US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33

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.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
CIZZL (IAF)	DAYSS (TF) (FB) (RNP 1.00)	283.18 / 3.99	4500
DAYSS (IF)	RIPPP (RF) (FB) (RNP 1.00)	(2.51 NM RADIUS CCW (CFFWG)/3.46	3500
VOODU (IAF)	RIPPP (TF) (FB) (RNP 1.00)	204.41 / 5.00	3500
RIPPP (IF)	TTIDE (RF) (FB) (RNP 1.00)	(2.51 NM RADIUS CCW (CFFWG)/4.45	2300
MYCRO (IAF)	GAMBE (TF) (FB) (RNP 1.00)	328.06 / 4.58	4000
(SEE FORM 8260-10)			

MISSED APPROACH

RNP: DA

CLIMB TO 800 THEN CLIMBING LEFT TURN TO 4200 DIRECT BTG VORTAC AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4200.

ADDITIONAL FLIGHT DATA:

HOLD N, RT, 165.00 INBOUND.
DISTANCE TO THLD FROM 335 HATH: 0.90 NM.
ROUTE TYPE: A,H
ROUTE TYPE QUALIFIER1: F
ROUTE TYPE QUALIFIER2: S
#TCH 79.1 MSL (DO NOT CHART)
CHART LOC RWY 10R
CHART KVUO IN PLANVIEW
CHART AT/ABOVE 5000 AT CIZZL
CHART MANDATORY 5000 AT MYCRO
CHART MANDATORY 5000 AT VOODU

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT BLAZR
3. FAC: 102.94 FAF: ____ DIST FAF TO MAP: ____ THLD: ____
4. MIN. ALT: BLAZR 2000
5. DIST TO THLD FROM OM: 6.03 MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2000 GS ALT AT: BLAZR 2000 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 49.3# 34:1 IS CLEAR
8. MSA FROM: RW10L 5800

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		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.30 DA	365	3200	335	365	3200	335	365	3200	335	365	3200	335			

NOTES:
CHART NOTE: GPS REQUIRED.
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE RNP 0.30 ALL CATS VISIBILITY TO RVR 5500
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.
CHART PLANVIEW NOTE: RADAR REQUIRED
(SEE FORM 8260-10)

QUALITY A CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 30 AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
PORTLAND, OR	PORTLAND INTL	RNAV	RNAV (RNP) Z RWY 10L, ORIG	AMDT: NONE
				DATED

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

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[X]	[X]	[X]	[X] **ZSE, PDX ATCT, ARPT MGR, ST AERO**

FLIGHT CHECKED BY

NAME:	FIFO	DATE:

DEVELOPED BY

NAME:	FIFO	DATE:
CHARLIE SCHNEIDER	**AJV-354**	**04/17/2012**

APPROVED BY

NAME:		FIFO	DATE:
DEZ SILAGYI	**MANAGER**	**AJV-354**	

CHANGES:

ORIGINAL PROCEDURE

REASONS:

FPT REQUEST

EFFECTIVE CONCURRENT WITH: KPDX ILS OR LOC RWY 10L AMDT 4

6/12/12: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 04/17/12.
1. ADDITIONAL FLIGHT DATA ADDED CHART ALTITUDES: AT/ABOVE 5000 AT CIZZL, 5000 AT MYCRO, AND 5000 AT VOODU.
2. REMOVED 6.03 FROM DIST FAF TO MAP FROM LINE 3.

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
GAMBE (IF)	TTIDE (RF) (FB) (RNP 1.00)	(2.50 NM RADIUS CW (CFFWH)/5.88	2300
BUXOM (IF)	TRAYL (TF) (FB) (RNP 1.00)	102.84 / 3.72	2300
TRAYL	TTIDE (TF) (FB) (RNP 1.00)	102.90 / 2.03	2300
TTIDE	BLAZR (TF) (FB) (RNP 0.40)	102.93 /0.97	2000
BLAZR (FAF)	RW10L (MAP) (TF) (FO)	102.94 / 6.03	
RW10L (MAP)	800 MSL (CA)	102.94	800
800 MSL	BTG VORTAC (DF) (FO)		4200

NOTES, (CONT.):
CHART PLANVIEW NOTE AT CIZZL, VOODU, AND MYCRO: MAX 210 KIAS
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -15C (5F) OR ABOVE 54C (130F)
CHART PLANVIEW NOTE ADJACENT TO CIZZL IAF: RF REQUIRED
CHART PLANVIEW NOTE ADJACENT TO MYCRO IAF: RF REQUIRED
CHART PLANVIEW NOTE ADJACENT TO VOODU IAF: RF REQUIRED
CHART PLANVIEW NOTE AT VOODU: (RNP 0.40)
CHART PLANVIEW NOTE AT CIZZL: (RNP 0.40)
CHART PLANVIEW NOTE AT BUXOM: (RNP 0.40)
CHART PLANVIEW NOTE AT MYCRO: (RNP 0.40)
CHART NOTE: USE OF FD OR AP PROVIDING RNAV TRACK GUIDANCE REQUIRED DURING SIMULTANEOUS OPERATIONS
CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED WITH RWY 10R

CITY AND STATE	ELEVATION: 31 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	RNAV	RNAV (RNP) Z RWY 10L, ORIG	AMDT: NONE
				DATED:

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

COORDINATED WITH:

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

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

CHANGES:

REASONS:

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ARINC PACKET - 424-18 - RNAV (RNP)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAD        BTG   K1011660VTHW N45445212W122352953    N45445163W122353227E0210002532     NARBATTLE GROUND

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BLAZR K10    C     N45383662W122431524                    E0161     NAR           BLAZR
        SUSAEAENRT   BUXOM K10    C     N45415127W122513838                    E0161     NAR           BUXOM
        SUSAEAENRT   CFFWG K10    W     N45411690W122424403                    E0161     NAR           CNF(CFFWG)
        SUSAEAENRT   CFFWH K10    W     N45365361W122461149                    E0161     NAR           CNF(CFFWH)
        SUSAEAENRT   CIZZL K10    W     N45413202W122360067                    E0161     NAR           CIZZL
        SUSAEAENRT   DAYSS K10    W     N45432867W122405923                    E0161     NAR           DAYSS
        SUSAEAENRT   GAMBE K10    W     N45361241W122493694                    E0161     NAR           GAMBE
        SUSAEAENRT   MYCRO K10    W     N45314813W122474943                    E0161     NAR           MYCRO
        SUSAEAENRT   RIPPP K10    W     N45425448W122452820                    E0161     NAR           RIPPP
        SUSAEAENRT   TRAYL K10    C     N45400367W122465988                    E0161     NAR           TRAYL
        SUSAEAENRT   TTIDE K10    W     N45390488W122442813                    E0161     NAR           TTIDE
        SUSAEAENRT   VOODU K10    W     N45464284W122405082                    E0161     NAR           VOODU

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1APDX     0     110YHN45351935W122354873E016000031        1800018000C    MNAR    PORTLAND INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1FH10LZ ABUXOM 010BUXOMK1EA0E  B    IF                                                  18000              A FS
        SUSAP KPDXK1FH10LZ ABUXOM 020TRAYLK1EA0E    010TF                                        + 02300                       A FS
        SUSAP KPDXK1FH10LZ ABUXOM 030TTIDEK1EA0EE   010TF                                        + 02300                       A FS
        SUSAP KPDXK1FH10LZ ACIZZL 010CIZZLK1EA0E  A    IF                                        + 05000    18000210           A-FS
        SUSAP KPDXK1FH10LZ ACIZZL 020DAYSSK1EA0E  B 010TF                                        + 04500                       A FS
        SUSAP KPDXK1FH10LZ ACIZZL 030RIPPPK1EA0E   L010RF      0025102832    20440035          + 03500            CFFWG K1EAA FS
        SUSAP KPDXK1FH10LZ ACIZZL 040TTIDEK1EA0EE  L010RF      0025102044    10290045          + 02300            CFFWG K1EAA FS
        SUSAP KPDXK1FH10LZ AMYCRO 010MYCROK1EA0E  A    IF                                          05000    18000210           A-FS
        SUSAP KPDXK1FH10LZ AMYCRO 020GAMBEK1EA0E  B 010TF                                        + 04000                       A FS
        SUSAP KPDXK1FH10LZ AMYCRO 030TTIDEK1EA0EE  R010RF      0025003281    10290059          + 02300            CFFWH K1EAA FS
        SUSAP KPDXK1FH10LZ AVOODU 010VOODUK1EA0E  A    IF                                          05000    18000210           A-FS
        SUSAP KPDXK1FH10LZ AVOODU 020RIPPPK1EA0E  B 010TF                                        + 03500                       A FS
        SUSAP KPDXK1FH10LZ AVOODU 030TTIDEK1EA0EE  L010RF      0025102044    10290045          + 02300            CFFWG K1EAA FS
        SUSAP KPDXK1FH10LZ H      010TTIDEK1EA0E  I    IF                                        + 02300    18000           A FS
        SUSAP KPDXK1FH10LZ H      020BLAZRK1EA1E  F 041TF                                        + 02000                RW10L K1PGA FS
```

QUALITY 1 CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: **PORTLAND INTL**	**RNAV**	**RNAV (RNP) Z RWY 10L, ORIG**	AMDT: **NONE**
				DATED:

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

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:

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```
        SUSAP KPDXK1FH10LZ H      020BLAZRK1EA2W                                          A031                          FS
        SUSAP KPDXK1FH10LZ H      030RW10LK1PG0GY M 031TF                                 00079            -300         A FS
        SUSAP KPDXK1FH10LZ H      040         0  M     CA                    1029       + 00800                        A FS
        SUSAP KPDXK1FH10LZ H      050BTG  K1D 0VY  L   DF                                + 04200                        A FS
        SUSAP KPDXK1FH10LZ H      060BTG  K1D 0VE  R   HM                    16500050    + 04200                        A FS
```

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1GRW10L   0098251030 N45354128W122354419+0000    -0013700030129049150IIVDG1
```

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KPDXK1SRW10LK1PG                0   18018005825                                                                  M
```

QUALITY CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	RNAV	RNAV (RNP) Z RWY 10L, ORIG	AMDT: NONE
				DATED:

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

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

RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC SUMMARY - 424-18 - RNAV (RNP)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BUXOM	BUXOM	010		IF		FB					
	BUXOM	TRAYL	020		TF		FB	1.0			AA 02300	
	BUXOM	TTIDE	030		TF		FB	1.0			AA 02300	
	CIZZL	CIZZL	010	IAF	IF		FB				AA 05000	AB 210
	CIZZL	DAYSS	020		TF		FB	1.0			AA 04500	
	CIZZL	RIPPP	030		RF	L	FB	1.0		003.5	AA 03500	
	CIZZL	TTIDE	040		RF	L	FB	1.0		004.5	AA 02300	
	MYCRO	MYCRO	010	IAF	IF		FB				AT 05000	AB 210
	MYCRO	GAMBE	020		TF		FB	1.0			AA 04000	
	MYCRO	TTIDE	030		RF	R	FB	1.0		005.9	AA 02300	
	VOODU	VOODU	010	IAF	IF		FB				AT 05000	AB 210
	VOODU	RIPPP	020		TF		FB	1.0			AA 03500	
	VOODU	TTIDE	030		RF	L	FB	1.0		004.5	AA 02300	
		TTIDE	010	FACF	IF		FB				AA 02300	
		BLAZR	020	FAF	TF		FB	0.4			AA 02000	
		RW10L	030	MAP	TF		FO	0.3			AT 00079	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		102.9(118.9T)		AA 00800	
	BTG	050		DF	L	FO				AA 04200	
	BTG	060		HM	R	FO		165.0(181.0T)	005.0	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
	BLAZR	N453836.62	W1224315.24	N4538.610	W12243.254
	BUXOM	N454151.27	W1225138.38	N4541.855	W12251.640
	CFFWG	N454116.90	W1224244.03	N4541.282	W12242.734
	CFFWH	N453653.61	W1224611.49	N4536.894	W12246.192
	CIZZL	N454132.02	W1223600.67	N4541.534	W12236.011
	DAYSS	N454328.67	W1224059.23	N4543.478	W12240.987
	GAMBE	N453612.41	W1224936.94	N4536.207	W12249.616
	MYCRO	N453148.13	W1224749.43	N4531.802	W12247.824
	RIPPP	N454254.48	W1224528.20	N4542.908	W12245.470
	TRAYL	N454003.67	W1224659.88	N4540.061	W12246.998
	TTIDE	N453904.88	W1224428.13	N4539.081	W12244.469
	VOODU	N454642.84	W1224050.82	N4546.714	W12240.847
	RW10L	N453541.28	W1223544.19	N4535.688	W12235.737

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH

CITY AND STATE	ELEVATION: 31 THRE: 30 / AIRPORT NAME:	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	**PORTLAND INTL**	**RNAV**	**RNAV (RNP) Z RWY 10L, ORIG**	AMDT: **NONE**
				DATED:

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

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:

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RW10L 00030 49

QUALITY CHECKED

CITY AND STATE	ELEVATION: 31 THRE: 30	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
PORTLAND, OR	AIRPORT NAME: PORTLAND INTL	RNAV	RNAV (RNP) Z RWY 10L, ORIG	AMDT: NONE
				DATED:

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

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.
INITIAL	CIZZL	DAYSS	1. AAO	454403.00N/1223836.00W	712 (4E)	1000	AC98 AT2690	4500
(RNP 1.00)			2. TERRAIN	454403.00N/1223836.00W	512 (500)		AS1500	2000
INTERMEDIATE	DAYSS	RIPPP	1. AAO	454403.00N/1223836.00W	712 (4E)	500	AC98 AT2190	3500
(RNP 1.00)			3. TERRAIN	454454.00N/1224109.00W	368 (400)		AS1500	1900
INITIAL	VOODU	RIPPP	4. AAO	454624.00N/1224124.00W	719 (4E)	1000	AC98 AT1683	3500
(RNP 1.00)			5. TERRAIN	454624.00N/1224124.00W	519 (500)		AS1500	2000
INTERMEDIATE	RIPPP	TTIDE	6. AAO	454127.00N/1224409.00W	296 (4E)	500	AC98 AT1406	2300
(RNP 1.00)			7. TERRAIN	454127.00N/1224421.00W	96 (100)		AS1500	1600
INITIAL	MYCRO	GAMBE	8. TOWER (41-000395)	453121.42N/1224511.35W	2049 (5D)	1000	AC50 AT901	4000
(RNP 1.00)			9. TERRAIN	453251.00N/1224557.00W	1277 (1300)		AS1500	2800
INTERMEDIATE	GAMBE	TTIDE	10. AAO	453530.00N/1224854.00W	1323 (4E)	500	AC98 AT379	2300
(RNP 1.00)			11. TERRAIN	453633.00N/1224948.00W	1093 (1100)		AS1000	2100
INTERMEDIATE	BUXOM	TRAYL	12. AAO	454039.00N/1225415.00W	1195 (4E)	500	AC98 AT507	2300
(RNP 1.00)			13. TERRAIN	454006.00N/1225303.00W	332 (300)		AS1500	1800
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA	BTG VORTAC				ASC		4200
			19. AAO	453915.00N/1222724.00W	1011 (3E)	1000	AC128	2200
ELEV:	204		20. TERRAIN	453915.00N/1222724.00W	811 (800)	1500		2300

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
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: **RW10L**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	AAO	037/ 28.7	4760 (6C)	5800					

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
PORTLAND, OR	ELEVATION: 31 AIRPORT NAME: PORTLAND INTL	RNAV	RNAV (RNP) Z RWY 10L, ORIG	ANM

PART B - SUPPLEMENTAL DATA

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

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		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: 3.00	ELEV RWY THRESHOLD: 29.8
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 49.3

9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: CHARLIE SCHNEIDER	DATE: 04/17/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-354

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

SEE ATTACHED AIRSPACE LETTER.

MISSED APPROACH IAW 8260.54A, IPDS BUILD
25 DEGREE BANK ANGLE USED IN MISSED APPROACH TO ALLOW FOR MINIMUM SEGMENT LENGTH

ACT: -15, HISTORICAL WEATHER NOT AVAILABLE
"AVERAGE COLD TEMPERATURE BASED ON STANDARD -30C ISA DEVIATION"
DELTA ISA LOW: -29.9384

VEB ROC APPLIED/USED.
VEB DATA: SEE ATTACHED SPREADSHEETS.

BACK-UP ALTIMETER NOT PUBLISHED, REDUNDANT REPORTING ON AIRPORT.

VGSI DATA: 3.00/51.0

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

RF SEGMENT RADIUS/BANK ANGLE COMPUTATIONS:

SEGMENT	ALT	KIAS	KTAS	HAA	VKTW*	TR	BA
GAMBE- TTIDE	4000	210	226.80	3969.2	50.0	2.50	24.09
DAYSS-RIPPP	4500	210	228.90	4469.2	52.0	2.51 (15279.63FT)	24.60
RIPPP-TTIDE	3500	210	224.70	3469.2	51.0	2.51 (15279.63FT)	23.80

*VKTW: OBTAINED FROM HISTORICAL WIND DATA (MITRE)

MAX SPEED MYCRO TO GAMBE - 210 KIAS
MAX SPEED GAMBE TO TTIDE - 210 KIAS
MAX SPEED TTIDE TO BLAZR - 210 KIAS
MAX SPEED VOODU TO RIPPP - 210 KIAS

APPLIED PBN MEMO 10/3/11 TO REMAIN UNDER 25 DEGREES FOR RF LEGS

PROCEDURE ENTRY NOT CONNECTED TO ENROUTE STRUCTURE PER AIR TRAFFIC/LEAD AIR CARRIER FOR FUTURE STARS. RADAR REQUIRED.

QUALITY 4

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INTERMEDIATE:	TRAYL	TTIDE	14. AAO	454024.00N/1224157.00W	289 (4E)	500	AC98 AT1413	2300
STEPDOWN			15. TERRAIN	454136.00N/1224506.00W	89 (100)		AS1500	1600
(RNP 1.00)								
INTERMEDIATE:	TTIDE	BLAZR	16. T-L TWR	453828.00N/1224244.00W	542 (4D)	500	AC50 AT908	2000
STEPDOWN			(53-000456)					
(RNP 0.40)			17. TERRAIN	453900.00N/1224412.00W	86 (100)		AS1500	1700
FINAL: RNP 0.30	BLAZR	RW10L				ASC	MA75	365/335
MISSED APPROACH	DA	RW10L	18. CTRL TWR (41-020289)	453515.16N/1223520.69W	291 (1A)	ASC	AC3	
(RNP 0.30-1.00)		(40:1)						
MISSED APPROACH	RW10L	DPK VOR/DME				ASC		
(RNP 0.30-1.00)								

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

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
PORTLAND, OR	ELEVATION: 31 AIRPORT NAME: PORTLAND INTL	RNAV	RNAV (RNP) Z RWY 10L, ORIG	ANM

QUALITY CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
SATISFACTORY ON:	☐ NWS ☐ FAA ☐ A/C OTHER:	SOURCE: DISTANCE: HOURS REMOTE OPERATION:
☐ VHF ☐ UHF ☐ HF	LOCATION:	ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		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: BATTLE GROUND VORTAC **STATE:** WA **COUNTRY:** US

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

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	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		4000	14000	4	10
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	11

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	AAO	455515.00N/1223427.00W	1615	4E
4	310	AAO	455935.60N/1223547.85W	3155	2A

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	TAKEOFF MINIMUMS	KSPB	SCAPPOOSE	OR (US)
1	VOR-A	KPDX	PORTLAND	OR (US)
1	TAKEOFF MINIMUMS	KVUO	VANCOUVER	WA (US)
1	TAKEOFF MINIMUMS	KPDX	PORTLAND	OR (US)
2	VOR/DME RWY 21	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)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 3 REQUESTED BY PDX APP CON AND ZSE
CHART PAT 3 ENROUTE HIGH AND LOW

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	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)
DP	RIVER			KPDX	PORTLAND	OR (US)
DP	TAKEOFF MINIMUMS		1	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		1	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	1	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 28R	2	KPDX	PORTLAND	OR (US)
IAP	LOC/DME RWY 21	2	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 RWY 28R	2	KPDX	PORTLAND	OR (US)
IAP	VOR-A	1	KPDX	PORTLAND	OR (US)
IAP	VOR/DME RWY 21	2	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	BONVL		KPDX	PORTLAND	OR (US)
STAR	HELNS		KPDX	PORTLAND	OR (US)
STAR	MOXEE		KPDX	PORTLAND	OR (US)
STAR	HELNS		KTTD	PORTLAND	OR (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: 24 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FIX USE
REMOVED PAT 4, PDX VOR/DME TO BE DECOMMISONED
REMOVED FAC 2,3,4, ATC REQUEST
ADDED NEW HOLDING PATTERN 4
REMOVED PAT 5, PROCEDURES NOT DEVELOPED

DEVELOPED BY: **DATE:** 04/17/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: BLAZR **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 453836.62N/1224315.24W **TYPE:** WP, RADAR, 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-VDG	LOC/DME		283.03	299.03	5.68	7.60	46196	2000	4500
2	BATTLE GROUND	BTG	VORTAC	H	200.04	221.04		8.29		2000	4500

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

REMARKS:
PORTLAND (FAC 1) USED TO ESTABLISH FIX COORDINATES
DME SOURCE FOR I-VDG: 453547.95N/1223613.55W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 10L	1, 2		KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) Y RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
FIX MOVED 594.95 FT, COORDINATES REVISED
FAC 1 MAG BRG CHANGED FROM 279.03 TO 283.03, FAC 1 MAGVAR CHANGE FROM 20E TO 16E
FAC 1 DME CHANGED FROM 5.58 TO 5.68, DIST FROM FAC 7.50 TO 7.60, 45601 FT TO 46196 FT
UPDATED FIX USE
FAC 2 BRG CHANGED FROM 199.38/220.38 TO 200.04/221.04, DIST FROM FAC FROM 8.27 TO 8.29

DEVELOPED BY: **DATE:** 04/12/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: BUXOM **STATE:** OR **COUNTRY:** US

LATITUDE/LONGITUDE: 454151.27N/1225138.38W **TYPE:** WP, RADAR, 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-VDG	LOC/DME		283.03	299.03	12.39	14.32		3000	4500
2	BATTLE GROUND	BTG	VORTAC	H	234.17	255.17		11.71		3000	4500

HOLDING: **HOLDING TYPE OF ACTION:** CANCEL

REMARKS:
PORTLAND (FAC 1) USED TO ESTABLISH FIX COORDINATES
DME SOURCE FOR I-VDG: 453547.95N/1223613.55W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 10L	1, 2		KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) RWY 28R			KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) Y RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)
IAP	LDA-A	1, 2		KVUO	VANCOUVER	WA (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FIX USE
FAC 1 MAG BRG CHANGED FROM 279.03 TO 283.03, FAC 1 MAGVAR CHANGE FROM 20E TO 16E
REMOVED PAT 1, ATC REQUEST HIL BE REMOVED FROM ALL PROCEDURES AS THEY WILL NEVER BE USED, AND ALL MISSED APPROACH HOLDING NO LONGER USES THIS FIX

DEVELOPED BY: **DATE:** 04/12/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: CFFWG **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454116.90N/1224244.03W **TYPE:** CNF

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/15/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: CFFWH **STATE:** OR **COUNTRY:** US

LATITUDE/LONGITUDE: 453653.61N/1224611.49W **TYPE:** CNF

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/15/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: CIZZL **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454132.02N/1223600.67W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10R			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/10/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: DAYSS **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454328.67N/1224059.23W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10R			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/10/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: GAMBE **STATE:** OR **COUNTRY:** US

LATITUDE/LONGITUDE: 453612.41N/1224936.94W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/11/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZDV
ATC FACILITY: PDX
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: HOGUM **STATE:** OR **COUNTRY:** US

LATITUDE/LONGITUDE: 454109.18N/1230110.85W **TYPE:** WP, 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	FEET	MRA	MAA
1	NEWBERG	UBG	VOR/DME	H	334.00	355.00	20.04	20.04		4000	17500

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

REMARKS:
NEWBERG (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V165	1				(US)
IAP	RNAV (GPS) RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) RWY 10R			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
FIX USE UPDATED
FIX MOVED 12.30 FT, COORDINATES REVISED

DEVELOPED BY: **DATE:** 04/16/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: MYCRO **STATE:** OR **COUNTRY:** US

LATITUDE/LONGITUDE: 453148.13N/1224749.43W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10R			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/10/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: RIPPP **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454254.48N/1224528.20W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/15/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: TTIDE **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 453904.88N/1224428.13W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/15/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: TRAYL **STATE:** OR **COUNTRY:** US

LATITUDE/LONGITUDE: 454003.67N/1224659.88W **TYPE:** WP, RADAR, 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-VDG	LOC/DME		283.03	299.03	8.68	10.60	64427	2200	4500
2	BATTLE GROUND	BTG	VORTAC	H	218.26	239.26		9.39		2200	4500

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

REMARKS:
PORTLAND (FAC 1) USED TO ESTABLISH FIX COORDINATES
DME SOURCE FOR I-VDG: 453547.95N/1223613.55W

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 10L	1, 2		KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) Y RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)
IAP	LDA-A	1, 2		KVUO	VANCOUVER	WA (US)

REQUIRED CHARTING: IAP, CONTROLLER

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
FIX MOVED 1919.03 FT, COORDINATES REVISED
UPDATED FIX USE
FAC 2 BRG CHANGED FROM 219.89/240.89 TO 218.26/239.26
FAC 1 DME CHANGED FROM 8.99 TO 8.68, DISTANCE FROM FAC FROM 10.92 TO 10.60 AND 66346 FT TO 64427 FT.
FAC 1 MAG BRG CHANGED FROM 279.03 TO 283.03, FAC 1 MAGVAR CHANGE FROM 20E TO 16E
FAC 2 BRG CHANGED FROM 219.89/240.89 TO 218.26/239.26, DIST FROM FAC FROM 9.55 TO 9.39

DEVELOPED BY: **DATE:** 04/12/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: VOODU **STATE:** WA **COUNTRY:** US

LATITUDE/LONGITUDE: 454642.84N/1224050.82W **TYPE:** WP

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 10L			KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 10R			KPDX	PORTLAND	OR (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 09/20/2012

DEVELOPED BY: **DATE:** 04/10/2012 **OFFICE:** AJV-354 **NAME:** CHARLES SCHNEIDER

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

SIGNATURE:

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

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: **PORTLAND** STATE: **OR**

AIRPORT NAME: **PORTLAND INTL** ID: **KPDX**

PROCEDURE: **RNAV (RNP) Z RWY 10L** AMDT: **ORIG**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **3.52**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **118.94**
4. High Terrain in **FINAL** segment containing 1000' point **178**
5. Distance from **THLD** to 1500' point **5.43**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **1.20**
7. True Course of **FINAL** segment containing 1500' point **118.94**
8. High Terrain in **FINAL** segment containing 1500' point **178**
9. Threshold Coordinates (if straight-in) ... ***453541.28N** / **1223544.19W**
10. ARP Coordinates ..... **453519.35N** / **1223548.73W**
11. Runway Approach End and distance furthest from ARP.....RWY **28R**
    Distance **1.32** NM
12. FAF Coordinates ..... **453836.62N** / **1224315.24W**
    (Click to Select)

REMARKS: Approach/Drawing attached. *DISPLACED THRESHOLD