

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
ILS STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.29

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
 Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> PORTLAND-HILLSBORO	<u>AIRPORT ID</u> KHIO	<u>PROCEDURE NAME</u> ILS OR LOC RWY 13R	<u>ORIGINAL/AMENDMENT</u> 10B	<u>CITY</u> PORTLAND	<u>STATE</u> OR
<u>AIRPORT ELEVATION</u> 208	<u>TDZE</u> 203	<u>SUPERSEDED</u> ILS OR LOC RWY 13R	<u>ORIGINAL/AMENDMENT</u> 10A	<u>DATED</u> 02/01/2018	<u>MAG VAR</u> 16E
<u>FACILITY</u> I-HIO	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL SUSPEND</u>	<u>EPOCH YEAR</u> 2010

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
UBG VOR/DME		DUCKA INT/UBG 29.00 DME					317.82	29.00	4500
BTG VORTAC		DUCKA INT/UBG 29.00 DME					256.36	26.93	4500
DAFFI/UBG 29.00 DME CW	IAF	DUCKA INT/UBG 29.00 DME	NOPT				29.00 DME ARC (UBG LR-322)		3700
DUCKA INT/UBG 29.00 DME	IF/IAF	COUVE INT/UBG 21.94 DME					127.57	7.41 (I-HIO)	3300
COUVE INT/UBG 21.94 DME		DOLLA INT					127.57	3.22 (I-HIO)	2900

MISSED APPROACH

MAP:

ILS: DA
 LOC: 8.34 NM AFTER DOLLA INT

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT UBG VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 120 AND BTG VORTAC R-175 TO CANBY/BTG 27.24 DME AND HOLD. (DME REQUIRED)

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- HOLD NW DUCKA/I-HIO, RT, 127.57 INBOUND, 3700 FT. IN LIEU OF PT (IAF), MAX 4600.
- FAC:** 127.57 **FAF:** DOLLA INT **DIST FAF TO MAP:** 8.34 **DIST FAF TO THLD:** 8.34
- MIN ALT:** DUCKA INT/UBG 29.00 DME 3700, COUVE INT/UBG 21.94 DME 3300, DOLLA INT 2900, JIKIM INT 1660*
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **HAT:** **GS ANT:** 880
- MIN GS INCPT:** 2900 **GS ALT AT FAF :** DOLLA INT 2900 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** **20:1:** **TCH:** 43.5
- MSA FROM:** PND NDB 030-180 3500, 180-280 5000, 280-030 4400



EQUIPMENT REQUIREMENTS NOTES

NOTES:

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
*1720 WHEN USING PORTLAND INTL ALTIMETER SETTING.
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO S-LOC 13R CATS A AND B.
CHART NOTE: FOR INOPERATIVE ALS WHEN USING PORTLAND INTL ALTIMETER SETTING, INCREASE S-ILS 13R ALL CATS VISIBILITY TO RVR 4500.
CHART NOTE: **RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA, NA WHEN USING PORTLAND INTL ALTIMETER SETTING.
CHART NOTE: 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 1 3/8 SM.

ADDITIONAL FLIGHT DATA:

1415 AAO 424023N/1230550W
CHART IN PLANVIEW: USE OF BTG R-256 AND UBG R-318 MAY BE NECESSARY TO LOCATE DUCKA INTERSECTION.
CHART CIRCLING ICON.
CHART UBG R-334 AT DAFFI.
CHART IN PLANVIEW: CANBY/BTG 27.24 DME
FAS OBST: 429 AAO 453651N/1230053W.
639 AAO 453760N/1230123W.
CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD S CANBY/BTG 27.24 DME, RT, 354.63 INBOUND.
HOLD S, RT, 003.00 INBOUND

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.; LOC: CAT A, B 1500-2, CAT C, D 1500-3, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
S-ILS 13R**	403	2400	200	403	2400	200	403	2400	200	403	2400	200			
S-LOC 13R	1660	6000	1457	1660	1 1/2	1457	1660	3	1457	1660	3	1457			
CIRCLING	1660	1 1/4	1452	1660	1 1/2	1452	1660	3	1452	1660	3	1452			
JIKIM FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)															
S-LOC 13R	680	2400	477	680	2400	477	680	5000	477	680	5000	477			
CIRCLING	680	1	472	720	1	512	720	1 1/2	512	980	2 1/2	772			

CHANGES - REASONS

1. CHANGED ALTERNATE MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 1000 THEN CLIMBING RIGHT TURN TO 4000 ON HEADING 120 AND BTG VORTAC R-175 TO CANBY/BTG 27.24 DME AND HOLD. (DME REQUIRED)." TO "CLIMB TO 1000 THEN CLIMBING LEFT TURN TO 4000 ON HEADING 120 AND BTG VORTAC R-175 TO CANBY/BTG 27.24 DME AND HOLD. (DME REQUIRED)" - CORRECTED PUBLISHING ERROR FROM AMENDMENT 10A.
2. UPDATED VGSI NOT COINCIDENT NOTE - ADDED (VGSI {ANGLE}/TCH{FEET}).



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZSE, PDX APP CON, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017.

Digitally signed by

DONALD H LANIER

May 16, 2018

OFFICE

DATE

DEVELOPED BY

Lonnie Everhart (Charles Ctr Thibodeaux)

Digitally signed by

DONALD H LANIER

May 16, 2018

OFFICE

DATE

AJV-5400

03/13/2018

APPROVED BY

Lonnie Everhart

Digitally signed by

DONALD H LANIER

May 16, 2018

OFFICE

DATE

TITLE

AJV-5400

MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
PORTLAND-HILLSBORO	KHIO	ILS OR LOC RWY 13R	10B	PORTLAND	OR	208	I-HIO

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
UBG VOR/DME

TO
DUCKA INT/UBG 29.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	29.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.AAO	454425.30N/1230748.00W	2417	1000	3	6A	2000					4500
2.TERRAIN	454425.30N/1230748.00W	2217 (2200)								AS1500	3700

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT
REMARKS:

FEEDER

FROM
BTG VORTAC

TO
DUCKA INT/UBG 29.00 DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	26.93										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.AAO	454708.90N/1230610.70W	2465	1000	3	6A	2000					4500
4.TERRAIN	454708.90N/1230610.70W	2265 (2300)								AS1500	3800

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT
REMARKS:



I-HIO

JIKIM INT

HMAS

1457

RF CENTER FIX/DISTANCE

8.34 NM AFTER DOLLA INT

HMAS

477

RF CENTER FIX/DISTANCE

REMARKS:

HOLD-IN-LIEU OF PT

FROM

DUCKA

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
		P-5									
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
9.AAO	455232.50N/1232342.50W	2693	1000	3	6A	1000					3700
10.TERRAIN	455232.50N/1232342.50W	2493 (2500)								AS1000	3500

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT
REMARKS:

MISSED APPROACH : ILS

FROM

DA

TO

UBG VOR/DME

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
		1	DA					235			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				3000
11.AAO	452348.00N/1230324.00W	1834	250	125	4E	1000					2900
12.TERRAIN	452348.00N/1230324.00W	1634 (1600)								AS1000	2600

COMPUTATIONS	ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT
REMARKS:



<u>AIRPORT</u>	<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
PORTLAND-HILLSBORO	KHIO	ILS OR LOC RWY 13R	10B	PORTLAND	OR	208	I-HIO

<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>		<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW31L - HIRL, REIL, PAPI-4L		NPI-G	ROLL OUT
RW13R - MALSR (PCL), HIRL, PAPI-4L		PIR-G	APPROACH

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	200	43.5	191.9	880	3.00	49.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
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CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - FINAL FACILITY DOES NOT HAVE DME.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

TERPS PARAGRAPH 289 APPLIED TO 639 AAO 453759.98N-1230122.95W AND 1415 AAO 454023N/1230550W.

RASS PRESSURE PATTERNS SAME
KHIO 208, KPDX 31
RA=59.93

KHIO AND KPDX ON WMSCR.

S-LOC 13R CATS A/B NOT WITHIN APPROACH LIGHT COVERAGE, APPROACH LIGHT CREDIT NOT APPLIED.

NO ADDITIONAL AIRSPACE REQUIRED.

PART E: PREPARED BY

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
LONNIE EVERHART (CHARLES CTR THIBODEAUX)	AJV-5400	03/13/2018	AERONAUTICAL INFORMATION SPECIALIST

QUALITY

19

CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

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