

RADIO FIX AND HOLDING DATA RECORD

NAME: AAYRR

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 463848.55N/1234320.60W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	SW		WP	239.12	059.12	L	10	12000	17500	15	17

CONTROLLING OBSTRUCTIONS:

PAT	AIRPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	463151.00N/1234318.00W	2353	4B

REASON FOR NONSTANDARD HOLDING:

PAT 1 TURN DIRECTION AND NON-STANDARD LEG LENGTH ATC REQUEST.

HOLDING RESTRICTIONS:

HOLDING RESTRICTED TO ESTABLISHED PATTERN(S).

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
STAR	HAWKZ (RNAV)		1	KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: STAR

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

1. PATTERNS: PAT 1 MAX TEMPLATE CHANGED FROM 18 TO 17.
2. CONTROLLING OBSTRUCTIONS: CHANGED FROM 2400 6C AAO TO 2353 4B AAO AND AIRPSEED UPDATED FROM 280 TO 230.
3. REASON FOR NONSTANDARD HOLDING: CHANGED FROM ATC REQUEST TO PAT 1 TURN DIRECTION AND NON-STANDARD LEG LENGTH ATC REQUEST.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Mar 29, 2024

QUALITY
14
CHECKED

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

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	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		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	VOR-A	KPDX	PORTLAND	OR (US)
1	TAKEOFF MINIMUMS	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) Y RWY 10L	KPDX	PORTLAND	OR (US)
4	RNAV (GPS)-A	KTTD	PORTLAND	OR (US)
4	RNAV (GPS) X RWY 28R	KPDX	PORTLAND	OR (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
 PAT 3 REQUESTED BY PDX APP CON AND ZSE.
 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	CASCADE (RNAV)			KPDX	PORTLAND	OR (US)
DP	HRMNS (RNAV)			KPDX	PORTLAND	OR (US)
DP	LAVAA (RNAV)			KPDX	PORTLAND	OR (US)
DP	PORTLAND			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)

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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	HIGH/LOW CHART	3			(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 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 28R		KPDX	PORTLAND	OR (US)
IAP	HI-ILS OR LOC/DME RWY 10R		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 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	TACAN RWY 28L		KPDX	PORTLAND	OR (US)
IAP	VOR-A	1	KPDX	PORTLAND	OR (US)
IAP	RNAV (GPS)-A	4	KTTD	PORTLAND	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: 39

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

1. PATTERNS: PAT 5 MIN/MAX TEMPLATES CHANGED FROM 23/31 TO 20/28.
2. REMARKS: UPDATED PAT 5 10 MILE LEG DME TEMPLATE FROM 23 TO 20, STILL 12 NM.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Mar 29, 2024



RADIO FIX AND HOLDING DATA RECORD

NAME: GRIFY

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 474609.02N/1222407.43W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: ESTABLISH

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	NW		WP	318.00	138.00	R		5	6000	6000	6	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (53-000084)	474604.92N/1222110.03W	933	1D

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:

ACTUAL FIX COORDINATES: 474609.020N/1222407.426W
PAT 1 FOR LOST COMMUNICATIONS ONLY FOR HAWKS STAR AT KSEA PER ATC.
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
SPECIAL IAP	RNAV (RNP) M RWY 16R			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 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	RNAV (GPS) Y RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) Y RWY 16R			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16C			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16L			KSEA	SEATTLE	WA (US)
IAP	RNAV (RNP) Z RWY 16R			KSEA	SEATTLE	WA (US)
STAR	HAWKZ (RNAV)		1	KSEA	SEATTLE	WA (US)
STAR	MARNR (RNAV)			KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: STAR, IAP, SPECIAL IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

- ADDED PAT 1, ASSOCIATED CONTROLLING OBSTACLE, RESTRICTION AND REMARKS.
- FIX USE: ADDED PAT 1 TO STAR HAWKZ (RNAV) AT KSEA.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Mar 29, 2024

QUALITY
14
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HAWKZ

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 464704.93N/1224420.29W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

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 MIN	ALTITUDES MAX	TEMPLATES MIN	MAX
1	S		WP	162.58	342.58	L	10	10000	40000	15	28

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	WINDMILL (53-108198)	464248.90N/1223559.93W	3311	4D

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
1	230	170

REASON FOR NONSTANDARD HOLDING:

PAT 1 TURN DIRECTION AND NON-STANDARD LEG LENGTH ATC REQUEST.

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
STAR	HAWKZ (RNAV)		1	KSEA	SEATTLE	WA (US)

REQUIRED CHARTING: STAR, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

1. PAT 1 CONTROLLING OBSTRUCTION CHANGED FROM 3092 TOWER TO 3311 WINDMILL, UPDATED AIRSPEED FROM 280 TO 230, AND ADDED 170 PRECIPITOUS TERRAIN.
2. UPDATED NONSTANDARD HOLDING REASON AND REPLACED FROM REMARKS.
3. REQUIRED CHARTING: ADDED CONTROLLER LOW.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 07/11/2024

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Mar 29, 2024

QUALITY
14
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: KRIEG

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 461912.75N/1224319.94W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
STAR

USE TITLE
HAWKZ (RNAV)

FAC

PAT

AIRPORT IDENT
KSEA

CITY
SEATTLE

STATE
WA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

REQUIRED CHARTING: ADDED CONTROLLER LOW/HIGH.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/29/2023

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Mar 29, 2024

QUALITY
14
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LATAY

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 462428.28N/1250418.52W

TYPE: WP

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE
STAR

USE TITLE
HAWKZ (RNAV)

FAC

PAT

AIRPORT IDENT
KSEA

CITY
SEATTLE

STATE
WA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 07/11/2024

REASON FOR REVISION:

REQUIRED CHARTING: ADDED CONTROLLER LOW/HIGH.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A431

NAME: RICHARD CHRISTENSEN

APPROVED BY:

DATE: 12/29/2023

OFFICE: AJV-A431

NAME: ERIC N SUSKI

SIGNATURE:

Digitally signed by

ERIC N SUSKI

Mar 29, 2024

QUALITY
14
CHECKED