Appendix D: INSTRUMENT APPROACH PROCEDURES

Airport Master Plan Update

Aurora State Airport
SEATTLE TRANSITION (SEA.HELNS4): From over SEA VORTAC via SEA R-161 to HELNS DME FIX. Thence....

.... From over HELNS DME FIX via BTG R-360 to BTG VORTAC. Thence....

LANDING EAST: Depart BTG VORTAC heading 280° for vectors to final approach course.

LANDING WEST: Depart BTG VORTAC heading 110° for vectors to final approach course.
Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). 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 or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

<table>
<thead>
<tr>
<th>NAME ALTERNATE MINIMUMS</th>
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<tbody>
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<td>ALCANY, OR</td>
<td>BELLINGHAM, WA</td>
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<td>ALCANY MUNI .............</td>
<td>BELLINGHAM INTL ..........</td>
</tr>
<tr>
<td>VOR/DME or GPS-A NA</td>
<td>ILS or LOC Rwy 16 RNAV (GPS) Rwy 16</td>
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<tr>
<td></td>
<td>NA when local weather not available.</td>
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<tr>
<td>ARLINGTN, WA</td>
<td>BIG PINEY, WY</td>
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<tr>
<td>ARLINGTN MUNI ...........</td>
<td>MILEY MEMORIAL FIELD .....</td>
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<tr>
<td>NDB or GPS Rwy 34</td>
<td>VOR Rwy 31 Category D, 800-2½.</td>
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<tr>
<td>NA when Paine Field control tower closed.</td>
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<tr>
<td>ASTORIA, OR</td>
<td>BILLINGS, MT</td>
</tr>
<tr>
<td>ASTORIA RGNL ............</td>
<td>BILLINGS LOGAN INTL ......</td>
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<tr>
<td>RNAV (GPS) Rwy 26¹²</td>
<td>RNAV (GPS) Rwy 10L¹ RNAV (GPS) Rwy 10L² RNAV (GPS) Rwy 28R³</td>
</tr>
<tr>
<td>VOR Rwy 8³</td>
<td>¹Category D, 800-2½. ²Categories A,B,C,D, 800-2½. ³Categories A,B, 900-2; Categories C,D, 900-3.</td>
</tr>
<tr>
<td>¹NA when local weather not available. ²Categories A, B, 900-2; Category C, 900-2½; Category D, 900-3. ³Category C, 800-2½; Category D, 900-3.</td>
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<tr>
<td>AURORA, OR</td>
<td>BOISE, ID</td>
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<tr>
<td>AURORA STATE .............</td>
<td>BOISE AIR TERMINAL(GOWEN FIELD) ..........</td>
</tr>
<tr>
<td>LOC Rwy 17¹ RNAV (GPS) Rwy 17² RNAV (GPS) Rwy 35³</td>
<td>LOC BC Rwy 28L RNAV (GPS) Y Rwy 10R RNAV (GPS) Y Rwy 28L VOR/DME or TACAN Rwy 10L VOR/DME or TACAN Rwy 28L</td>
</tr>
<tr>
<td>¹Category D, 800-2½. ²NA when local weather not available. ³Categories A, B, 900-2; Category C, 900-2½; Category D, 900-3.</td>
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<tr>
<td>BAKER, MT</td>
<td>BOZEMAN, MT</td>
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<tr>
<td>BAKER MUNI ..............</td>
<td>GALLATIN FIELD ..........</td>
</tr>
<tr>
<td>NDB Rwy 13¹ NDB Rwy 31²</td>
<td>RNAV (GPS)-A¹ VOR Rwy 12²</td>
</tr>
<tr>
<td>¹Categories A,B, 1100-2; Categories C,D, 1100-3. ²Categories A,B, 1000-2; Category C, 1000-2½; Category D, 1000-3.</td>
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<tr>
<td>BAKER CITY, OR</td>
<td>BREMERTON, WA</td>
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<tr>
<td>BAKER CITY MUNI ..........</td>
<td>BREMERTON NATIONAL ..</td>
</tr>
<tr>
<td>RNAV (GPS) Rwy 13¹³ VOR-A¹³ VOR/DME Rwy 13⁴</td>
<td>RNAV (GPS) Rwy 1 RNAV (GPS) Rwy 19¹</td>
</tr>
<tr>
<td>¹NA when local weather not available. ²Category D, 900-2½. ³Categories A,B, 1900-2; Categories C,D, 1900-3. ⁴NA when control zone not in effect.</td>
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<tr>
<td>¹Categories A,B, 1200-2; Categories C,D, 1200-3.</td>
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</table>

29 JUL 2010 to 26 AUG 2010
TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ARLINGTON, WA
ARLINGTON MUNI
TAKE-OFF MINIMUMS: Rwys 11, 600-2 or std. with a min. climb of 350' per NM to 700. Rwys 34, 500-2 or std. with a min. climb of 260' per NM to 700.
DEPARTURE PROCEDURE: Rwys 11, turn right. Rwys 16, climb direct to WATON LOM. Rwys 29, 34, turn left. All aircraft climb direct to WATON LOM. Aircraft departing WATON LOM on bearings 150° CW 200° and bearings 260° CW 340° from WATON LOM continue climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 4500 then continue climb on course. Aircraft departing WATON LOM on bearings 200° CW 260° from WATON LOM climb in holding pattern (S, left turns, 339° inbound) to 1500 then continue climb on course.

ASTORIA, OR
ASTORIA RGNL
TAKE-OFF MINIMUMS: Rwys 8, 800-3 or std. with a min. climb of 320' per NM to 900. Rwys 13, 700-2 or std. with a min. climb of 350' per NM to 800.
DEPARTURE PROCEDURE: Rwys 8, 31, turn left. Rwys 16, climb runway heading to 800 then climbing right turn. Rwys 26, turn right. Aircraft departing northbound climb via AST R-260 on course. All other aircraft climb to 1500 or above via AST R-290 then left turn to AST VOR/DME and continue climbing on course.

AUBURN, WA
AUBURN MUNI
DEPARTURE PROCEDURE: Use AUBURN DEPARTURE.

AURORA, OR
AURORA STATE
DEPARTURE PROCEDURE: Rwys 17, turn right, thence... Rwys 35, turn left, thence... Aircraft proceeding via V23 climb on course; All others climb in UBG VOR/DME holding pattern (hold south, left turn, 003° inbound) to cross UBG VOR/DME at or above MEA/MAEA for direction of flight.
NOTE: Rwys 17, multiple trees 31' from departure end of runway, 273' right of centerline, up to 90' AGL/270' MSL. Multiple trees beginning 979' from departure end of runway, 247' right of centerline up to 113' AGL/316' MSL. Road 254' from departure end of runway, 350' left of centerline, 16' AGL/209' MSL. Rwys 35, multiple trees and road beginning 31' from departure end of runway, 163' left of centerline, up to 138' AGL/329' MSL. Multiple trees beginning 973' from departure end of runway, 281' right of centerline, up to 58' AGL/253' MSL.

BAKER, MT
BAKER MUNI
NOTE: Rwys 13, 51' derrick 2200' from departure end of runway on centerline. 100' trees south of airport, near runway, various locations. Rwys 31, 146 antenna on tower 4000' from departure end of runway, 1800' left of centerline. 114' rod on OL antenna 3800' from departure end of runway on centerline.

BAKER CITY, OR
BAKER CITY MUNI
TAKE-OFF MINIMUMS: Rwys 8, 900-2 or std. with a min. climb of 315' per NM to 6000. (788' per min. at 150K, 1050' per min. at 200K, 1313' per min. at 250K). Rwys 13, 1400-2 or std. with a min. climb of 310' per NM to 6000 (775' per min. at 150K, 1033' per min. at 200K, 1292' per min. at 250K). Rwys 17, NA. Rwys 31, 1300-2 or std. with a min. climb of 240' per NM to 6000 (600' per min. at 150K, 800' per min. at 200K, 1000' per min. at 250K).
DEPARTURE PROCEDURE: Rwys 8, 13, turn left. Rwys 26, 31, 35, turn right. All aircraft climb direct BKE VOR/DME. Continue climb in BKE holding pattern (SE, right turns, 298° inbound) to cross BKE VOR/DME at or above MCA or MEA for route of flight.

BELLINGHAM, WA
BELLINGHAM INTL
DEPARTURE PROCEDURE: Rwys 16, climb heading 160° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound. Rwys 34, climb heading 340° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.
NOTE: Rwys 16, lighted windsock 9' from departure end of runway, 259' right of centerline, 16' AGL/181' MSL. Multiple trees beginning 747' from departure end of runway, 405' right of centerline, up to 68' AGL/213' MSL. Multiple trees beginning 1128' from departure end of runway, 57' left of centerline, up to 104' AGL/249' MSL. Rwys 34, lighted windsock 93' from departure end of runway, 516' right of centerline, 27' AGL/189' MSL, multiple trees beginning 1372' from departure end of runway, 619' right of centerline, up to 134' AGL/246' MSL.

BEND, OR
BEND MUNI (BDN)
AMDT 4 09183 (FAA)
DEPARTURE PROCEDURE: Use BEND DEPARTURE.

BIG PINEY, WY
MILEY MEMORIAL FIELD
TAKE-OFF MINIMUMS: Rwys 8, 26, NA.
DEPARTURE PROCEDURE: Rwys 13, climb to 8400 via BPI R-124. Rwys 31, climb to 10800 via BPI R-320 thence all aircraft climb on course.
MISSED APPROACH: Climb to 800 then climbing left turn to 3500 direct UBG VOR/DME and hold.
RNAV (GPS)-B
AURORA STATE (UAO)

APP CRS N/A
Rwy Idg N/A
Apt Elev 200

Category B

ASOS 118.525
PORTLAND APP CON 126.0 284.6
CLNC DEL 119.95
UNICOM 122.7 (CTAF)

DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 3500 direct UBG VOR/DME and hold.

AURORA, OREGON

AL-5722 (FAA)

NW-1, 29 JUL 2010 to 26 AUG 2010

AURORA STATE (UAO)

RNAV (GPS)-B

AURORA, OREGON

Orig 09211

45°1'5"N-122°46'W
RNAV (GPS) RWY 35
AURORA STATE (UAO)

**Procedure NA for arrivals at EMADE via V23 southwest bound.**

Procedure NA for arrivals at UBG VOR/DME on airway radials 085 CW 183.

**MISSING APPROACH:** Climb to 4000 direct MOKIY and hold, continue climb-in-hold to 4000.

**MISSED APCH FIX**

**Uncompensated Baro-VNAV Systems:**
- LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
- When local altimeter setting not received, use Mc Minnville Muni altimeter setting and increase all DA 42 feet and MDA 60 feet; increase LPV, LNAV/VNAV visibilities ¼ mile all Cats, increase LNAV Cat D visibility to ½. Visibility reduction by helicopters NA.
- Baro-VNAV NA when using Mc Minnville Muni altimeter setting.

**CIRCLING**
- RNAV (GPS) RWY 35
- RNAV (GPS) RWY 35

**CATEGORY**
- A
- B
- C
- D

**DA**
- LPV 500-1
- VNAV 405 (500-1½)
- LNAV MDA 700-1
- 501 (500-1)
- 700-1½
- 501 (500-1½)
- 760-2
- 560 (600-2)

**APP CRS**
- 349°

**Holding Pattern**
- 6 NM
RNAV (GPS) RWY 17
AURORA STATE (UAO)

**DME/DME RNP-0.3 NA.** When local altimeter setting not received, use Mc Minnville Muni altimeter setting and increase all DA 42 feet and all MDA 60 feet; increase LPV, LNAV/VNAV visibilities all Cats. 1/4 mile, increase LNAV visibility Cats. A/C/D 1/4 mile, increase Circling visibilities Cats. A/C/D 1/4 mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). Inoperative table does not apply. Visibility reduction by helicopters NA.

**MISSED APPROACH:**
Climb to 3500 direct DBMY and hold, continue climb-in-hold to 3500.

**Procedure NA for arrivals at UBG VOR/DME on airway radials 013 CW 085.**
LOC RWY 17
AURORA STATE (UAO)

MISSED APPROACH: Climb to 900 then climbing left turn to 4000 via heading 050° and BTG R-160 to GLARA Int/ BTG 28.2 DME and hold. Continue climb-in-hold to 4000.

ASOS
118.525

PORTLAND APP CON
126.0  284.6

CLNCE DEL
119.95

UNICOM
122.7 [CTAF] 6

FAF to MAP 7 NM

Inoperative table does not apply.