Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 05/10/2011	Task #: 2011051030690901004	Request #: 20110510306909
Procedure: LOC/DME RWY 21 AMDT 8B		Airport ID: KPDX	Airport: PORTLAND INTL		Reimbursable #:
City: PORTLAND	ST: OR	GPS #:		Estimated Chart Date: 05/02/2013	FICO #:
Fac ID: GPO	Fac. Type: LOC	Specialist: CASIMIR TABAKA			

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	11/13/2012	01/17/2013	CASIMIR TABAKA	
QA:	01/17/2013	01/17/2013	CASIMIR TABAKA	
Liaison:	01/17/2013		Spurlin	

P3

Procedure Comments: ENROUTE-NON **Remark Type:** INFORMATION

pkg 1 of 1

PORTLAND, OR PORTLAND INTL (KPDX) LOC/DME RWY 21, AMDT 8B ENROUTE-NO FC: 3.19.13 PUB: 5.2.13

ATTACHED FORMS: 8260-5; 8260-10; 8260-9; 8260-2(S): COVDU-INT, REV 1; CREAK-INT, REV 3; HUDOT-INT, REV 3; JAXAG-INT, REV 1; NULRE-INT, REV 1; YIPYU-INT, REV 1; (INFO ONLY) BATTLE GROUND (BTG) VTAC, REV 25.

CONTACT: PETE GETZ/LONNIE EVERHART-AVN-130 LEADS, 405.954.2079/ 405.954.4576.

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC/DME STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.25

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TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
BTG VORTAC	CREAK INT/I-GPO 18.70 DME	054.25 / 12.46	5700
CREAK INT/I-GPO 18.70 DME (IF/IAF)	NULRE/I-GPO 17.30 DME	209.02 / 1.40 (I-GPO)	5300
NULRE/I-GPO 17.30 DME	YIPYU/I-GPO 14.30 DME	209.02 / 3.00 (I-GPO)	4400
YIPYU/I-GPO 14.30 DME	COVDU/I-GPO 11.30 DME	209.02 / 3.00 (I-GPO)	3500
COVDU/I-GPO 11.30 DME	HUDUT/I-GPO 7.30 DME	209.02 / 4.00 (I-GPO)	2300

MISSED APPROACH

MAP: I-GPO 1.15 DME FIX

CLIMBING RIGHT TURN TO 4200 ON BTG VORTAC R-160 TO BTG VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4200.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 163.83 INBOUND.
CHART FAS OBST: 447 TREE 453657N/1223424W
CHART VDP AT 2.83 DME;
DISTANCE VDP TO THLD 1.68 MILES.
HUDUT TO RW21: 3.43/32.
CHART: MAXIMUM 10000 AT CREAK.

1. PT L SIDE OF COURSE 029.02 OUTBOUND 5700 FT WITHIN 10 MILES OF CREAK (IAF)
2.
3. FAC 209.02 FAF HUDUT/I-GPO 7.30 DME DIST FAF TO MAP THLD 6.15
4. MIN. ALT CREAK 5700, NULRE 5300, YIPYU 4400, COVDU 3500, HUDUT 2300, JAXAG/I-GPO 4.10 DME 1120
8. MSA FROM: BTG VORTAC 120-300 3500, 300-120 6200

MAG VAR: 16E EPOCH YEAR:2010

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A STANDARD @

CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-21	700	1	674	700	1	674	700	1 7/8	674	700	1 7/8	674			
CIRCLING	720	1	689	740	1	709	760	2	729	1000	3	969			

NOTES:

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
CHART NOTE: HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.

@ CAT D 1000-3

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 26	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	I-GPO	LOC/DME RWY 21, AMDT 8B	AMDT 8A
				DATE 01/10/2013

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
X		X	X	X	X	X **ZSE, PDX APCH, AMGR**

FLIGHT CHECKED BY		
NAME: **SCOTT ANDREW THOMPSON**	FIFO **FIOG**	DATE: **07/08/2010**
DEVELOPED BY		
NAME: **PETE GETZ (JOHN R. LINDSEY)**	FIFO **AJV-354**	DATE: **12/10/2012**
APPROVED BY		
NAME: **DEBORAH COPELAND** **MANAGER**	FIFO **AJV-354**	DATE:

CHANGES:

1. REMOVED THE ALTERNATE MISSED APPROACH.
2. DELETED DIST FAF TO MAP AND MADE MAP DME FIX ONLY.

REASONS:

1. PDX VOR/DME DECOMMISSIONED.
2. DME FIX AT THRESHOLD. TIME/DIST TABLE NOT REQUIRED BECAUSE DME IS REQUIRED.

QUALITY A CHECKED

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.25**

Bearings, headings, courses, 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 in feet RVR.

```
ARINC PACKET - 424-18 - LOC

                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        BTG   K1011660VTHW N45445212W122352953    N45445163W122353227E0210002532     NARBATTLE GROUND
        SUSAD KPDXK1 IGPO  K1010890 IT                    IGPON45344797W122370794     000310     NARPORTLAND INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   COVDU K10    R     N45424832W122254604                    E0160     NAR          COVDU
        SUSAEAENRT   CREAK K10    R     N45480110W122181607                    E0160     NAR          CREAK
        SUSAEAENRT   HUDUT K10    R     N45395904W122294869                    E0160     NAR          HUDUT
        SUSAEAENRT   JAXAG K10    R     N45374352W122330252                    E0160     NAR          JAXAG
        SUSAEAENRT   NULRE K10    R     N45470197W122194130                    E0160     NAR          NULRE
        SUSAEAENRT   YIPYU K10    R     N45445519W122224379                    E0160     NAR          YIPYU

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1APDX     0     110YHN45351935W122354873E016000031         1800018000C    MNAR    PORTLAND INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1FL21   ABTG   010BTG  K1D 0V       IF                                          18000                 0 DS
        SUSAP KPDXK1FL21   ABTG   020CREAKK1EA0E       TF                                B 1000005700                    0 DS
        SUSAP KPDXK1FL21   ABTG   030CREAKK1EA0E  AR   PI IGPOK1      0290018734400100PI  + 05700                         0 DS
        SUSAP KPDXK1FL21   ABTG   040NULREK1EA0E       CF IGPOK1      0290017320900014PI  + 05300                         0 DS
        SUSAP KPDXK1FL21   ABTG   050YIPYUK1EA0E       TF                                + 04400                         0 DS
        SUSAP KPDXK1FL21   ABTG   060COVDUK1EA0EE      CF IGPOK1      0290011320900030PI  + 03500                         0 DS
        SUSAP KPDXK1FL21   L      010COVDUK1EA0E  I    IF IGPOK1      02900113        PI  + 03500     18000               0 DS
        SUSAP KPDXK1FL21   L      020HUDUTK1EA0E  F    CF IGPOK1      0290007320900040PI  + 02300                 BTG   K1D 0 DS
        SUSAP KPDXK1FL21   L      021JAXAGK1EA0E S     CF IGPOK1      0290004120900032PI  + 01120             -343         0 DS
        SUSAP KPDXK1FL21   L      030RW21 K1PG0GY M    CF IGPOK1      0290001220900030PI    00058             -343         0 DS
        SUSAP KPDXK1FL21   L      040         0  M     CA                     2090       + 00431                         0 DS
        SUSAP KPDXK1FL21   L      050BTG  K1D 0VY  R   CFYBTG K1      0000000034000110D   + 04200                         0 DS
        SUSAP KPDXK1FL21   L      060BTG  K1D 0VE  R   HM                     1638T010    + 04200                         0 DS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1GRW21    0060002090 N45353861W122360085-0100    -0014500026000032150VIGPO0

                 1         2         3         4         5         6         7         8         9         0         1         2         3
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 26	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	I-GPO	LOC/DME RWY 21, AMDT 8B	AMDT: 8A
				DATED: 01/10/2013

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
LOC STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - FAR PART 97.25

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```
ILS     12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1IIGPO0   010890RW21 N45344975W1223710472090                1000     0572   E0160
                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1SBTG  K1D                 0   1203000622530012003525                                                        M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 26	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	I-GPO	LOC/DME RWY 21, AMDT 8B	AMDT: 8A
				DATED: 01/10/2013

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.25**

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ARINC SUMMARY - 424-18 - LOC

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BTG	BTG	010		IF		FB					
	BTG	CREAK	020		TF		FB				BT 1000005700	
	BTG	CREAK	030	IAF	PI	R	FB		344.0()	010.0	AA 05700	
	BTG	NULRE	040		CF		FB		209.0()	001.4	AA 05300	
	BTG	YIPYU	050		TF		FB				AA 04400	
	BTG	COVDU	060		CF		FB		209.0()	003.0	AA 03500	
		COVDU	010	FACF	IF		FB				AA 03500	
		HUDUT	020	FAF	CF		FB		209.0()	004.0	AA 02300	
		JAXAG	021	SDF	CF		FB		209.0()	003.2	AA 01120	
		RW21	030	MAP	CF		FO		209.0()	003.0	AT 00058	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		209.0()		AA 00431	
	BTG	050		CF	R	FO		340.0()	011.0	AA 04200	
	BTG	060		HM	R	FO		163.8()	T01.0	AA 04200	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	BTG	N454452.12	W1223529.53	N4544.869	W12235.492
	IGPO (DME)	N453447.97	W1223707.94	N4534.800	W12237.132
	COVDU	N454248.32	W1222546.04	N4542.805	W12225.767
	CREAK	N454801.10	W1221816.07	N4548.018	W12218.268
	HUDUT	N453959.04	W1222948.69	N4539.984	W12229.812
	JAXAG	N453743.52	W1223302.52	N4537.725	W12233.042
	NULRE	N454701.97	W1221941.30	N4547.033	W12219.688
	YIPYU	N454455.19	W1222243.79	N4544.920	W12222.730
	RW21	N453538.61	W1223600.85	N4535.644	W12236.014
	IGPO (LOC)	N453449.75	W1223710.47	N4534.829	W12237.175

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW21	00026	32

QUALITY CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 26	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	I-GPO	LOC/DME RWY 21, AMDT 8B	AMDT: 8A
				DATED: 01/10/2013

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER ☐ (specify) _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	BTG VORTAC	CREAK INT/I-GPO	1. AAO	454315.00N/1221739.00W	3681 (4E)	2000		5700
		18.70 DME	2. TERRAIN	454345.00N/1221909.00W	2451 (2500)		AS1500	4000
INITIAL: PT	10 NM	CREAK INT/I-GPO	3. AAO	455145.00N/1220739.00W	4430 (4E)	1000		5500
		18.70 DME	4. TERRAIN	455145.00N/1220739.00W	4230 (4200)		AS1500	5700
INTERMEDIATE	CREAK INT/I-GPO	NULRE/I-GPO	5. AAO	454446.50N/1221421.30W	4600 (6A)	500	PR116	5300
	18.70 DME	17.30 DME	6. TERRAIN	454512.00N/1221427.00W	4289 (4300)		AS1000	5300
	(IF/IAF)							
INTERMEDIATE:	NULRE/I-GPO	YIPYU/I-GPO	7. AAO	454420.55N/1221452.88W	4039 (2C)	500	SA-143	4400
STEPDOWN	17.30 DME	14.30 DME	8. TERRAIN	454442.00N/1221627.00W	2943 (2900)		AS1000	3900
INTERMEDIATE:	YIPYU/I-GPO	COVDU/I-GPO	9. AAO	454304.52N/1221914.22W	2839 (2C)	500	DG100	3500
STEPDOWN	14.30 DME	11.30 DME	10. TERRAIN	454421.00N/1222218.00W	2268 (2300)		AS1000	3300
INTERMEDIATE:	COVDU/I-GPO	HUDUT/I-GPO 7.30	11. AAO	454309.36N/1222515.85W	1319 (2C)	500	DG481	2300
STEPDOWN	11.30 DME	DME	12. TERRAIN	454218.00N/1222506.00W	1070 (1100)		AS1000	2100
FINAL	HUDUT/I-GPO 7.30	JAXAG/I-GPO 4.10	13. AAO	453811.70N/1223125.20W	529 (2C)	250	XL8 DG333	1120
	DME	DME						
2. PROCEDURE TURN	CREAK	10 NM	15. AAO	455809.00N/1220312.00W	4669 (4E)	1000		5700
			16. TERRAIN	455809.00N/1220312.00W	4469 (4500)		AS1000	5500
3. MISSED APPROACH — MAP:	I-GPO 1.15 DME	BTG VORTAC				ASC		4200
	FIX		17. AAO	454624.00N/1224124.00W	719 (4E)	1000		1800
ELEV:			18. TERRAIN	454624.00N/1224124.00W	519 (500)		AS1500	2000

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL		OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
CATEGORY A	1.3 NM	350	689		21. TREE (KPDXT0062)	453657.36N/1223520.82W	415 (1B)	300		720
CATEGORY B	1.5 NM	450	709		22. TREE (KPDXT0063)	453707.20N/1223609.85W	426 (1B)	300		740
CATEGORY C	1.7 NM	450	729		14. TREE (KPDXT0056)	453657.13N/1223423.53W	447 (1B)	300		760
CATEGORY D	2.3 NM	550	969		23. TREE	453248.61N/1223357.21W	684 (2C)	300		1000
CATEGORY E	4.5 NM	550								

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **BTG VORTAC**

QUALITY CHECKED

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
120-300	AAO	255/ 21.6	2465 (6C)	3500					
300-120	AAO	005/ 28.0	5165 (6C)	6200					

CITY AND STATE	ELEVATION: 31 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
PORTLAND, OR	PORTLAND INTL	I-GPO	LOC/DME RWY 21, AMDT 8B	ANM

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
PDX APP CON ZSE ARTCC	X	N W S	OTHER: ASOS	SOURCE: KPDX
		F A A		DISTANCE:
SATISFACTORY ON:		A / C		HOURS REMOTE OPERATION:
X V H F X U H F H F	LOCATION: KPDX/KPDX			ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID: I-GPO	
	MONITOR POINT: PDX ATCT	
	HRS OPTN: CAT 1	24
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING	X	ALSF-2 10R
		(S) SALS
	X	MALSR 10L, 28R, 28L
	X	HIRL 10L, 10R, 28R, 28L
	X	MIRL 21, 03
	X	REIL 21, 03
	X	TDZ 10R
	X	C/L 10L, 10R, 28R, 28L
	X	OTHER (SPECIFY) PAPI-4R 21, 10R, 28R PAPI-4L 10L, 03, 28L
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	PIR-G 10L, 10R, 28R, 28L
	INSTRUMENT	NPI-G 21, 03
7. RUNWAY VISUAL RANGE	APPROACH	10L, 10R, 28R, 28L
	MIDFIELD	10L, 10R, 28R, 28L
	ROLL OUT	10L, 10R, 28R, 28L
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD FT. FROM THRESHOLD
	X	ON CENTERLINE FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: PETE GETZ (JOHN R. LINDSEY)	DATE: 12/10/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-354

PART C - REMARKS:

PARA 251, 34:1 PENETRATION.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BLOCK 2. HRS OPTN: 24.
BLOCK 3. ALTIMETER SETTING
SOURCE: KPDX ASOS. HRS OPTN: 24
ASOS ON SERVICE A. REDUNDANT 24 HOUR WEATHER SOURCES AVAILABLE (NWS), BACKUP NOT REQUIRED.
VGSI DATA: 3.60/32; DESCENT ANGLE HUDUT TO RW21: 3.43/32
TERPS, VOLUME 1, "VISUAL PORTION OF FINAL" PENETRATIONS (FPO NOTIFIED):
34:1 RWY 21:
419 TREE (KPDXT0060) 453656.64N/1223436.46W (109.46)
378 TREE (KPDXT0046) 453643.91N/1223421.43W (73.03)
416 TREE (KPDX0022) 453655.60N/1223428.44W (96.79)
423 TREE (KPDX0021) 453656.71N/1223436.16W (112.87)
359 TREE (KPDX0020) 453641.85N/1223416.58W (51.19)
415 TREE (KPDX0019) 453654.56N/1223435.20W (107.98)
364 TREE (KPDX0018) 453639.20N/1223415.37W (59.97)
387 TREE (KPDX0017) 453646.46N/1223435.70W (97.76)
294 TREE (KPDX0016) 453639.57N/1223439.52W (24.91)
264 TREE (KPDX0015) 453628.74N/1223434.40W (10.13)
244 TREE (KPDX0014) 453638.96N/1223457.24W (2.40)
260 TREE (KPDX0013) 453634.99N/1223454.59W (22.83)

NO ADDITIONAL AIRSPACE REQUIRED.

VEGETATION HEIGHTS PROVIDED BY I-TEN PHOTOGRAMMETRY DIVISION THROUGH PORT OF PORTLAND AND FPO:
WASHINGTON SIDE OF THE COLUMBIA RIVER: 85 FT
OREGON SIDE OF the COLUMBIA RIVER: 75 FT
GOVERNMENT ISLAND: 130 FT

INTERMEDIATE SEGMENT EVALUATED MANUALLY DUE TO MULTIPLE STEPDOWN.
5. OBSTACLE LOCATED 1928 FEET INTO SECONDARY AREA, NO REDUCTION APPLIED.
7. OBSTACLE LOCATED 3213 FEET INTO SECONDARY AREA.

PT AREA RESTRICTED TO SMALLER PATTERN SIZE DUE TO AIRSPACE.
DME FIX USE FOR ACTUAL PT, CROSSING RADIAL FROM BTG VORTAC NEEDED TO LOCATE FIX FROM ENROUTE STRUCTURE.

QUALITY CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FINAL: STEPDOWN	**JAXAG/I-GPO 4.10**	**I-GPO 1.15 DME**	**14. TREE (KPDXT0056)**	**453657.13N/1223423.53W**	**447 (1B)**	**250**		**700**
	DME	**FIX**						

3. MISSED APPROACH									
	MAP:								
	ELEV:								

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.							
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL					
CATEGORY B	1.5 NM		450						
CATEGORY C	1.7 NM		450						
CATEGORY D	2.3 NM		550						
CATEGORY E	4.5 NM		550						

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

QUALITY CHECKED

CITY AND STATE	ELEVATION: 31 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
PORTLAND, OR	**PORTLAND INTL**	**I-GPO**	**LOC/DME RWY 21, AMDT 8B**	**ANM**

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
SATISFACTORY ON:		N W S	OTHER:	SOURCE:
		F A A		DISTANCE:
		A / C		HOURS REMOTE OPERATION:
V H F / U H F / H F	LOCATION:			ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	
5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

RADIO FIX AND HOLDING DATA RECORD

NAME: COVDU **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454248.32N/1222546.04W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PORTLAND	I-GPO	LOC/DME		029.02	045.02	11.30	11.30		3500	4500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LOC/DME RWY 21	1		KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 05/02/2013

REASON FOR REVISION:
DELETED ESV.
CHANGED FAC 1 MAA FROM 6000 TO 4500.
CORRECTED FAC 1 MAG BRG FROM 025.02 TO 029.02.

DEVELOPED BY: **DATE:** 12/07/2012 **OFFICE:** AJV-354 **NAME:** PETER GETZ (JOHN LINDSEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: PDX ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CREAK **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454801.10N/1221816.07W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PORTLAND	I-GPO	LOC/DME		029.02	045.02	18.70	18.70		5700	6000
2	BATTLE GROUND	BTG	VORTAC	H	054.25	075.25		12.46		5700	6000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-GPO	LOC/DME	R-029	19	5700	6000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LOC/DME RWY 21	1, 2		KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 05/02/2013

REASON FOR REVISION:
CHANGED ESV DATA FROM R-025, 30, 5300, 10000 TO READ R-029, 19, 5700, 6000.
CORRECTED FAC 1 MAG BRG FROM 025 TO 029
CHANGED FAC 1 AND FAC 2 MAA FROM 10000 TO 6000.

DEVELOPED BY: **DATE:** 12/07/2012 **OFFICE:** AJV-354 **NAME:** PETER GETZ (JOHN LINDSEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: PDX ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HUDUT **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 453959.04N/1222948.69W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PORTLAND	I-GPO	LOC/DME		029.02	045.02	7.30	7.30		2300	4500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LOC/DME RWY 21	1		KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 05/02/2013

REASON FOR REVISION:
FAC 1 MAG BRG CORRECTED FROM 025.02 TO 029.02

DEVELOPED BY: **DATE:** 12/07/2012 **OFFICE:** AJV-354 **NAME:** PETER GETZ (JOHN LINDSEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: PDX ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JAXAG **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 453743.52N/1223302.52W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PORTLAND	I-GPO	LOC/DME		029.02	045.02	4.10	4.10		1020	4500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LOC/DME RWY 21	1		KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 05/02/2013

REASON FOR REVISION:
FAC 1 MAG BRG CORRECTED FROM 025.02 TO 029.02

DEVELOPED BY: **DATE:** 12/07/2012 **OFFICE:** AJV-354 **NAME:** PETER GETZ (JOHN LINDSEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: PDX ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NULRE **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454701.97N/1221941.30W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PORTLAND	I-GPO	LOC/DME		029.02	045.02	17.30	17.30		5300	6000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-GPO	LOC/DME	R-029	18	4500	6000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LOC/DME RWY 21	1		KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 05/02/2013

REASON FOR REVISION:
CORRECTED FAC 1 MAG BRG FROM 025.02 TO 029.02.
CHANGED ESV DATA FROM R-025, 20, 4000, 10000 TO READ R-029, 18, 4500, 6000.

DEVELOPED BY: **DATE:** 12/10/2012 **OFFICE:** AJV-354 **NAME:** PETER GETZ (JOHN LINDSEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: PDX ATCT
OTHER:

QUALITY 2 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: YIPYU **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454455.19N/1222243.79W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PORTLAND	I-GPO	LOC/DME		029.02	045.02	14.30	14.30		4400	4500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	LOC/DME RWY 21	1		KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 05/02/2013

REASON FOR REVISION:
DELETED ESV.
CORRECTED FAC 1 MAG BRG FROM 025.02 TO 029.02
CHANGED FAC 1 MAA FROM 6000 TO 4500.

DEVELOPED BY: **DATE:** 12/07/2012 **OFFICE:** AJV-354 **NAME:** PETER GETZ (JOHN LINDSEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEBORAH COPELAND

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: PDX ATCT
OTHER:

QUALITY 2 CHECKED

INFO ONLY

RADIO FIX AND HOLDING DATA RECORD

NAME: BATTLE GROUND VORTAC **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454452.12N/1223529.53W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FAC FEET	MRA	MAA
1	BATTLE GROUND	BTG	VORTAC	H							45000

FIX RESTRICTIONS:
MCA V468 5000 NORTHEAST BOUND
MCA V112-182-520 4700 EASTBOUND
MCA V448 9400 NORTHEAST BOUND

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NW	BTG	VORTAC	329.16	149.16	R	1		4200	14000	5	18
2	N	BTG	VORTAC	343.83	163.83	R	1		4200	14000	5	18
3	S	BTG	VORTAC	163.00	343.00	R	1-1 1/2		4000	45000	4	29
4	N		WP	345.00	165.00	R		5	4200	14000	6	19
5	S		WP	163.00	343.00	R		10	24000	40000	23	31
6	NW	BTG	VORTAC	329.16	149.16	R	1-1 1/2		4200	10000	15	15

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	455430.60N/1224203.74W	1162	2A
1	310	AAO	455935.60N/1223547.85W	3155	2A
2	200	AAO	455500.00N/1223424.00W	1559	4E
2	310	AAO	455935.60N/1223547.85W	3155	2A
3	200	AAO	454703.00N/1223106.00W	837	4E
4	200	AA0	455515.00N/1223427.00W	1615	4E
4	310	AAO	455935.60N/1223547.85W	3155	2A
5	310	AAO	454446.50N/1221421.30W	4600	4E
6	310	AAO	455935.60N/1223547.85W	3155	2A

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
5	310	197

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	VOR/DME A	KSPB	SCAPPOOSE	OR (US)
1	VOR-A	KPDX	PORTLAND	OR (US)
2	LDA-A	KVUO	VANCOUVER	WA (US)
2	ILS OR LOC RWY 10L	KPDX	PORTLAND	OR (US)
2	ILS OR LOC RWY 28R	KPDX	PORTLAND	OR (US)
4	RNAV (GPS) Y RWY 10L	KPDX	PORTLAND	OR (US)
4	RNAV (RNP) Z RWY 10L	KPDX	PORTLAND	OR (US)
4	RNAV (GPS) X RWY 28R	KPDX	PORTLAND	OR (US)
4	RNAV (RNP) Y RWY 28R	KPDX	PORTLAND	OR (US)
4	RNAV (RNP) Z RWY 28R	KPDX	PORTLAND	OR (US)
6	TAKEOFF MINIMUMS	KSPB	SCAPPOOSE	OR (US)
6	TAKEOFF MINIMUMS	KVUO	VANCOUVER	WA (US)
6	TAKEOFF MINIMUMS	KPDX	PORTLAND	OR (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 3 REQUESTED BY PDX APP CON AND ZSE
CHART PAT 3 ENROUTE HIGH AND LOW
PAT 5 10 MILE LEG PER ATC REQUEST, MAX DME LEG LENGTH FOR TEMPLATE 23 IS 12 NM.
PAT 6 CLIMB-IN-HOLD EVALUATED TO 10000 FT.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	EUGENE			KEUG	EUGENE	OR (US)
DP	CANBY			KHIO	PORTLAND	OR (US)
DP	SCAPO			KHIO	PORTLAND	OR (US)
DP	CASCADE (RNAV)			KPDX	PORTLAND	OR (US)
DP	HRMNS (RNAV)			KPDX	PORTLAND	OR (US)
DP	LAVAA (RNAV)			KPDX	PORTLAND	OR (US)
DP	MINNE (RNAV)			KPDX	PORTLAND	OR (US)
DP	PORTLAND			KPDX	PORTLAND	OR (US)

QUALITY CHECKED 2

DP	TAKEOFF MINIMUMS	6	KPDX	PORTLAND	OR (US)
DP	WHAMY (RNAV)		KPDX	PORTLAND	OR (US)
DP	BLUE LAKE		KTTD	PORTLAND	OR (US)
DP	TAKEOFF MINIMUMS		KTTD	PORTLAND	OR (US)
DP	REDMOND		KRDM	REDMOND	OR (US)
DP	SALEM		KSLE	SALEM	OR (US)
DP	TAKEOFF MINIMUMS	6	KSPB	SCAPPOOSE	OR (US)
DP	TAKEOFF MINIMUMS		KKLS	KELSO	WA (US)
DP	YELM		KOLM	OLYMPIA	WA (US)
DP	KENT		KBFI	SEATTLE	WA (US)
DP	NEEDLE		KBFI	SEATTLE	WA (US)
DP	SEATTLE		KSEA	SEATTLE	WA (US)
DP	TAKEOFF MINIMUMS	6	KVUO	VANCOUVER	WA (US)
DP	NACHES		KYKM	YAKIMA	WA (US)
EN ROUTE	J1				(US)
EN ROUTE	J136				(US)
EN ROUTE	J15				(US)
EN ROUTE	J159				(US)
EN ROUTE	J16				(US)
EN ROUTE	J189				(US)
EN ROUTE	J67				(US)
EN ROUTE	J82				(US)
EN ROUTE	V112				(US)
EN ROUTE	V182				(US)
EN ROUTE	V23				(US)
EN ROUTE	V287				(US)
EN ROUTE	V448	3			(US)
EN ROUTE	V468				(US)
EN ROUTE	V495				(US)
EN ROUTE	V500				(US)
EN ROUTE	V520				(US)
IAP	LOC RWY 17		KUAO	AURORA	OR (US)
IAP	ILS OR LOC RWY 22		KMMV	MC MINNVILLE	OR (US)
IAP	RNAV (GPS) RWY 22		KMMV	MC MINNVILLE	OR (US)
IAP	ILS OR LOC RWY 13		KHIO	PORTLAND	OR (US)
IAP	NDB-B		KHIO	PORTLAND	OR (US)
IAP	RNAV (GPS) RWY 13		KHIO	PORTLAND	OR (US)
IAP	HI-ILS OR LOC/DME RWY 10R		KPDX	PORTLAND	OR (US)
IAP	HI-ILS OR LOC/DME RWY 28R		KPDX	PORTLAND	OR (US)
IAP	HI-TACAN RWY 10R		KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 10L	2	KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 28L		KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 28R	2	KPDX	PORTLAND	OR (US)
IAP	LOC/DME RWY 21	2	KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) RWY Y 10R		KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) X RWY 28R	4	KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) Y RWY 10L	4	KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Y RWY 28R	4	KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10L	4	KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 28R	4	KPDX	PORTLAND	OR (US)
IAP	TACAN RWY 28L		KPDX	PORTLAND	OR (US)
IAP	VOR-A	1	KPDX	PORTLAND	OR (US)
IAP	NDB OR GPS-A		KTTD	PORTLAND	OR (US)
IAP	LOC/DME RWY 31		KSLE	SALEM	OR (US)
IAP	LOC/DME RWY 15	1	KSPB	SCAPPOOSE	OR (US)
IAP	RNAV (GPS) RWY 15		KSPB	SCAPPOOSE	OR (US)
IAP	VOR/DME A	1	KSPB	SCAPPOOSE	OR (US)
IAP	NDB-A		KKLS	KELSO	WA (US)
IAP	LDA-A	2	KVUO	VANCOUVER	WA (US)
STAR	HELNS		KUAO	AURORA	OR (US)
STAR	HELNS		KHIO	PORTLAND	OR (US)
STAR	HELNS		KPDX	PORTLAND	OR (US)
STAR	MOXEE		KPDX	PORTLAND	OR (US)
STAR	HELNS		KTTD	PORTLAND	OR (US)
STAR	HAWKZ (RNAV)	5	KSEA	SEATTLE	WA (US)
STAR	OLYMPIA	3	KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW, EN ROUTE HIGH

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 25 **DATE OF REVISION:** 03/07/2013

REASON FOR REVISION:
ADDED HOLDING PAT 5 AND 6.
CHANGED PAT 1 MIN/MAX TEMPLATES FROM 4/10 TO 5/18 AND PAT 4 MAX TEMPLATE FROM 11 TO 19.
UPDATED FIX USE, ADDED HAWKZ (RNAV) STAR AND CHANGED HOLDING FROM PAT 1 TO PAT 6 FOR THE TAKEOFF MINIMUMS AT KPDX, KSPB AND KVUO, MIN ALT 6800 FROM
ADDED REMARKS, "PAT 5 10 MILE LEG PER ATC REQUEST, MAX DME LEG LENGTH FOR TEMPLATE 23 IS 12 NM" AND "PAT 6 CLIMB-IN-HOLD EVALUATED TO 10000 FT."

DEVELOPED BY: **DATE:** 09/10/2012 **OFFICE:** AJV-354 **NAME:** DION LANCIA

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

QUALITY 2 CHECKED

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: SEA APP CON
OTHER:

QUALITY 2