	926 (1000-2)
C CIRCLING	2120-1¼	926 (1000-1¼)	2120-3 926 (1000-3)	2240-3 1046 (1100-3)
JOSBO FIX MINIMUMS (DME REQUIRED)				
S-20	1760/24	566 (600-½)	1760-1¼	566 (600-1¼)
C CIRCLING	1760-1 566 (600-1)	1820-1 626 (700-1)	2080-2¾ 886 (900-2¾)	2240-3 1046 (1100-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020



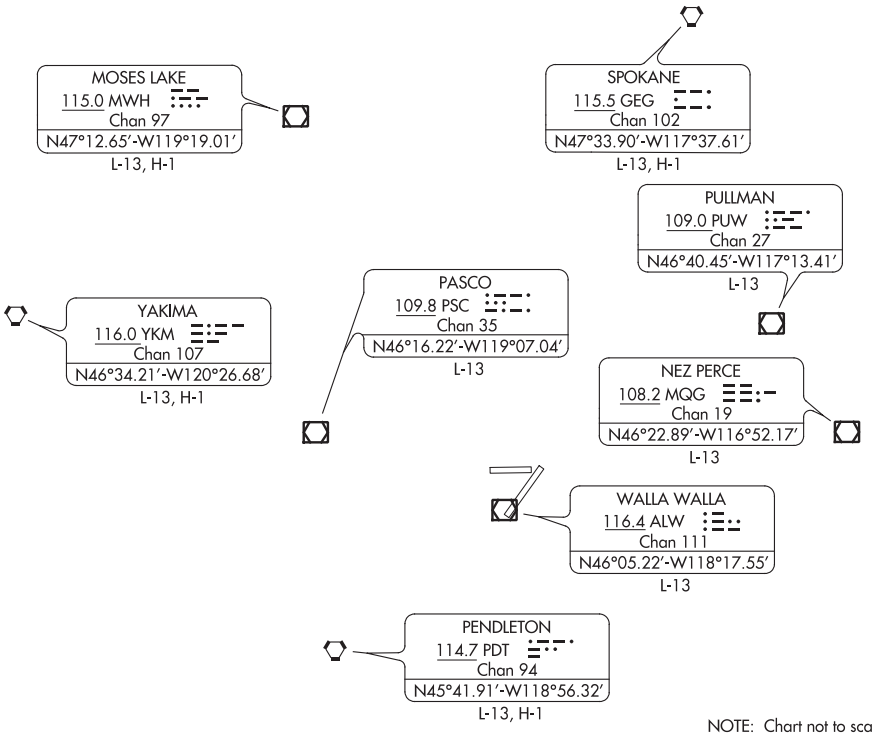
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 30 JAN 2020 to 26 MAR 2020

18144

WALLA WALLA ONE DEPARTURE

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.

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

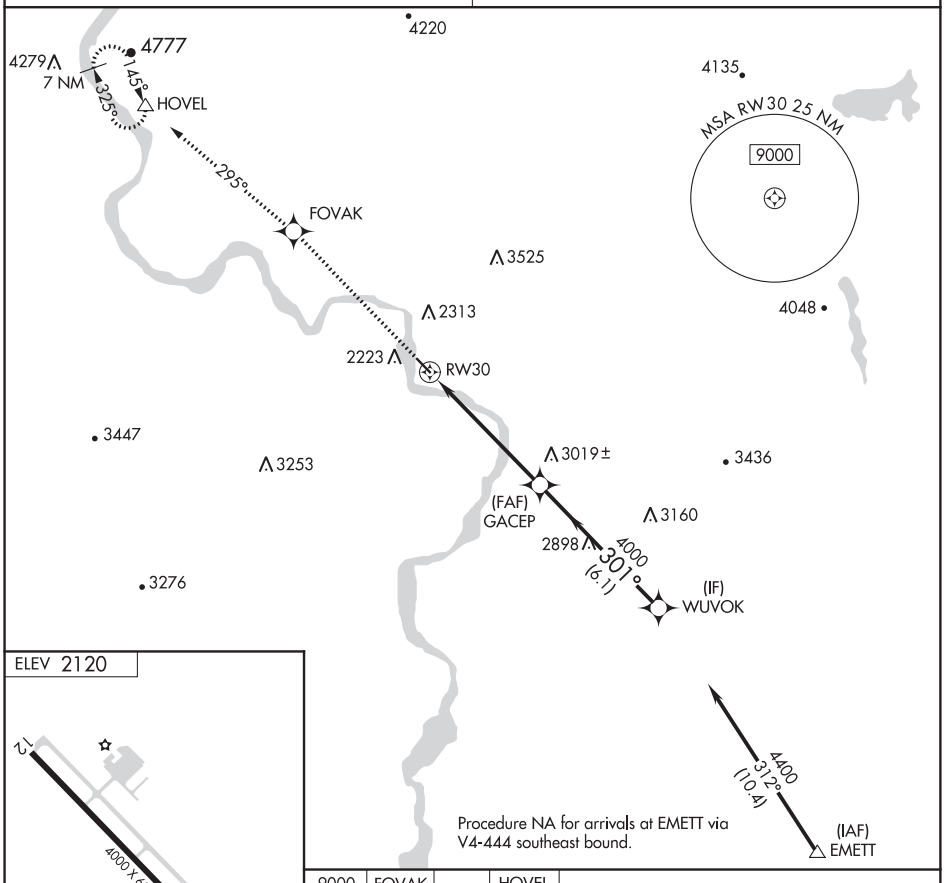
APP CRS	Rwy Idg	N/A
301°	TDZE	N/A
	Apt Elev	2120

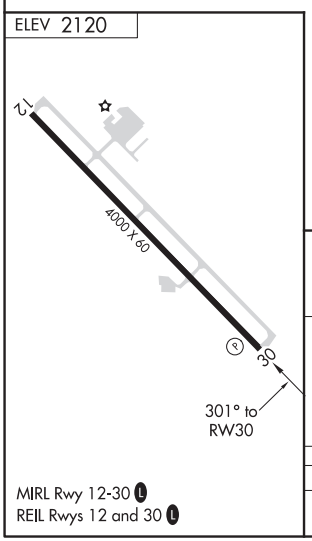
RNAV (GPS)-A
WEISER MUNI (S87)

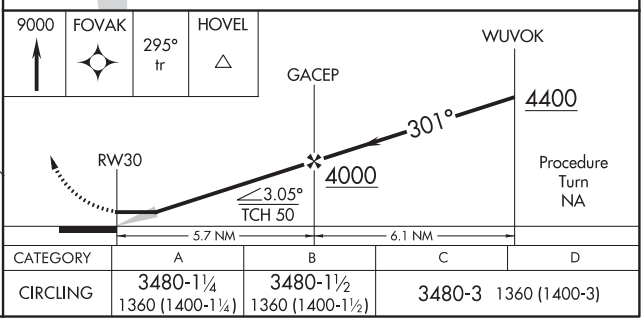
DME/DME RNP-0.3 NA. Procedure NA at night. Use Ontario altimeter setting; when not received, use Boise altimeter setting and increase all MDAs 160 feet.

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







CATEGORY	A	B	C	D
CIRCLING	3480-1¼ 1360 (1400-1¼)	3480-1½ 1360 (1400-1½)	3480-3 1360 (1400-3)	

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NW-1, 30 JAN 2020 to 26 MAR 2020

WENATCHEE, WASHINGTON | AL-641 (FAA) | 18200

ILS Y RWY 12

PANGBORN MEMORIAL (EAT)

LOC/DME I-ADJ	APP CRS	Rwy Idg 7000
109.35	120°	TDZE 1225
Chan 30 (Y)		Apt Elev 1249

T A -7°C — DME required.

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) L

DME REQUIRED

2710±

MISSED APCH FIX

111.0 EAT R-117 Chan 47 — 112.6 EPH R-223 Chan 73 — R-253 — QUINT EAT 16.6 — 115.0 MWH Chan 97

(IF) ZARLO I-ADJ 19.9 — 5810 — 6700 — 120° (3.8)

MSA EAT 25 NM: 184°–300°: 10700 / 300°–184°: 5500 / 274°–004°: 7800

7700 EAT 19 Arc — IR-294 — REINO I-ADJ 16.1 — 5700 — 120° (3.2)

YOYUG EAT 19 — 9400 — EAT 19 Arc

FILTU I-ADJ 12.9

R-285 — R-257 — R-117

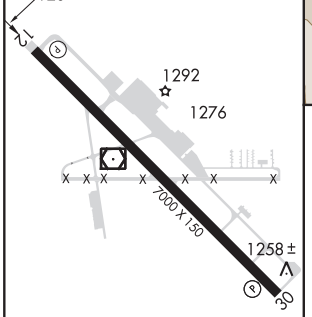
(IAF) WINIM EAT 19

LOCALIZER 109.35 I-ADJ Chan 30(Y)

WENATCHEE 111.0 EAT Chan 47

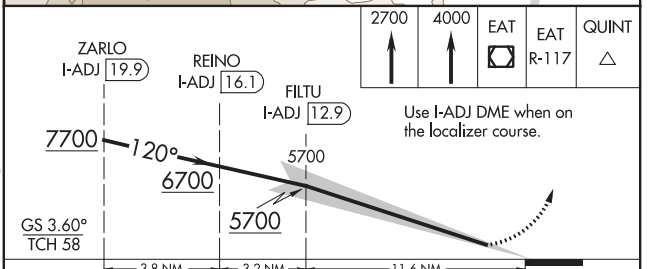
4254 — 3505± — 3605 — 4766 — 4621 — 2070 — 3327 — 3874± — 6880 — 5870

ELEV 1249 D TDZE 1225



HIRL Rwy 12-30 L

REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
S-ILS 12	2433-4 1208 (1200-4)			NA

WENATCHEE, WASHINGTON

Amdt 1 10NOV16

47°24′N-120°12′W

PANGBORN MEMORIAL (EAT)

ILS Y RWY 12

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

LOC/DME I-ADJ	APP CRS	Rwy Idg	7000
109.35	120°	TDZE	1225
Chan 30 (Y)		Apt Elev	1249

ILS Z RWY 12

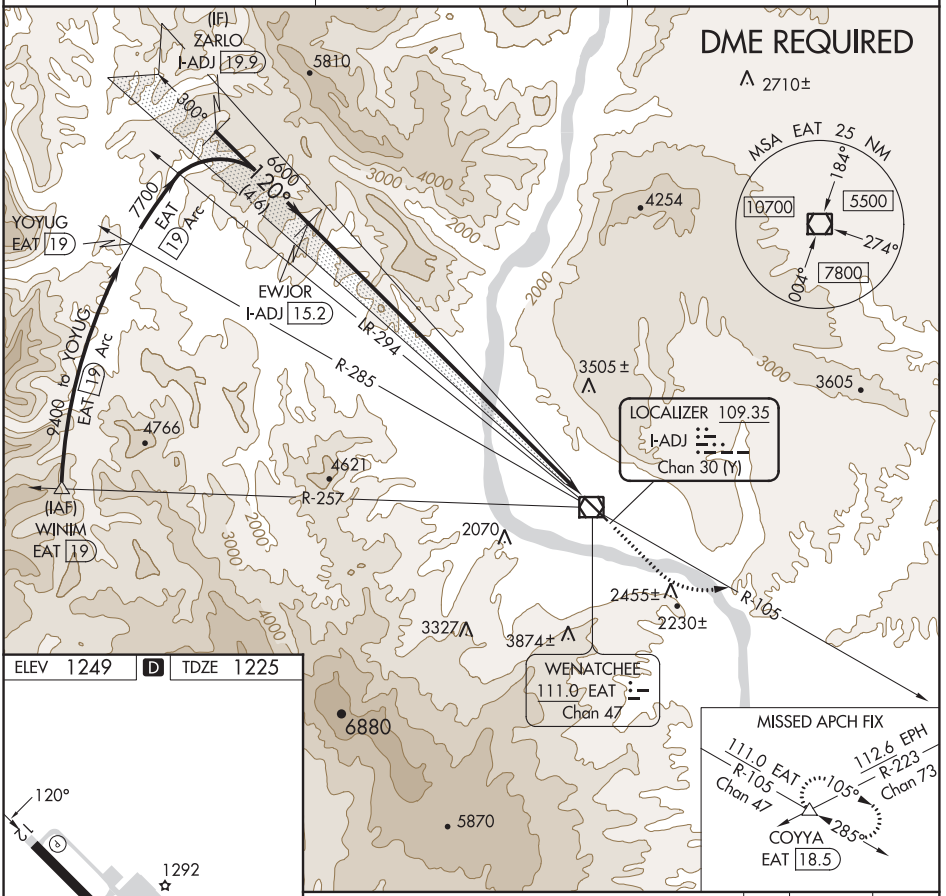
PANGBORN MEMORIAL (EAT)

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



CATEGORY	A	B	C	D
S-ILS 12	1555-1 330 (400-1)			NA

HIRL Rwy 12-30 L

REIL Rwys 12 and 30 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WENATCHEE, WASHINGTON | AL-641 (FAA) | 18200

RNAV (RNP) RWY 12

PANGBORN MEMORIAL (EAT)

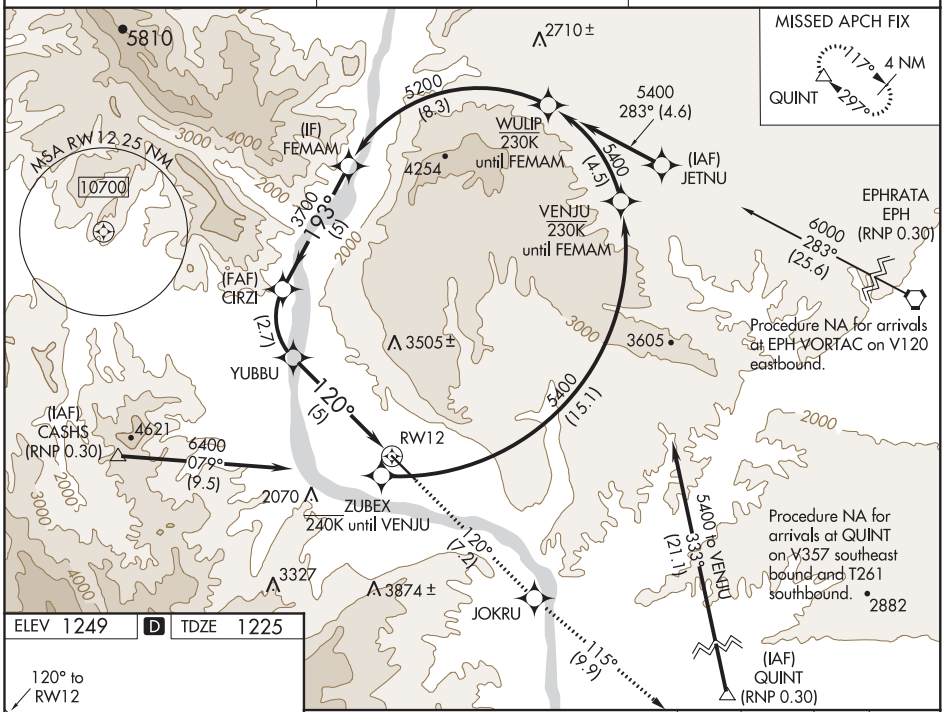
APP CRS	Rwy Idg	7000
120°	TDZE	1225
	Apt Elev	1249

T
A
-7°C

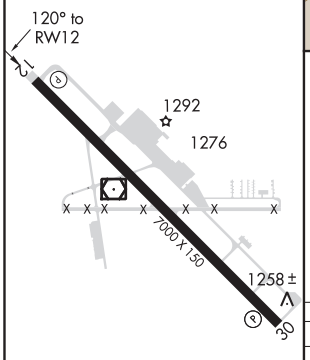
For uncompensated Baro-VNAV systems, procedure NA below -10°C (14°F) or above 54°C (130°F). RF required. GPS required. FD or HUD required.

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

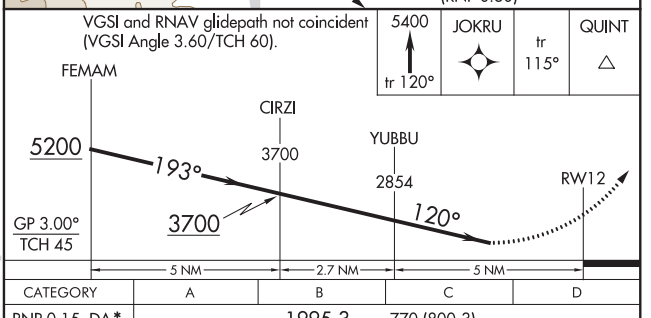


ELEV 1249 | D | TDZ 1225



HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

VGSI and RNAV glidepath not coincident (VGSI Angle 3.60/TCH 60).



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

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WENATCHEE, WASHINGTON
Amdt 1A 01FEB18

47°24'N-120°12'W

PANGBORN MEMORIAL (EAT)

RNAV (RNP) RWY 12

RNAV (RNP) Z RWY 30

PANGBORN MEMORIAL (EAT)

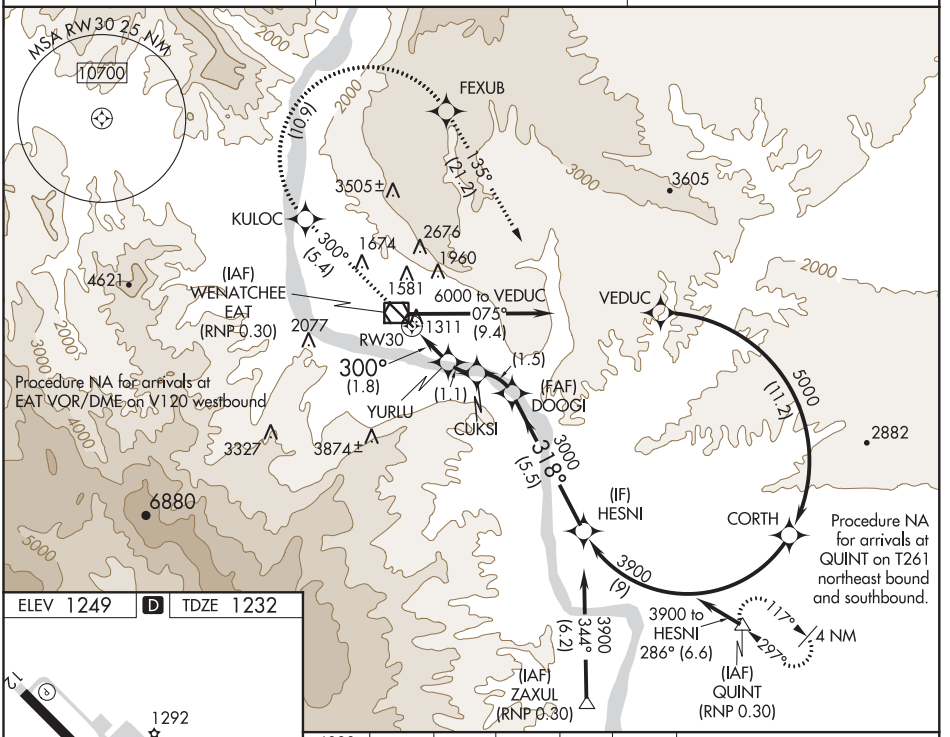
APP CRS	Rwy Idg	7000
300°	TDZE	1232
	Apt Elev	1249

T
-7°C

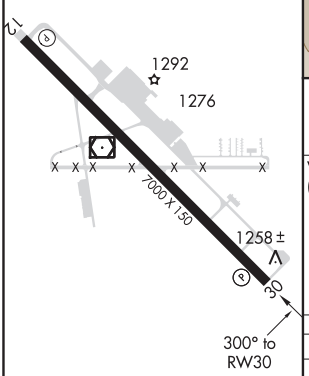
For uncompensated Baro-VNAV systems, procedure NA below -10°C (14°F) or above 44°C (111°F). RF required. GPS required. FD or HUD required.

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.

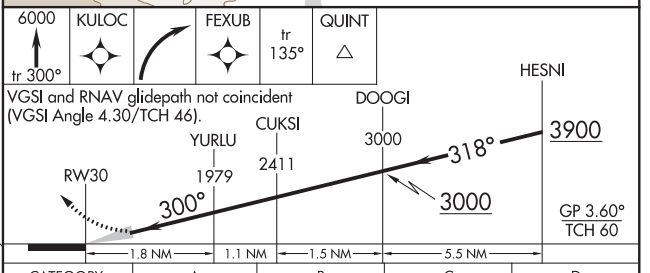
ASOS	SEATTLE CENTER	UNICOM
119.925	126.1 291.6	123.0 (CTAF) L



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#	1686-1⅜	454 (500-1⅜)		NA

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WENATCHEE, WASHINGTON | AL-641 (FAA) | 18200

VOR-A

PANGBORN MEMORIAL (EAT)

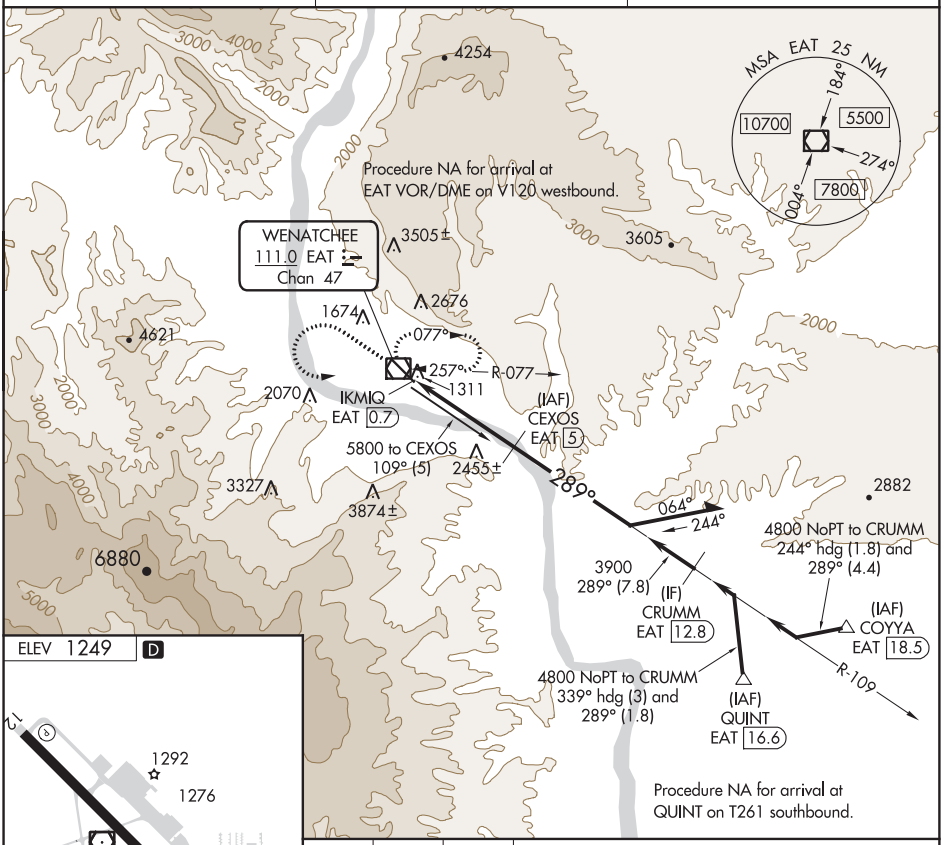
VOR/DME EAT	APP CRS	Rwy Idg	N/A
111.0	289°	TDZE	N/A
Chan 47		Apt Elev	1249

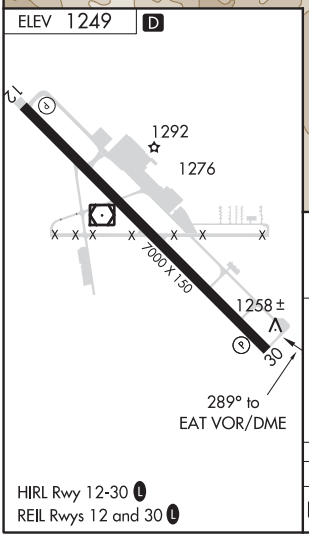
T A -7°C

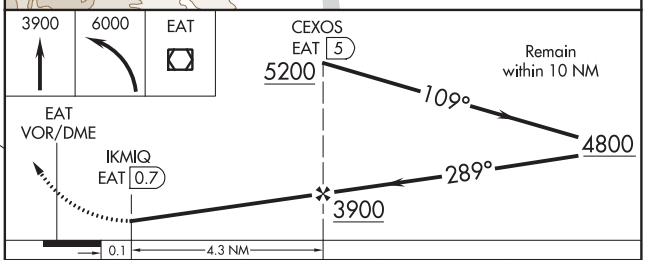
DME required.
Circling NA northeast of Rwy 12-30.

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 1931 (2000-1¼)	3180-1½ 1931 (2000-1½)	3200-3 1951 (2000-3)	3900-3 2651 (2700-3)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME EAT	APP CRS	Rwy Idg	N/A
111.0	104°	TDZE	N/A
Chan 47		Apt Elev	1249

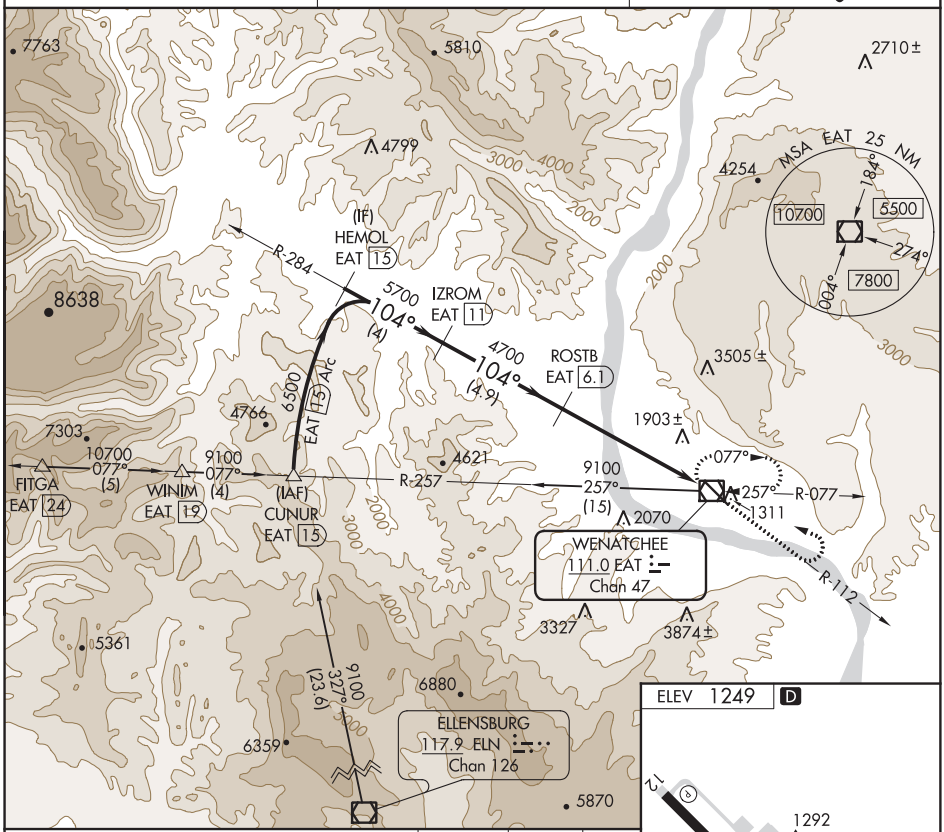
VOR-B

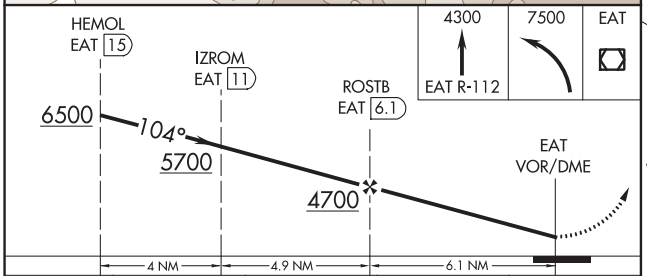
PANGBORN MEMORIAL (EAT)

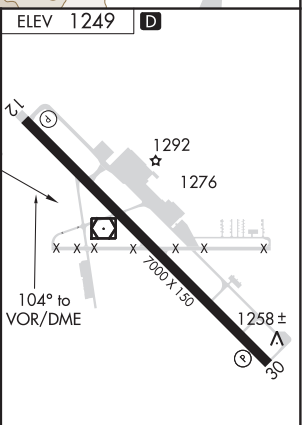
DME required.
Circling NA northeast of Rwy 12-30.
-7°C

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 1411 (1500-1¼)	2660-1½ 1411 (1500-1½)	3200-3 1951 (2000-3)	3900-3 2651 (2700-3)

HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

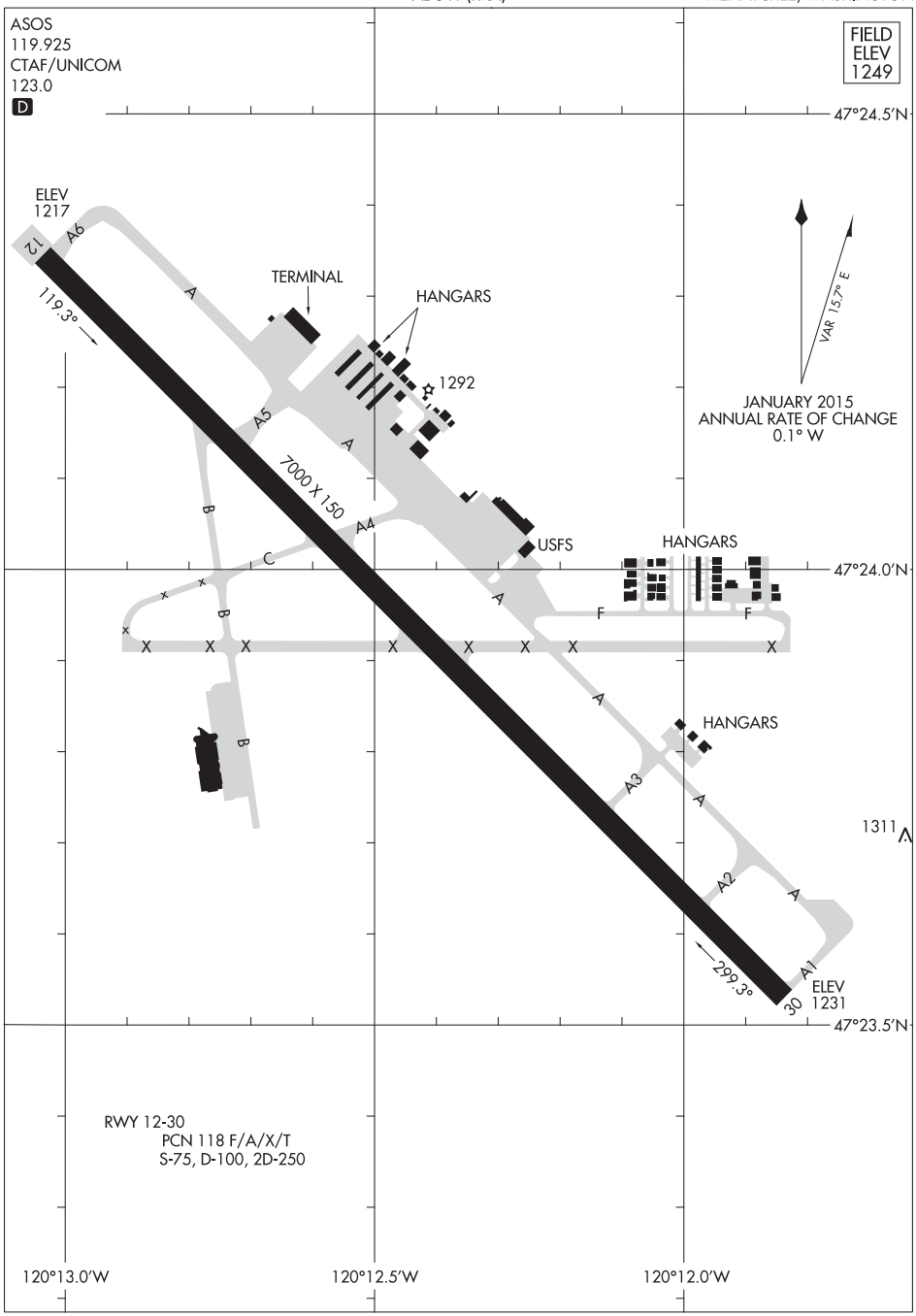
18144

AIRPORT DIAGRAM

AL-641 (FAA)

PANGBORN MEMORIAL (EAT)

WENATCHEE, WASHINGTON



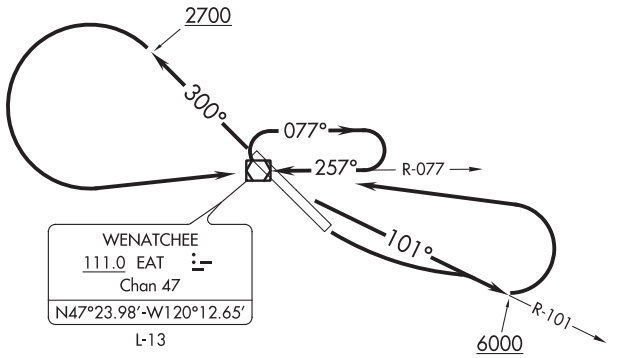
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
18144

WENATCHEE, WASHINGTON
PANGBORN MEMORIAL (EAT)

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

TOP ALTITUDE:
ASSIGNED BY ATC
(NOTES CONTINUED ON FOLLOWING PAGE)
SEATTLE CENTER
126.1 291.6
UNICOM
123.0
ASOS
119.925
N
2700
300°
WENATCHEE
EAT
120°
1750
JEXIT
250K
124°
(5)
OFARO
4400
171°
(7)
ZAXUL
4300
117°
(7)
QUINT
5200
062°
(9)
KRIST
5200
062°
(16)
EPHRATA
EPH
DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAY 12: Climb heading 120° to 1750, then direct JEXIT, thence . . . .
TAKEOFF RUNWAY 30: Climb heading 300° to 2700, then left turn direct JEXIT, thence . . . .
..then on track 124° to OFARO, then on transition. Expect filed altitude 10 minutes after departure.
EPHRATA TRANSITION (OFARO2.EPH)
QUINT TRANSITION (OFARO2.QUINT)
ZAXUL TRANSITION (OFARO2.ZAXUL)
NOTE: RNAV 1.
NOTE: GPS required.
NOTE: Departures may be restricted to cross KRIST at or above 7000.
TAKEOFF MINIMUMS
Rwy 12: Standard with minimum climb of 550' per NM to 3200.
Rwy 30: Standard with minimum climb of 500' per NM to 4000.
NOTE: Chart not to scale.

ZARLO TWO DEPARTURE (RNAV)

(ZARLO2.ZARLO) 10NOV16

WENATCHEE, WASHINGTON
PANGBORN MEMORIAL (EAT)

SEATTLE CENTER
126.1 291.6
UNICOM
123.0
ASOS
119.925

TOP ALTITUDE: ASSIGNED BY ATC.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb heading 120° to 3700, then left turn direct PREBE, thence . . .
TAKEOFF RUNWAY 30: Climb heading 300° to 1750, then direct PREBE, thence . . .

. . . on track 300° to cross UBIYO at or above 6700, then on depicted route to ZARLO, then on transition. Expect filed altitude 10 minutes after departure.

GLASR TRANSITION (ZARLO2.GLASR)
SKYKO TRANSITION (ZARLO2.SKYKO)

GLASR
SKYKO
10200
*8800
269°
(13)
HYAKK
10200
283°
(30)
10200
268°
(24)
ZARLO
300°
(5)
VECUS
300°
(3)
UBIYO
6700
300°
(6)
PREBE
1750
300°
WENATCHEE
EAT
120°
3700
N

TAKEOFF MINIMUMS
Rwy 12: Standard with minimum climb of 650′ per NM to 3300.
Rwy 30: Standard with minimum climb of 465′ per NM to 6200.

NOTE: RNAV 1.
NOTE: GPS required.
NOTE: Departures may be restricted to cross UBIYO at or below 11000.

NOTE: Chart not to scale.

(ZARLO2.ZARLO) 18144
ZARLO TWO DEPARTURE (RNAV)
AL-641 (FAA)
PANGBORN MEMORIAL (EAT)
WENATCHEE, WASHINGTON

LOC I-LOW	APP CRS	Rwy Idg	8399
110.7	012°	TDZE	6649
		Apt Elev	6649

ILS or LOC RWY 1
YELLOWSTONE (WYS)

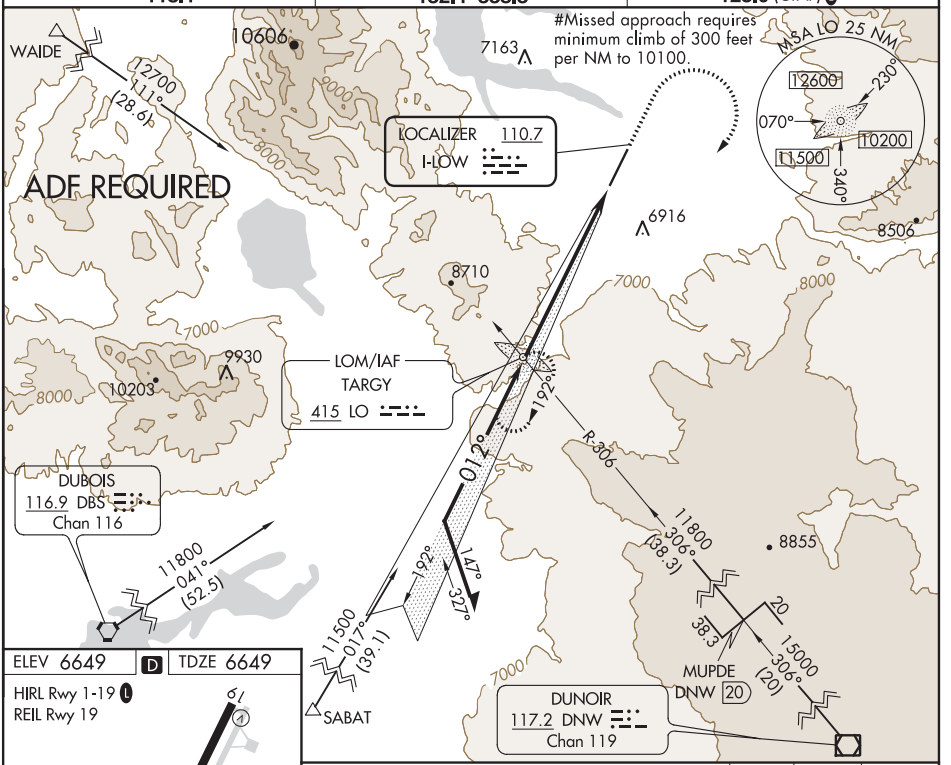
T
A NA
-19°C

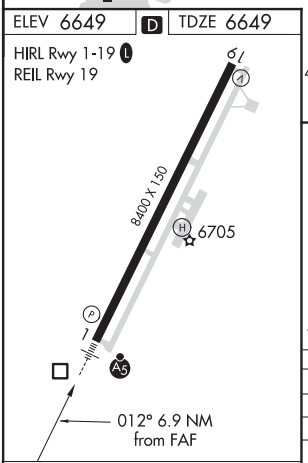
Obtain local altimeter setting on CTAF, when not received procedure NA. Inoperative table does not apply to S-LOC 1 Cat A. ADF required. For inoperative MALSR, increase S-ILS 1 all Cats visibility to 2 ¾ mile.

MALSR

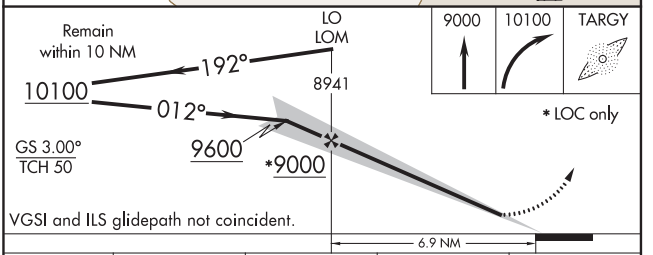
MISSED APPROACH: Climb to 9000, then climbing right turn to 10100 direct TARGY LOM and hold.

AWOS-3P	SALT LAKE CENTER	UNICOM
118.1	132.4 338.3	123.0 (CTAF)





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)	
CIRCLING	7780-1¼ 1131 (1200-1¼)	7780-1½ 1131 (1200-1½)	7780-3 1131 (1200-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

WEST YELLOWSTONE, MONTANA | AL-632 (FAA) | 20030

RNAV (GPS) RWY 1

YELLOWSTONE (WYS)

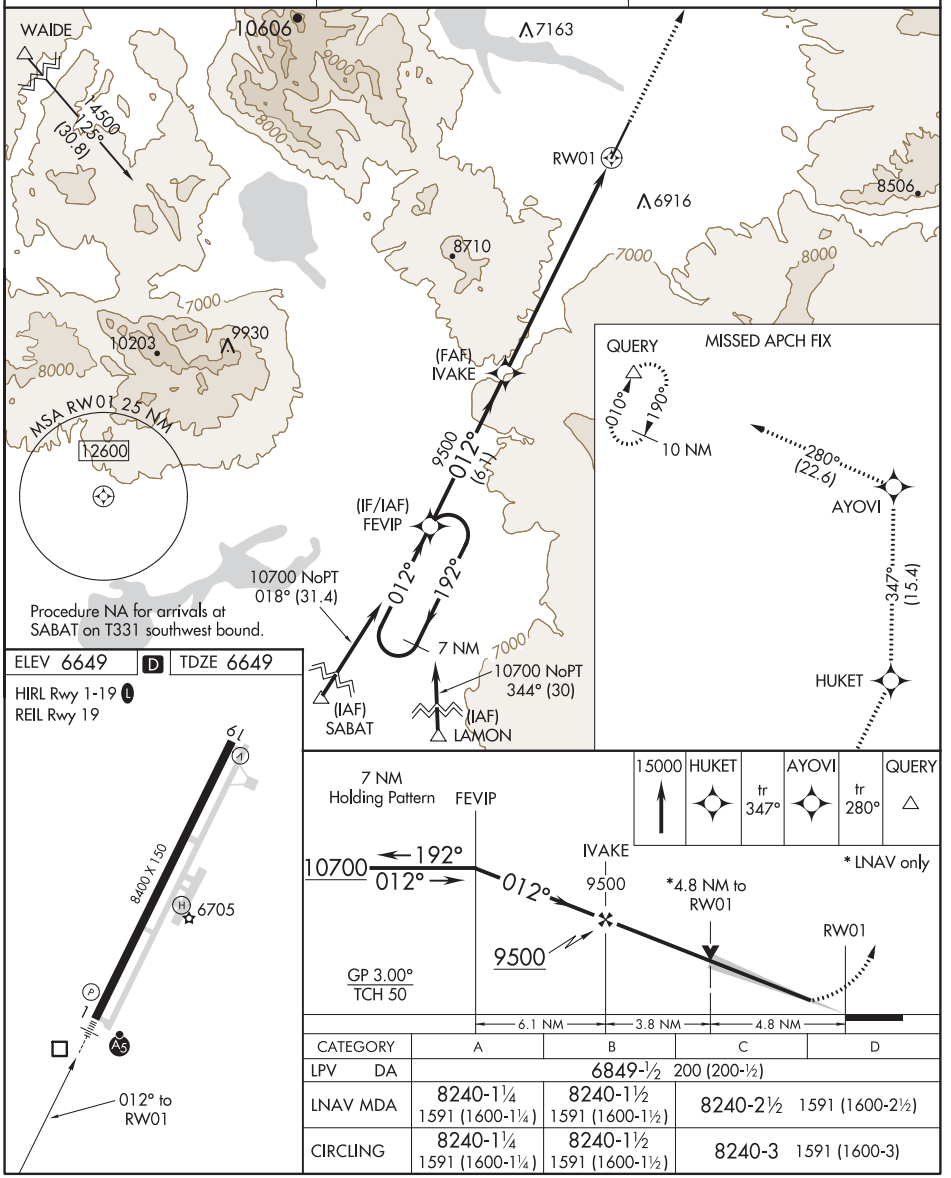
WAAS	APP CRS	Rwy Idg	8400
CH 86916	012°	TDZE	6649
W01A		Apt Elev	6649

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



ELEV 6649 | D | TDZ 6649

HIRL Rwy 1-19 L

REIL Rwy 19

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)	
CIRCLING	8240-1¼ 1591 (1600-1¼)	8240-1½ 1591 (1600-1½)	8240-3 1591 (1600-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 19

YELLOWSTONE (WYS)

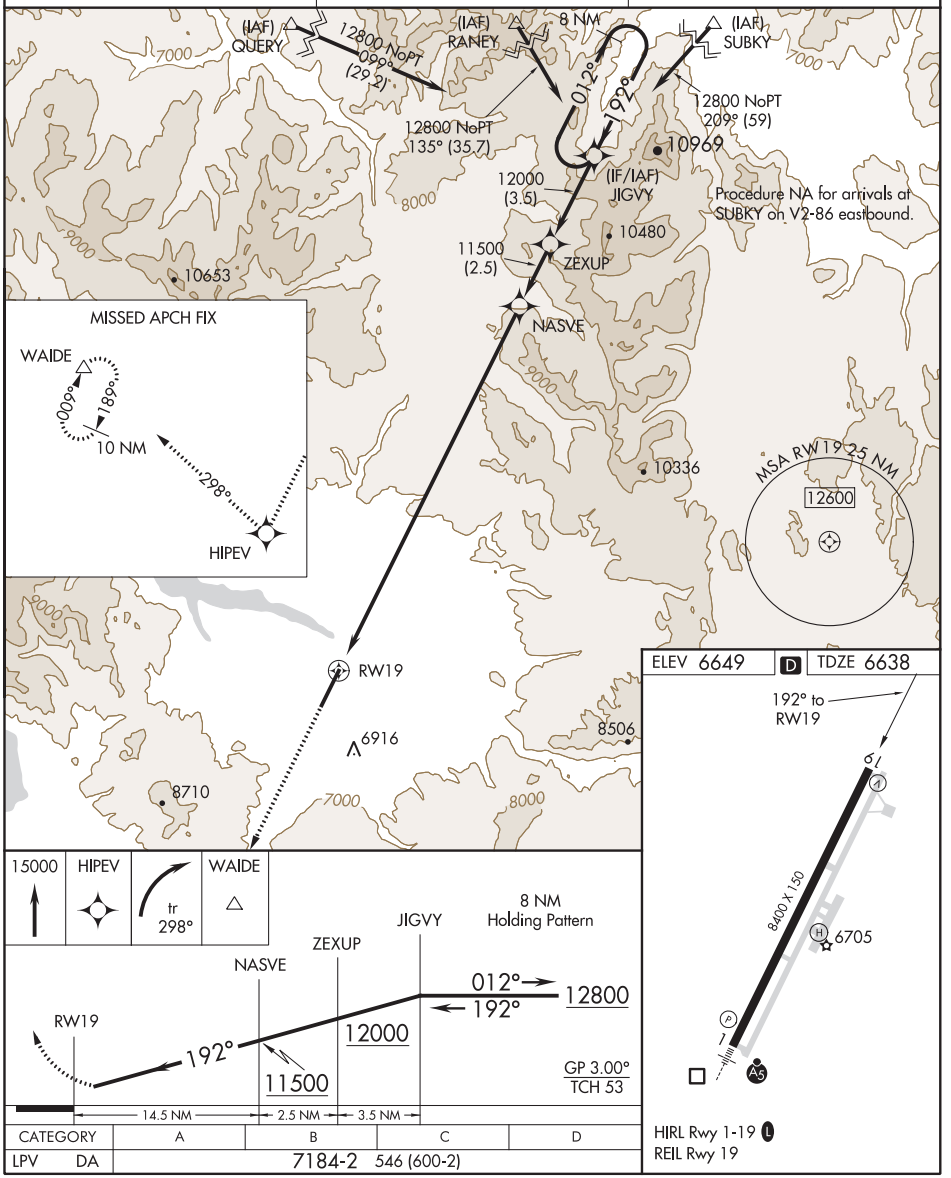
WAAS	APP CRS	Rwy Idg	8399
CH 82016	192°	TDZE	6638
W19A		Apt Elev	6649

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)			

HIRL Rwy 1-19 L
REIL Rwy 19

NW-1, 30 JAN 2020 to 26 MAR 2020

WEST YELLOWSTONE, MONTANA | AL-632 (FAA) | 20030

NDB RWY 1

YELLOWSTONE (WYS)

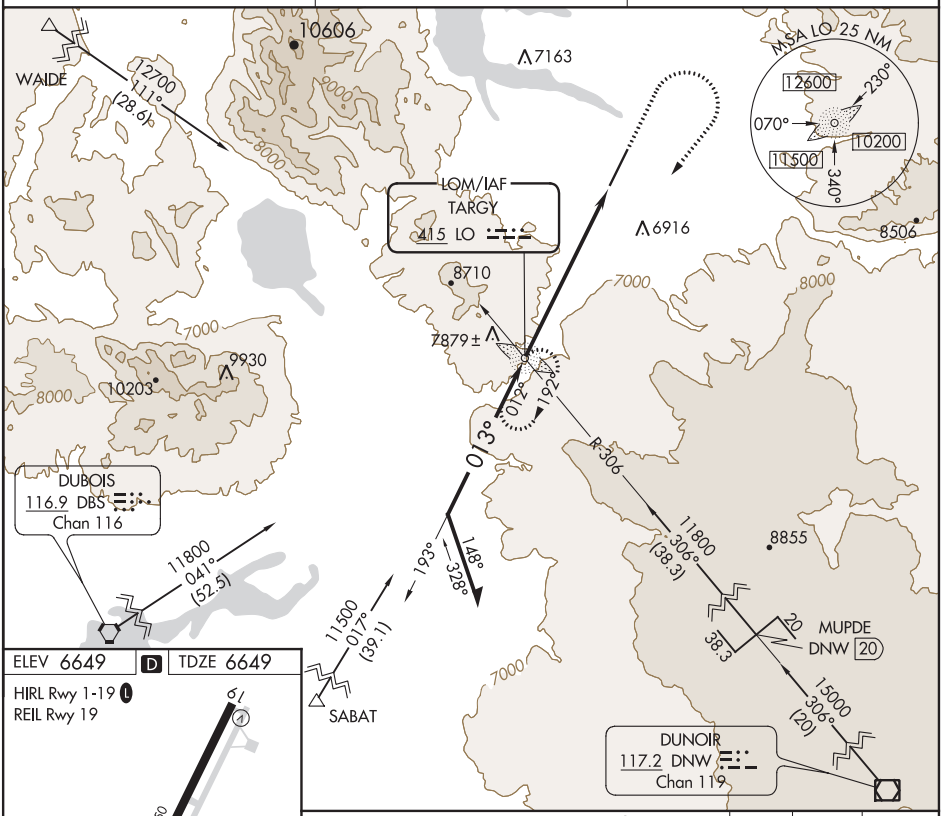
LOM LO	APP CRS	Rwy Idg	8399
415	013°	TDZE	6649
		Apt Elev	6649

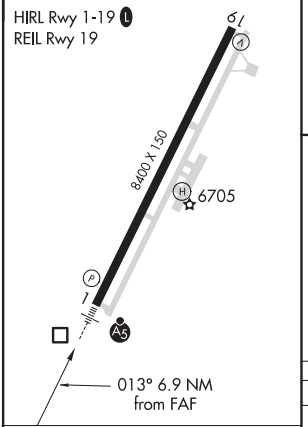
T NA -19°C — Obtain local altimeter setting on CTAF, when not received procedure NA. Inoperative table does not apply to S-1 Cat A and Cat B.

MALSR

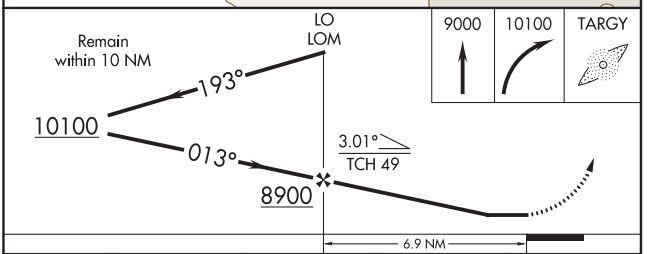
MISSED APPROACH: Climb to 9000 then climbing right turn to 10100 direct TARGY LOM and hold.

AWOS-3P	SALT LAKE CENTER	UNICOM
118.1	132.4 338.3	123.0 (CTAF) L





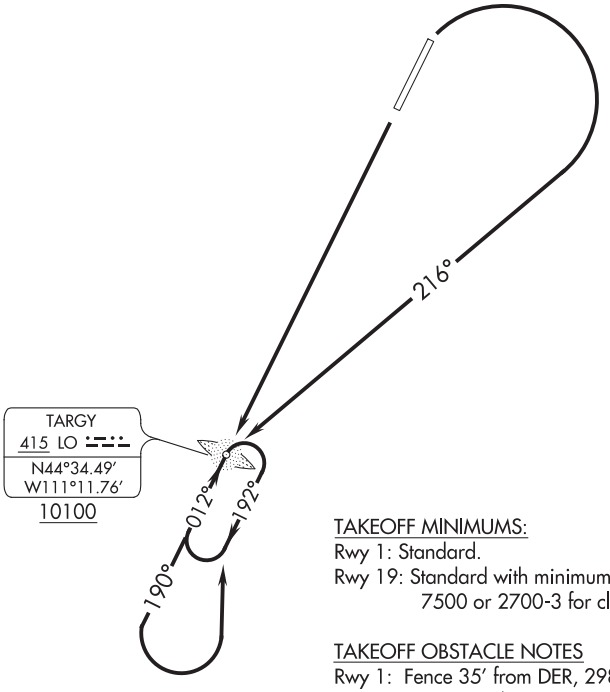
FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-1	8240-1¼ 1591 (1600-1¼)	8240-1½ 1591 (1600-1½)	8240-2½ 1591 (1600-2½)	8240-2¾ 1591 (1600-2¾)
CIRCLING	8240-1¼ 1591 (1600-1¼)	8240-1½ 1591 (1600-1½)	8240-3 1591 (1600-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 2020

WHEATLAND, WYOMING | AL-10272 (FAA) | 19339

RNAV (GPS)-A

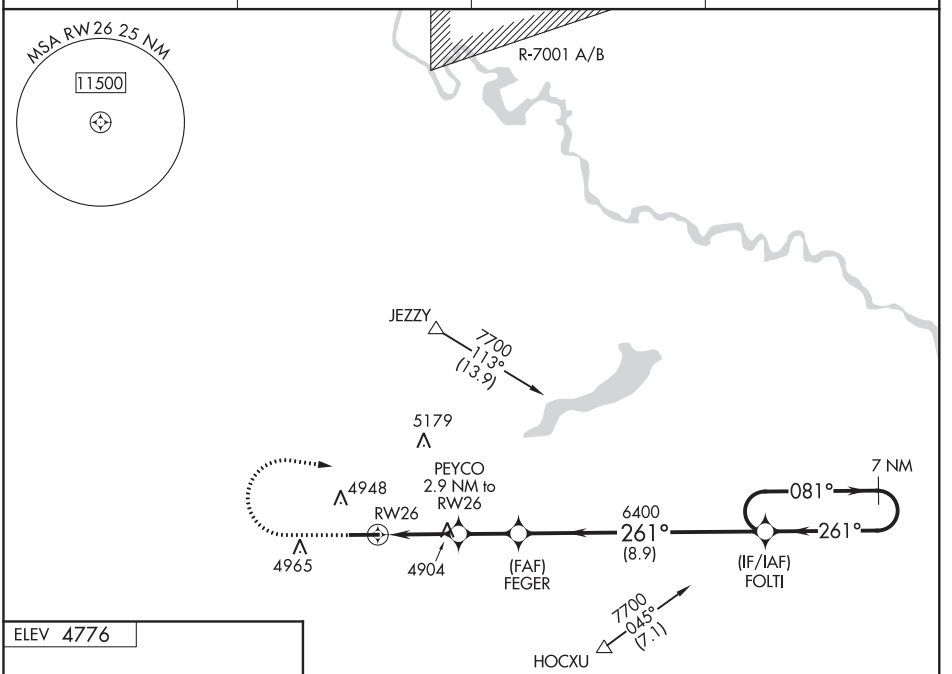
PHIFER AIRFIELD (EAN)

APP CRS	Rwy Idg	N/A
261°	TDZE	N/A
	Apt Elev	4776

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

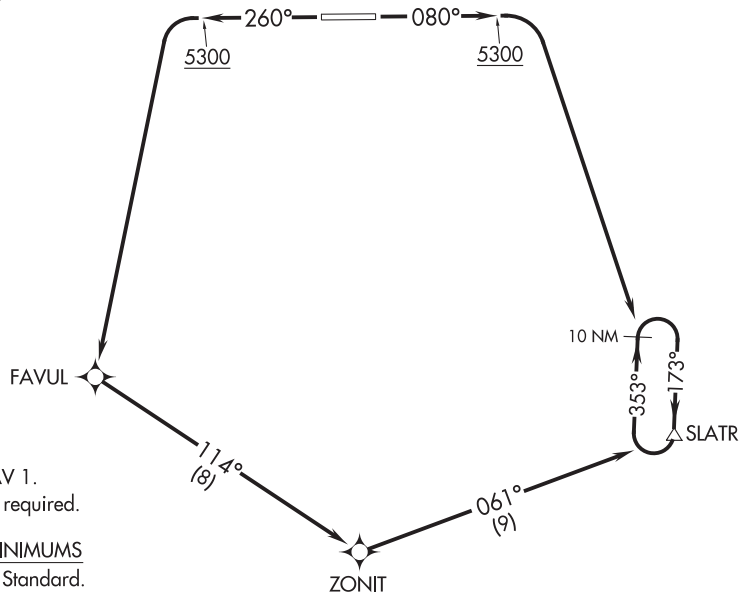


CATEGORY	A	B	C	D
C CIRCLING	5420-1 644 (700-1)	5440-1 664 (700-1)	5460-2 684 (700-2)	NA

REIL Rwy 26
MIRL Rwy 8-26 L

NW-1, 30 JAN 2020 to 26 MAR 2020

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, 30 JAN 2020 to 26 MAR 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 CAT ABCDE vis to ¾ mile.
** When ALS inop, increase CAT ABCDE vis to 1 mile.

ALSF-2

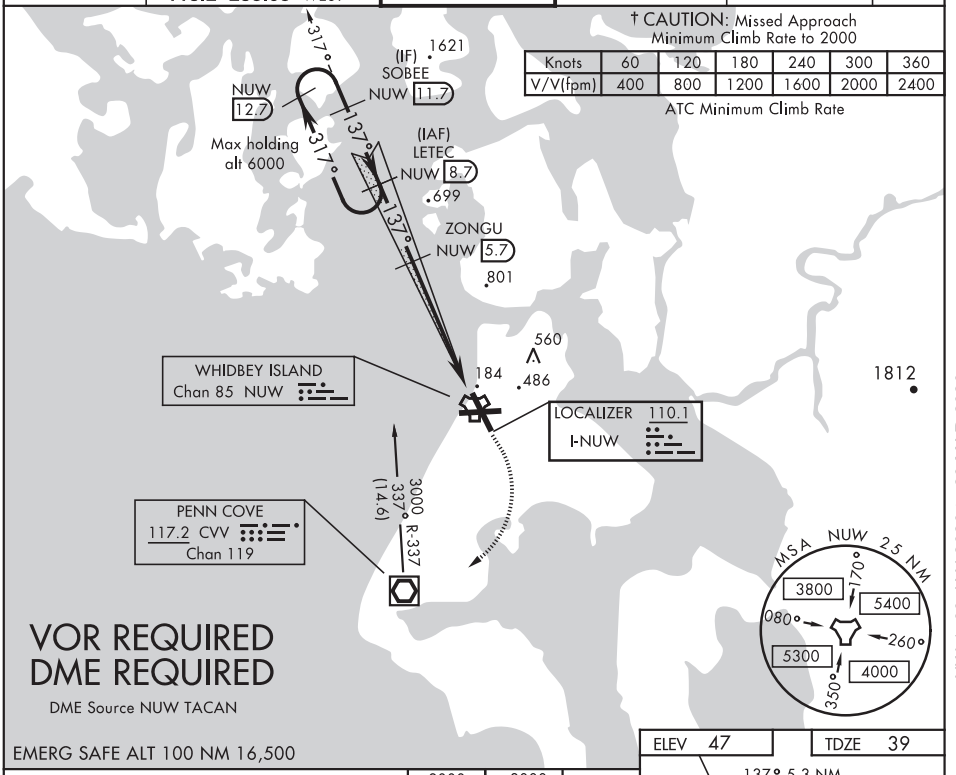
†MISSED APPROACH: Climb to 2000 via hdg 137°, then climbing right turn to 3000, direct CVV VOR/DME, then via CVV R-337 to LETEC and hold.

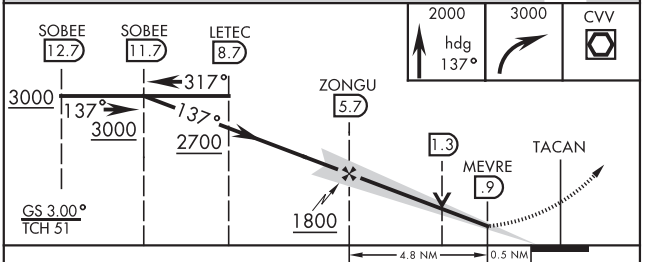
ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

† CAUTION: Missed Approach Minimum Climb Rate to 2000

Knots	60	120	180	240	300	360
V/V(fpm)	400	800	1200	1600	2000	2400

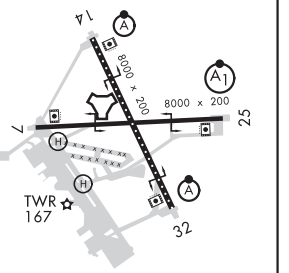
ATC Minimum Climb Rate





ELEV 47 | TDZE 39

137° 5.3 NM from FAF



CATEGORY	A	B	C	D	E
S-ILS 14 *	239-½ 200 (200-½)				
S-LOC 14 **	400-½ 361 (400-½)		400-⅝ 361 (400-⅝)		
C CIRCLING	760-1 713 (800-1)	800-1 753 (800-1)	900-2½ 853 (900-2½)	900-2¾ 853 (900-2¾)	1200-3 1153 (1200-3)

TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

48°21'N-122°39'W

NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON

RNAV (GPS) RWY 7

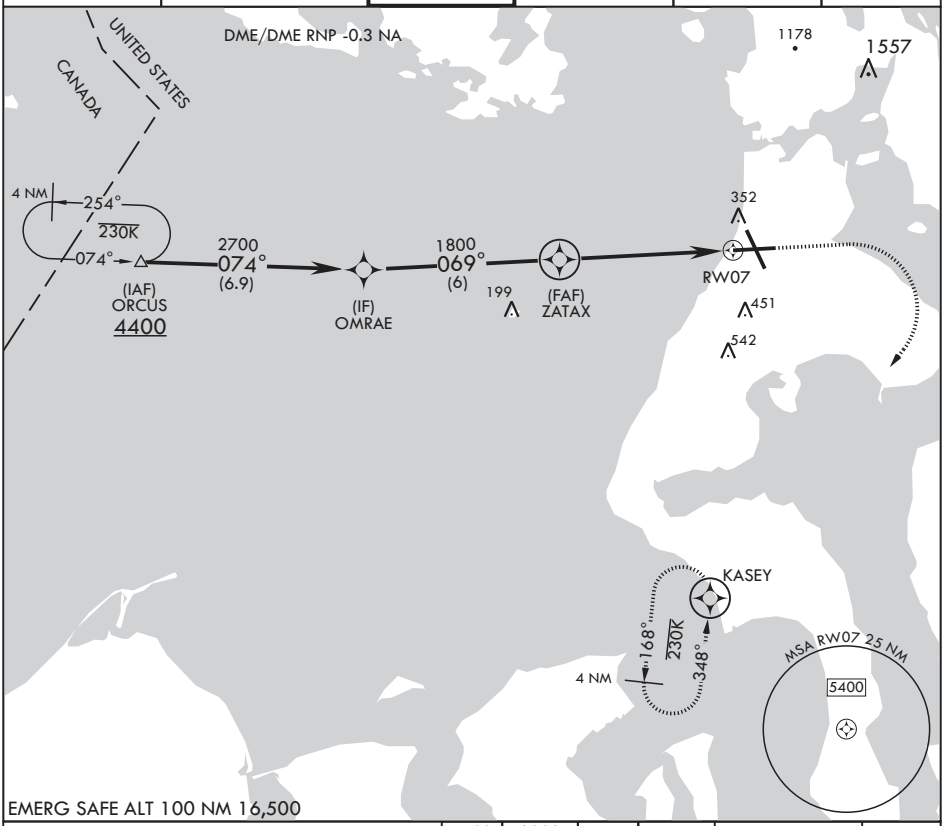
APCH CRS	Rwy Idg	8000
069°	TDZE	25
	Arpt Elev	47

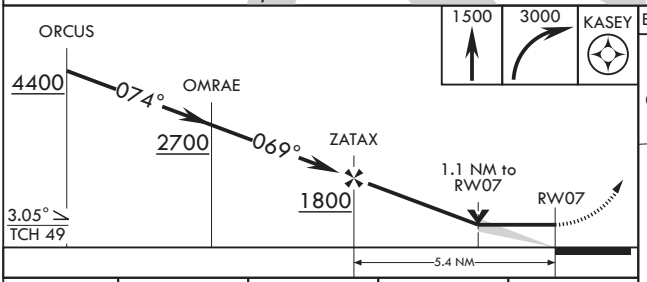
AL-451 (USN)

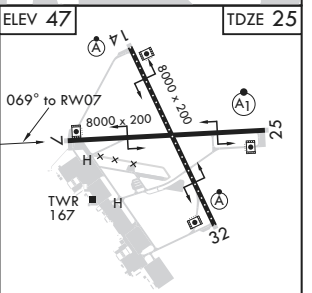
WHIDBEY ISLAND NAS (KNUW)

MISSED APPROACH: Climb to 1500, then climbing right turn to 3000 direct KASEY and hold.

ATIS	APP CON/DEP CON	TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	118.2 285.65 W 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)		420-1 1/8 395 (400-1 1/8)	
C CIRCLING	700-1 653 (700-1)	800-1 753 (800-1)	900-2 1/2 853 (900-2 1/2)	900-2 3/4 853 (900-2 3/4)

TDZL/CL Rwy 14
HIRL all Rwys

OAK HARBOR, WASHINGTON

48°21'N - 122°39'W

WHIDBEY ISLAND NAS (KNUW)

Orig 19JUL18
TERPS

RNAV (GPS) RWY 7

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON

RNAV (GPS) RWY 14

WAAS CH 50004 W14A	APCH CRS 137°	Rwy ldg 8000 TDZE 39 Arpt Elev 47

AL-451 (USN)

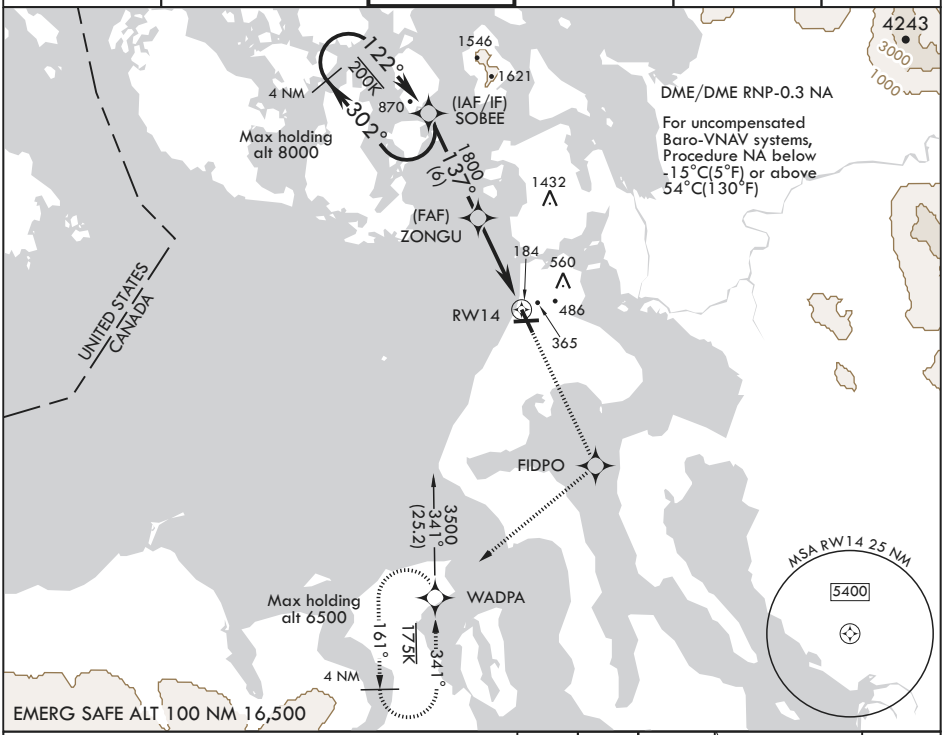
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

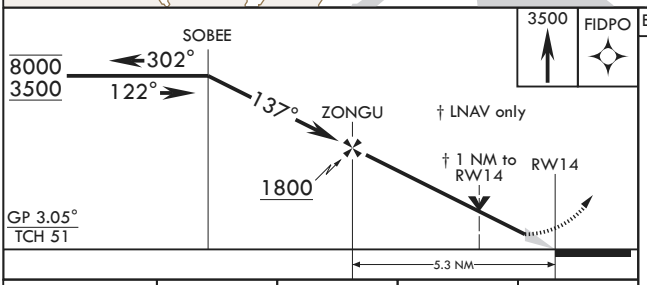
* When ALS inop, increase CAT ABCD vis to 3/4 mile.
** When ALS inop, increase CAT A vis to 3/4 mile, CAT BC vis to 7/8 mile, CAT D vis to 1 mile.
*** When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 1 1/8 miles.

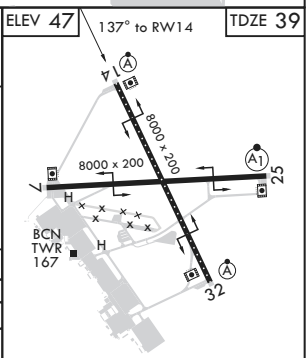
ALSF-2

MISSED APPROACH: Climb to 3500 direct FIDPO, then turn right direct WADPA and hold.

ATIS	APP CON/DEP CON	TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	118.2 285.65 W 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 253 (300-½)	313-½ 274 (300-½)	327-½ 288 (300-½)	342-½ 303 (700-½)
LNAV MDA***	420-½ 381 (400-½)		420-⅝ 381 (400-⅝)	
C CIRCLING	700-1 653 (700-1)	800-1 753 (800-1)	900-2½ 853 (900-2½)	900-2¾ 853 (900-2¾)

TDZL/CL Rwy 14
HIRL all Rwys

OAK HARBOR, WASHINGTON

RNAV (GPS) RWY 25

WAAS CH 44487 W25A	APCH CRS 249°	Rwy ldg 8000 TDZE 28 Arpt Elev 47

AL-451 (USN)

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

* When ALS inop, increase CAT ABCD vis to 3/4 mile.
** When ALS inop, increase CAT ABCD vis to 2 1/2 miles.
*** When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1 3/4 miles.

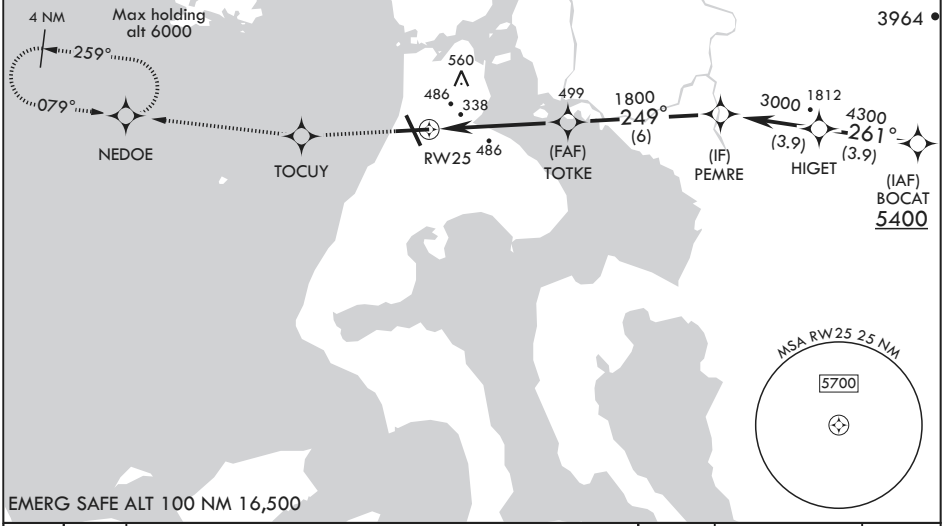
ALSF-1

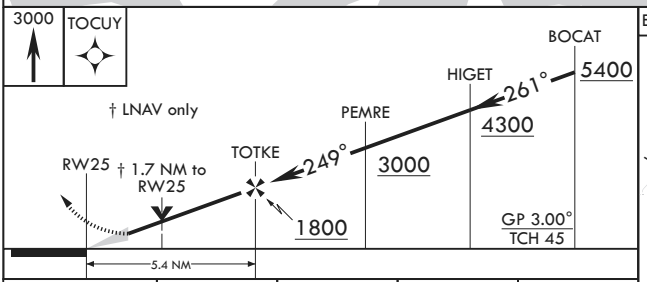
MISSED APPROACH: Climb to 3000 direct TOCUY, track to NEDOE and hold. continue climb in hold to 3000.

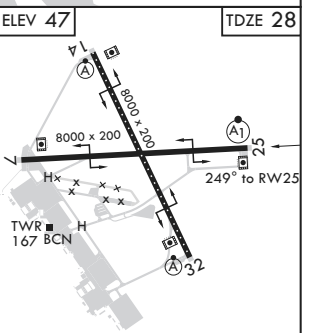
ATIS	APP CON/DEP CON	TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	118.2 285.65 W 120.7 270.8 E	127.9 340.2	121.75 336.4	135.1 379.9	

DME/DME RNP-0.3 NA

For uncompensated Baro-VNAV systems, Procedure NA below -15°C (5°F) or above 54°C (130°F).







CATEGORY	A	B	C	D
LPV DA*	228-½	200	(200-½)	
LNAV/VNAV DA**	681-1⅞	653	(700-1⅞)	
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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 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 CAT ABCD vis to 1 1/2 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 120.7 270.8 E	127.9 340.2	121.75 336.4	135.1 379.9	

For uncompensated Baro-VNAV systems, Procedure NA below -15°C (5°F) or above 54°C (130°F).

DME/DME RNP-0.3 NA

JVOLK
236°
230K
056°
4 NM

Max holding alt 6000
Min holding alt 2000

RW32

MSA RW32 25 NM
5400

(FAF)
LATRE
1800
(6)

(IF)
UREAL
2700
317°
(9.4)

(IAF)
NICIT
3500
137°
230K
317°
4 NM

3337

EMERG SAFE ALT 100 NM 16,500

1200 2000 JVOLK † LNAV only

NICIT 3500
UREAL 317° 2700
LATRE 1800
RW32 † 1.5 NM to RW32
GP 3.02°
TCH 50
5.3 NM

ELEV 47 TDZE 47

8000 x 200
8000 x 200
TWR 167
BCN
25
32
317° to RW32
HIRL all Rwys
TDZL/CL Rwy 14

CATEGORY	A	B	C	D
LNAV/VNAV DA*	492-1	445 (500-1)		
LNAV MDA**	580-½ 533 (600-½)		580-1 533 (600-1)	
C CIRCLING	700-1 653 (700-1)	800-1 753 (800-1)	900-2½ 853 (900-2½)	900-2¾ 853 (900-2¾)

NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON

TACAN RWY 7

TACAN	APCH CRS	Rwy ldg	8000
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 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

CAUTION: CAT CD intmed seg length 5 NM

WHIDBEY ISLAND Chan 85 NUW

1621 1432 560 486 204 1812

JAVTO NUW 11 R-058

KOYED NUW 6

(IF) KAMLE NUW 11

058° R-238

R-168

PENN COVE

3000 (4.5) 43°

371 309

NUW 11 Arc

(IAF) KASEY NUW 11

Max holding alt 3000

168° 348° R-168

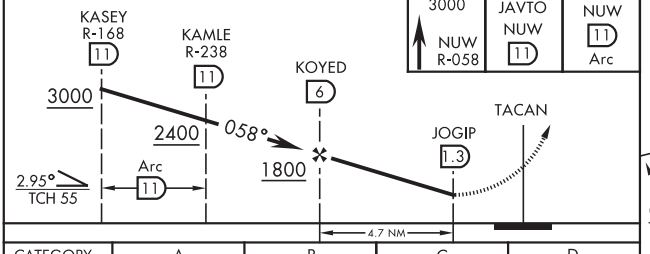
NUW 15

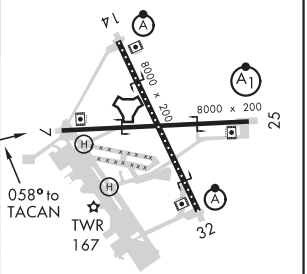
EMERG SAFE ALT 100 NM 16,500

MSA NUW 25 NM

170° 3800 5400 080° 260° 5300 4000 350°

ELEV 47 TDZE 25





CATEGORY	A	B	C	D
S-7	420-1 395 (400-1)		420-1⅛ 395 (400-1⅛)	
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

OAK HARBOR, WASHINGTON

Amdt 1 02MAR17

48°21'N-122°39'W

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

TACAN RWY 7

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON

TACAN RWY 14

TACAN	APCH CRS	Rwy ldg	8000
NUW Chan 85	141°	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 1¼ 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 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	

CAUTION: CAT CD intmed seg length 5 NM.

(IAF) LUPEZ NUW 11

R-321

NUW 15

128°

308°

Max holding alt 10,000

WETLI NUW 11

NUW 11 Arc

141°

699

ELLEK NUW 6

1432

R-308

558

FAXUT NUW 3.5

560

365

486

1546

1621

1812

WHIDBEY ISLAND Chan 85 NUW

4000 328° (16.2)

NUW 11 Arc

PENN COVE

CANUN NUW 11

R-131

M.S.A NUW 25 NM

170°

3800

5400

080°

260°

5300

4000

350°

EMERG SAFE ALT 100 NM 16,500

ELEV 47

TDZE 39

141° to TACAN

4000 NUW R-131

CANUN NUW 11

NUW 11 Arc

LUPEZ R-308 11

WETLI R-321 11

ELLEK 6

4000

3000

141°

1800

1020

FAXUT 3.5

1.5

JOVPO 0.8

TACAN

Arc 11

2.86° TCH 55

2.5 NM

2.7 NM

14

8000 x 200

A1

7

25

H

TWR 167

32

CATEGORY	A	B	C	D
S-14 *	460-½ 421 (500-½)		460-¾ 421 (500-¾)	
C CIRCLING	760-1 713 (800-1)	800-1 753 (800-1)	900-2½ 853 (800-2½)	900-2¾ 853 (800-2¾)

TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

48°21'N-122°39'W

NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON

TACAN RWY 25

TACAN	APCH CRS	Rwy ldg	8000
Chan 85	254°	TDZE	28
		Arpt Elev	47

AL-451 [USN]

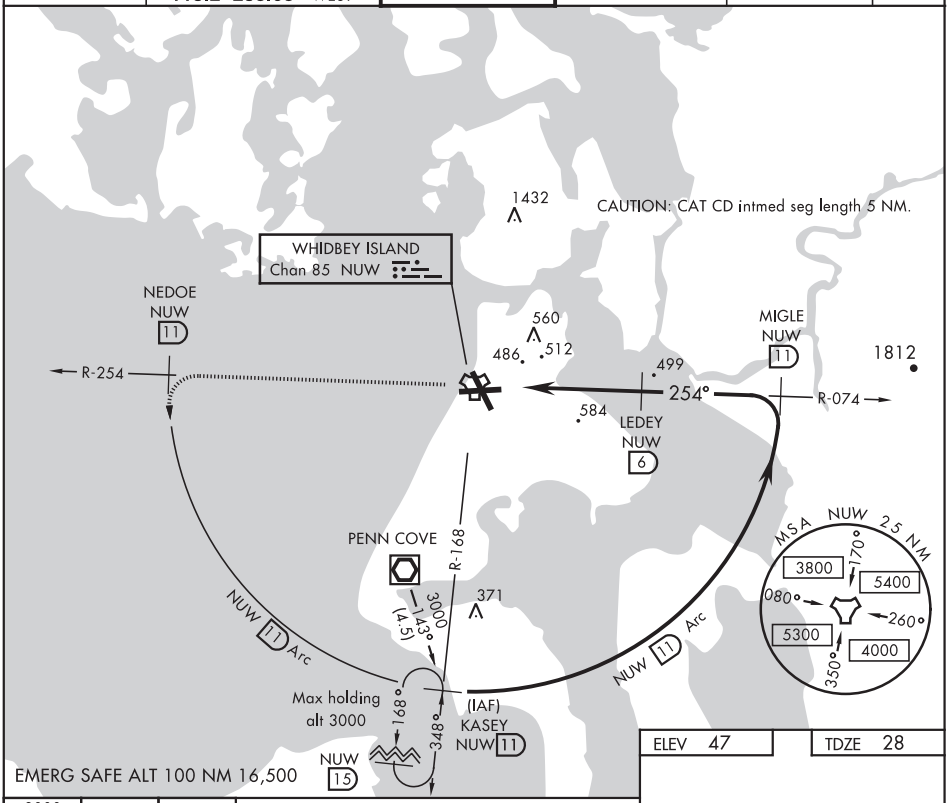
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

T * When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 2 miles.

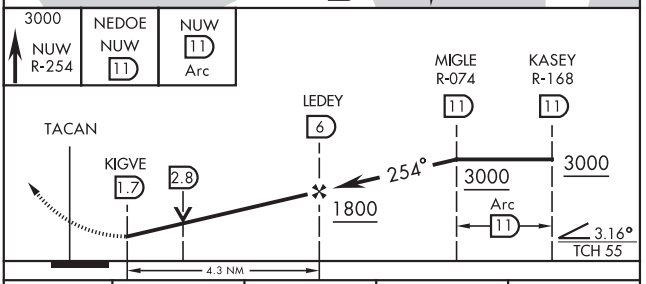
ALSF-1

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.

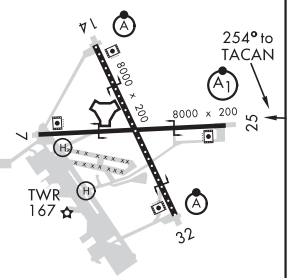
ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	



ELEV 47 | TDZE 28



CATEGORY	A	B	C	D
S-25 *	740-⅝ 712 (700-⅝)		740-1⅝ 712 (700-1⅝)	
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

OAK HARBOR, WASHINGTON
Amdt 1 02MAR17

48° 21'N-122° 39'W

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

TACAN RWY 25

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

OAK HARBOR, WASHINGTON

TACAN RWY 32

TACAN	APCH CRS	Rwy ldg	8000
NUW Chan 85	311°	TDZE	47
		Arpt Elev	47

AL-451 [USN]

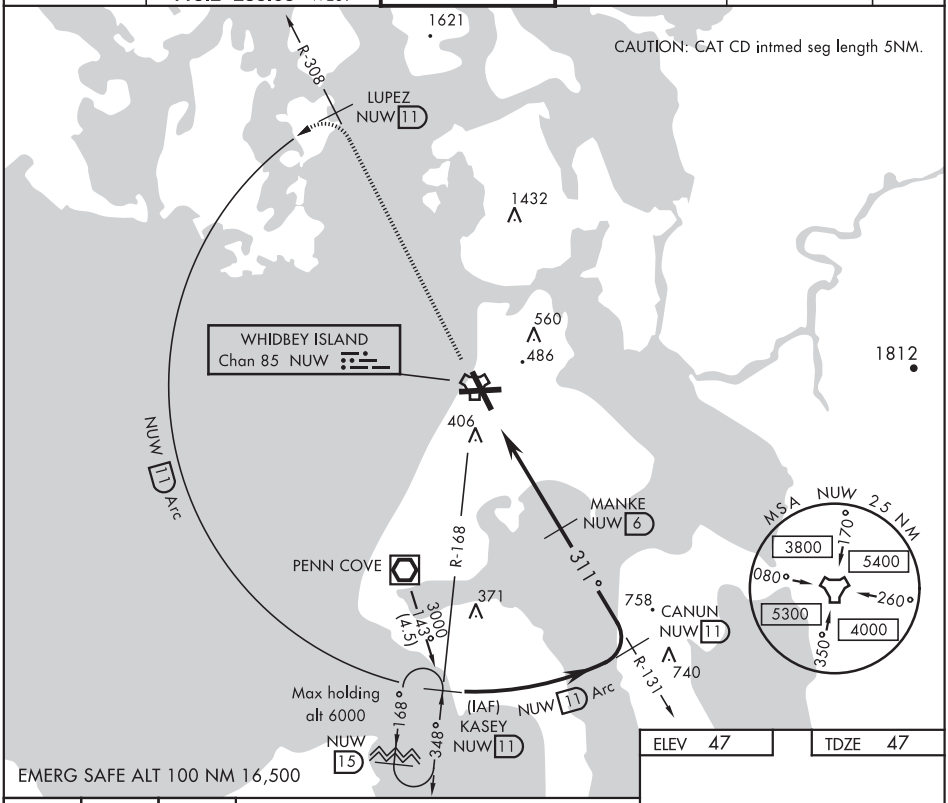
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

* When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 1¾ miles.

ALSF-2

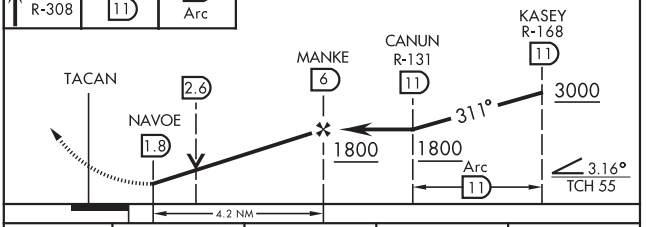
MISSED APPROACH: Climb to 3000 via NUW TACAN R-308 to LUPEZ, then Arc SW of NUW via 11 DME Arc to KASEY and hold.

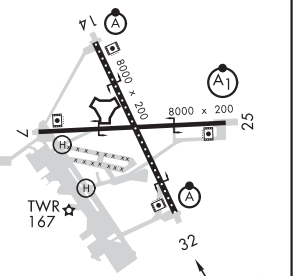
ATIS	WHIDBEY APP CON	WHIDBEY TOWER	GND CON	CLNC DEL	ASR/PAR
134.15 281.5	120.7 270.8 EAST 118.2 285.65 WEST	127.9 340.2	121.75 336.4	135.1 379.9	



ELEV	47	TDZE	47

3000	LUPEZ	NUW
NUW R-308	NUW 11	11 Arc





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 (800-2½)	900-2¾ 853 (800-2¾)

TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

OAK HARBOR, WASHINGTON

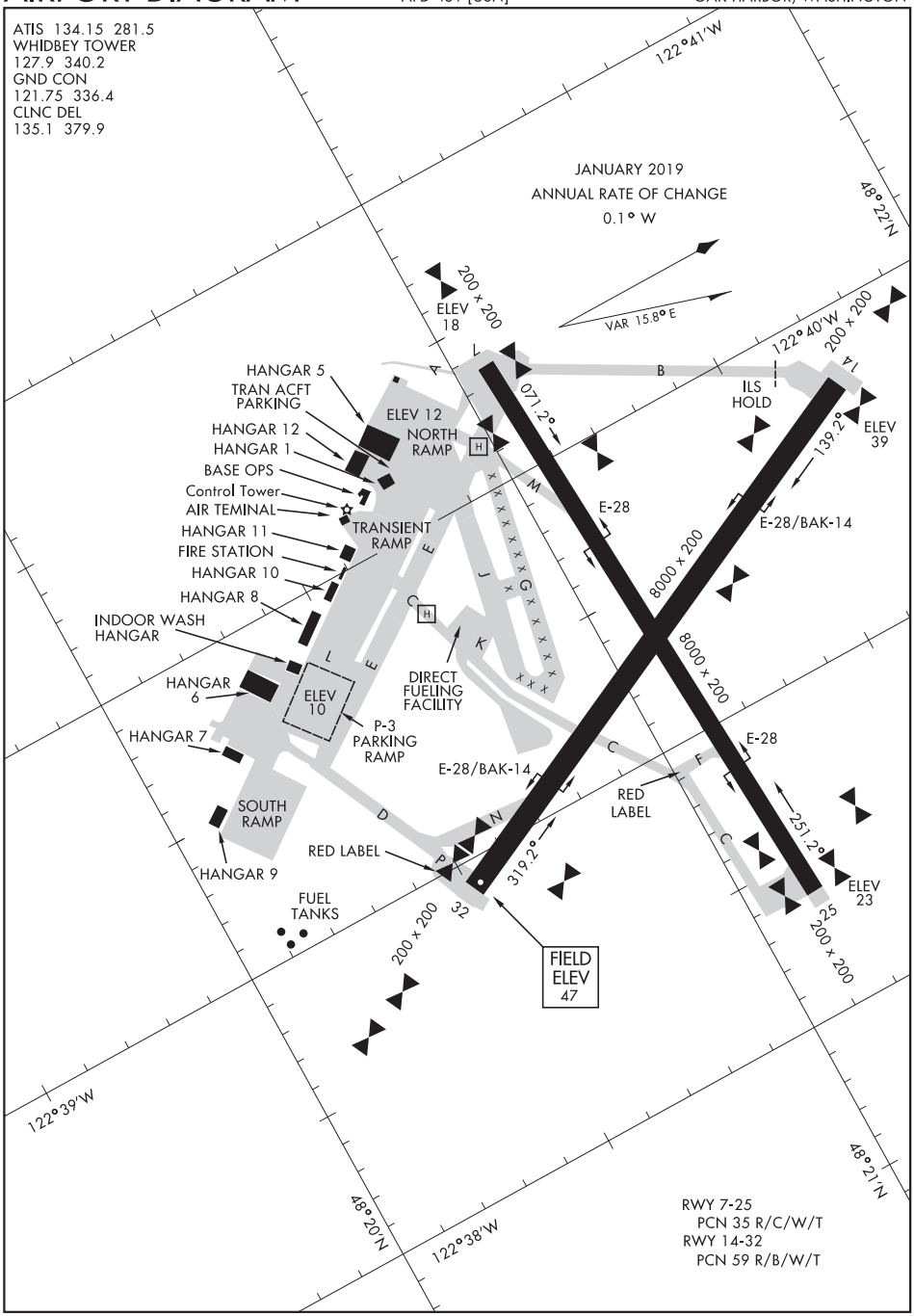
48° 21'N-122° 39'W

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 1 02MAR17

TACAN RWY 32

NW-1, 30 JAN 2020 to 26 MAR 2020



NW-1, 30 JAN 2020 to 26 MAR 2020

17117

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

NASWI ONE (OBSTACLE) DEPARTURE

OAK HARBOR, WASHINGTON

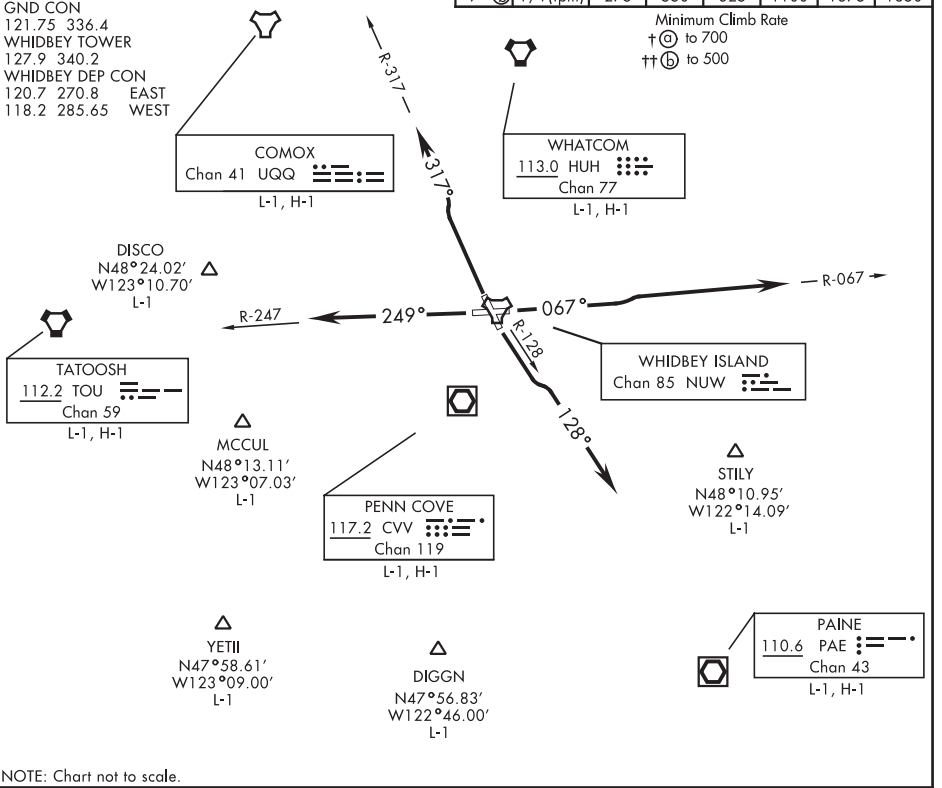
NW-1, 30 JAN 2020 to 26 MAR 2020

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

SL-451 [USN]

Rwy	Knots	60	120	180	240	300	360
7 ⓐ	V/V(fpm)	353	706	1059	1412	1765	2118
7 ⓑ	V/V(fpm)	275	550	825	1100	1375	1650

Minimum Climb Rate
†ⓐ to 700
††ⓑ 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:

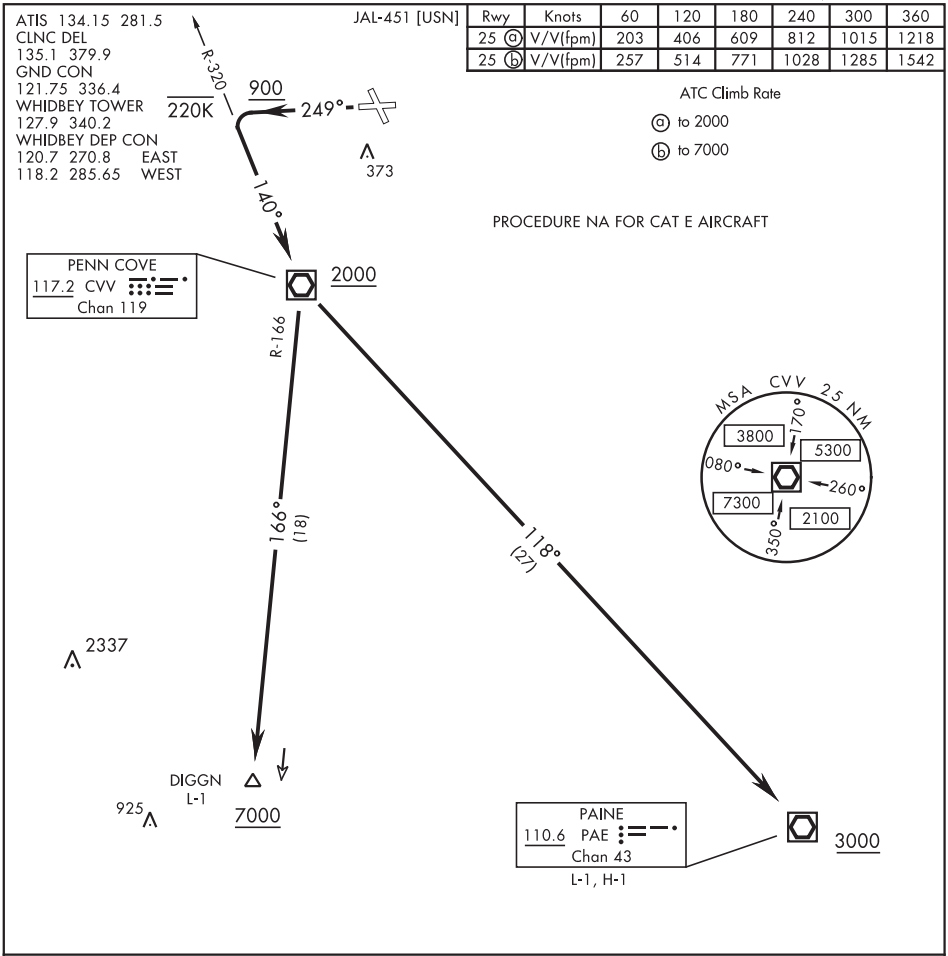
††RWY 7: Climb to 2000 via heading 067°, then radar vectors to assigned route.
RWY 14: Climbing left turn to 2000 via heading 128°, then radar vectors to assigned route.
RWY 25: Climb to 2000 via heading 249°, then radar vectors to assigned route.
RWY 32: Climb to 2000 via heading 317°, then radar vectors 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.

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

PENN COVE FOUR DEPARTURE (CVV4.CVV)

OAK HARBOR, WASHINGTON



Rwy	Knots	60	120	180	240	300	360
25 ⓐ	V/V(fpm)	203	406	609	812	1015	1218
25 ⓑ	V/V(fpm)	257	514	771	1028	1285	1542

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.

PENN COVE FOUR DEPARTURE (CVV4.CVV)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WILBUR, WASHINGTON

AL-10463 (FAA)

19171

RNAV (GPS)-A

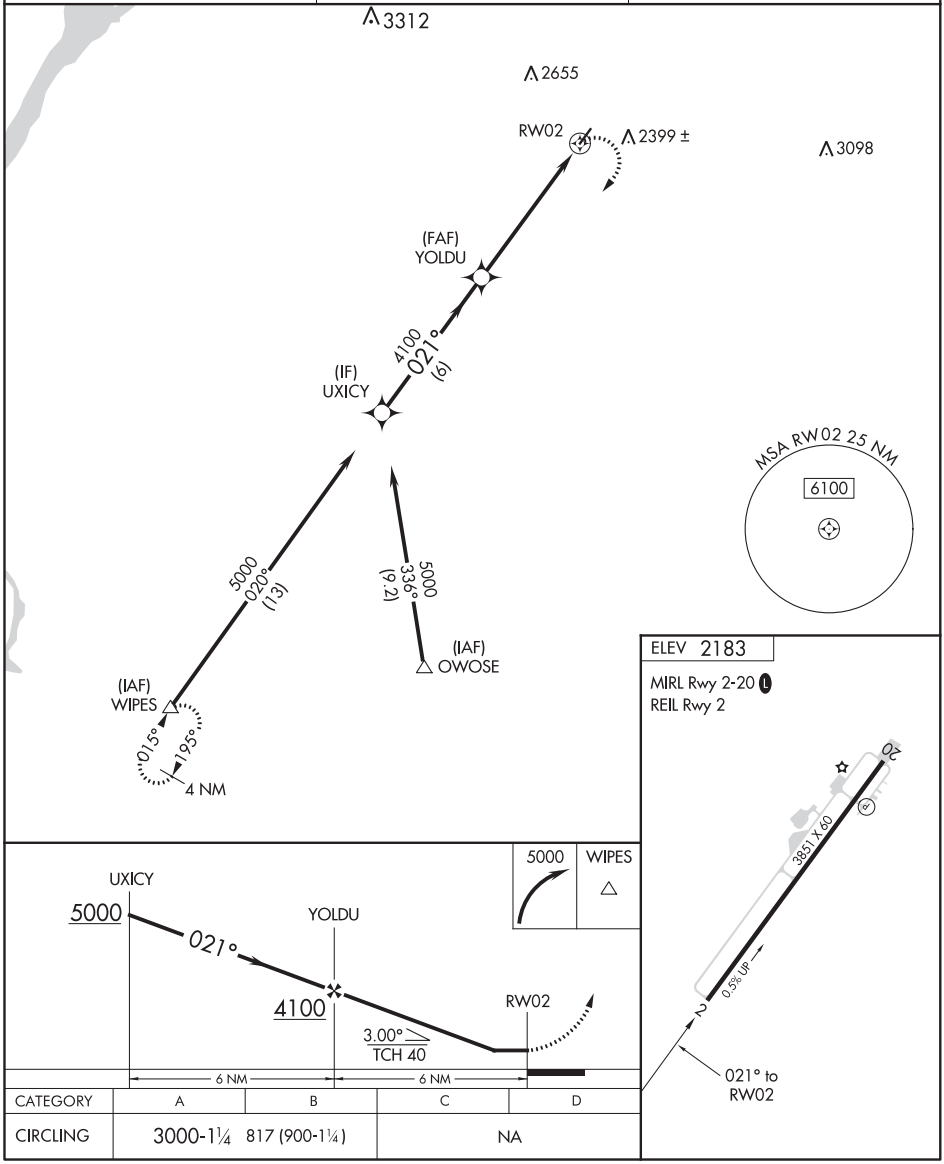
WILBUR (2S8)

APP CRS	Rwy Idg	N/A
021°	TDZE	N/A
	Apt Elev	2183

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, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

WIPES ONE DEPARTURE (OBSTACLE) (RNAV)

SL-10463 (FAA)

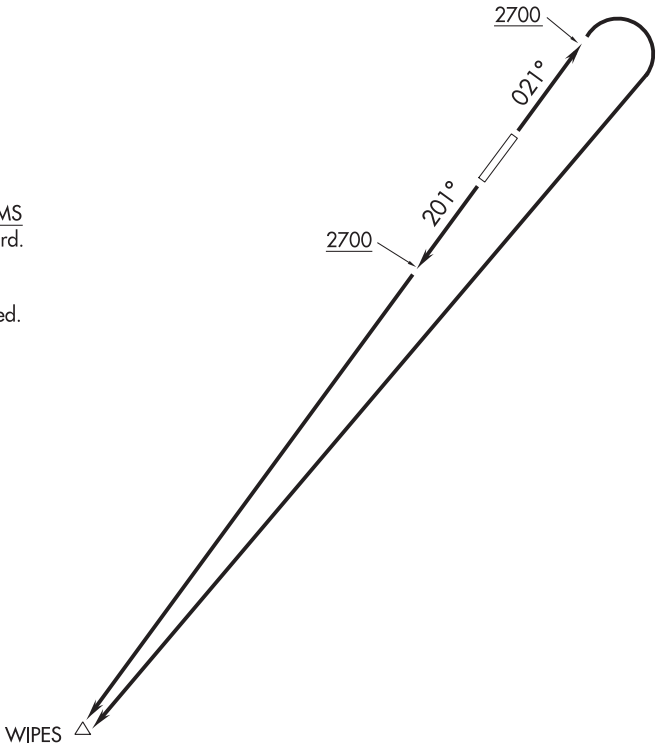
WILBUR, WASHINGTON

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.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

WOLF POINT, MONTANA AL-6018 (FAA) 19171

WAAS	APP CRS	Rwy Idg	5091
CH 77929	111°	TDZE	1988
W11A		Apt Elev	1989

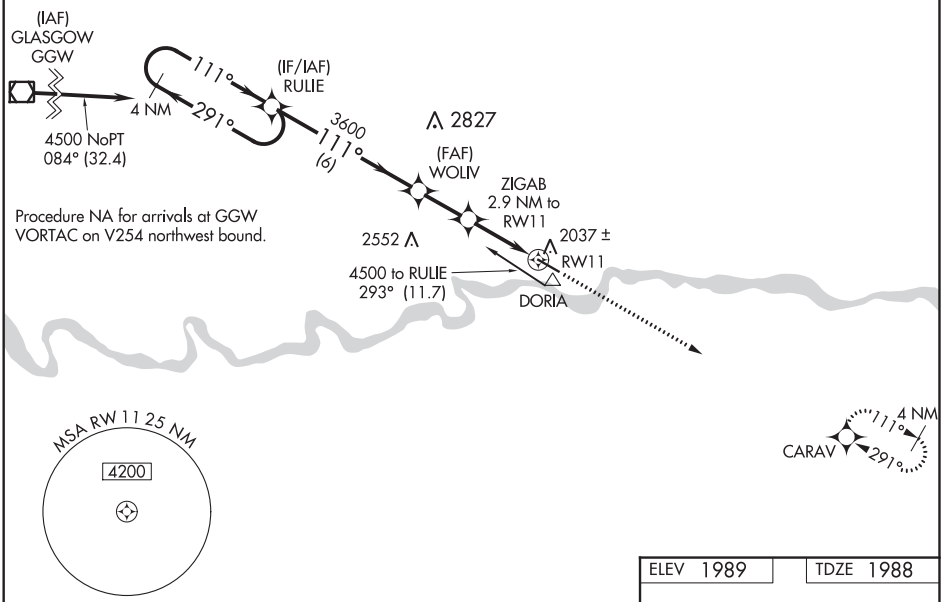
RNAV (GPS) RWY 11
L M CLAYTON (OLF)

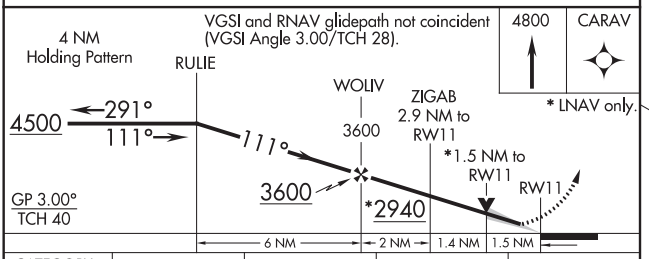
⚠ ❄ -38°C

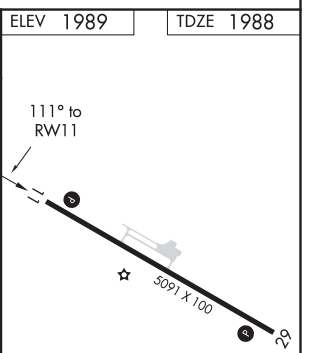
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter not received, use Glasgow altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV all Cats visibility ⅜ mile; LNAV/VNAV all Cats ½ mile; LNAV 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







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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 29

L M CLAYTON (OLF)

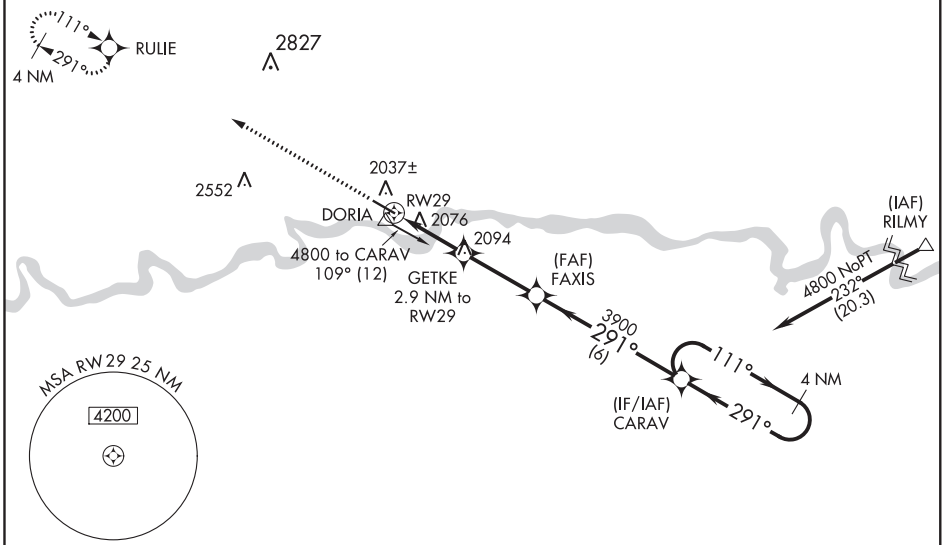
WAAS	APP CRS	Rwy Idg	5091
CH 49229	291°	TDZE	1989
W29A		Apt Elev	1989

-38°C

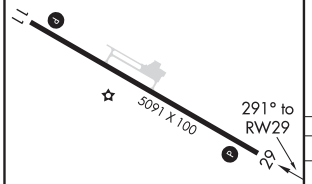
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Glasgow altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV all Cats visibility ⅜ mile, LNAV/VNAV all Cats visibility 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.

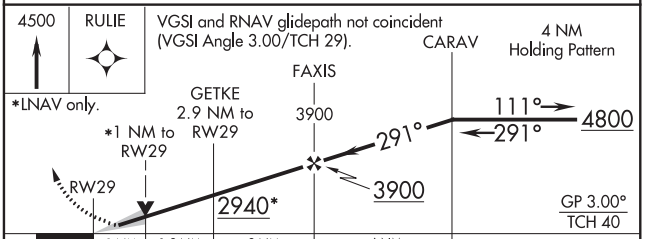
ASOS	SALT LAKE CENTER	UNICOM
118.325	126.85 305.2	122.8 (CTAF) L



ELEV 1989	TDZE 1989



MIRL Rwy 11-29 L
REIL Rwy 11-29 L



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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

16147

AIRPORT DIAGRAM

L M CLAYTON (OLF)
WOLF POINT, MONTANA

AL-6018 (FAA)

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
16147

WOLF POINT, MONTANA
L M CLAYTON (OLF)

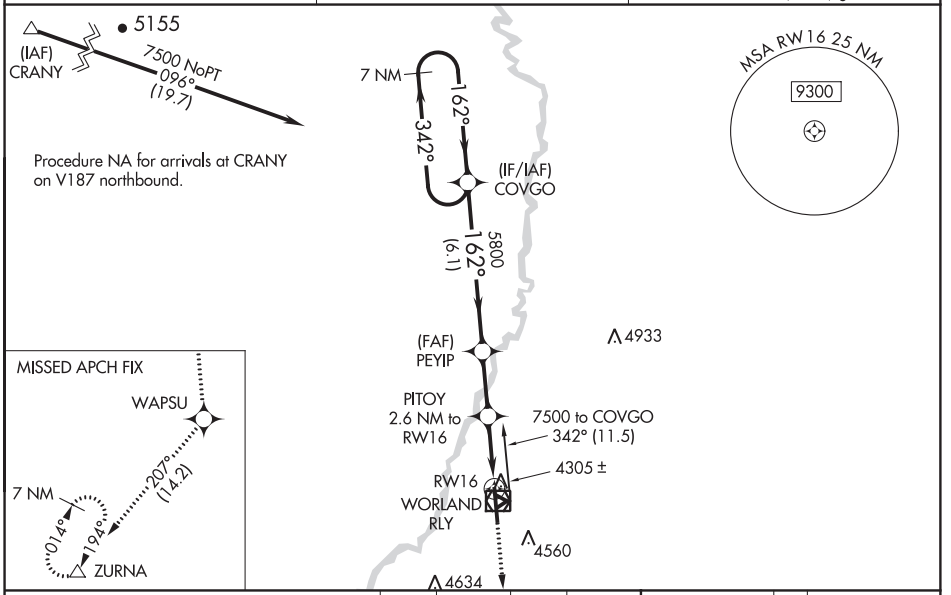
WAAS CH 40228 W16A	APP CRS 162°	Rwy Idg 7000 TDZE 4202 Apt Elev 4252

RNAV (GPS) RWY 16
WORLAND MUNI (WRL)

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 -33°C 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.

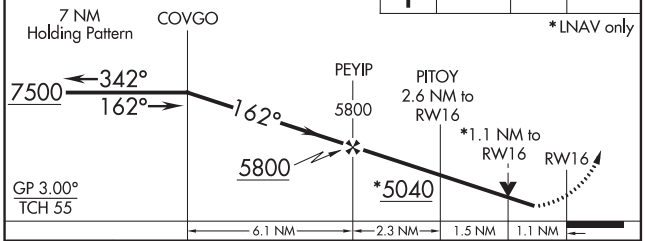
ASOS	SALT LAKE CENTER	UNICOM
135.475	133.25 285.6	123.05 (CTAF) L



9600	WAPSU	tr 207°	ZURNA

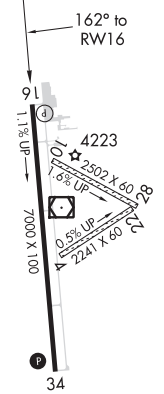
*LNAV only

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 41).



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)

ELEV 4252 D TDZE 4202



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

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

RNAV (GPS) RWY 34

WORLAND MUNI (WRL)

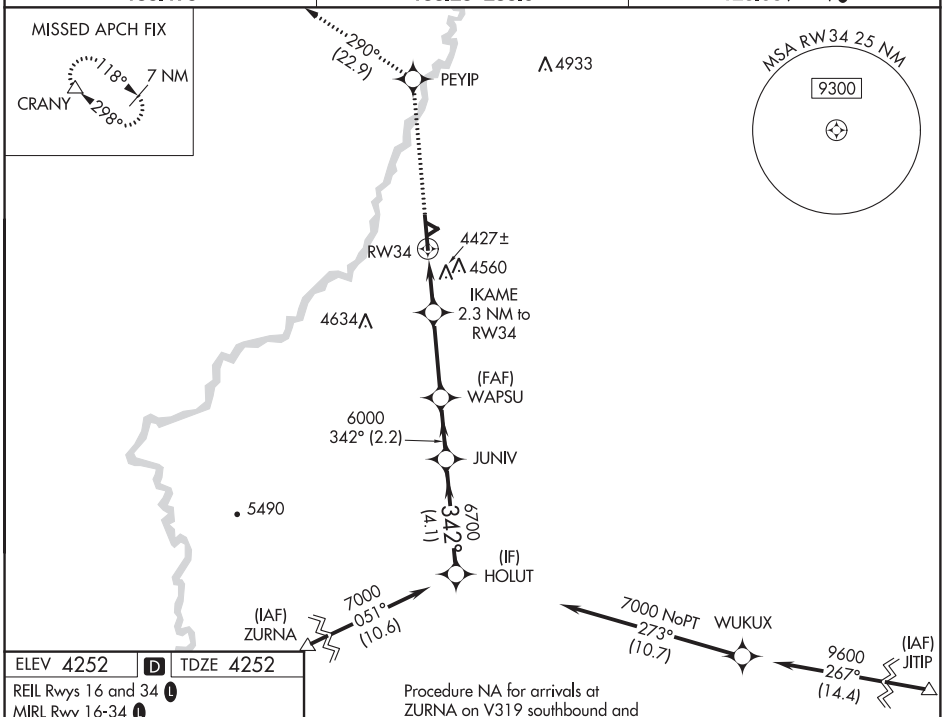
APP CRS	Rwy Idg	7000
342°	TDZE	4252
	Apt Elev	4252

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.

-33°C

MISSED APPROACH: Climb to 8500 direct PEYIP and on track 290° to CRANY and hold.

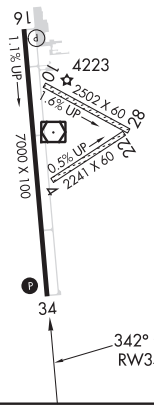
ASOS	SALT LAKE CENTER	UNICOM
135.475	133.25 285.6	123.05 (CTAF) L

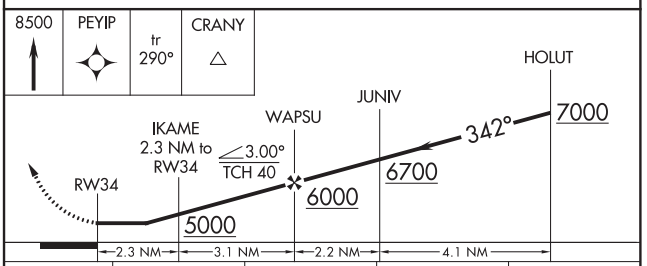


ELEV 4252 D TDZ 4252

REIL Rwys 16 and 34 L

MIRL Rwy 16-34 L





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)

NW-1, 30 JAN 2020 to 26 MAR 2020

VOR RWY 16

WORLAND MUNI (WRL)

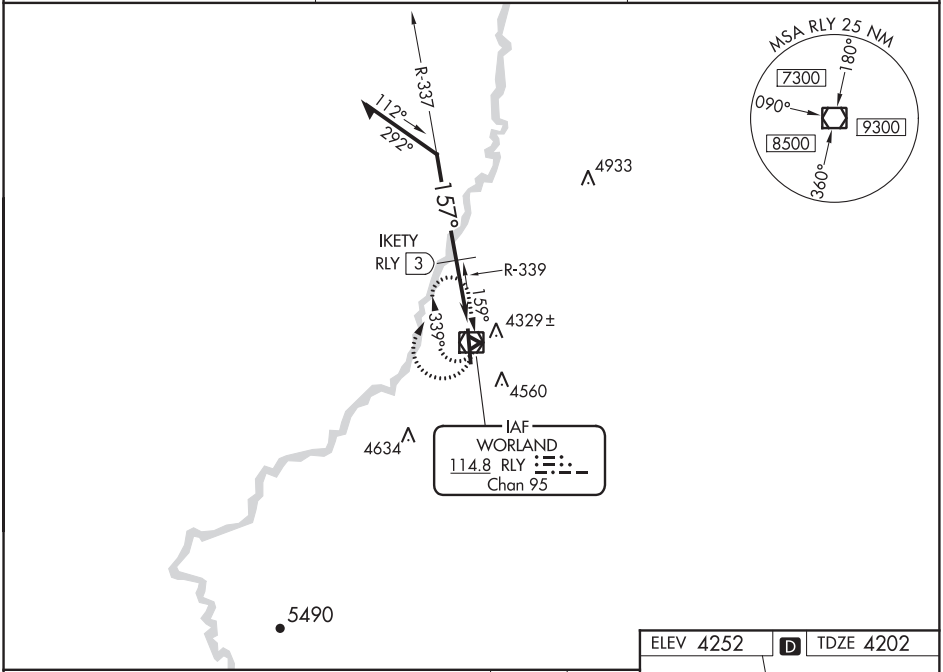
VOR/DME RLY	APP CRS	Rwy Idg	7000
114.8	157°	TDZE	4202
Chan 95		Apt Elev	4252

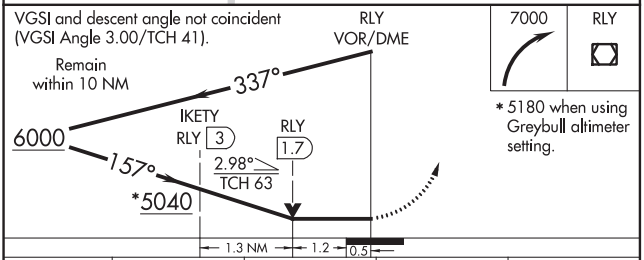
When local altimeter setting not received, use Greybull altimeter setting and increase all MDA 140 feet, and all visibilities ½ mile. Helicopter visibility reduction below ¾ SM NA. VDP NA with Greybull altimeter setting.

-33°C

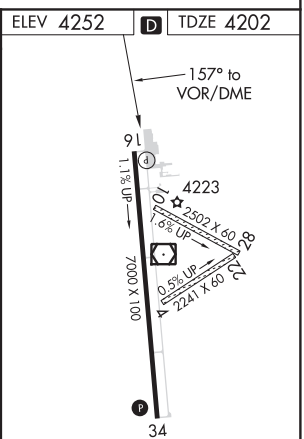
MISSED APPROACH: Climbing right turn to 7000 in RLY VOR/DME holding pattern.

ASOS	SALT LAKE CENTER	UNICOM
135.475	133.25 285.6	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-16	5040-1 838 (800-1)	5040-1¼ 838 (800-1¼)	5040-2½	838 (800-2½)
CIRCLING	5040-1 788 (800-1)	5040-1¼ 788 (800-1¼)	5040-2½	788 (800-2½)
IKETY FIX MINIMUMS				
S-16	4600-1	398 (400-1)	4600-1¼	398 (400-1¼)
CIRCLING	4880-1 628 (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

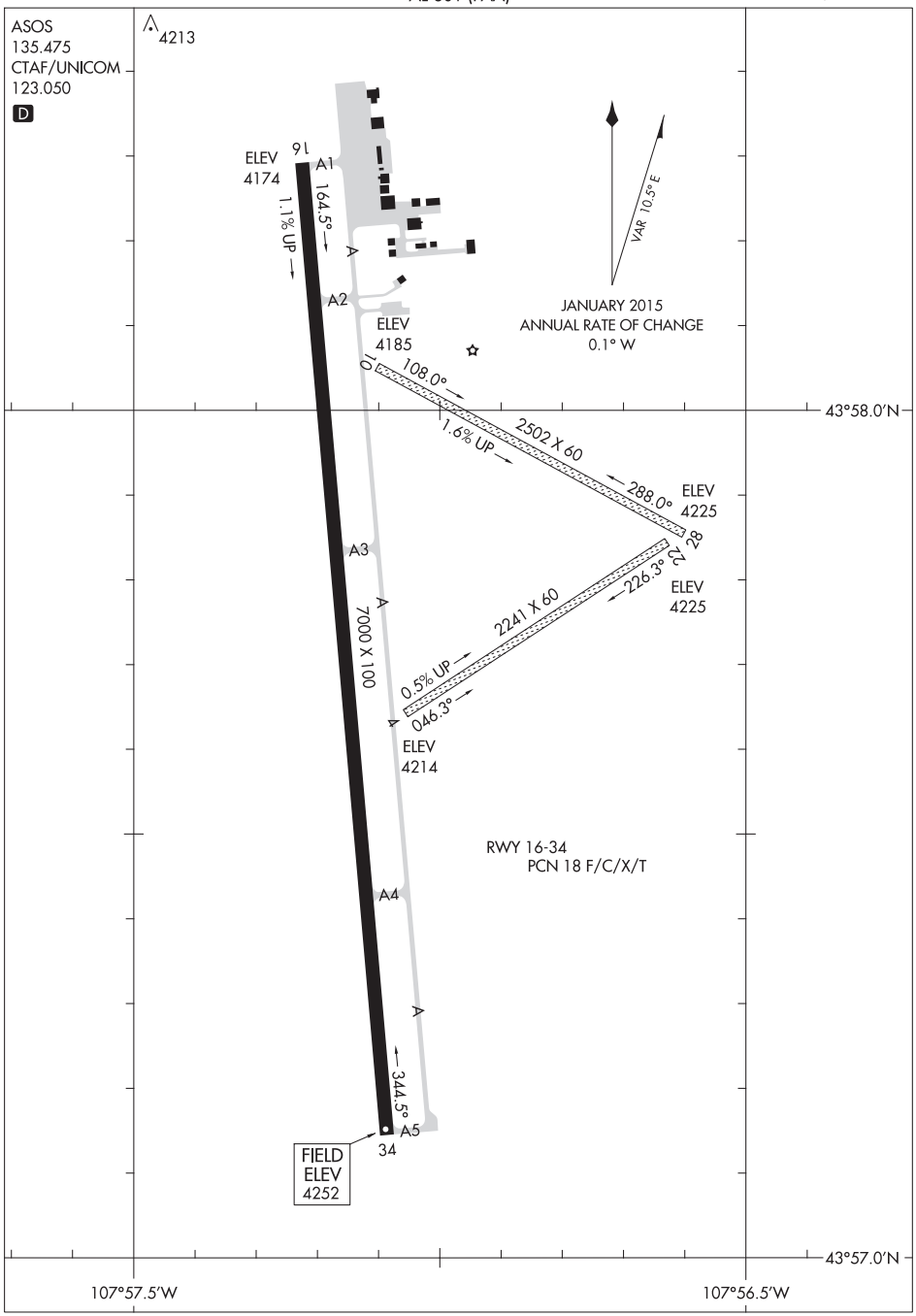
NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

16259

AIRPORT DIAGRAM

AL-801 (FAA)

WORLAND MUNI (WRL)
WORLAND, WYOMING



NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

AIRPORT DIAGRAM
16259

WORLAND, WYOMING
WORLAND MUNI (WRL)

LOC/DME I-YKM	APP CRS	Rwy Idg	7604
110.1	274°	TDZE	1068
Chan 38		Apt Elev	1099

ILS or LOC RWY 27

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

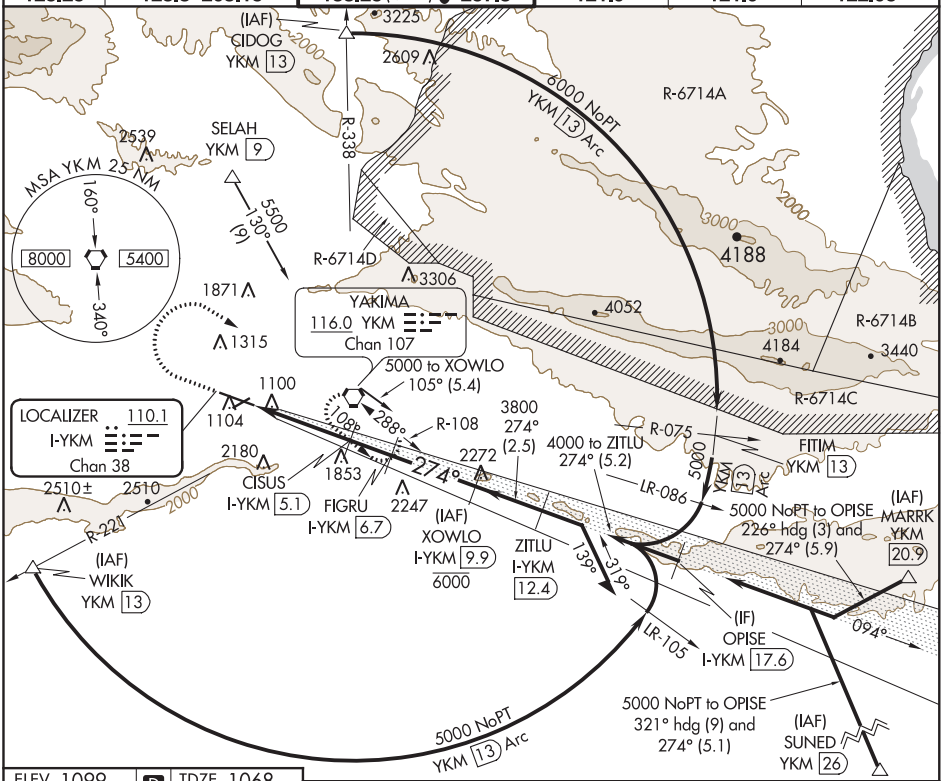
DME required for procedure entry. DME required for LOC only.

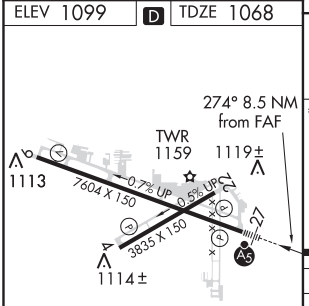
T A When local altimeter setting not received, procedure NA. Circling NA south of Rwys 9 and 27. For inop ALS, increase S-LOC 27 Cats C/D visibility to 2 SM. For inop ALS, increase S-ILS 27 all Cats visibility to 1⅞ SM. #RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

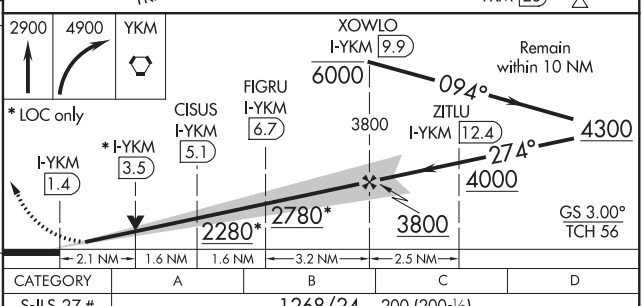
MISSED APPROACH: Climb to 2900 then climbing right turn to 4900 direct YKM VORTAC and hold, continue climb-in-hold to 4900. #Missed approach requires minimum climb of 275 feet per NM to 3600.

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





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)

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

YAKIMA, WASHINGTON | AL-465 (FAA) | 18200

APP CRS	Rwy Idg	7604
094°	TDZE	1099
	Apt Elev	1099

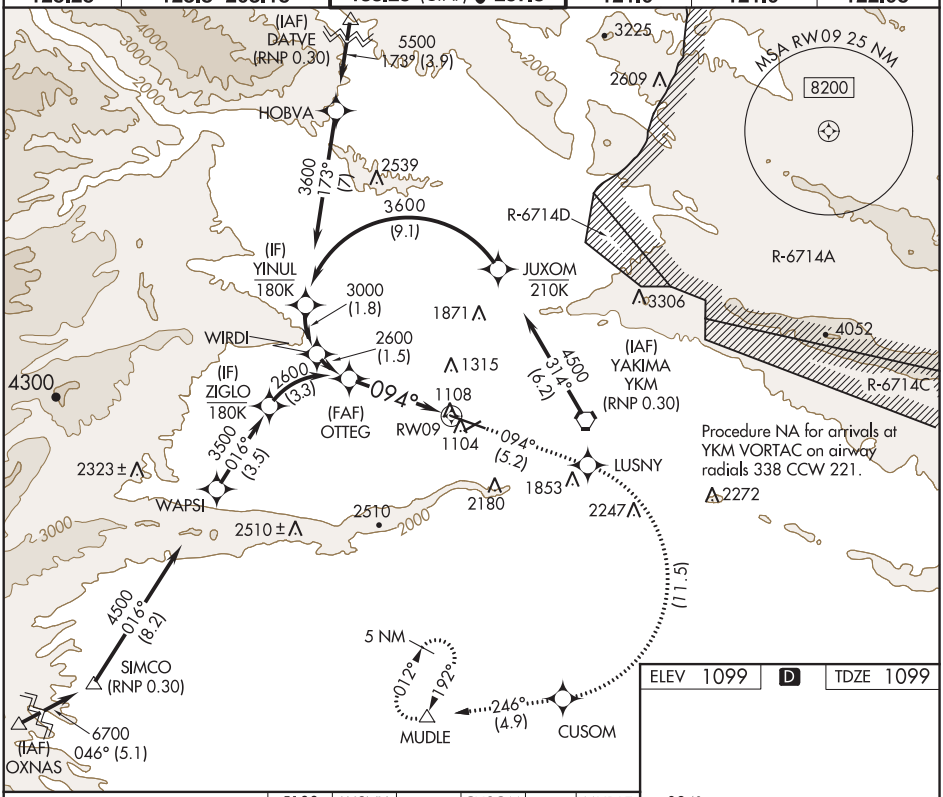
RNAV (RNP) RWY 9

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.

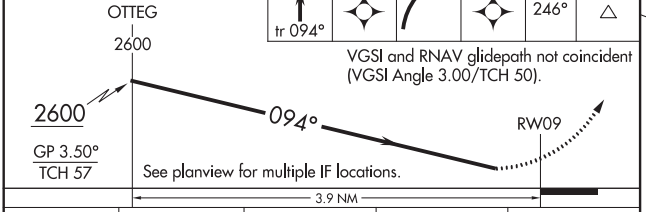
MISSED APPROACH: Climb to 5100 on track 094° to LUSNY right turn to CUSOM and on track 246° to MUDLE and hold.

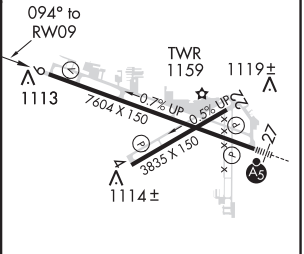
ATIS	CHINOOK APP CON *	YAKIMA TOWER *	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95



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

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

AUTHORIZATION REQUIRED

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

APP CRS	Rwy Idg	TDZE	Apt Elev
274°	7604	1068	1099

RNAV (RNP) Y RWY 27

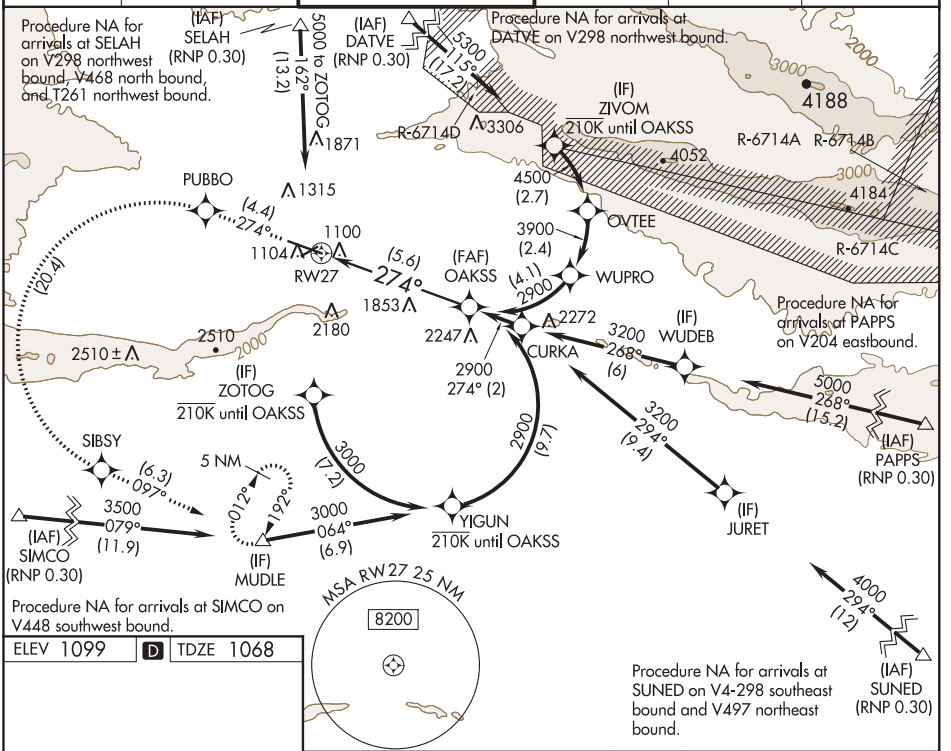
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

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.

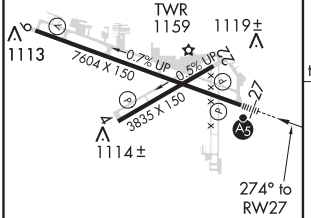
MALSR

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

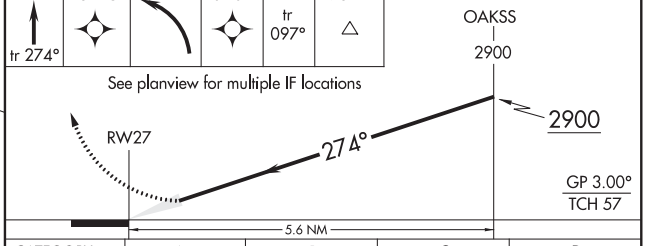


ELEV 1099 D TDZE 1068



5100 tr 274°	PUBBO		SIBSY	tr 097°	MUDLE

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

YAKIMA, WASHINGTON | AL-465 (FAA) | 18060

APP CRS	Rwy Idg	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

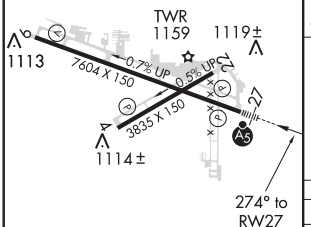
MISSED APPROACH: Climb to 5100 on track 274° to YEPCU left turn to JOPDI left turn to ZEMUN left turn to MUDLE and hold.
*Missed approach requires a minimum climb of 215 feet per NM to 4300.

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

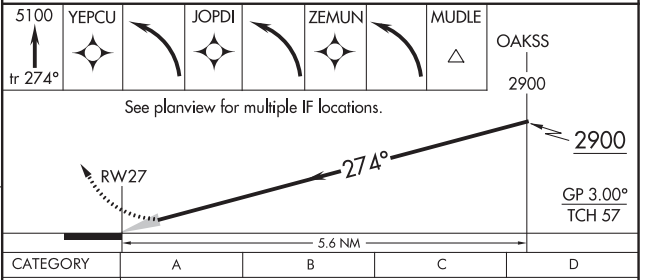
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 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
RNP 0.10 DA*	1348/24 280 (300-½)			
RNP 0.30 DA	1468/45 400 (400-⅞)			

AUTHORIZATION REQUIRED

YAKIMA, WASHINGTON
Orig-C 01MAR18

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
46°34'N-120°33'W
RNAV (RNP) Z RWY 27

WAAS CH 90512 W27A	APP CRS 274°	Rwy Idg 7604 TDZE 1068 Apt Elev 1099

RNAV (GPS) X RWY 27

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

RNP APCH.

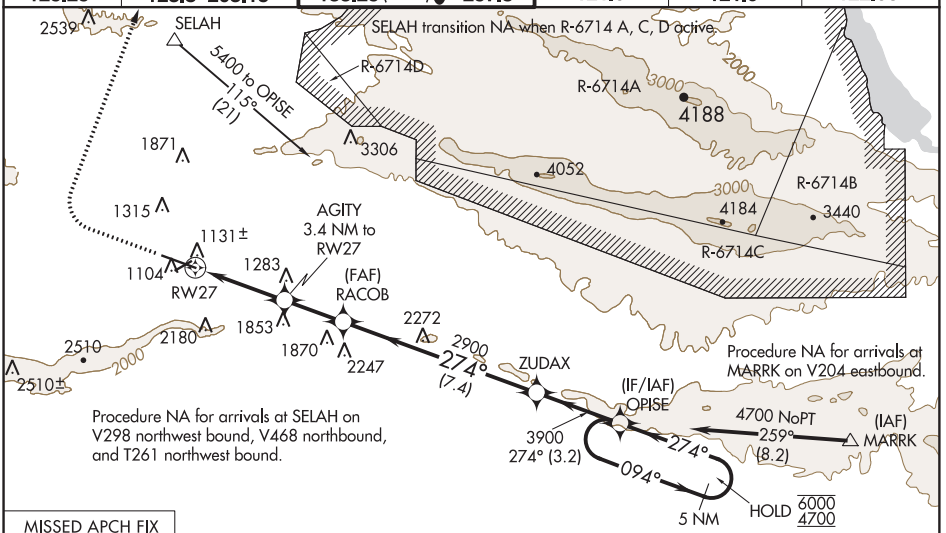
T Circling NA south of Rwys 9 and 27.

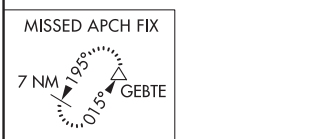
A For inop ALS, increase LPV all Cats visibility to 1¾ SM.
*RVR 1800 authorized with use of FD or AP or HUD to DA.

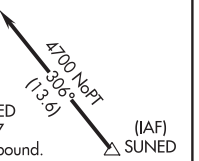
MALSR

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

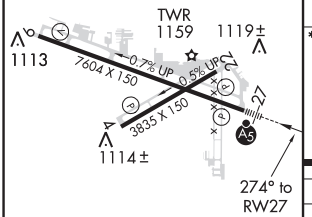


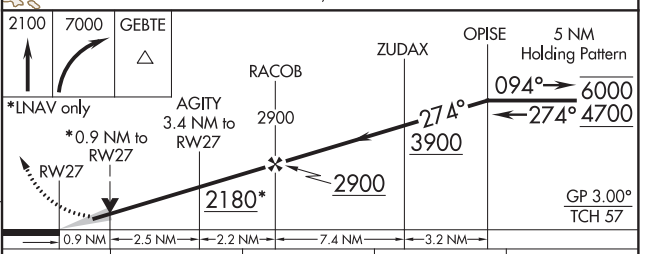




Procedure NA for arrivals at SUNED on V4-298 southeast bound, V497 northeast bound, and V497 southbound.

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, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

YAKIMA, WASHINGTON | AL-465 (FAA) | 19171

LOC/DME BC-B

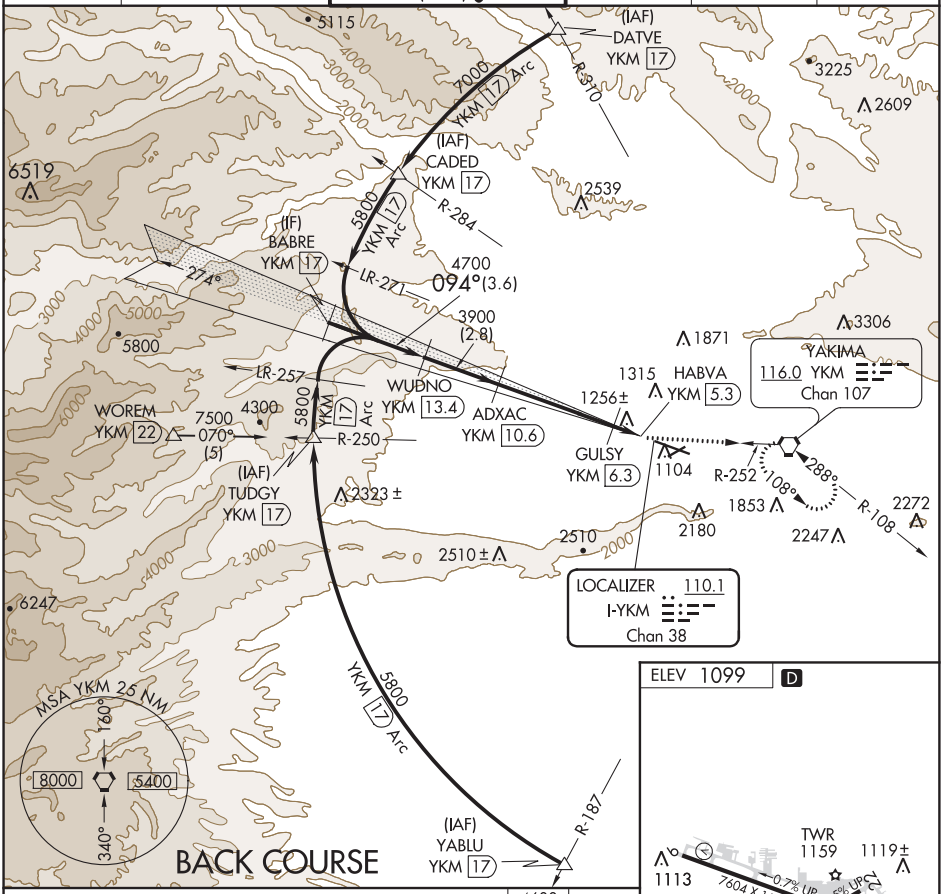
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

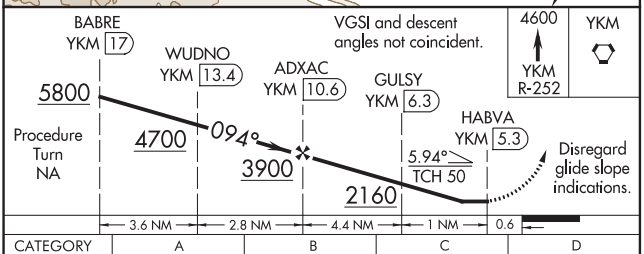
LOC/DME I-YKM	APP CRS	Rwy Idg	N/A
110.1	094°	TDZE	N/A
Chan 38		Apt Elev	1099

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
CIRCLING	1760-1 661 (700-1)		1760-1¾ 661 (700-1¾)	1800-2¼ 701 (800-2¼)

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

VOR/DME or TACAN RWY 27

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

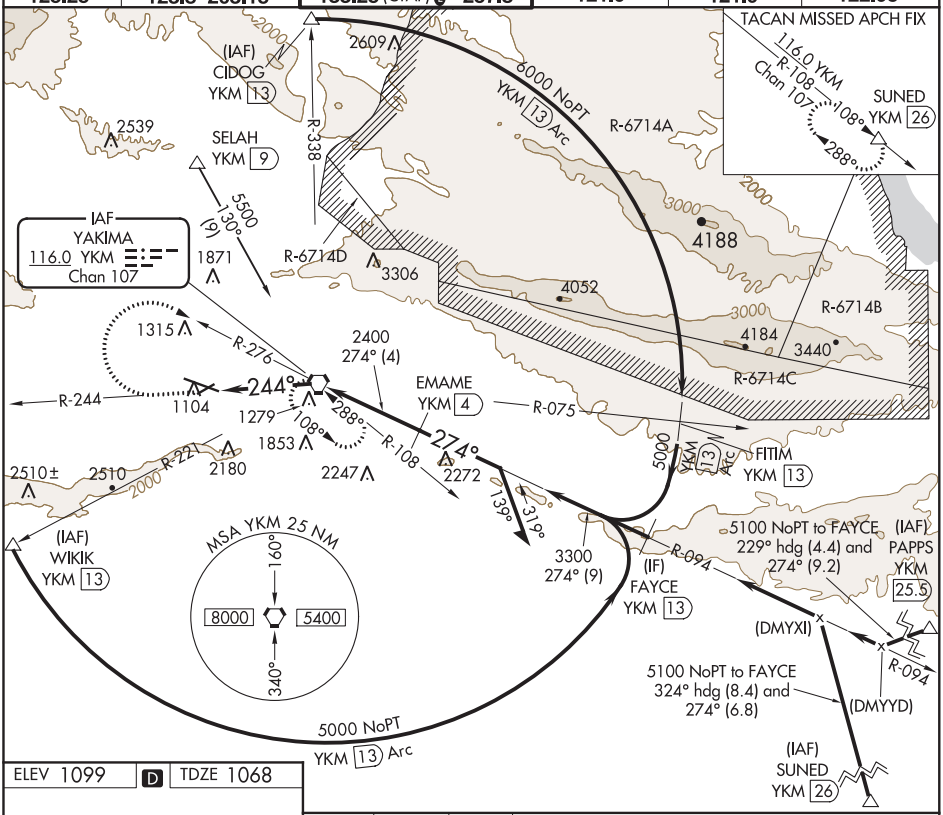
VORTAC YKM	APP CRS	Rwy Idg	7604
116.0	244°	TDZE	1068
Chan 107		Apt Elev	1099

T Inoperative table does not apply.
A Circling NA south of Rwy 9-27. When local altimeter setting not received, procedure NA.

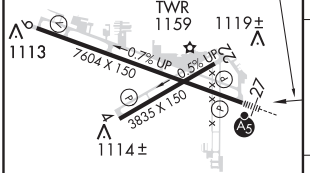
MALSR

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).

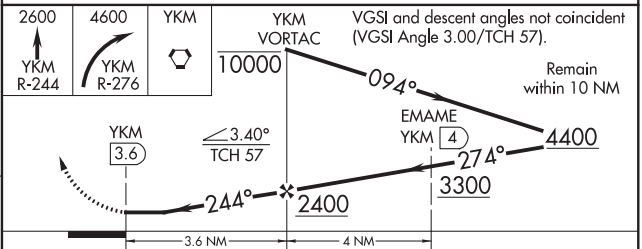
ATIS	CHINOOK APP CON ★	YAKIMA TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95



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-27	2100/60 1032 (1100-1¼)	2100-1½ 1032 (1100-1½)	2100-3 1032 (1100-3)	
CIRCLING	2100-1¼ 1001 (1100-1¼)	2100-1½ 1001 (1100-1½)	2100-3 1001 (1100-3)	

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

YAKIMA, WASHINGTON | AL-465 (FAA) | 18032

VORTAC YKM	APP CRS	Rwy Idg	N/A
116.0	251°	TDZE	N/A
Chan 107		Apt Elev	1099

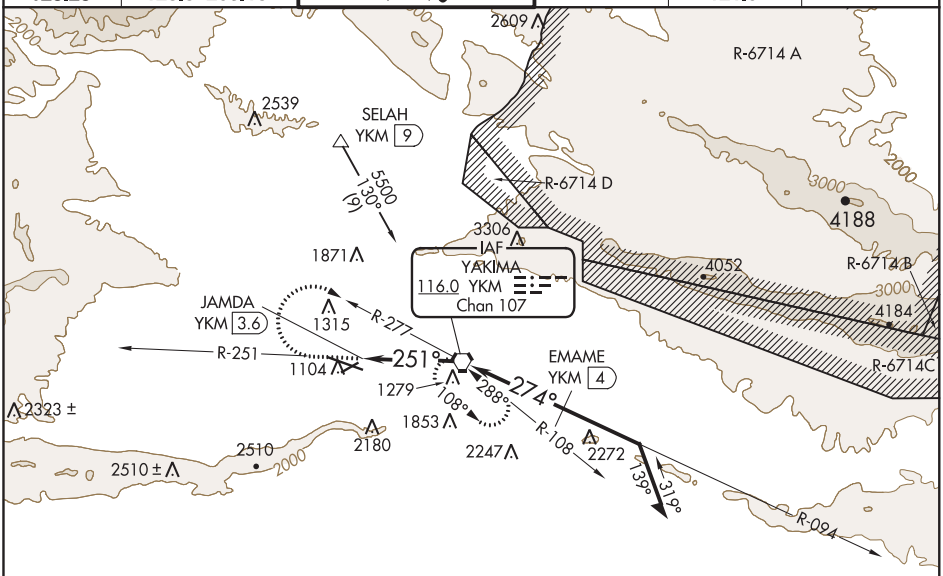
VOR-A

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.

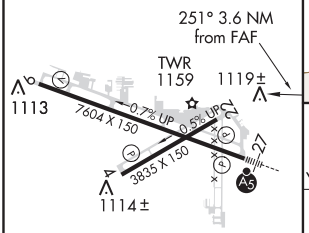
ATIS	CHINOOK APP CON ★	YAKIMA TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	123.8 263.15	133.25 (CTAF) L 257.8	121.9	121.9	122.95



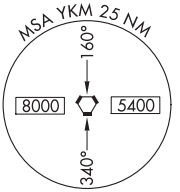
NW-1, 30 JAN 2020 to 26 MAR 2020

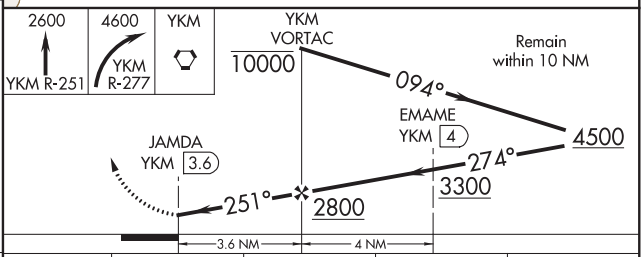
NW-1, 30 JAN 2020 to 26 MAR 2020

ELEV 1099 D



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

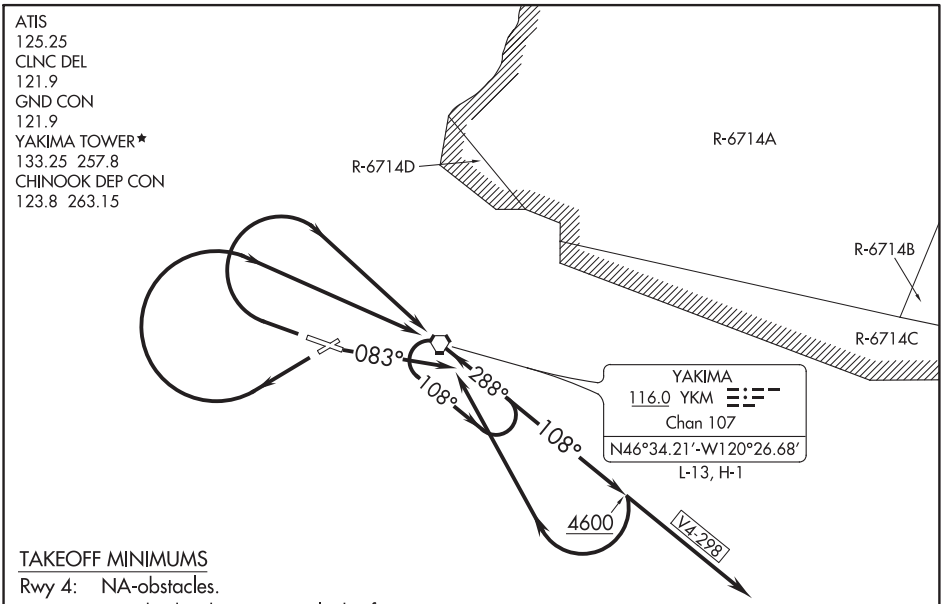
CATEGORY	A	B	C	D
CIRCLING	1840-1 741 (800-1)	1840-1¼ 741 (800-1¼)	1840-2¼ 741 (800-2¼)	1840-2½ 741 (800-2½)

ATIS 125.25
YAKIMA TOWER★ 133.25 257.8
GND CON 121.9
CLNC DEL 121.9
D
HS 1
EAST RAMP PARKING
ELEV 1056
TWR 1159
TERMINAL
FIRE STATION
WEST RAMP PARKING
22
04
274.5°
ELEV 1049
UNPAVED TIEDOWN AREA
0.5% UP
0.7% UP
224°
7604 X 150
7605 X 150
044°
094.5°
ELEV 1077
FIELD ELEV 1099
RWY 04-22
PCN 28 F/C/X/T
S-70, D-80, 2S-102, 2D-120
RWY 09-27
PCN 33 F/C/X/T
S-95, D-160, 2S-175, 2D-220, 2D/2D2-550
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
VAR 15.5°E
JANUARY 2015
ANNUAL RATE OF CHANGE
0.1° W
1180±
120°34.0'W
120°33.5'W
120°33.0'W
120°32.5'W
120°32.0'W
46°34.5'N
46°34.0'N
46°33.5'N

(ZILLA3.YKM) 16147

ZILLA THREE DEPARTURE (OBSTACLE)

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
SL-465 (FAA)
YAKIMA, WASHINGTON



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.

NW-1, 30 JAN 2020 to 26 MAR 2020
NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

(GROMO4.GROMO) 18312

GROMO FOUR DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
AL-465 (FAA) YAKIMA, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

NACHES FOUR DEPARTURE

TAKEOFF MINIMUMS

Rwy 4: NA-obstacles.
Rwy 9: Standard with minimum climb of 360' per NM to 4400.
Rwy 22: Standard with minimum climb of 495' per NM to 6000.
Rwy 27: Standard with minimum climb of 495' per NM to 6000.

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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.

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(WENAS7.WENAS) 18312
WENAS SEVEN DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
AL-465 (FAA) YAKIMA, WASHINGTON

NW-1, 30 JAN 2020 to 26 MAR 2020

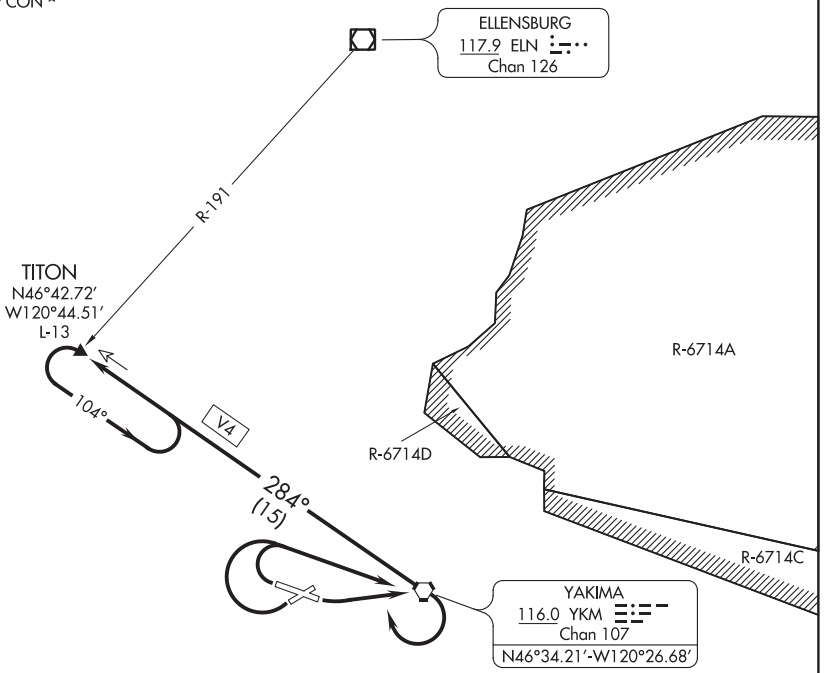
DEPARTURE ROUTE DESCRIPTION

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.

ATIS
125.25
CLNC DEL
121.9
GND CON
121.9
YAKIMA TOWER ★
133.25 257.8
CHINOOK DEP CON ★
123.8 263.15



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).

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INTENTIONALLY

LEFT

BLANK

NW-1, 30 JAN 2020 to 26 MAR 2020

NW-1, 30 JAN 2020 to 26 MAR 2020

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

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EFF. DATE 20030