

RADIO FIX AND HOLDING DATA RECORD

NAME: CARRO

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 471738.03N/1225127.86W

TYPE: WP, INT, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	SEATTLE	SEA	VORTAC	H	230.40	249.40	23.91	23.91		3000	17500
2	OLYMPIA	OLM	VORTAC	H	346.32	005.32	19.43	19.43		4000	17500

FIX RESTRICTIONS:

MRA V165-287 4000

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	SW	SEA	VORTAC	230.40	050.40	R	1-1 1/2	3000 17500	5 17
2	SW	WP	WP	227.40	047.40	R	4	3000 17500	5 17
3	N	OLM	VORTAC	346.32	166.32	R	1-1 1/2	4000 17500	5 17

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	471921.00N/1230024.00W	627	4E
1	310	TOWER (53-000732)	470451.34N/1231107.54W	1730	5E
2	200	AAO	471512.00N/1224836.00W	617	4E
2	310	TOWER (53-000732)	470451.34N/1231107.54W	1730	5E
3	200	AAO	472118.00N/1225821.00W	814	4E
3	310	TOWER (53-000358)	473253.00N/1224827.00W	2395	5E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKE-OFF MINIMUMS	KTIW	TACOMA	WA (US)
2	RNAV (GPS) RWY 20	KPWT	BREMERTON	WA (US)
2	RNAV (GPS) RWY 35	KTIW	TACOMA	WA (US)
2	RNAV (GPS) RWY 17	KTIW	TACOMA	WA (US)
3	ILS OR LOC RWY 20	KPWT	BREMERTON	WA (US)
3	TAKEOFF MINIMUMS	KPWT	BREMERTON	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		3	KPWT	BREMERTON	WA (US)
DP	TAKE-OFF MINIMUMS			KSHN	SHELTON	WA (US)
DP	TAKE-OFF MINIMUMS		1	KTIW	TACOMA	WA (US)
EN ROUTE	V165	1, 2				WA (US)
EN ROUTE	V27	1, 2	1			WA (US)
EN ROUTE	V287	1, 2				WA (US)
IAP	ILS OR LOC RWY 20	1, 2	3	KPWT	BREMERTON	WA (US)
IAP	RNAV (GPS) RWY 20		2	KPWT	BREMERTON	WA (US)
IAP	RNAV (GPS) RWY 15			KGRF	FORT LEWIS	WA (US)
IAP	RNAV (GPS) RWY 17			KOLM	OLYMPIA	WA (US)
IAP	NDB-A	1, 2		KSHN	SHELTON	WA (US)
IAP	RNAV (GPS) RWY 5		2	KSHN	SHELTON	WA (US)
IAP	RNAV (GPS) RWY 17		2	KTIW	TACOMA	WA (US)
IAP	RNAV (GPS) RWY 35		2	KTIW	TACOMA	WA (US)
SPECIAL DP	JESPA			K2WA7	CENTRALIA	WA (US)
SPECIAL DP	JOLPI			K8WA4	OLYMPIA	WA (US)
SPECIAL DP	HOGOT			K01WA	SOUTH BEND	WA (US)
SPECIAL IAP	COPTER RNAV (GPS) 13			K2WA7	CENTRALIA	WA (US)
SPECIAL IAP	COPTER RNAV (GPS) 16			K8WA4	OLYMPIA	WA (US)
SPECIAL IAP	COPTER RNAV (GPS) 13			K01WA	SOUTH BEND	WA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 22

DATE OF REVISION: 04/25/2019

REASON FOR REVISION:

DELETED KGRF ILS OR LOC RWY 15, NDB RWY 15 COPTER NDB RWY 15 AND KTIW NDB RWY 35 FROM FIX USE.

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

AJV-5411

NAME: RAKE MCGRAW**APPROVED BY:****DATE:****OFFICE:** AJV-5410**NAME:** GEORGE DAVIS**SIGNATURE:****DISTRIBUTION:****NFDC****FPO:** WST**ARTCC:** ZSE**ATC FACILITY:** SEA APP CON**OTHER:** USAASA

RADIO FIX AND HOLDING DATA RECORD

NAME: CIKRI

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 471456.73N/1223817.16W

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 NM	FAC FEET	MRA	MAA
1	TACOMA	I-GRF	LOC/DME		331.06	347.06	11.12	11.12		2000	4000

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		WP	331.02	151.02	R	5	2000 4000	6 7
2	NW	I-GRF	LOC/DME	331.06	151.06	R	5	2000 4000	5 6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TRANSMISSION_LINE (53-020039)	471704.34N/1223305.21W	718	1B
2	230	AAO	472406.00N/1224512.00W	649	4E

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15	1	2	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	RNAV (GPS) RWY 15		1	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	RNAV (GPS) RWY 33		1	KGRF	FORT LEWIS/TACOMA	WA (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 04/25/2019

REASON FOR REVISION:

FIX MOVED 149 FT N.
HOLDING COURSE INBOUND CHANGED FROM 151.03 TO 151.02.
ADDED FAC 1 GRF.
ADDED HOLDING PAT 2
UPDATED FIX USE.
ADDED DME TO FIX TYPE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-5411

NAME: RAKE MCGRAW

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: GRF ATC
OTHER: USAASA

RADIO FIX AND HOLDING DATA RECORD

NAME: EMOFO

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 470905.21N/1223618.40W

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 NM	FAC FEET	MRA	MAA
1	TACOMA	I-GRF	LOC/DME		331.06	347.06	5.10	5.10	31014	1500	2000

REMARKS:

TARGETS .58 PFAF CRITERIA USED TO DETERMINE FIX LOCATION.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15	1		KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	RNAV (GPS) RWY 15			KGRF	FORT LEWIS/TACOMA	WA (US)

REQUIRED CHARTING: MILITARY IAP, IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2

DATE OF REVISION: 04/25/2019

REASON FOR REVISION:

FIX MOVED 10 FT NORTH.
ADDED FAC 1 GRF.
UPDATED FIX USE.
ADDED DME TO FIX TYPE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-5411

NAME: RAKE MCGRAW

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: GRF ATC
OTHER: USAASA

RADIO FIX AND HOLDING DATA RECORD

NAME: GRAYE NDB STATE: WA COUNTRY: US ICAO REGION CODE: K1
 LATITUDE/LONGITUDE: 470901.06N/1223616.73W TYPE: WP, DME

AIRSPACE DOCKET: FIX TYPE OF ACTION: CANCEL

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	FEET	MRA	MAA
1	GRAYE	GRF	NDB	MH							17500
2	TACOMA	I-GRF	LOC/DME		331.07	347.07	5.03	5.03	30579	1600	4800

HOLDING: HOLDING TYPE OF ACTION: CANCEL

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	NW	GRF	NDB	331.08	151.08	R	1		1700	2000	5	5
2	S	GRF	NDB	172.84	352.84	L	1		2000	6000	5	7
3	NW	WP	WP	331.08	151.08	R		4	2000	2000	4	4
4	NW	GRF	NDB	331.08	151.08	R	1		2000	8700	11	15

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	470829.65N/1223645.31W	620	4E
2	230	AAO	465921.00N/1224130.00W	781	4E
3	100	AAO	470829.65N/1223645.31W	620	2C
4	310	TOWER (53-000029)	471643.50N/1223046.38W	918	2C

REASON FOR NONSTANDARD HOLDING:

PAT 2 MCCHORD AFB ATA AVOIDANCE

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.
 PRIOR COORDINATION REQUIRED WITH SEA APP CON FOR HOLDING OVER R-6703A/B/C/D AND/OR RAINIER MOA 1,2,3.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
4	NDB RWY 15	KGRF	FORT LEWIS/TACOMA	WA (US)
4	TAKEOFF MINMUMS	KGRF	FORT LEWIS/TACOMA	WA (US)

REMARKS:

HOLDING OVERLAPS R-6703 AND RAINIER MOA; ATC HAS RECALL.
 PAT 1,3: R-6703A/B, AND RAINIER 1,2,3 MOA.
 PAT 2: R-6703A/B/C/D, AND RAINIER 1,2,3 MOA.
 PAT 3: HOLDING FOR MILITARY HELICOPTERS ONLY, MAX AIRSPEED 100KTS.
 PRECIPITOUS TERRAIN EVALUATION COMPLETED.
 FAC 2 DME COORDINATES 470406.45N-1223441.81W.
 GRF NDB MAG VAR 16E, EPOCH YEAR 2015.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKEOFF MINMUMS	1	4	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	COPTER NDB RWY 15	1	1	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	ILS OR LOC RWY 15	1, 2	1	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	NDB RWY 15	1	1	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	NDB RWY 33	1	1	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	RADAR-1, PAR RWY 15/33	1	1	KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	NDB RWY 35	1	2	KTIW	TACOMA	WA (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 12 DATE OF REVISION: 01/04/2018

REASON FOR REVISION:

1. UPDATED FIX USE, REMOVED KGRF COPTER RNAV (GPS) RWY 15.
 2. CHANGED FAC 2 I-GRF DME DISTANCE FROM 4.50 NM TO 5.03 NM.
 3. CHANGED FAC 2 DME COORDINATES FROM 470441.00N-1223432.30W.

INITIATED BY: DATE: ORGANIZATION: NAME:

DEVELOPED BY: DATE: OFFICE: NAME:

APPROVED BY:**DATE:****OFFICE:** AJV-5410**NAME:** GEORGE DAVIS**SIGNATURE:****DISTRIBUTION:****NFDC****FPO:** WST**ARTCC:** ZSE**ATC FACILITY:** GRF ATCT, WESTERN DAR**OTHER:** USAASA

RADIO FIX AND HOLDING DATA RECORD

NAME: OLYMPIA VORTAC

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 465817.90N/1225406.60W

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	MRA FEET	MAA
1	OLYMPIA	OLM	VORTAC	H						45000

FIX RESTRICTIONS:

MCA V204 3200 WESTBOUND

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	S	OLM	VORTAC	176.00	356.00	R	1		3000	10000	4	9
2	SE	OLM	VORTAC	151.00	331.00	L	1		4000	17500	4	16
3	S	OLM	VORTAC	176.00	356.00	L	1		4200	14000	4	10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	465039.00N/1225006.00W	1113	4E
1	310	AAO	470012.00N/1230309.00W	1995	4E
2	200	AAO	465039.00N/1225006.00W	1113	4E
3	200	AAO	470009.00N/1230312.00W	2002	4E
3	310	TOWER (53-023297)	465822.40N/1230822.10W	3047	5E

PRECIPITOUS TERRAIN ADDITIONS:

PAT	SPEED	ADDITION
3	310	80

REASON FOR NONSTANDARD HOLDING:

PAT 2 TO AVOID R-6703
PAT 3 TO AVOID R-6703

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS.
PRIOR COORDINATION REQUIRED WITH CONTROLLING AGENCY FOR HOLDING OVER R-6703, AND RAINIER MOA, PAT 1 ALL ALTITUDES.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	TAKE-OFF MINIMUMS	KOLM	OLYMPIA	WA (US)
3	YELM	KOLM	OLYMPIA	WA (US)
3	VOR-A	KOLM	OLYMPIA	WA (US)

REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 3 200K OBSTACLE 1.80 NM INTO SECONDARY.
FACILITY MAG VAR: E19/1995

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	PORTLAND			KPDX	PORTLAND	OR (US)
DP	PAINE			KPAE	EVERETT	WA (US)
DP	LEWIS			KGRF	FORT LEWIS	WA (US)
DP	TAKE-OFF MINIMUMS		1	KOLM	OLYMPIA	WA (US)
DP	YELM		3	KOLM	OLYMPIA	WA (US)
DP	CBAIN (RNAV)			KBFI	SEATTLE	WA (US)
DP	KENT			KBFI	SEATTLE	WA (US)
DP	NEEDLE			KBFI	SEATTLE	WA (US)
DP	NRVNA (RNAV)			KBFI	SEATTLE	WA (US)
DP	HAROB (RNAV)			KSEA	SEATTLE	WA (US)
DP	SEATTLE			KSEA	SEATTLE	WA (US)
DP	SUMMA			KSEA	SEATTLE	WA (US)
DP	ALDER			KTCM	TACOMA	WA (US)
DP	MOCAA (RNAV)			KTCM	TACOMA	WA (US)
DP	OLYMPIC			KTCM	TACOMA	WA (US)
DP	PUGET			KTCM	TACOMA	WA (US)
DP	NARROWS			KTIW	TACOMA	WA (US)
DP	TAKE-OFF MINIMUMS			KTIW	TACOMA	WA (US)
EN ROUTE	J126					(US)
EN ROUTE	J34					(US)
EN ROUTE	J54					(US)
EN ROUTE	V165					(US)
EN ROUTE	V187					(US)
EN ROUTE	V204					(US)

QUALITY
38
CHECKED

EN ROUTE	V287	2			(US)
IAP	RNAV (GPS) RWY 26		KAST	ASTORIA	OR (US)
IAP	ILS OR LOC RWY 20		KPWT	BREMERTON	WA (US)
IAP	RNAV (GPS) RWY 2		KPWT	BREMERTON	WA (US)
IAP	RNAV (GPS) RWY 16		KCLS	CHEHALIS	WA (US)
IAP	ILS OR LOC RWY 15	2	KGRF	FORT LEWIS	WA (US)
IAP	RNAV (GPS) RWY 15		KGRF	FORT LEWIS	WA (US)
IAP	RNAV (GPS) RWY 33		KGRF	FORT LEWIS	WA (US)
IAP	ILS OR LOC RWY 17		KOLM	OLYMPIA	WA (US)
IAP	RNAV (GPS) RWY 17		KOLM	OLYMPIA	WA (US)
IAP	RNAV (GPS) RWY 35		KOLM	OLYMPIA	WA (US)
IAP	VOR RWY 35	3	KOLM	OLYMPIA	WA (US)
IAP	VOR-A	3	KOLM	OLYMPIA	WA (US)
IAP	ILS RWY 32L		KBFI	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16C (ALT MISSED)		KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16L (ALT MISSED)		KSEA	SEATTLE	WA (US)
IAP	ILS OR LOC RWY 16R (ALT MISSED)		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16C (SA CAT I, CAT II/III ALT MISSED)		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16L (SA CAT I, CAT II/III ALT MISSED)		KSEA	SEATTLE	WA (US)
IAP	ILS RWY 16R (SA CAT I, CAT II/III ALT MISSED)		KSEA	SEATTLE	WA (US)
IAP	RNAV (GPS) RWY 23		KSHN	SHELTON	WA (US)
IAP	ILS OR LOC RWY 34		KTCM	TACOMA	WA (US)
IAP	ILS RWY 34 (CAT II)		KTCM	TACOMA	WA (US)
IAP	TACAN RWY 34		KTCM	TACOMA	WA (US)
IAP	RNAV (GPS) RWY 35		KTIW	TACOMA	WA (US)
STAR	OLYMPIA	2	KPAE	EVERETT	WA (US)
STAR	OLYMPIA	2	KRNT	RENTON	WA (US)
STAR	OLYMPIA	2	KBFI	SEATTLE	WA (US)
STAR	OLYMPIA	2	KSEA	SEATTLE	WA (US)
STAR	ARRIE		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: 21

DATE OF REVISION: 06/20/2019

REASON FOR REVISION:

1. REMOVED 1 1/2 LEG TIME FROM PAT 2.

2. UPDATED FIX USE: REMOVED "DME" FROM VOR/DME RWY 35 AT KOLM:CHANGED ILS OR LOC Y RWY 34 TO ILS OR LOC RWY 34 AT KTCM.

3. UPDATED FIX USE: REMOVED KGRF NDB RWY 15, NDB RWY 33, AND COPTER NDB 15. REMOVED KTIW NDB RWY 35. ADDED HOLDING PAT 2 FIX USE TO KGRF ILS OR LOC RWY 15.

4. UPDATED FIX USE: REMOVED IAP, KSHN NDB-A.

INITIATED BY: **DATE:** **ORGANIZATION:** **NAME:**

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A421 **NAME:** DEANNA FIELDS

APPROVED BY: **DATE:** **OFFICE:** AJV-A420 **NAME:** JULIE MORGAN

SIGNATURE: *Digitally signed by*

DAVID DANNER

DISTRIBUTION: **NFDC** Feb 15, 2019
FPO: WST
ARTCC: ZSE
ATC FACILITY: BOEING ATCT, SEA APP CON
OTHER: OLM ATCT, USAASA

QUALITY
38
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ZAPEB

STATE: WA

COUNTRY: US

ICAO REGION CODE: K1

LATITUDE/LONGITUDE: 470720.01N/1223542.94W

TYPE: WP, DME

AIRSPACE DOCKET:

FIX TYPE OF ACTION: ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	TACOMA	I-GRF	LOC/DME		331.06	347.06	3.30	3.30		920	1600

FIX RESTRICTIONS:

MILITARY ONLY

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 15	1		KGRF	FORT LEWIS/TACOMA	WA (US)
IAP	RNAV (GPS) RWY 15			KGRF	FORT LEWIS/TACOMA	WA (US)

REQUIRED CHARTING: MILITARY IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG

DATE OF REVISION: 04/25/2019

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-5411

NAME: RAKE MCGRAW

APPROVED BY:

DATE:

OFFICE: AJV-5410

NAME: GEORGE DAVIS

SIGNATURE:

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZSE
ATC FACILITY: GRF ATCT
OTHER: USAASA