

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	FAC FEET	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 TIME	LENGTH DME	HOLDING MIN	ALTITUDES 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:

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	PLU	PUYALLUP	WA (US)
DP	CBAIN (RNAV)			BFI	SEATTLE	WA (US)
DP	NRVNA (RNAV)			BFI	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)
DP	ALDER	2, 3		TCM	TACOMA	WA (US)
DP	MOCAA (RNAV)			TCM	TACOMA	WA (US)
DP	TAKE-OFF MINIMUMS	1		TCM	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			GRF	FORT LEWIS/TACOMA	WA (US)
IAP	RNAV (GPS) RWY 35			PLU	PUYALLUP	WA (US)
IAP	ILS OR LOC RWY 34	2, 3		TCM	TACOMA	WA (US)
IAP	ILS RWY 34 (CAT II)	2, 3		TCM	TACOMA	WA (US)
IAP	RNAV (GPS) RWY 34			TCM	TACOMA	WA (US)
IAP	TACAN RWY 34	2, 3		TCM	TACOMA	WA (US)
IAP	RNAV (GPS) RWY 24			TDO	TOLEDO	WA (US)
STAR	ADYMS (RNAV)			TCM	TACOMA	WA (US)
STAR	WHYTE	1, 2		TCM	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:

1. UPDATED FIX MAKE-UP SEA AND OLM CLASS FROM "H" TO "VH".
2. UPDATED HOLDING RESTRICTION FROM "1. HOLDING LIMITED TO ESTABLISHED PATTERN" TO "HOLDING LIMITED TO ESTABLISHED PATTERN".

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: ATOME

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 473627.23N/1222147.61W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANGR (RNAV)			SEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			SEA	SEATTLE	WA (US)
DP	ISBRG (RNAV)			SEA	SEATTLE	WA (US)
DP	JEFPO (RNAV)			SEA	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

1. FIX USE: DELETED KSEA DP ATOME (RNAV) - PROCEDURE CANCELLED.
2. FIX USE: ADDED KSEA DP ISBRG (RNAV).
3. FIX USE: ADDED KSEA DP JEFPO (RNAV).
4. FIX USE: ADDED KSEA DP OZWLD (RNAV).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/21/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: BREMM

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 473712.00N/1222806.00W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANGR (RNAV)			SEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			SEA	SEATTLE	WA (US)
DP	ISBRG (RNAV)			SEA	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

1. FIX USE: DELETED KSEA DP ATOME (RNAV) - PROCEDURE CANCELLED.
2. FIX USE: ADDED KSEA DP ISBRG (RNAV).
3. FIX USE: ADDED KSEA DP OZWLD (RNAV).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/21/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: BUWZO

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 465708.19N/1221834.62W

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	SEATTLE	SEA	VORTAC	VH	161.00	180.00	29.00	29.00		10000	17500

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	CBAIN (RNAV)			BFI	SEATTLE	WA (US)
DP	NRVNA (RNAV)			BFI	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)
STAR	HELNS	1		UAO	AURORA	OR (US)
STAR	HELNS	1		HIO	PORTLAND	OR (US)
STAR	HELNS	1		PDX	PORTLAND	OR (US)
STAR	HELNS	1		TTD	PORTLAND	OR (US)
STAR	KRATR (RNAV)	1		PDX	PORTLAND	OR (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 03/19/2026

REASON FOR REVISION:

1. FIX MAKE-UP FACILITIES: CHANGED FAC 1 CLASS FROM H TO VH.
2. FIX USE: ADDED FAC 1 TO KRATR (RNAV) STAR @KPDX.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A33

NAME: THOMAS KUKLISH

APPROVED BY:

DATE: 02/12/2026

OFFICE: AJV-A33

NAME: KYLE THOMPSON

SIGNATURE:

RADIO FIX AND HOLDING DATA RECORD

NAME: CUSBU

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 472954.68N/1221903.23W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANGR (RNAV)			SEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			SEA	SEATTLE	WA (US)
DP	ISBRG (RNAV)			SEA	SEATTLE	WA (US)
DP	JEFPO (RNAV)			SEA	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

1. FIX USE: DELETED KSEA DP ATOME (RNAV) - PROCEDURE CANCELLED.
2. FIX USE: ADDED KSEA DP ISBRG (RNAV).
3. FIX USE: ADDED KSEA DP JEFPO (RNAV).
4. FIX USE: ADDED KSEA DP OZWLD (RNAV).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/21/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: DODVE

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 472955.59N/1221826.80W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANGR (RNAV)			SEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			SEA	SEATTLE	WA (US)
DP	ISBRG (RNAV)			SEA	SEATTLE	WA (US)
DP	JEFPO (RNAV)			SEA	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 34R			SEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

1. FIX USE: DELETED KSEA DP ATOME (RNAV) - PROCEDURE CANCELLED.
2. FIX USE: ADDED KSEA DP ISBRG (RNAV).
3. FIX USE: ADDED KSEA DP JEFPO (RNAV).
4. FIX USE: ADDED KSEA DP OZWLD (RNAV).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/21/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: DAVID TEFFETELLER

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: NESOE

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 472955.64N/1221838.45W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANGR (RNAV)			SEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			SEA	SEATTLE	WA (US)
DP	ISBRG (RNAV)			SEA	SEATTLE	WA (US)
DP	JEFPO (RNAV)			SEA	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

1. FIX USE: DELETED KSEA DP ATOME (RNAV) - PROCEDURE CANCELLED.
2. FIX USE: ADDED KSEA DP ISBRG (RNAV).
3. FIX USE: ADDED KSEA DP JEFPO (RNAV).
4. FIX USE: ADDED KSEA DP OZWLD (RNAV).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/21/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: OZWLD

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 473233.99N/1223503.88W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

HOLDING:

HOLDING TYPE OF ACTION:

FIX USE:

USE TYPE
DP

USE TITLE
OZWLD (RNAV)

FAC

PAT

AIRPORT IDENT
SEA

CITY
SEATTLE

STATE
WA (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 07/19/2018

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 03/29/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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

RADIO FIX AND HOLDING DATA RECORD

NAME: WUREL

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 473319.52N/1221836.66W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANGR (RNAV)			SEA	SEATTLE	WA (US)
DP	HAROB (RNAV)			SEA	SEATTLE	WA (US)
DP	ISBRG (RNAV)			SEA	SEATTLE	WA (US)
DP	JEFPO (RNAV)			SEA	SEATTLE	WA (US)
DP	OZWLD (RNAV)			SEA	SEATTLE	WA (US)

REQUIRED CHARTING: DP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

1. FIX USE: DELETED KSEA DP ATOME (RNAV) - PROCEDURE CANCELLED.
2. FIX USE: ADDED KSEA DP ISBRG (RNAV).
3. FIX USE: ADDED KSEA DP JEFPO (RNAV).
4. FIX USE: ADDED KSEA DP OZWLD (RNAV).

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/21/2018

OFFICE: AJV-5433

NAME: ANDREA CHANEY

APPROVED BY:

DATE:

OFFICE: AJV-5430

NAME: PATRICK MULQUEEN

SIGNATURE:

DISTRIBUTION:

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