

RADIO FIX AND HOLDING DATA RECORD

NAME: GRAIL STATE: HI COUNTRY: US ICAO REGION CODE: PH
 LATITUDE/LONGITUDE: 213046.77N/1585132.74W TYPE: 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 FAC NM	MRA	MAA
1	SOUTH KAUAI	SOK	VORTAC	H	110.63	121.63	44.01		6000	15200
2	LIHUE	LIH	VORTAC	H	124.21	135.21	38.04		6000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SOK	VORTAC	R-111	45	6000	15200

FIX RESTRICTIONS:

MRA V16 9000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

SOUTH KAUAI (FAC 1) USED TO ESTABLISH FIX COORDINATES.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	KEOLA	1		PHNL	HONOLULU	HI (US)
EN ROUTE	V16	1, 2				HI (US)
IAP	RNAV (RNP) Z RWY 21			PHLI	LIHUE	HI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 02/25/2021

REASON FOR REVISION:

1. CHANGED DP WITHIN FIX USE FROM "HONOLULU INTL - KEOLA DEPARTURE" TO "KEOLA"
2. CHANGED ENROUTE WITHIN FIX USE FROM "V-16 (FAC 1 AND 2 DME) TO "ENROUTE V16"
3. DELETED IAPS RNAV (GPS) Y RWY 21 AND VOR/DME OR TACAN RWY 21 AT PHLI.
4. ADDED CONTROLLER LOW TO REQUIRED CHARTING.
5. ADDED SOK ESV TO FORM.
6. DELETED REMARKS "ESV ON FILE 01/25/06" AND ADDED "SOUTH KAUAI (FAC 1) USED TO ESTABLISH FIX COORDINATES".
7. CHANGED FIX MAKE-UP FACILITIES 1 MRA/MAA FROM "3000/45000" TO "6000/15200".

1/5/21: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/23/20.
 ADDED "MRA V16 9000" TO FIX RESTRICTIONS.

INITIATED BY: DATE: ORGANIZATION: NAME:

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A433 NAME: JAMES LAFFERTY

APPROVED BY: DATE: OFFICE: AJV-A430 NAME: GEORGE DAVIS

SIGNATURE: *Digitally signed by*

DAVID TEFFETELLER

DISTRIBUTION:

NFDC
 FPO: LAX
 ARTCC: ZHN
 ATC FACILITY: LIH
 OTHER:

Jan 06, 2021

QUALITY
 45
 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HONOLULU VORTAC STATE: HI COUNTRY: US ICAO REGION CODE: PH
 LATITUDE/LONGITUDE: 211829.96N/1575549.48W 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	HONOLULU	HNL	VORTAC	H						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	HNL	VORTAC	171.00	351.00	L	1	3000 14000	6 10

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	AAO	212227.00N/1575054.00W	1946	4D

REASON FOR NONSTANDARD HOLDING:

PAT 1 TERRAIN

HOLDING RESTRICTIONS:

HOLDING LIMITED TO ESTABLISHED PATTERNS

REMARKS:

PAT 1 OBSTACLE 11666.67' INTO SECONDARY AREA.
 PRECIPITOUS TERRAIN EVALUATION COMPLETED:
 HNL VORTAC MAG VAR: 11 E.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ALANA			PHNL	HONOLULU	HI (US)
DP	HONOLULU (OBSTACLE)			PHNL	HONOLULU	HI (US)
DP	KEAHI			PHNL	HONOLULU	HI (US)
DP	KEOLA			PHNL	HONOLULU	HI (US)
DP	MOLOKAI			PHNL	HONOLULU	HI (US)
DP	OPIHI			PHNL	HONOLULU	HI (US)
DP	PALAY			PHNL	HONOLULU	HI (US)
DP	SAITO			PHNL	HONOLULU	HI (US)
DP	STACEY			PHOG	KAHULUI	HI (US)
DP	TAKE-OFF MINIMUMS			PHJR	KAPOLEI, OAHU ISLAND	HI (US)
DP	GECKO			PHHI	WAHIAWA	HI (US)
EN ROUTE	V12					HI (US)
EN ROUTE	V15					HI (US)
EN ROUTE	V2					HI (US)
EN ROUTE	V20					HI (US)
EN ROUTE	V21					HI (US)
EN ROUTE	V4					HI (US)
EN ROUTE	V8					HI (US)
IAP	ILS RWY 8L			PHNL	HONOLULU	HI (US)
IAP	ILS Y RWY 4R			PHNL	HONOLULU	HI (US)
IAP	ILS Z RWY 4R			PHNL	HONOLULU	HI (US)
IAP	LDA RWY 26L			PHNL	HONOLULU	HI (US)
IAP	LOC RWY 4R			PHNL	HONOLULU	HI (US)
IAP	LOC RWY 8L			PHNL	HONOLULU	HI (US)
IAP	VOR OR TACAN -A			PHNL	HONOLULU	HI (US)
IAP	VOR OR TACAN RWY 4R			PHNL	HONOLULU	HI (US)
IAP	VOR OR TACAN-B			PHNL	HONOLULU	HI (US)
IAP	RNAV (GPS) RWY 4R			PHJR	KAPOLEI	HI (US)
IAP	VOR/DME RWY 4R			PHJR	KAPOLEI, OAHU ISLAND	HI (US)
IAP	RNAV (GPS)-C			PHHI	WAHIAWA	HI (US)
IAP	VOR OR TACAN-B		1	PHHI	WAHIAWA	HI (US)
STAR	BOOKE			PHNL	HONOLULU	HI (US)
STAR	JULLE			PHNL	HONOLULU	HI (US)
STAR	OPACA			PHNL	HONOLULU	HI (US)
STAR	SAKKI			PHNL	HONOLULU	HI (US)
STAR	KAYAK			PHKO	KAILUA-KONA	HI (US)

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

COMPULSORY REPORTING POINT: LOW/HIGH

RECORD REVISION NUMBER: 10

DATE OF REVISION: 12/31/2020

QUALITY
45
CHECKED

REASON FOR REVISION:

1. ADDED SAITO AND ALANA DP'S TO FIX USE.
2. ADDED MILITARY DP TO REQUIRED CHARTING.
3. DELETED HOLDING PATTERNS 1 AND 3.
4. DELETED CONTROLLING OBSTRUCTIONS 1 AND 3.
5. DELETED PRECIPITOUS TERRAIN ADDITION FOR PATTERN 1.
6. DELETED PAT 3 ATC FROM REASON FOR NONSTANDARD HOLDING.
7. CHANGED PAT 2 TO PAT 1 IN REASON FOR NONSTANDARD HOLDING.
8. DELETED REMARK PATS 1 AND 3 FOR ATC USE.
9. CHANGED PAT 2 OBSTACLE 11666.67' INTO SECONDARY AREA TO PAT 1.
10. DELETED FAC 1 FROM ALANA AND SAITO DEPARTURES IN FIX USE.
11. DELETED RNAV (GPS) Y RWY 8L AT PHNL FROM FIX USE.
12. ADDED LOC RWY 8L AT PHNL TO FIX USE.

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

AJV-A433

NAME: JAMES LAFFERTY**APPROVED BY:****DATE:****OFFICE:** AJV-A430**NAME:** GEORGE DAVIS**SIGNATURE:***Digitally signed by***DAVID TEFFETELLER****DISTRIBUTION:****NFDC****FPO:** WST

Jan 06, 2021

ARTCC: ZHN**ATC FACILITY:** HCF / JRF ATCT**OTHER:** HI ANG, USAASA

QUALITY
45
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: LILIA

STATE: OP

COUNTRY: US

ICAO REGION CODE: P

LATITUDE/LONGITUDE: 223027.72N/1613459.46W

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	SOUTH KAUAI	SOK	VORTAC	H	277.00	288.00	120.00	120.00		8000	18700

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SOK	VORTAC	R-277	120	8000	18700

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANZI (RNAV)			PHNL	HONOLULU	HI (US)
DP	KEOLA			PHNL	HONOLULU	HI (US)
DP	PIPLN (RNAV)			PHNL	HONOLULU	HI (US)
DP	HIAKA (RNAV)			PHOG	KAHULUI	HI (US)
DP	PUHEE (RNAV)			PHOG	KAHULUI	HI (US)
EN ROUTE	V15	1				(US)

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

COMPULSORY REPORTING POINT: LOW/HIGH

RECORD REVISION NUMBER: 4

DATE OF REVISION: 12/31/2020

REASON FOR REVISION:

1. ADDED NM DISTANCE TO FIX MAKE-UP FACILITY.
2. CHANGED MAA FROM 45000 TO 18700 TO MATCH ESV.
3. REMOVED (RNAV) FROM DP KEOLA WITHIN FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: JAMES LAFFERTY

APPROVED BY:

DATE:

OFFICE: AJV-A430

NAME: GEORGE DAVIS

SIGNATURE:

Digitally signed by

DAVID TEFFETELLER

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZHN
ATC FACILITY:
OTHER:

Jan 06, 2021

QUALITY
45
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NAPUA

STATE: HI

COUNTRY: US

ICAO REGION CODE: PH

LATITUDE/LONGITUDE: 214410.93N/1591438.56W

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	SOUTH KAUAI	SOK	VORTAC	H	110.61	121.61	18.68	18.68		3000	46000
2	LIHUE	LIH	VORTAC	H	147.99	158.99	14.66	14.66		3000	46000

FIX RESTRICTIONS:

MRA V16 6000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

SOUTH KAUAI (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	KEOLA			PHNL	HONOLULU	HI (US)
EN ROUTE	V16	1				(US)
IAP	ILS OR LOC RWY 35	1		PHLI	LIHUE	HI (US)
IAP	RNAV (GPS) RWY 17			PHLI	LIHUE	HI (US)
IAP	RNAV (GPS) Y RWY 21			PHLI	LIHUE	HI (US)
IAP	RNAV (GPS) Y RWY 35			PHLI	LIHUE	HI (US)
IAP	RNAV (RNP) Z RWY 35			PHLI	LIHUE	HI (US)
IAP	VOR OR TACAN RWY 35	2		PHLI	LIHUE	HI (US)
IAP	VOR/DME OR TACAN RWY 21	2		PHLI	LIHUE	HI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6

DATE OF REVISION: 02/25/2021

REASON FOR REVISION:

1. ADDED CONTROLLER LOW TO REQUIRED CHARTING.
2. ADDED RNAV (GPS) Y RWY 21 AT PHLI TO FIX USE.

1/5/21: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 11/23/20.
ADDED "MRA V16 6000" TO FIX RESTRICTIONS.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: JAMES LAFFERTY

APPROVED BY:

DATE:

OFFICE: AJV-A430

NAME: GEORGE DAVIS

SIGNATURE:

Digitally signed by

DAVID TEFFETELLER

DISTRIBUTION:

NFDC

FPO: SEA

ARTCC: ZHN

ATC FACILITY: LIH ATCT

OTHER:

Jan 06, 2021

QUALITY
45
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: NONNI

STATE: OP

COUNTRY: US

ICAO REGION CODE: P

LATITUDE/LONGITUDE: 211342.30N/1610259.58W

TYPE: WP, 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 FAC NM	FAC FEET	MRA	MAA
1	HONOLULU	HNL	VORTAC	H	258.00	269.00	174.88	174.48		29000	45000
2	SOUTH KAUAI	SOK	VORTAC	H	234.00	245.00	94.08	94.08		22000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
HNL	VORTAC	R-258	175	29000	45000

FIX RESTRICTIONS:

MRA V12 29000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

REMARKS:

FIX PLOTTED AS DME FROM HNL.
HNL DME 174.8769838

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	KEOLA	1, 2		PHNL	HONOLULU	HI (US)
DP	HIAKA (RNAV)			PHOG	KAHULUI	HI (US)
DP	PUHEE (RNAV)			PHOG	KAHULUI	HI (US)
EN ROUTE	V12	1				(US)

REQUIRED CHARTING: DP, EN ROUTE LOW, CONTROLLER LOW

COMPULSORY REPORTING POINT: HIGH

RECORD REVISION NUMBER: 2

DATE OF REVISION: 12/31/2020

REASON FOR REVISION:

1. ADDED CONTROLLER LOW TO AND DELETED STAR FROM REQUIRED CHARTING.
2. DELETED STAR "OPACA" AT PHNL FROM FIX USE.
3. ADDED NM DISTANCE TO FAC 1/2.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

OFFICE OF PRIMARY RESPONSIBILITY:

AJV-A433

NAME: JAMES LAFFERTY

APPROVED BY:

DATE:

OFFICE: AJV-A430

NAME: GEORGE DAVIS

SIGNATURE:

Digitally signed by

DISTRIBUTION:

NFDC
FPO: WST
ARTCC: ZHN
ATC FACILITY:
OTHER:

DAVID TEFFETELLER

Jan 06, 2021

QUALITY
45
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: PUPPI STATE: OP COUNTRY: US ICAO REGION CODE: P
 LATITUDE/LONGITUDE: 215516.98N/1614046.68W TYPE: WP, 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 FAC NM	MRA	MAA
1	SOUTH KAUAI	SOK	VORTAC	H	260.00	271.00	120.00	120.00	11000	45000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
SOK	VORTAC	R-260	120	11000	18700

FIX RESTRICTIONS:

MRA V16 11000

HOLDING:

HOLDING TYPE OF ACTION: NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	BANZI (RNAV)			PHNL	HONOLULU	HI (US)
DP	KEOLA	1		PHNL	HONOLULU	HI (US)
DP	PIPLN (RNAV)			PHNL	HONOLULU	HI (US)
DP	HIKA (RNAV)			PHOG	KAHULUI	HI (US)
DP	PUHEE (RNAV)			PHOG	KAHULUI	HI (US)
EN ROUTE	V16	1				(US)
STAR	BOOKE	1		PHNL	HONOLULU	HI (US)
STAR	KLANI (RNAV)			PHNL	HONOLULU	HI (US)

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

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5

DATE OF REVISION: 12/31/2020

REASON FOR REVISION:

ADDED CONTROLLER LOW TO REQUIRED CHARTING.

INITIATED BY: DATE: ORGANIZATION: NAME:

OFFICE OF PRIMARY RESPONSIBILITY: AJV-A433 NAME: JAMES LAFFERTY

APPROVED BY: DATE: OFFICE: AJV-A430 NAME: GEORGE DAVIS

SIGNATURE:

Digitally signed by

DISTRIBUTION: NFDC
 FPO: WST
 ARTCC: ZHN
 ATC FACILITY:
 OTHER:

DAVID TEFFETELLER
 Jan 06, 2021

QUALITY
45
CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: SOUTH KAUAI VORTAC

STATE: HI

COUNTRY: US

ICAO REGION CODE: PH

LATITUDE/LONGITUDE: 215401.41N/1593143.94W

TYPE:

AIRSPACE DOCKET:

FIX TYPE OF ACTION: CANCEL

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM NM	FAC FEET	MRA	MAA
1	SOUTH KAUAI	SOK	VORTAC	H						3000	45000

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	KEOLA	1		PHNL	HONOLULU	HI (US)
DP	OPIHI	1		PHNL	HONOLULU	HI (US)
EN ROUTE	V15	1				HI (US)
EN ROUTE	V16	1				HI (US)
IAP	ILS OR LOC RWY 35	1		PHLI	LIHUE	HI (US)
IAP	VOR OR TACAN RWY 35	1		PHLI	LIHUE	HI (US)
STAR	BOOKE	1		PHNL	HONOLULU	HI (US)
STAR	OPACA	1		PHNL	HONOLULU	HI (US)

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

COMPULSORY REPORTING POINT: LOW/HIGH

RECORD REVISION NUMBER: 8

DATE OF REVISION: 07/19/2018

REASON FOR REVISION:

REMOVED PHLI DIANE DP FROM FIX USE.

INITIATED BY:

DATE:

ORGANIZATION:

NAME:

DEVELOPED BY:

DATE: 02/15/2018

OFFICE: AJV-5432

NAME:

APPROVED BY:

DATE:

OFFICE: AJV-A430

NAME: GEORGE DAVIS

SIGNATURE: *Digitally signed by*

DAVID TEFFETELLER

DISTRIBUTION:

NFDC

FPO: WST

ARTCC: ZHN

ATC FACILITY: HCF APP CON

OTHER:

Jan 06, 2021

QUALITY
45
CHECKED