

# RADIO FIX AND HOLDING DATA RECORD

NAME: ALDER

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 464917.62N/1222451.19W

TYPE: WP, 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	MRA	MAA
1	SEATTLE	SEA	VORTAC	VH	167.67	186.67	37.09	37.09	4000	45000
2	OLYMPIA	OLM	VORTAC	VH	095.00	114.00	21.99	21.99	5300	45000
3	MCCHORD	TCM	TACAN	T	157.70	172.70	19.73	19.73	5300	12200

## FIX RESTRICTIONS:

MCA V204 5800 EASTBOUND  
MCA V495 9000 SOUTHBOUND

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	N	SEA	VORTAC	167.67	167.67	R	1	5300 10000	4 11

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	175	AAO	464354.00N/1222709.00W	3816	4E
1	230	AAO	464245.00N/1222606.00W	4000	4E

## PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	175	210
1	230	230

## HOLDING RESTRICTIONS:

1. HOLDING LIMITED TO ESTABLISHED PATTERN.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKEOFF MINIMUMS	KPLU	PUYALLUP	WA (US)

## REMARKS:

SEATTLE (FAC 1) AND OLYMPIA (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKEOFF MINIMUMS	1, 2	1	KPLU	PUYALLUP	WA (US)
DP	CBAIN (RNAV)			KBFI	SEATTLE	WA (US)
DP	NRVNA (RNAV)			KBFI	SEATTLE	WA (US)
DP	OZWLD (RNAV)			KSEA	SEATTLE	WA (US)
DP	ALDER	2, 3		KTCM	TACOMA	WA (US)
DP	MOCAA (RNAV)			KTCM	TACOMA	WA (US)
DP	TAKE-OFF MINIMUMS	1		KTCM	TACOMA	WA (US)
EN ROUTE	J1	1, 2				(US)
EN ROUTE	J189	1, 2				(US)
EN ROUTE	V204	1, 2				(US)
EN ROUTE	V495	1, 2				(US)
IAP	RNAV (GPS) RWY 33			KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	RNAV (GPS) RWY 35			KPLU	PUYALLUP	WA (US)
IAP	ILS OR LOC RWY 34	2, 3		KTCM	TACOMA	WA (US)
IAP	ILS RWY 34 (CAT II)	2, 3		KTCM	TACOMA	WA (US)
IAP	RNAV (GPS) RWY 34			KTCM	TACOMA	WA (US)
IAP	TACAN RWY 34	2, 3		KTCM	TACOMA	WA (US)
IAP	RNAV (GPS) RWY 24			KTDO	TOLEDO	WA (US)
STAR	ADYMS (RNAV)			KTCM	TACOMA	WA (US)
STAR	WHYTE	1, 2		KTCM	TACOMA	WA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 14

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

UPDATED FIX MAKE-UP SEA AND OLM CLASS FROM "H" TO "VH".

**INITIATED BY:****DATE:****ORGANIZATION:****NAME:****OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A422

**NAME:** DANIEL WESTON**APPROVED BY:****DATE:** 03/13/2025**OFFICE:** AJV-A422**NAME:** RAKE MCGRAW**SIGNATURE:**

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** BATTLE GROUND VORTAC      **STATE:** WA      **COUNTRY:** US      **ICAO REGION CODE:** K1  
**LATITUDE/LONGITUDE:** 454452.12N/1223529.53W      **TYPE:**  
**AIRSPACE DOCKET:** 23-AWP-47      **FIX TYPE OF ACTION:** NO CHANGE

## FIX MAKE-UP FACILITIES:

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

## FIX RESTRICTIONS:

MCA V112 5000 EASTBOUND  
 MCA V182 5000 EASTBOUND  
 MCA V448 9400 NORTHEAST BOUND  
 MCA V468 5300 NORTHEAST BOUND  
 MCA V520 4700 EASTBOUND

## HOLDING:

**HOLDING TYPE OF ACTION:** NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN 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	5000 45000	5 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	20 28

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	455400.00N/1223512.00W	1132	4E
1	310	AAO	455936.00N/1223548.00W	3252	4E
2	200	AAO	455445.00N/1223451.00W	1277	4E
2	310	AAO	455936.00N/1223548.00W	3252	4E
3	200	AAO	454703.00N/1223106.00W	837	4E
4	200	AAO	455515.00N/1223427.00W	1615	4E
4	310	AAO	455936.00N/1223548.00W	3252	4E

## PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
4	310	200

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKEOFF MINIMUMS	KPDX	PORTLAND	OR (US)
1	VOR-A	KPDX	PORTLAND	OR (US)
1	TAKEOFF MINIMUMS	KSPB	SCAPPOOSE	OR (US)
1	VOR/DME-A	KSPB	SCAPPOOSE	OR (US)
1	TAKEOFF MINIMUMS	KVUO	VANCOUVER	WA (US)
2	LOC/DME RWY 21	KPDX	PORTLAND	OR (US)
2	ILS OR LOC RWY 10L	KPDX	PORTLAND	OR (US)
2	ILS OR LOC RWY 28R	KPDX	PORTLAND	OR (US)
4	RNAV (GPS)-A	KTTD	PORTLAND	OR (US)
4	RNAV (GPS) Y RWY 10L	KPDX	PORTLAND	OR (US)
4	RNAV (GPS) X RWY 28R	KPDX	PORTLAND	OR (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 PAT 5 10 MILE LEG PER ATC REQUEST, MAX DME LEG LENGTH FOR TEMPLATE 20 IS 12 NM.  
 BTG MAG VAR 1975/E21.

## 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	PORTLAND			KPDX	PORTLAND	OR (US)
DP	TAKEOFF MINIMUMS		1	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	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	3			(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 13R		KHIO	PORTLAND	OR (US)
IAP	NDB-B		KHIO	PORTLAND	OR (US)
IAP	RNAV (GPS) RWY 13R		KHIO	PORTLAND	OR (US)
IAP	HI-ILS OR LOC RWY 10R		KPDX	PORTLAND	OR (US)
IAP	HI-ILS OR LOC RWY 28R		KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 10L	2	KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 10R		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	ILS RWY 10R (CAT II - III)		KPDX	PORTLAND	OR (US)
IAP	ILS RWY 10R (SA CAT I)		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	VOR-A	1	KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS)-A	4	KTTD	PORTLAND	OR (US)
IAP	ILS OR LOC Z RWY 31		KSLE	SALEM	OR (US)
IAP	LOC Y RWY 31		KSLE	SALEM	OR (US)
IAP	LOC/DME RWY 15		KSPB	SCAPPOOSE	OR (US)
IAP	RNAV (GPS) RWY 15		KSPB	SCAPPOOSE	OR (US)
IAP	VOR/DME-A	1	KSPB	SCAPPOOSE	OR (US)
STAR	HELNS		KUAO	AURORA	OR (US)
STAR	HELNS		KHIO	PORTLAND	OR (US)
STAR	OCITY	3	KHIO	PORTLAND	OR (US)
STAR	HELNS		KPDX	PORTLAND	OR (US)
STAR	HHOOD (RNAV)		KPDX	PORTLAND	OR (US)
STAR	KRATR (RNAV)		KPDX	PORTLAND	OR (US)
STAR	OCITY	3	KPDX	PORTLAND	OR (US)
STAR	TMBRS (RNAV)		KPDX	PORTLAND	OR (US)
STAR	HELNS		KTTD	PORTLAND	OR (US)
STAR	OCITY	3	KTTD	PORTLAND	OR (US)
STAR	OLYMPIA	3	KPAE	EVERETT	WA (US)
STAR	OLYMPIA	3	KRNT	RENTON	WA (US)
STAR	OLYMPIA	3	KBFI	SEATTLE	WA (US)
STAR	HAWKZ (RNAV)	5	KSEA	SEATTLE	WA (US)
STAR	OLYMPIA	3	KSEA	SEATTLE	WA (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 41

**DATE OF REVISION:** 04/17/2025

**REASON FOR REVISION:**

AIRSPACE DOCKET: ADDED 23-AWP-47.

REMARKS: REMOVED PAT 3 REQUESTED BY PDX APP CON AND ZSE - PAT 3 IS ALREADY CHARTED ON HIGH/LOW AIRWAYS.

FIX USE: REMOVED EN ROUTE - HIGH/LOW CHART. REMOVED KPDX HI-TACAN RWY 10R AND TACAN RWY 28L IAPS. ADDED PAT 3 TO J1.

CHANGED KPDX HI-ILS OR LOC/DME RWY 10R TO HI-ILS OR LOC RWY 10R. ADDED KSLE ILS OR LOC Z RWY 31 AND LOC Y RWY 31 IAPS.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A423

**NAME:** BARRY SMITH

**APPROVED BY:**

**DATE:** 03/13/2025

**OFFICE:** AJV-A423

**NAME:** ALLAN WILL

**SIGNATURE:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: BAYTS

STATE: OR

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 420439.50N/1230633.32W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 23-AWP-47

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	FORT JONES	FJS	VOR/DME	VL	321.25	340.25	40.04	40.04		10000	17500
2	ROGUE VALLEY	OED	VORTAC	VH	181.00	200.00	25.64	25.64		8000	17500

## FIX RESTRICTIONS:

MCA V121 9000 SOUTHBOUND  
MRA V121 10000

## HOLDING:

HOLDING TYPE OF ACTION: MODIFY

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	N	OED	VORTAC	181.00	181.00	R		7	8000	17500	9	17

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	420118.00N/1231542.00W	6555	4E

## PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	358

## HOLDING RESTRICTIONS:

HOLDING PATTERN 1 IS DME ONLY.  
HOLDING LIMITED TO ESTABLISHED PATTERN(S).

## REMARKS:

FORT JONES (FAC 1) AND ROGUE VALLEY (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
PAT 1 IS ATC REQUESTED HOLDING.  
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
SPECIAL IAP	RNAV (GPS) M RWY 32			KMFR	MEDFORD	OR (US)
EN ROUTE	V121	1, 2				(US)
EN ROUTE	V495	1, 2				(US)
IAP	RNAV (RNP) Z RWY 32			KMFR	MEDFORD	OR (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, SPECIAL IAP, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.  
FIX MAKE-UP FACILITIES: CHANGED FAC 1 (FJS) CLASS FROM H TO VL.  
ESV: REMOVED FJS VOR/DME ESV DATA - FIX IS WITHIN STANDARD SERVICE VOLUME.  
FIX RESTRICTIONS: REMOVED MRA V495 10000 - FIX MRA RESTRICTION REFERS TO V121 ONLY.  
HOLDING RESTRICTIONS: ADDED HOLDING LIMITED TO ESTABLISHED PATTERN(S).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: CIDUG

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 470028.09N/1222257.83W

TYPE: WP, DME

AIRSPACE DOCKET: 23-AWP-47

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	SEATTLE	SEA	VORTAC	VH	167.67	186.67	25.84	25.84		3500	17500

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	N	SEA	VORTAC	167.67	167.67	R	1		5000	9000	6	10
2	N		WP	351.62	171.62	R		5	5000	9000	6	10

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	470142.00N/1221751.00W	1172	4E
2	200	AAO	470142.00N/1221751.00W	1159	4E

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S).

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V495	1				
IAP	RNAV (GPS) RWY 35			S50	AUBURN	WA (US)
IAP	RNAV (GPS)-A			S50	AUBURN	WA (US)
IAP	ILS OR LOC RWY 14R	1	1	KBFI	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 14R		2	KBFI	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 14R		2	KBFI	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34C	1		KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34L	1		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34C (SA CAT I-II)	1		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34L (SA CAT I-II)	1		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 34C			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 34L			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 34R			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 15

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: CHANGED FAC 1 (SEA) CLASS FROM H TO VH.

FIX USE: COMBINED KSEA ILS RWY 34C (SA CAT I) AND (SA CAT II) INTO SINGLE LINE ENTRY. COMBINED KSEA ILS RWY 34L (SA CAT I) AND (SA CAT II) INTO SINGLE LINE ENTRY.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: CORVALLIS VOR/DME

STATE: OR

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 442958.44N/1231737.18W

TYPE:

AIRSPACE DOCKET: 23-AWP-47

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	CORVALLIS	CVO	VOR/DME	VH							45000

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	SE	CVO	VOR/DME	154.00	334.00	R	1	3000 8000	4 8
2	E	CVO	VOR/DME	081.00	261.00	R	1	3400 17500	4 16
3	N	CVO	VOR/DME	356.60	176.60	R	1	4000 17500	4 16
4	SW	CVO	VOR/DME	212.37	032.37	R	1	3600 14000	4 10

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	442506.00N/1232121.00W	1359	2C
2	200	AAO	443134.00N/1232306.00W	1239	2C
2	310	AAO	443747.87N/1232107.08W	2320	2C
3	200	AAO	443747.87N/1232107.08W	2320	2C
4	200	AAO	442524.00N/1232806.00W	2258	4E

## PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
2	310	130
3	200	130
4	200	100

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
2	TAKEOFF MINIMUMS	S12	ALBANY	OR (US)
2	TAKEOFF MINIMUMS	KCVO	CORVALLIS	OR (US)

## REMARKS:

PAT 3 ATC REQUESTED.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
FACILITY MAG VAR E18 1995.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKEOFF MINIMUMS		2	S12	ALBANY	OR (US)
DP	SHEDD			KCVO	CORVALLIS	OR (US)
DP	TAKEOFF MINIMUMS		2	KCVO	CORVALLIS	OR (US)
DP	EUGENE			KEUG	EUGENE	OR (US)
DP	REDMOND			KRDM	REDMOND	OR (US)
DP	SALEM			KSLE	SALEM	OR (US)
EN ROUTE	T263					(US)
EN ROUTE	V481					(US)
EN ROUTE	V495					(US)
EN ROUTE	V536					(US)
IAP	VOR-A		4	S12	ALBANY	OR (US)
IAP	ILS OR LOC RWY 17			KCVO	CORVALLIS	OR (US)
IAP	RNAV (GPS) RWY 17			KCVO	CORVALLIS	OR (US)
IAP	RNAV (GPS) RWY 35			KCVO	CORVALLIS	OR (US)
IAP	VOR RWY 17			KCVO	CORVALLIS	OR (US)
IAP	VOR-A			KCVO	CORVALLIS	OR (US)
IAP	ILS OR LOC RWY 16L		1	KEUG	EUGENE	OR (US)
IAP	ILS OR LOC RWY 16R		1	KEUG	EUGENE	OR (US)
IAP	ILS RWY 16R (CAT II-III)		1	KEUG	EUGENE	OR (US)
IAP	ILS RWY 16R (SA CAT I)		1	KEUG	EUGENE	OR (US)
IAP	RNAV (GPS) Y RWY 16L			KEUG	EUGENE	OR (US)
IAP	RNAV (GPS) Y RWY 16R			KEUG	EUGENE	OR (US)
IAP	RNAV (RNP) Z RWY 16L			KEUG	EUGENE	OR (US)
IAP	RNAV (RNP) Z RWY 16R			KEUG	EUGENE	OR (US)
IAP	ILS OR LOC Z RWY 31			KSLE	SALEM	OR (US)
IAP	LOC BC RWY 13			KSLE	SALEM	OR (US)
IAP	LOC Y RWY 31			KSLE	SALEM	OR (US)
IAP	RNAV (GPS) RWY 31			KSLE	SALEM	OR (US)
STAR	HOOOD (RNAV)			KPDx	PORTLAND	OR (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 27

**DATE OF REVISION:** 04/17/2025

**REASON FOR REVISION:**

FIX USE: ADDED KPDX HHOOD (RNAV) STAR.  
REQUIRED CHARTING: ADDED STAR.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A423

**NAME:** BARRY SMITH

**APPROVED BY:**

**DATE:** 03/13/2025

**OFFICE:** AJV-A423

**NAME:** ALLAN WILL

**SIGNATURE:**



# RADIO FIX AND HOLDING DATA RECORD

NAME: FORT JONES VOR/DME

STATE: CA

COUNTRY: US

ICAO REGION CODE: K2

LATITUDE/LONGITUDE: 412658.81N/1224823.21W

TYPE:

AIRSPACE DOCKET: 23-AWP-47

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	FORT JONES	FJS	VOR/DME	VL						17500

## HOLDING:

HOLDING TYPE OF ACTION: MODIFY

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	NW	FJS	VOR/DME	337.00	157.00	R	1	10000 17500	5 16

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	175	AAO	412400.00N/1225703.00W	7340	4E
1	230	AAO	412303.00N/1225712.00W	7448	6A
1	265	AAO	412311.50N/1225707.00W	7728	6E

## PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	265	364
1	175	283
1	230	343

## HOLDING RESTRICTIONS:

HOLDING BELOW 16000 LIMITED TO ESTABLISHED PATTERN.

## REMARKS:

INCREASE CONTROLLED AIRSPACE NE THRU SE FJS TO INCREASE ALTITUDES AVAILABLE FOR HOLDING.

PAT 1 HOLDING ATC REQUEST.

PRECIPITOUS TERRAIN EVALUATION COMPLETE.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CHICO			KCIC	CHICO	CA (US)
DP	SHASTA			KRDD	REDDING	CA (US)
DP	KINGSLEY			KLMT	KLAMATH FALLS	OR (US)
EN ROUTE	V121					(US)
EN ROUTE	V23					(US)
EN ROUTE	V287					(US)
EN ROUTE	V495					(US)
IAP	NDB OR GPS-A	1		KSIY	MONTAGUE	CA (US)
IAP	RNAV (GPS)-D			KMFR	MEDFORD	OR (US)
IAP	VOR/DME-C	1		KMFR	MEDFORD	OR (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: CHANGED FAC 1 (FJS) CLASS FROM H TO VL.

HOLDING: CHANGED PAT 1 LEG LENGTH TIME FROM 1 - 1 1/2 TO 1.

FIX USE: ADDED KRDD SHASTA DP. REMOVED HYPHEN FROM ALL VICTOR AIRWAY ENTRIES.

REQUIRED CHARTING: CHANGED CONTROLLER TO CONTROLLER LOW AND EN ROUTE LOW. ADDED DP.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: HORTE

STATE: OR

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 441302.73N/1232355.54W

TYPE: INT, DME

AIRSPACE DOCKET: 23-AWP-47

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	CORVALLIS	CVO	VOR/DME	VH	177.00	195.00		17.52		4000	17500
2	EUGENE	EUG	VORTAC	VH	292.38	307.38	9.55	9.55		4000	17500

## FIX RESTRICTIONS:

MCA V452 4300 WESTBOUND

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

CORVALLIS (FAC 1) AND EUGENE (FAC 2) USED TO ESTABLISH FIX COORDINATES.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V452	1, 2				(US)
EN ROUTE	V495	1, 2				(US)

REQUIRED CHARTING: EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: EXCHANGED FACS 1 AND 2. CHANGED FACS 1 (CVO) AND 2 (EUG) CLASS FROM H TO VH.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: MERLI

STATE: OR

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 422844.68N/1231513.39W

TYPE: INT, DME

AIRSPACE DOCKET: 23-AWP-47

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FAC FEET	MRA	MAA
1	ROSEBURG	RBG	VOR/DME	L	154.08	174.08	42.41	42.41		8000	17500
2	ROGUE VALLEY	OED	VORTAC	VH	251.00	270.00	15.13	15.13		8000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
RBG	VOR/DME	R-154	43	8000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

ROSEBURG (FAC 1) AND ROGUE VALLEY (FAC 2) USED TO ESTABLISH FIX COORDINATES.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V495	1, 2				

REQUIRED CHARTING: EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: ADDED FAC 1 (RBG) DME 42.41 - ESVMs APPROVED. CHANGED FAC 2 (OED) CLASS FROM H TO VH.

ESV: CHANGED RBG VOR/DME MIN ALTITUDE FROM 6300 TO 8000.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** NEWBERG VOR/DME      **STATE:** OR      **COUNTRY:** US      **ICAO REGION CODE:** K1

**LATITUDE/LONGITUDE:** 452111.64N/1225841.33W      **TYPE:**

**AIRSPACE DOCKET:** 23-AWP-47      **FIX TYPE OF ACTION:** NO CHANGE

**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	VH						45000

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

**PATTERNS:**

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME DME	HOLDING ALTITUDES MIN MAX	TEMPLATES MIN MAX
1	S	UBG	VOR/DME	183.00	003.00	R	1	3000 17500	4 16
2	S	UBG	VOR/DME	183.00	003.00	L	1	3800 17500	4 16
3	S		WP	183.00	003.00	L		3000 17500	5 17
4	W	UBG	VOR/DME	288.00	108.00	R	1	3900 17500	4 16
5	S		WP	186.00	006.00	L		3000 17500	5 17

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	452112.00N/1225839.00W	1805	4E
1	265	AAO	452348.00N/1230324.00W	1834	4E
1	310	AAO	452348.00N/1230324.00W	1834	4E
2	200	AAO	452348.00N/1230324.00W	1834	4E
2	310	AAO	451651.50N/1232637.90W	1834	4E
3	200	AAO	452348.00N/1230324.00W	1834	4E
4	200	AAO	452348.00N/1230324.00W	1834	4E
4	310	AAO	453103.00N/1232254.00W	2868	4E
5	200	AAO	452348.00N/1230324.00W	1834	4E
5	310	AAO	451651.50N/1232637.90W	3320	4E

**REASON FOR NONSTANDARD HOLDING:**

PAT 2 ATC OPERATIONS  
PAT 3 TERRAIN AVOIDANCE  
PAT 5 TERRAIN AVOIDANCE

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERNS

**PROCEDURES REQUIRING CLIMB-IN-HOLD:**

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS OR LOC RWY 13R	KHIO	PORTLAND	OR (US)
2	TAKEOFF MINIMUMS	KUAO	AURORA	OR (US)
2	TAKEOFF MINIMUMS	KMMV	MC MINNVILLE	OR (US)
3	RNAV (GPS) RWY 13R	KHIO	PORTLAND	OR (US)
4	TAKEOFF MINIMUMS	KHIO	PORTLAND	OR (US)
5	NEWBERG (RNAV)	KUAO	AURORA	OR (US)

**REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
PATTERN 5 FOR NEWBERG DP CIH PATTERN (P21).  
PATTERN 2 CIH PATTERN (P20).  
FACILITY MAG VAR E21 1965.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	NEWBERG (RNAV)		5	KUAO	AURORA	OR (US)
DP	TAKEOFF MINIMUMS		2	KUAO	AURORA	OR (US)
DP	EUGENE			KEUG	EUGENE	OR (US)
DP	TAKEOFF MINIMUMS		2	KMMV	MC MINNVILLE	OR (US)
DP	CANBY			KHIO	PORTLAND	OR (US)
DP	FARMINGTON			KHIO	PORTLAND	OR (US)
DP	SCAPO			KHIO	PORTLAND	OR (US)
DP	TAKEOFF MINIMUMS		4	KHIO	PORTLAND	OR (US)
DP	PORTLAND			KPDX	PORTLAND	OR (US)
DP	BLUE LAKE			KTTD	PORTLAND	OR (US)
DP	REDMOND			KRDM	REDMOND	OR (US)
DP	SALEM			KSLE	SALEM	OR (US)
DP	YELM			KOLM	OLYMPIA	WA (US)
DP	SEATTLE			KSEA	SEATTLE	WA (US)
EN ROUTE	J126					(US)
EN ROUTE	T263					(US)
EN ROUTE	V165					(US)
EN ROUTE	V182					(US)
EN ROUTE	V287		2			(US)
EN ROUTE	V495					(US)
EN ROUTE	V500					(US)

IAP	LOC RWY 17	1	KUAO	AURORA	OR (US)
IAP	RNAV (GPS) RWY 17		KUAO	AURORA	OR (US)
IAP	RNAV (GPS) RWY 35		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	RNAV (GPS) RWY 4		KMMV	MC MINNVILLE	OR (US)
IAP	VOR/DME-B		KMMV	MC MINNVILLE	OR (US)
IAP	ILS OR LOC RWY 13R	1	KHIO	PORTLAND	OR (US)
IAP	NDB-B	1	KHIO	PORTLAND	OR (US)
IAP	RNAV (GPS) RWY 13R	3	KHIO	PORTLAND	OR (US)
IAP	HI ILS OR LOC RWY 28R		KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 10L		KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 10R	1	KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 28L	2	KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC RWY 28R		KPDX	PORTLAND	OR (US)
IAP	ILS RWY 10R (CAT II - III)	1	KPDX	PORTLAND	OR (US)
IAP	ILS RWY 10R (SA CAT I)	1	KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS) X RWY 28L	3	KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Y RWY 28L	3	KPDX	PORTLAND	OR (US)
IAP	RNAV (RNP) Z RWY 28L	3	KPDX	PORTLAND	OR (US)
IAP	TACAN RWY 28L		KPDX	PORTLAND	OR (US)
IAP	ILS OR LOC Z RWY 31		KSLE	SALEM	OR (US)
IAP	LOC BC RWY 13		KSLE	SALEM	OR (US)
IAP	LOC Y RWY 31		KSLE	SALEM	OR (US)
IAP	RNAV (GPS) RWY 13		KSLE	SALEM	OR (US)
IAP	RNAV (GPS) RWY 31		KSLE	SALEM	OR (US)
STAR	HHOOD (RNAV)		KPDX	PORTLAND	OR (US)
STAR	OCITY		KPDX	PORTLAND	OR (US)
STAR	OLYMPIA		KPAE	EVERETT	WA (US)
STAR	OLYMPIA		KRNT	RENTON	WA (US)
STAR	OLYMPIA		KBFI	SEATTLE	WA (US)
STAR	OLYMPIA		KSEA	SEATTLE	WA (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 27

**DATE OF REVISION:** 04/17/2025

**REASON FOR REVISION:**

AIRSPACE DOCKET: ADDED 23-AWP-47.

HOLDING: CHANGED PATS 1, 2 AND 4 LEG LENGTH TIME FROM 1 - 1 1/2 TO 1.

FIX USE: REMOVED KPDX TMBRS (RNAV) STAR. ADDED KHIO CANBY AND SCAPO DPS. ADDED KPDX OCITY STAR, ILS OR LOC RWY 10L IAP, ILS OR LOC RWY 28R IAP AND TACAN RWY 28L IAP.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A423

**NAME:** BARRY SMITH

**APPROVED BY:**

**DATE:** 03/13/2025

**OFFICE:** AJV-A423

**NAME:** ALLAN WILL

**SIGNATURE:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: PAPLE

STATE: OR

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 421901.67N/1231334.80W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 23-AWP-47

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	FORT JONES	FJS	VOR/DME	VL	321.25	340.25	55.32	55.32		10000	17500
2	ROSEBURG	RBG	VOR/DME	L	153.84	173.84		52.20		8000	17500
3	ROGUE VALLEY	OED	VORTAC	VH	216.14	235.14	17.00	17.00		6000	17500

## EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
RBG	VOR/DME	R-154	53	8000	17500

## FIX RESTRICTIONS:

MRA V122 10100  
MCA V495 10000 SOUTHEAST BOUND

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

ROGUE VALLEY (FAC 1) AND FORT JONES (FAC 2) USED TO ESTABLISH FIX COORDINATES.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V122	1, 2, 3				(US)
EN ROUTE	V495	1, 2, 3				(US)
IAP	RNAV (RNP) Z RWY 14			KMFR	MEDFORD	OR (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.  
FIX MAKE-UP FACILITIES: CHANGED FAC 1 (FJS) CLASS FROM H TO VL. CHANGED FAC 2 (RBG) MRA FROM 9000 TO 8000 - ESVMs VALUE.  
ESV: REMOVED FJS VOR/DME ESV DATA - FIX IS WITHIN STANDARD SERVICE VOLUME. CHANGED RBG VOR/DME MIN ALTITUDE FROM 9000 TO 8000.  
FIX RESTRICTIONS: REMOVED MRA V495 10100 - MRA RESTRICTION IS FOR CROSSING RADIAL AND APPLIES TO V122 ONLY. ADDED MRA V122 10100 - PART 95 VERIFIED. ADDED MCA V495 10000 SOUTHEAST BOUND - FJS VOR/DME FACILITY RESTRICTION.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

NAME: ROSEBURG VOR/DME

STATE: OR

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 431056.70N/1232108.07W

TYPE:

AIRSPACE DOCKET: 23-AWP-47

FIX TYPE OF ACTION: NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	ROSEBURG	RBG	VOR/DME	L							45000

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG TIME	LENGTH DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	N	RBG	VOR/DME	343.00	163.00	R	1		5000	17500	5	16

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	431012.00N/1231745.00W	2274	4E
1	310	AAO	430709.95N/1231438.28W	3439	2C

## PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	310	146

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TEXTUAL DEPARTURE	KRBG	ROSEBURG	OR (US)

## REMARKS:

OTH VORTAC BACKUP FACILITY FOR V121 AND IS WITHIN SERVICE VOLUME.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
ASSIGNED FACILITY MAGVAR: E20/1965

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	EUGENE			KEUG	EUGENE	OR (US)
DP	TEXTUAL DEPARTURE			3S8	GRANTS PASS	OR (US)
DP	KINGSLEY			KLMT	KLAMATH FALLS	OR (US)
DP	NORTH BEND			KOTH	NORTH BEND	OR (US)
DP	TEXTUAL DEPARTURE		1	KRBG	ROSEBURG	OR (US)
EN ROUTE	J143					(US)
EN ROUTE	V121					(US)
EN ROUTE	V448					(US)
EN ROUTE	V495					(US)
IAP	VOR-A		1	KRBG	ROSEBURG	OR (US)
STAR	STINS			KSFO	SAN FRANCISCO	CA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13

DATE OF REVISION: 12/26/2024

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.  
HOLDING RESTRICTIONS: CHANGED PATTERNS TO PATTERN.  
FIX USE: REMOVED J589.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 12/26/2024

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

# RADIO FIX AND HOLDING DATA RECORD

**NAME:** SEATTLE VORTAC      **STATE:** WA      **COUNTRY:** US      **ICAO REGION CODE:** K1  
**LATITUDE/LONGITUDE:** 472607.34N/1221834.62W      **TYPE:**  
**AIRSPACE DOCKET:** 23-AWP-47      **FIX TYPE OF ACTION:** NO CHANGE

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	SEATTLE	SEA	VORTAC	VH							45000

## FIX RESTRICTIONS:

MCA V298 4300 EASTBOUND  
 MCA V2 4300 EASTBOUND  
 MCA V4 6200 EASTBOUND  
 MCA V120 6300 EASTBOUND  
 MCA V495 4700 SOUTHBOUND

## HOLDING:

**HOLDING TYPE OF ACTION:** NO CHANGE

## PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	DME	HOLDING ALTITUDES MIN	MAX	TEMPLATES MIN	MAX
1	E	SEA	VORTAC	110.00	290.00	L	1		3000	18000	4	16
2	SE	SEA	VORTAC	130.00	310.00	L	1		3000	18000	4	16

## CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	472357.00N/1220809.00W	765	4E
1	310	AAO	471854.00N/1215815.00W	1368	4E
2	200	AAO	472712.00N/1221709.00W	725	4E
2	310	AAO	470754.00N/1221003.00W	1073	4E

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC REQUEST.  
 PAT 2 ATC REQUEST.

## HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN(S)

## PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	RENTN	KRNT	RENTON	WA (US)
1	TAKEOFF MINIMUMS	KRNT	RENTON	WA (US)
2	TAKEOFF MINIMUMS	KSEA	SEATTLE	WA (US)

## REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.  
 ASSIGNED FACILITY MAG VAR E19/2000.

## FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	PORTLAND			KPDJ	PORTLAND	OR (US)
DP	PAINE			KPAE	EVERETT	WA (US)
DP	YELM			KOLM	OLYMPIA	WA (US)
DP	WATTR (OBSTACLE)			KCLM	PORT ANGELES	WA (US)
DP	TAKEOFF MINIMUMS			KPLU	PUYALLUP	WA (US)
DP	RENTN		1	KRNT	RENTON	WA (US)
DP	TAKEOFF MINIMUMS		1	KRNT	RENTON	WA (US)
DP	KENT			KBFI	SEATTLE	WA (US)
DP	NEEDLE			KBFI	SEATTLE	WA (US)
DP	TAKEOFF MINIMUMS AND OBSTACLE DP			KBFI	SEATTLE	WA (US)
DP	BANGR (RNAV)			KSEA	SEATTLE	WA (US)
DP	ELMAA			KSEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			KSEA	SEATTLE	WA (US)
DP	MOUNTAIN			KSEA	SEATTLE	WA (US)
DP	SEATTLE			KSEA	SEATTLE	WA (US)
DP	SUMMA			KSEA	SEATTLE	WA (US)
DP	TAKEOFF MINIMUMS		2	KSEA	SEATTLE	WA (US)
DP	NARROWS			KTIW	TACOMA	WA (US)
DP	TAKEOFF MINIMUMS			KTIW	TACOMA	WA (US)
DP	NACHES			KYKM	YAKIMA	WA (US)
EN ROUTE	J1					(US)
EN ROUTE	J12					(US)
EN ROUTE	J189					(US)
EN ROUTE	J20					(US)
EN ROUTE	J5					(US)
EN ROUTE	J503					(US)
EN ROUTE	J505					(US)



EN ROUTE	J523			(US)
EN ROUTE	J65			(US)
EN ROUTE	J70			(US)
EN ROUTE	J90			(US)
EN ROUTE	Q902			(US)
EN ROUTE	T487			(US)
EN ROUTE	V120			(US)
EN ROUTE	V2			(US)
EN ROUTE	V23			(US)
EN ROUTE	V27			(US)
EN ROUTE	V298			(US)
EN ROUTE	V4			(US)
EN ROUTE	V495			(US)
IAP	ILS OR LOC RWY 20	KPWT	BREMERTON	WA (US)
IAP	RNAV (GPS) RWY 34L	KPAE	EVERETT	WA (US)
IAP	ILS OR LOC RWY 15	KGRF	FORT LEWIS	WA (US)
IAP	RNAV (GPS) RWY 15	KGRF	FORT LEWIS	WA (US)
IAP	HI TACAN Z RWY 14	KNUW	OAK HARBOR	WA (US)
IAP	HI TACAN Z RWY 25	KNUW	OAK HARBOR	WA (US)
IAP	HI TACAN Z RWY 32	KNUW	OAK HARBOR	WA (US)
IAP	HI TACAN Z RWY 7	KNUW	OAK HARBOR	WA (US)
IAP	ILS OR LOC RWY 17	KOLM	OLYMPIA	WA (US)
IAP	RNAV (GPS) RWY 17	KOLM	OLYMPIA	WA (US)
IAP	ILS OR LOC RWY 9	KCLM	PORT ANGELES	WA (US)
IAP	HARBOR VISUAL RWY 14R	KBFI	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 14R	KBFI	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 32L	KBFI	SEATTLE	WA (US)
IAP	BAY VISUAL RWY 16 R/C/L	KSEA	SEATTLE	WA (US)
IAP	HUSKY VISUAL RWY 16 R/C/L	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16C	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16L	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16R	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34C	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34L	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 34R	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16C (CAT II - III)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16C (SA CAT I)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16L (CAT II - III)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16L (SA CAT I)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (CAT II - III)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34C (SA CAT I - II)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34L (SA CAT I - II)	KSEA	SEATTLE	WA (US)
IAP	ILS RWY 34R (SA CAT I - II)	KSEA	SEATTLE	WA (US)
IAP	MALL VISUAL RWY 34 R/C/L	KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 17	KTIW	TACOMA	WA (US)
STAR	HELNS	KUAO	AURORA	OR (US)
STAR	HELNS	KHIO	PORTLAND	OR (US)
STAR	HELNS	KPDX	PORTLAND	OR (US)
STAR	KRATR (RNAV)	KPDX	PORTLAND	OR (US)
STAR	HELNS	KTTD	PORTLAND	OR (US)
STAR	CHINS	KPAE	EVERETT	WA (US)
STAR	OLYMPIA	KPAE	EVERETT	WA (US)
STAR	CHINS	KRNT	RENTON	WA (US)
STAR	GLASR	KRNT	RENTON	WA (US)
STAR	OLYMPIA	KRNT	RENTON	WA (US)
STAR	SKYKO	KRNT	RENTON	WA (US)
STAR	CHINS	KBFI	SEATTLE	WA (US)
STAR	GLASR	KBFI	SEATTLE	WA (US)
STAR	JAWBN	KBFI	SEATTLE	WA (US)
STAR	OLYMPIA	KBFI	SEATTLE	WA (US)
STAR	SKYKO	KBFI	SEATTLE	WA (US)
STAR	CHINS	KSEA	SEATTLE	WA (US)
STAR	GLASR	KSEA	SEATTLE	WA (US)
STAR	JAWBN	KSEA	SEATTLE	WA (US)
STAR	OLYMPIA	KSEA	SEATTLE	WA (US)
STAR	SKYKO	KSEA	SEATTLE	WA (US)
STAR	ARRIE	KTCM	TACOMA	WA (US)
STAR	GLASR	KTCM	TACOMA	WA (US)
STAR	JAWBN	KTCM	TACOMA	WA (US)
STAR	WHYTE	KTCM	TACOMA	WA (US)

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

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 33

**DATE OF REVISION:** 04/17/2025

**REASON FOR REVISION:**

FIX USE: ADDED KCLM WATTR (OBSTACLE) DP. RESTORED V495 FROM PREVIOUS REV 32. CHANGED KCLM ILS OR LOC RWY 8 TO RWY 9.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A423

**NAME:** BARRY SMITH

**APPROVED BY:**

**DATE:** 03/13/2025

**OFFICE:** AJV-A423

**NAME:** ALLAN WILL

**SIGNATURE:**

# RADIO FIX AND HOLDING DATA RECORD

NAME: TOUTL

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 460124.01N/1223248.14W

TYPE: WP, INT, DME

AIRSPACE DOCKET: 23-AWP-47

FIX TYPE OF ACTION: MODIFY

## FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	BATTLE GROUND	BTG	VORTAC	VH	345.47	006.47	16.64	16.64		5000	17500
2	ASTORIA	AST	VOR/DME	VL	083.00	098.00		56.31		8500	17500

## FIX RESTRICTIONS:

MCA V495 9000 NORTHBOUND

## HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

## REMARKS:

BATTLE GROUND (FAC 1) AND ASTORIA (FAC 2) USED TO ESTABLISH FIX COORDINATES.

## FIX USE:

USE TYPE	USE TITLE	FAC 1, 2	PAT	AIRPORT IDENT	CITY	STATE (US)
EN ROUTE	V495					WA (US)
IAP	RNAV (GPS) RWY 24			KTDO	TOLEDO	WA (US)
IAP	RNAV (GPS)-B			KVUO	VANCOUVER	WA (US)

REQUIRED CHARTING: IAP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 10

DATE OF REVISION: 04/17/2025

## REASON FOR REVISION:

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: CHANGED FAC 1 (BTG) CLASS FROM H TO VH AND FAC 2 (AST) CLASS FROM L TO VL.

ESV: REMOVED AST VOR/DME ESV DATA - FIX IS WITHIN STANDARD SERVICE VOLUME.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A423

NAME: BARRY SMITH

APPROVED BY:

DATE: 03/13/2025

OFFICE: AJV-A423

NAME: ALLAN WILL

SIGNATURE:

**REQUIRED CHARTING:** IAP, EN ROUTE LOW, CONTROLLER LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 19

**DATE OF REVISION:** 04/17/2025

**REASON FOR REVISION:**

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: CHANGED FAC 1 (EUG) CLASS FROM H TO VH. ADDED FAC 2 (RBG) DME 46.49 - APPROVED ESV FOR DME.

**INITIATED BY:**

**DATE:**

**ORGANIZATION:**

**NAME:**

**OFFICE OF PRIMARY RESPONSIBILITY:**

AJV-A423

**NAME:** BARRY SMITH

**APPROVED BY:**

**DATE:** 03/13/2025

**OFFICE:** AJV-A423

**NAME:** ALLAN WILL

**SIGNATURE:**

## RADIO FIX AND HOLDING DATA RECORD

NAME: VAUGN

STATE: OR

**COUNTRY:** US

ICAO REGION CODE: K1

**LATITUDE/LONGITUDE:** 435715.22N/1232657.26W

**TYPE:** WP, INT, DME

**AIRSPACE DOCKET: 23-AWP-47**

**FIX TYPE OF ACTION:** MODIFY

**FIX MAKE-UP FACILITIES:**

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM FEET	MRA	MAA
1	EUGENE	EUG	VORTAC	VH	209.50	224.50	14.00		4000	17500
2	ROSEBURG	RBG	VOR/DME	L	334.81	354.81	46.49	46.49	7000	17500

**EXPANDED SERVICE VOLUME (ESV):**

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
RRG	VOR/DME	R-335	47	7000	17500

**FIX RESTRICTIONS:**

MRA V121 7000

**HOLDING:**

**HOLDING TYPE OF ACTION: NO CHANGE**

**PATTERNS:**

PATTERNS		IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH		HOLDING ALTITUDES		TEMPLATES	
PAT	DIR						TIME	DME	MIN	MAX	MIN	MAX
1	SW	EUG	VORTAC	209.50	029.50	L	1		4100	6000	5	13
2	SW		WP	209.50	029.50	L		4	4000	6000	5	6
3	SW		WP	209.50	029.50	L		5	5000	6000	6	14

**CONTROLLING OBSTRUCTIONS:**

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	435530.43N/1232934.03W	2159	2C
1	310	AAO	435448.00N/1234424.00W	2910	2C
2	200	AAO	435533.00N/1232933.00W	2048	4E
3	200	AAO	435436.00N/1232251.00W	2094	3E
3	310	AAO	435448.00N/1234424.00W	2910	3E

**PRECIPITOUS TERRAIN ADDITIONS:**

PAT	SPEED	ADDITION
1	310	110
3	310	110

## REASON FOR NONSTANDARD HOLDING:

PAT 1 ATC  
PAT 2 ATC  
PAT 3 ATC

**HOLDING RESTRICTIONS:**

HOLDING LIMITED TO ESTABLISHED PATTERNS.

### PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	ILS RWY 16R (SA CAT I)	KEUG	EUGENE	OR (US)
1	ILS RWY 16R (CAT III)	KEUG	EUGENE	OR (US)
1	VOR OR TACAN RWY 34L	KEUG	EUGENE	OR (US)
1	ILS RWY 16R (CAT II)	KEUG	EUGENE	OR (US)
1	ILS OR LOC RWY 16R	KEUG	EUGENE	OR (US)
3	RNAV (GPS) Y RWY 16R	KEUG	EUGENE	OR (US)
3	RNAV (RNP) Z RWY 16R	KEUG	EUGENE	OR (US)

## REMARKS:

EUGENE (FAC 1) AND ROSEBURG (FAC 2) USED TO ESTABLISH FIX COORDINATES.  
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

**FIX USE:**

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V121	1, 2				(US)
EN ROUTE	V495	1, 2				(US)
IAP	ILS OR LOC RWY 16R	1	1	KEUG	EUGENE	OR (US)
IAP	ILS RWY 16R (CAT II)	1	1	KEUG	EUGENE	OR (US)
IAP	ILS RWY 16R (CAT III)	1	1	KEUG	EUGENE	OR (US)
IAP	ILS RWY 16R (SA CAT I)	1	1	KEUG	EUGENE	OR (US)
IAP	RNAV (GPS) Y RWY 16R		3	KEUG	EUGENE	OR (US)
IAP	RNAV (GPS) Y RWY 34L		2	KEUG	EUGENE	OR (US)
IAP	RNAV (GPS) Y RWY 34R			KEUG	EUGENE	OR (US)
IAP	RNAV (RNP) Z RWY 16L			KEUG	EUGENE	OR (US)
IAP	RNAV (RNP) Z RWY 16R		3	KEUG	EUGENE	OR (US)
IAP	RNAV (RNP) Z RWY 34L		2	KEUG	EUGENE	OR (US)
IAP	RNAV (RNP) Z RWY 34R			KEUG	EUGENE	OR (US)
IAP	VOR OR TACAN RWY 34L	1	1	KEUG	EUGENE	OR (US)

**REQUIRED CHARTING:** IAP, EN ROUTE LOW, CONTROLLER LOW

**COMPULSORY REPORTING POINT:** NO

**RECORD REVISION NUMBER:** 19

**DATE OF REVISION:** 04/17/2025

**REASON FOR REVISION:**

AIRSPACE DOCKET: ADDED 23-AWP-47.

FIX MAKE-UP FACILITIES: CHANGED FAC 1 (EUG) CLASS FROM H TO VH. ADDED FAC 2 (RBG) DME 46.49 - APPROVED ESV FOR DME.

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