CHANGE

HCF 7110.1E
CHG 1

Effective Date:
October 15, 2015

SUBJ: HCF 7110.1E, Standard Operating Procedures

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1. Purpose of This Change. This change transmits revised pages to HCF Order Standard Operating Procedures.

2. Audience. This change applies to all HCF Air Traffic Control personnel, Trainees and Training Department.

3. Where Can I Find This Change? This change is available in the HCF 7110.1E Standard Operating Procedures binders in the operations area, Training office and on the HCF Share drive.

4. Explanation of Changes. See the Explanation of Changes attachment.

5. Distribution. This Order is distributed to the HCF library, action binders, sector binders, staff offices, HCF National Air Traffic Controllers Association (NATCA), HCF Training Department and the Western Service Center Systems Group.

6. Disposition on Transmittal. Retain this transmittal until superseded by a new basic order.

7. Page Control Chart. See the page control chart attachment.

[redacted]

Michael C. Schmidt
Manager, Hawaii-Pacific District

Date: 10/13/2015

Distribution: HCF Operations Floor, Staff Offices, WSA System Group
HCF Training Department

Initiated by: GL

Explanation of Changes

SOP Change 1 dated 10/15/2015 replaces pages dated 07/06/2015.

PAGE	EXPLANATION OF CHANGES
Table of Contents	Pages i thru vii - Chapters/pages renumbered due to changes.
Page 1-1	Paragraph 1-6. Effective date corrected to July 6, 2015.
Page 1-1	Paragraph 1-9. Added Local Control 2 (LC2), renamed Local Control to Local Control 1 (LC1)
Page 1-2	Paragraph 1-10. LC1 and LC2 added to table.
Page 2-3	Added depiction of Dillingham (HDH) airspace to Terminal Area Chart.
Page 3-1	Paragraph 3-1 a2 (g). Added (g) LC1 and LC2 Renumbered (g) to (h), change to LC1 and LA Renumbered (h) to (i).
Page 3-2	Paragraph 3-1 a 4 b. Added Verbal Briefing Procedures, IAFDOF aircraft added.
Pages 3-5 thru 3-18	Page 3-5. Paragraph 3-1 b 4. Added Departure Runway Assignments and Arrival Restrictions. HCF Notice N7110.41. Subsequent paragraphs renumbered.
Page 3-5, 3-6	Paragraph 3-1 c 2 a thru c . Amended Duty Familiarization and Transfer of Position Responsibilities to include procedures when OJTI is being conducted. HCF Notice N7110.40
Page 3-10	Paragraph 3-4. Added reference to MIA/MVA maps.
Page 3-10	Paragraph 3-5. Diverse Vector Areas for LIH, MKK, OGG, KOA, ITO. Subsequent paragraphs and pages renumbered.
Pages 4-1 thru 4-2(b)	Page 4-2 renumbered to 4-2(a), added page 4-2(b) chart with Dillingham Jump Area.
Pages 4-7 thru 4-13	Page 4-7. Paragraph 4-1 C 4 (c). Sector 2/6/8 - updated instructions for entering wind data into OFDPS. HCF Control Sheet 14-11-042. Page 4-8. Paragraph 4-1 C5. Deleted reference to IAFDOF and Preserved Track procedures for oceanic aircraft. Subsequent paragraphs and pages renumbered.
Page 4-18	Paragraph 4-2 b 3. Fix WILIS deleted from TBL 4-2-1 Holding Patterns.

PAGE	EXPLANATION OF CHANGES
Page 4-23	Paragraph 4-2 d 7 changed to 4-2 e 1-7. IAFDOF Procedure updated for Sector 3. HCF Notice 7110.39
Page 4-28	Change to Ordnance Routes: NGF to W194: NGF.HELUX3.HELUX..MASAE..LOKIE..SERAH..GARZZ W194 to NGF: GARZZ..SERAH..LOKIE..MASAE.. NUDSE..NGF
Page 4-31	TBL 4-3-1 Holding Patterns – fix WILIS deleted.
Page 4-32	Paragraph 4-3 c. Equipment renumbered from 4-3 b.
Page 4-37	Changed Sector 3 NGF ARR route from "Direct MKK Direct Harpe" to "Direct MKK Direct Nudse"
Page 4-43	Sector 5 Holding Patterns – fix WILIS deleted.
Page 4-57	Paragraph 4-5 7 C 4 (a) (3). Sector 7 - updated instructions for entering wind data into OFDPS. HCF Control Sheet 14-11-042.
Page 4-58	Paragraph 4-5 d 7. Updated IAFDOF Procedures. HCF Notice 7110.39
Page 4-70	Paragraph 4-6 g 3. Added - Helicopters inbound via McGregor Point crossing Runway 2 final. HCF Control Sheet 15-03-060.
Page 5-1	Paragraph 5-1 a 5, renumbered (there were two 5-1 a 4s). Paragraph 5-1 a 6. Added responsibility of FLM/CIC for anticipating and initiating departure release when LC1 and LC2 are decombined. Paragraph 5-1 b 5. Added - HNL weather ceilings and releasing authority from LC2 back to LC1.
Page 5-2	Paragraph 5-2. Hours of Operation table. LC changed to LC1, added LC2 0900-1500L. Paragraph 5-5. Changed back-up frequency for LC1 and LC2; added spare frequencies 128.65/323.05.
Page 5-4	Paragraph 5-8 b. Changed FLM to FLM/CIC. Paragraph 5-8 c deleted.
Page 5-5 thru 5-6	Paragraph 5-11. Added General Runway Use; SURF Program deleted. Page 5-6. Paragraph 5-13. Added reference to National Security Area over Ford Island (Appendix 29).
Page 6-1 to 6-2	Paragraph 6-1 b 2, Figure 1. Flight strip and numbers corrected. Notice HCF N7110.43.

PAGE	EXPLANATION OF CHANGES
Page 6-2	Paragraph 6-1 b 2, Figure 2. Added Box 28 Aircraft's assigned departure heading. HCF Notice N7110.37.
Page 6-3	Paragraph 6-1 d. Changed letter identifier "P" from Palay Departure to Punchbowl Departure (strip marking).
Page 6-7	Paragraph 6-2 c 5(b)(1). Adds restriction to shoreline during 2 LC ops. Paragraph 6-2 c 5 (b) (4). Adds Punchbowl Departure and restrictions.
Page 6-9	Paragraph 6-4 d 1. Added Punchbowl Departure to L Departure Radar table.
Page 6-14	Paragraph 6-7 a 3 (b). Added "HB-Punchbowl Departure" to fix pair chart. Paragraph 6-9. Added Clearance Procedures when LC1 and LC2 are decombined
Page 6-15	Paragraph 6-10. Added Flight Data procedures when LC1 and LC2 are decombined.
Page 7-1	Paragraph 7-1. Added Note referring to paragraph 7-6 for changes in Ground Control Operations when LC1 and LC2 are decombined.
Page 7-2	Paragraph 7-2 b 3. Changed area of non-visibility from Taxiway RB between taxiways M and RA to Taxiway RB south of the RB bridge.
Page 7-4	Paragraph 7-3 c 4. Changed to say GC must record the coordination for runway crossing via a recorded land line & advise LA/LC1 when traffic is clear of the runway or has completed coordinated request.
Page 7-4	Paragraph 7-3 c 5. Added LC delegation of closed runway. Paragraph 7-3 d 1. Added RWY 26R as departure runway. Paragraph 7-3 d 2. Deleted requirement for RWY 26R. Paragraph 7-3 d 4. Added Departure Runway Assignments & Arrival Restrictions. HCF Notice N7110.41 Paragraph 7-3 e 4. Added during RWY 22/26 operations, only ADG V and above aircraft must be held short for departing traffic on 22L/22R.
Page 7-5	Paragraph 7-3 e 6. Added procedures for aircraft parking at Hickam. Paragraph 7-3 e 7 (e). Added taxi route for RWY 26R from North ramp. Paragraph 7-3 e 7 (f). Added taxi route from South ramp to RWY 26R via C.
Page 7-6	Paragraph 7-4 a 2. Changed back-up frequency to 128.65
Page 7-7	Para 7-4 d. Added Note regarding Motorola PET

PAGE	EXPLANATION OF CHANGES
Page 7-7	Para 7-5 e 1. "Box 9" renumbered to "Box 8". Notice HCF N7110.43.
Page 7-8	Para 7-6. Added Ground Control Operations when LC1 and LC2 are decombined.
Page 8-3	Paragraph 8-2 a 8. Added LC may delegate portion of a closed runway that doesn't intersect with an active runway to GC.
Page 8-4	Paragraph 8-2 b. Added sentence that defines LC2's airspace when decombined. Paragraph 8-2 c. Added NOTE, no change to airspace. Paragraph 8-2 g 1. Added NOTE regarding barrier control coordination.
Page 8-5	Paragraph 8-3 b 3. Removes requirement for aircraft ADG IV or smaller on TWY RA.
Page 8-6	Control Instructions. Deleted paragraph stating controller with arriving traffic to intersecting runways must have the pilot acknowledge runway exiting/hold short instruction or observe the aircraft in a turn clearing the runway… Paragraph 8-4 c 1. Added new arrival flow.
Page 8-7	Paragraph 8-4 c 4. Added requirement for large twin turbo props and larger to depart RWY 8R 0900-1500 HST. Paragraph 8-4 c 5 (a). Renumbered from 8-4 c 4. New in-trail arrival flow - 5 MIT inclusive of Channel approach. Paragraph 8-4 c 5 (c). Added new arrival flow – 5MIT to RWY 8L final. Paragraphs 8-4 c 6 thru c 9. Added new paragraphs for adjusted arrival flow.
Page 8-8	Paragraph 8-4 f. Touch and go: deletes RWY RA helicopter ops.
Page 8-9	Paragraph 8-4 i 2. Changed wording for use of ASOS and WSP to determine winds for LAHSO. Paragraph 8-4 j. Changed LC to LC1.
Page 8-10	Paragraph 8-5 a 5. Adds TWY M as area for de-arming .
Page 8-11	Paragraph 8-6 b 1. Added Kona departure procedures. Paragraph 8-6 c 1. Helicopter holding changed to Ford Island. Notice HCF N7110.43.
Page 8-12	Paragraph 8-8. Added Transfer of Communications. Subsequent paragraphs renumbered.

PAGE	EXPLANATION OF CHANGES
Page 8-12	Paragraph 8-9 a. Changed LC to LC1. Paragraph 8-9 a 2. Changed back up frequency to 128.65/323.05 Paragraph 8-10 b. Changed LC to LC1 or LC2.
Page 8-13	Paragraph 8-11 a. Added PBO-Punchbowl Departure to Alphanumeric List.
Page 8-14	Paragraph 8-11 a. Added TRI-Tripler Arrival to Alphanumeric List.
Pages 8-15 thru 8-19	Paragraphs 8-12 thru 8-18. New Paragraphs addressing LC1 and LC2 ops.
Page 9-1	Paragraph 9-2 b. Added duties to Assist LC. HCF Notice N 7110.37. Subsequent paragraphs renumbered.
Page 9-2	Paragraph 9-3 h. Word "runway" deleted from first reference to runway 22/26. Notice HCF N7110.43.
Page 9-4	Paragraph 9-8. Added LA responsibilities when LC1 and LC2 are decombined.
Page 10-2	Paragraph 10-3 d. Added spare frequency 135.4/327.1 Paragraph 10-3 f. New paragraph added regarding RWY 4/8 when LC2 is open.
Page 10-4	Paragraph 10-4. Deleted: SL # Assigned sealane. Added: **MAV, PBO and TRI**. Added: W(4, 8 or 22) Assigned Waterway. HCF Notice N7110.43. Paragraph 10-4 b. Added fix pairs HB, HM, HU and HZ.
Page10-5	Paragraph 10-4 c and d. Sentence added regarding use of this function. Paragraph 10-5 c. Added verbiage to eliminate ambiguity with the type of strip to use and to create uniformity with sub para b.
Page 10-6	Paragraph 10-6 a. Eliminated the designation of HNL Tower airspace. Tower airspace has already been defined in other parts of this SOP. Paragraph 10-6 b. Moved to para 10-4 b (fix pairs).
Page 10-7	Paragraph 10-7 d. Renumbered from 10-7 c. Prearranged coordination is not available.
Page 10-8	Para 10-8. Replaced Informal Runway Use Program with Noise Abatement. Para 10-8 c-f. Procedures between 0630-2200 HST and between 2200-0700 HST moved to end of section 10.

PAGE	EXPLANATION OF CHANGES
Page 10-8 and 10-9	Paragraph 10-9. Added General Runway Use Program. revised LC1/LC2 procedures. Paragraph 10-10. Practice Approaches, renumbered from 10-9. Added practice approaches between 0900 HST and 1500 HST.
Page 10-10	Paragraph 10-11. Mosaic-renumbered from paragraph 10-10.
Page 11-2	Paragraph 11-3 c 1 (c). Added. Punchbowl departure.
Page 11-5	Paragraph 11-8 I renumbered to 11-8 (e). Sector 3 may vector aircraft landing MKK or LUP (typographical error). Para 11-8 b 1 I renumbered to 11-8 b 1 (c). RWY 22/26 departures (typographical error).
Page 11-6	Para 11-8 I renumbered to 11-8 (e). HHI departures (typographical error). Paragraph 11-9. Added Punchbowl Departure (PBO) to Departure/Fix Pair table.
Page 12-2	Paragraph 12-3 b. Deleted runway 4L and runway 22L. Approach control will no longer sequence aircraft to runway 4L or 22Lduring normal operations. Paragraph 12-3 c. Deleted words: When runway 4L is closed. Paragraph 12-3 e. Added word: via. Paragraph 12-3 h 1. Added " -for aircraft from the south." Paragraph 12-3 h 2. Change: V radar will sequence VFR aircraft to RWY 4R with coordination with H controller who is also sequencing to 4R. Paragraph 12-3 j. Added: V Radar responsibilities during RWY 22/26 operations.
Page 12-3	Paragraph 12-4 e. Added UTC and DTC operations are not available when LC2 is open.
Page 13-2	Paragraph 13-3 h 1 (a), (b) and (i). (a). Changed 7 MIT to 5 MIT for RWY 26L arrivals for large twin turbo prop & turbojet aircraft (excluding fighters). (b). Added sentence stating there are no specific speed restriction for in trail aircraft. (i). Added, Departure Runway Assignments and Arrival Restrictions. HCF Notice N7110.41

PAGE	**EXPLANATION OF CHANGES**
APPENDIX 5	Paragraph B7 added, strip marking for IAFDOF, subsequent paragraphs renumbered.
APPENDIX 8	Update to FLM Briefing Checklist
APPENDIX 13	Added depiction of Parker North & East.
APPENDIX 15	Added Preferential Routes (erroneously omitted). Subsequent pages renumbered.
APPENDIX 22	Changed Note: ***NOTE –*** *The information on the Sector 3 bay headers contain the release times to be used when W189 is active. For release times when W189 is NOT active, refer to the chart on the ACE/IDS.*
APPENDIX 24	Added: paragraph 4-k. JULLE /SAKKI arrivals between Sectors 4/H/V .
APPENDIX 27-1	Added HCF Minimum IFR Altitude Map added (erroneously omitted).
APPENDIX 28	MAUI MVA Map renumbered from Appendix 26-1 to 28.
APPENDIX 29	Added National Security Area chart; deleted SURF procedures.
APPENDIX 40- 42	Changed depictions of runway critical areas
Appendix 51-53	Added Sector 2/3 boundary to charts.

ORDER

HCF 7110.1E

STANDARD OPERATING PROCEDURES

HONOLULU CONTROL FACILITY

July 6, 2015

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: CL, ACTN, SECT, ALHCF, HCF NATCA, RAYTHEON, AJO2-W2 Initiated By: HCF SM

FOREWORD

This Order prescribes standard operating procedures and responsibilities for each sector/position within the Honolulu Control Facility (HCF). The HCF is a Combined Control Facility (CCF) providing Enroute, Approach Control and Tower air traffic control services.

[redacted]

Michael C. Schmidt
Hawaii-Pacific District Manager
Honolulu Control Facility Air Traffic Manager

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PART I – BASIC

CHAPTER 1 – GENERAL

1-1. **PURPOSE OF THIS ORDER**. This Order prescribes standard operating procedures and responsibilities for each sector/position within the HCF. Position/ Sector binders for each operational position have been established to provide operational information in as easily accessible location. This Order supplements requirements in FAA Order JO 7110.65.

1-2. **AUDIENCE.** This order applies to all HCF personnel and anyone using HCF directives.

1-3. **WHERE CAN I FIND THIS ORDER.** This order is available on the Facility Directives Repository web site at https://loa.faa.gov, on the ACE-IDS and in the facility libraries.

1-4. CANCELLATION. HCF Order 7110.1D, same subject, dated March 1, 2012 is canceled.

1-5. EXPLANATION OF CHANGES. The significant changes to this order are identified in the Explanation of Changes pages. It is advisable to retain the pages throughout the duration of this basic order.

1-6. EFFECTIVE DATE. This order is effective on July 6, 2015.

1-7. RECOMMENDATIONS FOR PROCEDURAL CHANGES. Any recommended changes to this order must be submitted to the Support Manager (SM) through the individual's supervisor.

1-8. DISTRIBUTION. This Order is distributed to the HCF library, action binders, sector binders, staff offices, HCF National Air Traffic Controllers Association (NATCA), Raytheon Technical Services Company – Air Traffic Control Optimum Training Solution (ATCOTS) Program (Raytheon) and the Western Service Center Systems Group.

1-9. **DEFINITIONS.**

a. *HONOLULU TOWER* includes the Air Traffic positions, Flight Data (FD), Clearance Delivery (CD), Ground Control (GC), Local Control 1(LC1), Local Control 2 (LC2), Local Assist (LA) that perform the Tower functions that serve Honolulu International Airport (HIA).

b. *HONOLULU APPROACH* includes the Air Traffic positions, sectors H, W, V, and L, which perform the Approach Control functions for the Honolulu Terminal Area.

c. *HCF CENTER* includes the Air Traffic positions, sectors 2, 3, 4, 5, 6, 7 and 8, that perform the Air Traffic Control functions for all the areas not covered by the HONOLULU APPROACH or MAUI APPROACH.

d. *MAUI APPROACH* – The Air Traffic positions, sectors 9 and 10, located

in the HCF that performs the Approach Control functions for Kahului Airport.

e. *HCF APPROACH* – The radio telephony identifier used by HONOLULU APPROACH and MAUI APPROACH in the air-to-ground transmissions and inter-facility coordination.

1-10. ABBREVIATIONS. As used in this order, the following abbreviations have the meanings indicated (See TBL 1-10-1)

TBL 1-10-1
HCF Order 7110.1E Abbreviations

Abbreviation	Meaning
ACE/IDS	ASOS Controller Equipment/Information Display System
ADCC	Air Defense Control Center (Baldwin)
ADR	Automation Discrepancy Report
AIT	Automated Information Transfer
ALTRV	Altitude Reservation
ASDE-X	Airport Surface Detection Equipment, X-Band Radar
ASR	Airport Surveillance Radar
ATOP	Advanced Technologies and Oceanic Procedures
CCF	Combined Control Facility
CCT	RDVS Communications Control Terminal
CD	Clearance Delivery
CS	CAB (Tower) Supervisor
CWG	Contract Weather Observer
DALR	Digital Audio Legal Recorder
FACSFAC	Fleet Area Control Surveillance Facility (Hula Dancer)
FD	Flight Data
FLM	Front Line Manager
OSIC	Front Line Manager-In-Charge
GC	Ground Control
H	H TRACON position
HIANG	Hawaii Air National Guard
HIRAOC	Hawaii Region Air Operations Center (Baldwin)
HNL	Honolulu International Airport
HPASA	Holding Pattern Airspace Area
ISLCIC	FLM/CIC Island Controller-in-Charge
L	L TRACON position
LA	Local Assist
LC1	Local Control 1
LC2	Local Control 2
MEARTS	Microprocessor En Route Automated Radar Tracking System
NEXRAD	Next Generation Weather Radar
OID	Operator Interface Device
PMRF	Pacific Missile Range Facility
RBDER	Radar Brite Display Equipment Replacement
RDBM	Radar Display Buffer Memory
RDVS	Rapid Deployment Voice Switch
SDA	System Data Area
SDOT-A	State Department of Transportation, Airports Division
SIA	Status Information Area
SOC	Service Operations Center

Abbreviation	Meaning
TAB	Terminal Area Boundary
TCW	Terminal Controller Workstation
TED	Touch Entry Display
TMC	Traffic Management Coordinator
TS	TRACON Supervisor
V	V TRACON position
VSBP	Voice Switch Bypass
W	Radar Coordinator position
WARP	Weather and Radar Processor

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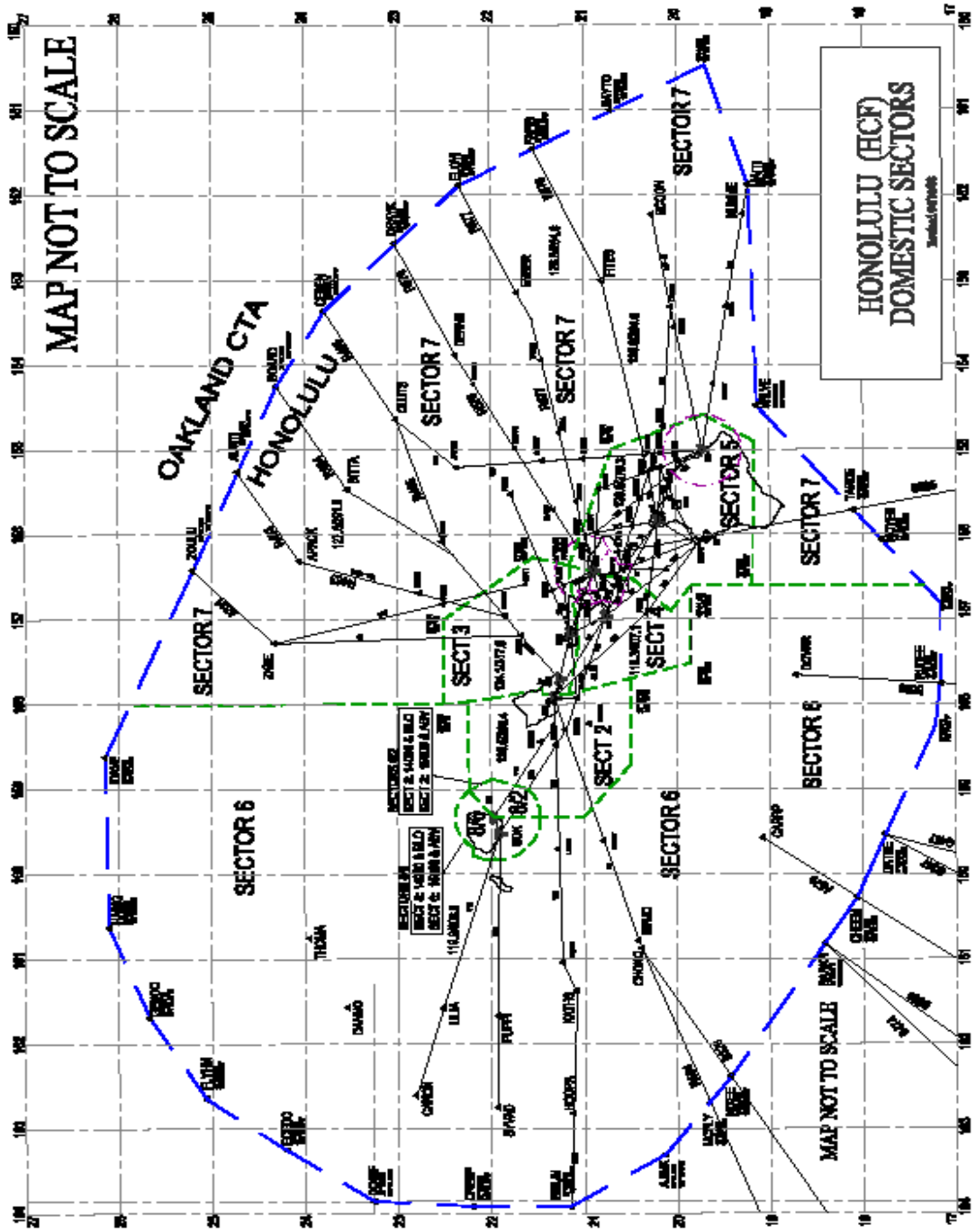
CHAPTER 2- AIRSPACE

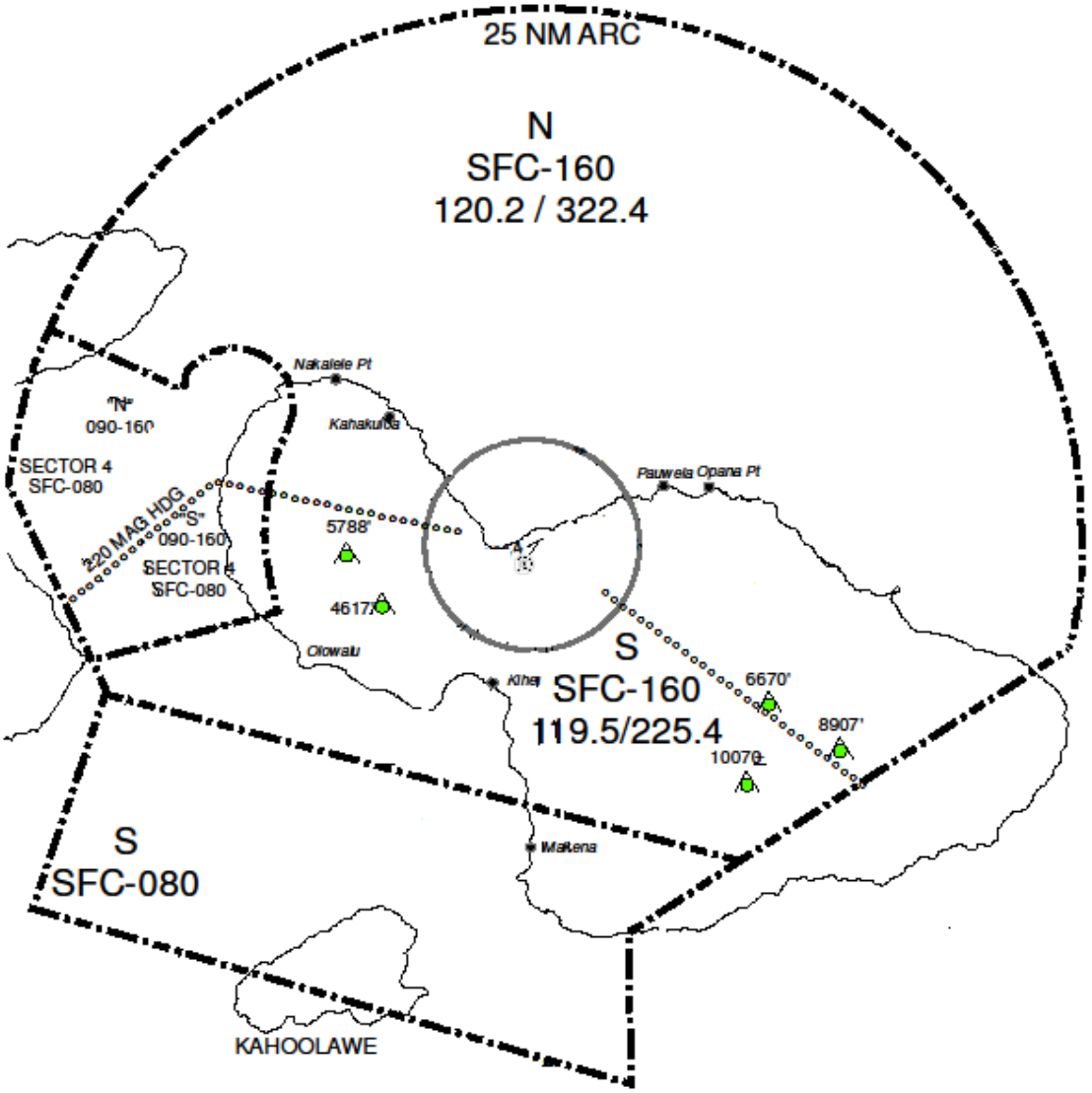
2-1 Honolulu Control Facility Domestic Sectors. (See FIG 2-1-1) (See Appendix 1 for textural description)

FIG 2-1-1
Honolulu Control Facility Domestic Sectors Airspace



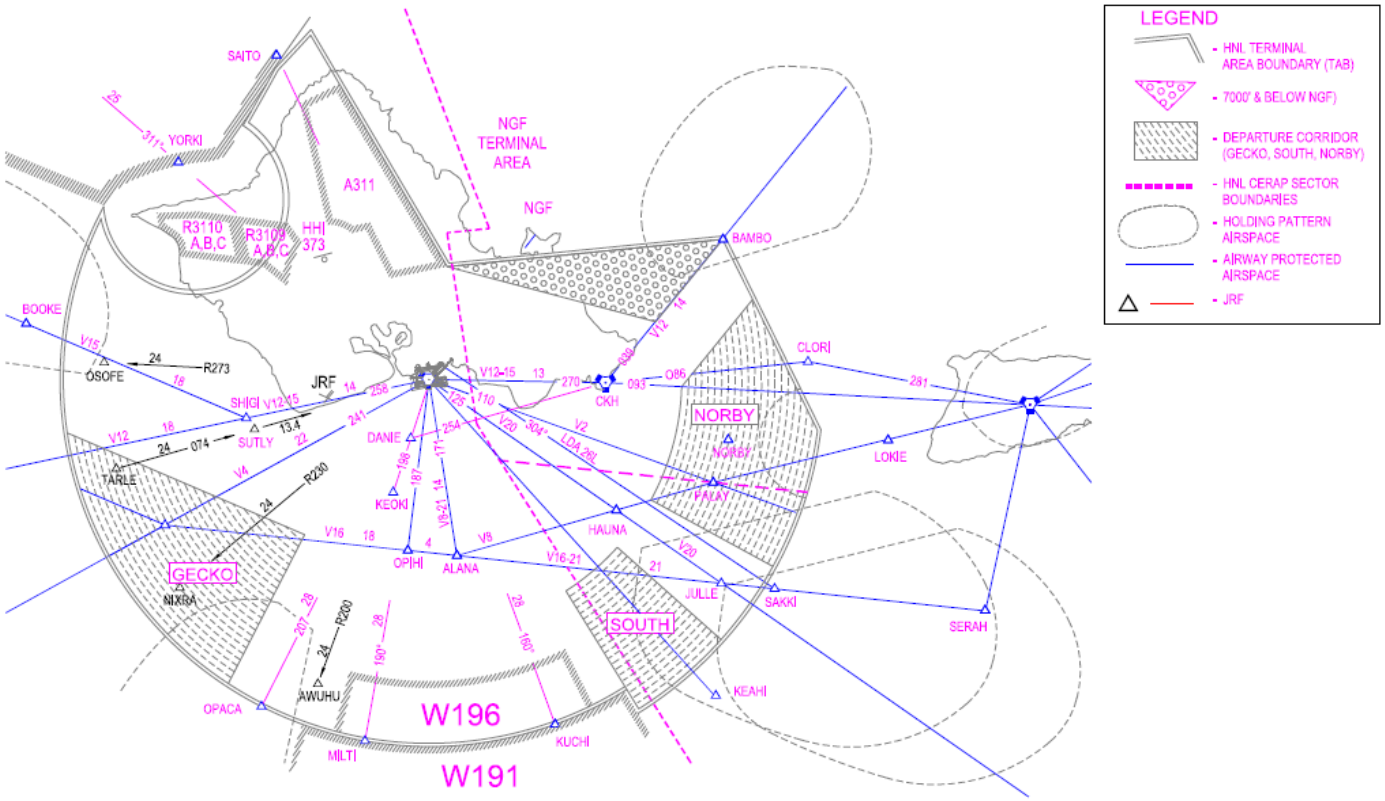
2-2 Maui Approach Airspace. (See FIG 2-2-1) (Refer to Appendix 1 for textural description.)

FIG 2-2-1
Maui Approach Airspace



2-3 Honolulu Terminal Area Airspace. (See FIG 2-3-1) (Refer to Appendix 2 for textural description.)

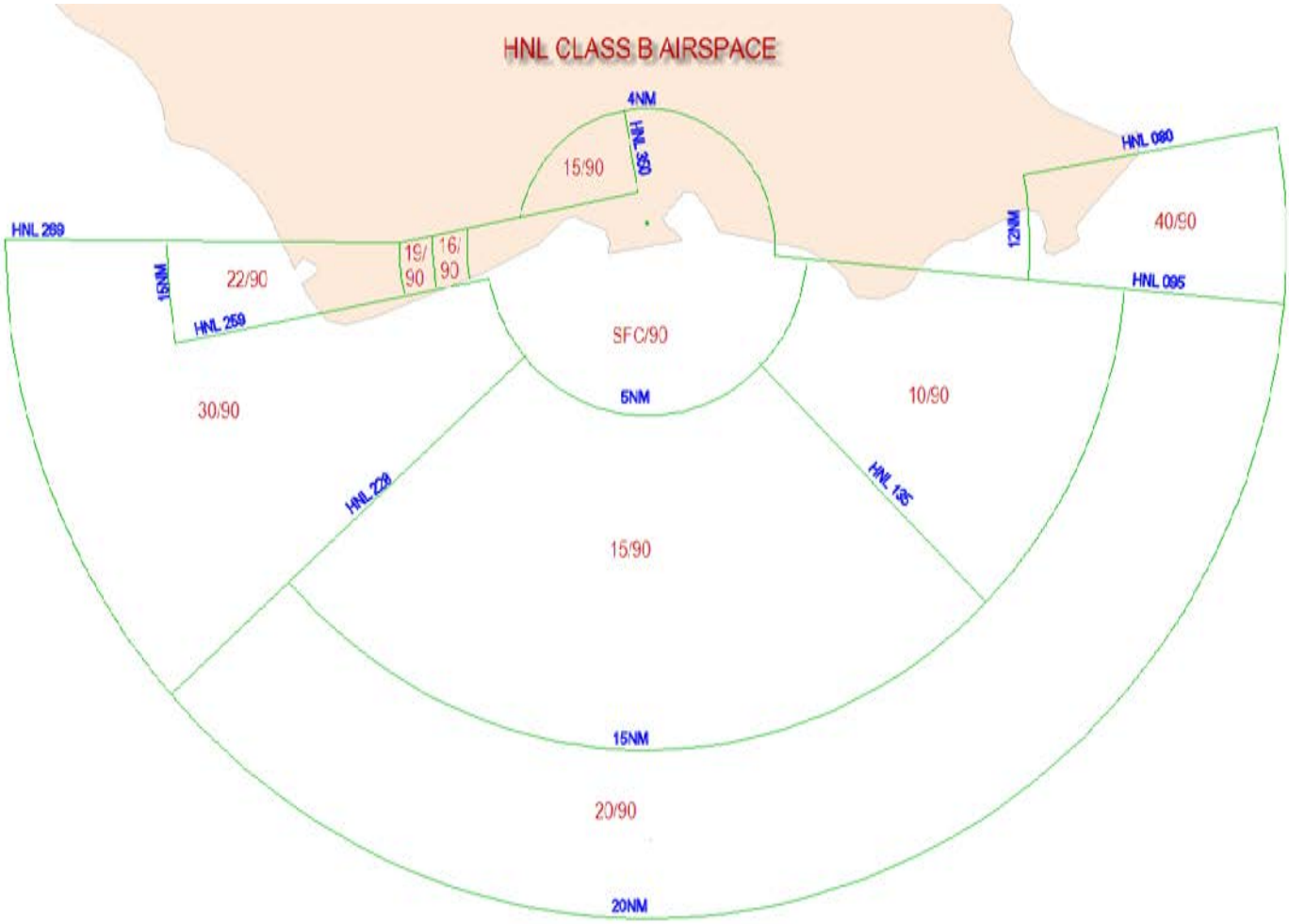
FIG 2-3-1
Honolulu Terminal Area Airspace



Honolulu Terminal Area – 16,000 & Below

2-4 Honolulu Class Bravo Airspace. (See FIG 2-4-1) (Refer to Appendix 3 for textural description.)

FIG 2-4-1
Honolulu Class Bravo Airspace



2-5 HOLDING PATTERNS. (See Appendix 4 for holding pattern airspace depictions).

a. Sector 2/6/8. (See TBL 2-5-1)

TBL 2-5-1

Holding Patterns – Sector 2/6/8

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
BOOKE	W	LIH 110	58	L-1 MIN 4 DME		50/140			YES
	W	LIH 110	58	R-1.5 MIN 6 DME			160/240		NO
DIKNY	SW	NBS 222	15	R-5 DME		40/230			
DARIL	N	LIH 011	12	L-7 DME	30/170	30/170		OVERLAPS W-188	NO
ELAYN	SW	HNL 245	45	R-3 MIN 20 DME	40/160	40/160			NO
FRAKR	N	LIH 015	16	L-1 MIN 7 DME	15/100	15/100		OVERLAPS W-188/189	
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
JAVAT	S	NBS 166	12	R-13 DME			180/265		
KLANI	W	121 COURSE		R-2 MIN 8 DME		90/140			YES
KREEN	E	LIH 070	12	R-1.5 MIN 5 DME	22/170	22/170	22/170		YES
KREEN WP	E	070 HDG	12	R-5 DME		030/060 200K	060/140 230K		YES
LIH VORTAC	NE	LIH 070		L-1 MIN	40/140	40/140			YES (VOR or GPS-A)
MORKE	S	I-LIH CRS	12	R-1 MIN 7 DME	22/50	22/50	22/50		NO
NAGAI	SE	LIH 148	12	L-1.5 MIN 5 DME	20/170	20/170	20/170		YES
NAGAI WP	SE	154 HDG	12	L-5 DME	30/60 200K	60/140 230K	140/170 265K		YES
OPACA	SW	HNL 207	28	L-7 DME	60/140	60/80			YES

b. Sector 3. (See TBL 2-5-2)

TBL 2-5-2
Holding Patterns – Sector 3

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
BAMBO	NE	CKH 039	14	R-1 MIN 10 DME	60/140	60/140		OVERLAPS NGF	YES
BLUSH	NE	MKK 056	30	R-1 MIN 8 DME	50/140	50/140	50/140		NO
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
LOKIE	E	MKK 254	10	R-1 MIN 6 DME	30/140	30/140		OVERLAPS Honolulu Approach/ SECTOR 4	NO
MKK	NE	MKK 056		R-1 MIN	40/140	40/140			YES
VORTAC				6 DME					
	W	MKK 254		L-1 MIN 6 DME	35/140	35/140		OVERLAPS SECTOR 4	YES
OGG	S	OGG 187		L-1.5 MIN	80/140	80/140	140/175	310K 140/175	NO
PLUMB	NW	OGG 320	32	L-1.5 MIN 7 DME		50/140	145/175		NO

c. Sector 4/5. (See TBL 2-5-3)

TBL 2-5-3
Holding Patterns – Sector 4/5

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
ANDES	NW	KOA 294	11.7	R-1 – 1½ MIN	15/175	15/175	15/175		YES
ANDES	NW	WP	12	5DME	50/175	50/175	50/175		

BOGEE	E	MKK 100	19.6	R-1 MIN 4 DME	60/100			RESTRICTED APRVD OPS	NO
	W	MKK 100		L-1 MIN 4 DME	60/100				NO
CAMPS	W	LNY 095	21.4	L-1 MIN 3 DME	50/140	50/140			YES
CHAIN	NW	MKK 115	16.8	R-1 MIN 3 DME	20/80			RESTRICTED APRVD OPS	NO
GRAMY	W	LNY 278	10	R-1 MIN		20/140			YES
HARPO	W	WP		R- 4 DME		60/80		Published holding limited to established patterns	NO
	SE	WP		L - 4 DME		60/120			NO
	S	WP		R - 4 DME		50/140			NO
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
KOA	W	KOA 270		R-1 MIN	50/120	50/60			NO
VORTAC									
ITO	E	ITO 079		L-1 MIN	20/100	20/100			YES
VORTAC	S	ITO 162		R-1 MIN	20/100	20/40			YES
	W	ITO 280		R-1.5 MIN	160/200	160/200			
JASON	SW	MUE 234	13	L-5 DME		43/140			NO
	NE*	MUE 234	13	R-1 MIN	40/60*			*Helicopters only	NO
	SW	WP		L-4 DME		43/140			NO
JULLE	E	LNY 278	36	L-1 MIN 10 DME	40/140	40/140			YES
KAYAK	NW	KOA351	12	L-1 MIN	15/60	15/60			YES
KEIKI	W	LNY 095	17	L-1 MIN 3 DME	50/100	50/120			YES
LNY	W	LNY 278		R-1 MIN		40/140			NO
VORTAC									
FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
OGG VORTAC	S	OGG 187		L-1.5 MIN	80/140	80/140	140/175	310K 140/175	NO

PARIS	NW	ITO 325	29	R-1 MIN 4 DME L-1 MIN 4 DME		40/140 40/140			NO
POA	N	POA 340B		L-1 MIN	30/140	30/200	40/200	NDB	NO
SAKKI	E	LNY 278	31	L-1 MIN 10 DME	40/140	40/140			YES
SERAH	W	LNY 278	18	R-1.5 MIN 10 DME	20/180	20/180			NO
TEETA	W	BSF 289	11	L-1 MIN		80/100			YES
TIGAH	NE NE	MUE 057 WP	13	R-5 DME R-4 DME		50/140 50/140		Holding limited to established patterns	NO NO
FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
UPP VORTAC	N	UPP 338		R-1.5 MIN	80/120*	80/140	140/200	* - At request, limited to established pattern	NO
VECKI	N	I-KOA CRS-	12	R-1 MIN	30/60	30/60		*	NO
VEWES	E	ITO 079		L-1 MIN 8 DME	18/200	18/200	30/200	310K 30/200	YES

2-6 FLIGHT PROGRESS STRIPS/FIX POSTINGS.

a. Controllers must post, as a minimum, one flight progress strip per aircraft per HCF Center sector.

b. Normally, flight progress strips should be displayed as follows:

1. Sequence in chronological order.

2. In ascending order of assigned altitudes over a holding fix.

3. Arrivals and departures will normally be posted under the same fix posting(s); however they may also be displayed separately.

4. Display flight progress strips under the fix postings listed in TBL 2-6-1 below. Additional fix postings may be used as the traffic situations/radar system capability dictate.

TBL 2-6-1
Sector Fix Postings

Sector	Fix Postings
2	HNL, BOOKE/KLANI/KAENA/KEOLA, HNL/OCEAN, LIH, TRACK A/B
3	HNL/ZIGIE, HNL/APACK, HNL/CLUTS, HNL/EBBER, HNL/FITES/SCOON, HNL/OCN FL280, BAMBO/NGF, MKK/LOKIE, HNL, OGG, PLUMB
4	HNL, JULLE/SAKKI, LNY, JHM
5	OGG/MAKEN/LAVAS, KOA, ITO/PUMIC, MUE
6	THOMA, LILIA/PUPPI, KATHS/NONNI, CHOKO/ZUKEY, CARRP, DOVRR, DANNO
7	ZIGIE/ZOULU, APACK/AUNTI, BITTA/BOARD, CLUTS/CEBEN, DENNS/DRAYK, EBBER/ELOYI, FITES/FAPIS, SCOON/SAYTO
8	LIH, BKH
9	NONE
10	NONE
H	NONE
L	NONE
V	NONE
W	NONE

NOTE *- The aforementioned procedures are to be used as a guide; however, where flight progress strips are posted is at the controller's discretion.*

5. See Appendix 5, Flight Strip Preparation and Marking Procedures, and Appendix 6 Authorized Two-Letter Identifiers.

2-7 SECTOR CLASSIFICATIONS/AIRSPACE JURISDICTION.

a. TBL 2-7-1 identifies the sectors established as components of the HCF area. The classification indicates the type of control procedures used in the sector and the sub-classification indicates the altitude strata contained within the sector.

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TBL 2-7-1
HCF Sector Classifications

SECTOR	CLASSIFICATION	SUB-CLASSIFICATION
2	Radar/Non-radar	High & Low
3	Radar/Non-radar	High & Low
4	Radar/Non-radar	High & Low
5	Radar/Non-radar	High & Low
6	Radar/Non-radar	High & Low
7	Radar/Non-radar	High & Low
8	Radar/Non-radar	Low
9	Radar	Low
10	Radar	Low
H	Radar	Low
L	Radar	Low
V	Radar	Low
W	Radar	Low

b. Airspace jurisdiction is 500 feet below the assigned base cardinal altitude.

CHAPTER 3 – GENERAL PROCEDURES

3-1 DUTY FAMILIARIZATION/TRANSFER OF POSITION RESPONSIBILITIES.

a. Consists of procedures outlined in JO 7110.65.

1. Duty familiarization. Review CEDAR at the beginning of an individual's shift.

2. Position relief briefings may not be conducted simultaneously for the following position pairs until one of the positions in the pair has completed the transfer of position responsibility, including the two (2) minute overlap, to the relieving controller.

(a) R2 and D2

(b) R3 and D3

(c) R4 and D4

(d) R5 and D5

(e) R7 and D7

(f) R9 and R10 (when decombined)

(g) LC1 and LC2

(h) LC1 and LA

(i) RH and RW

3. Transfer of position responsibilities.

(a) The specialist being relieved must be responsible for ensuring that any pertinent status information of which he/she is aware is relayed to the relieving specialist and is either:

(1) Accurately displayed in the Status Information Area's (SIAs) for which he/she has responsibility, or

(2) Relayed to the position having responsibility for accurately displaying the status information.

(b) The relieving specialist must be responsible for ensuring that, prior to accepting responsibility for the position; any unresolved questions pertaining to the operation of the position are resolved.

(c) The relieving specialist and the specialist being relieved must share equal responsibility for the completeness and accuracy of the position relief briefing.

(d) The specialists engaged in a position relief must conduct the relief process at the position being relieved unless other procedures have been established and authorized by the facility air traffic manager.

NOTE - *The "sharing" of this responsibility means that the specialist being relieved is obligated to provide a complete, accurate briefing and the relieving specialist is obligated to ensure that a briefing takes place and is to his/her total satisfaction.*

4. Step by step process.

(a) Preview the position.

Relieving Specialist	Specialist Being Relieved
1. Follow checklist and review the Status Information Area(s).	
2. Observe position equipment, operational situation, and the work environment.	
3. Listen to voice communications and observe other operational actions.	
4. Observe current and pending aircraft and vehicular traffic and correlate with flight and other movement information.	
5. Indicate to the specialist being relieved that the position has been previewed and that the verbal briefing may begin.	
NOTE-*Sub steps 4a2, 3, and 4 may be conducted concurrently or in any order.*	

(b) Verbal briefing.

Relieving Specialist	Specialist Being Relieved
	1. Brief the relieving specialist on the abnormal status of items not listed on the Status Information Area(s) as well as on any items of special interest calling for verbal explanation or additional discussion.
	2. Brief on traffic if applicable. Include IAFDOF aircraft. **3.** Brief communication status of all known aircraft.
4. Ask questions necessary to ensure a complete understanding of the operational situation.	
	5. Completely answer any questions asked.

(c) Assumption of position responsibility.

Relieving Specialist	Specialist Being Relieved
1. Make a statement or otherwise indicate to the specialist being relieved that position responsibility has been assumed.	
	2. Release the position to the relieving specialist and mentally note the time.

(d) Review the position.

Relieving Specialist	Specialist Being Relieved
1. Check, verify, and update the information obtained in steps 4a and b.	
2. Check position equipment in accordance with existing directives.	
	3. Review checklist, Status Information Area/s, written notes, and other prescribed sources of information and advise the relieving specialist of known omissions, updates, or inaccuracies.
	4. Observe overall position operation to determine if assistance is needed.
	5. If assistance is needed, provide or summon it as appropriate.
	6. Advise the appropriate position regarding known Status Information Area(s) omissions, updates, or inaccuracies.
	7. Sign-on the relieving specialist with the time as noted in step 4c2. (This will be accomplished by FLM/CIC)
	8. Sign off the position in accordance with existing directives or otherwise indicate that the relief process is complete.

b. Supervision in the operations area. (See Appendix 7, Operations Floor Map)

1. Watch supervision may be performed by an Operations Manager (OM) or Front-Line Manager/Operations Supervisor-In-Charge in accordance with JO 7210.3. (See Appendix 8) Supervision tasks must also include:

(a) Providing guidance and goals for the shift.

(b) Monitoring/managing traffic volume/flow.

(c) Position assignments within their area.

(d) Position relief within their area.

(e) Training assignments within their area.

(f) Processing leave requests.

(g) Configuring/monitoring/reporting equipment status. All outages, regardless of type, must be reported to the Service Operations Center (SOC).

(h) Data collection, Traffic Count (via OPSNET) and reporting.

(i) Monitoring presidential aircraft movement in accordance with JO 7210.3.

(j) Maintaining situational awareness and remaining engaged in the operations at all times. This must include, but not be limited to anticipating and coordinating any changes to runway configuration, flow control restrictions, NAVAID/ radar status, or any significant weather impacting the operations.

(k) Managing and eliminating distractions in the operational area.

(l) Receiving and disseminating NOTAMS/GENOTS/ AIRMETS/ SIGMENTS as appropriate. Follow guidelines established to ensure messages are received at HUB facilities and document as appropriate.

(m) Ensure PIREPs are solicited once per hour when weather conditions outlined in JO 7110.65, exist or are forecasted in the HCF area of jurisdiction.

(n) Posting accurate information displayed in CEDAR and the SIAs.

(o) Supervisory personnel assigned the OSIC position must review the watch checklist items as depicted in Appendix 8 at the specified times.

2. Outages: The FLM/Controller-In-Charge (CIC) must review the impact of all requests for outages prior to approval.

. **3.** The Operations Supervisor-in Charge (OSIC) must, under Non-radar and Limited Radar Procedures (See Appendix 9 for f non-radar routings):

(a) Coordinate one-way traffic flows with Oakland ARTCC at least 12 hours before a scheduled outage and as soon as possible for extended non-scheduled outages.

(b) Inform all users and facilities affected by the radar outage.

(c) Not authorize VORTAC or OFDPS shutdowns. Should a shutdown precede a radar outage, action should be taken to restore it as soon as possible.

(d) Obtain the use of W190, W192, W193 and W 194 as deemed necessary

(e) Ensure the appropriate information is posted on the SIA.

(f) Be responsible for all inter-facility coordination (flow control, etc.).

4. TRACON FLM/CIC. Between the hours of 0900-1500 HST, flow control will be implemented as needed. This includes taking the following actions(s) as appropriate:

(a) Suspend jet arrivals to Runway 4R or increase the MIT.

(b) Increase MIT to Runway 8L.

(c) Approve/disapprove practice approaches to Honolulu International Airport.

5. Controller-in-Charge (CIC). Provided guidance from the OSIC to coordinate/perform duties as outlined above.

c. Responsibilities.

1. All personnel assigned to an operational position are required to receive duty familiarization.

2. All supervisory and controller personnel being relieved must ensure the briefing to the relieving controller is recorded utilizing the RDVS relief brief (RB) function and the appropriate position checklist. When combining/de-combining positions/sectors, utilize the RDVS ring line or hotline.

(a) The relieving specialist must plug into the vacant operational jack and advise when ready to receive the verbal briefing.

1 When training will be conducted, the OJTI plugs into the vacant operational position. The DEV/CPC-IT may monitor the relief briefing by plugging into the overhead position and placing an override call to the position being relieved. The OJTI will advise when ready to receive the verbal briefing. Once the 2 minute overlap is completed, the DEV/CPC-IT will then plug into the operator jack.

Note: The overhead position will not pick up any ring line calls received. The DEV/ CPC-IT will need to be briefed on the nature/content of any such calls received during the position relief briefing.

2 When a training pair is being relieved the relieving specialist may plug into the overhead position and place an override call to the position being relieved. The relieving specialist will then advise when ready to receive the briefing. The DEV/CPC-IT may provide the briefing while the OJTI monitors the relief brief from the operational position. Once complete the DEV/ CPC-IT will then unplug and the relieving specialist will plug in and commence the 2 minute overlap with the OJTI.

Note 1: For Honolulu TRACON positions, due to the location of the overhead panel in relation to the positions, the RDVS adjacent to the operating positions must be used in lieu of the overhead position. The

DEV/CPC-IT must activate the HOT LINE feature to connect to the relief position while the position relief is conducted. When the relief briefing is completed, she/he must deactivate the HOT LINE and plug into the operational jack as appropriate.

Note 2: Due to hardware limitations, this procedure is not feasible for the Tower positions. The DEV/CPC-IT must receive the relief briefing from the OJTI after the transfer of position responsibilities.

(b) Because override calls are recorded, when using the overhead position to conduct the relief briefing it is not necessary to utilize the relief brief (RB) function. However, the specialist being relieved must state "relief brief."

(c) The specialist being relieved continues through the relief checklist at the position. When completed, the specialist being relieved and relieving specialist must state his/her operating, then deactivate the RB function and remain plugged in for a minimum of 2 minutes to make sure all pertinent information and traffic situations are communicated and understood.

3. All ART entries shall be completed by FLM/CIC.

d. Radar displays.

1. HCF's radar sensors (See Appendix 10 for locations) are as follows:

(a) Primary and secondary sensors: Ka'ala (QKA), Koke'e (QKK), Honolulu (HNL), Kaneohe (NGF), Lihue (LIH), Maui (OGG) and Hilo (ITO).

(b) Secondary (beacon) only sensors: Haleakalā (QPN), Kona (KOA) and Pahoa (POA).

2. Narrowband:

(a) Honolulu Approach Control must operate on HNL sensor mode. If HNL is inoperative, Ka'ala (QKA) single sensor mode must be used. If HNL and QKA sensors are inoperative, MEARTS/MOSAIC must be used.

(b) Maui Approach Control must operate on the Maui Single Source Polygon (SSP) sensor mode.

(c) HCF Center must operate on the MEARTS/MOSAIC program.

3. RBDE/R is the principal back-up system for the Microprocessor En Route Automated Radar Tracking System or Micro-EARTS (MEARTS). (See Appendix 11) RBDE/R sensors are:

(a) Ka'ala (QKA), Koke'e (QKK), Honolulu (HNL), Kaneohe (NGF), Lihue (LIH), Maui (OGG) and Hilo (ITO) sensors – primary and secondary (beacon).

(b) Haleakalā (QPN), Kona (KOA) and Pahoa (POA) sensors – Secondary Surveillance Radar (SSR) systems – beacon only.

e. Automation procedures and system information are contained in Appendix 12.

f. Controlled Area Intrusion. The following procedures for tracking and identification of any aircraft that enters Class B, C, or D airspace without authorization.

1. The Controller shall:

(a) Notify the OSIC when you become aware of a Class B, C or D airspace violation.

(b) Verify that the aircraft is not in communication with another sector.

(c) To the extent possible, attempt to contact aircraft via normal control frequencies, other aircraft and/or Guard frequencies.

(d) Advise other sectors of intruder, as necessary.

(e) Identify and track apparent violators handed off or pointed out to you intra/inter-facility.

(f) Notify the receiving controller of apparent violators when handing off/pointing out subject aircraft.

2. The OSIC shall:

(a) Process a pilot deviation for a Honolulu Class B intrusion.

(b) Process a pilot deviation if the intrusion originates in the HCF portion of the Maui Class C airspace.

(c) Provide information to other facilities as requested.

g. Military operations. (See Appendix 13 for Military Use Areas)

1. Fleet Area Control and Surveillance Facility (FACSFAC), call sign “Hula Dancer” using agency for W187/189/190/191/192/193/194.

2. Pacific Missile Range Facility (PMRF) – using agency for W186/188.

3. Hawaii Region Air Operations Center (HIRAOC) – Air Defense Control Facility (ADCF).

4. Kalaeloa Airport (JRF) – Kalaeloa Airport Tower.

5. Wheeler Army Airfield (HHI) – Wheeler Air Field Tower.

6. Marine Corp Base Hawaii-Kaneohe (NGF) – Kaneohe Tower and Approach Control.

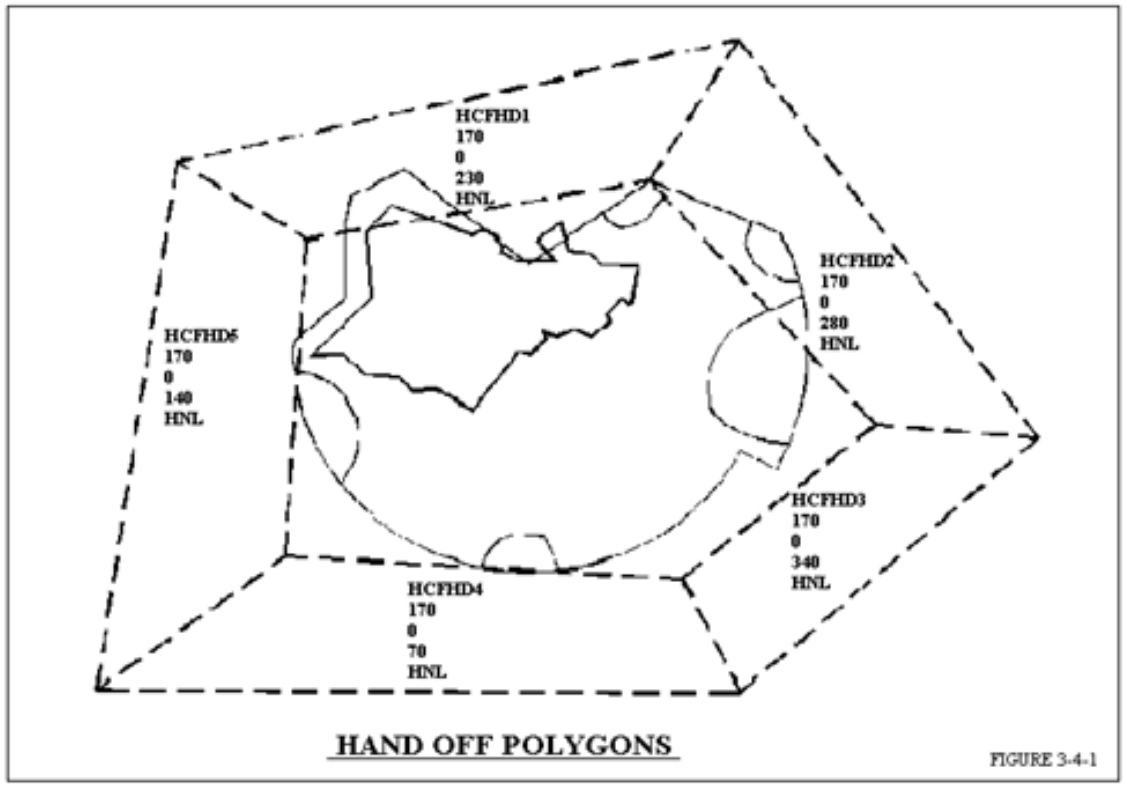
7. Bradshaw Army Airfield (BSF) – Bradshaw Tower.

3-2 INTRA-FACILITY AUTOMATED RADAR PROCEDURES.

a. Upon acceptance of a radar handoff by Honolulu Approach or Hilo Approach, the assigned altitude field of the data block will be automatically deleted as in compliance with JO 7210.3.

b. Automated handoffs are adapted for aircraft entering Honolulu Approach airspace from HCF Center airspace. The handoff polygons are depicted in Figure 3-2-1 and show the altitude stratum and polygon headings. Aircraft must be within this altitude stratum and within 90º of the heading depicted for the automated handoff to initiate.

FIG 3-2-1
Hand Off Polygons



c Scratch pad information may be displayed on the HCF Center Sector's IFR data block. This scratch pad data corresponds to a specific IFR departure route (See TBL 3-2-1).

TBL 3-2-1
SCRATCH PAD INFORMATION FOR DEPARTURE/FIX PAIR AND TRANSITION

DEPARTURE/FIX PAIR	TRANSITION	SCRATCH PAD DATA
KEOLA SID	KATHS	KAT
	KEOLA	KEO
	LIHUE	LIH
	LILIA	LIL
	NONNI	NON
	PUPPI	PUP
	SOUTH KAUAI	SOK
OPIHI SID	CARRP	CAR
	DOVRR	DOV
	CHOKO	CHO
	OPIHI	OPI
GECKO SID		GEC
SHINSEKI SID	MOLOKAI	MKK
	MOLOKAI (landing Molokai)	MKA
	PALAY	PAL
	LANAI (landing Hilo)	PLN
MKK SID	ZIGIE	ZIG
	APACK	APA
	CLUTS	CLU
	EBBER	EBB
	FITES	FIT
	PULPS (landing Hilo)	PUL
	PULPS	PLP
	MOLOKAI	MKK
	MOLOKAI (landing Molokai)	MKA
PALAY SID	LANAI	LNY
	MOLOKAI (V2, V8)	MKK
	MOLOKAI (landing Molokai)	MKA
	LANAI (landing Hilo)	PLN
	PALAY	PAL
KEAHI SID	JORDA	KEA
	KEAHI	KEA
	LANAI	KEA
	UPOLU	KEA
	UPOLU (landing Hilo)	KUP
	LANAI (landing Maui)	KOG
JRF Airport Departure	LANAI (landing Hilo, via PARIS)	PAR

3-3 INTRA-FACILITY NON-RADAR OPERATIONS. Unless otherwise coordinated, Honolulu Approach must establish a minimum of 25 NM longitudinal separation, constant or increasing between similar type aircraft assigned the same altitude. (See Appendices 2, 4 & 9)

3-4 MINIMUM MIA & MVA MAPS. See appropriate appendix:

HNL MVA Map	Appendix 47, 48
HCF Minimum IFR Map	Appendix 27
Maui MVA Map	Appendix 28

3-5 DIVERSE VECTOR AREAS (DVA):

a. DVAs are an area in which random radar vectors below the MVA/MIA, established in accordance with the TERPS criteria for diverse departures, obstacles and terrain avoidance, may be issued to departing aircraft.

b. DVAs are a range of headings that are authorized for use with specific runways. When using DVAs:

1. Determine the aircraft's departure runway.
2. Issue a DVA heading approved for the departure runway.
3. Assign an altitude above the MIA/MVA.

(Note: DVAs are not authorized in Class G surface areas.)

c. Display DVA on the MEARTS by selecting the appropriate DVA GEO MAP Button in the map menu.

d. Approved DVAs are as follows:

LIHUE:
RWY 3: 020° CW to 160° out to 20 NM
RWY 21: Right turn to heading 030° *May be used only during RWY 17/21 operations and when RWY 17/35 is closed.
RWY 17: 360° CW to150° out to 20 NM
RWY 35: 020° CW to 165° out to 20NM

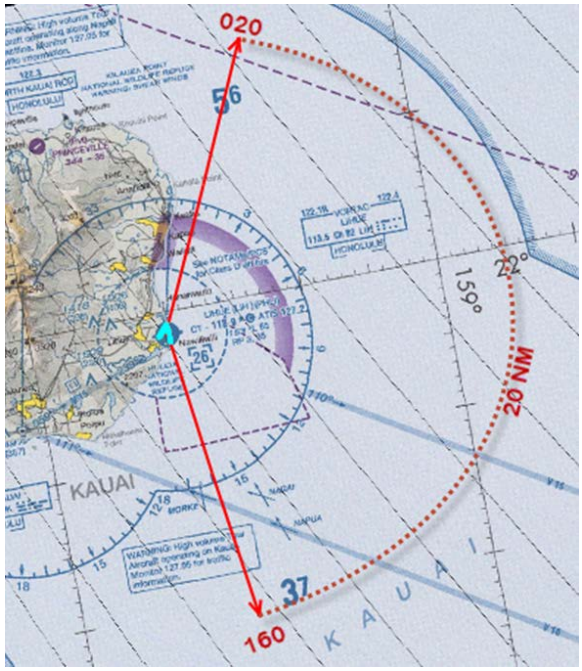
MOLOKAI:
RWY 17: 125° CW to 195° out to 15 NM
RWY 35: NA
RWY 5: NA
RWY 23: 120° CW to 040° out to 20 NM

KONA
RWY 17: 165° CW 350° out to 20 NM
RWY 35: 175° CW 005° out to 20 NM

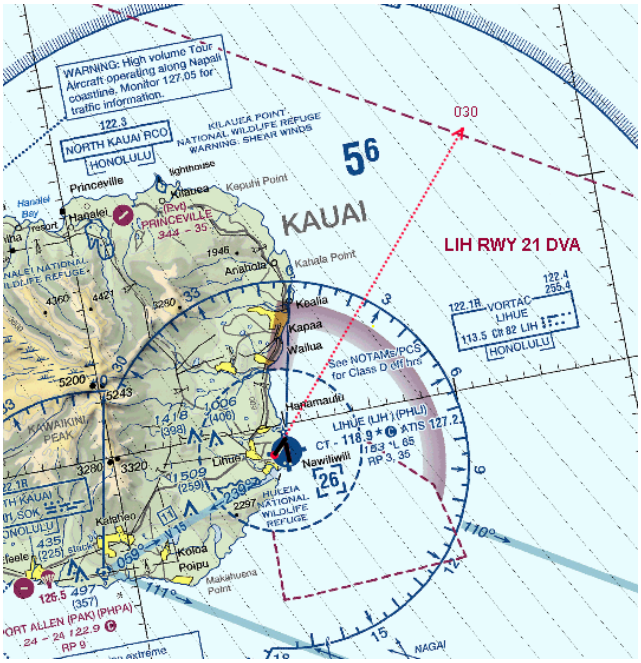
HILO
RWY 3: 320° CW 170° out to 20 NM
RWY 21: NA
RWY 8: 330° CW 170° out to 20 NM
RWY 26: NA

KAHULUI

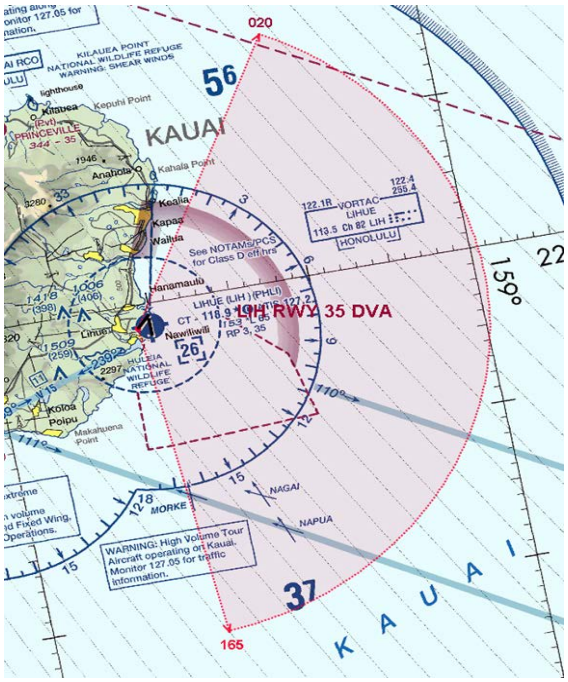
RWY 2: 320° CW 050° out to 15 NM
RWY 20: Only course is 185° to 15 NM
RWY 5: 315° CW 040° out to 15 NM
RWY 23: NA



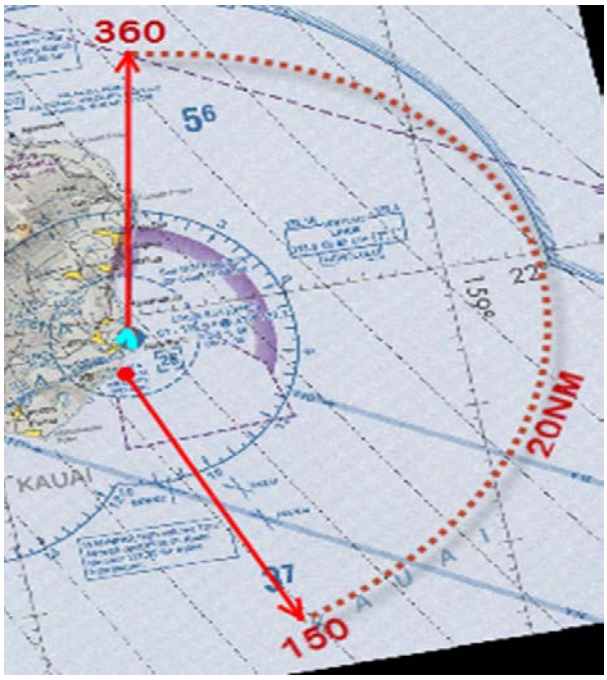
LIH RWY 3: 020° CW to 160°



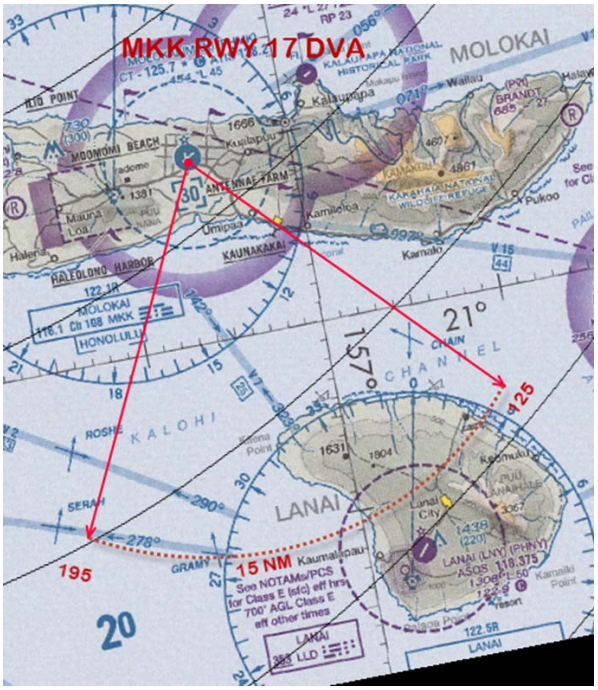
LIH RWY 21: RT to heading 030º



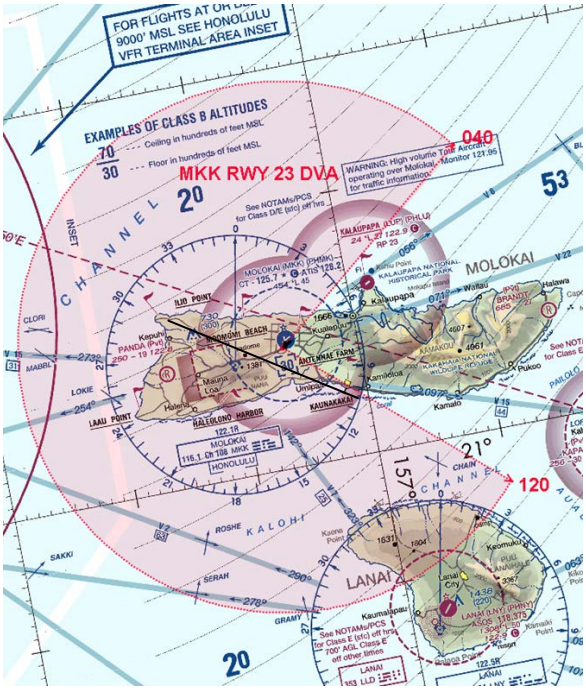
LIH RWY 35: 020º CW to 165º



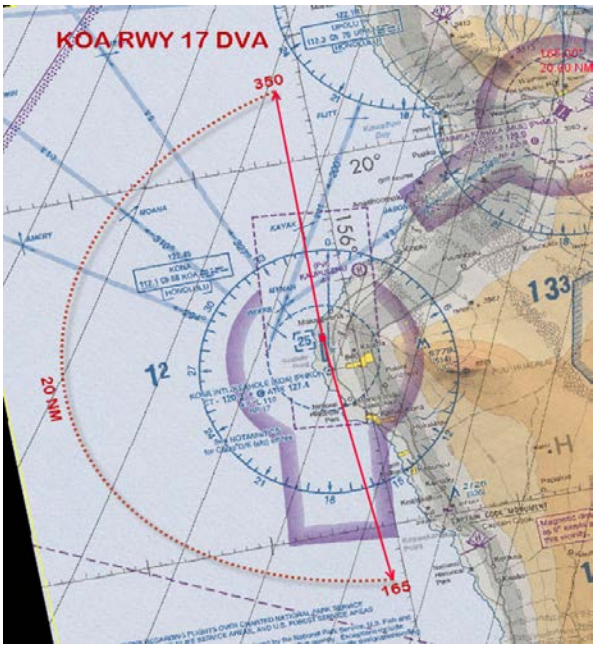
LIH RWY 17: 360º CW to 150º



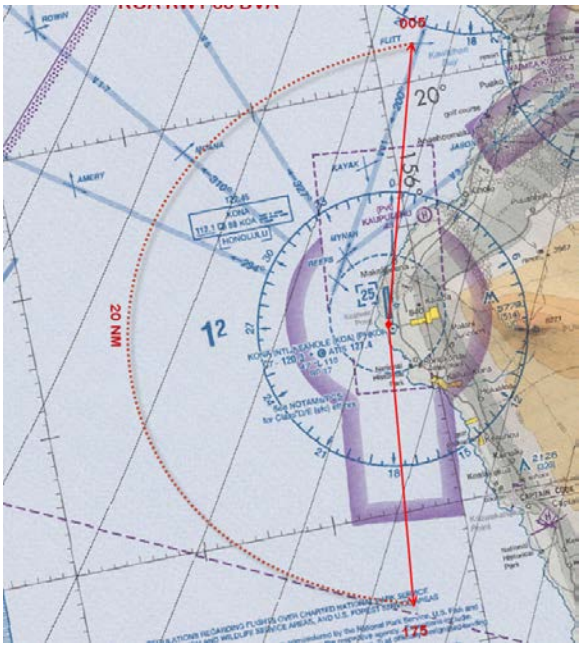
MKK RWY 17: 125º CW to 195º
MKK RWY 35: N/A



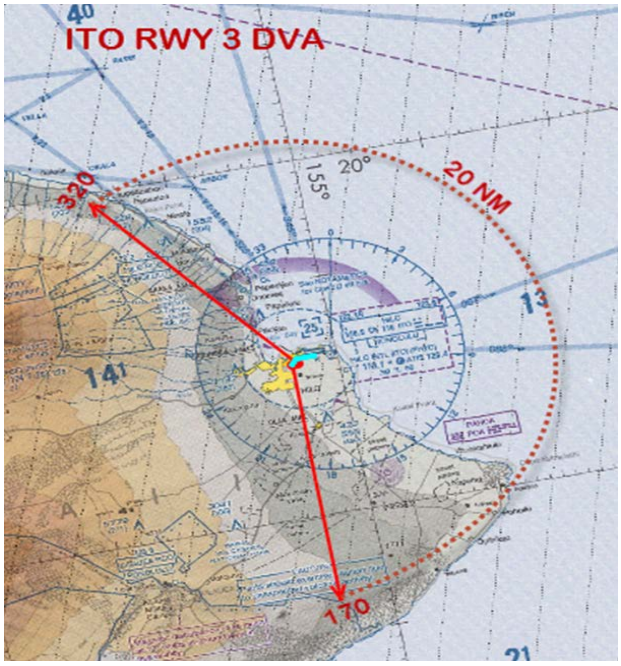
MKK RWY 23: 120º CW to 040º
MKK RWY 5: N/A



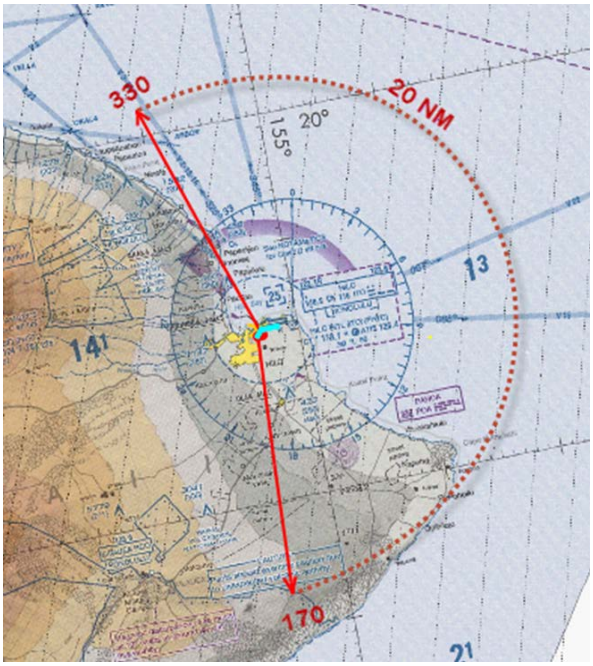
KOA RWY 17: 165º CW to 350º



KOA RWY 35: 175º CW to 005º

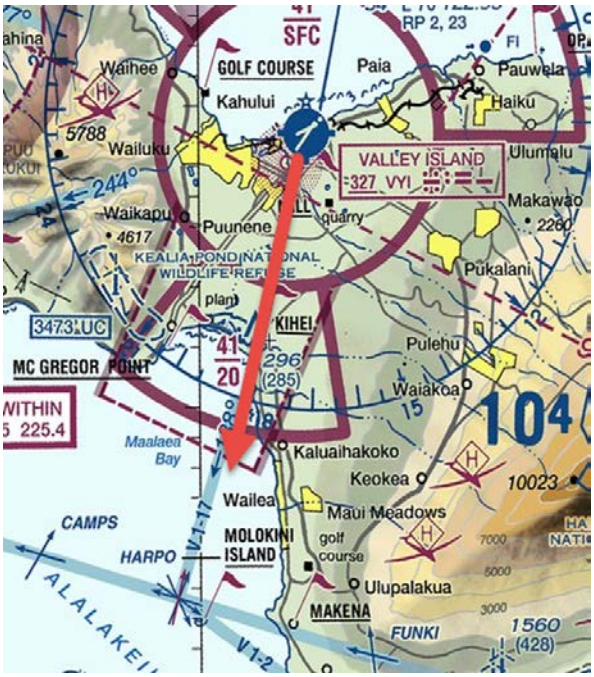


ITO RWY 3: 320º CW to 170º
ITO RWY 21: N/A

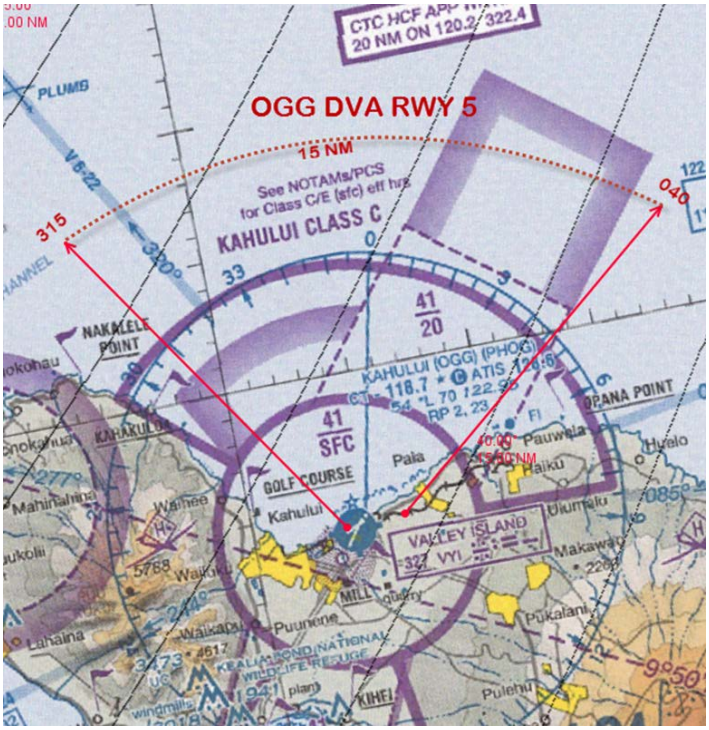


ITO RWY 8: 330º CW to 170º
ITO RWY 26: N/A

OGG RWY 2: 320º CW to 050º



OGG RWY 20: ONLY COURSE 185º



OGG RWY 5: 315º CW to 040º
OGG RWY 23: N/A

3-6 EMERGENCY SECURITY CONTROL OF AIR TRAFFIC (ESCAT).

a. Follow the directions of ATCSCC via the DEN to implement ESCAT restrictions as specified by Pacific Command (PACOM).

b. Provide PACOM feedback via the DEN on the impact of restrictions and when restrictions have been imposed.

c. Disseminate ESCAT implementation instructions to civil and military air traffic control facilities.

d. Maintain current information on the status of restrictions imposed on air traffic.

e. Process flight plans in accordance with current ESCAT instructions. All flights must comply with the airspace control measures in effect, the ESCAT Air Traffic Priority List (EATPL) (listed in ACE-IDS or the Alert Binder), or must have been granted a Security Control Authorization.

3-7 AIRCRAFT MOVEMENT INFORMATION SERVICE (AMIS) OPERATING PROCEDURES.

a. General: This prescribes the procedures to be used in forwarding AMIS information. These procedures are supplementary to those contained in FAA Order 7610.4. Reference to this procedure is addressed in the Letter of Agreement with Oakland ARTCC. General Air Defense Identification Zone (ADIZ) procedures are also published in the Pacific Chart Supplement.

b. Procedures**.**

1. The sector controller shall:

(a) Forward AMIS information to 169th ACWS (HIRAOC) on all known aircraft that will operate in the Hawaiian Coastal ADIZ, excluding:

(1) Aircraft that will operate entirely within the Hawaiian Defense Area (HDA) (inside the ADIZ inner boundary).

(2) Aircraft departing the Island of Hawaii that will not penetrate the HDA (ADIZ inner boundary).

(3) Aircraft that are operating at a true airspeed of less than 180 knots, or at any speed if remaining within 3 miles of the coastline of the Island of Hawaii.

(4) Flight plans notating "NOPAR" in remarks section on a flight progress strip.

NOTE - *These exclusions do not apply if the HCF is notified by the Commander, 169th ACWS, that the defense readiness conditions (DEFCON) status is raised.*

2. The appropriate sector controller must forward AMIS information at least 20 minutes prior to ADIZ penetration, or as soon as possible, as follows:

(a) Flex-tracks and air traffic service (ATS) routes (jet aircraft):

(1) Route (identify by Track 11, Track 12, or Flight Information Region (FIR) fix.

(2) Call sign.

(3) Altitude.

(4) Estimated time of arrival (ETA) at Oceanic Transfer fix.

(5) Mode 3/A Code.

(b) Other oceanic inbounds:

(1) Call sign.

(2) Altitude.

(3) Transfer fix and ETA.

(4) Next reporting point and ETA.

(5) Mode 3/A Code.

(6) Island of Hawaii departures:

a Departure point.

b Call sign.

c Departure time unless the time is within 3 minutes of the time call is made.

d Mode 3/A Code.

(7) Airfiles:

a Call sign.

b Position.

c Mode 3/A Code.

NOTE 1 - *The mode 3/A code may be omitted if the aircraft is bulk-stored.*

NOTE 2 - *The procedures listed in paragraphs 2a (1) through 2a (2) may be accomplished automatically through the use of the Offshore Flight Data Processing System (OFDPS).*

c. Revert to manual operations upon notification of a shutdown/ failure of the OFDPS.

d. Assist with possible identification when the HIRAOC reports an unidentified track within the air defense system.

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PART II – HCF CENTER AND MAUI APPROACH AIR TRAFFIC CONTROL OPERATIONS

CHAPTER 4 – HCF CENTER AND MAUI APPROACH SECTOR PROCEDURES

4-1 SECTORS 2/6/8.

a.. General

1. Sector Description: Sector 2/6/8 provides approach control services to Lihue Airport and Barking Sands Airport in addition to enroute services in designated airspace. Secondary airports include HI01 (Princeville) and PAK (Port Allen).

2. Combining/decombining HCF Center Sectors will be at the discretion of the OSIC/Island Approach (ISL) CIC.

b. Airspace. (See Figure 4-1-1.)

1. Sector 2/6/8 airspace is defined in Appendix 1 and normally combined.

2. The vertical limits of the Sector 2/6 is unlimited, Sector 8 is 14000’.

3. Pacific Organized Track System (PACOTS) tracks 11/12 is in use from 1000Z to 2100Z, and A/B are in use from 1900Z to 0800Z, as described in the Chart Supplement Pacific (PAC SUP)

4. HCF delegates military airspace W187/R3107, W188 (RAINBOW), W189, W190, W191, W192, W193, and W194 to Hula Dancer (FACSFAC).

5. HCF delegates military airspace W188 (VANDA, THOMA, RAINBOW), W186, R3101 to PMRF.

6. The controlling Agency for Restricted Area 3109/3110 is Wheeler (HHI) Range Control.

7. Military Refueling routes include AR903 and AR904. (See Appendix 14, Air Refueling Chart)

8. Provide air traffic services to Dillingham and Port Allen jump operations.

9. Holding patterns (See TBL 4-1-1)

FIG 4-1-1 (a)
Island Approach: Sectors 2/6/8 Airspace

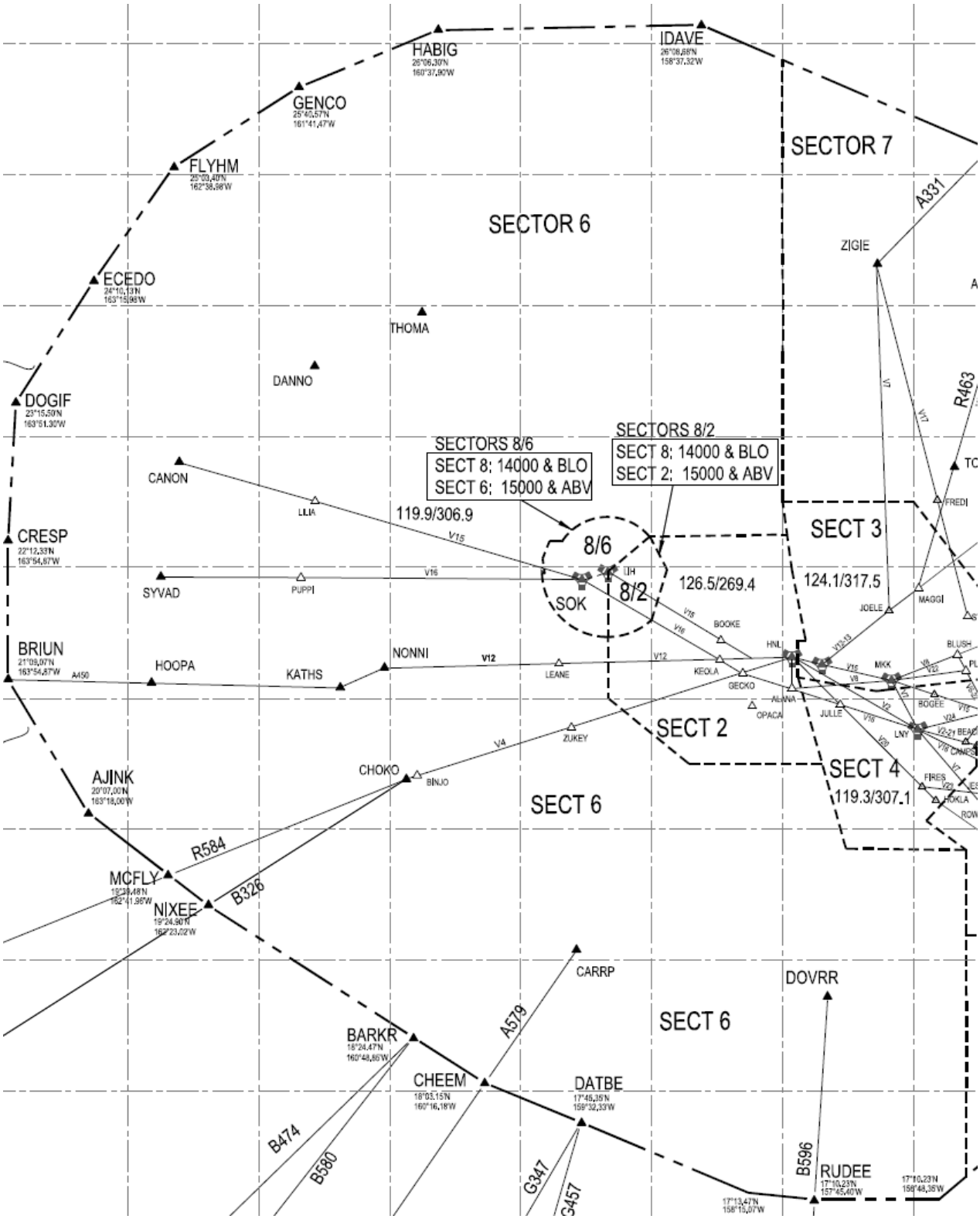
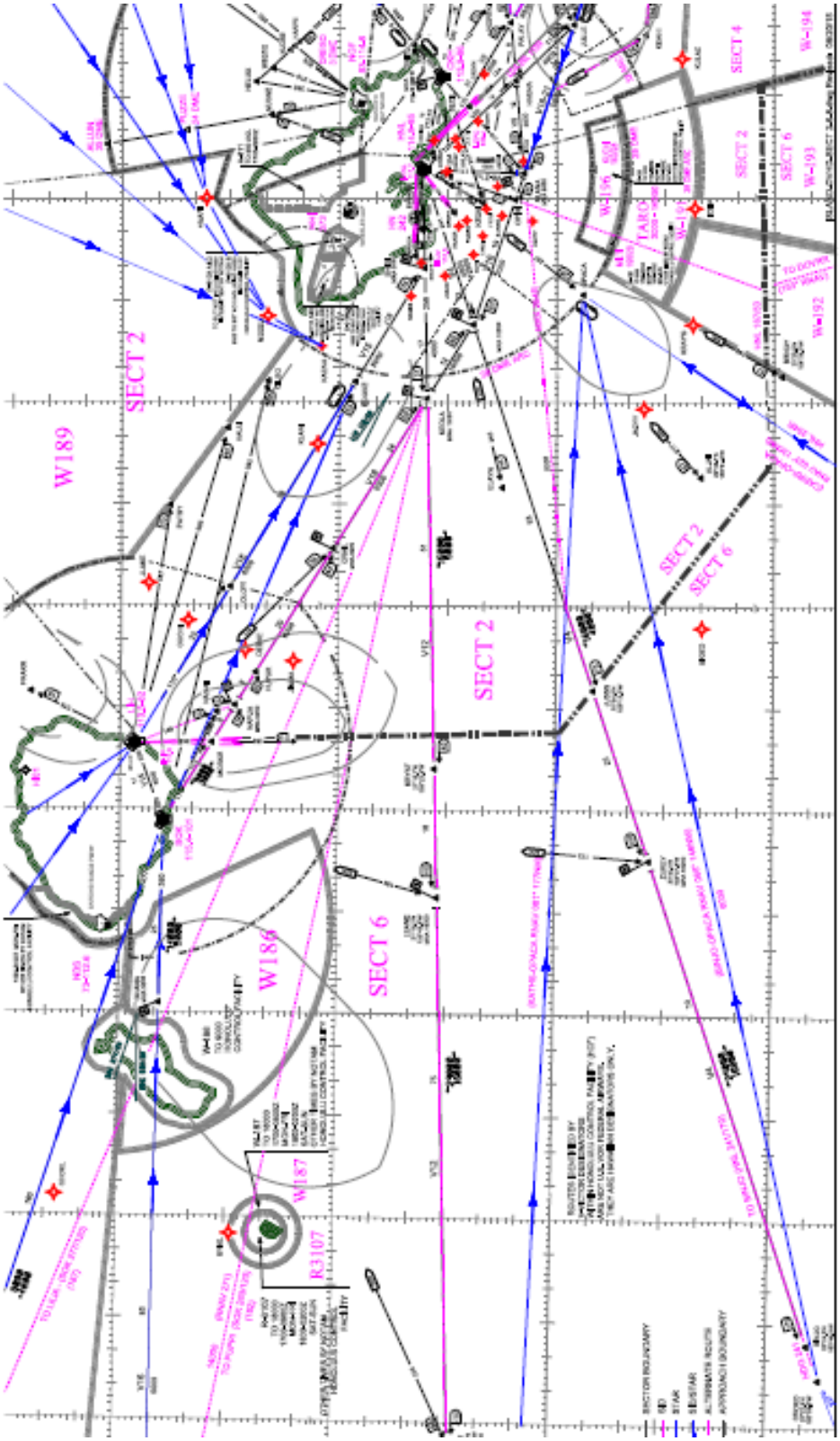


FIG 4-1-1 (b)
Sector 2 with Dillingham Jump Area



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TBL 4-1-1

Holding Patterns - Sectors 2/6/8

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175K	200-230K	265K		
BOOKE	W	LIH 110	58	L-1 MIN 4 DME		50/140			YES
	W	LIH 110	58	R-1.5 MIN 6 DME			160/240		NO
DIKNY	SW	NBS 222	15	R-5 DME		40/230			
DARIL	N	LIH 011	12	L-7 DME	30/170	30/170		OVERLAPS W-188	NO
ELAYN	SW	HNL 245	45	R-3 MIN 20 DME	40/160	40/160			NO
FRAKR	N	LIH 015	16	L-1 MIN 7 DME	15/100	15/100		OVERLAPS W-188/189	
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
JAVAT	S	NBS 166	12	R-13 DME			180/265		
KLANI	W	121 COURSE		R-2 MIN 8 DME		90/140			YES
KREEN	E	LIH 070	12	R-1.5 MIN 5 DME	22/170	22/170	22/170		YES
KREEN WP	E	070 HDG	12	R-5 DME		030/060 200K	060/140 230K		YES
LIH VORTAC	NE	LIH 070		L-1 MIN	40/140	40/140			YES (VOR or GPS-A)
MORKE	S	I-LIH CRS	12	R-1 MIN 7 DME	22/50	22/50	22/50		NO
NAGAI	SE	LIH 148	12	L-1.5 MIN 5 DME	20/170	20/170	20/170		YES
NAGAI WP	SE	154 HDG	12	L-5 DME	30/60 200K	60/140 230K	140/170 265K		YES
OPACA	SW	HNL 207	28	L-7 DME	60/140	60/80			YES

NOTE - *Holding pattern information is published by Flight Standards and may provide non-radar separation from adjacent airways.*

c.. Equipment.

1. Radar.

(a) Sector position symbols (handoff): (See TBL 4-1-2)

TBL 4-1-2
Sector Position (Handoff) Symbols

SECTOR	POSITION SYMBOL	REMARKS
2	J	
3	I	
4	F	
5	D	
6	K	
7	G	
9	S	
10	N	
H	H	
V	V	
L	L	
HULA DANCER	2	<Handoff> 2 OR To force automation <MF> G HR or HU
NGF APCH	3	<Handoff> 3 OR Manual entry <MF> G HG

NOTE: *The automated handoff to Hula Dancer doesn't work for local flight plans. The flight plan must be processed in OFDPS.*

(b) Radar limitations.

(1) Sector 2. Honolulu sensor (HNL) cannot track aircraft below 6,000′ in the vicinity of BOOKE intersection.

(2) Sector 6. Honolulu Control Facility's radar coverage is limited beyond the oceanic ingress fixes.

(3) Sector 8. Honolulu Control Facility's radar coverage is limited below 2,000′ in the vicinity of HI01.

2. Non-radar and limited radar procedures (See Appendix 15 for depiction of non-radar routings)

(a) Non-radar procedures. (See TBL 4-1-3)

TBL 4-1-3

Non-Radar Departure Routes - HNL

HNL DEPARTURE	ROUTING	REMARKS
TO LIHUE	V4 GECKO V16 NAPUA LIH 148R LIH	
TO BARKING SANDS	V4 GECKO V16 SOK BKH	
TO NORTHWEST OCEAN	V4 GECKO B16 SYVAD XXX	XXX = FIX
TO WEST OCEAN	V4 GECKO V16 KEOLA V12 NONNI XXX	XXX = FIX
TO SOUTH PACIFIC	OPIHI DP, CHOKO, CARRP & DOVRR TRANSITIONS	

(b) HNL arrival routes (See TBL 4-1-4)

TBL 4-1-4

Non-Radar Arrival Routes - HNL

HNL ARRIVAL	ROUTING	REMARKS
FROM LIHUE	V15 HNL	Lateral separation between V15 and V16 does not exist beyond 58 miles east of LIH
FROM BARKING SANDS	SOK/KEKEHA SID SOK V15 HNL	XXX = FIX
FROM NORTHWEST OCEAN	XXX CANON V15 HNL or CANON BOOKE STAR HNL SYVAD V16 SOK V15 HNL or SYVAD BOOKE STAR HNL	XXX = FIX When W188 not available for transit
FROM WEST OCEAN	XXX NONNI SOK 235R SOK V15 HNL	XXX = FIX
FROM SOUTH PACIFIC	XXX CHOKO RNAV BINJO V4 HNL 50 DME ARC TO INTCPT HNL 207R XXX CARRP HNL 204R HNL 50 DME ARC TO INTCPT HNL 207R XXX DOVRR JULLE/SAKKI STAR HNL	XXX = FIX

(c) Limited radar procedures.

(1) Normal radar procedures shall be used in areas of satisfactory radar coverage. (See Appendix 16, HCF Radar Coverage – Long Range and Appendix 17, HCF Radar Coverage - Terminal)

(2) Koke'e, Ka'ala, Haleakalā, Kona, and Pahoa sensor radar coverage areas are depicted in Appendix 16.

a Koke'e Sensor OTS – Use non-radar procedures for aircraft proceeding beyond 250NM from the Ka'ala sensor.

NOTE1 - *FLM/CIC shall coordinate suspension of reduced longitudinal separation when the Kokee sensor is OTS.*

NOTE2 - *The use of 15 degrees divergence will not be available at CANON or SYVAD due to loss of radar coverage prior to these waypoints.*

b Ka'ala Sensor OTS – Sector 2, 6 and 8. Non radar routes shall be used for the following:

1 Oceanic aircraft departing HNL until the aircraft is established on radar in the LIH or QKK sensor radar coverage areas.

2 Oceanic inbound from the west or south to HNL prior to exiting the QKK sensor coverage area.

c LIH sensor OTS – No change; there is an overlap of sensor coverage for this area with QKA and QKK.

3. Other facilities. Aeronautical Radio, Inc. (ARINC) shall instruct oceanic inbound aircraft to contact Honolulu Control Facility on the frequencies prescribed in Appendix 18.

4. OFDPS. Use OFDPS automation to process flight plan data.

(a) Enter PR (progress) message when progress time differs by 3 minutes or more.

(b) Enter AM (amendment) message when aircraft is rerouted into or out of a sector.

(c) Wind stations and updating winds aloft.

(1) Wind stations: APACK, CANON, CARRP, CHOKO, CLUTS, DANNO, DOVRR, EBBER, FIRES, FITES, GRAIL, HNL, KATHS, LILIA, MAGGI, NONNI, PUPPI, SCOON, SOOCN, SWOCN, SYVAD, THOMA and ZIGIE.

(2) Altitudes available: 03, 06, 09, 12, 18, 24, 30, 34, 39

(3) To update winds aloft:

Field 20 (upper wind data) contains four digits, of which the first two digits represent the azimuth in tens of degrees, and the last two digits represent the speed in knots.

The azimuth ranges from 01 to 36 when the speed ranges from 05 to 95.

For speeds from 100 to 195 knots, the azimuth is incremented by the value 50 (thus ranging 51 to 86), and only the last two digits of the speed are inputted.

Example: Winds of 270 at 110 knots would be entered as 7710.

If either azimuth or speed contains the value 99, it is interpreted as azimuth 360 and speed 1 knot. Otherwise, the following Rejection message is returned:

REJECT — xxxx INVALID DATA

The acceptable values for the first 2 digits are 01-36 or 51-86. Last two digits are 05-95 for wind speeds below 100 and 00-95 for wind speeds greater than 100.

Entering 99xx, xx99 or 9999 will result in the wind value equaling 3601. Entering 9999 can be used as a short cut to reset existing wind data.

Wind data does not clear itself. Wind information entered today may still be in the system next week if new wind data has not been entered or the OFDPS has not had a shutdown.

5. Communications. Sector frequencies and indirect access information are listed in Appendix 20. Frequency limitations are as follows:

(a) 126.5/269.4 (M/S and BUEC) west side of Kauai (Princeville to Barking Sands) below 7000ft.

(b) 126.5/269.4 (M/S and BUEC) on the ground at certain parts of LIH airport.

(c) 134.0/319.2 may be used in these areas for coverage. 134.0/319.2 shall be selected during midnight operations.

(d) 119.9/306.9 (M/S) vicinity of OPACA below 8000ft.

(e) See Appendix 21 for primary and BUEC frequencies and location map.

d. Oceanic procedures.

1. Oceanic departures will be coordinated with the following sectors:

(a) Sector 3 for aircraft exiting HCF airspace through Sector 7.

(b) Sector 2 for aircraft exiting HCF airspace through Sector 6.

2. The first HCF sector having control jurisdiction for an oceanic over flight must ensure Sector 2 or 3, whichever is applicable, has received the over flight information.

3. Release times listed in Appendix 22 may be used when applying Mach number technique in the Composite Route System. (See Appendix 23)

4. Departure times shall be forwarded to Flight Data for civil oceanic aircraft landing or over flying foreign airspace, with the exception of Canada.

(a) Enroute sector receives departure time.

(b) D position calls Flight Data with the following departure information:

(1) Call sign

(2) Destination

(3) Departure time

(c) To indicate the information has been forwarded, circle the destination airport in red on the departure strip.

(d) If Flight Data is not available, advise the FLM on duty of the departure information.

5. All oceanic departures must be level at assigned altitude or must have been assigned a crossing restriction to ensure level altitude prior to the oceanic sector boundary, in compliance with oceanic separation rules prior to termination of radar services and/or released to en route frequencies, unless otherwise coordinated.

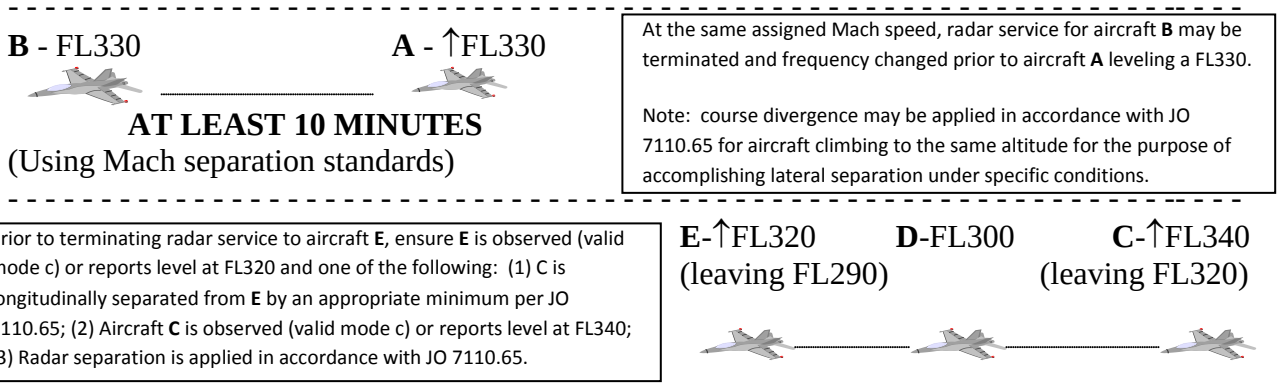
NOTE - *If TRK DROP is used, an RF command must be entered into the OFDPS to force the flight plan information back into the TAB list. <RF> space <ACID> space <ZHN>, then enter.*

6. Strategic Lateral Offset Procedures (SLOP) may be utilized for oceanic aircraft within HCF airspace as outlined in Pacific Chart Supplement.

7. PACOTS track 11/12 and A/B are published daily. All IFR flight levels at or above 290 to 410 are useable between 1000-2100Z (eastbound) and 1900-0800Z (westbound).

8. Ensure approved oceanic separation exists in accordance with JO 7110.65, prior to releasing an aircraft to enroute frequencies. (See FIG 4-1-2)

Fig. 4-1-2
Oceanic Separation Examples



e. Intra-facility coordination.

1. Procedures.

a. The first HCF Center sector is responsible for the accuracy of flight plan information and must advise Clearance Delivery of the active flight plan in use in the event of duplication/revision, unless identical.

b. Computer generated flight strips constitute a clearance. Coordinate for altitude assignments on all eastbound oceanic departures with the appropriate HCF Center sector.

c. Departure times on all aircraft departing the Honolulu Terminal Area must be forwarded via the MEARTS intra-facility program. Tower must manually forward actual departure times for known premature/non-existent auto-acquisition.

d. Arrival information on all aircraft entering the Honolulu Terminal Area must be forwarded via the MEARTS intra-facility program, or at least five minutes prior to inbound fix via inter-phone. Information must include aircraft identification, type, beacon code, and destination.

e. Traffic information must be given to HNL Approach on aircraft transiting above HNL Approach airspace at 17, 000'.

f. Sector 2 has approval to enter the HPASA at BOOKE or OPACA.

g. Automated Information Transfer (AIT) may be used between sectors as specified in Appendix 24 (AIT Procedures).

h. Amendments to scratch pad entries after initiation of a hand-off must be verbally coordinated.

2. Transfer of control.

a. HCF Center.

(1) Transfer of control for vectors, altitude change, speed adjustments, and beacon code changes between all HCF sectors will be after completion of a radar handoff, unless otherwise coordinated.

(2) Honolulu Approach/HCF Center Sector has control of VFR aircraft for beacon changes.

b. HNL Approach.

(1) Sector 2 may climb aircraft in the GECKO departure corridor except those aircraft assigned 10,000' or below.

(2) Sector 2 has control for vectors on departing aircraft within the GECKO departure corridor.

(3) Sector H has control for vectors, descent, beacon code changes and speed adjustments within 5 miles of the Honolulu TAB upon completion of a radar handoff, unless otherwise coordinated.

f. Traffic flow. *See Appendix 15 for Preferential Routes.*

1. HNL/OGG Approach will establish s minimum of 3 NM separation increasing to 5 NM in accordance with JO 7110.65, paragraph 5-5-4, Minima.

2. See TBL 4-1-5 for routes that may be used in lieu of the preferential/filed routes.

NOTE - *Field 7 (scratch pad) inputs of speed, headings or direct next fix may be used in lieu of verbal coordination in accordance with Appendix 25. Verbal coordination must be accomplished if the potential for confusion exists. An OFDPS amendment must be made if the new route will take the aircraft into or out of a sector.*

TBL 4-1-5

SECTORS 2/6/8: ROUTES IN LIEU OF PREFERENTIAL/FILED ROUTES

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTORs 3/7	LIH Arrivals W189/190 Cold LIH Arrivals W189/2190 Hot	DIRECT LIH or IAF/IF or via V12 DIRECT KEOLA DIRECT LIH/IAF/IF or via V12	Descending to FL200 Descending to FL200
FROM SECTORs 3/7	HNL Arrival	BOOKE KAENA STAR	Descending to FL200 Via Star
FROM SECTORs 3/7	NGF Departures	NGF/MUGGE SID	
TO SECTORs 3/7	Oceanic Deps W189/W190 Cold Oceanic Deps W189/W190 Hot	DIRECT ZIGIE, APACK, CLUTS, EBBER, FITES or SCOON DIRECT CKH, then heading 080 degrees	
TO SECTORs 3/7	OGG Arrivals Jets South Flow	DIRECT HNL, then DIRECT PLUMB or OLONE	
TO SECTORs 3/7	NGF Arrivals	DIRECT FUZZE, DIRECT NUDSE	Descending to 8,000’
FROM/TO	**REMARKS**	**ROUTING**	**ALTITUDE**
FROM SECTOR 4	LIH Arrivals BKH Arrivals	DIRECT KEOLA then DIRECT IAF/IF DIRECT KEOLA, then DIRECT IAF	
TO SECTOR 4	OGG Jet Arrivals during standard/modified standard flow KOA Arrivals	DIRECT LNY or IAF/IF DIRECT LNY or IAF/IF	
FROM HNL APCH	HNL APCH will establish a	minimum of 3NM separation increasing to 5NM	IAW JO 7110.65.
FROM HNL APCH	LIH ARRIVALS BKH ARRIVALS HHI Departures	Via the KEOLA SID or vector 260 degrees* to intercept the LIH 148R Via KEOLA SID Via GECKO SID	*HCF APCH may assign headings of 230 – 270 degrees for westbound departures instead of 260, as long as hdg used is in the scratch pad.

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM HNL APCH	OCEANIC Departures	Via OPIHI SID CHOKO must be cleared DIRECT CHOKO	
	All Other Acft exiting the GECKO Corridor	On vectors 230 to 270 degrees. If heading other than 260 degrees, scratch pad inputs of heading may be used in lieu of verbal coordination.	
	All Other Westbound Deps		Climbing to 16,000' or filed altitude, whichever is lower
TO HNL APCH	Jet Arrivals	Via STAR or V15	Descending to 8000' or via RNAV STAR
	Prop Arrivals	Via V15	Descending to 7000'
	OPACA STAR Arrivals	OPACA STAR	Cross OPACA at 6000'
TO HNL APCH	JRF Arrivals North of V12 JRF Arrivals South of V12	DIRECT KEOLA, DIRECT TARLE, DIRECT JRF DIRECT GECKO, DIRECT TARLE, DIRECT JRF	Cross KEOLA at 4000' Cross GECKO at 4000'
TO HNL APCH	HHI Arrivals	Via V15 HNL, DIRECT HHI	Descending to 7000'
TO HNL APCH	Sector 2 will input	destination airport in scratch pad for aircraft	landing other than HNL.

3. Ordnance routes. (See TBL 4-1-6)

TBL 4-1-6
Recommended Ordnance Routes

AIRCRAFT CARRYING ORDNANCE (INCLUDING SONOBOUYS) MUST UTILIZE OVER WATER ROUTES

DEP	DEST	RECOMMENDED ROUTE	ALT
NGF	W194	NGF.NGF SID.FUZZE..MUGGE..CKH039020..LOKIE..SERAH..GARZZ	PROPS 070 JETS 230
W194	NGF	GARZZ..SERAH..LOKIE..CKH039020..NUDSE..NGF	PROPS 080 JETS 180
NGF	W192 W193 MELA AREAS	NGF.NGF SID.FUZZE..HAULI..JAZYY OR NGF.NGF SID.FUZZE..HAULI..BIGZO	PROPS 120 JETS 240
W192 W193 MELA AREAS	NGF	JAZYY..HAULI..FUZZE..NIKKI..NGF OR BIGZO..HAULI..FUZZE..NIKKI..NGF	PROPS 130 JETS 190
HNL	W192 W193 MELA AREAS	HNL.OPIHI SID.OPIHI..JAZYY OR HNL.OPIHI SID.OPIHI..BIGZO	PROPS 120 JETS 240

DEP	DEST	RECOMMENDED ROUTE	ALT
W192 W193 MELA AREAS	HNL	JAZYY..OPACA.OPACA STAR.HNL OR BIGZO..OPACA.OPACA STAR.HNL	PROPS 130 JETS FL190
NGF	R3103	NGF.NGF SID.FUZZE..NIKKI..LOKIE..SERAH..KOA	FL230
R3103	NGF	DARBB..SERAH..LOKIE..NUDSE..NGF	FL240
HNL	W192 W193 W194	HNL.OPIHI SID.OPIHI..MILTI	JETS 160 PROPS 080
W192 W193 W194	HNL	KUCHI..HNL	060
HNL	W189 W190 RAINBOW	HNL.KEOLA SID.KEOLA..HAULI	FL240
W189 W190 RAINBOW	HNL	HAULI..BOOKE.BOOKE STAR.HNL	FL190

g. Conflict areas.

1. Sector 2.

a. Barking Sands Airport (BKH) departures/Lihue Airport (LIH) arrivals (Runway 3/35) and departures (runway17/21).

b. BOOKE/KLANI/ KAENA arrival sequencing.

c. KAENA/KLANI descending via clearance with V15 prop arrivals.

d. OPACA arrivals with OPIHI departures.

e. APACK/ZIGIE direct BOOKE. Do not authorize any aircraft to fly through the Dillingham jump area 16,000’ and below.

f. Fighter recoveries from W189 with BOOKE arrivals.

g. LIH- U.S. mainland inbounds/outbounds over HNL when W189/190 active.

h. Jet descending to 8000 with Props at 7000 in the vicinity of BOOKE (HNL radar limitations may prohibit approach from seeing A/C at 7000ft).

2. Sector 6.

a. Oceanic arrivals/departures, climbing and descending.

b. QKK sensor OTS with Oceanic separation.

c. Oceanic inbounds with THOMA/VANDA airspace active.

3. Sector 8.

a. LIH arrival/departure separation.

b. BKH arrival/departure separation.

h. Dillingham (HDH) Parachute Operations: HCF publishes a Letter to Airmen regarding parachute operations at Dillingham Airfield every two years. It specifies notification requirements for the parachute operations companies (no earlier than 24 hours before or no later than 1 hour before operations begins), to be faxed to the ops floor. The FAR requirement for the pilots is to establish communications with HCF (126.5) at least 5 minutes prior to parachute operations, until the pilot advises ATC that the parachute operation has ended for that flight. The pilot will make 3 calls to HCF, **5 minutes prior to jump, jumpers away, and jumpers on the ground**. The 5-mile radius airspace around HDH, surface to 16,000 ft., has been delegated to Sector 2. It is included in the Center radar map button labeled "MAP 1."

HCF's responsibility is to issue traffic advisories (7110.65 Para 9-7-4). Before the jump, advise the parachute operations pilot of all known aircraft which will transit through the jump area. Also, issue advisories to all known aircraft which will transit through the jump area. Advisories to nonparticipating aircraft must consist of the location, time, duration, and altitude from which the jump will be made.

RESERVED

RESERVED

4-2 SECTOR 3.

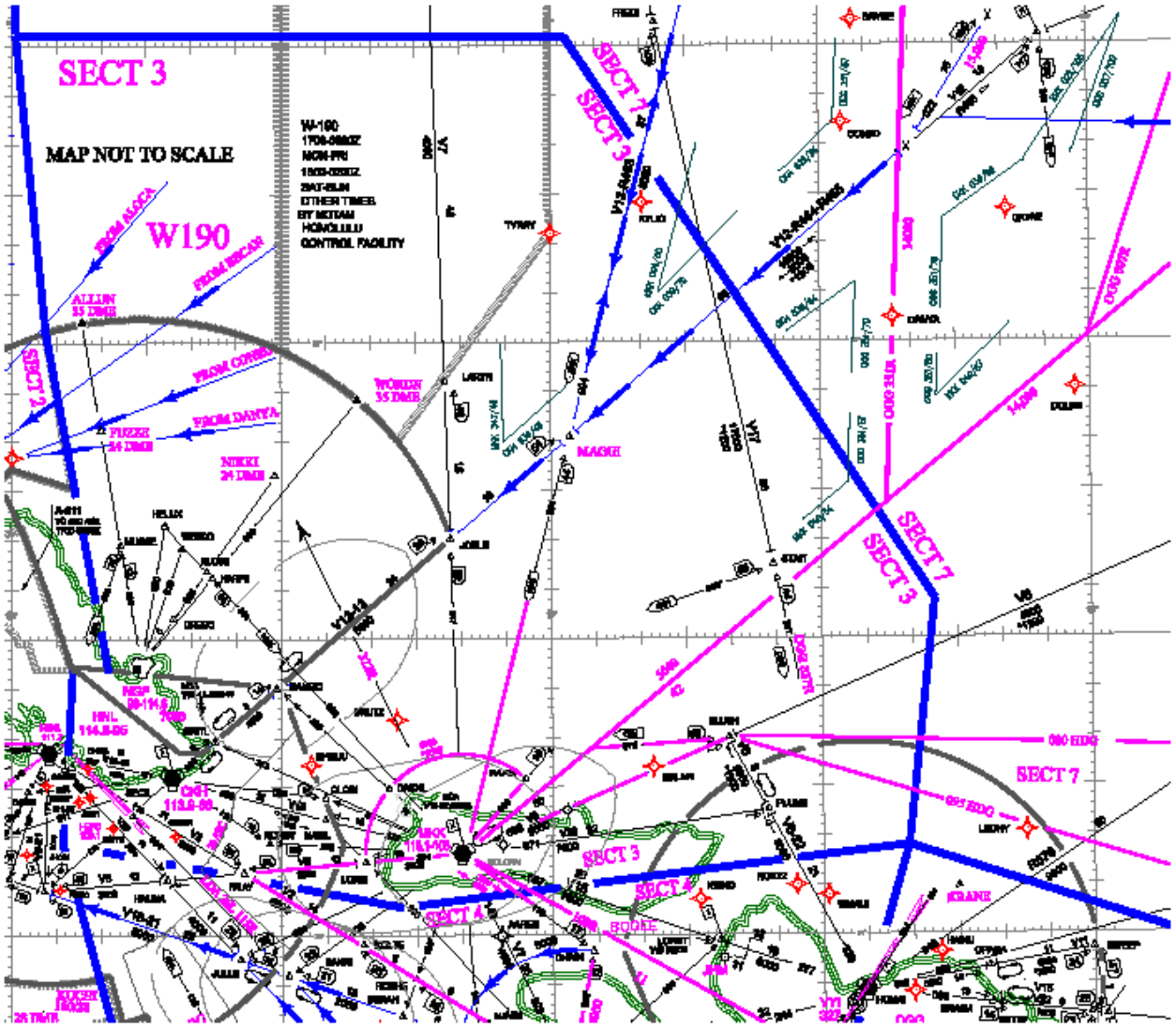
a. General.

1. Sector Description: Sector 3 provides approach control services to Molokai Airport, Kalaupapa Airport, and Kaneohe Airport (NGF approach closed). Secondary airports include HI49 (Panda Ranch).

2. Combining/decombining HCF Center Sectors will be at the discretion of the OSIC/ISLCIC.

b. Airspace. (See FIG 4-2-1)

FIG 4-2-1
Island Approach: Sector 3 Airspace



1. Sector 3 airspace is defined in Appendix 1.

2. HCF delegates military airspace W189 W190 to Hula Dancer (FACSFAC).

3. Holding fixes and holding patterns (See TBL 4-2-1)

TBL 4-2-1
Holding Patterns – Sector 3

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
BAMBO	NE	CKH 039	14	R-1 MIN 10 DME	60/140	60/140		OVERLAPS NGF	YES
BLUSH	NE	MKK 056	30	R-1 MIN 8 DME	50/140	50/140	50/140		NO
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
LOKIE	E	MKK 254	10	R-1 MIN 6 DME	30/140	30/140		OVERLAPS Honolulu Approach/ SECTOR 4	NO
MKK	NE	MKK 056		R-1 MIN	40/140	40/140			YES
VORTAC				6 DME					
	W	MKK 254		L-1 MIN 6 DME	35/140	35/140		OVERLAPS SECTOR 4	YES
OGG	S	OGG 187		L-1.5 MIN	80/140	80/140	140/175	310K 140/175	NO
PLUMB	NW	OGG 320	32	L-1.5 MIN 7 DME		50/140	145/175		NO

NOTE - *Holding pattern information is published by Flight Standards and may provide non-radar separation from adjacent airways.*

c. Equipment.

1. Radar.

(a) Sector position symbols (handoff): (See TBL 4-2-2)

TBL 4-2-2

Sector Position (Handoff) Symbols

SECTOR	POSITION SYMBOL	REMARKS
2	J	
3	I	
4	F	
5	D	
6	K	
7	G	
9	S	
10	N	
H	H	
V	V	
L	L	
HULA DANCER	2	<Handoff> 2 OR To force automation <MF> G HR or HU
NGF APCH	3	<Handoff> 3 OR Manual entry <MF> G HG

NOTE: *The automated handoff to Hula Dancer doesn't work for local flight plans. The flight plan must be processed in OFDPS.*

(b) Radar limitations.

(1) Honolulu Control Facility's radar coverage is good:

a QPN sensor limitations may reflect split beacons northeast of the sensor.

b Limited beyond the oceanic ingress fixes.

(2) Honolulu (HNL) radar sensor cannot track aircraft below:

a 8,000' in the vicinity of BAMBO/Koko Head VORTAC (CKH).

b 4,000' in the vicinity of MABBL.

2. Non-radar and limited radar procedures. (See Appendix 15 for depiction of non-radar routing)

(a) Non-radar procedures.

(1) HNL departure routes (SEE TBL 4-2-3)

TBL 4-2-3

Non-Radar Departure Routes - HNL

HNL DEPARTURE	ROUTING
TO R463	V8 MKK to MKK 004R to MAGGI R463 to APACK
TO R465	V8 MKK MKK 040R CLUTS
TO R577	V8 MKK V15 OGG R577 EBBER
TO MOLOKAI	V8 MKK
TO MAUI	V8 MKK V22 OGG
TO KAPALUA (JHM)	V8 MKK MKK 100R BOGEE JHM
TO KONA (JETS)	V8 MKK KAYAK STAR KOA
TO HILO (JETS)	V8 MKK MKK 108R PULPS V21 PUMIC V15 ITO

(2) HNL arrival route (See TBL 4-2-4)

TBL 4-2-4

Non-Radar Arrival Routes - HNL

HNL ARRIVAL	ROUTING
FROM ZIGGIE	ZIGGIE V7 JOELE V12
FROM APACK	APACK V13 V12
FROM BITTA	BITTA MAGGI STAR HNL
FROM MOLOKAI	V8 HNL

(3) HNL runway 22/26: Route HNL KONA/ITO jets via Sector 4.

(4) Maui South Flow: No change to routes.

(b) Limited radar procedures

(1) Normal radar procedures shall be used in areas of satisfactory radar coverage.

(2) Koke’e, Ka’ala, Haleakalā, Kona, and Pahoa sensor radar coverage areas are depicted in Appendix 16.

a Koke'e Sensor OTS. No change; this sensor has no impact on Sector 3.

b Pahoa Sensor OTS. No impact for sector 3.

c Haleakalā Sensor OTS. No change.

d Ka'ala Sensor OTS. Sector 3. The Haleakalā sensor provides radar coverage for most of Sector 3 except in the area south of BAMBO and over Molokai.

1 All aircraft departing HNL should be established on non-radar routes until the aircraft is established on radar in the Haleakalā radar coverage area.

2 Radar handoffs may be initiated by Honolulu Control Facility to Honolulu Approach at BAMBO if radar contact is maintained.

3 To aid Sectors 4/5 the following reroutes are recommended:

(aa) Aircraft inbound to HNL from FITES will be routed via FITES RV V12 HNL.

(bb) Oceanic aircraft departing HNL to FITES/SCOON be rerouted via V8 BLUSH RV FITES/SCOON.

(cc) OGG-HNL aircraft routed via V6 BLUSH RV V12 HNL.

e LIH Sensor OTS. No change; this sensor has no impact on Sector 3.

f Kona Sensors OTS. No change; this sensor provides redundancy for other sensors for Sector 3.

g ITO Sensor OTS. No change; Pahoa sensor covers this area.

3. Offshore Data Processing System (OFDPS).

(a) Use OFDPS automation to process flight plan data.

(1) Enter PR (progress) message when progress time differs by 3 minutes or more.

(2) Enter AM (amendment) message when aircraft is rerouted into or out of a sector.

(3) Wind stations and updating winds aloft.

a Wind stations: APACK, CANON, CARRP, CHOKO, CLUTS, DANNO, DOVRR, EBBER, FIRES, FITES, GRAIL, HNL, KATHS, LILIA, MAGGI, NONNI, PUPPI, SCOON, SOOCN, SWOCN, SYVAD, THOMA and ZIGIE.

b Altitudes available: 03, 06, 09, 12, 18, 24, 30, 34, 39

c To update winds aloft:

1 Use the first 2 digits of the direction and the 2 digit speed. For speed over 99 knots, add 50 to the direction and subtract 100 from the speed

EXAMPLE - *240 at 118 knots = 7418*

2 Enter UW_ (wind station) _ (altitude) _ (wind direction and speed).

EXAMPLE - *UW_ (MAGGI) _ (34) _ (7418)*

4. Communications. Sector frequencies and indirect access information are listed in Appendix 19. Frequency limitations are as follows:

(a) 124.1/317.5 (M/S and BUEC) between Kalaupapa and Cape Halawa below 4,000'.

(b) 124.1/317.5 (M/S) in the Kaneohe Approach Area.

(c) 135.4/327.1 may be used as back-up frequency.

d. Oceanic procedures.

1. Oceanic departures will be coordinated with the following sectors:

(a) Sector 3 for aircraft exiting HCF airspace through Sector 7.

(b) Sector 2 for aircraft exiting HCF airspace through Sector 6.

2. The first HCF sector having control jurisdiction for an oceanic over-flight shall ensure Sector 2 or 3, whichever is applicable, has received the over flight information.

3. Release times listed in Appendix 22 may be used when applying Mach number technique in the Composite Route System.

4. Departure times shall be forwarded to flight data for civil oceanic aircraft landing or overflying foreign airspace, with the exception of Canada.

(a) Enroute sector receives departure time.

(b) D position calls Flight Data with the following departure information:

(1) Call sign

(2) Destination

(3) Departure time

(c). To indicate the information has been forwarded, circle the destination airport in **red** on the departure strip.

(d) If Flight Data is not available, advise the FLM on duty of the departure information.

5. All oceanic departures shall be level at assigned altitude or shall be assigned a crossing restriction to ensure level altitude prior to the oceanic sector boundary, in compliance with oceanic separation rules prior to termination of radar services and/or released to en route frequencies, unless otherwise coordinated.

6. Ensure standard oceanic separation exists in accordance with JO 7110.65, prior to releasing an aircraft to en route frequencies. See Figure 4-1-2.

e. Inappropriate Altitude for Direction of Flight (IAFDOF) Procedures.
In all cases of inbound oceanic IAFDOF over A331, A332/R463, R578, or SAYTO the following procedures will be used.

1. D3 will place the oceanic transfer strip under the appropriate bay header. Search for potential conflict with aircraft cleared outbound assigned the same altitude and block the altitude. Underline any IAFDOF altitude in **RED.**

2. If no conflict identified, IAFDOF may be approved.

3. When potential conflict is identified; D3 will approve or disapprove the assignment of the requested altitudes based on traffic.

NOTE- *This may include the estimated inbound time of the IAFDOF aircraft.*

4. If the inbound IAFDOF aircraft and outbound are expected to pass within HCF airspace, the altitude may be assigned, but separation will be ensured until the aircraft are no longer a factor.

5. If the inbound IAFDOF aircraft and outbound are expected to pass within ZOA airspace, the altitude may not be assigned.

6. The IAFDOF strip may be removed after Sector 7 verifies the aircraft has been radar identified.

7. Include IAFDOF in position relief briefing IAW relief briefing checklist.

f. Intra-facility Coordination.

1. Procedures.

(a) The first HCF Center sector is responsible for the accuracy of flight plan information and must advise Clearance Delivery of the active flight plan in use in the event of duplication/revision, unless identical.

(b) Computer generated flight strips constitute a clearance. Coordinate for altitude assignments on all eastbound oceanic departures with the appropriate HCF Center sector.

(c) Departure times on all aircraft departing the Honolulu Terminal Area must be forwarded via the MEARTS intra-facility program. Tower must manually forward actual departure times for premature/non-existent auto-acquisition.

(d) Arrival information on all aircraft entering the Honolulu Terminal Area shall be forwarded via the MEARTS intra-facility program, or at least five minutes prior to inbound fix via inter-phone. Information shall include aircraft identification, type, beacon code, and destination.

(e) Traffic information must be given to HNL Approach on aircraft transiting above HNL Approach airspace at 17, 000'.

(f) Sector 3 has approval to enter the HPASA at BAMBO or LOKIE.

(g) Automated Information Transfer (AIT) may be used between sectors as specified in Appendix 24 (AIT Procedures).

(h) Amendments to scratch pad entries after initiation of a hand-off must be verbally coordinated.

2. Transfer of Control.

(a) HCF Center: Transfer of control for vectors, altitude change, speed adjustments, and beacon code changes between all HCF sectors and Maui Approach will be after completion of a radar handoff, unless otherwise coordinated.

(b) HNL Approach.

(1) Sector 3 may assume control for vectors on aircraft within the NORBY corridor.

(2) Sector 3 may assume control to climb aircraft assigned 10,000' or above.

(3) Sector 3 may vector/descend aircraft landing MKK and LUP upon completion of radar handoff.

(4) Sectors H and V have control for vectors, descent, speed adjustments within 5 NM of the Honolulu TAB, beacon code changes upon completion of radar handoff, unless otherwise coordinated.

g. Traffic flow. *See Appendix 15 for Preferential Routes.*

1. HNL/OGG Approach will establish a minimum of 3 NM separation increasing to 5 NM in accordance with JO 7110.65, paragraph 5-5-4.

2. See TBL 4-2-5 for routes that may be used in lieu of the preferential/filed routes.

NOTE - *Field 7 (scratch pad) inputs of speed, headings or direct next fix may be used in lieu of verbal coordination in accordance with Appendix 25. Verbal coordination must be accomplished if the potential for confusion exists. An OFDPS amendment must be made if the new route will take the aircraft into or out of a sector.*

TBL 4-2-5

SECTOR 3: ROUTES IN LIEU OF PREFERENTIAL/FILED ROUTES

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTORs 2/6/8	Oceanic DEPs W189/W190 Cold Oceanic DEPs W189/W190 Hot	DIRECT ZIGIE, APACK, CLUTS, EBBER, FITES or SCOON DIRECT CKH, then heading 080 degrees	
FROM SECTORS 2/6/8	OGG JET ARRs via South Flow NGF ARRs	DIRECT PLUMB or OLONE DIRECT FUZZE DIRECT NUDSE	 Descending to 8,000”
TO SECTORs 2/6/8	LIH ARRs W189/W190 Cold LIH ARRs W189/W190 Hot	DIRECT LIH or IAF/IF or via V12 DIRECT KEOLA, DIRECT LIH/IIAF/IF or via V12	Descending o FL200 Descending to FL200
TO SECTORs 2/6/8	NGF DEPs	Via NGF/MUGGE SID	
FROM/TO	**REMARKS**	**ROUTING**	**ALTITUDE**
TO SECTORs 2/6/8	HNL ARRs W189/W190 Cold	DIRECT BOOKE Via KAENA STAR	Descending to FL 200 Descending via the STAR
FROM SECTOR 4	NGF ARRs	DIRECT MKK DIRECT NUDSE	
FROM SECTOR 7	HNL ARRs	DIRECT BAMBO or MAGGI Via RNAV STAR	Descending to 10,000’ (Rwy 22/26 ops cross BAMBO @ 10,000’) Descending via the STAR
FROM SECTOR 7	NGF ARRs	DIRECT NUDSE/NIKKI	Descending to 8,000’

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTOR 7	LIH ARRs W189/W190 Cold LIH ARRs W189/W190 Hot	DIRECT LIH or IAF/IF DIRECT CKH, DIRECT KEOLA, DIRECT LIH/IAF/IF	
TO SECTOR 7	OCEANIC Departures	DIRECT ZIGGIE, APACK, CLUTS, EBBER, FITES or SCOON	
FROM SECTOR 10	MKK or HNL ARRs LIH ARRs	Via V6, V22 or DIRECT MKK VORTAC Via CKH075R, CKHV12	
TO SECTOR 10	OGG ARRs-Standard Flow PROPS	Via BLUSH V6 Via PLUMB V22	Descending to 5,000' Descending to 7,000"
TO SECTOR 10	JETS South Flow- PROPS PROPS	Via PLUMB V22 or DIRECT OLONE Via PLUMB V22 Via BLUSH V6	Descending to 7,000' Descending to 7,000' Descending to 5,000'
FROM HNL APCH	MKK SID and JRF DEPs	Inter-Island DEPs DIRECT MKK ZIGIE, APACK or CLUTS HDG 060-090 (Scratch pad inputs of hdgs may be used in-lieu of verbal coordination if other than 060 degree hdg) EBBER via DIRECT EBBER PULPS, FITES, SAYTO Via DIRECT MKK VORTAC	Climb to assigned altitude
FROM HNL APCH	HHI DEPs	Via SHINSEKI SID	Climbing to assigned altitude
FROM HNL APCH	HNL RWY 22/26; All DEPs		Climb to assigned altitude or 7,000', whichever is higher
TO HNL APCH	HNL ARRs RWY 4/8	Via MAGGI STAR or V12 Via RNAV STAR Via V8	Descending to 10,000' (Inter-island PROPS to 8,000') Descending via the STAR To cross LOKIE @ 4,000'
TO HNL APCH	HNL ARRs RWY 22/26	Via MAGGI STAR or v12 Via V8	Cross BAMBO at 10,000' (Interisland PROPS at 8000') To cross LOKIE @ 4000' (Handoff to H,118.3/269.0)

FROM/TO	REMARKS	ROUTING	ALTITUDE
TO HNL APCH	JRF ARRs	Via BAMBO, DIRECT CKH, DIRECT GECKO Via LOKIE, V8, ALANA, DIRECT GECKO	Descending to 10,000’
TO HNL APCH	HHI ARRs	Via BAMBO, DIRECT HNL Via LOKIE, V8, HNL, DIRECT HHI	Descending to 10,000’ To cross LOKIE @ 4000’
TO HNL APCH	Sector 3 will input	destination airport in scratch pad for aircraft	landing other than HNL.

3. Ordnance Routes. (See TBL 4-2-6)

g. Conflict areas.

1. HNL to MKK/MKK to HNL - opposite direction traffic on V8.

2. Arrival sequencing at BAMBO.

3. W190 recoveries/NGF arrivals and departures/ MAGGI/REEEF/ KAENA STAR arrivals/oceanic departures.

4. Departure/arrival separation at MKK.

5. OGG oceanic departures and arrivals/HNL oceanic departures and arrivals.

6. MKK SID departures/MAGGI/REEEF/KAENA STAR arrivals.

7. Northeast of MKK, V8 - opposite direction, climbing/descending traffic.

8. OGG to LIH arrivals and departures/MKK SID.

TBL 4-2-6
Recommended Ordnance Routes

AIRCRAFT CARRYING ORDNANCE (INCLUDING SONOBOUYS) MUST UTILIZE OVER WATER ROUTES

DEP	DEST	RECOMMENDED ROUTE	ALT
NGF	W194	NGF.HELUX3.HELUX..MASAE..LOKIE..SERAH..GARZZ	PROPS 070 JETS 230
W194	NGF	GARZZ..SERAH..LOKIE..MASAE..NUDSE..NGF	PROPS 080 JETS 180
NGF	W192 W193 MELA AREAS	NGF.NGF SID.FUZZE..HAULI..JAZYY OR NGF.NGF SID.FUZZE..HAULI..BIGZO	PROPS 120 JETS 240
W192 W193 MELA AREAS	NGF	JAZYY..HAULI..FUZZE..NIKKI..NGF OR BIGZO..HAULI..FUZZE..NIKKI..NGF	PROPS 130 JETS 190
HNL	W192 W193 MELA AREAS	HNL.OPIHI SID.OPIHI..JAZYY OR HNL.OPIHI SID.OPIHI..BIGZO	PROPS 120 JETS 240
W192 W193 MELA AREAS	HNL	JAZYY..OPACA.OPACA STAR.HNL OR BIGZO..OPACA.OPACA STAR.HNL	PROPS 130 JETS FL190
NGF	R3103	NGF. HELUX3.HELUX..MASAE..LOKIE..SERAH..DARBB	FL230
R3103	NGF	DARBB..SERAH..LOKIE..MASAE..NUDSE..NGF	FL240
HNL	W192 W193 W194	HNL.OPIHI SID.OPIHI..MILTI	JETS 160 PROPS 080
DEP	**DEST**	**RECOMMENDED ROUTE**	**ALT**
W192 W193 W194	HNL	KUCHI..HNL	060
HNL	W189 W190 RAINBOW	HNL.KEOLA SID.KEOLA..HAULI	FL240
W189 W190 RAINBOW	HNL	HAULI..BOOKE.BOOKE STAR.HNL	FL190

4-3 SECTOR 4.

a. General.

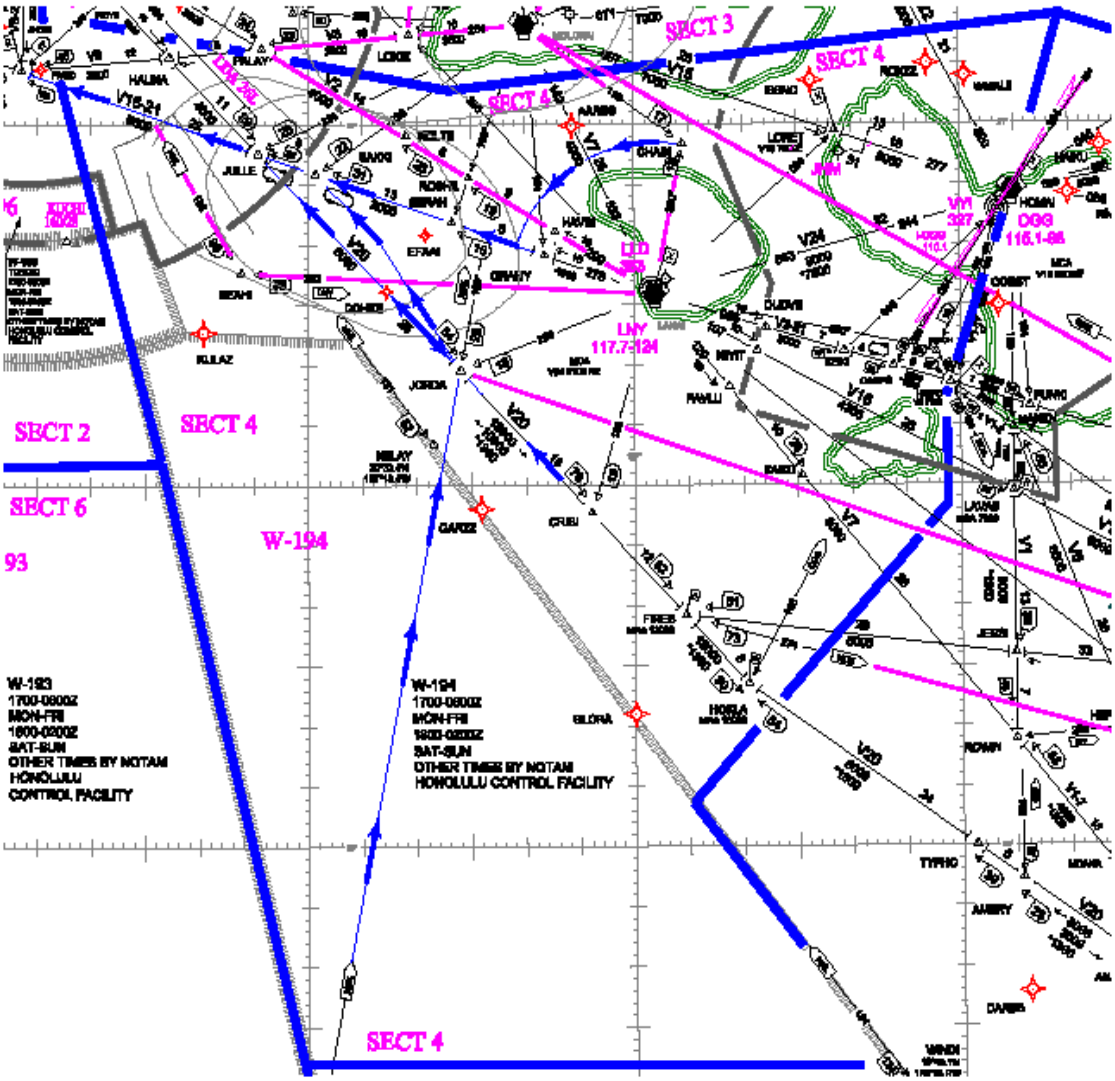
1. Sector 4 provides approach control services to Lanai airport and Kapalua airport in addition to enroute services in designated areas.

2. Combining/decombining HCF Center Sectors will be at the discretion of the OSIC/ISLCIC.

b. Airspace. (See FIG 4-3-1)

FIG 4-3-1

Island Approach: Sector 4 Airspace



1. Sector 4 airspace as defined in Appendix 1.

2. See FIG 2-2-1 for OGG approach airspace.

3. CASEY airspace shall be requested from FACSFAC during HNL 22/26 operations. See Appendix 13.

4. Holding patterns as described below:

(a) Sector 4 holding patterns (See TBL 4-3-1)

TBL 4-3-1
Holding Patterns – Sector 4

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
ANDES	NW	KOA 294	11.7	R-1 – 1½ MIN	15/175	15/175	15/175		YES
ANDES	NW	WP	12	5DME	50/175	50/175	50/175		
BOGEE	E	MKK 100	19.6	R-1 MIN 4 DME	60/100			RESTRICTED APRVD OPS	NO
	W	MKK 100		L-1 MIN 4 DME	60/100				NO
CAMPS	W	LNY 095	21.4	L-1 MIN 3 DME	50/140	50/140			YES
CHAIN	NW	MKK 115	16.8	R-1 MIN 3 DME	20/80			RESTRICTED APRVD OPS	NO
DYANE	S	KOA 168	10	L-1 MIN 5 DME	20/160	20/160			NO
GRAMY	W	LNY 278	10	R-1 MIN		20/140			YES
HARPO	W	WP		R- 4 DME		60/80		Published holding limited to established patterns	NO
	SE	WP		L - 4 DME		60/120			NO
	S	WP		R - 4 DME		50/140			NO
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
KOA	W	KOA 270		R-1 MIN	50/120	50/60			NO
VORTAC									
ITO	E	ITO 079		L-1 MIN	20/100	20/100			YES
VORTAC	S	ITO 162		R-1 MIN	20/100	20/40			YES
	W	ITO 280		R-1.5 MIN	160/200	160/200			

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
JASON	SW NE* SW	MUE 234 MUE 234 WP	13 13	L-5 DME R-1 MIN L-4 DME	40/60*	43/140 43/140		*Helicopters only	NO NO NO
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
KAYAK	NW	KOA351	12	L-1 MIN	15/60	15/60			YES
KEIKI	W	LNY 095	17	L-1 MIN 3 DME	50/100	50/120			YES
LNY VORTAC	W	LNY 278		R-1 MIN		40/140			NO
OGG VORTAC	S	OGG 187		L-1.5 MIN	80/140	80/140	140/175	310K 140/175	NO
PARIS	NW	ITO 325	29	R-1 MIN 4 DME L-1 MIN 4 DME		40/140 40/140			NO
POA	N	POA 340B		L-1 MIN	30/140	30/200	40/200	NDB	NO
SAKKI	E	LNY 278	31	L-1 MIN 10 DME	40/140	40/140			YES
SERAH	W	LNY 278	18	R-1.5 MIN 10 DME	20/180	20/180			NO
TEETA	W	BSF 289	11	L-1 MIN		80/100			YES
TIGAH	NE NE	MUE 057 WP	13	R-5 DME R-4 DME		50/140 50/140		Holding limited to established patterns	NO NO
UPP VORTAC	N	UPP 338		R-1.5 MIN	80/120*	80/140	140/200	* - At request, limited to established pattern	NO
VECKI	N	I-KOA CRS-	12 11.5	R-1 MIN	30/60	30/60		*	NO
VEWES	E	ITO 079		L-1 MIN 8 DME	18/200	18/200	30/200	310K 30/200	YES

NOTE *- Holding pattern information is published by Flight Standards and may provide non-radar separation from adjacent airways.*

c. Equipment.

1. Radar.

(a). Sector position symbols (handoff) (See TBL 4-3-2)

TBL 4-3-2
Sector Position (Handoff) Symbols

SECTOR	POSITION SYMBOL	REMARKS
2	J	
3	I	
4	F	
5	D	
6	K	
7	G	
9	S	
10	N	
H	H	
V	V	
L	L	
HULA DANCER	2	<Handoff> 2 OR To force automation <MF> G HR or HU
NGF APCH	3	<Handoff> 3 OR Manual entry <MF> G HG

NOTE: *The automated handoff to Hula Dancer doesn't work for local flight plans. The flight plan must be processed in OFDPS.*

(b) Radar limitations. Sector 4 radar coverage limited in areas north to northeast of LNY where Kona Sensor coverage may be impeded by terrain.

2. Non-radar and limited radar procedures. (See Appendix 16 for depiction of non-radar routing)

(a) Non-radar procedures for Sector 4 (See TBL 4-3-3).

TBL 4-3-3
Non-Radar Routes – Sector 4

DEPARTURE ROUTE	ROUTING
HNL – KONA	V2 LNY V2 MAKEN V5 KOA
HNL – HILO (Props)	V2 LNY V2 ITO
HNL – MAUI	V2 CAMPS I-OGG

DEPARTURE ROUTE	ROUTING
HNL RWY 22/26	VIA KEAHI SID
OGG – HNL (Maui Std Flow)	REROUTED VIA SECTOR 3
MAUI SOUTH FLOW	ALL DEPs (EXCEPT OCEANIC ACFT) SHOULD BE ROUTED VIA BEACH SID
ARRIVAL ROUTE	**ROUTING**
DENNS – HNL	DENNS R576 OGG V24 LNY V21 HNL
FITES – HNL	FITES R578 DEREC UPP066R UPP V23 FIRES V20 JULLE V21 HNL
KAPALUA – HNL	CHAIN LNY360R LNY V21 HNL
MAUI – HNL	BEACH SID LNY V21 HNL
KONA – HNL (Jets)	V20 JULLE V21 HNL
KONA – HNL (Props)	V7 LNY V21 HNL
HILO – HNL	V22 OKALA V16 UPP V23 FIRES V20 JULLE V21 HNL
HNL RWY 22/26	VIA LNY SAKKI STAR HNL
MAUI STANDARD FLOW	VIA CAMPS
MAUI SOUTH FLOW	Should be routed HNL – OGG No Change (via V22)

(b) Limited radar procedures.

(1) Normal radar procedures shall be used in areas of satisfactory radar coverage.

(2) Koke'e, Ka'ala, Haleakalā and Pahoa sensor radar coverage areas are depicted in Appendix 15.

a Koke'e Sensor OTS. No change; this sensor has no impact on Sector 4.

b Pahoa Sensor OTS. No impact on Sector 4.

c Haleakalā Sensor OTS. No change; this sensor has no impact on Sector 4.

d Ka'ala Sensor OTS. Non-radar procedures should be used in areas where other sensor coverage is limited. (North to East areas of LNY below 5000 ft). Areas should be low level where terrain impedes the other sensors (ex. KOA, OGG, QPN).

e KOA Sensors OTS. No change; this sensor has no impact on Sector 4.

f ITO Sensor OTS. No Change, this sensor has no impact on Sector 4.

g LIH Sensor OTS. No change; this sensor has no impact on Sector 4.

3. Offshore Data Processing System (OFDPS). Use OFDPS automation to process flight plan data.

(a) Enter PR (progress) message when progress time differs by 3 minutes or more.

(b) Enter AM (amendment) message when aircraft is rerouted into or out of a sector.

(c) Wind stations and updating winds aloft.

(1) Wind stations: APACK, CANON, CARRP, CHOKO, CLUTS, DANNO, DOVRR, EBBER, FIRES, FITES, GRAIL, HNL, KATHS, LILIA, MAGGI, NONNI, PUPPI, SCOON, SOOCN, SWOCN, SYVAD, THOMA and ZIGIE.

(2) Altitudes available: 03, 06, 09, 12, 18, 24, 30, 34, 39

(3) To update winds aloft:

a Use the first 2 digits of the direction and the 2 digit speed. For speed over 99 knots, add 50 to the direction and subtract 100 from the speed.

EXAMPLE - *240 at 118 knots = 7418*

b Enter UW_ (wind station) _ (altitude) _ (wind direction and speed).

EXAMPLE - *UW_ (HNL) _ (34) _ (7418)*

4. Communications. Sector frequencies and indirect access information are listed in Appendix 19. Frequency limitations are as follows: No frequency limitations on 119.3.

d. Oceanic procedures

(1) Oceanic departures will be coordinated with the following sectors:

(a) Sector 3 for aircraft exiting HCF airspace through Sector 7.

(b) Sector 2 for aircraft exiting HCF airspace through Sector 6.

(2) Departure times shall be forwarded to flight data for civil oceanic aircraft landing or over flying foreign airspace, with the exception of Canada.

(a) Enroute sector receives departure time.

(b) D position calls Flight Data with the following departure information:

1 Call sign

2 Destination

3 Departure time

(c) To indicate the information has been forwarded, circle the destination airport in **red** on the departure strip.

(d) If Flight Data is not available, advise the FLM on duty of the departure information.

e. Intra-facility coordination.

(1) Procedures.

(a) The first HCF Center sector is responsible for the accuracy of flight plan information and must advise Clearance Delivery of the active flight plan in use in the event of duplication/revision, unless identical.

(b) Computer generated flight strips constitute a clearance. Coordinate for altitude assignments on all eastbound oceanic departures with the appropriate HCF Center sector.

(c) Departure times on all aircraft departing the Honolulu Terminal Area must be forwarded via the MEARTS intra-facility program. Tower must manually forward actual departure times for premature/non-existent auto-acquisition.

(d) Arrival information on all aircraft entering the Honolulu Terminal Area shall be forwarded via the MEARTS intra-facility program, or at least five minutes prior to inbound fix via inter-phone. Information shall include aircraft identification, type, beacon code, and destination.

(e) Traffic information must be given to HNL Approach on aircraft transiting above HNL Approach airspace at 17, 000’.

(f) Sector 4 has approval to enter the HPASA at JULLE or SAKKI.

(g) Automated Information Transfer (AIT) may be used between sectors as specified in Appendix 24 (AIT Procedures).

(h) Amendments to scratch pad entries after initiation of a hand-off must be verbally coordinated.

(2) Transfer of control.

(a) HCF Center: Transfer of control for vectors, altitude change, speed adjustments, and beacon code changes between all HCF sectors and Maui Approach will be after completion of a radar handoff, unless otherwise coordinated.

(b) HNL Approach:

1 Sector 4 has control for vectors within the NORBY corridor.

2 Sector 4 has control for climb of aircraft assigned 11,000' or above in the NORBY corridor.

3 Sectors H and V have control for vectors, descent, speed adjustments, and beacon code changes within 5 NM of the Honolulu TAB upon completion of a radar handoff, unless otherwise coordinated.

f. Traffic flow. *See Appendix 15 for Preferential Routes.*

(1) HNL/OGG Approach will establish a minimum of 3 NM separation increasing to 5 NM in accordance with JO 7110.65, paragraph 5-5-4, Minima.

(2) See TBL 4-3-4 for routes that may be used in lieu of the preferential/filed routes.

NOTE - *Field 7 (scratch pad) inputs of speed, headings or direct next fix may be used in lieu of verbal coordination in accordance with Appendix 25. Verbal coordination must be accomplished if the potential for confusion exists. An OFDPS amendment must be made if the new route will take the aircraft into or out of a sector.*

TBL 4-3-4
SECTOR 4: ROUTES IN LIEU OF PREFERENTIAL/FILED ROUTES

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTORs 2/6/8	OGG ARRs KOA ARRs	DIRECT LNY or CAMPS DIRECT LNY or IAF/IF	
TO SECTORS 2/6/8	LIH ARRs BKH ARRs	DIRECT KEOLA DIRECT IAF/IF DIRECT KEOLA DIRECT IAF	

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTOR 3	LNY ARR OGG ARR JHM ARR KOA ARR ITO ARR	DIRECT IAF LNY CAMPS STAR MKK 100R DIRECT IAF DIRECT PUMIC/PARIS	
TO SECTOR 3	NGF ARRs	DIRECT MKK DIRECT NUDSE	
FROM SECTOR 5	HNL ARRs MKK/NGF ARRs	DIRECT JULLE, SAKKI or LNY DIRECT LNY V7	
TO SECTOR 5	KOA ARRs ITO ARRs MUE ARRs	Via STAR or DIREC IAF/IF DIRECT PUMIC or PARIS DIRECT IAF/IF	Descending to 13,000’
FROM SECTOR 9	OGG South Flow	HNL ARRs: DIRECT LNY, JULLE, or SAKKI to join the STAR LIH ARRs: DIRECT LNY, JULLE or SAKKI to join V16	
TO SECTOR 9	OGG ARRs	Via STAR or DIRECT IAF/IF	JETS – Descending to 7,000’ PROPs – Descending to 5,000’
FROM SECTOR 10	HNL ARRs	DIRECT LNY, SAKKI, or H250 to join STAR	
FROM SECTOR 10	LIH ARRs	DIRECT SAKKI, JULLE or LNY to join V16	
FROM HNL APCH	RWY 4/8 OPS	VIA THE PALAY SID/V2	JETS: Climbing to 13,000’* PROPS: Climbing to 9000’* *Or filed altitude whichever is lower.
FROM HNL APCH	RWYS 22/26 OPS	PALAY SID/V2 KEAHI SID	All acft climbing to 7000” or filed altitude whichever is higher All acft climbing to 5000’
FROM HNL APCH	JRF DEPs	DIRECT PALAY or Radar Vectors to Join V2 prior to exiting the HNL TAB	HNL RWYs 4/8 JETS: Climbing to 13,000’* PROPS: Climbing to 9000’* *Or filed altitude whichever is lower. HNL RWYs 22/26 All acft climbing to 7000” or filed altitude whichever is higher
FROM HNL APCH	HHI DEPs	VIA THE SHINSEKI SID	Climbing to assigned altitude
TO HNL APCH	ARRs during RWY 4/8	VIA JULLE STAR, V16, V20 or V21	JETS to cross JULLE at or below 14,000 to maintain 10,000’ PROPs, 190 kts or greater, descending to 8,000’ PROPs 180 kts of less, descending to 6,000’
TO HNL APCH	ARRs during RWY 22/26	VIA SAKKI STAR, V16, V20 or V21	Acft above 12, 500 lbs cross SAKKI @ 6000’ Acft below 12,500 lbs cross SAKKI @4000’

FROM/TO	REMARKS	ROUTING	ALTITUDE
TO HNL APCH	JRF ARRs	DIRECT ALANA, DIRECT GECKO, then DIRECT JRF (Remain on or south of V16 prior to the TAB)	HNL RWYs 4/8 – Descending to 8000'* HNL RWYs 22/26 – Cross the TAB @ 4,000'
FROM/TO	**REMARKS**	**ROUTING**	**ALTITUDE**
TO HNL APCH	HHI ARRs-RWY 4/8 HHI ARRs-RWY 22/26	DIRECT ALANA, DIRECT HHI DIRECT SAKKI, DIRECT HNL, DIRECT HHI	Descending to 8000' Descending to 8000'
TO HNL APCH	Sector 4 will input	destination airport in scratch pad for	aircraft landing other than HNL.

(3) Ordnance routes. (See TBL 4-3-5)

TBL 4-3-5

Recommended Ordnance Routes

AIRCRAFT CARRYING ORDNANCE (INCLUDING SONOBOUYS) MUST UTILIZE OVER WATER ROUTES

DEP	DEST	RECOMMENDED ROUTE	ALT
NGF	W194	NGF.NGF SID.FUZZE..MUGGE..CKH039020..LOKIE..SERAH..GARZZ	PROPS 070 JETS 230
W194	NGF	GARZZ..SERAH..LOKIE..CKH039020..NUDSE..NGF	PROPS 080 JETS 180
NGF	W192 W193 MELA AREAS	NGF.NGF SID.FUZZE..HAULI..JAZYY OR NGF.NGF SID.FUZZE..HAULI..BIGZO	PROPS 120 JETS 240
W192 W193 MELA AREAS	NGF	JAZYY..HAULI..FUZZE..NIKKI..NGF OR BIGZO..HAULI..FUZZE..NIKKI..NGF	PROPS 130 JETS 190
HNL	W192 W193 MELA AREAS	HNL.OPIHI SID.OPIHI..JAZYY OR HNL.OPIHI SID.OPIHI..BIGZO	PROPS 120 JETS 240
W192 W193 MELA AREAS	HNL	JAZYY..OPACA.OPACA STAR.HNL OR BIGZO..OPACA.OPACA STAR.HNL	PROPS 130 JETS FL190
NGF	R3103	NGF.NGF SID.FUZZE..NIKKI..LOKIE..SERAH..KOA	FL230
R3103	NGF	DARBB..SERAH..LOKIE..NUDSE..NGF	FL240
HNL	W192 W193 W194	HNL.OPIHI SID.OPIHI..MILTI	JETS 160 PROPS 080
W192 W193 W194	HNL	KUCHI..HNL	060

DEP	DEST	RECOMMENDED ROUTE	ALT
HNL	W189 W190 RAINBOW	HNL.KEOLA SID.KEOLA..HAULI	FL240
W189 W190 RAINBOW	HNL	HAULI..BOOKE.BOOKE STAR.HNL	FL190

g. Conflict areas.

1. Westbound OGG departures/HNL departures on PALAY SID, or V2.

2. Lanai Airport (LNY) arrival/departure/over-flights.

3. OGG to LIH/LIH to OGG flights/MKK SID.

4. Westbound Kapalua Airport (JHM) departures/traffic on PALAY SID, or V2.

5. OGG BEACH SID departures/CAMPS STAR arrivals.

6. Arrival sequencing at JULLE/SAKKI.

7. JHM arrival/departure separation.

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4-4 SECTOR 5.

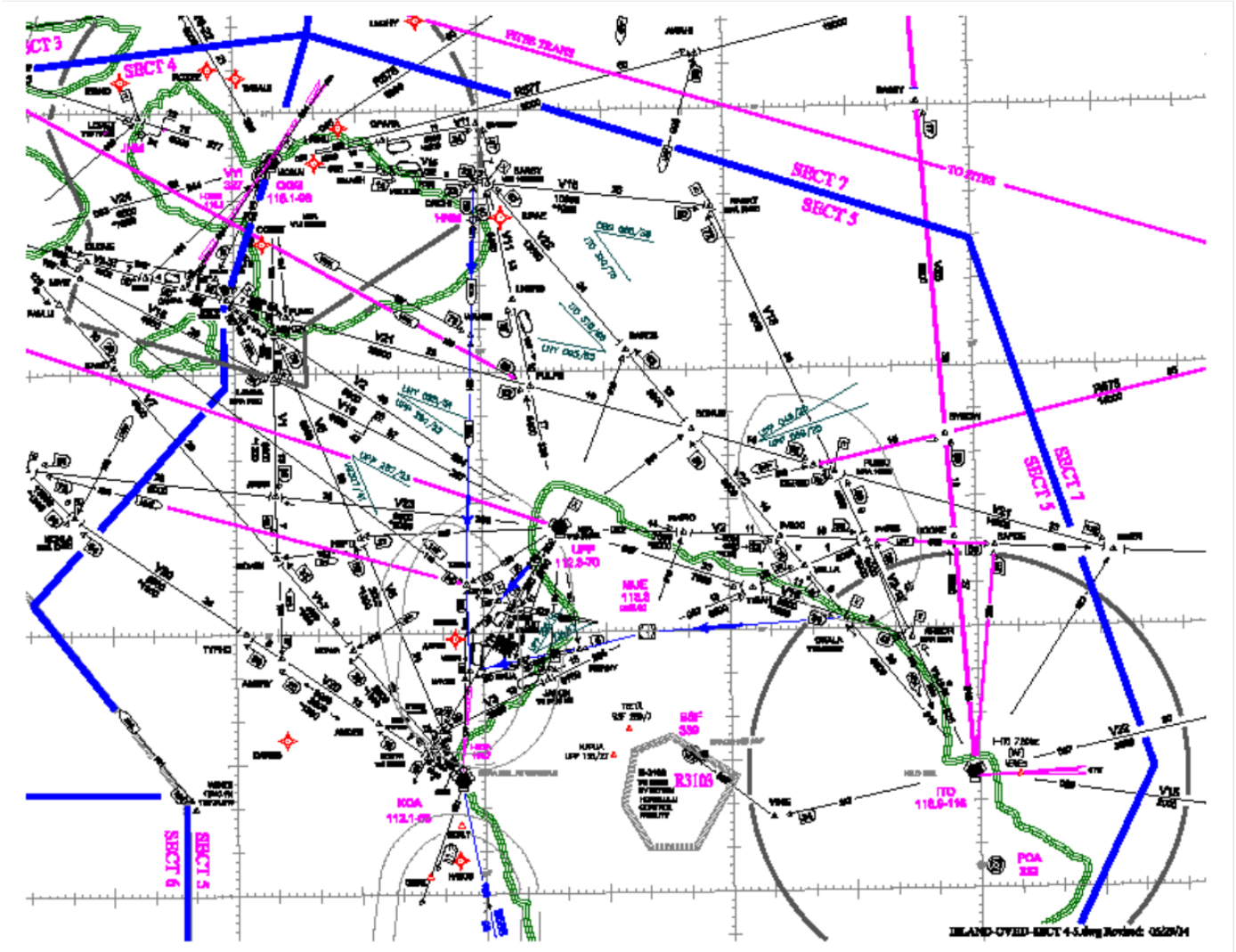
a. General.

1. Provide approach control services to Kona, Kamuela, Bradshaw and Hana airports. Secondary airport includes Upolu. HCF has control of ITO airspace and frequencies from 0800-1600Z.

2. Combining/decombining HCF Center Sectors will be at the discretion of the OSIC/ISLCIC.

b. Airspace. (See FIG 4-4-1)

FIG 4-4-1
Island Approach: Sector 5 Airspace



1. Sector 5 airspace as defined in Appendix 1.

2. The controlling agency for R3103 is BSF Army Range. The controlling agency for PELE, PELE SOUTH, PARKER NORTH/EAST airspace is FACSFAC. See Appendix 13.

c.. Holding patterns (See TBL 4-4-1)

TBL 4-4-1

Holding Patterns – Sector 5

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
ANDES	NW	KOA 294	11.7	R-1 – 1½ MIN	15/175	15/175	15/175		YES
ANDES	NW	WP	12	5DME	50/175	50/175	50/175		
BOGEE	E	MKK 100	19.6	R-1 MIN 4 DME	60/100			RESTRICTED APRVD OPS	NO
	W	MKK 100		L-1 MIN 4 DME	60/100				NO
CAMPS	W	LNY 095	21.4	L-1 MIN 3 DME	50/140	50/140			YES
CHAIN	NW	MKK 115	16.8	R-1 MIN 3 DME	20/80			RESTRICTED APRVD OPS	NO
DYANE	S	KOA 168	10	L-1 MIN 5 DME	20/160	20/160			NO
GRAMY	W	LNY 278	10	R-1 MIN		20/140			YES
HARPO	W	WP		R- 4 DME		60/80		Published holding limited to established patterns	NO
	SE	WP		L - 4 DME		60/120			NO
	S	WP		R - 4 DME		50/140			NO
HNL	E	HNL 090		R-1 MIN	40/140	40/140			NO
VORTAC	S	HNL 171		L-1 MIN	30/140	30/140			NO
	SE	HNL 100		L-1.5 MIN		160/280	160/220		NO
KOA VORTAC	W	KOA 270		R-1 MIN	50/120	50/60			NO
ITO	E	ITO 079		L-1 MIN	20/100	20/100			YES
VORTAC	S	ITO 162		R-1 MIN	20/100	20/40			YES
	W	ITO 280		R-1.5 MIN	160/200	160/200			
JASON	SW	MUE 234	13	L-5 DME		43/140			NO
	NE*	MUE 234	13	R-1 MIN	40/60*			*Helicopters only	NO
	SW	WP		L-4 DME		43/140			NO
JULLE	E	LNY 278	36	L-1 MIN 10 DME	40/140	40/140			YES

FIX	PATTERN				HOLDING SPEED-ALT			REMARKS	PUBL
	DIR	RAD/BRG	DME	TURNS	170-175	200-230	265		
KAYAK	NW	KOA351	12	L-1 MIN	15/60	15/60			YES
KEIKI	W	LNY 095	17	L-1 MIN 3 DME	50/100	50/120			YES
LNY VORTAC	W	LNY 278		R-1 MIN		40/140			NO
OGG VORTAC	S	OGG 187		L-1.5 MIN	80/140	80/140	140/175	310K 140/175	NO
PARIS	NW	ITO 325	29	R-1 MIN 4 DME L-1 MIN 4 DME		40/140 40/140			NO
POA	N	POA 340B		L-1 MIN	30/140	30/200	40/200	NDB	NO
SAKKI	E	LNY 278	31	L-1 MIN 10 DME	40/140	40/140			YES
SERAH	W	LNY 278	18	R-1.5 MIN 10 DME	20/180	20/180			NO
TEETA	W	BSF 289	11	L-1 MIN		80/100			YES
TIGAH	NE NE	MUE 057 WP	13	R-5 DME R-4 DME		50/140 50/140		Holding limited to established patterns	NO NO
UPP VORTAC	N	UPP 338		R-1.5 MIN	80/120*	80/140	140/200	* - At request, limited to established pattern	NO
VECKI	N	I-KOA CRS-	12 11.5	R-1 MIN	30/60	30/60		*	NO
VEWES	E	ITO 079		L-1 MIN 8 DME	18/200	18/200	30/200	310K 30/200	YES

***Note**: Holding pattern information is published by Flight Standards and may provide non-radar separation from adjacent airways.*

d. Equipment.

1. Radar.

(a) Sector position symbols (handoff) (See TBL 4-4-2)

TBL 4-4-2
Sector Position (Handoff) Symbols

SECTOR	POSITION SYMBOL	REMARKS
2	J	
3	I	
4	F	
5	D	
6	K	
7	G	
9	S	
10	N	
H	H	
V	V	
L	L	
HULA DANCER	2	<Handoff> 2 OR To force automation <MF> G HR or HU
NGF APCH	3	<Handoff> 3 OR Manual entry <MF> G HG

(b) Radar limitations. Sector 5 radar coverage limited below 8,000′ in the vicinity of MUE, UPP, and WAPIO.

2. Non-radar and limited radar procedures. (See Appendix 15 for depiction of non-radar routing).

(a) Non-radar procedures for Sector 5 (See TBL 4-4-3).

TBL 4-4-3
Non-Radar Routes – Sector 5

DEPARTURE ROUTE	ROUTING
HNL – KONA	V2 LNY V2 MAKEN V5 KOA
HNL – HILO (Props)	V2 LNY V2 ITO
HNL – HILO (Jets)	V8 MKK MKK108R PULPS V21 PUMIC V15
HNL – MAUI	V2 CAMPS I-OGG
HNL RWY 22/26	VIA KEAHI SID

ARRIVAL ROUTE	ROUTING
OGG Maui Std Flow	OGG – ITO: PROPS – ONOHI SID BARBY V11 UPP V2 ITO JETS – ONOHI SID BARBY V22 BONUS V21 PUMIC V15 ITO OGG – KOA: ONOHI SID KOA 351R KOA OGG – HNL: Rerouted via Sector 3
MAUI SOUTH FLOW	ALL DEPs (EXCEPT OCEANIC ACFT) SHOULD BE ROUTED VIA BEACH SID
DENNS – HNL	DENNS R576 OGG V24 LNY V21 HNL
FITES – HNL	FITES R578 DEREC UPP066R UPP V23 FIRES V20 JULLE V21 HNL
KONA – HNL (Jets)	V20 JULLE V21 HNL
KONA – HNL (Props)	V7 LNY V21 HNL
HILO – HNL	V22 OKALA V16 UPP V23 FIRES V20 JULLE V21 HNL
OGG – ITO	BEACH SID HARPO V2 ITO or HARPO V21 PUMIC V15 ITO or ONOHI SID BARBY V22 BONUS V21 PUMIC V15 ITO
OGG – KOA	BEACH SID HARPO V2 MAKEN V5 KOA
OGG – APACK	OGG 337R to MKK 004R to MAGGI R463 to APACK
OGG – CLUTS	OGG 027R CLUTS
OGG – EBBER	OGG R577 EBBER
KOA – OGG	V1 MAKEN V2 CAMPS OGG
KOA – ITO	V5 MYNAH V3 PARIS V2 ITO
KOA – APACK	V1 OGG OGG 337R to MKK 004R to MAGGI R463 to APACK
KOA – CLUTS	V1 OGG OGG 027R CLUTS
KOA – EBBER	V1 OGG R577 EBBER
ITO – OGG	V22 OKALA V16 UPP V2 CAMPS OGG or V22 OGG
ITO – KOA	V22 OKALA KAYAK STAR KOA
ITO – APACK	V22 OGG OGG 337R to MKK 004R to MAGGI R463 to APACK
ITO – CLUTS	V25 CLUTS
ITO – EBBER	ITO 030R EBBER
HNL RWY 22/26	HNL ARRs will be cleared via LNY SAKKI STAR HNL
MAUI STANDARD FLOW	OGG ARRs via CAMPS
MAUI SOUTH FLOW	HNL – OGG: No change (v22) KOA –OGG: KOA R351R BARBY V15 OGG ITO – OGG: V22 OGG

(b) Limited radar procedures.

(1) Normal radar procedures shall be used in areas of satisfactory radar coverage.

(2) Koke'e, Ka'ala, Haleakalā and Pahoa sensor radar coverage areas are depicted in Appendix 16.

(a) Koke'e Sensor OTS. No change; this sensor has no impact on Sector 5.

(b) Pahoa Sensor OTS. Sector 5 should use non-radar procedures for aircraft inbound to ITO west of UPP VORTAC.

(c) Haleakalā Sensor OTS. No change; this sensor has no impact on Sector 5.

(d) Ka'ala Sensor OTS. Non-radar procedures should be used in areas where other sensor coverage is limited. Areas should be low level where terrain impedes the other sensors.

(e) KOA Sensors OTS. Sensor provides radar coverage for areas south clockwise to the northeast where not impeded by the terrain. Exact coverage has yet to be determined. Non-radar procedures below 5,000 in the vicinity of Keahole Airport.

(f) ITO Sensor OTS. No Change, this area is covered by Pahoa sensor.

(g) LIH Sensor OTS. No change; this sensor has no impact on Sector 5.

3. Other facilities. Sector 5 coordinates with the Air Defense Control Facility (ADCF) for aircraft departing the Big Island, entering the inner Air Defense Identification Zone (ADIZ) not passed through the OFDPS.

4. Offshore Data Processing System (OFDPS).

(a) Use OFDPS automation to process flight plan data.

(1) Enter PR (progress) message when progress time differs by 3 minutes or more.

(2) Enter AM (amendment) message when aircraft is rerouted into or out of a sector.

(3) Wind stations and updating winds aloft.

(a) Wind stations: APACK, CANON, CARRP, CHOKO, CLUTS, DANNO, DOVRR, EBBER, FIRES, FITES, GRAIL, HNL, KATHS, LILIA, MAGGI, NONNI, PUPPI, SCOON, SOOCN, SWOCN, SYVAD, THOMA and ZIGIE.

(b) Altitudes available: 03, 06, 09, 12, 18, 24, 30, 34, 39

(c) To update winds aloft:

1 Use the first 2 digits of the direction and the 2 digit speed. For speed over 99 knots, add 50 to the direction and subtract 100 from the speed.
EXAMPLE - *240 at 118 knots = 7418*

2 Enter UW_ (wind station) _ (altitude) _ (wind direction and speed).
EXAMPLE - *UW_ (FIRES) _ (34) _ (7418)*

5. Communications. Sector frequencies and indirect access information are listed in Appendix 19. Frequency limitations are as follows

(a) 126.0 (M/S and BUEC) in the vicinity of MUE, HNM, and ITO airport.

(b) 126.6 may be used as a backup frequency in the vicinity of ITO airport.

d. Oceanic procedures.

1. Oceanic departures will be coordinated with the following sectors:

(a) Sector 3 for aircraft exiting HCF airspace through Sector 7.

(b) Sector 2 for aircraft exiting HCF airspace through Sector 6.

2. Departure times shall be forwarded to flight data for civil oceanic aircraft landing or over flying foreign airspace, with the exception of Canada.

(a) Enroute sector receives departure time.

(b) D position calls Flight Data with the following departure information:

(1) Call sign

(2) Destination

(3) Departure time

(c) To indicate the information has been forwarded, circle the destination airport in red on the departure strip.

(d) If Flight Data is not available, advise the FLM on duty of the departure information.

e. Intra-facility coordination.

1. Procedures.

(a) The first HCF Center sector is responsible for the accuracy of flight plan information.

(b) Computer generated flight strips constitute a clearance. Coordinate for altitude assignments on all oceanic departures with the appropriate HCF Center sector.

(c) Automated Information Transfer (AIT) may be used between sectors as specified in Appendix 24 (AIT Procedures).

(d) Amendments to scratch pad entries after initiation of a hand-off must be verbally coordinated.

2. Transfer of control.

(a) HCF Center. Transfer of control for vectors, altitude change, speed adjustments, and beacon code changes between all HCF sectors and Maui Approach will be after completion of a radar handoff, unless otherwise coordinated.

(b) ITO Approach.

(1) ITO Approach may assume control of inbound aircraft, east of the ITO 310R.

(2) HCF may assume control of ITO outbound aircraft 20NM from ITO VORTAC.

f. Traffic flow. *See Appendix 15 for Preferential Routes.*

1. OGG Approach will establish a minimum of 3 NM separation increasing to 5 NM in accordance with JO 7110.65, paragraph 5-5-4, Minima.

2. See TBL 4-4-4 for routes that may be used in lieu of the preferential/filed routes.

NOTE - *Field 7 (scratch pad) inputs of speed, headings or direct next fix may be used in lieu of verbal coordination in accordance with Appendix 25. Verbal coordination must be accomplished if the potential for confusion exists. An OFDPS amendment must be made if the new route will take the aircraft into or out of a sector.*

TBL 4-4-4

SECTOR 5: ROUTES IN LIEU OF PREFERENTIAL/FILED ROUTES

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTOR 4	KOA ARRs	Via STAR or DIRECT IAF/IF	Descending to 13,000’
FROM SECTOR 4	ITO ARRs	DIRECT PUMIC or PARIS	
FROM SECTOR 4	MUE ARRs	DIRECT IAF/IF	
TO SECTOR 4	HNL ARRs	DIRECT JULLE, SAKKI or LNY	
FROM/TO	**REMARKS**	**ROUTING**	**ALTITUDE**
TO SECTOR 4	MKK/NGF ARRs	DIRECT LNY	
FROM SECTOR 7	HNL ARRs	DIRECT LNY	Descending to FL280
FROM SECTOR 7	KOA ARRs	DIRECT ONOHI or UPP then the STAR	Descending to FL200
FROM SECTOR 7	ITO ARRs	DIRECT ITO	Descending to 9000’
FROM SECTOR 7	OGG ARRs	DIRECT PULPS, DIRECT LAVAS, DIRECT HARPO	Descending to FL200
TO SECTOR 7	OCEANIC DEPs	DIRECT ZIGIE, APACK, CLUTS, EBBER, FITES or SCOON	
FROM SECTORs 9/10	ITO ARRs	Via BEACH/ONOHI SID or DIRECT PARIS	
FROM SECTORs 9/10	KOA ARRs	Via BEACH/ONOHI SID or DIRECT IAF/IF	
TO SECTORs 9/10	OGG ARRs – Standard Flow	DIRECT IAF/IF	Descending to 8,000’
NOTE:	*Oceanic arrivals should*	*be routed via PULPS, direct LAVAS, and*	*direct HARPO from Sector 7.*
TO SECTORs 9/10	OGG ARRs – South Flow	DIRECT BARBY or V15/V22	Descending to 9,000’

3. Ordnance routes. (See TBL 4-4-5)

TBL 4-4-5

Recommended Ordnance Routes

AIRCRAFT CARRYING ORDNANCE (INCLUDING SONOBOUYS) MUST UTILIZE OVER WATER ROUTES

DEP	DEST	RECOMMENDED ROUTE	ALT
NGF	W194	NGF.NGF SID.FUZZE..MUGGE..CKH039020..LOKIE..SERAH..GARZZ	PROPS 070 JETS 230
W194	NGF	GARZZ..SERAH..LOKIE..CKH039020..NUDSE..NGF	PROPS 080 JETS 180
NGF	W192 W193 MELA AREAS	NGF.NGF SID.FUZZE..HAULI..JAZYY OR NGF.NGF SID.FUZZE..HAULI..BIGZO	PROPS 120 JETS 240
DEP	**DEST**	**RECOMMENDED ROUTE**	**ALT**
W192 W193 MELA AREAS	NGF	JAZYY..HAULI..FUZZE..NIKKI..NGF OR BIGZO..HAULI..FUZZE..NIKKI..NGF	PROPS 130 JETS 190
HNL	W192 W193 MELA AREAS	HNL.OPIHI SID.OPIHI..JAZYY OR HNL.OPIHI SID.OPIHI..BIGZO	PROPS 120 JETS 240
W192 W193 MELA AREAS	HNL	JAZYY..OPACA.OPACA STAR.HNL OR BIGZO..OPACA.OPACA STAR.HNL	PROPS 130 JETS FL190
NGF	R3103	NGF.NGF SID.FUZZE..NIKKI..LOKIE..SERAH..KOA	FL230
R3103	NGF	DARBB..SERAH..LOKIE..NUDSE..NGF	FL240
HNL	W192 W193 W194	HNL.OPIHI SID.OPIHI..MILTI	JETS 160 PROPS 080
W192 W193 W194	HNL	KUCHI..HNL	060
HNL	W189 W190 RAINBOW	HNL.KEOLA SID.KEOLA..HAULI	FL240
W189 W190 RAINBOW	HNL	HAULI..BOOKE.BOOKE STAR.HNL	FL190

g. Conflict areas.

1. OGG BEACH SID departures/traffic on V2, V21, or V16.

2. OGG BEACH/SWEEP/ONOHI SID departures/traffic on V2 or V21 or V16.

3. KOA arrival/departure separation.

4. Bradshaw AAF (BSF) arrivals and departures/traffic on V3/MUE arrivals and departures.

5. KOA eastbound oceanic departures/traffic on V2 or V16.

6. MUE eastbound departures/ITO arrivals and departures.

7. OGG CAMPS SID arrivals/traffic on V2, V16, or V21.

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4-5 SECTOR 7.

a. General.

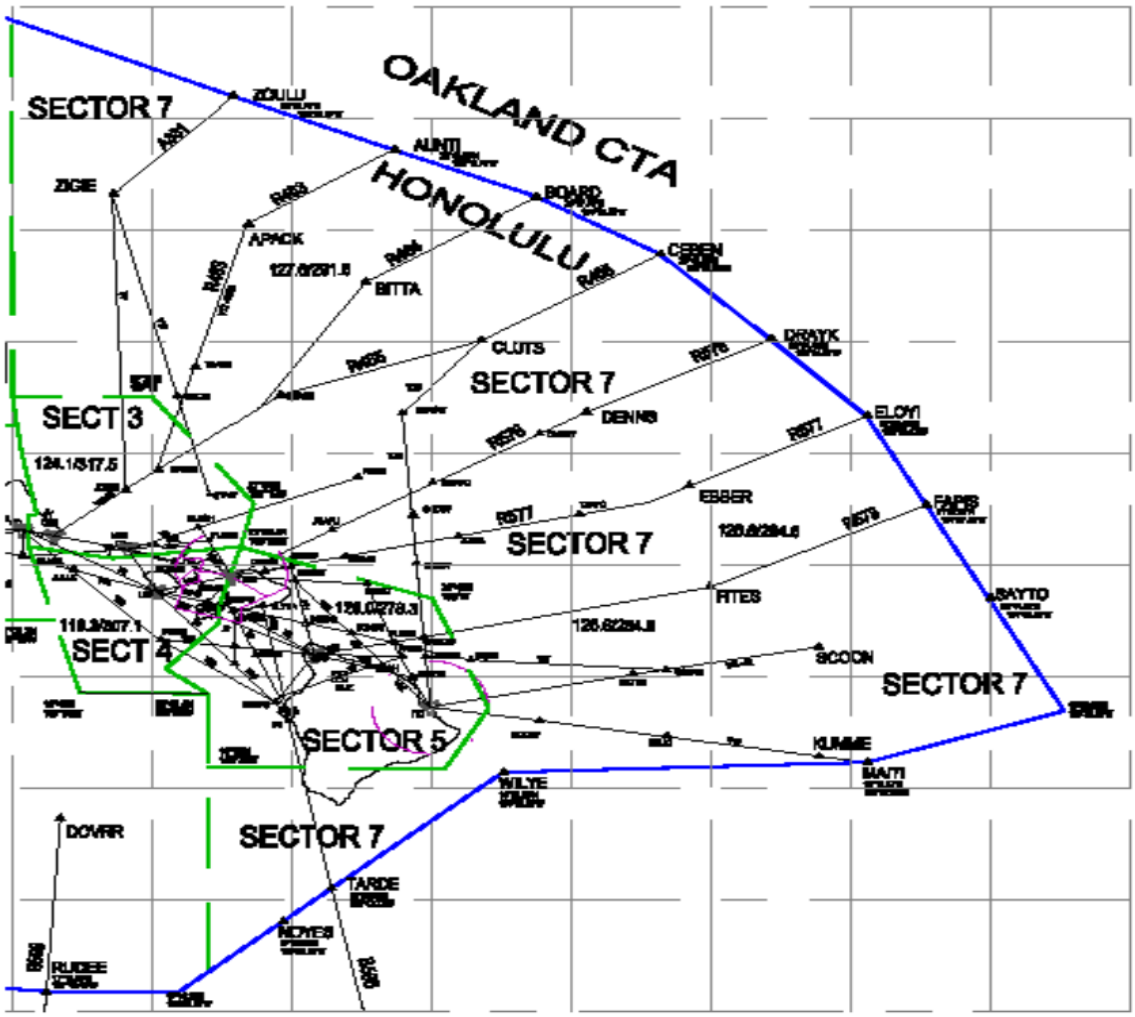
1. Sector description: Sector 7 provides enroute services in designated airspace.

2. Combining/decombining HCF Center Sectors will be at the discretion of the OSIC/ISLCIC.

3. Military refueling routes include AR901 and AR902. (See Appendix 14, Air Refueling Chart.)

b. Airspace. (See FIG 4-5-1) (See Appendix 1 for textural description)

FIG 4-5-1
Island Approach: Sector 7 Airspace



c. Equipment.

1. Radar.

(a) Sector position symbols (handoff) (See TBL 4-5-1)

TBL 4-5-1
Sector Position (Handoff) Symbols

SECTOR	POSITION SYMBOL	REMARKS
2	J	
3	I	
4	F	
5	D	
6	K	
7	G	
9	S	
10	N	
H	H	
V	V	
L	L	
HULA DANCER	2	<Handoff> 2 OR To force automation <MF> G HR or HU
NGF APCH	3	<Handoff> 3 OR Manual entry <MF> G HG

NOTE: *The automated handoff to Hula Dancer doesn't work for local flight plans. The flight plan must be processed in OFDPS.*

(b) Radar limitations.

(1) Honolulu Control Facility's radar coverage is good:

a QPN Sensor limitations may reflect split beacons northeast of the sensor.

b Limited beyond the Oceanic Ingress fixes.

(2) Honolulu (HNL) radar sensor cannot track aircraft below:

a 8,000′ in the vicinity of BAMBO/CKH VORTAC

b 4,000' in the vicinity of MABBL.

2. Non-radar and limited radar procedures. (See TBL 4-5-2) (See Appendix 15 for depiction of non-radar routing)

TBL 4-5-2

Non-Radar Routes – Sector 7

DEPARTURE ROUTE	ROUTING
HNL - APACK	MKK 004R to MAGGI R463 to APACK
HNL – CLUTS	MKK 040R CLUTS
OGG, KOA – CLUTS	OGG 027R CLUTS
ITO – CLUTS	V25 CLUTS
HNL, OGG, KOA – EBBER	OGG R577 EBBER
ITO – EBBER	ITO 030R EBBER
OGG, KOA, ITO – APACK	OGG 337R to MKK 004R to MAGGI R463 to APACK
ARRIVAL ROUTE	**ROUTING**
ZIGIE – HNL	ZIGIE V7 JOELE V12 HNL
ZIGIE – OGG	ZIGIE V7 MKK 347R MKK V22 OGG
ZIGIE – KOA	ZIGIE V7 MKK 347R MKK KAYAK STAR KOA
APACK - HNL	APACK V13 MAGGI V12 HNL
APACK – OGG	APACK V13 V17 STAIT OGG 337R OGG
APACK – KOA	APACK V13 V17 STAIT OGG 337R OGG V1 MAKEN V5 KOA
BITTA – HNL	BITTA MAGGI V12 HNL
BITTA – OGG	BITTA R464 OGG 351 R OGG
BITTA – KOA	BITTA R464 OGG 351R OGG V1 MAKEN V5 KOA
DENNS – HNL	DENNS R576 OGG V24 LNY V21 HNL
DENNS – OGG	DENNS R576 OGG
DENNS – KOA	DENNS R576 OGG V1 MAKEN V5 KOA
DENNS – IT0	DENNS ITO 011R ITO
FITES – HNL	FITES R578 DEREC V21 LNY V21 HNL
FITES – OGG	FITES R578 DEREC UPP 066 R UPP V2 HARPO CAMPS STAR OGG
FITES – KOA	FITES R578 DREC UPP 066R UPP V11 KAYAK STAR KOA
FITES – ITO	FITES ITO 049R ITO

(b) Limited radar procedures.

(1) Normal radar procedures shall be used in areas of satisfactory radar coverage.

(2) Koke'e, Ka'ala, Haleakalā, Kona, and Pahoa sensor radar coverage areas are depicted in Appendix 15.

a Koke'e Sensor OTS. This sensor has no impact on sector 7.

b Pahoa Sensor OTS. Non-radar routes/procedures should be used for tracks south of DENNS.

c Haleakalā Sensor OTS. This sensor has no impact on sector 7.

d Ka'ala Sensor OTS. This sensor has no impact on sector 7.

1 All aircraft departing HNL should be established on non-radar routes until the aircraft are established on radar in the Haleakalā radar coverage area.

2 Radar handoffs may be initiated by Honolulu Control Facility to Honolulu Approach at BAMBO if radar contact is maintained.

3 To aid sectors 4/5 the following reroutes are recommended:

(aa) Aircraft inbound to HNL from FITES will be routed via FITES RV V12 HNL.

(bb) Oceanic aircraft departing HNL to FITES/SCOON be rerouted via V8 BLUSH RV FITES/SCOON.

(cc) OGG-HNL aircraft routed via V6 BLUSH RV V12 HNL.

e LIH Sensor OTS. No change; this sensor has no impact on sector 7.

f Kona Sensors OTS. No change; this sensor has no impact on sector 7.

g ITO Sensor OTS. No change; Pahoa sensor covers this area.

3. Other facilities.

(a) Sector 7 coordinates with the ADCF for aircraft entering the outer ADIZ.

(b) ARINC shall instruct oceanic inbound aircraft to contact Honolulu Control Facility on the frequencies prescribed in Appendix 20.

4. Offshore Data Processing System (OFDPS).

(a) Use OFDPS automation to process flight plan data.

(1) Enter PR (progress) message when progress time differs by 3 minutes or more.

(2) Enter AM (amendment) message when aircraft is rerouted into or out of a sector.

(3) Wind stations and updating winds aloft.

(a) Wind stations: APACK, CANON, CARRP, CHOKO, CLUTS, DANNO, DOVRR, EBBER, FIRES, FITES, GRAIL, HNL, KATHS, LILIA, MAGGI, NONNI, PUPPI, SCOON, SOOCN, SWOCN, SYVAD, THOMA and ZIGIE.

(b) Altitudes available: 03, 06, 09, 12, 18, 24, 30, 34, 39

(c) To update winds aloft:

Field 20 (upper wind data) contains four digits, of which the first two digits represent the azimuth in tens of degrees, and the last two digits represent the speed in knots.

The azimuth ranges from 01 to 36 when the speed ranges from 05 to 95.

For speeds from 100 to 195 knots, the azimuth is incremented by the value 50 (thus ranging 51 to 86), and only the last two digits of the speed are inputted.

Example: Winds of 270 at 110 knots would be entered as 7710.

If either azimuth or speed contains the value 99, it is interpreted as azimuth 360 and speed 1 knot. Otherwise, the following Rejection message is returned:

REJECT — xxxx INVALID DATA

The acceptable values for the first 2 digits are 01-36 or 51-86. Last two digits are 05-95 for wind speeds below 100 and 00-95 for wind speeds greater than 100.

Entering 99xx, xx99 or 9999 will result in the wind value equaling 3601. Entering 9999 can be used as a short cut to reset existing wind data.

Wind data does not clear itself. Wind information entered today may still be in the system next week if new wind data has not been entered or the OFDPS has not had a shutdown.

5. Communications. Sector frequencies and indirect access information are listed in Appendix 20. Frequency limitations are as follows:

(a) 126.6/284.6 (M/S and BUEC). North of MKK - Switch to 124.1 when Sector 3 & 7 combined

(b) Boundary of OAK/HCF. 127.6/291.6

(c) See Appendix 21 for frequencies site location.

d. Oceanic procedures.

1. Oceanic departures will be coordinated with the following sectors:

(a) Sector 3 for aircraft exiting HCF airspace through Sector 7.

(b) Sector 2 for aircraft exiting HCF airspace through Sector 6.

2. The first HCF Sector having control jurisdiction for an oceanic over-flight shall ensure Sector 2 or 3, whichever is applicable, has received the over flight information.

3. Release times listed in Appendix 22 may be used when applying Mach number technique in the Composite Route System.

4. Departure times shall be forwarded to flight data for civil oceanic aircraft landing or over flying foreign airspace, with the exception of Canada.

(a) Enroute sector receives departure time.

(b) D position calls Flight Data with the following departure information:

(1) Call sign

(2) Destination

(3) Departure time

(c) To indicate the information has been forwarded, circle the destination airport in **red** on the departure strip.

(d) If Flight Data is not available, advise the FLM on duty of the departure information.

5. All oceanic departures shall be level at assigned altitude or shall have been assigned a crossing restriction to ensure level altitude prior to the oceanic sector boundary, in compliance with oceanic separation rules prior to termination of radar services and/or released to en route frequencies, unless otherwise coordinated.

6. Ensure standard oceanic separation exists in accordance with JO 7110.65, prior to releasing an aircraft to en route frequencies. (See Figure 4-5-2)

e. Inappropriate Altitude for Direction of Flight (IAFDOF) Procedures

In all cases of oceanic IAFDOF approval requests over A331, A332/R463, R578, or SAYTO (Sector 3/7), the following procedures will be used.

1. Upon receipt of a Flight Progress Strip (FPS) for which an IAFOF is filed,

underline the IAFDOF altitude in **RED.**

2. Sector 7

(a) ZOA calls HCF sector with approval request (APREQ) of IAFDOF.

(b) D7 will ensure the IAFDOF FPS is offset and check strip bay for traffic.

(c) D7 will ensure positive separation between IAFDOF inbound and outbound traffic by coordinating with the appropriate adjacent sectors and R7.

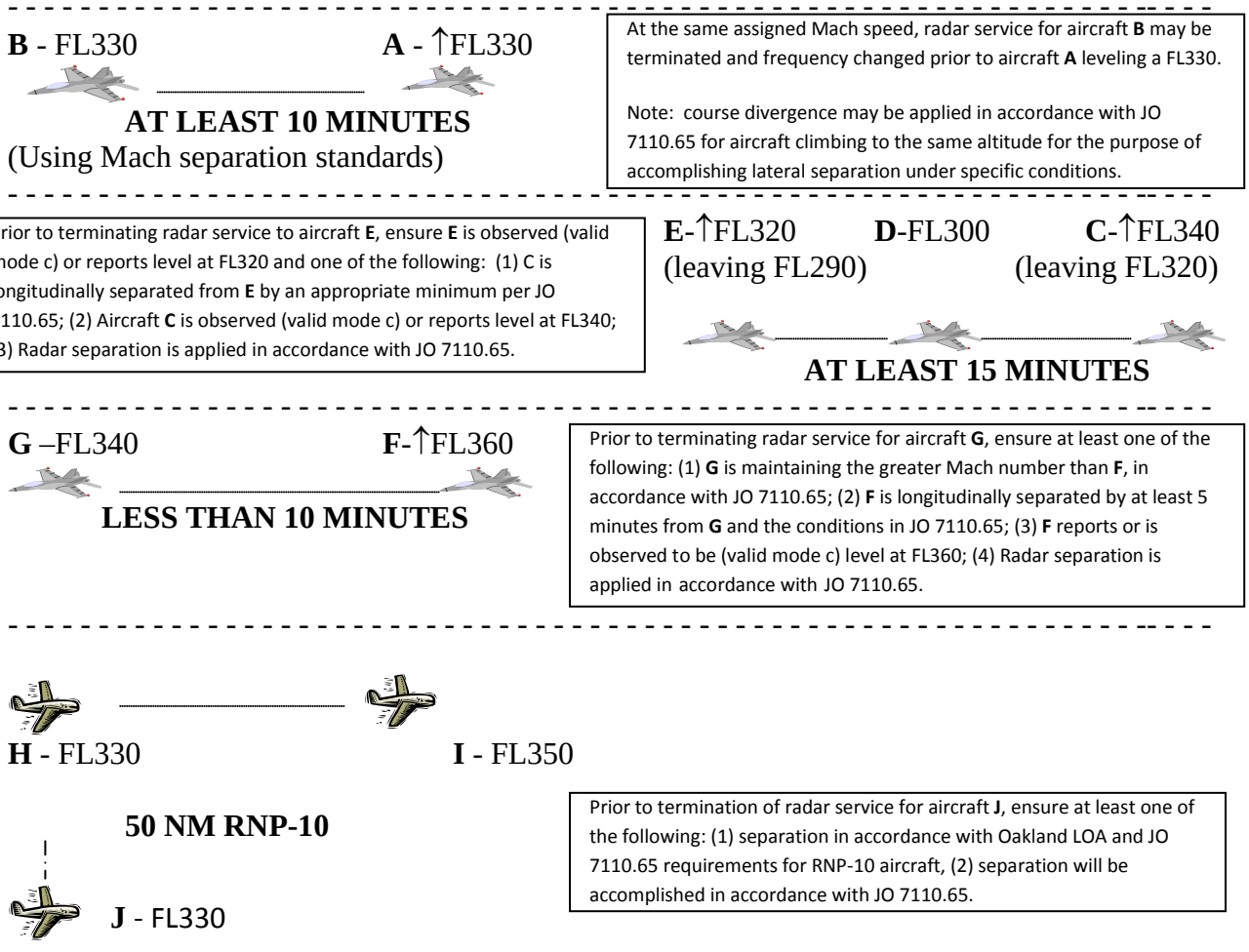
(d) D7 will generate an IAFDOF inbound strip for D3, APREQ the IAFDOF with sector 3; if approved, write D3 in black in box 21 and circle in **RED**.

(e) Advise ZOA of IAFDOF approval and then may put strip flat in bay.

(f) D7 will notify D3 when IAFDOF inbound has been radar identified.

(g) Include IAFDOF in position relief briefing IAW briefing checklist.

Fig. 4-5-2
Oceanic Separation Examples



K - FL320 **L** - FL340 **M** - FL330 N - FL320

RVSM SEPARATION

Prior to termination of radar service for aircraft, ensure at least one of the following: (1) separation in accordance with Oakland LOA and JO 7110.65 requirements for RVSM aircraft, (2) separation will be accomplished in accordance with JO 7110.65.

e. Intra-facility coordination.

1. Procedures.

(a) The first HCF Center sector is responsible for the accuracy of flight plan information.

(b) Automated Information Transfer (AIT) may be used between sectors as specified in Appendix 24 (AIT Procedures).

(c) Amendments to scratch pad entries after initiation of a hand-off must be verbally coordinated.

(d) Preserved Track Functionality for Opposite Direction Aircraft on Oceanic Tracks: To mitigate collision risk for opposite direction traffic at the same altitude on the same oceanic track, initiate the preserved track functionality to start an NT (no track) full data block (FDB) on the radar display.

(1) Applies to flights on A331, A332/R463, R578, SAYTO, and other flights not laterally separated from outbound aircraft.

(2) On initial contact, start a preserved track FDB outside the HCF airspace at a position relative to the flight path of the inbound aircraft.

EXAMPLE- *Aircraft on A332 would be started outside of AUNTI*

(3) To initiate a preserved track:

a Select the <TRK STRT> quick action key.

b Enter one of the following:

1 The TAB list letter identifying the aircraft, *or*

2 The aircraft's beacon code, *or*

3 The aircraft's call sign.

NOTE*: If using either (b) OR (c), it is not necessary to select the <TRK STRT> key.*

(4) Identify the appropriate location for the target, and then SLEW, and <SLEW ENTER>.

(5) If an incorrect TAB list letter, beacon code or call sign is entered, resulting in the incorrect flight track being started, enter a TRK SUSP or TRK DROP command.

a <TRK SUSP> space <ACID> <ENTER>, or

b <TRK SUSP> SLEW <SLEW ENTER>, or

c <TRK DROP> space <ACID> <ENTER>, or

d <TRK DROP> SLEW <SLEW ENTER>

NOTE - *If TRK DROP is used, a RF command must be entered into the OFDPS to force the flight plan information back into the TAB list. <RF > space <ACID > space <ZHN >, then enter.*

f. Strategic Lateral Offset Procedures (SLOP) may be utilized for oceanic aircraft within HCF airspace as outlined in Pacific Chart Supplement.

2. Transfer of control.

(a) HCF Center. Transfer of control for vector, altitude changes, speed adjustments and beacon code changes between all HCF Center sectors and Maui Approach will be after the completion of radar handoff, unless otherwise coordinated.

f. Traffic flow. *See Appendix 15 for Preferential Routes.*

1. OGG Approach will establish a minimum of 3 NM separation increasing to 5 NM in accordance with JO 7110.65, paragraph 5-5-4, Minima.

2. The following routes may be issued in lieu of the preferential/filed routes:

NOTE - *Field 7 (scratch pad) inputs of speed, headings or direct next fix may be used in lieu of verbal coordination in accordance with Appendix 25. Verbal coordination must be accomplished if the potential for confusion exists. An OFDPS amendment must be made if the new route will take the aircraft into or out of a sector.*

(a) From all sectors direct ZIGIE, APACK, CLUTS, EBBER, FITES or SCOON.

NOTE1 - *Sector 2/6/8 should assign oceanic departures direct CKH, then heading 080° when W189/W190 is HOT and handoff to Sector 3.*

NOTE2 - *TARDE departures typically worked by Sector 5, point out to Sector 7.*

(b) See TBL 4-5-3 for routes that may be used in lieu of the preferential/filed routes.

TBL 4-5-3
SECTOR 7: ROUTES IN LIEU OF PREFERENTIAL/FILED ROUTES

FROM/TO	REMARKS	ROUTING	ALTITUDE
TO SECTORS 2/6/8	W189/2190 COLD	LIH ARR-DIRECT LIH or IAF/IF HNL ARR-DIRECT BOOKE **or** VIA THE KAENA STAR	Descending to FL200 Descending to FL200 Descending via the STAR
TO SECTOR 3	LIH Arrivals (W189/190 COLD) LIH Arrivals (189/190 HOT)	DIRECT LIH **or** IAF/IF DIRECT CKH, DIRECT KEOLA, then DIRECT LIH or IAF/IF	
	HNL Arrivals	DIRECT BAMBO or MAGGI	Descending to 10,000' * *Rwys 22/26 configuration to cross BAMBO @ 10000'
		VIA RNAV STAR	Descending via the STAR
	NGF Arrivals	DIRECT NUDSE or NIKKI	Descending to 8000'
TO SECTOR 5	HNL Arrivals	DIRECT LNY	Descending to FL280
	KOA Arrivals	DIRECT ONOHI **or** UPP, then the STAR	Descending to FL200
	ITO Arrivals	DIRECT ITO	Descending to 9000' (handoff to ITO APCH)
	OGG Arrivals (Standard Flow, Modified standard routing)	DIRECT PULPS, DIRECT LAVAS, DIRECT HARPO, CAMPS3 ARR, HARPO Transition	Descending to FL200
TO SECTOR 10	OGG Arrivals (Standard Flow)	DIRECT OGG, HAIKO **or** HOMAI VIA HAIKU STAR	Descending to 7000' Descending via the STAR
	OGG Arrivals (South FLow)	DIRECT KRANE	Descending to 4000'
FROM ALL SECTORS	OCEANIC DEPARTURES	DIRCT TO INGRESS FIX	Climbing to assigned altitude

g. Conflict areas.

1. A331, A332, R463, R578 - Opposite direction traffic (two-way tracks).

2. Oceanic arrival/departure separation near Sectors 2, 3, 5 and 10 boundaries.

3. Sector 10 oceanic and ONOHI departures versus arrivals direct OGG.

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4-6 SECTORS 9/10 - MAUI APPROACH.

a. General.

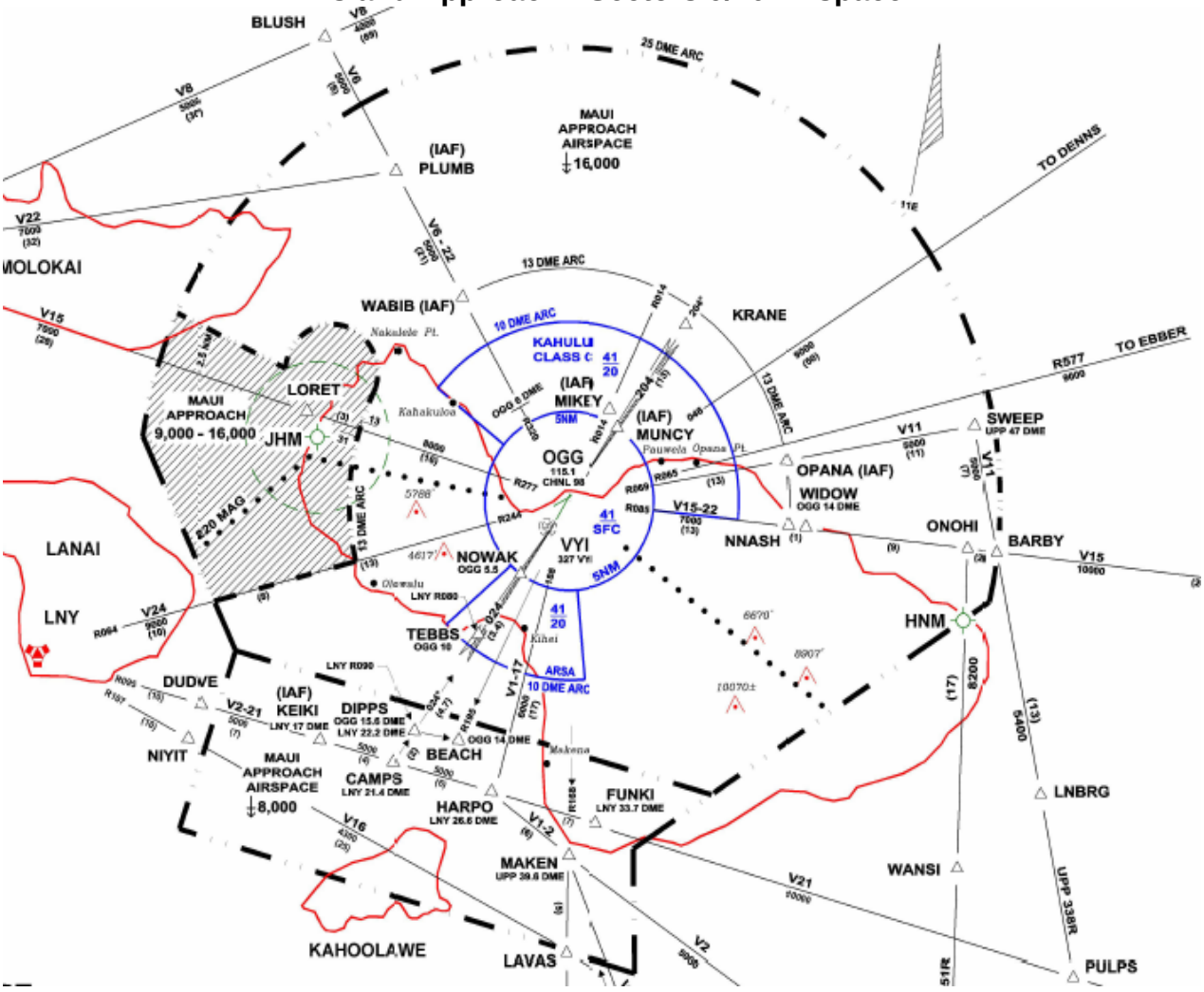
1. Sector Description: Sector 9/10 provides approach control services to Kahului Airport.

2. Sector 9 must be open no later than 1030AM HST and close no earlier than 1600PM HST.

3. Sector 9 and 10 must select Single Source OGG radar displays (SSOG) mode.

b.. Airspace (See FIG 4-6-1) (See Appendix 1 for textural description)

FIG 4-6-1
Island Approach: Sectors 9/10 Airspace



c. Equipment.

1. Limited radar procedures.

(a) Normal radar procedures shall be used in areas of satisfactory radar coverage.

(b) Koke'e, Ka'ala, Haleakalā and Pahoa sensor radar coverage areas are depicted in Appendix 16.

(1) Koke'e Sensor OTS. No change; this sensor has no impact on Maui Approach.

(2) Pahoa Sensor OTS. No change; this sensor has no impact on Maui Approach.

(3) Haleakalā Sensor OTS. Limited impact. Use non-radar procedures until established in Ka'ala radar sensor area.

(4) Ka'ala Sensor OTS. Sector operating in MEARTS / MOSAIC mode, should use non-radar procedures until established within the OGG sensor area.

(5) LIH Sensor OTS. No change; this sensor has no impact on Maui Approach.

(6) Kona Sensor OTS. No change unless Ka'ala sensor is OTS. If this occurs, sector operating in MEARTS/MOSAIC mode should use non-radar procedures until established within the OGG sensor area.

2. Communications. Sector frequencies and indirect access information are listed in Appendix 19.

d. Intra-facility coordination.

1. Procedures.

(a) The first HCF Center sector is responsible for the accuracy of flight plan information and must advise Clearance Delivery of the active flight plan in use in the event of duplication/revision, unless identical.

(b) Computer generated flight strips constitute a clearance. Coordinate for altitude assignments on all eastbound oceanic departures with the appropriate HCF Center sector.

(c) Amendments to scratch pad entries after completion of a hand-off must be verbally coordinated.

(d) Automated Information Transfer (AIT) may be used between sectors as specified in Appendix 23 (AIT Procedures).

(e) The arrival sector is responsible for the integrity of the sequence to OGG airport. *(Ex. OGG RWY 2/5, R9 is responsible for maintaining the integrity of the sequence to both runways).*

2. Transfer of control. Transfer of control for vectors, altitude change, speed adjustments, and beacon code changes between all HCF sectors will be after completion of a radar handoff, unless otherwise coordinated.

e. Traffic flow.

1. OGG Approach will establish a minimum of 3 NM separation increasing to 5 NM in accordance with JO 7110.65, paragraph 5-5-4, Minima.

2. See TBL 4-6-1 for preferred routes for Maui Approach.

2. See TBL 4-6-2 for routes that may be issued in lieu of the preferential/ filed routes:

NOTE - *Field 7 (scratch pad) inputs of speed, headings or direct next fix may be used in lieu of verbal coordination in accordance with Appendix 24. Verbal coordination must be accomplished if the potential for confusion exists. An OFDPS amendment must be made if the new route will take the aircraft into or out of a sector.*

TBL 4-6-1
MAUI APCH: PREFERED ROUTES

	INBOUND FIX	ROUTING	ALTITUDE	TYPE AIRCRAFT
Standard Flow				
	PLUMB	V22	↓ 7,000’	Props (Civil)
	BLUSH	V8 V6	↓ 5,000’	Props (Civil)
	CAMPS	CAMPS STAR	↓ 7,000’	All
			↓ 5,000’	Props & LNY dep.
	HARPO	CAMPS STAR	↓ 8,000’	All
	OGG/HAIKU/HOMAI	Direct	↓ 7,000’	All
	HAIKU	HAIKU STAR	↓VIA STAR	

	INBOUND FIX	ROUTING	ALTITUDE	TYPE AIRCRAFT
South Flows	PLUMB	V22	↓ 7,000’	All
	BLUSH	V8 V6	↓ 5,000’	All
	BARBY	V15/22	↓9,000’	All
	KRANE	Direct KRANE	↓4,000’	All

	INBOUND FIX	ROUTING	ALTITUDE	TYPE AIRCRAFT
Modified Standard Flows	CAMPS	CAMPS STAR	↓ 7,000’ ↓ 5,000’	Jets Props
	HARPO	CAMPS STAR	↓8,000’	Jets
	Direct OGG	Direct OGG	↓7,000’	All

TBL 4-6-2

MAUI APCH: ROUTES IN LIEU OF PREFERENTIAL/FILED ROUTES

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTOR 3	Standard Flow for props	DIRECT BLUSH B6 DIRECT PLUMB V22	Descending to 5000’ Descending to 7000’
FROM SECTOR 3	South Flow –Jets South Flow – Props South Flow - Props	DIRECT PLUMB V22 **or** DIRECT OLONE DIRECT PLUMB V22 or DIRECT BLUSH V6	Descending to 7000’ Descending to 7000’ Descending to 5000’
TO SECTOR 3	MKK or HNL Arrivals LIH Arrivals	V6, V22 **or** DIRECT MKK DIRECT LIH **or** IAF/IF **or** via CKH075R CKH V12	
FROM SECTOR 4	Standard Flow for jets Standard Flow for porps	VIA STAR or DIRECT IAF/IF	Descending to 7000’ Descending to 5000’
TO SECTOR 4	OGG Standard Flow (From Sector 10)	HNL ARR- DIRECT LNY, SAKKI **or** H250 to join the STAR LIH ARR-DIRECT SAKKI, JULLE, LNY **or** H250 TO JOIN V16	
TO SECTOR 4	OGG South Flow (From Sector 9)	HNL ARR-DIRECT LNY, JULLE **or** SAKKI to join the STAR LIH ARR-DIRECT LNY, JULLE or SAKKI to join V16	
FROM SECTOR 5	Standard/Modified Flow	DIRECT IAF/IF **and/or** the STAR	Descending to 8000’
NOTE -	*Oceanic arrivals will be*	*routed via PULPS, direct LAVAS, direct HARPO*	*from Sector 7.*
FROM SECTOR 5	South Flow	DIRECT BARBY or V15/V22	Descending to 9000’
TO SECTOR 5	ITO ARRIVALS KOA ARRIVALS MUE ARRIVALS	VIA BEACH/ONOLHI SID **or** DIRECT PARIS VIA BEACH/ONOHI or DIRECT IAF/IF VIA BEACH/ONOHI SID **or** DIRECT IAF/IF	

FROM/TO	REMARKS	ROUTING	ALTITUDE
FROM SECTOR 7	Standard Flow	DIRECT OGG, HAIKU **or** HOMAI VIA HAIKU STAR	Descending to 7000' Descending via the STAR
FROM SECTOR 7	South Flow	DIRECT KRANE	Descending to 4000'
TO SECTOR 7		DIRECT ZIGIE, APACK, CLUTS, EBBER, FITES or SCOON	

f. Micro-EARTS Single Source Area for Maui (SSOG). Defined as a 40 NM circle around the Maui Radar sensor, below FL 180 in which applicable terminal separation standards can be applied. The airspace within 55 miles of the Maui Radar sensor, up to and including 18,000 feet MSL, has been adapted to show the symbology indicating use of the Maui sensor or others. (See Appendix 26, Maui Approach: Single Source Area Depiction)

1. To activate the single sensor adaptation, controller must:

(a) Type (F7)W, enter then again

(b) Type (F7)W SSOG, enter.

NOTE1 – *The first entry puts the display in Mosaic mode.* ***This must be done first****. System will not enter the single source mode from single sensor. The second entry activates the SSOG.*

NOTE 2 – *Allows MEARTS to display a target from any source by allowing all sensors to be in any sort box, with OGG being the preferred source and indicators to demonstrate target being received by a sensor other than the preferred.*

2. Applicable Separation Standards.

(a) Terminal separation procedures authorized between all beacon and/or primary tracks reported by the OGG sensor.

(b) Five (5) mile separation procedures must be used between tracks when one or both aircraft are:

(1) Reported/indicated NOT from the OGG sensor,

(2) Reported/indicated outside of the adapted single source area.

If, during the utilization of applicable terminal separation, one or both targets change to indicate the source other than OGG, immediate steps to establish another form of separation must be taken. These include:

a 5 NM lateral

b 1000' vertical

c Visual

3. Minimum Vectoring Altitude Requirements. (See Appendix 28).

(a) Aircraft being displayed by other than the OGG source while in single source mode, must utilize MVAs.

(b) Aircraft that change from OGG single source to other than OGG source must transition to the higher MVAs unless established on a published approach segment.

g. Conflict areas.

1. Standard flow.

(a) OGG oceanic departures vs. oceanic arrivals from the north.

(b) Oceanic arrivals from north vs. BEACH, ONOHI and VFR east and south bound departures.

(c) BEACH departures vs. inbound from the south.

2. South flow.

(a) Inbound from south vs. BEACH departures.

(b) Overflights and OGG departures climbing above 16,000.

3. Tour helicopters inbound via McGregor Point area.

Maui tour helicopter operators inbound via the McGregor Point area have been instructed to check in with HCF Approach west of McGregor Point and to remain clear of the final approach course for Runway 2 until HCF Approach establishes radar contact and/or provides instructions for the aircraft to proceed beyond McGregor Point.

Helicopters will not continue on course or transition across the final approach course until communications and radar contact have been established and/or instructions are received to proceed beyond the area west of the Runway 2 final.

4-7 FLIGHT DATA.

a.. Equipment.

1. AISR.

(a) Receives Service A and B messages via Salt Lake City NADIN.

(b) Primary input system for International departures and NOTAMs into NADIN.

(c) Primary and backup systems consisting of:

(1) CPU with keyboard and mouse.

(2) Monitor.

(3) Lexmark E250dn printer/Brother Intellifax 4750e.

(4) Speakers.

2. Offshore Flight Data Processing System (OFDPS).

(a) Flight data processing system utilized by Honolulu Control Facility.

(b) This system interfaces with MEARTS, ATOP, FDIO, HIRAOC and NADIN.

(c) Primary system consisting of:

(1) One KVDT keyboard and monitor I/O terminal.

(2) One thermal strip printer.

3. Rapid Deployment Voice System (RDVS).

(a) Terminal for intra-facility communications.

(b) Indirect or direct dial access to external facilities and users.

(c) System consists of:

(1) Touch Screen Entry Device (TED).

(2) Telephone handset.

(3) Speaker with ring and volume control.

b. Responsibilities.

1. Upon request or notification from system user, will verify whether or not a flight plan is in the system, if it's filed correctly, and provide assistance as appropriate.

NOTE – *The current system does not provide an alert if a flight plan is rejected. Awareness of a possible rejected flight plan known upon query from user and/or ATCS.*

2. Provide flight plan data or progress strips when OFDPS is out-of-service.

3. Enter departure information for international flights (exceptions include Canada and some overseas US military bases).

4. Input flight plan information when ATOP is out-of-service.

5. Message handling.

(a) Hourly weather sequence.

(1) Update ACE-IDS non-ASOS location weather and altimeter information, as necessary.

(2) Update ACE-IDS location weather during interface outages.

(b) Significant Meteorological Information (SIGMET) and Airmen's Meteorological (AIRMET) information. When necessary, input into ACE-IDS and send out to sector(s) via KVDT GI message.

(c) Pilot Weather Report (PIREP). Send to sector(s) via KVDT GI message. Deliver copy to OSIC.

(d) Notice to Airmen (NOTAM), NOTAM Summary (NOSUM), General Notice (GENOT), flow Control Messages, Track Information (Tracks 11 and 12; Tracks A and B), Altitude Reservations (ALTRV), etc. deliver to OSIC.

(e) Local, Terminal, Hawaiian Island Forecasts, etc. deliver to OSIC, as requested.

(f) Classified messages must be handled in accordance with Order HCF 1600.1, Classified Material Handling.

PART III – HONOLULU TERMINAL AIR TRAFFIC PROCEDURES
CHAPTER 5 – HONOLULU TERMINAL GENERAL PROCEDURES

5-1 RESPONSIBILITIES.

a. Tower FLM/CIC (CS).

1. Responsible for position assignments and position relief in the Tower.

2. Ensure the accuracy of the SIA page(s).

3. Coordinate equipment malfunctions and abnormal field conditions with the Honolulu Approach FLM and/or OSIC.

4. Responsible for anticipating and initiating timely runway changes.

(a) Coordination between Tower and Honolulu Approach FLM or OSIC is required prior to the runway change.

(b) Notify Ramp Control and Hickam Ramp Advisory.

(c) The Tower FLM is responsible for annotating on FAA Form 7230-4.

5. Complete the Tower Cab's Watch Checklist and notify the OSIC.

6. When LC1 and LC2 are decombined, is responsible for anticipating and initiating departure release authority based on reported weather at HNL. When the reported weather at HNL is 040 reported ceiling or 4 SM miles reported visibility, the FLM/CIC may consider delegating release authority from LC2 back to LC1 (4/8 configuration and LC1 and LC2 are decombined). When the reported weather is at or below 030 and/or less than 3 SM reported visibility, release authority must be designated to LC1.

b. Honolulu Approach FLM (TS).

1. Responsible for position assignments and position relief in Honolulu Approach area.

2. Ensure the accuracy of the SIA page.

3. Coordinate equipment malfunctions and abnormal conditions with the Tower FLM and report them to SOC.

4. During a runway change, ensure notifications are complete to JRF, HHI and Hula Dancer.

5-2 HOURS OF OPERATION. The following are guidelines for combining/decombining of the Terminal positions:

TOWER CAB	HONOLULU APPROACH
LC1 – 24 Hours	H – 24 Hours
LC2 – 0900-1500L	W – 0800 to 1600L
LA – 0800 to 1800L	V – 0700 to 1900L
GC – 0600 to 2400L	L – 0900 to 1800L
CD – 0700 to 1900L	
FD – As necessary	

NOTE - *CD, LA, L and W may be combined up to 30 minutes earlier at the discretion of the TS/CS.*

5-3 WATCH CHECKLIST. As soon as possible, after 0000L, 0800L and 1600L(or times as indicated on TBL 5-3-1), the OSIC, in concert with the Tower FLM will collectively ensure the items listed under the Watch Checklist are checked. The watch checklist must be completed within 60 minutes of its commencement and annotated on FAA Form 7230-4 as "WCLC".

5-4 TRAFFIC COUNT.

a. The OSIC will ensure all applicable traffic count information is recorded at the close of business daily.

b. The W radar coordinator position must log instrument approaches on the manual clicker when the ceiling is less than 3,100' or visibility is less than 3 miles.

5-5 EQUIPMENT.

a. Tower frequency:

CD / FD	121.4/281.4
GC	121.9/348.6
LC1	118.1/257.8
LC2	123.9/273.575
Spare Frequencies	128.65/322.05
EMERGENCY VEHICLE TO PILOT	121.1

b. The NAVAID Monitor panel located in the tower monitors the following:

1. Runway 8L ILS – localizer and glide slope.

2. Runway 4R ILS – localizer, glide slope and DME.

3. Runway 26L LDA – localizer and DME.

4. NDB.

c. ASDE-X (See Appendix 30).

d. Automated Surface Observation (ASOS) Controller Equipment Information Display (ACE-IDS). (See Appendix 31).

TBL 5-3-1

Watch Checklist

ITEM	TIMES (DAILY)	REQUIREMENT
Guard Frequencies – **HNL APCH**	0800 HST 1600 HST	Verify 121.5 and 243.0, receiver only, are selected at the L radar position in speaker mode with the volume at a comfortable monitor level.
TOWER		
ATIS	0000 HST 0800 HST 1600 HST	Monitor ATIS transmissions on a transceiver for quality, clarity and content.
Guard Frequencies	0000 HST 0800 HST * 1600 HST	Verify 121.5 and 243.0 receiver only are selected at LC1 or LC2 in the speaker mode with the volume at a comfortable level. *EVERY TUESDAY @ 0800 HST, perform a two-way ground-to-air radio check.
Radar Performance Check	0000 HST 0800 HST 1600 HST	Determine the MEARTS presentation is satisfactory.
MSAW/CA	0000 HST 0800 HST 1600 HST	Test aural alarm and verify gain is set at a reasonable level.
MOTOROLA PET-2000 Transceiver	0800 HST *	Select air-to-ground frequency and verify quality of transceiver's reception. *EVERY TUESDAY, conduct a 2-way radio check with airborne aircraft.
Wind Indicator	0000 HST 0800 HST 1600 HST	ASOS MAG (magnetic) wind must be used for official weather. The Ribbon Display Terminal (RDT) of the Weather System Processor (WSP) may be used for operational purposes, which include direct reading to pilots, determining LAHSO operations and configuring runways.
PRIMARY CRASH NET	Initiated at 0800 HST by HIK	HIK and RDC are responsible for conducting a daily test.
ILS Monitor Panel	0000 HST 0800 HST 1600 HST	Check the status of the ILS/LDA systems.
ALS/MALS	0000 HST	Check and verify through all steps including flashers.
Light Guns	0800 HST	Check the operation of the light guns.
Coordination	Between 0700 and 0800 HST	Coordinate with the TRACON FLM/OSIC/TMC items such as: RWYs and approaches in use; equipment outages which may impact HCF Center traffic flow; flow control; or any other pertinent information. Coordinate at other times as necessary.
ASDE-X	0000 HST 0800 HST 1600 HST	Ensure that the equipment is configured and operating according to Appendix 30.

5-6 RUNWAY AND TAXIWAY CLOSURES.

a. The CS may deny coordination for a runway closure and taxiway closure for engine run-ups based on traffic needs and requirements. Advise of expected delay.

b. When runway 8R has been approved by the SDOT for an engine run-up, authority to use runway 8L for all departures has been delegated to Honolulu Tower. If an aircraft specifically requests runway 8R, Honolulu Tower will move the run-up aircraft off runway 8R, authorize the departure, and then coordinate the run-up.

c. The Airport Superintendent (District 5/Code 22) will provide authorization for opening and closing portions of the airfield. Radio authorization will be utilized only when telephone clearance from the Airport Manager, Superintendent of Operations or Airport Services Supervisor is impractical or when expediency is required.

d. Daily runway checks are completed by SDOT between 0830-0930 HST and once every mid-shift.

e. Do not allow aircraft to land or takeoff on a runway when there is debris reported. Contact Ramp Control to request an inspection.

f. When any portion of Taxiway A or Z between K and G is closed, pushbacks in the alleyway may be authorized by tower.

5-7 GRASS CUTTING PROCEDURES. The airport authority will close the affected runway(s).

5-8 BIRD HAZARD / BIRD ACTIVITIES.

a. The SDOT-Airports has the primary responsibility for the detection and control of existing and potential bird hazards. It is their responsibility to issue necessary NOTAMs. The facility will assist in identifying and eliminating these hazards.

b. The Tower FLM/CIC must notify the SDOT-A of any bird strikes and file a Mandatory Occurrence Report (MOR).

5-9 PRIMARY CRASH NET.

a. When activating the primary crash net, use one of the terms below to identify the type of alert.

1. Standby Alert. ETA of emergency aircraft is 5 minutes or more from primary crash net activation time.

2. Emergency Alert. ETA of emergency aircraft is less than 5 minutes from primary crash net activation time.

b. Ensure that Hickam Ramp is on the line and that all pertinent information has been passed and understood. Base Operations will answer any questions from other agencies on the net.

5-10 SINGLE PERSON MIDNIGHT OPERATIONS.

a. When an operational area is operated with one ATCS during the mid-shift, and in order to ensure that a receiving controller is prepared to accept an aircraft; coordination between HCF Approach and Honolulu Tower must be accomplished via automation. i.e., acceptance of the hand-off by a keystroke entry.

NOTE - *Automated coordination cannot be handoffs that do not include human interaction.*

b. In the event there is no response from the operational area with which coordination is attempted; immediate action must be taken to determine the status of the unresponsive controller and begin appropriate notification.

c. In the event Honolulu Tower has a single ATCS in the operational area during the mid-shift, LC must advise H radar and the FLMIC.

d. The H radar position must enable/disable all automatic handoffs to the Tower (T) via the following keyboard entry:

<HD>, *, <Space>, **ALL**, <Space>, **T**, <enter>

NOTE - *This entry serves as an on/off "switch" and is not enabled/disabled by a change in controller preferences.*

5-11 GENERAL RUNWAY USE

a. Arrivals RWY 4/8 Configuration between 0700 – 1900 HST:

1. To the maximum extent possible, all large turbo jet aircraft and larger must be sequenced to RWY 8L.

2. RWY 8L final arrivals must be at least 5 MIT to include channel approaches.

3. Large jet aircraft sequenced to RWY 4R must be at least 4 MIT between successive large jet arrivals.

4. All VFR arrival routes and straight-in arrivals to RWY 4R will be sequenced by the TRACON to RWY 4R.

a. Runway 4/8 Configuration between 0900 – 1500 HST

1. Assign and taxi all large Twin Turbo prop aircraft from the North ramp to RWY 8R for departure.

2. Assign and taxi all twin prop and smaller aircraft from the south ramp to RWY 4R/4L TWY F for departure.

b. Arrivals RWY 22/26 configuration between 0700 – 1900 HST

1. All offshore arrivals on the RWY 26L final (to include the LDA/DME, RNAV, RNP, Visual, etc...) expect RWY 26L.

2. All VFR arrival routes and Charted Visual approaches are to RWY 22L. Pilots may expect RWY 22R.

NOTE: LC1 must ensure all ADW/CRO rules are adhered to when ARRIVING/DEPARTING RWY 22L.

5-12 TARMAC DELAY PROGRAM. (See Appendix 32)

5-13 NATIONAL SECURITY AREA. (See Appendix 29)
For reasons of national security, pilots are requested to avoid flight below 5000 ft. MSL in this area (Ford Island).

CHAPTER 6 – FLIGHT DATA / CLEARANCE DELIVERY

6-1 FLIGHT DATA – TOWER CAB.

a. Responsibilities.

1. Process and forward flight plan information.

(a) Obtain and record IFR departure clearances/releases as required from the appropriate HCF Center sector.

(b) Record and prepare Class B airspace strips, local IFR flight progress strips, and VFR/IFR practice approach flight progress strips as required.

(c) Prepare, record and/or monitor the ATIS.

(d) Advise the TRACON of the new ATIS code.

(e) Ensure validity of flight progress strips prior to forwarding to next controller.

b. Flight plan information – OFDPS.

1. Update the information on proposed flight plans when received. Ensure that flight plans identified on RS messages are eliminated.

2. Flight plan information is received via the thermal printer/receiver of the OFDPS system and printed on Flight Progress Strips. The following information is received on the Thermal Flight Progress Strips for IFR departure flight plans.

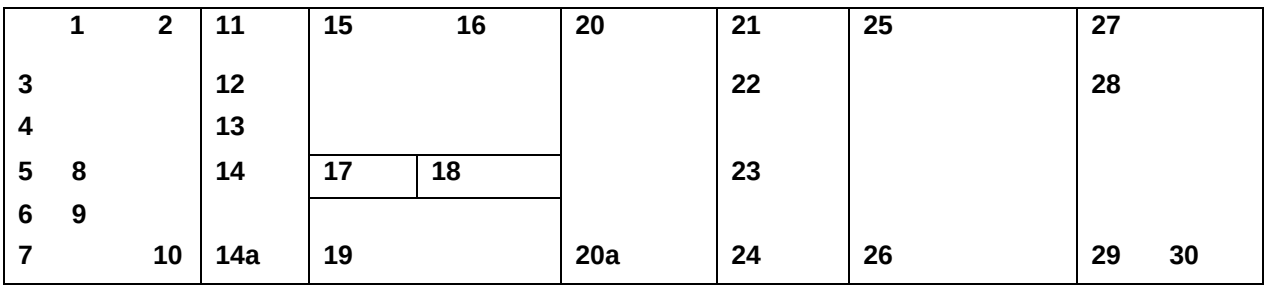


Figure 1

Box 2	*Revision number.*
Box 3	*ACID *(underline in red when aircraft advises unable to comply with CKH R240 crossing restriction).*
Box 4	*Aircraft type / number in flight.*
Box 5	*Filed true airspeed.*
Box 7	*Computer identification number. (CID)*
Box 9	*Printer I.D.*
Box 10	*Strip number.*
Box 11	*Departure release time (4 digits, underlined, and IN RED).*
Box 17	*Place a ✓ for oceanic eastbound flights after the PDC flight plan has been processed*
Box 18	*4-digit time when PDC processed. For eastbound oceanic, 4-digit time when final altitude has been assigned.*
Box 19	*Departure fix / Proposed departure time (UTC).*
Box 20	*Altitude options and minutes in-trail time.*
Box 21	*Actual assigned altitude if other than requested altitude in Box 24.*
Box 24	*Requested altitude.*
Box 25	*Destination airport/clearance limit, departure procedure, and transition.*
Box 26	*ATIS code the aircraft has received.*
Box 27	*Mode 3/A beacon code.*
Box 28	*Aircraft's assigned departure heading.*
Box 29	
Box 30	*When the FDIO/OFDPS is OTS, place a ✓ to indicate the departure time has been forwarded to the appropriate sector for oceanic en route departures.*

Figure 2

c. Flight plan information – Local IFR. The following information is required on FAA Form 7230-8 for local IFR departure flight plans:

1	**5**	**8**	**9**	**10**	**11**	**12**
3	**6**			**13**	**14**	**15**
4	**7**	**8A**	**9A**	**16**	**17**	**18**

Box 1	ACID-last 3 digits of full call sign are sufficient or local use indicators in accordance with Appendix 34.*(underline in **red** when a/c advises unable to comply with CKH R240 crossing restriction).
Box 3	Aircraft type / number in flight. (if necessary for fighter operations)
Box 5	Assigned beacon code. a) Aircraft requesting local IFR clearances must be issued beacon codes assigned by the computer in the 15-- block. b) Assign HIANG aircraft beacon codes in the 41-- block with the last two digits coinciding with the flight number. c) Military aircraft in support of HIANG missions must be assigned beacon codes in the 42- – block.
Box 9	Destination airport/clearance limit, departure procedure, and transition or coded local IFR procedure as follows: (written description located in Chap. 6-2). ALANA, CKH, HHI, IL4, IL8, VR4, VRB, JRF, NGF.
Box 9A	ATIS code the aircraft has received.
Box 10-18	**Red** "Z" for local IFR flight progress strips.

d. The following letters may be used to denote fix/SID:

C	KEAHI SID.
E	Freeway Departure.
F	KEOLA SID.
G	GECKO SID.
K	Kona Departure.
M	MKK SID.
N	Redhill Departure.
O	OPIHI SID.
P	Punchbowl Departure
R	SHINSEKI SID.
S	Shoreline Departure.
T	West Loch Departure.
Z	Local Clearance.

e. Flight plan information – Class B airspace. The following information is required for Class B departure flight plans on FA Form 7230-8:

1		**5**	**8**	**9**	**10**	**11**	**12**
3		**6**			**13**	**14**	**15**
4	**7**	**7**	**8A**	**9A**	**16**	**17**	**18**

Box 1	ACID-last 3 digits of the full call sign are sufficient unless there are similar call signs at the airport. H may be used in place of N to indicate civil helicopters. Local use indicators may be used in accordance with Appendix 34.
Box 5	Beacon codes assigned by the computer in 02-- block; last two digits are sufficient.
Box 9	VFR departure coded routes as indicated in par. 6-1.e.
Box 9A	ATIS code the aircraft has received. Special departure requests. Highlight all special requests on all flight progress strips in **RED**.

NOTE - *Helicopters may operate SVFR in Class B airspace with approval from FLM.*

f. IFR flight progress strips received via OFDPS.

1. Comply with the Intra-facility procedures outlined in Chapter 3 for those aircraft requesting clearance to an inter-island destination or westbound oceanic departure.

2. Request altitude assignment and release from the appropriate HCF Center sector for all eastbound oceanic en route departures. No coordination needed for Oceanic International departures to the south and west via PALAY SID.

3. Release times shall be:

(a) Entered in 4-digits in RED. Include an after "<" symbol, if applicable.

(b) Underlined in RED.

g. Gatehold procedures. Gatehold procedures require pilots to request clearance when 10 minutes to taxi.

1. *"10" minutes to taxi"* indicates a pilot is capable of departing the blocks/taxi/tow/pushback within 10 minutes of receiving en route clearance.

2. Sector will specify a release time if there is a delay for the filed altitude and will offer alternate altitudes and/or routes that will permit an earlier release. Relay alternates to the pilot.

3. When the HCF Center sector states a release time reference another aircraft compute the estimated release time by adding the delay to an estimated time of departure for the lead aircraft and issue the estimated delay to the pilot. If the first aircraft does not depart the blocks within 10 minutes after receiving clearance (or 10 minutes prior to his release time) and the second aircraft requesting the same altitude/route has pushed back or is ready to taxi, and requests the original altitude, cancel the original aircraft's clearance, advise the HCF Center controller and coordinate the re-sequencing of departures as required.

4. A pilot opting for a release time is required to pushback no later than 10 minutes prior to his/her release time (airborne).

NOTE - *FD coordinates gatehold procedures. CD and GC will assist Flight data monitoring gatehold.*

h. Report weather information.

1. The METAR weather sequence is received hourly via the ASOS.

(a) Utilize the ASOS Operator Interface Device (OID) to disseminate visibility received from LC/Tower FLM when appropriate.

(b) Back up is via commercial telephone.

2. The weather sequence received via the ASOS is used to prepare the ATIS broadcast.

(a) Wind data shall be the magnetic (MAG) wind derived from the ASOS.

(b) Disseminate the current ATIS code verbally to all tower positions and via the RDVS to the "W" controller. Ensure the MEARTS System Data Area is updated to reflect the current ATIS code.

3. Verify the ATIS code reported by the pilot is current and mark the Flight Progress Strip.

4. When the reported ceiling is at or below 5000' or the visibility is less than 5 miles, encode this information in the MEARTS System Data Area.

i. Maintain status information area (SIA). Update the SIA as needed and/or as directed.

6-2 CLEARANCE DELIVERY.

a. Responsibilities.

1. Operate communications equipment.

2. Process and forward flight plan information.

3. Issue clearances and ensure accuracy of pilot read-backs.

4. Assist tower cab in meeting situation objectives.

5. Operate tower equipment.

6. Utilize alphanumerics.

7. Advise tower cab positions and "W" of current changes to the ATIS.

b. Inter-phones. Utilize the RDVS for inter-facility and intra-facility coordination.

c. Flight plan information.

1. Flight plan information is received via the OFDPS on flight progress strips. Preferred departure routes are encoded and transmitted to the aircraft as coordinated.

2. Computer generated flight strips must constitute a clearance. CD must coordinate for altitude assignments and releases on all eastbound oceanic departures with Sector 3.

3. Oceanic aircraft departing for points west and southwest must be released by Tower, expecting filed altitude.

4. Local IFR routes have been developed to standardize the clearance items

and strip marking procedures for aircraft requesting local IFR departure clearances.

(a) Assignments during runway 4/8 configuration, (See TBL 6-2-1)

TBL 6-2-1
Runway 4/8 Standard IFR Departure Clearances

DESTINATION /REQUEST	***Cleared to***	***Cross CKH R240 at or above 2,500' Maintain***	***Fly Heading***	***Departure frequency will be***	***Squawk***
ALANA	*ALANA intersection via radar vectors*	*4,000'*	*155*	*118.3/269.0*	*15xx*
CHK	*CKH VORTAC via radar vectors*	*5,000'*	*120/140 (depending on type acft)*	*124.8/317.6*	*15xx*
HHI	*HHI airport via radar vectors to EWABE (NDB Apch)/HNL VORTAC (VOR Apch)*	*5,000'*	*155*	*118.3/269.0*	*15xx*
IL4/VOR/ VOR-DME	*HNL airport via radar vectors ILS/ VOR/VOR-DME final approach course*	*4,000'*	*155*	*118..3/269.0*	*15xx*
IL8	*HNL airport via radar vectors ILS RWY 8L final approach course*	*4,000'*	*155*	*118.3/269.0*	*15xx*
JRF	*JRF airport via radar vectors VOR/DME or NDB rwy 4R final approach course*	*4,000'*	*155*	*118.3/269.0*	*15XX*
NGF	*MUGGE intersection via radar vectors*	*5,000' expect 7000' /9000' 10 minutes after departure.*	*155*	*118.3/269.0*	*15xx*

(b) Assignments during runway 22/26 configuration (See TBL 6-2-2)

TBL 6-2-2
Runway 22/26 Standard IFR Departure Clearances

DESTINATION /REQUEST	*Cleared to*	*Maintain*	*Fly Heading*	*Departure frequency will be*	*Squawk*
HHI	*HHI airport via radar vectors EWABE/HNL VORTAC*	*5,000'*	*220*	*118.3/269.0*	*15xx*
JRF	*JRF airport via radar vectors VOR/DME or NDB rwy 4R final approach course*	*4,000'*	*220*	*118.3/269.0*	*15XX*
NGF	*MUGGE intersection via radar vectors*	*5,000' expect 7000' /9000' 10 minutes after departure.*	*220*	*118.3/269.0*	*15xx*

5. VFR coded departure procedures are as follows:

(a) Issue Class B airspace coded departure procedures.

(1) Issue to pilot on request.

(2) If the pilot does not request a Class B airspace coded departure route by name, issue detailed departure procedures.

(3) Any deviations to the published departure procedure must be issued to the pilot in the clearance.

(b) During runway 4/8 configuration, assign the following:

(1) Shoreline Departure. Except for float planes departing the Water Ways, the Shoreline departure is not available for fixed wing aircraft between 0900 – 1500L.

(2) Freeway Departure – This departure is intended for use by single engine aircraft during daylight hours only.

(3) Redhill Departure.

(4) Punchbowl Departure – During the hours of 0900-1500L, this departure is intended for use by twin engine and high performance single engine aircraft.

(c) During runway 22/26 configuration, issue the following:

(1) Kona Departure.

(2) West Loch Departure.

6. Strip forwarding.

(a) Forward oceanic flight progress strips to FD on a first come, first served basis as the clearance is requested.

NOTE - *FD is responsible for coordinating with the appropriate HCF Center sector to request clearance/release, if required.*

(b) Place complete flight progress strips on the GC counter above the CD position.

6-3 HELICOPTER OPERATIONS.

a. Helicopter operations during runway 4/8 configuration:

1. Shoreline Departure – Maintain at or below 500’ while in the Class B airspace.

2. Freeway Departure – Maintain at or below 1,000’ while in the Class B airspace.

3. Redhill Departure – Maintain at or below 1,000’ while in the Class B airspace.

b. Helicopter operations during runway 22/26 configuration:

1. West Loch Departure – Maintain at or below 1,000’ while in the Class B airspace.

2. SHORELINE DEPARTURES ARE NOT PERMITTED.

3. Kona Departure – Proceed direct to the VOR Building (VFR visual reference point), then fly southbound. Maintain at or below 1500’ while in the Class B airspace.

NOTE - *Lifeguard, Police Department, Fire Department, Coast Guard and Search and Rescue helicopter operations must be cleared as requested to accomplish mission requirements.*

6-4 ISSUE CLEARANCES.

a. Prior coordination with the appropriate HCF Center sector is required on all eastbound oceanic en route clearances and on aircraft requesting other than their filed altitude (Westbound and southwest bound departures must be released by Tower, expecting filed altitude).

b. Assist FD in monitoring gatehold procedures. Issue a time check with clearances that include release times or clearance void times.

c. Military formation flights.

1. Issue 1 clearance and 1 squawk to the flight leader and instruct the last element to squawk standby for standard formation flights of two (2). For flights of three (3) or more, instruct the last element to squawk non-discreet code (i.e. for HIANG F-22s, for HIANG hosted fighters or for others).

2. If the flight requests non-standard separation, ascertain separation (miles/time) required, make a notation on the strip and coordinate with LA. Instruct the last element to squawk non-discreet code. Aircraft other than fighters requesting non-standard separation must be limited to 2 aircraft unless otherwise coordinated by the Tower FLM/CIC in advance.

d. Departure frequencies are assigned as follows:

1. Sector L.

"L" DEPARTURE RADAR 124.8/317.6	
MKK SID PALAY SID KEAHI SID (RWY 22/26 only) Local IFR Eastbound	Shoreline XX Departure (VFR) Freeway XX Departure (VFR) Punchbowl XX Departure (VFR) Kona XX Departure (VFR-RWY 22/26 only) *XX denotes current published number*

2. Sector V.

"V" ARRIVAL / DEPARTURE RADAR 119.1/239.05
Redhill XX Departure (VFR) West Loch XX Departure (VFR-runway 22/26 only) *XX denotes current published number*

3. Sector H.

"H" ARRIVAL RADAR 118.3/269.0	
KEOLA SID OPIHI SID Local IFR Southeast bound	Kalaeloa Airport Wheeler AAF Kaneohe Bay MCAS

e. Altitude restrictions.

1. Runway 4/8 configuration:

(a) Non-SID departures cross CKH R240 at or above 2,500', maintain 5,000'.

(b) Non-SID departures: When altitude requested is above 5,000', advise the aircraft to expect requested altitude 10 minutes after departure.

(c) PALAY SID: Maintain 5,000', expect 13,000' for turbojets.

(d) When the CKH VORTAC is OTS, issue the SID with the crossing restriction.

EXAMPLE - *Cleared to (destination) airport via (SID) departure, (name) transition, then as filed. Cross HNL 6 DME at or above 2,500', maintain 5,000'.*

2. Runway 22/26 configuration:

(a) Non-SID departures: Maintain 5,000' expect requested altitude 10 minutes after departure.

(b) KEAHI SID: Maintain 5,000' expect requested altitude at LNY/JORDA.

(c) MKK SID (NORBY corridor): Maintain 5,000' expect 7,000' or higher.

3. Upon request by the pilot, cancel the CKH R240 crossing restriction. Underline the ACID in **RED** to indicate aircraft has received clearance canceling the crossing restriction.

f. Departure headings:

1. Runway 4/8 configuration:

(a) MKK and PALAY SID – via assigned headings or as coordinated:

(1) Props – 120° heading.

(2) Jets – 140° heading.

(b) KEOLA and OPIHI SID – 155° heading.

(c) Practice approaches to runways 4R and 8L and departures to JRF and NGF – 155° heading.

(d) Departures to HHI – 155° heading.

2. Runway 22/26 configuration:

(a) MKK, PALAY and KEAHI (assigned to prop acft only) SID – via assigned headings or as coordinated:

(1) Props – 180° heading.

(2) Jets – 200° heading.

(b) KEOLA and OPIHI SID – 220° heading.

(c) Departures to JRF, HHI and NGF – 220° heading.

6-5 ACTIVE AIR DEFENSE SCRAMBLES, PRACTICE LAUNCH, KOA SHIELD, SENTRY SHIELD and FLUSH OPERATIONS.

a. Air Defense Active Scramble information is received via the direct line from Baldwin.

1. Record identification received on FAA Form 7230-8:

(a) ACID.

(b) Number in flight.

(c) Heading or airway to join.

(d) Altitude and climb schedule.

(e) Controlling facility.

2. Information is forwarded immediately to LC who must issue the clearance.

3. Advise “W” as soon as possible.

4. Notify the OSIC and the appropriate HCF Center sector that will be receiving the scramble aircraft and forward the information listed in paragraph 6-5, a (1).

b. Air Defense Control Center must advise Honolulu Tower of actual Flush operations.

1. Flush aircraft must identify the activity and request clearance via a published SID or radar vector and specify the controlling agency.

2. Assign 16,000’ to Flush Aircraft.

3. Advise “W” as soon as possible.

c. Practice Launch, Koa Shield and Sentry Shield missions are scheduled exercises by the HIANG. A copy of each exercise will be provided in advance for reference. All departures are limited to the MKK, KEOLA, PALAY or OPIHI SID, to expect 16,000’.

6-6 TOWER EQUIPMENT.

a. The MEARTS program is in use at this facility, CD utilizes a Terminal Controller Workstation (TCW) and associated keyboard for input of MEARTS and OFDPS information. Various keyboard entries are required to input the necessary information utilized by the tower cab and Honolulu Approach for all departure aircraft. CD is responsible for the Preview Area which displays the information that is being input into the MEARTS system. Refer to paragraph 6-7 for MEARTS alphanumeric input.

b. Runway approach lighting systems and navigational aids. (See TBL 6-6-1)

TBL 6-6-1

Honolulu’s Runway Approach Lighting System & Navigational Aids

	RUNWAY 8L	RUNWAY 26R	RUNWAY 4R	RUNWAY 22L	RUNWAY 4L	RUNWAY 22R	RUNWAY 8R	RUNWAY 26L
Apch Lgtng System	MALSR		MALSR					MALSF
HIRL	X	X	X	X			X	X
MIRL					X	X		
REIL		X			X	X	X	
PAPI	P4L	P4L	P4L	P4L	P4L			P4L
VASI							V6L	

c. Tower Data Link System (TDLS). (See Appendix 33).

6-7 ALPHANUMERIC INPUT.

a. Input of information to the MEARTS system is dependent on the type of request.

1. IFR en route departure requests are assigned beacon codes by the OFDPS via flight progress strips. When block altitudes are authorized, verbally coordinate with the appropriate departure controller.

2. Local IFR clearance requests are assigned beacon codes from the computer in the 15-- block by depressing the "+" symbol on the alphanumeric keyboard. Depress the "Flight Data" key and then enter data as follows:

(a) Type in ACID. Last three digits of the full call sign are sufficient

of local use indicators in accordance with Appendix 34 (not to exceed 7 characters).

(b) Type in the "+" for the beacon code (41-- or 42-- may be entered for HIANG aircraft).

(c) Type in a fix pair (see list below), then ENTER.

ENTRY	SCOPE	ROUTE
HA	H	Heading 155, 4,000', holding at ALANA.
HC	L	Heading 120, 5,000', holding at CKH
HG	H	Heading 155, 5,000', to NGF
HH	H	Heading 155, 5,000', holding at HNL
HI	H	Heading 155, 4,000', ILS RWY 8L
HV	H	Heading 155, 4,000', ALANA for VOR-DME
HW	H	Heading 155, 5,000', to HHI
HX	H	Heading 155, 4,000', to JRF
ZI	H	Heading 155, 4,000', ILS RWY 4R
ZV	H	Heading 155, 4,000', VOR RWY 4

(1) Coordinate non-standard routings, altitudes, block altitudes or other requests with the appropriate departure controller.

(2) Advise the departure controller when aircraft will depart as a flight. For local IFR fighter operations, coordination must be via MEARTS, multifunction Z, FLT#.

3. Local VFR clearance requests are assigned beacon codes from the computer in the 02-- block. Beacon Code assignments by the computer are done automatically. Enter data as follows:

(a) Type in ACID (last 3 digits of full call sign are sufficient or local use designator in accordance with Appendix 34).

(b) Type in a fix pair (see list below) and then ENTER:

ENTRY	SCOPE	ROUTE
HN	V	Redhill Departure
HS	L	Shoreline Departure
HE	L	Freeway Departure
HT	V	West Loch Departure
HK	L	Kona Departure
HB	L	Punchbowl Departure

4. Non-standard IFR or VFR clearance requests may be entered as follows:

(a) Type in ACID (last 3 digits of full call sign are sufficient or local use designator in accordance with Appendix 34), <space>, beacon code assigned VFR by default. Press "+" for IFR.

(b) Type in departure scope (H, L or V), then ENTER. Data tag will be assigned to the H, L or V tab list.

b. Coordinate the clearance request with the departure controller.

6-8 CLEARANCE PROCEDURES FOR OCEANIC DEPARTURES. Upon receipt of a clearance request for an oceanic departure, the controller must provide the following:

a. If the release time is 15 minutes of less, issue a clearance for the requested altitude/route with restrictions, as necessary.

b. If the release time exceeds 15 minutes for the requested altitude/route:

1. Issue options for requested altitude/route with appropriate restrictions, and

2. Issue options for alternate altitudes and/or routes that require less or no delay.

3. Issue clearance with appropriate restrictions, if necessary, after the pilot has indicated his/her preferred option.

NOTE1 - *Do not apply these procedures to approved altitude reservations.*

NOTE2 – *CD and GC will assist FD monitoring gatehold as described in paragraph 6-1g*

6-9 CLEARANCE PROCEDURES WHEN LOCAL CONTROL1 (LC1) AND LOCAL CONTROL 2 (LC2) ARE DECOMBINDED.

a. Helicopters departing on the Shoreline Departure route will be advised to contact tower on frequency 123.9/273.525 when ready for departure.

b. Helicopters departing on the Red Hill, Freeway, or Punchbowl Departures will advised to contact Tower on 118.1/257.8

c. Between 0900 – 1500L, fixed wing aircraft are not authorized the Shoreline departure. The Freeway or Punchbowl departures will be available in place of the Shoreline departure between 0900 – 1500L.

NOTE 1: Due to performance characteristics, sea planes departing the water ways are authorized to fly the Shoreline departure. Clearance Delivery will advise sea planes to contact Tower on 123.9 for departure. All other VFR departure routes will be assigned 118.1 for departure.

NOTE 2: Exception: MEDEVAC aircraft requesting priority may be approved to depart on the Shoreline Departure. MEDEVAC departing RWY 4R/4L will be assigned Tower on 118.1 for departure.

6-10 FLIGHT DATA PROCEDURES WHEN LC1 AND LC2 ARE DECOMBINED

a. During RWY 4/8 configuration, include statement on the ATIS that "Unless otherwise advised by ATC, all aircraft arriving via VFR routes must keep base turn for RWY 4R at or North of TWY RA. If unable Advise."

b. During RWY 22/26 configuration, include statement on the ATIS for "all aircraft arriving on VFR and Charted visual approaches may expect RWY 22R."

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CHAPTER 7. GROUND CONTROL

7-1 RESPONSIBILITIES.

NOTE: *See Paragraph 7-6 for changes in Ground Control Operation when LC1 and LC2 are de-combined.*

a. Ensure separation.

b. Initiate control instructions.

c. Monitor and operate communications equipment.

d. Utilize tower radar display.

e. Utilize alphanumerics.

f. Assist the LA position with coordination.

g. Ensure computer entries are complete for instructions or clearances issued or received.

h. Ensure strip marking is complete for instructions or clearances issued or received.

i. Process and forward flight plan information.

j. Perform any function of the Tower Team, which will assist in meeting situation objectives.

k. Advise other team members of operational situations that may require attention/ immediate action or affect efficient performance of operational requirements.

l. Initiate actions/recommendations to resolve situations that create unnecessary workload or that may require attention/immediate action by the team.

m. Participate in sector/position/team planning.

n. Monitor the environment, .i.e. equipment, traffic, workload, etc. to maintain situational awareness to assess team status and provide feedback or assistance in a supportive manner when warranted.

o. Ensure validity of flight progress strips prior to forwarding to the next controller.

7-2 ENSURE SEPARATION.

a. Area of responsibility: GC has control responsibility for all surface traffic except on runways and movement areas in the area north and east of the dashed line depicted in Appendix 35, and excludes:

1. Taxiways between runways 4R/22L and 4L/22R, and between runways 8L/26R and 22L.

2. Portions of taxiway A, west of taxiway L, and portions of taxiway RB as depicted on Appendix 35.

b. Non-visible areas include:

1. Portions of the Inter-Island ramp. (See Appendix 37)

2. Gates 1A through 1D. (See Appendix 37)

3. Taxiway RB south of the RB bridge.

c. Non-movement Areas. When an aircraft calls ground control requesting pushback instructions from a non-movement area, include the phraseology "at pilot's discretion" along with the requirements outlined in JO 7110.65, paragraphs 3-7-1 and 3-7-2. (See Appendix 37, 38 and 39)

EXAMPLE – *DAL21 pushback at pilot's discretion.*

d. Glide slope and localizer critical areas are depicted in Appendices 37, 38 and 39.

e. A chart listing "runway length remaining" from all intersections is located at GC (see TBL 7-2-1).

f. No authorized heliports are located on Honolulu International Airport.

TBL 7-2-1
Runway Length Remaining

Runway 8L	12,300	Runway 26R	Runway 4R	9,000	Runway 22L
7,400	L	4,850	6,900	F	2,050
6,850	G	5,400	5,500	D	3,500
5,150	D	7,100	4,000	E	4,950
4,100	J	8,150	3,250	K	5,700
3,650	E	8,650	2,750	P	6,200
2,100	K	10,100	2,350	EL	6,600
1,350	4R	10,900			
	C	11,700			

Runway 8R	12,000	Runway 26L	Runway 4L	6,952	Runway 22R
11,500	RC	450	5,350	D	1,550
8,050	RM	3,900	3,900	E	3,000
3,900	RG	8,050	2,700	K	4,200
450	RH	11,500			

7-3 CONTROL INSTRUCTION.

a. Flight progress strips are utilized for all aircraft issued taxi clearances.

b. Taxi departing aircraft to runways or designated points on the runways as shown on TBL 7-3-1. Coordinate for departure points not designated.

TBL 7-3-1
DESIGNATED DEPARTURE POINTS

RUNWAY	DESIGNATED DEPARTURE POINTS
8L	Runway 8L **or** Runway 8L at Taxiway L
8R	Runway 8R
4R	Runway 4R **or** Runway 4R at Taxiway F
4L	Runway 4L
26R	Runway 26R **or** Runway 26R at Taxiway L **or** Runway 26R at Taxiway E
26L	Runway 26L
22L	Runway 22L **or** Runway 22L at Taxiway P
22R	Runway 22R

c. Half flight progress strips are utilized for aircraft and/or vehicles requesting to transition across the active runways.

1. From the north to the south ramp, the preferred route is via taxiway E southbound across runway 8L, 4L and 4R.

2. From the south to north ramp, the preferred route is via taxiway D northbound across runway 4R, 4L and 8L. EXCEPTION: During runway 22/26 configuration, taxiway D is the preferred routing for heavy jets to proceed across runway 26R, 22R and 22L en route to runway 26L.

3. Alternate routes may be determined by the Tower FLM/CIC predicated on runway configuration or runway/taxiway closures.

4. The local controller must issue all active runway crossing instructions as required directly to aircraft/vehicles. An exception may be made for aircraft/vehicle not equipped to transmit and receive on local control frequency or emergencies. In those instances, GC must record the coordination for runway crossing via a recorded land line, and advise LA/LC1 when the traffic is clear of the runway or has completed coordinated request.

5. LC may delegate that portion of a closed runway that does not intersect with an active runway to GC for the purpose to crossing and vehicle access. This coordination must be recorded with landline communication to include runway, crossing points. End time and limitations.

EXAMPLE: "Ground, Local, RWY 8L is closed, you have crossing and access authority west of Taxiway Echo until 2030Z, remain clear of RWY 4L and 4R (initials of both controllers).

d. General runway use program. Unless runway closure, wind, weather, traffic conditions, aircraft emergencies, actual air defense missions or operational necessity requires, aircraft will be assigned runways and routings as prescribed below:

1. All heavy and/or large four-engine turbojet aircraft must depart runway 8R, **26R,** 22L or 26L, except heavy air carrier aircraft bound for an Outer Island may depart runway 8L.

2. Aircraft requiring departures on runway 8L due to operational necessity must obtain authorization from Ramp Control; SDOT will advise the CS/CIC of authorization.

3. Do not authorize turbojet/large four-engine propeller driven aircraft to depart runway 4R or 4L, except: during daylight hours only, turbojet aircraft with gross take-off weight less than 22,000 pounds may depart runway 4R. Instruct aircraft to execute a right turn to their assigned departure heading prior to runway 8L.

4. Between the hours of 0900-1500 HST:

(a) Runways 4/8 – All large aircraft and above (inclusive of turboprops) will be taxied to Runway 8R.

(b) Runways 22/26 – All large aircraft and above (inclusive of turboprops) will be taxied to Runway 26R unless operational requirements require Runway 22L or Runway 26L (i.e. F22 to Runway 22L).

e. Taxi routes and restrictions.

1. Do not authorize wide body aircraft under power to taxi out from the inter-island ramp. Towed aircraft must not unhook in front of ARFF Station 1.

2. Do not authorize any aircraft larger than a B717/B737 to taxi in to the inter-island ramp unless authorized by SDOT.

3. Taxiway P is closed to aircraft more than 12,500 pounds.

4. Aircraft on taxiway RA must be held short at the appropriate hold line for conflicting traffic either on approach to runway 4L/R. During runway 22/26 configuration, only ADG V and above aircraft must be held short of the appropriate hold line for traffic departing runway 22L/22R

5. Runway 4/8 configuration. The taxi route:

(a) From the inter-island terminal is outbound on taxiway L and inbound on taxiway G.

(b) From Hickam AFB is outbound on taxiway T and inbound on taxiway V, unless otherwise coordinated.

(c) Taxi route from the north/main terminal to runway 8R is via runway taxiways A and RB.

(d) Taxi route from the south ramp to runway 8R is via taxiways C, RT and RA.

6. Aircraft that have landed or crossed runway 8L and will be parking at Hickam, and exited to the north and switched to GC will exit via Taxiway A to A1, A2, A3, A4, or V. If LC1 retains those aircraft to Hickam, they must point-out traffic to GC.

7. Runway 22/26 configuration. The taxi route:

(a) From the inter-island terminal is outbound on taxiway L and inbound on taxiway G.

(b) From Hickam AFB is outbound on taxiway V and inbound on taxiway T, unless otherwise coordinated.

(c) Taxi route for heavy and four-engine turbojet aircraft from the north/main terminal/Hickam to runway 22L is via taxiway A; to runway 26L via taxiway A, D, C, RT and RA.

(d) Taxi route for heavy four-engine turbojet aircraft from the south ramp to runway 26L is via taxiway C, RT and RA.

(e) Taxi route for large/heavy jet aircraft from the North ramp to runway 26R via taxiway A, C.

(f) Taxi route for aircraft from the South Ramp to runway 26R via C.

f. Run-up areas.

1. Idle power only – All aircraft. All gate positions are authorized with prior approval from SDOT. If an aircraft calls for a run-up and tower has not received approval from SDOT, refer the aircraft to Ramp Control (121.8).

2. Full power.

(a) Heavy and large four-engine turbojet aircraft are permitted on runways only. Preferred run-up areas are as follows:

(1) Runway 4L – 1,000’ from approach end.

(2) Runway 8L – 200’ west of taxiway N.

(3) Runway 8R – approach end. Departures on runway 8L are approved by SDOT for all aircraft when a run-up on runway 8R is in progress.

(4) Runway 22R – 1,500’ from the approach end.

(b) All two and three engine turbojets (except heavy) and all propeller-driven aircraft are authorized to run-up on taxiway F and taxiway RA, in-line with the taxiway. Between 2200 and 0600 HST, run-ups must be on taxiway RA between taxiway RT and HNL VORTAC.

g. Reporting delays.

1. As directed by the Tower FLM/CIC, the requested taxi time will be posted on all IFR departure strips when a potential delay may occur. A potential delay may occur for IFR weather, runway 8L/26R, runway 8R/26L or runway 4R/22L closure, runway changes; unusual occurrences (e.g. military exercises, emergencies).

2. The facility utilizes an average of 8 minutes of taxi time from any point on the airport to an active runway. A difference of 23 minutes or more between request taxi time to departure will be considered a delay.

7-4 COMMUNICATIONS EQUIPMENT.

a. Ground Control frequency:

1. 121.9/348.6. Both frequencies are available through the RDVS and VSBP which bypasses the RDVS.

2. 128.65 is utilized as a back-up frequency.

(a) Advise LA and CD of frequency change.

(b) Advise Tower FLM when frequency problems extend to 10 minutes.

b. Utilize the RDVS for inter-facility and intra-facility coordination.

c. In accordance with the current LOA, utilize 121.1 for coordination between aircraft's pilot and emergency vehicles.

1. Notify emergency equipment of arrival status of emergency arrival aircraft.

2. As required, suspend/restrict traffic on taxiways to expedite the movement of emergency vehicles to staging areas. Movement of emergency vehicles from Fire Station 1 is restricted by the canal and drainage canal abeam the egress to the taxiway. Do not block taxiway A fronting Fire Station 1.

3. When notified a military aircraft is carrying hazardous cargo, HCF must close taxiway B to civil operations and proceed via procedures outlined in the LOA.

4. GC will coordinate and authorize emergency vehicles on or across any runway when responding to an emergency.

5. The agencies responsible for responding to airport emergencies are as follows:

(a) Civil aircraft – SDOT, YANKEE TWO, Fire Chief-in-Charge.

(b) Military aircraft – USAF, BATTALION THREE, Fire Chief-in-Charge.

(c) Back-up will be provided by either agency.

d. Motorola PET – 2000 UHF/VHF Transceivers. The transceiver is located to the right of the GC position with 10 preset frequencies.

NOTE: The Motorola PET – 2000 UHF/VHF Transceiver located between GC and LC2 is shared with LC2 when LC2 is decombined from LC2, LC2 shall have priority of use when required

7-5 STRIP PROCESSING AND MARKING.

a. GC is responsible for preparing flight progress strips for those aircraft requesting high speed taxi, touch and go or pattern work, and/or vehicle and aircraft requesting to cross the active runways.

b. During runway 4/8 configuration, pass military and helicopter flight progress strips to LC/LA.

c. During runway 22/26 configuration, pass helicopter and HIANG F-22 flight progress strips to LC/LA.

d. Thermal flight progress strip:

1. Box 15, encode the taxiway designator or runway assignment of aircraft.

2. Request taxi times will be encoded in box 28 of all IFR departure flight progress strips when a potential delay may occur, see paragraph 7-3g, Reporting Delays.

3. Box 26 denotes the ATIS code the pilot acknowledged receipt of. If the ATIS on the strip does not correspond with the *current* ATIS, the GC must ensure the pilot is issued the current ATIS.

4. Box 19, ensure the flight plan has not timed out (2 hours past the proposed departure time).

e. FAA Form 7230-8:

1. Box 8: encode the taxiway designator or runway assignment of aircraft.

2. Box 9A denotes the ATIS code the pilot acknowledged receipt of. If the ATIS on the strip does not correspond with the *current* ATIS, GC must ensure the pilot is issued the current ATIS.

3. Requested taxi times will be encoded in box 14 of all IFR departure flight progress strips when a potential delay may occur, see paragraph 7-3g, Reporting Delays.

f. Half progress strips are used for aircraft and vehicles requesting to transition, primarily when their route will require a runway crossing

1	5	8
2	6	
4	7	

1. Box 1 – ACID.

2. Box 8 – Location of aircraft/vehicle.

NOTE - *Traffic should be crossed on LC frequency, unless the aircraft/vehicle is not equipped with the appropriate frequency.*

7-6 GROUND CONTROL OPERATIONS WHEN LC1 AND LC2 ARE DECOMBINED

a. Instruct all aircraft taxiing to RWY 8R from the south ramp to hold short of the RWY 4R final approach course hold line and monitor tower on 118.1

b. GC must create a half strip and pass to LC1 for aircraft holding short of the RWY 4R final approach course hold line. Half strips will be made IAW paragraph 7-5f.

c. When aircraft from the North ramp require RWY 26L (22/26 configuration) for departure due to operational necessity GC will create a half strip for aircraft holding short of RWY 26R at TWY D and advise aircraft to monitor tower on 118.1. Half strips will be made IAW paragraph 7-5f.

d. When the ASDE-X is out of service, GC (at the direction of the FLM/CIC) will assist CD/FD in the creating of half-strips for the purpose of runway crossings to reach assigned runway for departure if they will depart a runway designated to LC2.

e. Deliver all full flight progress strips as designated (RWY 4/8)

1. RWY 8R departure, pass flight progress strip to LC2

2. RWY 8R departure from the south ramp, pass flight progress strip to LC2, half strip to LC1 for aircraft holding short of the RWY 4R final approach

3. Pass all military flight plans to LC1 that will be outbound on TWY T or M.

4. Pass all flight progress strips for aircraft taxing from the Hickam AMC (outbound at A1 – A4) ramp to LC2.

5. Pass all helicopters (and float planes) flight progress strips departing on the Shoreline departure to LC2. All other helicopters and VFR departure route fixed wing aircraft will be passed to LC1.

NOTE: Shoreline departures for fixed wing aircraft, except for float planes, are not authorized when LC1 and LC2 are de-combined.

f. Deliver all flight progress strips as designated (RWY 22/26)

1. Pass all RWY 26R, 22L, 22R departure flight progress strips to LC1.

2. Pass all RWY 26L departure flight progress strips to LC2.

3. Pass all helicopter, VFR departure route fixed wing aircraft, and float plane departures strips to LC1.

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CHAPTER 8 – LOCAL CONTROL

8-1 RESPONSIBILITIES.

a. Ensure separation.

b. Initiate control instructions.

c. Monitor and operate communication equipment.

d. Utilize tower radar display.

e. Utilize alphanumeric.

f. Assist the LA position with coordination.

g. Ensure computer entries are complete for instructions or clearances issued or received.

h. Ensure strip marking is complete for instructions or clearances issued or received.

i. Process and forward flight plan information.

j.. Perform any functions of the Tower Team that will assist in meeting situation objectives.

k. Advise other team members of operational situations that may require attention/immediate action or affect efficient performance of operational requirements. LC must receive *verbal confirmation* from the relieving controller when a runway is unavailable/ closed/occupied.

l. Initiate actions/recommendations to resolve situations that create unnecessary workload or that may require attention/immediate action by the team.

m. Participate in sector/position/team planning.

n. Monitor the environment, i.e. equipment, traffic workload, etc. to maintain situational awareness to assess team status and provide feedback or assistance in a supportive manner when warranted.

8-2 AREA OF RESPONSIBILITIES.

a. Area of responsibility. LC has responsibility for the surface traffic on all runways and on the movement areas in the area south and west of the solid line depicted in Appendix 33.

1. LC must use a strip holder with the words “VEHICLE ON RUNWAY” to

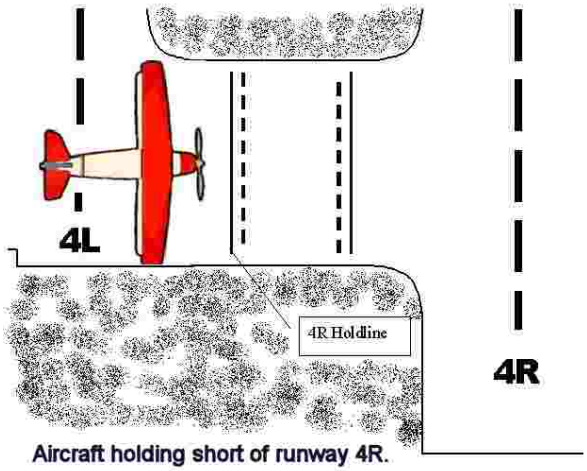
place over the departure sequence strips as a memory aid when a vehicle is on the runway. If there are no departure strips, the strip holder must be placed on the counter at LC1 position.

2. Do not allow aircraft to exit via taxiways designated as primary departure points without coordination.

3. Coordinate with GC to accommodate an aircraft exiting a runway, which requires the aircraft to enter another taxiway in order to clear a runway. Unless specific instructions are issued to the pilot, expect the pilot to clear the runway even if that requires the aircraft to intrude into, but not cross, another taxiway/runway/ramp area.

4. Hold lines between runways 4L/22R and 4R/22L overlap. Do not clear an aircraft to land or depart behind an aircraft holding between the runways. (See FIG 8-2-1)

FIG 8-2-1
Hold Lines: Runways 4L/22R and 4R/22L



5. Do not allow aircraft larger than a B737/B717 to make a 180 degree turn on taxiway A west of taxiway A1. This restriction also applies to taxiways V and T north of runway 8L.

6. ILS critical areas are clearly defined on the taxiways:

(a) Glide Slope critical area hold line for runway 8L extends across taxiways A, RB and T south of runway 8L. (See Appendix 38)

(b) Glide Slope critical area hold line for runway 4R extends across taxiway C short of runway 4R. (See Appendix 37)

(c) Localizer critical area hold line for runway 26L extends across taxiway C east of the LDA equipment shack. (See Appendix 39)

7. IAW FAA JO 7110.65, paragraph 3-7-2e, multiple runway crossings with a single clearance is authorized for the following (see FIG 8-2-1);

(a) Runways 4R/22L and 4L/22R at TWY F.

(b) Runways 4R/22L and 4L/22R at TWY D.

(c) Runways 4R/22L and 4L/22R at TWY E.

(d) Runways 4R/22L and 4L/22R at TWY C.

(e) Runways 4R/22L and 8L/26R (4L/22R) at TWY K.

(f) Runways 4R/22L and 8L/26R at TWY E.

FIG 7-3-1
Authorized Multiple Crossing Points

8. LC may delegate that portion of a closed runway that does not intersect with an active runway to GC for the purpose to crossing and vehicle access. This coordination must be recorded with landline communication to include runway, crossing points, and limitations.

EXAMPLE: "Ground, Local, RWY 8L is closed, you have crossing and access authority west of Taxiway Echo until 2030Z, remain clear of RWY 4L and 4R (Initials of both controllers)."

b. Runway 4/8 – Tower airspace must be delegated as within a 3 mile radius of the airport north of runway 8L centerline and a 5 mile radius south of the centerline of runway 8L; vertical limit is 1,500', except in the departure corridor (defined as south of the shoreline in and including area L), the vertical limit is 5,000'. **NOTE:** When LC2 is de-combined, LC2 must be delegated that airspace south and east of runways 8L, 8R, and 4R within the departure corridor (defined as south of the shoreline in and including area L

c. Runway 22/26 – Tower airspace must be delegated as within a 3 mile radius of the airport north of runway 26R centerline extending from the surface up to and including 1,500'. Within a 5 mile radius south of the centerline of runway 26R extending to the southeast quadrant extending from the surface up to and including 3,000'. Within a 5 mile radius of the centerline of runway 26R in the southwest quadrant extending from the surface up to and including 5,000'. **NOTE:** When LC2 is decombined, there is no change to delegated airspace in a runway 22/26 configuration.

d. IFR circling approaches are not authorized north of the airport.

e. Pattern altitudes:

1. VFR aircraft (small) from the south, pattern altitude is 1,000'.

2. VFR aircraft (small) from the northwest, pattern altitude is 800'.

3. VFR aircraft, large or heavy, 1,500'.

4. Overhead approaches must be conducted in accordance with the LOA.

5. Waterway Operations.

(a) North arrivals: 800'.

(b) South arrivals: small 1,000, large 1,500'.

f. An 8 ½ x 11 inch writing pad will be utilized to record all inbound aircraft to Honolulu. Draw a line across the ACID of aircraft that have landed and are no longer a factor.

g. Arresting Gear Systems are installed on runway 4R/22L, 8L and 8R/26L.

1. BAK-14 is installed on runway 4R and 26L, 1,500' from the approach end. Associated visual and aural warning emanate when the cable is in the up position. **NOTE:** When LC2 is de-combined, LC2 will coordinate with LA to have RWY 26L/8R barrier raised/lowered as required for fighter departures.

(a) HIANG NORDO approaches may require arrested landing.

(1) Initial approach to runway 8L, left break, aircraft do not require an arrestment.

(2) Initial approach to runway 8L, right break, landing runway 4R – raise the cable and alert the emergency equipment.

(b) Fighter aircraft will require the cable for departures on runway 8R and runway 22L.

2. Aerazur brake system/barrier installed on runway 8L for departure end engagement only.

h. Airport lighting. During the period of sunset to sunrise, the associated lighting for the primary arrival and departure runways should be set on step one unless a higher step is operationally necessary. See Appendix 43 for procedures.

8-3 ENSURE SEPARATION.

a. LC is responsible for initial departure separation of successive departures. All eastbound propeller driven aircraft are assigned a 120 degree heading during runway 4/8 configuration and a 180 degree heading during runway 22/26 configuration. No further coordination is required with departure radar provided:

1. All conflicts have been resolved with inbound IFR/VFR traffic.

2. All conflicts have been resolved with outbound IFR/VFR traffic.

3. LC must be responsible for notifying the appropriate departure controller when a heading other than that specified is assigned.

4. Aircraft issued 120 degree heading are on or south of the shoreline.

NOTE – *IAW FAA JO 7110.65, para 5-6-3, Vectors Below Minimum Altitude, the altitudes for prominent obstacles can now be displayed by using the map button "4/8 OBSTCLS."*

b. Restrictions.

1. If an aircraft is holding short of a runway and cleared for takeoff, the takeoff roll commences when the aircraft is on the runway, its longitudinal axis is aligned with the runway centerline and forward motion begins.

2. If an aircraft is holding in position and is issued a takeoff clearance, the takeoff roll commences once his tires begin its forward roll.

3. Prior to an aircraft departing runway 22L/22R, ensure that an arriving aircraft on runway 26L has completed landing roll and is clear of the projected departure path. Do not allow departures from runway 22L or 22R to over-fly aircraft on runway 26L or taxiway RM. Do not allow aircraft to depart runway 22L/22R with aircraft ADG V and above within the projected departure path on taxiway RA. Ensure that arriving traffic on runway 26L do not cross landing threshold until departure on runway 22L/22R is south of runway 26L, is turning to avoid a conflict, or in the case of a West Loch Departure, has been instructed to remain north of runway 26L.

4. Do not allow aircraft on final to runway 4L or 4R, or Waterway 4/8, to overfly aircraft taxiing on taxiway RA or RT.

5. Portions of the waterways are not visible from the Tower. Waterways are located in a non-movement area.

6. Prior to an aircraft departing runway 22L/R, ensure that the following occur for aircraft arriving on runway 26L:

(a) Large twin turbo prop and turbojet aircraft (excluding fighters) arriving on runway 26L are ABEAM or EAST of the ADW LINE depicted on the tower radar display when the 22L/R departure begins take-off roll.

1 If the runway 22L/R departure has NOT begun take-off roll when the runway 26L arrival is ABEAM the ADW LINE, the take-off clearance MUST be cancelled.

2 For all runway 26L arrival aircraft OTHER THAN large twin turbo prop and jets refer to subparagraph 6(c) below.

(b) Aircraft arriving on runway 26L have completed landing roll and are clear of the projected runway 22L/R departure path.

(c) Ensure that arrivals to runway 26L do not cross the landing threshold until the runway 22L/R departure is SOUTH of runway 26L, or is turning to avoid a conflict.

7. Adjust flight or ground operations, (takeoff or landing roll), as necessary to preclude aircraft operating on runway 4L/22R from operating abeam aircraft on runway 4R/22L, unless both aircraft are twin engine propeller driven or smaller.

8-4 CONTROL INSTRUCTIONS.

a. Taxi/Ground movement procedures.

1. The controller with arriving traffic to intersecting runways must have the pilot acknowledge runway exiting/hold short instruction, or observe the aircraft in a turn clearing the runway or observe the aircraft is clear of the landing runway/intersection prior to the second aircraft crossing the landing threshold of the intersecting runway.

b. Line Up and Wait (LUAW). See Appendix 44 for application of LUAW at the HCF.

c. General Runway Use Program.

1. All heavy and/or large four-engine turbojet aircraft must depart runway 8R, 22L, 26R or 26L, except heavy air carrier aircraft bound for an outer island may depart runway 8L.

2. Do not authorize turbojet and/or large four-engine propeller driven aircraft to depart runway 4L/4R except during daylight hours. Turbojet aircraft with gross take-off weight of less than 22,000 pounds may depart on runway 4R. Instruct aircraft to execute a right turn to their assigned departure heading prior to runway 8L.

3. No straight out departures for large turbojet aircraft are authorized for runway 26L/26R except for Air Defense scrambles.

4. When departing in a Runway 4/8 configuration, all large twin turbo prop aircraft and larger must depart Runway 8R during the hours of 0900-1500HST.

5. Arrivals, Runway 4/8 Configuration.

(a) During the hours of 0700-1900 HST, turbojet aircraft should be sequenced to runway 8L except for controller/pilot operational necessity/closures/equipment outages. Arrivals must be 5 miles in trail at the threshold inclusive of the Channel approach.

(b) During the hours of 1900-0700 HST, turbojet aircraft should be sequenced to runway 4R except for operational necessity/closures/equipment outages. Requests for runway 8L will be advised that the runway is noise sensitive and approvals for runway 8L will be logged on FAA Form 7230-4.

(c) During the hours 0630-2200 HST, large aircraft may be sequenced to runway 8L with a base-leg at the Pearl Harbor Channel.

(d) Overhead approaches to runway 4R must have prior approval by Tower.

6. Arrivals, Runway 22/26 Configuration. All IFR traffic is sequenced to runway 26L excluding aircraft on the Charted Visual approach to RWY 22L. If an operational necessity exists (e.g. to accommodate a runway 26L or 22L departure, coordination may be completed to change a large aircraft to runway 26R.

7. Approach must sequence all VFR arrival routes (e.g. North, freeway, West, or Tripler) with straight in traffic to Runway 4R.

8. Approach must not sequence arrivals to runway 4L. Tower will retain the option to change an aircraft to runway 4L.

9. IFR aircraft are not authorized on VFR arrival routes (Freeway, North, West or Tripler). Aircraft must be advised to expect vectors off shore to runway 4R.

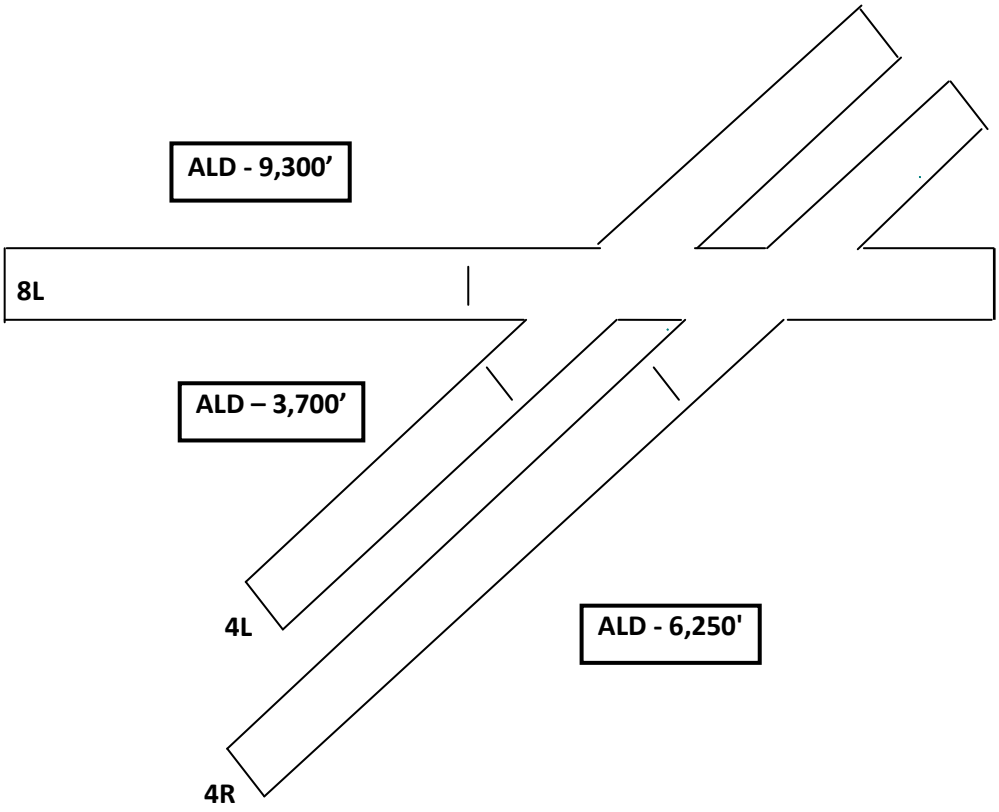
d. Land and Hold Short operations (LAHSO) must be in compliance with National directives and appropriate LOAs. The Available Landing Distance (ALD) (See FIG 8-4-1) for Honolulu runways are: 4L – 3,700’; 4R – 6,250’; 8L – 9,300’. (See TBL 8-4-1 for Runway Remaining Distances) For air carrier operations, only arrival versus arrival operations are authorized.

e. Go Around procedure. Respond to a pilot initiating a go-around due to an aircraft/vehicle or pedestrian on the runway with a control instruction, e.g. “Go around” or “Cancel landing clearance”.

NOTE *- “Roger” or “Approved” is NOT a control instruction.*

FIG 8-4-1

AVAILABLE LANDING DISTANCE



TBL 8-4-1

RUNWAY REMAINING CHART

Runway 8L	12300	Runway 26R	Runway 4R	9,000	Runway 22L
7,400	L	4,850	6,900	F	2,050
6,850	G	5,400	5,500	D	3,500
5,150	D	7,100	4,000	E	4,950
4,100	H	8,150	3,250	K	5,700
3,650	E	8,650	2,750	P	6,200
2,100	K	10,150	2,350	8L	6,600
1,350	4R	10,900			
	C	11,700			

Runway 8R	12,000	Runway 26L	Runway 4L	6,952	Runway 22R
11,500	RC	450	5,350	D	1,550
8,050	RM	3,900	3,900	E	3,000
3,900	RG	8,050	2,700	K	4,200
450	RH	11,500			

f. Touch-and-Go (closed pattern) operations.

1. Helicopters closed pattern operations or autorotation training on Taxiway RA are not authorized.

2. Heavy jet touch-and-go operations are authorized on runway 8R only, traffic permitting and after proper coordination.

3. Large turbojet aircraft may conduct low approaches to runway 4R to execute a right turn to their assigned heading prior to runway 8L. Touch-and-go operations are not authorized on runway 4R for large turbojet aircraft.

4. Large propeller driven aircraft may conduct touch-and-go operations on runway 4R to execute a right turn to their assigned heading prior to runway 8L.

g. Overhead approaches are authorized for runway 8L (left break), runway 26L (left break) and runway 4R (right break).

h. Waterway operations. The following conditions must be met prior to using waterways:

1. Weather must be VFR.

2. Operations must be conducted during daylight hours only.

3. Operations must be confined to landing/departures only.

4. Arrival/departure routes must adhere to current arrival/departure procedures.

i. Weather System Processor (WSP) is designed to detect wind shear and microburst activity.

1. If a wind shear or microburst alert is received for the runway in use, issue the alert information as it is displayed on the ribbon display.

2. When ASOS and WSP are available the WSP (wind) should be used to determine wind factor for the purposes of LAHSO.

j. LC1 is responsible for visibility observations as required. FD will disseminate the observation.

8-5 ACTIVE AIR DEFENSE SCRAMBLES, PRACTICE LAUNCH, KOA SHIELD, SENTRY SHIELD and FLUSH OPERATION.

a. Air Defense Active Scramble information is received via the direct line from Baldwin.

1. Record identification received on FAA Form 7230-8.

(a) ACID.

(b) Number in flight.

(c) Cardinal direction or airway to join.

(d) Altitude and climb schedule.

(e) Controlling facility.

2. Information is forwarded immediately to LC who will issue the clearance.

3. Advise "W" as soon as possible.

4. Notify the OSIC and the appropriate HCF Center sector that will be receiving the scramble aircraft and forward the information listed in paragraph 8-5a. (1).

5. Upon completion of the mission, expect the aircraft to de-arm either at the base of the tower on taxiway B, east of taxiway G (runway 4/8), or on taxiway RB facing south when taxiway M is not available.

b. Baldwin must advise Honolulu Tower of actual Flush operations.

1. Flush aircraft must identify the activity and request clearance via a published SID or radar vector and specify the controlling agency.

2. Assign 16,000' to flush aircraft.

3. Advise "W" as soon as possible.

c Practice Launch, Koa/Sentry Shield missions are scheduled exercises by the HIANG. A copy of each exercise will be provided in advance for reference.

1. All departures are limited to the MKK, KEOLA, PALAY or OPIHI SID at 16,000'.

2. Upon completion of the mission, expect the aircraft to be de-armed (see paragraph 8-5a (5) above).

8-6 HELICOPTER OPERATIONS.

a. Runway 4/8 configuration.

1. Departures must be switched to the appropriate departure controller. Reminder: SFAR 71 requires air tour operators (including helicopters) to operate at or above 1500' AGL except during takeoff, landing or operating in compliance with ATC.

2. Shoreline arrivals must be approved for Lifeguard, Police Department, Fire Department, Coast Guard and Search and Rescue helicopters to accomplish mission requirements.

b. Runway 22/26 configuration.

1. Helicopters must be cleared via West Loch or Kona Departure. Kona Departure: After departure, remain over the runway until departure end, then turn left heading 180, climb and maintain 1500 feet. Expect radar vectors to avoid traffic on Runway 26L LDA final approach course. Helicopters depart the south ramp and proceed direct to HNL VORTAC; do not overfly any runways. From HNL VORTAC, fly heading 180, climb and maintain 1000 feet.

2. Lifeguard, Police Department, Fire Department, Coast Guard and Search and Rescue helicopter operations must be cleared to depart or into Class B airspace as requested to accomplish mission requirements.

3. Tower may approve Shoreline arrivals, traffic permitting.

4. Departures must be switched to the appropriate departure controller. (See paragraph 8-6 a (1) above).

c. Arrivals.

1. Helicopters inbound from the west/interchange must be cleared by Approach to hold at Ford Island.

2. Helicopters from the east must be cleared by Approach to Punchbowl.

3. Tower assumes control of the helicopters at Ford Island, Punchbowl, or after frequency change from Approach for sequence to the South Ramp. If holding is required, advise the appropriate V/L radar controller.

d. Helicopters must be positively controlled to ensure that they are clear of/do not overfly any runway that has an aircraft that has been:

1. Cleared for takeoff, unless specific instructions are issued that will ensure that the helicopter will pass behind the aircraft operating on the runway, *or*

2. Cleared to land and is over or past the landing threshold, unless specific instructions are issued that will ensure that the helicopter will pass behind the aircraft operating on the runway. A helicopter may cross in front of an arrival aircraft that has reached taxi speed (has acknowledged runway exiting instructions or is observed turning off the arrival runway).

NOTE – *If an aircraft has been restricted to Land and Hold Short (LAHSO) of an intersecting runway, a helicopter may cross the runway beyond the LAHSO line.*

f. The Local Controller must issue restrictions to remain clear of any applicable runways when helicopters are maneuvering in a manner that may result in a runway being overflow.

EXMAPLE - *"Remain east of runway 4R and south of runway 8L for arriving/departing aircraft."*

8-7 OPPOSITE DIRECTION OPERATIONS (ODO). These procedures provide for positive control during ODO, and for the coordination in the use of defined minimum cutoff points identified by distances or fixes for same runway operations in the conduct of ODO at HCF IAW JO 7210.3, para. 2-1-30 and ATO-SG-14-09. See Appendix 45 for the specific responsibilities and procedures for utilizing ODO.

8-8 TRANSFER OF COMMUNICATIONS. Local Control must maintain communications with departing IFR/VFR aircraft until:

a. The aircraft is established on their initial departure heading or VFR route and conflicts between all arrival and departure aircraft have been resolved.

b. The data block has auto acquired and is correctly displaying the flight information.

NOTE *– For military fighter aircraft, the requirement remains that all conflicts must be resolved prior to clearing the aircraft for takeoff. There is no need to hold on to the aircraft on departure as they are switched prior to takeoff.*

8-9 COMMUNICATIONS EQUIPMENT.

a. LC1 frequency.

1. 118.1/257.8 frequencies are available through the RDVS and VSBP which bypasses the RDVS.

2. 128.65/323.05 may be used as a backup when the frequency is blocked. Advise Honolulu Approach and GC of frequency changes.

b. Broadcast any ATIS code changes on frequency.

c. Motorola PET 2000 UHF/VHF transceivers are located by LC1 with 10 preset frequencies.

8-10 TOWER RADAR DISPLAY.

a. Transfer of data and/or radar handoff between the Honolulu Tower and Approach, and Approach (data transfer only) and Tower, is automatically accomplished by the MEARTS program. This information is displayed on the TCW located at the LC console. An arrival to Honolulu will be displayed on the "T" position symbol.

b. Automatic acquisition. Departures will automatically acquire within 1 mile from the runway end. LC1 or LC2 will be responsible for ensuring that the departure track has acquired appropriately (i.e. to the appropriate departure control symbol with a full data block).

NOTE - *Although the aircraft may be changed to departure frequency immediately after departure, the responsibility for ensuring departure track has acquired correctly is still retained by LC1.*

c. Arrivals will automatically change to the "T" symbol when an aircraft inbound to Honolulu is below 4,800' and within 13 miles of the airport.

d. Verbally or manually handoff an aircraft that does not acquire or when advised the MEARTS data is unusable or unavailable. LC determines whether conditions are adequate for the use of MEARTS data received on the TCW display.

8-11 ALPHANUMERIC. Scratch pad data may be used for coordinating only between positions that have or will have control of the aircraft. The following abbreviations are authorized:

a. Local IFR and VFR:

ALA	ALANA.
ARZ	Proceeding to the Arizona Memorial.
CKH	Koko Head.
DN(runway)	Unable LAHSO
DTC	Down the Pearl Harbor Channel at or below 300'.
EMG	Emergency aircraft.
FRE	Freeway departure.
SHO	Shoreline departure.
PBO	Punchbowl Departure
RED	Redhill departure.
WST	West Loch departure
FWY	Freeway arrival assigned a left downwind to Runway 4L at 2,000' until descended by LC.
TRI	Tripler Arrival
HIK	Helicopter traffic inbound to Hickam.
HM	Handoff made.
IL4/8	ILS approach to runway 4R or 8L.
IP	Inbound passed.
JRF	Kalaeloa Airport.
KOA	Kona departure, VFR aircraft, destination Kona.
LAE	VFR, low approach, departs on the Freeway departure.
LAH	VFR, low approach, heading 155°, altitude 4,000', 118.3.
LAR	VFR, low approach, departs on the Redhill departure, small aircraft only.
LAS	VFR, low approach, departs on the Shoreline departure.
LIH	VFR aircraft, destination LIH.
LNY	VFR aircraft, destination LNY.
MAH	IFR missed approach, heading 155°, altitude 4,000', 118.3.
MAL	IFR missed approach, heading 120º/140°, altitude 5,000', 124.8.
N (runway)	Unable LAHSO
NDB	NDB approach.
NPS	Ford Island ALF.
OGG	VFR aircraft, destination Maui.
OVD	Overhead approach

QNS	Queens Hospital.
(runway #)	Assigned runway.
SL(#)	Assigned sealane.
SR	South ramp.
TOV	Tactical overhead.
TPR	Tripler Army Hospital.
UTC	Up the Pearl Harbor Channel at or below 300'.
VDM	VOR/DME approach.
VOR	VOR approach.
VR4	VOR runway 4R approach.
MKA	Honolulu IFR departure landing Molokai
NGF	Kaneohe MCBH (Marine Corp Base Hawaii)
HHI	Wheeler AAF
KUC	KUCHI
MIL	MILTI

b. HCF Center IFR:

APA	APACK.
CLU	CLUTS.
EBB	EBBER.
FIT	FITES.
MKK	MOLOKAI.
PUL	PULPS.
ZIG	ZIGIE.
KEA	KEAHI.
KUP	KEAHI, UPOLU.
PLN	PALAY, LANAI.
KAT	KATHS.
LIH	LIHUE.
LIL	LILIA.
NON	NONNI.
PUP	PUPPI.
SOK	SOUTH KAUAI.
CAR	CARRP.
CHO	CHOKO.
DOV	DOVER.
KEO	KEOLA.
KUC	KUCHI.
PAR	JRF departure, LANAI (landing Hilo, via PARIS).
GEC	GECKO.
PAL	PALAY.

8-12 OPERATION WHEN LOCAL CONTROL 1 (LC1) AND LOCAL CONTROL 2(LC2) ARE DECOMBINED

a. REQUIREMENTS FOR LC1 AND LC2 TO DECOMBINE:

1. The following positions must be staffed for LC1 and LC2 to de-combine:

(a) LC1

(b) LA

(c) GC

(d) CD/FD

(e) FLM/CIC

2. The MEARTS/TCW at LC1, LC2, and LA must be functional

3. RWY 8R/26L must be open.

4. When positions are de-combined, LC1 must delegate release authority to LC2 via the RDVS using the RB button during the de-combination briefing. When LC2 is combined to LC1, LC2 will delegate release authority back to LC1.

5. All intra-facility coordination for IFR release, runway crossing, or runway access must be conducted via the recorded landline communication.

6. All landing and departure clearances must be on the frequency of the controller who has responsibility for the landing or departing aircraft.

7. LC1 must quick look LC2 and LC2 must quick-look LC2

b. LC1 and LC2 must be de-combined between 0900 – 1500 HST. LC2 may be de-combined outside those hours at the discretion of the FLM/CIC as needed.

8-13 RUNWAYS 4/8 CONFIGURATION:

LC1 POSITION RESPONSIBILITIES WHEN LC1 AND LC2 ARE DECOMBINED:

a. Will have responsibility for operations on RWY 8L, 4L, and 4R

b. Handles all runway crossings

c. Manages ground traffic on taxiways at the approach end of RWY 8L

d. Manages ground traffic on taxiways between RWY 8L and 4R not including those Taxiways delegated to LC2

e. Shall have automatic release authority for aircraft departing on the Redhill, Freeway, and Punchbowl VFR departure routes. LC1/LA will issue a traffic advisory to LC2 for Punchbowl departures.

f. LC1/LA must request via a recorded RDVS landline from LC2 for all IFR aircraft departing RWY 8L, 4R/4L.

PHRASEOLOGY: LC2, LC1 APREQ IFR release on (ACID), (Type aircraft), (Initial departure heading), and (RWY departing).

EXAMPLE: LC1: *" LC2, LC1, APREQ IFR release on CPT8700, C208 heading 120, departing RWY 4L."*

RESPONSE FROM LC2: *"Released" or "Follow HAL218, B717 departing RWY 8R heading 140, released."*

g. When a HOLD FOR RELEASE is given to LC1 by LC2 for a departure, LC1 or LA must place the HOLD FOR RELEASE memory aide placard on the departure strip for which the release was requested.

h. Must provide a point-out to LC2 for aircraft flying an extended downwind to RWY 4R.

i. LC1 shall have approval/disapproval authority for fighter aircraft requesting the overhead approach to RWY 4R. Overhead approaches to RWY 4R must be APREQ's by Approach Control with LC1/LA. LC1/LA shall then advise LC2 of the arriving fighters.

k. LC1 is responsible for that area on taxiway RA between the runway 4R Approach hold lines. Departing aircraft from taxiway C on taxiway RA will be held short of the Runway 4R final approach and switched to LC1 frequency. LC1 will taxi aircraft in the Runway 4R final approach course on RA to avid overflight by aircraft under their control.

LC1/LA must issue traffic to LC2 on any Punchbowl VFR departure.

PHRASEOLOGY: *"Traffic, N9118Z, PA28, departing on the Punchbowl."*
LC2: *"Traffic observed."*

8-14 HELICOPTER OPERATIONS

a. LC1 is responsible for all helicopters departing the south ramp on the Red Hill or Freeway VFR departure routes. LC2 is responsible for helicopters departing on the Shoreline VFR departure Route.

b. When advised by LC2 of helicopters departing in the Shoreline VFR departure route, LC1 must exchange traffic with LC2 on helicopters departing on the Freeway or Redhill VFR departures and any helicopters arriving the south ramp from the North, West, or east VFR arrival routes.

8-15 WATERWAY OPERATIONS.

a. LC1 shall have responsibility for all Waterway arrivals from the North, East, or West for landing waterways 4/8.

b. LC2 shall have responsibility for Sea Planes departing on the Shoreline VFR departure route.

c. Exchange traffic with LC2 on any arriving Seaplanes to Waterways 4/8 when LC2 has advised LC1 of any waterway departures on the Shoreline VFR departure route.

8-16 RWY 22/26 CONFIGURATION LC1 and LC2 DECOMBINED:

a. LC1 is responsible for operations on Runway 26R, 22R, and 22L.

b. LC1 is responsible for those taxiways between runways 26R and 22L east of TWY S and TWY C from RWY 22R to RWY 26R.

c. LC1 is responsible for all helicopter operations to and from the South ramp with the exception of off shore arrivals from the South. Helicopters arriving on the south ramp via coordinated off-shore arrival from the South must be coordinated between LC1 and LC2. LC1 and LC2 must exchange traffic on other helicopters arriving or departing the south ramp until LC2 advises that the off-shore arrival helicopter is landing assured.

d. LC1 is responsible for all waterway arrivals and departures.

e. LC1 shall have release authority for all aircraft departures except for those on runway 26L. When IFR release is requested by LC2 for a runway 26L departure, LC2 must request release with LC1/LA via recorded landline

f. Aircraft arriving to runway 26L may only be changed to runway 25R if an operational advantage exists.

g. LC1 must meet all ADW and CRO requirements when arriving or departing runway 22L.

8-17 LC2 RESPONSIBILITES RUNWAYS 4/8 CONFIGURATION

a. After verbal coordination with LC1 during a recorded position de-combination briefing, LC2 will have release authority for all IFR departures with reference to the runway 4R straight-in arrivals.

b. LC2 is responsible for Runway 8R, Taxiway RB south of Taxiway B, Taxiway RA west of the 4R final approach course hold short line and all taxiways between RA and Runway 8R exclusive of that portion of Taxiway RA between the Runway 4R approach hold lines which is designated to LC1.

c. Advise LC1 of any helicopter traffic departing on the Punchbowl VFR departure route. All helicopters on the Shoreline departures from the south ramp will be under the control on LC2. LC2 must exchange traffic on any helicopter arrivals from the North, West, or East that are under LC1 control.

d. LC2 approves IFR releases of all departures off runway 4L/4R and 8L with LC1/LA

PHRASEOLOGY: LC2, LC1 APREQ IFR release on (ACID), (Type aircraft), (Initial departure heading), and (RWY departing).

EXAMPLE: LC1: "*LC2, LC1, APREQ IFR release on CPT8700, C208 heading 120, departing RWY 4L*."

RESPONSE FROM LC2: "Released" or "Follow HAL218, B717 departing RWY 8R heading 140, released." Or "*Hold for release.*"

e. LC2 must use memory aides when approving an IFR release to LC1/LA

f. LC2 is responsible for separation, avoid overflight, and wake turbulence application for all runway 8R departures with reference to the Runway 4R arrivals.

g. When traffic has been issues to LC2 by LC1/LA on a Punchbowl departure, LC2 is responsible for separation with reference to Runway 8R departures. LC2 must account for type aircraft, performance characteristics, and location of Punchbowl departure aircraft when departing traffic off Runway 8R once TRAFFIC has been issued.

h. LC2 is designated control of the waterways for aircraft departing on the Shoreline departure. Unless advised by LC1/LA as a Waterway arrival, LC2 may depart the waterways without coordination. If a Sea Plane is requesting a departure other than the Shoreline Departure, LC2 must get approval from LC1 to enter LC1's area of responsibility.

i. Coordinate immediately for with LC1/LA to ensure separation of any go-around off Runway 8L or 4R/4L with reference to Runway 8R departures. LA will coordinate with TRACON for both LC1 and LC2 on departure headings and altitudes.

8-18 LC2 RESPONSIBILITIES DURING RUNWAY 22/26 CONFIGURATION:

a. LC2 is responsible for Runway 26L, Taxiway RA and those taxiways between Runway 26L and Taxiway RA, Taxiways RB, T, and A south of Runway 26R, and Taxiway B west of Taxiway D (see Appendix 35, 36).

b. LC2 must request a release from LC1/LA for all departures that require a Runway 26L departure. Memory aides must be used when a HOLD FOR RELEASE is issued.

PHRASEOLOGY: "Request release on (ACID), (Type aircraft), (Initial departure heading), and (RWY departing).

EXAMPLE: LC1: "*Request release on PAL100, A340, heading 220, departing RWY 26L*."

RESPONSE FROM LC1: *"Released" or "Follow HAL218, B717 departing RWY 26R heading 200, released."* or *"Hold for Release."*

c. Aircraft arriving to runway 26L may only be changed to runway 26R if an operational advantage exists.

d. All landing clearances must be done on the frequency for the position that has responsibility for the landing runway.

e. All ADG IV aircraft and below landing Runway 26R and taxing to the south ramp are authorized to taxi through the departure corridor for Runway 22l/22R without restriction. ADG V and VI aircraft must be held short of the departure corridor for Runway 22R/22L until the departure is clear of Taxiway RA. LC2 will hold ADG V and VI aircraft short of the departure corridor and coordinate with LC1/LA to transition the corridor.

f. LC2 will hold all aircraft eastbound on Taxiway RA short of Taxiway RT and advise the aircraft to monitor GC.

g. After proper coordination, LC2 will be responsible for all helicopters arriving offshore from the southeast. LC1 and LC2 must exchange traffic on other helicopter traffic under LC1's control until the offshore helicopter is landing assured. LC2 must advise LC1/LA when traffic is landing assured.

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CHAPTER 9 – LOCAL ASSIST (LA)

9-1 RESPONSIBILITIES.

a. Assist Local Control (LC) with ensuring separation. Alert LC of any potential conflicts.

b. Operate interphones.

c. Maintain awareness of tower cab activities.

d. Utilize alphanumeric.

e. Utilize tower radar display(s).

f. Assist Local Control (LC) by accepting/initiating coordination for the continued smooth operation of the tower cab and ensure that LC is made immediately aware of any actions taken.

g. Manage flight plan information.

h. Ensure computer entries are completed for instructions issued or received and enter instructions issued or received by LC.

i. Ensure strip marking is completed for instructions issued or received and enter instructions issued or received by LC.

j. Ensure strips are written for go-arounds and practice approaches.

k. Ensure validity of flight progress strips before aircraft departs.

9-2 AREA OF RESPONSIBILITY.

a. Assist LC in maintaining the position and identification of traffic.

b. Assist LC by ensuring departure data block has auto-acquired and is correctly displaying the flight information.

c. Assist LC in tracking vehicular movements on runways and taxiways with the use of the “VEHICLE ON RUNWAY” holder as a memory aid.

d. Advise LC of actions taken by other controllers which affect his/her traffic.

e. Obtain approval from LC for runway crossings.

f. Recommend to the Tower FLM/CIC revised traffic flow based on unusual circumstances. Notify supervisor when flow control is implemented and/or terminated.

g. Ensure LC is aware of and complies with departure release times.

h. Responsible for all field and navigational lighting.

i. Keep Tower FLM, LC and GC informed of aircraft emergency information forwarded from TRACON. Relay status of emergency.

j. At the end of the hour, as needed, review the IFR Flight Progress Strips and advise the Tower FLM of delays.

k. When the Local Assist position is not staffed, it will be combined with LC.

9-3 TRACON COORDINATION.

a. Automatic acquisition. Assist LC in ensuring the departure track has acquired appropriately. Departures will automatically acquire within 1 mile from the runway end.

1. LC is responsible for ensuring the departure track has correctly acquired.

2. Verbally or manually hand-off an aircraft that does not acquire or when advised that the MEARTS data is unusable or unavailable.

b. Verify the information contained in the departure data block is accurate with respect to call-sign, assigned altitude, scratch pad data and route of flight; coordinate with the appropriate departure controller any aircraft tagged incorrectly.

c. As needed, advise the appropriate departure controller when visual separation is being applied between successive departures.

d. Coordinate with Sector V requests for departure release on aircraft unable to comply with the CKH R240 crossing restriction.

e. Formation flights.

1. When appropriate, request release and/or coordinate non-standard operation with TRACON. Include call-sign and number in flight.

2. Coordinate position of last element in flight when airborne with TRACON. Not necessary if last element is squawking appropriate non-discreet code.

f. Coordinate with the appropriate departure controller any non-standard departure headings.

g. Coordinate with Sector W prior to implementing runway changes.

h. During 22/26, coordinate with V to sequence all east and west arrivals to runway 22R if needed.

9-4 UTILIZE ALPHANUMERICS. During runway changes and flow control changes that are initiated by TRACON or HCF Center sectors, assist LC by amending MEARTS data entries (i.e. fix pair entries, change of clearance limits, etc.) for those aircraft that are on LC's frequency, or delegate this responsibility to CD.

9-5 UTILIZE TOWER RADAR DISPLAYS. Use the TCW and the LA position and the information provided through MEARTS to:

a. Accept and/or initiate hand-offs to the appropriate departure radar controller, as needed.

b. Accept and/or initiate point-outs with TRACON.

9-6 OFDPS ENTRIES. When necessary, forward departure messages for IFR en route departures via the FDIO keyboard. Ensure Coordinated Universal Time (UTC) is utilized on departure messages, as needed.

9-7 STRIP MARKING.

a. Thermal flight strip.

<table>
<tr>
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14a</td>
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23

24 <s>26</s> 26</td>
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28

29 30</td>
</tr>
</table>

Box 3	When ACID is underlined in **red**, it requires a departure release from "V".
Box 11	Indicates departure release time. *NOTE: Information is written and underscored in* **RED**.
Box 26	The ATIS code the pilot acknowledges receipt of.
Box 28	Letter "R" to indicate the aircraft has been released for departure by the appropriate radar controller.
Box 29	
Box 30	When FDIO/OFDPS is OTS, write a check mark to indicate the departure time has been forwarded to the appropriate sector for oceanic en route departures.

b. FAA Form 7230-8. (IFR/VFR)

1	**5**	**8**	**9**	**10**	**11**	**12**
3	**6**			**13**	**14**	**15**
4	**7**	**8A**	**9A**	**16**	**17**	**18**

Box 1	When ACID is underscored in **red**, it requires a departure release from "V".
Box 4	Indicates departure release time. NOTE: Information is written and underscored in **red**.
Box 9A	The ATIS code the pilot acknowledges receipt of.
Box 10 -18	Letter "R" to indicate the aircraft has been released for departure by the appropriate departure radar controller. Write a "Z" to indicate aircraft is IFR.
Box 16	Actual departure times; use 2 digits UTC. (not required for VFR aircraft) *NOTE: Use four digits if in the next hour.*

9-8 LA RESPONSIBILITIES WHEN LC1 AND LC2 ARE DECOMBINED.

a. Initiates and accepts coordination between LC1 and LC2 as well as coordination from the TRACON to LC1 or LC2

b. Landline coordination between LA and LC2 for IFR departure releases using specific phraseology:

PHRASEOLOGY: "Request release, call sign, type aircraft, departure runway, initial departure heading"

Ex. (request release, CPT8687, C208. Departing runway 4L, heading 120."

c. Coordination regarding helicopter departures and arrivals to south ramp need only be verbally communicated.

d. Maintains a scratch pad for arrivals to 26L when ASDE-X is not available

e. Coordinates with LC2 and the TRACON for coordinated headings and altitudes in the event of a go-around on any runway.

CHAPTER 10 – TERMINAL RADAR TEAM

10-1 RESPONSIBILITIES.

a. Ensure separation.

b. Initiate control instructions.

c. Monitor and operate radios.

d. Accept and initiate automated handoffs.

e. Assist other members of the radar team when needed.

f. Scan radar display and correlate with flight progress strip information.

g. Ensure computer entries are completed on instructions or clearances issued or received.

h. Ensure strip marking is complete.

i. Adjust equipment at radar position to be usable by all members of the team.

10-2 RADAR EQUIPMENT. (See Appendix 46, Honolulu Video Map)

a. Use the ASR 9 as the primary radar system. Use the ARSR-4 in single-sensor mode as the backup radar system (<multi-function> W + QKA). Do NOT use mosaic radar. (See Appendix 47)

1. Use the "MVA ASR 9" minimum vectoring altitude chart (MVAC) when the ASR 9 radar is being used. (See Appendix 47)

2. Use the "MVA KAALA" MVAC when the ARSR-4 (single-sensor mode) is being used. (See Appendix 48)

b. Filter limits. Set the upper altitude filter limit to no lower than 17,000'.

c. Beacon code assignments.

1. The following beacon codes are used within the Honolulu TAB:

02XX	Class B operations (VFR).
04XX	Kaneohe IFR use codes.
12XX	VFR (non-Class B).
13XX	IFR EN ROUTE overflights.
14XX	Local IFR (+) using the MEARTS

15XX	All terminal local area general use IFR flights.
16XX	Local VFR (/) using the MEARTS
17XX	EN ROUTE VFR aircraft.
41XX	HIANG interceptors.
42XX	HIANG target aircraft.
XXXX	IFR assigned by Honolulu EN ROUTE.

2. Codes 12XX and 41XX must be selected in the MEARTS SDA; other codes at controller's option.

d. Ensure the altimeter setting in the MEARTS is accurate.

10-3 COMMUNICATION. HCF will utilize the Rapid Deployment Voice Switch (RDVS).

a. Touch Entry Devices (TED) s are located at each position for all radio and interphone functions.

b. The RDVS computer (CCT) is located at the SOC console and regulates the frequency assignments of each position.

c. Guard frequency 121.5/243.0 (receiver only) on RDVS loudspeaker must be selected at the L Departure Radar position at all times.

d. Assigned frequencies are as follows:

Facility/Position	Frequency (MHz)
L	124.8/317.6
V	119.1/239.05
H	118.3/269.0
W – (Back-Up)	120.9/338.2
Sector 2	126.5/269.4
Sector 3	124.1/317.5
Sector 4	119.3/307.1
JRF TWR	132.6/340.2
HHI	126.3/241.0
NGF APPROACH	125.0/263.15
Hula Dancer	127.0/266.4
Spare	135.4/327.1

e. Voice Switch Bypass jacks are available at the H and V positions.

POSITION	FREQUENCY
H	118.3 / 269.0
V	119.1 / 239.05

f. Approach Control shall instruct arriving aircraft to contact the appropriate Local Control position.

1. Runway 4/8 configuration when LC2 is open:

(a) Runway 8L, 4L and 4R arrivals shall be switched to LC1 (118.1).

(b) Runway 8R arrivals shall be switched to LC2 (123.9)

2. Runway 22/26 configuration when LC2 is open

(a) Runway 26R, 22R and 22L arrivals shall be switched to LC1 (118.1).

(b) Runway 26L arrivals shall be switched to LC2 (123.9)

10-4 ALPHANUMERICS.

a. Scratch pad data must be used for coordination between positions that have or will have control of the aircraft. The following are authorized abbreviations for coordination between Honolulu Tower and Approach:

8LX	Base leg over or west of JRF
ALA	ALANA.
APA	APACK.
ARZ	Arizona Memorial.
CAR	CARRP.
CHO	CHOKO.
CKH	Koko Head.
CLU	CLUTS.
DH	Diamond Head
DIR	Direct
DOV	DOVRR.
DTC	Down the Pearl Harbor Channel at or below 300'.
EBB	EBBER.
EMG	Emergency aircraft.
FIT	FITES.
FRE	FREEWAY DEPARTURE.
FW	Helicopter remaining over water at or below 300'.
FWY	Freeway arrival assigned a left downwind to runway 4L at 2,000′ until descended by LC.
GEC	GECKO.
GP	GPS Approach. Include Alphabet or runway to avoid confusion (e.g. GPA, GP21).
HHI	WHEELER.
HIK	Helicopter traffic inbounds to Hickam at or below 300'.
HM	Handoff made.
IL4/IL8	ILS approach to runway 4R or 8L.
INTR	Interchange
IP	Inbound passed.
JRF	KALAELOA Airport.
KAT	KATHS.
KEA	KEAHI.
KEO	KEOLA.
KOA	Kona departure. VFR aircraft, destination Kona.
KUC	KUCHI.
KUP	KEAHI, UPOLU.
LAH	VFR low approach, heading 155°, altitude 4,000', 118.3.
LAR	VFR low approach, depart on Redhill Departure.
LAE	VFR low approach, depart on Freeway Departure.
LAS	VFR low approach, depart on Shoreline Departure.
LIH	VFR aircraft, destination LIH: KEOLA DEPARTURE LIHUE TRANSITION.
LIL	LILIA.

LNY	VFR aircraft destination Lanai : PALAY DEPARTURE LANAI TRANSITION.
MAL	IFR missed approach, heading 120º/140° (assign based on aircraft type), altitude 5,000', cross CKH R240 at or above 2,500', and 124.8.
MAH	IFR missed approach, heading 155°, altitude 4,000', 118.3. (CKH R240 crossing rest).
MAV	IFR missed approach, heading 155º, altitude 4,000. 119.1
MIL	MILTI.
MKA	Final altitude 5,000' (runway4/8) or 7,000' (runway 22/26), landing Molokai.
MKK	MOLOKAI.
N (runway)	Unable LAHSO.
NDB	NDB Approach.
NGF	KANEOHE MCBH (Marine Corp Base Hawaii).
NON	NONNI.
NPS	Ford Island ALF.
OGG	VFR aircraft, destination Maui.
OVD	Overhead approach.
OVR	Overflight
PAL	PALAY.
PAR	JRF departure, LANAI (landing Hilo, via PARIS).
PB	Punch Bowl
PLN	PALAY, LANAI.
PUL	PULPS.
PUP	PUPPI.
PBO	Punchbowl Departure
QNS	Queens's hospital.
RED	REDHILL.
RN	RNAV Approach. Include runway to avoid confusion (e.g. RN21, RN8L).
(runway#)	Assigned runway.
SHO	SHORELINE.
SOK	SOUTH KAUAI.
SR	South ramp.
TOV	Tactical overhead.
TFC	Traffic watch, northbound and southwest-bound along the H-1 freeway.
TPR	Tripler Army Hospital.
UTC	Up the Pearl Harbor Channel, at or below 300'.
TRI	Tripler Arrival
VDM	VOR/DME APPROACH.
VR4	VOR 4R APPROACH.
VOR	Honolulu VOR (holding).
W (4, 8 or 22)	Assigned Waterway
WST	West Loch Departure.
ZIG	ZIGIE.

NOTE: *Other scratch pad coordination is as stated in paragraph 3-2c.*

b. Departures will auto-acquire to the appropriate departure controller based on MEARTS/OFDPS fix pair entries. The following fix pairs may be used to enter clearance requests to fixes, airports, a scope or a position:

HA	ALANA.
HC	CKH.
HB	Punchbowl Departure
HE	Freeway Departure.
HG	NGF.

HH	Honolulu Airport.
HI	IL8.
HK	Kona Departure.
HM	MILTI
HN	Redhill Departure.
HS	Shoreline Departure.
HT	West Loch Departure.
HU	KUCHI
HV	VDM.
HW	HHI.
HX	JRF.
HZ	HAULI
ZI	IL4.
ZV	VR4

c. Distance Measuring Device Patch. Display Utility, SLEW (middle button on mouse), SLEW (middle button on mouse). Bearing, time and range from first slew to second will be displayed. This function assists in determining radial/distance from the closest NAVAID.

d. LAT/LONG Coordinate Patch. Display Utility, L, SLEW (middle button on mouse). This function provides coordinates (useful for Search and Rescue or aircraft's last known position)

10-5 STRIP MARKING.

a. Strip marking must be completed in accordance with National and Facility directives.

b. VFR arrivals are recorded on half strips. The minimum information required on VFR arrival strips must be aircraft identification; the last 3-digits are sufficient unless there are similar call signs at the HNL airport. The letter "H" may be substituted for "N" to designate civil helicopter. Local use designators may be used in accordance with Appendix 34. ~~V~~-> must be used to indicate a VFR overflight.

c. Local IFR arrivals are recorded on full size thermal flight progress strips. The minimum information required on local IFR strips must be aircraft identification and route or requested operation. "OVR" must be used to indicate IFR overflight.

d. Thermal flight progress strip.

1	**2**	**11**	**15**	**16**	**20**	**21**	**25**	**27**	
3								**28**	
4		**12**				**22**			
5	**8**	**13**				**23**			
6	**9**	**14**	**17**	**18**					
7	**10**	**14a**	**19**			**24**	**26**	**29**	**30**

Sample local IFR strip:

N199Q					**ALA** **Request**	

Sample VFR arrival strip:

N146

10-6 PREDETERMINED DEPARTURE HEADINGS.

a. Predetermined departure headings must be used for departures from Honolulu that are confined within the lateral limits of:

1. Area L – RWY 4/8 configuration

2. Area F – RWY 22/26 configuration

b. Runway 4/8 configuration. LC1/LC2 will ensure that the eastbound IFR departures enter the departure corridor heading 120° or 140°, and westbound IFR departures heading 155°.

c. Runway 22/26 configuration. LC1/LC2 will ensure that the eastbound IFR departures enter the departure corridor heading 180˚ or 200˚, and westbound departures heading 220˚

10-7 PREARRANGED COORDINATION (P-ACP). Prearranged coordination procedures have been established where one controller allows another aircraft to penetrate or transit another controller's airspace in a manner that assures standard separation without individual coordination for each aircraft as prescribed in FAA JO 7210.3, para. 3-6-7, Prearranged Coordination.

a. Prearranged coordination procedures have been established between H and L to enable H to penetrate L's airspace (Area F) with departing aircraft without affecting a point-out, provided:

1. Runways 4/8 are in use.

2. ASR-9/ARSR-4 is operational, both primary & secondary.

3. H quick-looks L at all times.

4. L quick-looks H at all times.

5. The full data blocks must be displayed at all times. A minimum of position symbol, mode C readout and Heavy Jet /B757 information is required.

6. When H is penetrating L's airspace, L is not authorized to penetrate H's airspace simultaneously.

b. Prearranged coordination procedures have been established between L and H to enable L to penetrate H's airspace (Area F) with departing aircraft, without affecting a point-out, provided:

1. Runways 22/26 are in use.

2. ASR-9/ARSR-4 is operational, both primary & secondary.

3. L quick-looks H at all times.

4. H quick-looks L at all times.

5. The full data block must be displayed at all times.

6. When L is penetrating H's airspace, H is not authorized to penetrate L's airspace simultaneously.

c. Coordination for arrivals and departures during runway 22/26 configuration are as follows: The boundary between airspace sectors B and C between Diamond Head and the airport is the south shoreline of the island of Oahu. To eliminate excessive coordination required by the 1 ½ miles required from another sector, the following coordination has been established:

1. V radar must ensure aircraft remain at least 1 ½ miles north of the LDA final approach course until entering the airport surface area, airspace sector M.

2. H radar must ensure aircraft remain on or south of the LDA final approach course until entering the airport surface area, airspace sector L. W must point out all aircraft on the LDA to V radar.

d. Prearranged coordination is not available when:

1. Either primary or secondary radar is OTS.

2. MEARTS is OTS and operating in RBDER.

3. The aircraft is non-transponder equipped.

NOTE - *When operating under other than prearranged coordination procedures, H/L must point-out all departures that will penetrate L/H's airspace per JO 7110.65.*

e. Automated Information Transfer (AIT) may be used between sectors as follows as outlined in Appendix 24.

1. The first sector initiates a handoff to an intermediate sector.

2. At the intermediate sector's discretion, they may accept the handoff and then immediately initiate a handoff to a third sector. They are indicating that they are approving a point-out by doing this. This is optional if the intermediate sector opts to work the aircraft, they should NOT initiate a handoff to the third sector until after they are in communications with the aircraft.

3. Upon the completion of the handoff to the third sector, the first sector may switch the aircraft directly to the third sector. This is optional – if the first sector does not wish to wait for the third sector to accept the handoff, they may switch the aircraft to the intermediate sector.

NOTE - *The third sector will have control of the aircraft from BOTH sectors as outlined in the Transfer of Control sections in this document.*

10-8 NOISE ABATEMENT.

a. All hours, the following will apply.

1. Large/heavy aircraft arrivals from the east/northeast must not be descended below 8,000’ over the island of Oahu.

2. Large/heavy aircraft arrivals from the west/northwest must not be vectored north of the south shoreline of Oahu for a right base leg to runway 22/26.

b. During the hours of 0630-2200 HST large aircraft may be sequenced to runway 8L with a base leg at the Pearl Harbor Channel. Large aircraft on vectors for a visual approach to runway 8L at the Pearl Harbor Channel must be instructed/vectored to enter the channel from the south.

c. During the hours of 2200-0700 HST all turbojet aircraft must be vectored to runway 4R. When a request for runway 8L is received, advise aircraft the runway is noise sensitive and record the ACID on the daily log (FAA Form 7230-4).

10-9 GENERAL RUNWAY USE PROGRAM

a. Runway 4/8 configuration

1. During the hours of 0700-1900 HST,

(a) Turbojet aircraft should be sequenced to runway 8L except for controller/pilot operational necessity/closures/equipment outages. Arrivals must be 5 miles in trail at the threshold inclusive of the channel approach.

(b) All turbo jet aircraft categorized large and above requesting a visual approach must be instructed or vectored to remain within the confines of the Class B airspace as follows:

(1) Arrivals from the west landing runway 8L must be instructed/vectored to remain south of the Kahe Power Plant.

(2) Arrivals on vectors to a visual approach to runway 8L from south of the runway 8L final, other than channel approaches, must be instructed/vectored to turn base over or west of Kalaeloa Airport;

(c) Approach Control must receive prior approval from LC1/LA for Overhead Approaches to runway 4R.

2. During the hours of 1900-0700 HST.

Turbojet aircraft should be sequenced to runway 4R except for operational necessity, closures or equipment outages.

3. All hours

(a) Approach must sequence all aircraft on VFR arrivals routes (e.g. North, Freeway, or West) with straight in traffic to runway 4R.

(b) Approach must not sequence arrivals to runway 4L. (*Tower will retain the option to change an aircraft to runway 4L*).

(c) Visual approaches to runway 8R are available upon pilot request. Coordinate with LC1/LA and Kalaeloa Tower.

b. Runway 22/26 configuration

1. Vector large/heavy turboprop and all turbojet aircraft to the final approach course of runway 26L. A minimum of 5 miles in trail spacing with comparable speeds shall be provided by approach. *(Tower will retain the option to change an aircraft to runway 26R.)*

2. Approach must not sequence arrivals to runway 22L.

3. Small VFR/IFR turboprop aircraft may be sequenced to runway 22R.

4. The Tripler One Arrival shall be the primary arrival route for VFR aircraft from the North/West in lieu of the North Arrival.

NOTE - *Requests for deviations to the visual approach, other than aircraft in emergency status, must be disapproved based on non-conformance with established directives from the informal use runway program and preferential traffic flows. IFR aircraft shall not be cleared for a visual approach via a published VFR arrival route.*

c. Class B airspace coded arrival routes to Honolulu Airport are published in the Pacific Chart Supplement.

10-10 PRACTICE APPROACHES.

a. Practice approaches will not be approved during radar outages.

b. Climb out/missed approach/low approach instructions, assigned by Honolulu Approach, must be coordinated with the Tower via the authorized MEARTS entry in scratch pad data.

c. Practice approaches to HNL and practice holding not permitted during runway 22/26 configuration except for GECKO.

d. All practice approaches to both HNL and JRF between 0900 HST and 1500 HST will be approved based on traffic and complexity. Any practice approach to HNL and JRF must be approved by the TRACON FLM/CIC.

10-11 MOSAIC. Mosaic mode combines radar input from up to 3 sites into a single picture utilizing a mosaic grid composed of radar sort boxes. Mosaic mode is used as a backup radar data source when the ASR-9 fails and/or is out of service

a. Radar/Altitude Limitations.

1. Radar systems are unable to track aircraft flying through the cone of silence that exists over the main bang. The higher the altitude, the larger the area of silences. Aircraft passing over the radar sites go into coast and take approximately four (4) miles to reacquire.

2. Due to the lower scan rate of the ARSR-4 radar (12 seconds), when using the Mt. Ka'ala (ARSR) radar site in conjunction with MOSAIC or single sensor mode, extra attention must be given to anticipate performance, as it will take longer to evaluate turns and/or altitude changes.

b. Mosaic Operating Procedures. See Appendix 49.

c. Mosaic Separation and Procedures. See Appendix 50.

CHAPTER 11 – L RADAR

11-1 RESPONSIBILITIES.

a. Ensure separation.

b. Initiate control instructions.

c. Monitor and operate radios.

d.. Accept and initiate automated handoffs.

e. Scan radar display and correlates with flight progress strip information.

f. Ensure computer entries are completed on instructions or clearances issued or received.

g. Ensure strip marking is complete.

h. Adjust equipment at radar position to be usable by all members of the team.

11-2 AREA OF RESPONSIBILITY.

a. Assigned airspace and runway 4/8 configuration: (See Appendix 51)

Area B	SFC – 070
Area C	SFC – 160
Area D	050 – 160
Area E	030 – 160
Area F	025 – 160

b. Assigned airspace and runway 22/26 configuration: (See Appendix 52)

Area D	070 – 160
Area E	SFC – 020 070 – 160
Area F	SFC – 050
Area G	SFC – 160

c, Assigned airspace and runway 4/8, runway 8L closed configuration: (See Appendix 53)

Area B	SFC – 050
Area C	050 – 160
Area D	050 – 160
Area E	030 – 160
Area F	025 – 050

11-3 CONTROL INSTRUCTIONS.

a. Provide radar services within assigned airspace.

b. Provide departure control services to eastbound IFR departure.

c. Provide departure control services to all eastbound Class B departures.

1. Runway 4/8 configuration:

(a) Freeway departure.

(b) Shoreline departure.

(c) Punchbowl departure.

2. Runway 22/26 configuration: Kona departure

d. Provide Class B airspace services and/or traffic advisories to VFR aircraft overflying Honolulu from east to west; coordinate with V/H radar as appropriate.

e. Point out IFR departures arriving MKK to V radar. Aircraft are identified by "MKA" in the scratch pad field.

f. Runway 22/26 operations. The following will apply unless VERBALLY coordinated:

1. L must assign all aircraft exiting the Honolulu terminal area via V2 or the NORBY corridor 7,000' or filed altitude, whichever is higher.

2. L must ensure all aircraft exiting the south corridor be established on the KEAHI SID prior to the Honolulu TAB.

3. All aircraft on the KEAHI SID must be assigned 5,000' to expect final altitude or whichever is lower.

g. Runway 4/8 operations. The following will apply unless VERBALLY coordinated:

1. Assign jet aircraft on the PALAY SID 13,000' or filed altitude, whichever is lower.

2. Assign propeller aircraft on the PALAY SID 9,000' or filed altitude, whichever is lower.

h. Arrival into Honolulu:

1. L authorizes V control of aircraft inbound via the Freeway Arrival.

2. On initial contact from HCF Center, clear aircraft into Class B airspace.

11-4 HELICOPTER OPERATIONS.

a. Helicopters inbound from the east/freeway should be cleared into Class B airspace at or below 1,000’ to hold at Punchbowl and expect further clearance from Honolulu Tower.

b. Helicopters transiting Class B airspace westbound must be coordinated with V radar for altitude assignment at or above 2,000’.

c. Shoreline arrivals must be permitted for MEDIVAC, Police or Fire department helicopters. Other shoreline arrivals may be permitted with Tower approval.

11-5 PREDETERMINED DEPARTURE HEADINGS.

a. Predetermined departure headings must be used for departures from Honolulu that are confined within Area L and H. Honolulu Tower is authorized the airspace during runway 4/8 configuration within Area L – Surface to 5,000’.

1. Departures will auto-acquire to the appropriate departure controller.

2. LC will ensure that the eastbound IFR departures are established heading 120° to 140° and westbound IFR departures heading 155° within Area L.

3. During runway 4/8 configuration, the departure controller may assign any eastbound IFR departure aircraft any heading within the clockwise range of 080° to 140° without coordination in Area L.

b. During runway 22/26 configuration the departure controller may assign eastbound IFR departures any heading within the clockwise range of 165° to 200° without coordination in Area H.

11-6 FREQUENCY INFORMATION.

a. L radar frequencies – 124.8 / 317.6.

b. HCF Center sector frequencies:

1. Sector 3:

I – 124.1 / 317.5
MKK SID
PALAY SID, MKK Transition
JRF Departures via MKK VORTAC
IWOHI SID, CKH Transition

2. Sector 4:

F – 119.3 / 307.1
PALAY SID, LNY Transition
KEAHI SID, (runway 22/26 only)
SHINSEKI SID, PALAY Transition
JRF Departures via V2

c. NGF:

1. Tower – 120.7 / 360.2.

2. Approach Control – 125.0 / 263.15.

d.. Voice Switch Bypass – not available.

e. Motorola PET 2000 UHF/VFR Transceivers – not available.

11-7 AUTOMATED HANDOFF. Automated handoffs to the HCF Center sectors are available for all aircraft departing the Honolulu TAB.

a. Handoffs to the appropriate HCF Center sector will be accomplished with the sector symbol, slew and ENTER.

1. Sector 2 – J.

2. Sector 3 – I.

3. Sector 4 – F.

b. In the event MEARTS is out-of-service, manual handoffs will be required to the appropriate HCF Center sector.

11-8 INTRA-FACILITY COORDINATION.

a. Transfer of control.

1. HNL Approach:

(a) Have control for vectors, descent, beacon code and speed adjustments within five (5) miles of the HNL TAB upon completion of radar handoff, unless otherwise coordinated.

(b) Sector 3 and 4 may assume control for vectors on aircraft within the NORBY corridor.

(c) Sector 4 has control for climb of aircraft assigned 11,000’ or above

in the NORBY corridor

(d) Sector 3 may assume control to climb aircraft assigned 10,000’ or above.

(e) Sector 3 may vector/descend aircraft landing MKK or LUP.

(f) L may assign the frequency that is associated with the data tag.

EXAMPLE 1 - *HAL182 going to Hilo, L handoffs to Sector 3, then Sector 3 hands off to Sector 4. If Sector 4 accepts the handoff prior to L transferring communications to Sector 3, L may transfer communications directly to Sector 4.*

EXAMPLE 2 - *Sector 3 will be responsible for the point out with Sector 4.*

b. Traffic flow.

1. From HNL Approach:

(a) MKK SID/JRF departures:

(1) Inter-Island departures direct MKK.

(2) ZIGIE, APACK or CLUTS heading 060° to 090°. Scratch pad inputs of headings may be used in-lieu of verbal coordination if other than a 060º.

(3) EBBER direct EBBER.

(4) PULPS, FITES, SAYTO direct MKK.

(5) Climbing to altitude.

(b) RWY 4/8 departures – PALAY SID/V2:

(1) Jets climbing to 13,000’ or filed altitude, whichever is lower.

(2) Props climbing to 9,000’ or filed altitude, whichever is lower.

(c) RWY 22/26 departures:

(1) PALAY SID/V2, all aircraft climbing to 7,000’ or filed altitude, whichever is higher.

(2) KEAHI SID, all aircraft climbing to 5,000’.

(d) JRF departures direct PALAY or radar vectors to join V2 prior to exiting the HNL TAB. Assign the same altitudes as (b) (1), (b) (2) and (c) (1).

(e) HHI departures via the SHINSEKI SID, climbing to assigned altitude. Aircraft that are assigned altitudes above 16,000' must be pointed out to Sector 3.

2. To HNL Approach. Traffic information must be given to HNL Approach on aircraft transitioning above HNL Approach Control airspace at 17,000'.

11-9 COMPUTER ENTRIES. The entries below indicate the departure procedure and transition for IFR and Class B airspace departures that operate in L radar airspace:

DEPARTURE/FIX PAIR	TRANSITION	SCRATCH PAD DATA
HNL*CKH		CKH
FREEWAY DEPARTURE		FRE
PUNCHBOWL DEPARTURE		PBO
SHORELINE DEPARTURE		SHO
KONA DEPARTURE		KOA
MKK SID	ZIGIE	ZIG
	APACK	APA
	CLUTS	CLU
	EBBER	EBB
	FITES	FIT
	PULPS (landing Hilo)	PUL
	PULPS	PLP
	MOLOKAI	MKK
PALAY SID	LANAI	LNY
	MOLOKAI	MKK
	LANAI (landing Hilo)	PLN
KEAHI SID	JORDA	KEA
	LANAI	KEA
	UPP	KEA
	UPP (landing Hilo)	KUP
JRF Departures	LANAI (landing Hilo)	PAR
SHINSEKI SID	LANAI	LNY
	LANAI (landing Hilo)	PLN
	MOLOKAI	MKK
	PALAY	PAL
GECKO SID		GEC

CHAPTER 12 – V RADAR

12-1 RESPONSIBILITIES.

a. Ensure separation.

b. Initiate control instructions.

c. Monitor and operate radios.

d. Accept and initiate automated handoffs.

e. Scan radar display.

f. Ensure computer entries are complete on instructions or clearances issued or received.

g. Ensure strip marking is complete.

h. Adjust equipment at radar position to be usable by all members of the team.

12-2 AREA OF RESPONSIBILITY.

a. Assigned airspace, runway 4/8 configuration: (See Appendix 51)

Area A	SFC – 030
Area D	SFC – 040
Area E	SFC – 020
Area F	SFC – 015
Area G	SFC – 020
Area H	SFC – 020
Area M	020 – 025

b. Assigned airspace, runway 22/26 configuration: (See Appendix 52)

Area A	SFC – 030
Area B	SFC – 030
Area D	SFC – 030
Area M	020 – 030

c. Assigned airspace, runway 4/8, and runway 8L closed configuration: (See Appendix 53)

Area A	SFC – 030
Area C	SFC – 040
Area D	SFC – 040
Area E	SFC – 020
Area F	SFC – 015
Area M	020 – 025

12-3 CONTROL INSTRUCTIONS.

a. Provides radar services within assigned airspace.

b. Establishes approach sequence to runway 4R, 22 R and waterways. Aircraft inbound for waterway 4/8/22 must be indicated in the MEARTS scratch pad.

1. L authorizes V control of aircraft inbound via the Freeway Arrival.

2. Transfer of control from L to V must be completed prior to Koko Head.

3. Clear aircraft into Class B upon initial contact from HCF Center.

c. V must sequence the north and freeway arrivals with the runway 4R arrivals.

d. Provides approach control services to all Class B aircraft.

e. Provides departure control services to all Class B aircraft departing to the north via the Redhill or West Loch.

f. Vector inter-island arrivals from the southeast for the visual approach to runway 8L with base leg at the Pearl Harbor Channel with H radar approval.

1. H radar must approve the visual approach via the channel by entering 8L in the MEARTS scratch pad of the aircraft concerned.

2. H radar authorizes V radar control of aircraft upon completion of radar handoff.

g. Provide LA departure release for aircraft unable to comply with the CKH R240 crossing restriction. Inform the appropriate departure controller that the release has been approved with the ACID.

h. Runway 8L closure.

1. H radar assumes control of RWY 4R sequencing for aircraft from the south.

2. V radar will sequence to runway 4R with coordination with the H controller who is sequencing to 4R also.

i. During runway 4/8 “No LAHSO operation”, sequence runway 4R arrivals after and/or between runway 8L traffic.

j. During runway 22/26 operations, V radar must ensure VFR aircraft remain at least 1 ½ miles north of the LDA final approach course until entering the airport terminal area airspace sector M. V must point out aircraft inbound via the Kona arrival or charted visual approach to W, in reference to aircraft inbound to 26L.

k. All arrivals must enter the tower's airspace through Area M. Offshore inbounds should enter Area M through Area H.

l. HCF Center Sector 3 can enter the Honolulu Terminal Area Holding Pattern Airspace Area (HPASA) with aircraft having an associated full data block at LOKIE prior to a radar handoff completion.

12-4 HELICOPTER OPERATIONS.

a. Helicopters inbound from the west interchange must be cleared into Class B airspace to hold at Ford Island.

b. Helicopters inbound from the east/freeway must be cleared into Class B airspace at or below 1,000' to hold at Punchbowl and to expect further clearance from Honolulu Tower.

c. Helicopters transiting Class B airspace eastbound must be coordinated with L radar for altitude assignment at or above 2,000'.

d. Shoreline arrivals must be permitted for MEDIVAC, Police or Fire department helicopters at or below 300'. Other shoreline arrivals may be permitted with the Tower's approval.

e. East or West must be put in the aircraft type in addition to UTC/DTC for direction of flight after the channel transition. UTC and DTC operations are not available when LC2 is open.

12-5 FREQUENCY INFORMATION.

a. V Radar Frequencies – 119.1 / 239.05.

b. HCF Center sector frequencies: Sector 3 – 124.1 / 317.5. LOKIE arrivals, runway 4/8 configuration only.

c. Voice Switch Bypass. Frequencies available at V radar are 119.1 / 239.05.

d. Motorola PET 2000 UHF/VHF Transceivers not available.

12-6 AUTOMATED HANDOFF. Automated handoffs are available for all IFR en route aircraft inbound to HNL, JRF and/or HHI from over LOKIE intersection. Inbound aircraft to satellite airports will be indicated by "JRF" (JRF) or "HHI" (HHI).

12-7 COMPUTER ENTRIES. The entries below indicate the departure procedures for IFR and Class B aircraft that operate in V radar's airspace:

DEPARTURE/FIX PAIR	TRANSITION	SCRATCH PAD ENTRY
REDHILL DEPARTURE		RED
WEST LOCH DEPARTURE		WST

INTENTIONALLY LEFT BLANK

CHAPTER 13 – H RADAR

13-1 RESPONSIBILITIES.

a. Ensure separation.

b. Initiate control instructions.

c. Accept and initiate automated handoffs.

d. Scan radar display and correlates with flight progress strip information.

e. Ensure computer entries are completed on instructions or clearances issued or received.

f. Ensure strip marking is complete.

g.. Adjust equipment at radar position to be usable by all members of the team.

13-2 AREA OF RESPONSIBILITY.

a. Assigned airspace, runway 4/8 configuration: (See Appendix 51)

Area A	040 – 160	Area I	SFC – 160
Area B	080 – 160	Area J	SFC – 160
Area G	030 – 160	Area K	SFC – 160
Area H	030 – 160	Area L	060 – 160
		Area M	030 – 160

b. Assigned airspace, runway 22/26 configuration: (See Appendix 52)

Area A	040 – 160	Area F	060 – 160
Area B	040 – 160	Area H	060 – 160
Area C	SFC – 160	Area I	SFC – 160
Area D	040 – 060	Area J	SFC – 160
Area E	030 – 060	Area L	040 – 160
		Area M	040 – 160

c. Assigned airspace for runway 4/8 during runway 8L closed configuration: (See Appendix 53)

Area A	040 – 160	Area I	SFC – 160
Area B	060 – 160	Area J	SFC – 160
Area F	060 – 160	Area K	SFC – 160
Area G	SFC – 160	Area L	060 – 160
Area H	SFC – 160	Area M	030 – 160

13-3 CONTROL INSTRUCTIONS.

a.. Provide radar service within assigned airspace.

b. Establish approach sequence for runway 8L and 26L. Effect handoff to V radar for arrivals via the JULLE star for sequence to runway 4R or type 8L in the scratch pad field for V radar to sequence to runway 8L, traffic conditions permitting.

c. Provide IFR departure control services to IFR aircraft north, west and southbound from HNL. All oceanic aircraft departing for points west and southwest must be climbed to 16,000'.

d. During runway 4/8 "no LAHSO operations", provide 7 miles in trail spacing between runway 8L arrivals to allow V radar to sequence runway 4R arrivals between the runway 8L arrivals. "No LAHSO operations" refers to an overall condition caused by equipment, weather, and/or wind. This does not refer to individual aircraft unable to participate in LAHSO.

e. During runway 8L closure, establish Honolulu Approach sequence for runway 4R.

f. After coordination with V radar, provide departure and approach control services to JRF and HHI. During runway 22/26 configuration, coordinate via the MEARTS and verbally with the cab for runway 22/29 arrivals to JRF.

g. Provides tower to tower radar services between NGF and HNL/JRF/HHI.

h. Establish approach sequence for runway 4R and/or 8L and 26L as follows:

1. For arrivals to Runway 26L, ensure that all large twin turbo prop and turbojet aircraft (excluding fighters):

(a) Are at least 5 MIT when the preceding arrival aircraft crosses the runway threshold.

(b) Cross HNL VOR 6 DME at No GREATER than 180 knots. There are no specific speed restrictions for in trail aircraft, other than that aircraft shall be at similar speeds to prevent compression to less than the required MIT.

(c) For arrivals via the JULLE STAR

(1) Effect hand-off to V radar for sequence to runway 4R.

(2) Traffic conditions permitting, type in "8L" in the scratch pad field for V radar to sequence to runway 8L.

i. Between the hours of 0900-1500 HST, all B757, heavy jet aircraft and military fighters will be sequenced to Runway 8L with a minimum of 5MIT. The 5 MIT is inclusive of channel approaches.

13-4 PREDETERMINED DEPARTURE HEADINGS. Predetermined departure headings must be used for departures from Honolulu that are confined within Area L and F. Honolulu Tower is authorized the following airspace during runway 4/8 configuration: Area L SFC – 5,000'.

a. Departures will auto acquire to the appropriate departure controller.

b. LC will ensure that the eastbound IFR departures are established heading 120° and/or 140° and westbound IFR departures heading 155° within Area L.

c. During runway 4/8 configuration, the appropriate departure controller may assign southbound, westbound and northbound IFR departures any headings within the clockwise range of 155° to 360° without coordination in Area L.

d. During runway 22/26 configuration, the appropriate departure controller may assign southbound, westbound and northbound IFR departures any heading within the clockwise range of 220° to 360° without coordination in Area H.

13-5 FREQUENCY INFORMATION.

a. H Radar frequencies are 118.3/269.0.

b. Honolulu – HCF Center sector frequencies are:

1. Sector 2:

J – 126.5 / 269.4
KEOLA SID OPIHI SID Arrivals over BOOKE, OPACA and GECKO

2. Sector 3:

I – 124.1 / 317.5
Arrivals over BAMBO Arrivals over LOKIE, during runway 22/26 configuration

3. Sector 4:

F – 119.3 / 307.1
Arrivals over JULLE and SAKKI

c.. JRF – Tower 132.6 / 340.2.

d. HHI – Tower 126.3 / 241.0.

e. NGF:

1. Approach Control – 125.0 / 263.15.

2. Tower – 120.7 / 360.2.

f. Hula Dancer frequencies are 127.0 / 266.4; backup 132.4 / 336.8.

g. Voice Switch Bypass: Frequencies available at H radar are: 118.3 / 269.0.

13-6 AUTOMATED HANDOFF.

a. Automated handoffs are available for all aircraft departing HNL, JRF and HHI.

1. When tower passes information on a departure that does not acquire (primary and secondary), apply non-radar procedures.

2. Handoff to the appropriate HCF Center sector is accomplished by typing the sector position symbol, slew and ENTER. See TBL 13-6-1

TBL 13-6-1
HCF Position (Handoff) Symbols

SECTOR	POSITION SYMBOL	REMARKS
2	J	
3	I	
4	F	
HULA DANCER	2	<Handoff> 2 OR To force automation <MF> G HR or HU
NGF APCH	3	<Handoff> 3 OR Manual entry <MF> G HG

NOTE: *The automated handoff to Hula Dancer doesn't work for local flight plans. The flight plan must be processed in OFDPS.*

3. In the event the MEARTS is out-of-service, manual handoffs will be required to the appropriate HCF Center sector.

b. Automated handoffs are available for IFR traffic outbound to the Warning Areas via SAITO, YORKI, KUCHI, and MILTI.

1. A filed flight plan has to be accepted by HULA DANCER's system and by MEARTS.

2. Routings may be entered manually into MEARTS via appropriate fix pairs, i.e. HO, HY, HU or HM.

3. Handoff is accomplished via “Handoff 2, slew ENTER” or “0, slew, ENTER”.

c. Automated handoffs are not available for IFR traffic inbound from the Warning Areas.

1. Inbound information is received on the HULA DC line.

2. Manual handoffs are accomplished on the HULA DC line.

13-7 INTRA-FACILITY COORDINATION.

a. Transfer of Control.

1. HNL Approach:

(a) Have control for vectors, descent, beacon code and speed adjustments within five (5) miles of the HNL TAB upon completion of radar handoff, unless otherwise coordinated.

(b) Sector 2 may climb aircraft in the GECKO departure corridor except those aircraft assigned 10,000’ or below.

I Sector 2 may assume control for vectors on departing aircraft within the GECKO departure corridor.

b. Traffic flow.

1. From HNL Approach:

(a) HNL approach will establish a minimum of 3 NM separation increasing to 5 NM in accordance with JO7110.65.

(b) LIH Arrivals: KEOLA SID or 260° to intercept the LIH 148R.

I BKH arrivals: KEOLA SID.

(d) HHI departures: GECKO SID.

I OPIHI SID, CHOKO transition, via direct CHOKO.

(f) All other aircraft must be on vectors 230º to 270º exiting the GECKO corridor. Scratch pad inputs of headings may be used in-lieu of verbal coordination if other than a 260º.

(g) All aircraft departing westbound will be climbing to 16,000’ or filed altitude, whichever is lower.

2. To HNL Approach:

(a) HNL RWY 4/8 arrivals:

(1) MAGGI STAR or V12, descending to 10,000’, inter-island props descending to 8,000’.

(2) Cross LOKIE at 4,000’.

(3) JULLE STAR, V16/V20/V21.

a Jets to cross JULLE at or below 14,000’ to maintain 10,000’.

b Props 190 knots or greater descending to 8,000’.

c Props 189 knots or less descending to 6,000’.

(4) BOOKE STAR or V15:

a Jets descending to 8,000’.

b Props descending to 7,000’.

(5) OPACA STAR cross OPACA at 6,000’.

(6) RNAV STAR descending via the STAR.

(b) HNL RWY22/26 arrivals:

(1) SAKKI STAR, V16/V20/V21:

a Aircraft above 12,500 pounds cross SAKKI at 6,000’.

b Aircraft 12,500 pounds and below cross SAKKI at 4,000’.

(2) BOOKE STAR.

a Jets descending to 8,000’.

b Props descending to 7,000’.

(3) OPACA STAR cross OPACA at 6,000’.

(c) JRF arrivals:

(1) BAMBO: Direct CKH, direct GECKO descending to 10,000’.

(2) LOKIE: Direct ALANA descending to 4,000’.

(3) JULLE: Direct ALANA, direct GECKO descending to 8,000’.

(4) RWY 22/26 from SAKKI: Direct ALANA, direct GECKO descending to 4,000’.

(5) JRF arrivals north of V12 will be direct KEOLA, direct TARLE, direct JRF, cross KEOLA at 4,000.

(6) JRF arrivals south of V12 will be direct GECKO, cross GECKO at 4,000’.

(d) HHI arrivals:

(1) BAMBO: Direct HNL descending to 10,000’.

(2) V8 HNL direct HHI; cross LOKIE at 4,000’.

(3) RWY 22/26 from SAKKI/JULLE: Direct SAKKI, direct HNL, direct HHI descending to 8,000’.

(4) OPACA: Cross OPACA at 6,000’, then direct HNL.

(5) BOOKE: V15 HNL, direct HHI descending to 7,000’.

(e) Traffic information must be given to HNL Approach on aircraft transiting above the HNL Approach airspace at 17,000’.

(f) Enter the Honolulu Terminal Area Holding Pattern Airspace Area (HPASA) with aircraft having an associated full data block at fixes on their respective boundaries prior to a radar handoff completion as follows:

(1) Sector 2 has approval to enter the HPASA at BOOKE or OPACA.

(2) Sector 3 has approval to enter the HPASA at BAMBO.

(3) Sector 4 has approval to enter the HPASA at JULLE or SAKKI.

13-8 COMPUTER ENTRIES.

a. The entries below indicate the SID and transition for IFR departures from Honolulu Tower that operate in H radar airspace:

DEPARTURE/FIX PAIR	TRANSITION	STRATCH PAD DATA
HNL*ALA		ALA
HNL*HHI		HHI
HNL*JRF		JRF
HNL*NGF		NGF
HNL*VOR (entered as HH for holding at HNL VOR)		VOR
HNL*VDM		VDM
HNL*IL8		IL8
KEOLA SID	KATHS	KAT
	LIHUE	LIH
	LILIA	LIL
	NONNI	NON
	PUPPI	PUP
	SOUTH KAUAI	SOK
OPIHI SID	CARRP	CAR
	DOVRR	DOV
	CHOKO	CHO
JRF Departures	LANAI (landing Hilo, via PARIS)	PAR
SHINSEKI SID	LANAI (landing Lanai)	LNY
	MOLOKAI	MKK
	PALAY	PAL
	LANAI (landing Hilo)	PLN
GECKO SID		GEC

b. The following indicators determine the airport of landing:

1. Kalaeloa Airport – JRF.

2. Wheeler Army Airfield – HHI.

3. Honolulu International Airport – HNL.

CHAPTER 14 – W RADAR COORDINATION

14-1 RESPONSIBILITIES.

a. Assist traffic flow.

b. Initiate and accept manual handoffs.

c. Coordinate between all radar positions as needed, or when necessary. Monitor H radar primarily.

d. HHI and JRF departure releases must be coordinated with H and/or V radar positions.

e. Answer all hot/ring lines, except those for L radar when that position is open.

f.. If necessary, initiate coordination with the HCF Center sector for restrictions and advises the OSIC/Tower FLM.

g.. Coordinate with LA, as necessary (i.e. weather, emergency information, JRF information or unusual situations).

h. Issue and relay clearances.

1. Ensure computer entries are complete on instructions or clearances issues and/or received.

2. Advise appropriate radar position on special instructions, operations and restrictions.

i. Responsible for recording actual approaches when the ceiling is reported at or below 3,000’ or if visibility is below 3 miles.

14-2 AREA OF RESPONSIBILITY.

a. W assumes responsibility for initiating traffic flows. The radar position will remain responsible for aircraft separation when the Radar Coordinator position is staffed.

b. The W will serve primarily to assist H radar.

1. Accept and/or completes manual handoffs to adjacent positions/facilities, as appropriate.

2. All landline and hotline coordination should be completed by the W position, except for L and/or V radar when that position is open.

c. Assist any radar position, as needed. If a radar position is unable to accept coordination calls due to priority traffic, coordination will be accomplished; through the W position. The W position will forward the requested coordination.

14-3 CONTROL INSTRUCTIONS. Coordinate arrival/departure flow between the tower and Approach, as needed. Advise the FLM of any flow control implemented/canceled.

14-4 OPERATE INTERPHONES.

a. Operate interphones to the following facilities for the receipt and relay of non-control instructions, i.e. aircraft clearances, both IFR/VFR and en route clearances, and weather sequence information.

1. Coordinates with JRF Flight Data position via the RDVS JRF ring line. The RDVS hot line to JRF Tower can also be utilized to obtain the current ATIS code.

2. Disseminates JRF hourly weather to H radar when ceiling is below 2,000' and/or visibility is less than 3 miles.

(a) When JRF advises the field is IFR, advise the appropriate departure/arrival controller and tower cab that Area D, as described in the HCF/Kalaeloa Airport LOA, is IFR.

(b) When the JRF ring line is out-of-service, utilize the JRF hot line.

3. Coordinates with Wheeler Tower via the RDVS HHI ring line. Disseminates weather information to the appropriate radar controller.

4. Coordinates with NGF via the RDVS NGF ring line. Issues tower to tower clearances between NGF and HNL/JRF/HHI/KUCHI/MILTI/ELAYN.

5. Coordinates with Hula Dancer via the RDVS ring line.

b.. Authorizes departure release of aircraft from satellite airports.

1. Departure releases from JRF after coordination with H radar and/or V radar or Honolulu Tower.

2. Departure releases from HHI after coordination with H radar and/or V radar.

3. Accepts and coordinates manual handoffs to NGF prior to the airspace boundary. Advises the appropriate radar controller when complete or via appropriate MEARTS entry into scratch pad area of the full data block.

c. Accepts and coordinates manual handoffs to Hula Dancer in accordance with the LOA. Advises the appropriate radar controller when complete or via appropriate MEARTS entry into the scratch pad area of the full data block.

d. Operate all hotline/ring lines, except those for L radar when that position is open.

14-5 FLIGHT DATA INFORMATION.

a. Ensures computer entries are complete on clearances issued or received.

b. Input of information into MEARTS depends on the request.

1. IFR en route departure requests are assigned beacon codes via the OFDPS . Changes to flight plans by the HCF Center sector(s) will automatically update the tabular list at the radar flight data position.

2. IFR civil aircraft type must be entered into MEARTS via the FDIO/OFDPS.

3. Except for formation flights, military aircraft type must be entered into MEARTS via the FDIO/OFDPS.

(a) When a flight consists of more than one aircraft, it must be indicated in MEARTS as "FLT #" (#denotes the number in the flight: *Example: FLT2, FLT4).*

(b) When block altitudes are authorized, utilize the highest altitude for the flight strip entry and verbally coordinate with the appropriate departure controller.

4. Local IFR departure requests are assigned 14xx or 15xx beacon codes by the MEARTS.

(a) Depress the Flight Data key to start the input of information into the MEARTS system.

(b) Type in the ACID* (not to exceed 7 characters).

(c) Type in "+" for IFR assigned beacon code.

(d) Type in the appropriate fix pair or radar position symbol, and then ENTER. Use the following:

(1) To JRF: HX.

(2) To HHI: HW.

(3) Departures from HHI:

SHINSEKI SID
NO ENTRIES

GECKO SID
NO ENTRIES

(4) To NGF: HG.

(5) To HNL: Enter radar position symbol instead of fix pair and verbally coordinate.

5. VFR coded clearances are assigned beacon codes from the compute in the 02xx block. Class B airspace entries may be accomplished with the following entries:

(a) Depress the Flight Data key.

(b) Type in ACID*.

I Appropriate position symbol, then ENTER.

*ACID – last 3 digits of the full call sign are sufficient unless there are similar call signs at the airport. Local use designators may be used in accordance with Appendix 32.

14-6 REPORT WEATHER INFORMATION.

a. Receives ATIS code changes from the Tower and advises radar controllers of the changes in a timely manner.

b. Copies JRF hourly weather sequence and updates the ATIS code information on the SIA board. Disseminates JRF hourly weather to H radar when ceiling is below 2,000’ and/or visibility is less than 3 miles, as necessary.

c. Obtain HHI weather, as necessary.

APPENDIX 1. AIRSPACE AND SECTOR BOUNDARIES.

Sector 2. That airspace bounded by a line from:

21° 09.5'N / 157° 53'W, TO 20° 30'N / 157° 43'W, TO
20° 30'N / 158° 40'W, TO 21° 00'N / 159° 20'W, TO
21° 28'N / 159° 20'W, THEN COUNTERCLOCKWISE ALONG THE 30 NM ARC CENTERED AT 21° 57.92'N. 159° 20.29'W (LIH VORTAC) TO
21° 35'N / 159° W, TO 21° 29'N / 158° 53'W, THEN COUNTERCLOCKWISE ALONG THE 25 NM ARC CENTERED AT
21° 57.92'N / 159° 20.29W (LIHVORTAC) TO 22° 15'N / 159° W, TO
22° 15'N / 157° 58'W, TO 22° 01'N / 157° 56'W, TO
21° 26.5'N / 157° 49.5'W, TO 21° 27'N / 157° 53'W, TO
POINT OF ORIGIN.

That airspace 16,000' and below bounded by a line from:

21° 37'49"N / 159° 08' 50"W, TO 20° 37' 23"N / 158° 16' 25"W,
THEN COUNTER CLOCKWISE ALONG A 5 NM ARC CENTERED AT
21° 34.77"N / 158° 11.84"W (HDH), TO 21° 38' 30"N / 158° 08' 15"W,
TO POINT OF ORIGIN.

That airspace 15,000' and above bounded by a line from:

22°15′N/159°W, THEN CLOCKWISE ALONG THE 25 NM ARC CENTERED AT 21° 57.92′N/159° 20.29′W (LIH VORTAC) TO
21° 59′N/158° 53′W, TO 21° 35′N/159′W, THEN CLOCKWISE ALONG THE 30 NM ARC CENTERED AT 21° 57.92′N/159° 20.29′W (LIH VORTAC) TO
21° 28′N/159° 20′W, TO 21° 57.92′N/159° 20.29′W, TO
POINT OF ORIGIN.

Sector 3. That airspace bounded by a line from:

21° 27′N/157° 53′W, TO 21° 26.5′N/157° 49.5′W, TO
22° 01′N/157° 56′W, TO 22° 30′N/158°W, TO
22° 30′N/157°W, TO 21° 34′N/156° 19′W, TO
21° 09.5′N/156° 22′W, TO 21° 06.5′N/156° 49′W, TO
21° 04′N/157° 11′W, TO 21° 03.2′N/157° 17′W, TO
21° 06.5′N/157° 34.4′W, TO 21° 09.5′N/157° 53′W, TO
POINT OF ORIGIN, excluding that airspace delegated to Sector 10.

Sector 4. That airspace bounded by a line from:

21° 03.2′N/157° 17′W, TO 21° 04′N/157° 11′W, TO
21° 09.5′N/156° 22′W, TO 20° 39.5′N/156° 31′W, TO
20° 29′N/156° 31′W, TO 20° 03.8′N/156° 54.2′W, TO
19° 41.4′N/156° 36′W, TO 19° 42′N/157° 31′W, TO
21° 09.5′N/157° 53′W, TO POINT OF ORIGIN,
excluding that airspace delegated to Sectors 9 and 10

Sector 5. That airspace bounded by line from:

21° 09.5′N/156° 22′W, TO 20° 45′N/155°W, TO
19° 43′N/154° 38.5′W, TO 19° 09′N/154° 58′W, TO
19° 09′N/156° 36′W, TO 19° 41.4′N/156° 36′W, TO
20° 03.8′N/156° 54.2′W, TO 20° 29′N/156° 31′W, TO
20° 39.5′N/156° 31′W, TO POINT OF ORIGIN,
excluding that airspace delegated to Sectors 9 and 10.

Sector 6. That airspace bounded by a line from:

25° 52′51”N/158°W, TO 22° 30′N/158°W, TO
22° 15′N/157° 58′W, TO 22° 15′N/159°W, THEN
COUNTERCLOCKWISE ALONG THE 25 NM ARC CENTERED AT
21° 57.92′N/159° 20.29′W (LIH VORTAC) TO 22° 13′N/159° 42′W, TO
22° 12′N/159° 45′W, TO 22° 05′N/159° 50′W, TO
21° 58.5′N/159° 49′W, TO 21° 59′N/159° 52′W, THEN
COUNTERCLOCKWISE ALONG THE 30 NM ARC CENTERED AT
21° 57.92′N 159° 20.29′W (LIH VORTAC) TO 21° 28′N/159° 20′W, TO
21°N/159° 20′W, TO 20° 30′N/158° 40′W, TO
20° 30′N/157° 43′W, TO 19° 42′N/157° 31′W, TO
19° 41.4′N/156° 36′W, TO 19° 09′N/156° 36′W, TO
17° 23′02”N/156° 33′ 32”W, TO 17° 10′ 14”N/156° 48’ 21”W, TO
17° 10′14”N/157° 45’ 24”W, TO 17° 13’ 28”N/158° 15’ 04”W, TO
17° 45′02”N/159° 32′ 20”W, TO 18° 03′ 09”N/160° 16’ 11”W, TO
18° 24′28”N/160° 48’ 51”W, TO 19° 24’ 54”N/162° 23’ 01”W, TO
19° 39′29”N/162° 41′ 58”W, TO 20° 07’N/163° 18’W, TO
21° 09′04”N/163° 54’ 52”W, TO 22° 12’ 20”N/163° 54’ 52”W, TO
23° 15′30”N/163° 51′ 18”W, TO 24° 10′ 08”N/163° 15’ 59”W, TO
25° 03′24”N/162° 38’ 59”W, TO 25° 40’ 34”N/161° 41’ 28”W, TO
26° 06′18”N/160° 37’ 54”W, TO 26° 08 ’41”N/158° 37’ 19”W, TO
POINT OF ORIGIN.

That airspace 15,000’ and above bounded by a line from:

21°28′N/159° 20′W, THEN CLOCKWISE ALONG THE 30 NM ARC
CENTERED AT 21° 57.92′N 159° 20.29′W (LIH VORTAC) TO
21°59′N/159° 52′W, TO 21° 58.5′N/159° 49′W, TO
22°05′N/159° 50′W, TO 22° 12′N/159° 45′W, TO
22°13′N/159° 42′W, THEN CLOCKWISE ALONG THE 25 NM ARC
CENTERED AT 21° 57.92N 159° 20.29W (LIH VORTAC) TO
22° 15′N/159°′W TO 21° 57.92′N/159° 20.29′W, TO
POINT OF ORIGIN.

Sector 7. That airspace bounded by a line from:

25° 11′ 45”N/156° 25’ 16”W,	TO	24° 43′ 17”N/155° 15′ 47”W,	TO
24° 17′45”N/154° 15′W,	TO	23° 46’50”N/153° 21′ 58”W,	TO
23° 01′27”N/152° 34′ 40”W,	TO	22° 20′39”N/151° 53′ 07”W,	TO
21° 32’52”N/151° 27’ 59”W,	TO	20° 41’49”N/151° 01′ 09”W,	TO
19° 41′47”N/150° 30′ 11”W,	TO	19° 13′22.56”N/151° 52′ 46.68”W,	TO
19° 08’32”N/154° 29’W,	TO	18° 06’32”N/155° 42′ 42”W,	TO
17° 23′02”N/156° 33′ 32”W,	TO	19° 09′N/156° 36′W,	TO
19° 09′N/154° 58′W,	TO	19° 43′N/154° 38.5′W,	TO
20° 45′N/155°W,	TO	21° 09.5′N/156° 22′W,	TO
21° 34′N/156° 19′W,	TO	22° 30′N/157°W,	TO
22° 30′N/158°W,	TO	25° 52′N/158°W,	TO

POINT OF ORIGIN, excluding that airspace delegated to Sector 10.

Sector 8. That airspace 14,000’ and below bounded by a line from:

21° 59′N/158° 53′W,	TO	21° 35′N/159°W,	THEN

CLOCKWISE ALONG THE 30 NM ARC CENTERED AT 21° 57.92′N 159° 20.29′W

(LIH VORTAC)	TO	21° 59′N/159° 52′W,	TO
21° 58.5′N/159° 49′W,	TO	22° 05′N/159° 50′W,	TO
22° 12′N/159° 45′W,	TO	22° 13′N/159° 42′W,	THEN

CLOCKWISE ALONG THE 25 NM ARC CENTERED AT 21° 57.92′N 159° 20.29′W

(LIH VORTAC)	TO	POINT OF ORIGIN.	

Sector 9. That airspace 16, 000’ and below bounded by a line starting at 20° 53.93′N 156° 25.91′W (OGG VORTAC) westbound to:

20° 56.7′N/156° 39.8′W,	THEN	COUNTERCLOCKWISE ALONG THE 13 NM	

ARC CENTERED AT 20° 53.93′N 156° 25.91′W (OGG VORTAC) TO

20° 51′N/156° 39.2′W,	TO	20° 48.7′N/156° 48′W,	TO
20° 47.6′N/156° 47.3′W,	TO	20° 39′N/156° 16.5′W,	TO
20° 43′N/156° 09.5′W,	TO	POINT OF ORIGIN.	

That airspace 8,000’ and below bounded by a line from:

20° 47.6′N/156° 47.3′W,	TO	20° 39′N/156° 16.5′W,	TO
20° 36′N/156° 21.4′W,	TO	20° 28′N/156° 21.2′W,	TO
20° 36.8′N/156° 50.5′W,	TO	POINT OF ORIGIN.	

That airspace 9,000’ to 16,000’ bounded by a line starting at:

20° 56.7′N/156° 39.8′W,	THEN	COUNTERCLOCKWISE ALONG THE 13 NM	

ARC CENTERED AT 20° 53.93′N 156° 25.91′W (OGG VORTAC) TO

20° 51′N/156° 39.2′W,	TO	20° 48.7′N/156° 48′W,	TO
20° 51.5′N/156° 49.52′W,	TO	20° 57′N/156° 42′W,	TO

POINT OF ORIGIN.

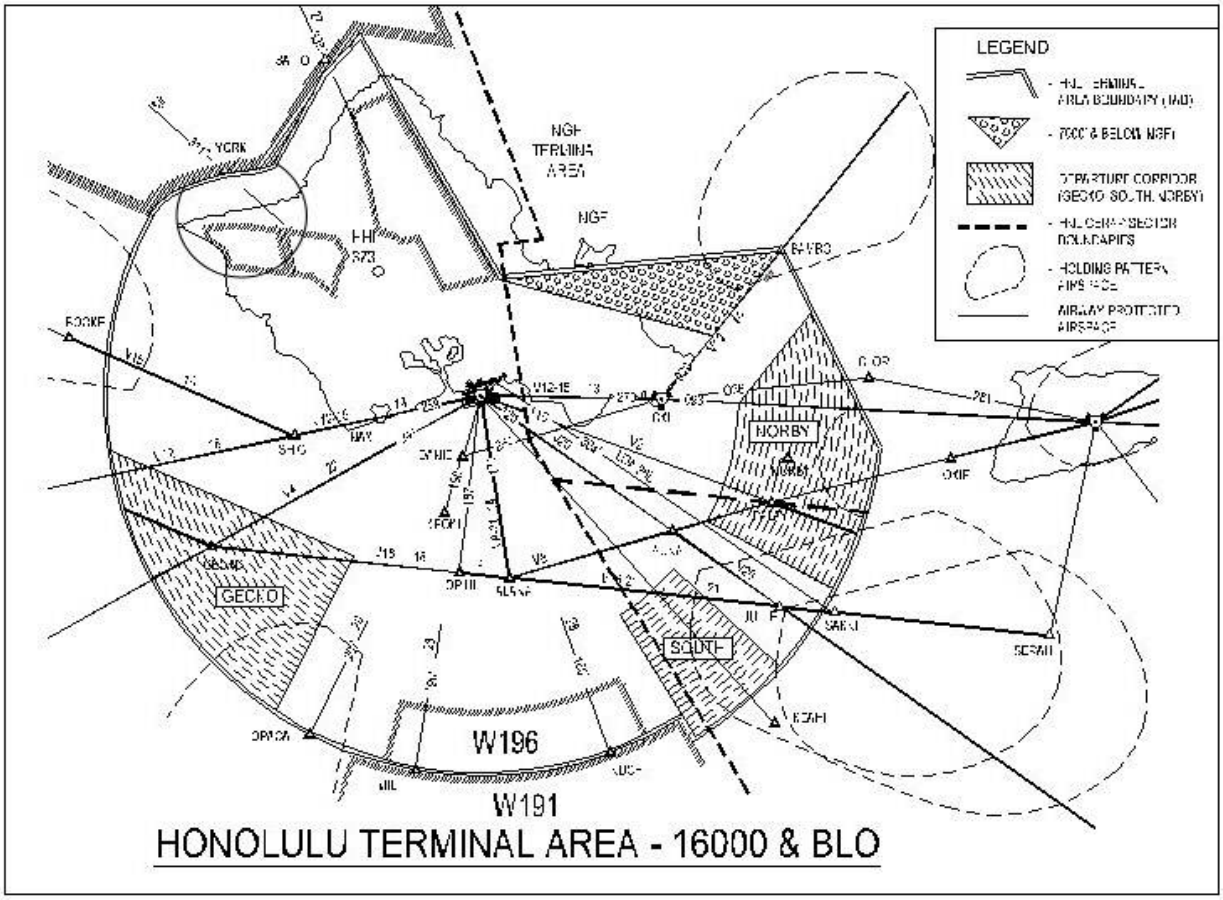
Sector 10. That airspace 16,000’ and below bounded by a line starting at 20° 53.93′N 156° 25.91′W (OGG VORTAC) westbound to:

20° 56.7′N/156° 39.8′W, THEN CLOCKWISE ALONG THE 13 NM ARC CENTERED AT 20° 5407.2′N 156° 2604.7′W (OGG VORTAC) TO 21°′N/156° 38.5′W, THEN COUNTERCLOCKWISE ALONG THE 2.4 NM ARC CENTERED AT 21°00.7′N/156°41′W, TO 21° 02.6′N/156° 42.3′W, TO 21° 05′N/156° 50.3′W, THEN CLOCKWISE ALONG THE 25 NM ARC CENTERED AT 20° 53.93′N / 156° 25.91′W. (OGG VORTAC) TO 20° 48′N/156° 00.4′W, TO 20° 43′N/156° 09.5′W, TO POINT OF ORIGIN.

That airspace 9,000’ to 16,000’ bounded by a line starting at:

20°56.7′N/156°39.8′W, THEN CLOCKWISE ALONG THE 13 NM ARC CENTERED AT 20° 53.93′N 156° 25.91′W (OGG VORTAC) TO 21°′N/156° 38.5′W, THEN COUNTERCLOCKWISE ALONG THE 2.4 NM ARC CENTERED AT 21° 00.7′N/ 156° 41.0′W, TO 21° 02.6′N/156° 42.3′W, TO 21° 05′N/156° 50.3′W, THEN COUNTERCLOCKWISE ALONG THE 25 NM ARC CENTERED AT 20° 53.93′N 156° 25.91′W (OGG VORTAC) TO 20° 58.4′N/156° 52.4′W, TO 20° 51.5′N/156° 49.5′W, TO 20° 57′N/156° 42′W, TO POINT OF ORIGIN.

APPENDIX 2. HONOLULU TERMINAL AREA AIRSPACE DEPICTION



Honolulu TAB is described as that airspace extending upward from the surface up to and including 16,000' MSL, within an airspace bounded by a line beginning at the CKH039R, 14 DME (21° 24' 59"N / 157° 30' 36"W) EXTENDING SE to 21° 09' 49"N / 157° 22' 53"W, then clockwise via the HNL VORTAC 32 mile radius arc to the HNL 148R (20° 48' 31"N / 157° 43' 35"W), then via the HNL 148R to intercept the HNL 28 mile radius arc (20° 52' 16"N / 157° 45' 07"W), then clockwise via the HNL VORTAC to 21° 35' 22"N / 158° 19' 49"W, then NE to 21° 37' 18"N / 158° 17' 20"W, then E to 21° 37' 23"N / 158° 16' 25"W, then counterclockwise via 5 mile radius around the Dillingham Airfield Airport Reference Point (21° 34.77'N / 158° 11.84'W) to 21° 38' 30"N / 158° 08' 15"W, then NE to 21° 43' 48"N / 158° 03' 50"W, then to 21° 47'N / 158° 00.5'W, thence extending along a straight line to intercept 21° 26' 39"N / 157° 52' 53"W, then E along a straight line to the point of beginning. Except, the airspace underlying the airspace described as extending upward from the surface up to and including 7,000' MSL within an airspace bounded by a line beginning at the CKH 039R, 14 DME (21° 24' 59"N / 157° 30' 36"W), extending SE via the CKH 039R to 6 DME (21° 17' 51"N / 157° 39' 47"W), then via a straight line extending northwest bound from the CKH 039R, 6 DME to coordinates 21° 26' 39"N / 157° 52' 53"W, thence a straight line to the beginning, has been delegated to Kaneohe MCBH.

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APPENDIX 3. HONOLULU CLASS BRAVO AIRSPACE

The Honolulu Class B airspace is described as:

AREA A: That airspace extending upward from the surface to and including 9,000' MSL within an area bounded by a line beginning at a point 4 miles north of the HNL VORTAC on the HNL R001, then clockwise along a 4 mile radius arc of the HNL VORTAC to the HNL R106, then east on the HNL R106 to 5 miles, then clockwise along a 5 mile radius arc of the HNL VORTAC to the HNL R270, then west on the HNL R270 to 5.6 miles, then clockwise along a 5.6 mile radius arc of the HNL VORTAC to a point 0.5 miles north of and parallel to the ILS runway 8L localizer course to the HNL R001, then north on the HNL R001 to the point of beginning.

AREA B. That airspace extending upward from 1,500' MSL to and including 9,000' MSL within an area bounded by a line beginning at a point 4 miles north of HNL VORTAC on the HNL R001 then counterclockwise along a 4 mile radius arc of the HNL VORTAC to a point 0.5 miles north of and parallel to the ILS runway 8L localizer course, then east along a line 0.5 miles north of and parallel to the ILS runway 8L localizer course to the HNL R001, to the point of beginning.

AREA C. That airspace extending upward from 4,000' MSL to and including 9,000' MSL within an area bounded by a line beginning at a point 12 miles east of HNL VORTAC on the HNL R091, then east on the HNL R091 to 20 miles, then clockwise along a 20 mile radius arc of the HNL VORTAC to the HNL R106, then west on the HNL R106 to 12 miles, then counterclockwise along a 12 mile radius arc of the HNL VORTAC to the point of beginning.

AREA D. That airspace extending upward from 1,000' MSL to and including 9,000' MSL within an area bounded by a line beginning at a point 5 miles ESE of the HNL VORTAC on the HNL R106, then ESE on the HNL R106 to 15 miles, then clockwise along a 15 mile radius arc of the HNL VORTAC to the HNL R146 to 5 miles, then NE on the HNL R146 to 5 miles, then counterclockwise along a 5 mile radius arc of the HNL VORTAC to the point of beginning.

AREA E. That airspace extending upward from 1,500' MSL to and including 9,000' MSL within an area bounded by a line beginning at a point 5 miles ESE of the HNL VORTAC on the HNL R146, then SE on the HNL R146 to 15 miles, then clockwise along a 15 mile radius arc of the HNL VORTAC to the HNL R239, then NE on the HNL R239 to 5 miles, then counterclockwise along a 5 mile radius arc of the HNL VORTAC to the point of beginning.

AREA F. That airspace extending upward from 2,000' MSL to and including 9,000' MSL within an area bounded by a line beginning at a point 15 miles ESE of the HNL VORTAC on the HNL R106, then ESE on the HNL R106 to 20 miles, then clockwise along a 20 mile radius arc of the HNL VORTAC to the HNL R239, then NE on the HNL R239 to 15 miles, then counterclockwise along a 15 mile radius arc of the HNL VORTAC to the point of beginning.

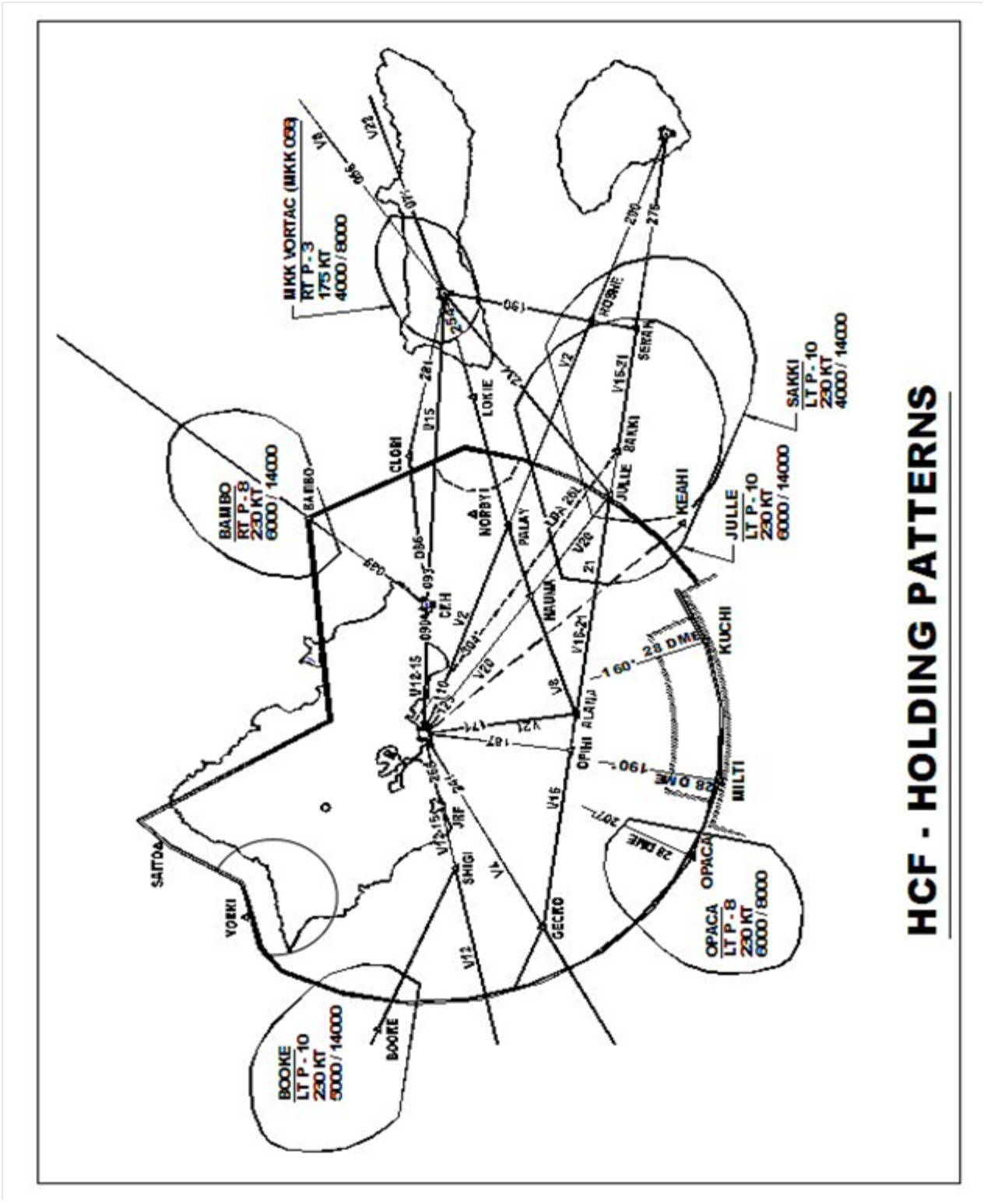
AREA G. That airspace extending upward from 3,000’ MSL to and including 9,000” MSL within an area bounded by a line beginning at a point 5 miles southwest of the HNL VORTAC on the HNL R239, then SW on the HNL R239 to 20 miles, then clockwise along a 20 mile radius arc of the HNL VORTAC to the HNL R280, then ESE on the HNL R280 to 15 miles, then counterclockwise along a 15 mile radius arc of the HNL VORTAC to the HNL R270, then east on the HNL R270 to 5 miles, then counterclockwise along a 5 mile radius arc of the HNL VORTAC to the point of beginning.

AREA H. That airspace extending upward from 2,200’ MSL to and including 9,000’ MSL within an area bounded by a line beginning at a point 7.7 miles west of the HNL VORTAC on the HNL R270, then west on the HNL R270 to 15 miles, then clockwise along a 15 mile radius arc of the HNL VORTAC to the HNL R280 to 15 miles, then ESE on the HNL R280 to 7.7 miles then counterclockwise along a 7.7 mile radius arc of the HNL VORTAC to the point of beginning.

AREA I. That airspace extending upward from 1,900’ MSL to and including 9,000’ MSL within an area bounded by a line beginning at a point 6.7 miles west of the HNL VORTAC on the HNL R270, then west on the HNL R270 to 7.7 miles, then clockwise along a 7.7 mile radius arc of the HNL VORTAC to a point 0.5 miles north of and parallel to the ILS runway 8L localizer course, then east along a line 0.5 miles north of and parallel to the ILS runway 8L localizer course to 6.7 miles, then counterclockwise along a 6.7 mile radius arc of the HNL VORTAC to the point of beginning.

AREA J. That airspace extending upward from 1,600’ MSL to and including 9,000’MSL within an area bounded by a line beginning at a point 5.6 miles west of the HNL VORTAC on the HNL R270, then west on the HNL R270 to 6.7 miles, then clockwise along a 6.7 mile radius arc of the HNL VORTAC to a point 0.5 miles north of and parallel to the ILS runway 8L localizer course, then east along a line 0.5 miles north of and parallel to the ILS runway 8L localizer course to 5.6 miles, then counterclockwise along a 5.6 mile radius arc of the HNL VORTAC to the point of beginning.

APPENDIX 4. HONOLULU HOLDING PATTERN DEPICTIONS



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APPENDIX 5. FLIGHT PROGRESS STRIP PREPARATION & MARKING PROCEDURES

A. General. This prescribes flight progress strip preparation and marking procedures supplemental to JO 7110.65 and incorporates strip marking procedures currently being used.

B. Procedures.

1. Aircraft identification. Eastbound aircraft may be hand printed in red.

2. Assigned Mach number.

a. Departure Strip. Enter in space 15.

b. En Route Strip. Enter in space 26.

3. Radar status. Enter in space 24.

4. Route information.

a. The appropriate two-letter identifier(s) specified in Appendix 11 may be used. (***Reminder:*** *OFDPS will not accept two-letter identifiers*.)

b. The Route Truncation Symbol ". /." specifies that a portion of the route of flight has been issued and processed but not being displayed on the flight progress strip.

c. The Incomplete Route Symbol "XXX" indicates that the flight plans have NOT been processed beyond the point preceding the "XXX' symbol.

d.

(1) Black/Blue – Controller initiated.

(2) Black box around "XXX" – Computer initiated.

REMINDER: *In either case above, controller action is required.*

5. En Route VFR Radar Advisory Service. Information on aircraft receiving VFR advisory service must be recorded on the flight progress strip by utilizing one of the following methods:

a. Front of flight progress strip – utilize the format specified in JO 7110.65 for IFR aircraft.

b. Back of flight progress strip – information must include, but is not limited to the following:

(1) Call sign.

(2) Type of Aircraft.

(3) Beacon code.

NOTE: *Several entries may be recorded on the back of the flight progress strip. Place an "X" when VFR advisory service is terminated.*

6. Maui Airport Class C strips. Information on aircraft receiving VFR Class C services in the Kahului Airport area must be recorded on the four inch flight progress strip and must include, but is not limited to, the following:

a. Call sign.

b. "Over" indicator as outlined in paragraph 5 g (3).

7. Inappropriate Altitude for Direction of Flight (IAFDOF). Underline any IAFDOF altitude in **RED.**

8. Miscellaneous. Contractions and codes.

a. RRTE: Reroute (space 26).

b. R/C "__": Rough Cut mission designator (space 26).

c. OVR or V: "Over" – for strip counting purposes. Enter this code on aircraft that qualify for an additional oceanic/domestic over count (space 26) or an ARSA over count.

d. "_____"(Red): Preplanned items may be written in RED and circled to indicate coordination has been accomplished.

e. "\" (Black/blue): Used to indicate that "transfer verification" on flight plans passed from ATOP to OFDPS has been accomplished. (Space 27-30).

f. "/" (Red); Used to indicate Aircraft Movement Information Service (AMIS) information has been forwarded to the Air Defense Control Facility (ADCF) (space 27-30).

APPENDIX 6 AUTHORIZED TWO LETTER IDENTIFIERS

(FOR INTRA-FACILITY USE ONLY)

A	E	K	P
AJINK – AJ	EBBER – EB	KAENA – KJ	PALAY – PY
AKULE – AK	ECEDO – EC	KATHS – KH	PARIS – PA
ALANA – AL	EGIPT – EG	KAYAK – KA	PATSY – PS
ANDES – AN	ELAYN – EL	KEAHI – KI	PERLY – PE
ANUYA – AA	ELOYI – EI	KEIKI – KE	PLUMB – PL
APACK – AP		KEKOA – KK	PULPS – PZ
ARBOR – AR	**F**	KEOLA – KO	PUMIC – PU
ASAYA – AS	FAPIS – FA	KLANI – KG	PUPPI – PP
AUNTI – AU	FIRES – FI	KOLTE – KT	
	FITES – FF	KRANE – KN	**R**
B	FLYHM – FL	KREEN – KR	REEEF – RF
BAMBO – BB	FRAKR – FR	KUCHI – KC	RUDEE – RU
BARBY – BA	FUZZE – FZ		
BARKR – BR		**L**	**S**
BAYCA – BC	**G**	LAVAS – LA	SAKKI – SK
BESTS – BS	GECKO – GK	LEANE – LE	SAYTO – SA
BITTA – BI	GENCO – GE	LILIA – LL	SCOON – SC
BLUSH – BL	GICEK – GI	LOKIE – LK	SELIC – SE
BOARD – BD	GRAMY – GR	LYDAT – LD	SERAH – SA
BOGEE – BO			SHARK – SH
BOOKE – BK	**H**	**M**	SYVAD – SY
BRIUN – BN	HABIG – HB	MAGGI – MG	
BRNDY – BY	HARPE – HE	MAHAO – MH	**T**
BRYDG – BG	HARPO – HA	MAITI – MI	TAMMI – TM
		MAKEN – MA	TARDE – TA
C	HASOG – HG	MATTE – MT	THOMA – TH
CAMPS – CA	HAULI – HI	MCFLY – MC	
CANON – CN	HOMAI – HO	MILTI – ML	**U**
CARRP – CP	HOSAX – HS	MORKE – MR	UJGEM – UJ
CEBEN – CE	HOXLY – HX	MUGGE – MU	
CHAIN – CH	HNAPI – HN		**V**
CHEEM – CM		**N**	VECKI – VE
CHOKO – CK	**I**	NAPUA – NP	VELLA – VL
CLUTS – CL	IDAVE – ID	NIKKI – NK	
CLYYD – CD	IVATE – IV	NIXEE – NE	**W**
COBIK – CO		NONNI – NN	WANSI – WS
CRESP – CR	**J**	NUDSE – NU	WILYE – WY
	JASON – JA		WINDI – WN
D	JAVAT – JV	**O**	WORDN – WD
DANNO – DN	JEMKO – JX	OKALA – OK	
DARIL – DA	JORDA – JR	OJOVU – OJ	**Z**
DATBE – DB	JULLE – JL	OLONE – OL	ZIGIE – ZI
DENNS – DE	JOELE – JO	ONOHI – ON	ZILNA – ZL
DOGIF – DO		OPACA – OP	ZOULU – ZO
DOVRR – DV			ZUKEY – ZK
DRAYK – DK			

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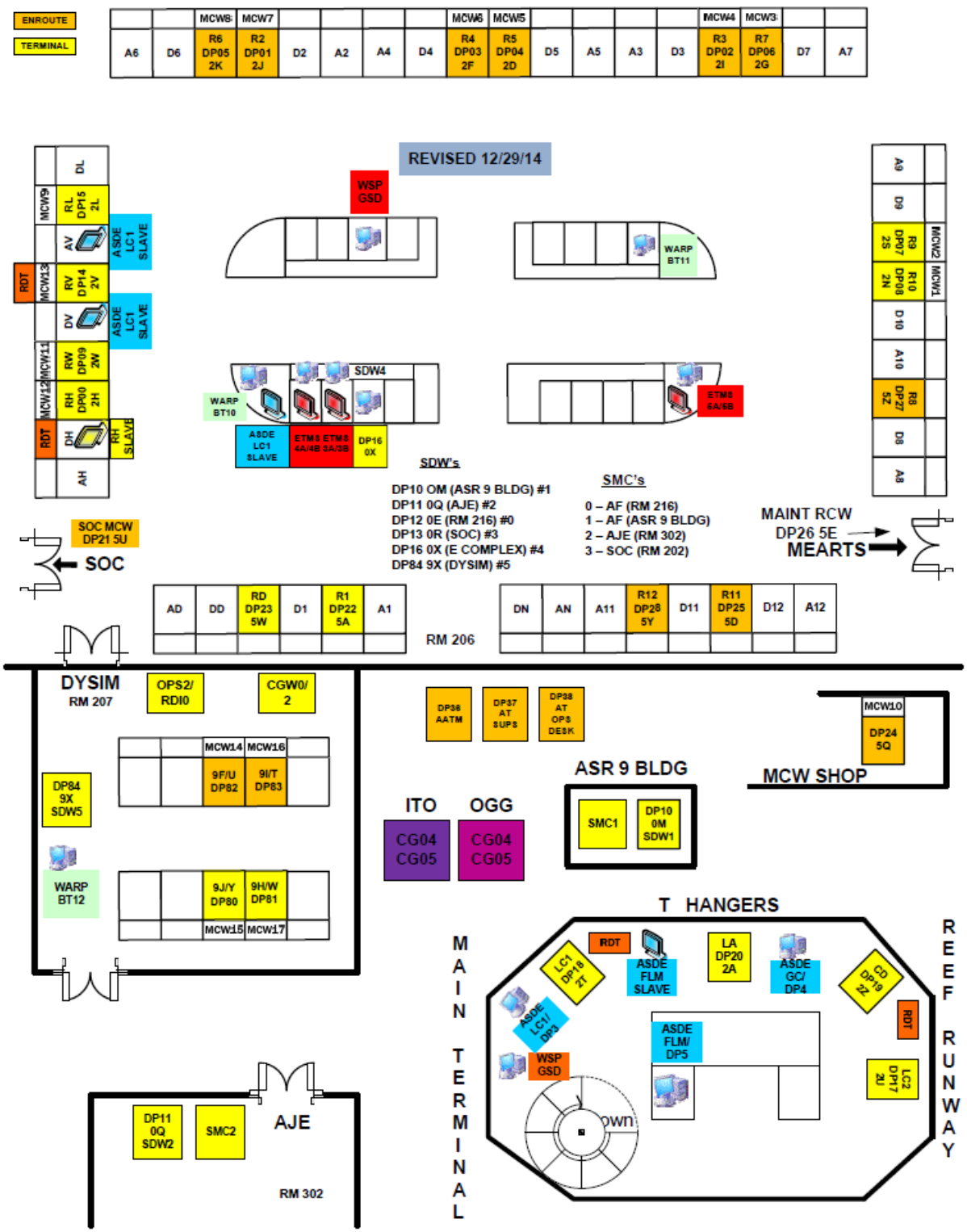
APPENDIX 7. OPERATIONS FLOOR MAP



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APPENDIX 8. FRONT LINE MANAGER CHECKLIST

FLM BRIEFING CHECKLIST

1. SIAS

2. EQUIPMENT OUTAGES

3. WEATHER / TRENDS (SIGMETS, AIRMETS, ETC.)

4. AIRPORT(S) CONDITIONS / ACTIVITIES / STATUS

5. FLOW CONTROL / TRAFFIC RESTRICTIONS
WARNING/RESTRICTED AREAS

6. SPECIAL ACTIVITIES
EMERGENCIES

7. SPECIAL INSTRUCTIONS / RESTRICTIONS

8. CURRENCY

9. STAFFING

10. TRAINING IN PROGRESS

11. OPERATION NOTAMS

12. T&A STATUS

13. OTHER DUTIES

14. TIME OUTSIDE SHIFT REQUESTS/APPROVALS

15. LEAVE REQUESTS/APPROVALS

16. COMMUNICATION STATUS & TRAFFIC
- **A. COMMUNICATION STATUS OF ALL KNOWN AIRCRAFT**
- **B. SPECIAL ACTIVITY AIRCRAFT**
- **C. NON-RADAR OPERATIONS**
- **D. COORDINATION AGREEMENTS WITH OTHER POSITIONS, FACILITIES, ETC**
- **E. SPECIAL PROBLEMS, REQUESTS OR INSTRUCTIONS**
- **F. PRESERVE TRACK REQUIRED**
- **G. IAFDOF AIRCRAFT**

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APPENDIX 9. HONOLULU ARRIVAL PROCEDURES – NON RADAR

ROUTE	CLEARANCE LIMIT & ALTITUDE	
	CENTER RADAR OUT	TOWER RADAR OUT
MAGGI STAR	BAMBO	
	JETS: 10,000' LAA	JETS/PROPS: 8,000' LAA
	PROPS: 6,000' LAA	
V8	MKK	
	MKK departures only:	MKK departures only:
	4,000'	4,000'
JULLE STAR or SAKKI STAR	SAKKI	
	JETS: 10,000' LAA	JETS/PROPS: 8,000' LAA
	PROPS: 6,000' LAA	
OPACA STAR	HONOLULU VORTAC	
HONOLULU VORTAC RADIALS	JETS: 10,000' LAA	JETS/PROPS: 8,000' LAA
	PROPS: 6,000' LAA	
BOOKE STAR	BOOKE	
	JETS: 10,000' LAA	JETS/PROPS: 8,000' LAA
	PROPS: 7,000' LAA	
HIGH ALTITUDE APPROACHES	Coordinate on individual basis.	

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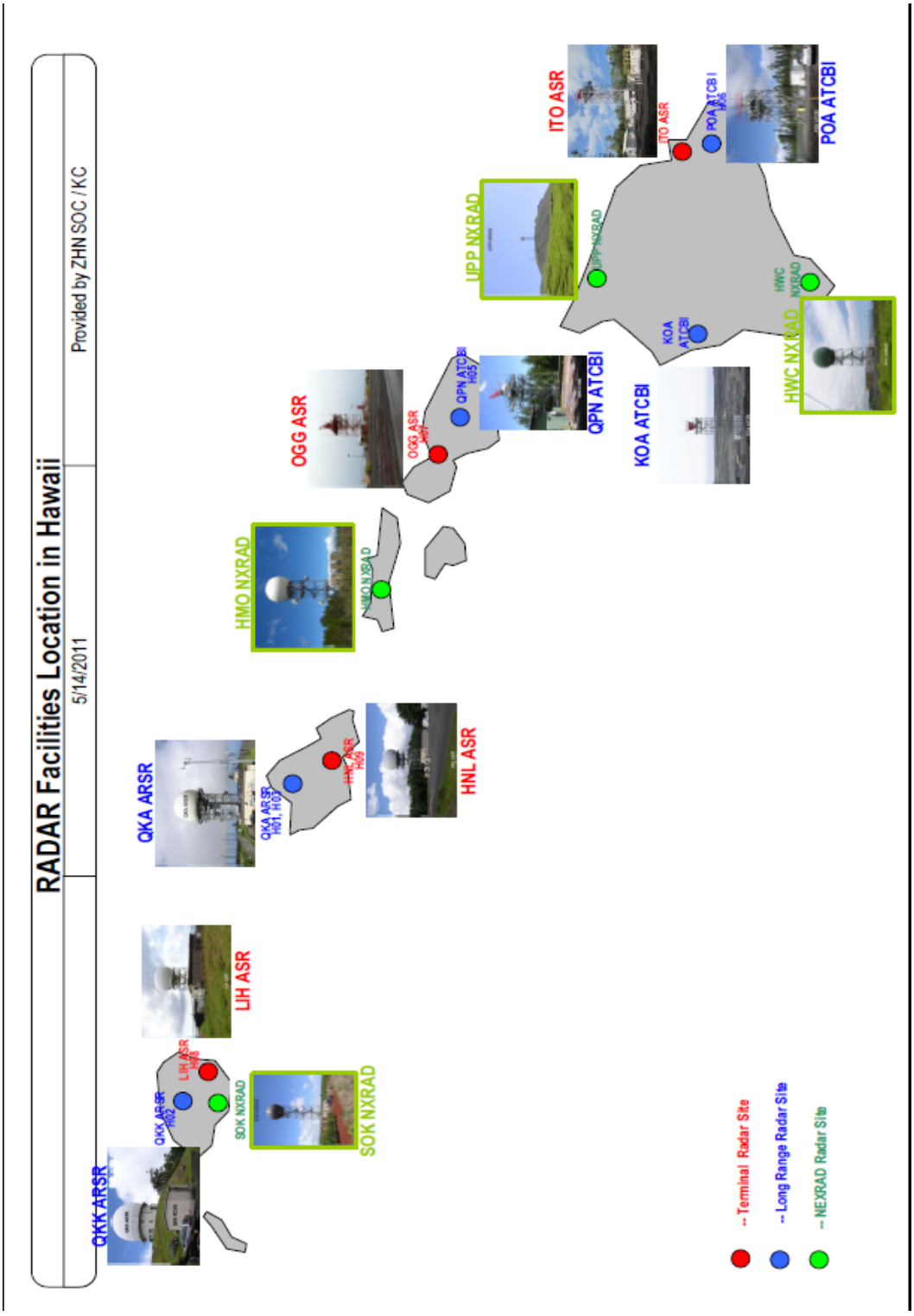
APPENDIX 10. RADAR FACILITY LOCATIONS



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APPENDIX 11. RADAR BRIGHT DISPLAY EQUIPMENT REPLACEMENT (RBDE/R) AIR TRAFFIC CONTROL SYSTEM OPERATING PROCEDURES

A. General. This establishes procedures to be used by personnel operating in RBDE/R air traffic control system. RBDE/R is the principal back-up system for the Microprocessor En Route Automated Radar Tracking System or Micro-EARTS (MEARTS).

1. The RBDE/R system was installed to provide a state-of-the-art- cost-effective back-up system to the MEARTS capable of processing and displaying narrowband and (digitized) radar data.

2. RBDE/R will automatically be implemented if there should be a failure in the dual Pentium processors of the MEARTS or can be manually accessed by selecting the F18 (Display Function) key and the letter “M”. No coordination with the National Airspace System Operations Manager (NOM)/Area Specialist (NAS) is required.

B. Responsibilities.

1. OSIC must advise the NOM/NAS of any system abnormalities.

2. Sector controllers must:

a. Immediately upon transitioning to RBDE/R:

(1) Take appropriate action to identify and resolve all potential conflicts.

(2) Ensure that the altimeter setting, radar sensor and time display are corrected and verified. Mode C altitudes will not be used for control purposes until the altimeter setting has been corrected.

(3) When the display comes up in RBDE/R mode, or goes from Micro-EARTS to RBDE/R, the radar will default to the sensor nearest the center of the scope and needs to be adjusted on a per scope basis.

b. During RBDE/R operations:

(1) Verify that the most appropriate sensor has been selected.

(2) Verify the altimeters and time settings are current and correct.

(3) Advise OSIC of any discrepancies.

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APPENDIX 12. AUTOMATION PROCEDURES AND SYSTEM INFORMATION

A. DROP TRACK (TB) MESSAGE. Reminder: If a “drop track” message is unintentionally entered into the MEARTS, a Request MEARTS Transfer (RF) message must be entered into the OFDPS to associate the flight plan data in both systems.

B. TEST FLIGHT PLANS. A ‘test’ flight plan should ALWAYS contain the prefix “YYY” preceding the call sign. “Test FP – disregard” should also be entered in the remarks section (field 11) of the flight plan.

C. AIRCRAFT TYPE. The OFDPS has been adapted to recognize numerous types of aircraft in accordance with JO 7110.65, Appendices A through C and will assign the appropriate Preferential Routing (PDAR, PDR PAR, etc.). However, these “types” of aircraft must be individually adapted; therefore, the entry must be identical to the adaptation to be recognized. For example, the OFDPS will recognize “2/F15/P” as a flight of two F-15’s, however, it will not recognize “2F15/P” and will default by call it a civil prop.

D. WIND STATIONS.Wind stations adapted in the OFDPS are:APACK, CANON, CARRP CHOKO, CLUTS, DANNO, DOVRR, EBBER, FIRES, FITES, GRAIL, HNL, KATHS, LILIA, MAGGI, NONNI, PUPPI, SCOON, SOOCN, SWOCN, SYVAD, THOMA and ZIGIE.

REMINDER: Enter Upper Winds (UW) messages will affect computer generated estimates. (Correct ground speeds, boundary crossing times, airport arrival times, etc.)

E. UNSUCCESSFUL TRANSMISSION MESSAGES (UTMs).

1. The Coordination Indicator (ZCE or ZH+) is printed in space 30 of the flight progress strip.

a. Black – Indicates that the ATOP/OFDPS interface was functioning at the time the flight progress strip was output to the sector and an attempt will be made to forward the information.

IMPORTANT: Although the Coordination Indicator is printed in black, a UTM may be received, requiring verbal coordination.

b. Black box around Coordination Indicator – Indicates that the interface was NOT functioning at the time the flight progress strip was output to the sector, therefore, verbal coordination is required.

2. Flight Plan Transfers.

a. Actual Boundary Crossing Time (ABCT). Active flight plans will be transferred to the receiving facility as follows:

(1) ZCE (ATOP) to ZCV (OFDPS) – fifty (50) minutes before the boundary crossing time.

(2) ZCV (OFDPS) to ZCE (ATOP) – seventy (70) minutes before the boundary crossing time.

b. Proposed Boundary Crossing Time (PBCT). Proposed flight plans are transferred from ZCV (OFDPS) to ZCE (ATOP) 20 minutes before the proposed departure time.

c. OFDPS to MEARTS Transfer. The OFDPS transfers flight plans to the MEARTS 30 minutes before the proposed departure time.

d. Proposed flight plans.

(1) Proposed flight plans are automatically removed from the OFDPS and the MEARTS, two hours after the proposed departure time.

(2) The MEARTS is capable of storing up to five flight plans for the same aircraft.

F. SPECIAL ROUTE INDICATOR.

1. VFR – Visual Flight Rules.

2. DVFR – Defense Visual Flight Rules.

3. XXX – Stop route processing

NOTE - *The flight plan is not processed past the fix preceding the Special Route Indicators.*

4. . /. – Route truncation. Indicates that part of the route has been left out.

5. ETE – Estimated time en route.

6. *** - Indicates that information has not been printed on the flight progress strip. A Flight Plan Readout (FR) message will display all data pertaining to the flight plan.

G. REFERENCE MATERIAL. The following reference materials are located in the areas listed below:

1. Controller Quick Reference Cards – Sectors.

2. Automation book – Systems Engineers desk.

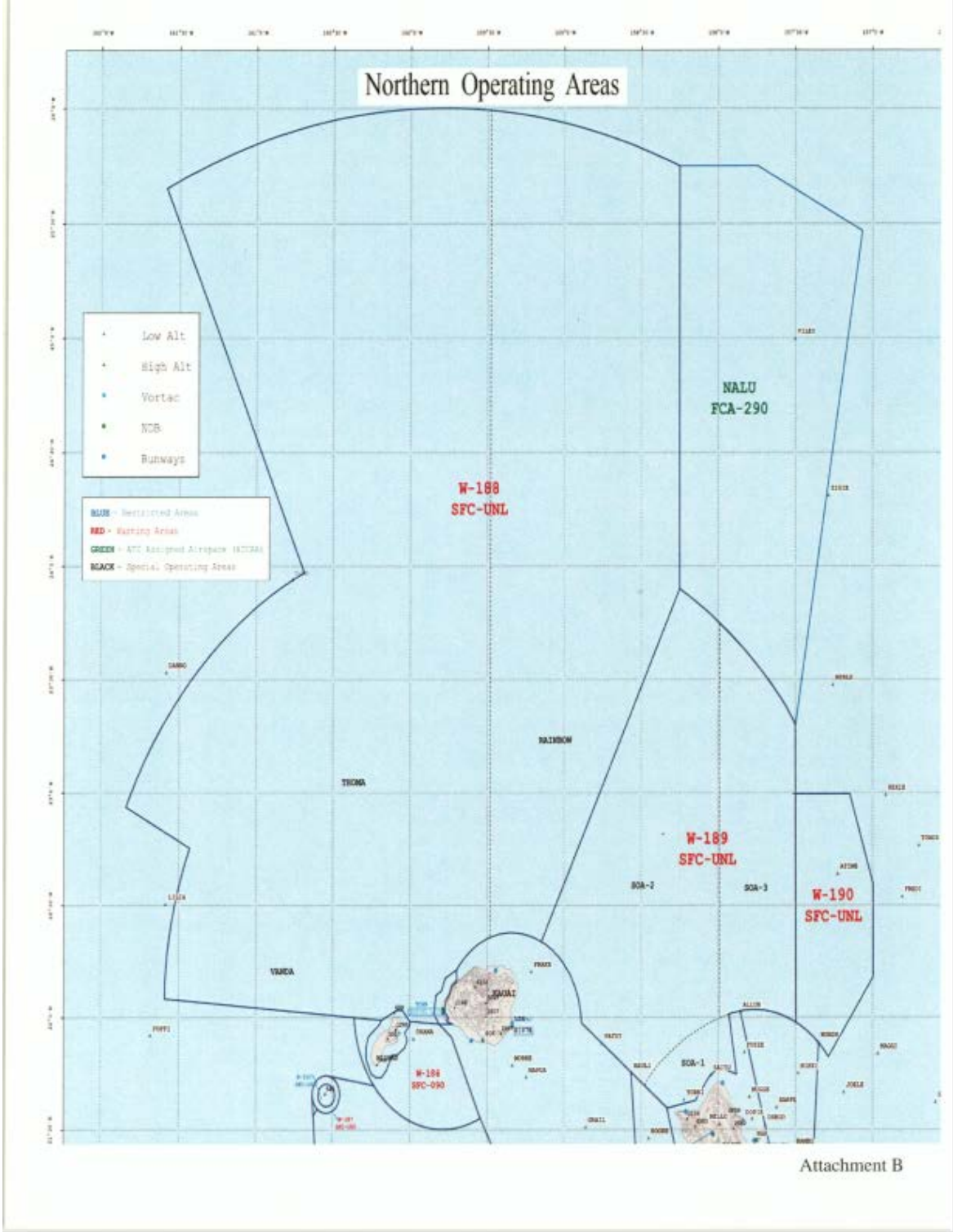
3. Center Stored Flight Plans – Flight Data Area.

4. Quick Reference book – Flight Data Area.

5. Reference Information – ACE-IDS.

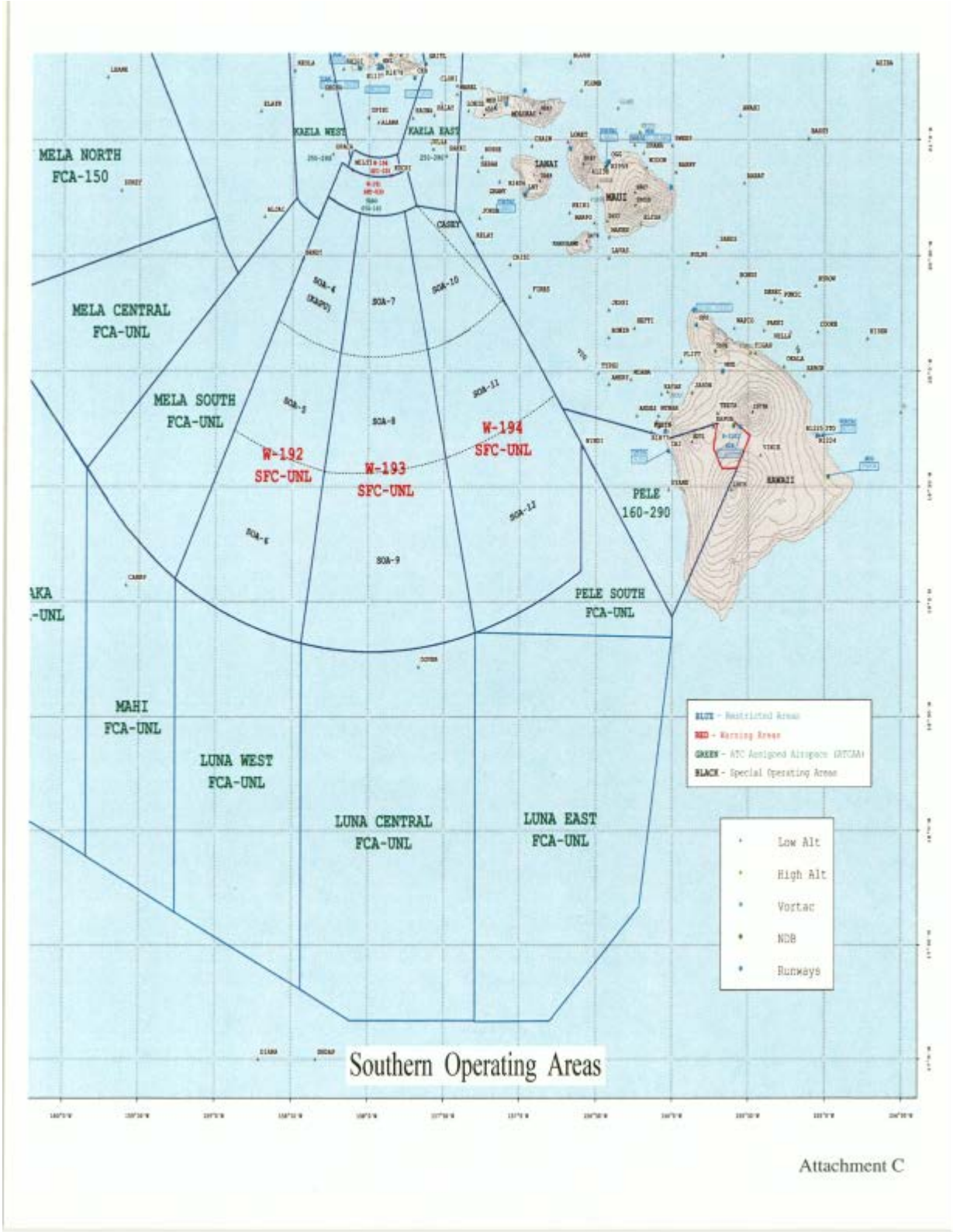
APPENDIX 13. Military Use Areas

Northern Operating Areas



APPENDIX 13. Military Use Areas

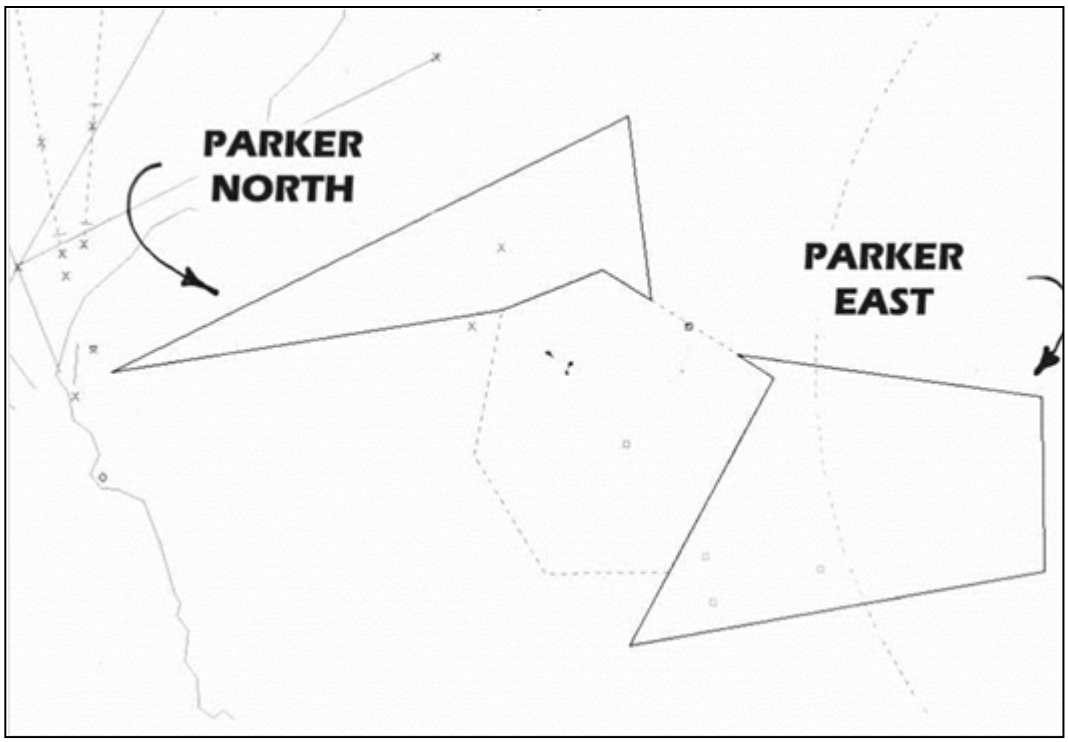
Southern Operating Areas



APPENDIX 13. Military Use Areas

ALTRV PARKER NORTH & PARKER EAST

(SHORT-TERM AND SPECIAL USE)



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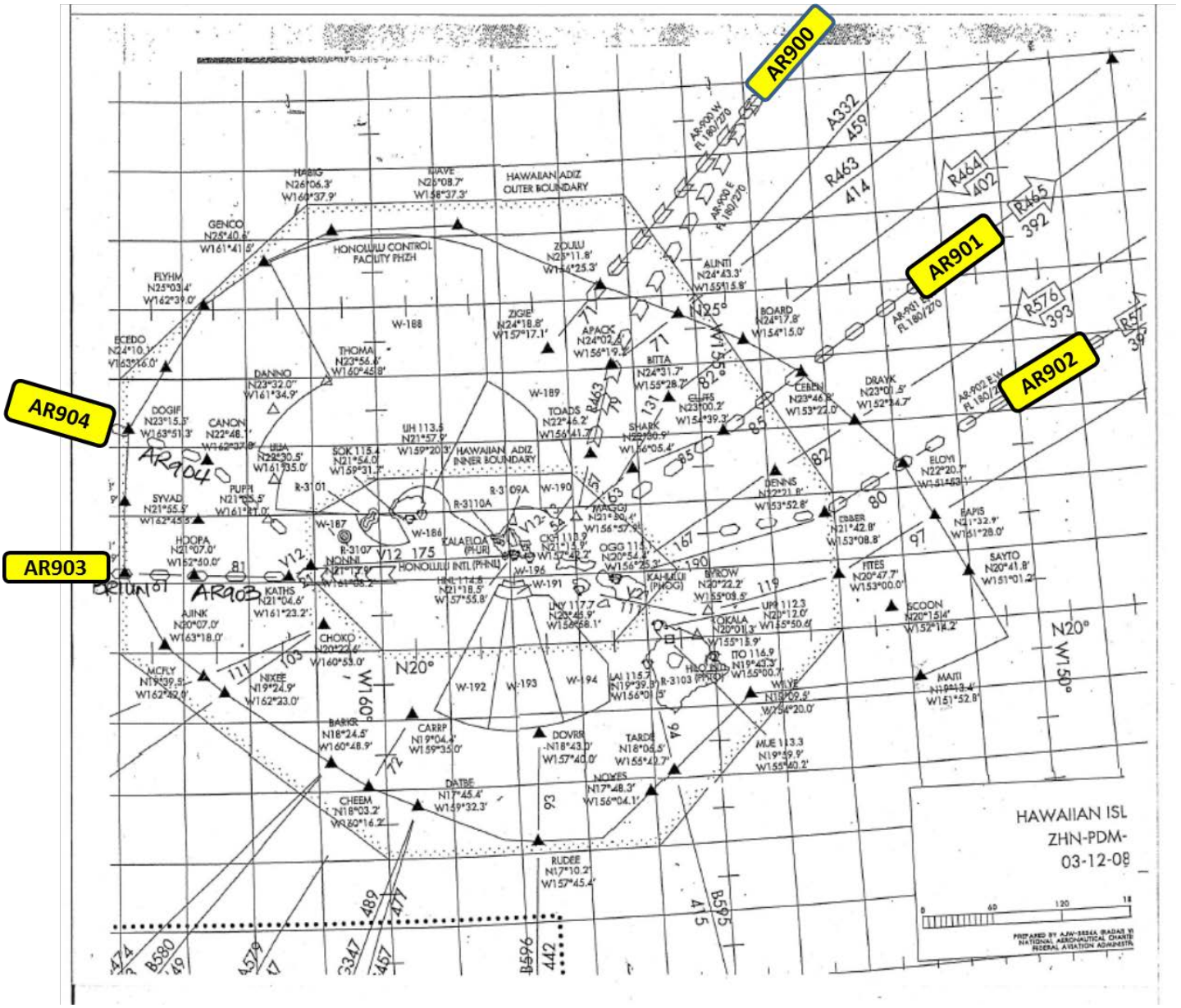
APPENDIX 14. Air Refueling Chart



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APPENDIX 15. PREFERENTIAL ROUTES

PREFERENTIAL ROUTES AS ADAPTED FOR CIVILIAN AIRPORTS					
Departure Point	Destination	Aircraft Type	Altitude Restriction	Other Restrictions	Route
HNL	LIH	ALL			HNL.KEOLA2.LIH
HNL	LIH	ALL	At or below 8,000		HNL.KEOLA2.KEOLA.HNL258R..LIH148R.LIH
HNL	MKK	ALL			HNL.MKK4.MKK
HNL	LNY	ALL			HNL.PALAY2.LNY
HNL	OGG	JETS			HNL.PALAY2.LNY.CAMPS3.OGG
HNL	OGG	PROPS	At or above 7,000		HNL.MKK4.MKK.V22.OGG
HNL	OGG	PROPS	At or below 6,000		HNL.MKK4.MKK.V8.BLUSH.V6.OGG
HNL	JHM	ALL			HNL.MKK4.MKK.MKK100R.BOGEE..JHM
HNL	ITO	JETS	At or above 13,000		HNL.MKK4.PULPS.V21.PUMIC.V15.ITO
HNL	ITO	JETS	At or below 12,000		HNL.PALAY2.LNY.V21.PUMIC.V15.ITO
HNL	ITO	PROPS			HNL.PALAY2.LNY.V16.UPP.V2.ITO
HNL	KOA	ALL			HNL.PALAY2.LNY.VECKI8.KOA
HNL	KOA	ALL		KOA ILS OTS	HNL.PALAY2.LNY.KAYAK5.KOA
HNL	MUE	PROPS			HNL.PALAY2.LNY.V16.UPP.UPP174R.JASON..MUE
HNL	MUE	JETS			HNL.MKK4.PULPS.V11.UPP.UPP174R.JASON..MUE
OGG	HNL	JETS	At or above 9,000		OGG.MAUI5.OGG..LNY.JULLE5.HNL
OGG	HNL	PROPS			OGG.V6.BLUSH.V8.HNL
OGG	HNL	C208s	At or above 8,000		OGG.V6.BLUSH.V8.MKK.MKK300R.BAMBO.V12.HNL
OGG	KOA	JETS			OGG.ONOHI2.ONOHI.VECKI8.KOA
OGG	KOA	PROPS	At or above 8,100		OGG.BEACH4.HARPO.V2.MAKEN.V5.KOA
OGG	KOA	C208s	At or Above 8,100		OGG.ONOHI2.ONOHI.VECKI8.KOA
OGG	ITO	JETS			OGG.ONOHI2.BARBY.V22.BONUS.V21.PUMIC.V15.ITO
OGG	ITO	PROPS	At or above 10,000		OGG.ONOHI2.BARBY.V11.PULPS.V21.PUMIC.V15.ITO
OGG	ITO	PROPS	At or below 10,000		OGG.ONOHI2.BARBY.V11.UPP.V2.ITO
OGG	MUE	JETS			OGG.ONOHI2.BARBY.V11.UPP.UPP174R.JASON..MUE
OGG	MUE	PROPS	At or above 8,100		OGG.BEACH4.HARPO.V2.UPP.UPP174R.JASON..MUE
OGG	MUE	PROPS	At or below 8,000		OGG.V1.HARPO.V2.UPP.UPP174R.JASON..MUE
OGG	MUE	C208s	At or above 8,000		OGG.ONOHI2.BARBY.V11.UPP.UPP174R.JASON..MUE
OGG	LIH	JETS	At or above 9,000		OGG.MAUI5.OGG..LNY.V16.NAPUA..LIH
OGG	LIH	PROPS			OGG.V6.BLUSH.CKH075R.CKH.V12.KEOLA.V16.NAPUA..LIH
OGG	JHM	ALL			OGG.V6.BLUSH.V8.MKK.MKK100R.BOGEE..JHM
OGG	LNY	PROPS	At or above 8,100		OGG.BEACH4.LNY
OGG	LNY	PROPS	At or below 8,000		OGG.V1.HARPO.V2.LNY
OGG	MKK	PROPS			OGG.V6..V8.MKK
ITO	HNL	JETS	At or above 10,000	ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V16.LNY.JULLE5.HNL
ITO	HNL	PROPS		ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V23..V7.LNY.JULLE5.HNL
ITO	HNL	JETS	At or above 10,000	ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V16.LNY.JULLE5.HNL
ITO	HNL	PROPS		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V23..V7.LNY.JULLE5.HNL
ITO	HNL	JETS	At or below 9,000	ITO ATCT Open	ITO.V22.OKALA.V16.LNY.JULLE5.HNL
ITO	HNL	PROPS		ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V23..V7.LNY.JULLE5.HNL
ITO	HNL	JETS	At or below 9,000	ITO ATCT Closed	ITO.PARIS4.PARIS.V2.LNY.JULLE5.HNL
ITO	HNL	PROPS		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V23..V7.LNY.JULLE5.HNL
ITO	LIH	ALL	At or above 10,000	ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V23.FIRES.V20.JULLE.V16.NAPUA..LIH
ITO	LIH	ALL	At or above 10,000	ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V23.FIRES.V20.JULLE.V16.NAPUA..LIH
ITO	LIH	ALL	At or below 9,000	ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V2.LNY.V16.NAPUA..LIH
ITO	LIH	ALL	At or below 9,000	ITO ATCT Closed	ITO.PARIS4.PARIS.V2.LNY.V16.NAPUA..LIH
ITO	OGG	ALL		ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V2.HARPO.CAMPS3.OGG
ITO	OGG	ALL		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.HARPO.CAMPS3.OGG
ITO	JHM	ALL		ITO ATCT Open	ITO.V22.OKALA.V16.LNY.LNY014R.BOGEE..JHM
ITO	JHM	ALL		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V16.LNY.LNY014R.BOGEE..JHM
ITO	KOA	ALL		ITO ATCT Open	ITO.V22.OKALA.VECKI8.KOA
ITO	KOA	ALL		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.VECKI8.KOA
ITO	MUE	ALL		ITO ATCT Open	ITO.V22.OKALA.V16.TIGAH.V3.MUE
ITO	MUE	ALL		ITO ATCT Closed	ITO.PARIS4.PARIS.V3.MUE
KOA	OGG	ALL			KOA.V1.HARPO.CAMPS3.OGG

Departure Point	Destination	Aircraft Type	Altitude Restriction	Other Restrictions	Route
KOA	OGG	C208	060B999		KOA.KOA191R.CIGAK..MYNAH.V11.UPP.V2.HARPO.CAMPS3.OGG
KOA	ITO				KOA.V5.MYNAH.V3.PARIS.V2.ITO
KOA	MUE	ALL			KOA.V5.MYNAH.V3.MUE
KOA	HNL	JETS			KOA.V20.HOKLA.JULLE5.HNL
KOA	HNL	PROPS	At or above 13,000		KOA.V20.HOKLA.JULLE5.HNL
KOA	HNL	PROPS	At or below 12,900		KOA.V7.LNY.JULLE5.HNL
KOA	LIH	JETS			KOA.V20.JULLE.V16.NAPUA..LIH
KOA	LIH	PROPS	At or above 13,000		KOA.V20.JULLE.V16.NAPUA..LIH
KOA	LIH	PROPS	At or below 12,900		KOA.V7.LNY.V16.NAPUA..LIH
KOA	JHM	C208	At or above 6,000		KOA.KOA191R.CIGAK..MYNAH.V11.UPP.V2 LNY.LNY014R.BOGEE..JHM
MUE	ITO	ALL			MUE.V3.PARIS.V2.ITO
MUE	KOA	ALL			MUE.V3.MYNAH.V5.KOA
MUE	OGG	ALL			MUE.V3.TIGAH.V16.UPP.V2.HARPO.CAMPS3.OGG
MUE	JHM	ALL			MUE.V3.TIGAH.V16.LNY.LNY014R.BOGEE..JHM
MUE	LNY	ALL			MUE.V3.TIGAH.V16.LNY
MUE	MKK	ALL			MUE.V3.TIGAH.V16.LNY.V7.MKK
MUE	HNL	JETS			MUE.V3.TIGAH.V16.UPP.JULLE5.HNL
MUE	HNL	PROPS			MUE.V3.TIGAH.V16.UPP.V23..V7.LNY.JULLE5.HNL
MUE	LIH	ALL			MUE.V3.TIGAH.V16.UPP.V23.FIRES.V20.JULLE.V16.NAPUA..LIH
LNY	OGG	ALL			LNY.CAMPS3.OGG
LNY	HNL	ALL			LNY.JULLE5.HNL
LNY	HNL	C208	At or below 6,000		LNY.V7.MKK.MKK300R.BAMBO.V12.HNL
LNY	JHM	ALL			LNY.LNY014R.BOGEE..JHM
LNY	KOA	ALL			LNY.VECKI8.KOA
LNY	MUE	ALL			LNY.V16.UPP.UPP174R.JASON..MUE
LNY	ITO	JETS			LNY.V21.PUMIC.V15.ITO
LNY	ITO	PROPS			LNY.V16.UPP.V2.ITO
LNY	LIH	ALL			LNY.V16.NAPUA..LIH
MKK	HNL	ALL			MKK.V8.HNL
MKK	HNL	C208			MKK.HAPAI3.BAMBO.V12.HNL
MKK	LNY	ALL			MKK.V7.LNY
MKK	OGG	JETS			MKK.V7.LNY.CAMPS3.OGG
MKK	OGG	PROPS			MKK.BLUSH2.BLUSH.V6.OGG
MKK	JHM	ALL			MKK.MKK100R.BOGEE..JHM
MKK	KOA	ALL			MKK.V7.LNY.VECKI8.KOA
MKK	ITO	JETS			MKK.V7.LNY.V21.PUMIC.V15.ITO
MKK	ITO	PROPS			MKK.V7.LNY.V16.UPP.V2.ITO
MKK	LIH	ALL			MKK.V8.ALANA.V16.NAPUA..LIH
LIH	HNL	ALL			LIH.V15.HNL
LIH	MKK	ALL			LIH.V15.MKK
LIH	LNY	ALL			LIH.V15.HNL.V2.LNY
LIH	OGG	JETS			LIH.V15.HNL.V2.LNY.CAMPS3.OGG
LIH	OGG	PROPS	At or above 7,000		LIH.V15.MKK.V22.OGG
LIH	OGG	PROPS	At or below 6,000		LIH.V15.MKK.V8.BLUSH.V6.OGG
LIH	JHM	ALL			LIH.V15.MKK.MKK100R.BOGEE..JHM
LIH	KOA	JETS	At or above 12,000		LIH.V15.MKK.VECKI8.KOA
LIH	KOA	ALL	At or below 11,000		LIH.V15.HNL.V2.LNY.VECKI8.HNL
LIH	KOA	PROPS	At or above 12,000		LIH.V15.HNL.V2.LNY.VECKI8.HNL
LIH	MUE	ALL			LIH.V15.HNL.V2.LNY.V16.UPP.UPP174R.JASON..MUE
LIH	ITO	JETS	At or above 10,000		LIH.V15.HNL.V2.LNY.V21.PUMIC.V15.ITO
LIH	ITO	PROPS	At or below 9,000		LIH.V15.HNL.V2.LNY.V16.UPP.V2.ITO
JHM	HNL	ALL			JHM..CHAIN.JULLE5.HNL
JHM	ITO	JETS			JHM..CHAIN.LNY360R.LNY.V21.PUMIC.V15.ITO
JHM	ITO	PROPS			JHM..CHAIN.LNY360R.LNY.V16.UPP.V2.ITO

Departure Point	Destination	Aircraft Type	Altitude Restriction	Other Restrictions	Route
JHM	MUE	ALL			JHM..CHAIN.LNY360R.LNY.V16.UPP.UPP174R.JASON..MUE
JHM	KOA	ALL			JHM..CHAIN.LNY360R.LNY.VECKI8.KOA
JHM	LNY	ALL			JHM..CHAIN.LNY360R.LNY
JHM	LIH	ALL			JHM..CHAIN.LNY360R.LNY.V16.NAPUA..LIH
LUP	HNL	PROPS	At or below 6,000		LUP..MKK.V8.HNL
LUP	HNL	C208	At or above 7,000		LUP..MKK.MKK300R.BAMBO.V12.HNL
LUP	JHM	PROPS			LUP..MKK.MKK100R.BOGEE..JHM
LUP	LNY	PROPS			LUP..MKK.V7.LNY
LUP	OGG	PROPS			LUP..MKK.V8.BLUSH.V6.OGG
LUP	OGG	PROPS			LUP..MKK.V7.LNY.CAMPS1.OGG
LUP	OGG	PROPS	At or above 5,000		LUP..MKK.V7.LNY.V2,,V17,,OGG

PREFERENTIAL ROUTES AS ADAPTED FOR MILITARY AIRPORTS

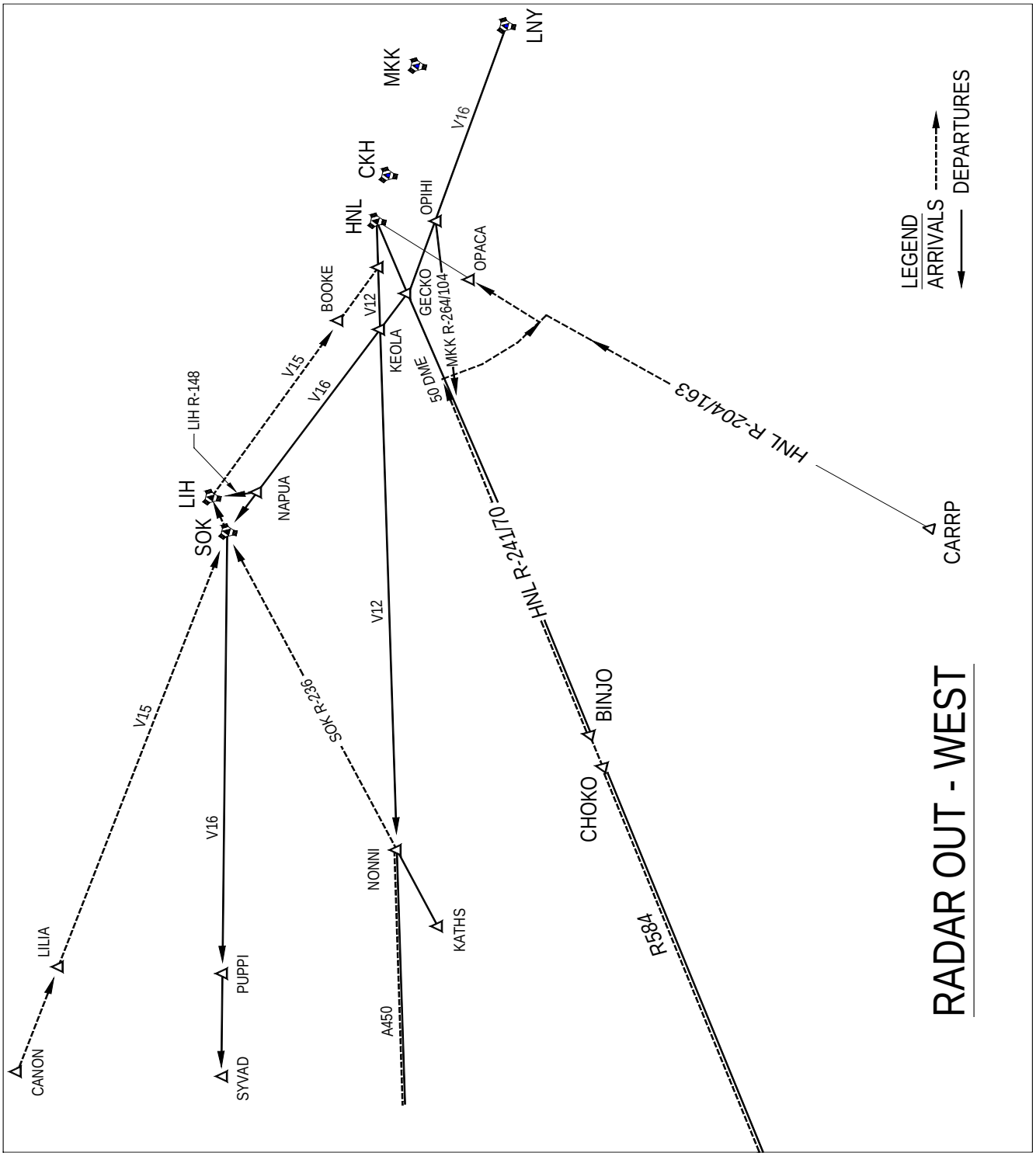
Departure Point	Destination	Aircraft Type	Altitude Restriction	Other Restrictions	Route
HNL	BKH	ALL	At or above 9,000		HNL.KEOLA2.SOK..ASAYA..BKH
HNL	HHI	ALL	At or Below 5,000		HNL..HHI
HNL	NGF	ALL	At or below 9,000		HNL..MUGGE..NGF
HNL	JRF	ALL	At or below 3,000		HNL..JRF
OGG	BKH	ALL	At or above 9,000		OGG.MAUI5.LNY.V16.SOK..ASAYA..BKH
OGG	HHI	PROPS	At or below 8,000		OGG.V6.BLUSH.V8.ALANA..HHI
OGG	HHI	JETS	At or above 9,000		OGG.MAUI5.LNY.V16.ALANA..HHI
OGG	NGF	JETS	At or above 9,000		OGG.MAUI5.OGG.V22.MKK..NUDSE..NGF
OGG	NGF	PROPS			OGG.V6.BLUSH..NUDGE..NGF
OGG	NGF	ALL	At or below 6,900		OGG.V6.BLUSH.V8.MKK..NUDSE..NGF
OGG	JRF	PROPS	At or below 8,000		OGG.V1.HARPO.V2.LNY.V16.ALANA..GECKO..JRF
OGG	JRF	C208			OGG.V6.PLUMB.V22.MKK.MKK300R.BAMBO.V12.HNL..SIMSN..JRF
OGG	JRF	PROPS	At or above 8,100		OGG.BEACH4.LNY.V16.ALANA..GECKO..JRF
OGG	JRF	JETS	At or above 9,000		OGG.MAUI5.OGG..LNY.V16.ALANA..GECKO..JRF
ITO	BKH	ALL			ITO.V22.OKALA.V16.SOK..ASAYA..BKH
ITO	HHI	ALL		ITO ATCT Open	ITO.V22.OKALA.V16.ALANA..HHI
ITO	HHI	ALL		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V16.ALANA..HHI
ITO	NGF	ALL	At or above 7,000	ITO ATCT Open	ITO.V22.OKALA.V16.LNY.V7.MKK..NUDSE..NGF
ITO	NGF	ALL	At or above 7,000	ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V16.LNY.V7.MKK..NUDSE..NGF
ITO	JRF	JETS		ITO ATCT Open	ITO.V22.OKALA.V16.ALANA..GECKO..JRF
ITO	JRF	JETS		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V16.ALANA..GECKO..JRF
ITO	JRF	PROPS		ITO ATCT Open	ITO.V22.OKALA.V16.UPP.V23..V7..V16.GECKO..JRF
ITO	JRF	PROPS		ITO ATCT Closed	ITO.PARIS4.PARIS.V2.UPP.V23..V7..V16.GECKO..JRF
LNY	HHI	ALL			LNY.V16.ALANA..HHI
LNY	JRF	ALL			LNY.V16.ALANA..GECKO..JRF
MKK	HHI	ALL			MKK.V8.ALANA..HHI
MKK	JRF	ALL			MKK.V8.GECKO..JRF
MKK	JRF	C208			MKK.HAPAI3.BAMBO.V12.HNL..SIMSN..JRF
LIH	BKH	ALL			LIH..KREEN..SOK..ASAYA..BKH
LIH	HHI	ALL			LIH.V15.HNL..HHI
LIH	NGF	ALL			LIH..HAULI..FUZZE..NIKKI..NGF
LIH	JRF	ALL			LIH.V15.BOOKE..GECKO..JRF
BKH	HNL	ALL			BKH.SOK3.SOK.V15.HNL
BKH	OGG	ALL			BKH.SOK3.SOK.V15.MKK.V22.OGG
BKH	LIH	ALL			BKH.SOK3.SOK.V16.MORKE..LIH
BKH	JRF	ALL			BKH.SOK3.SOK.V15.BOOKE..GECKO..JRF

Departure Point	Destination	Aircraft Type	Altitude Restriction	Other Restrictions	Route
BKH	NGF	ALL			BKH.SOK3.SOK..HAULI..FUZZE..NIKKI
HHI	OGG	JETS			HHI.SHINS1.LNY.CAMPS3.OGG
HHI	OGG	PROPS			HHI.SHINS1.MKK.V8.BLUSH.V6.OGG
HHI	ITO	JETS	At or above 13,000		HHI.SHINS1.MKK..PULPS.V21.PUMIC.V16.ITO
HHI	ITO	PROPS			HHI.SHINS1.LNY.V16.UPP.V2.ITO
HHI	LNY	ALL			HHI.SHINS1.LNY
HHI	MKK	ALL			HHI.SHINS1.MKK
HHI	LIH	ALL	At or below 9,000		HHI.GECKO1.GECKO.V16.KEOLA.HNL258R..LIH148R..LIH
HHI	LIH	ALL			HHI.GECKO1.GECKO.V16.NAPUA..LIH
HHI	BKH	ALL	At or above 10,000		HHI.GECKO1.GECKO.V16.SOK..ASAYA..BKH
NGF	HNL	ALL			NGF.MUGGE7.HNL
NGF	OGG	ALL			NGF.HELUX3.MKK.V22.OGG
NGF	ITO	ALL	At or above 10,000		NGF.HELUX3.MKK.V7.LNY.V21.PUMIC.V16.ITO
NGF	ITO	ALL			NGF.HELUX3.VKK.V7.LNY.V16.UPP.V2.ITO
NGF	MKK	ALL			NGF.HELUX3.MKK
NGF	LIH	ALL			NGF.NGF2.SOK..LIH
NGF	BKH	ALL			NGF.NGF2.SOK..ASAYA..BKH
NGF	JRF	ALL	At or below 16,000		NGF.MUGGE7.HNL..GECKO..TARLE..JRF
JRF	OGG	C208			JRF..IWOHI..CKH.V15.MKK.V22.PLUMB.V6.OGG
JRF	MKK	C208			JRF..IWOHI..CKH.V15.MKK

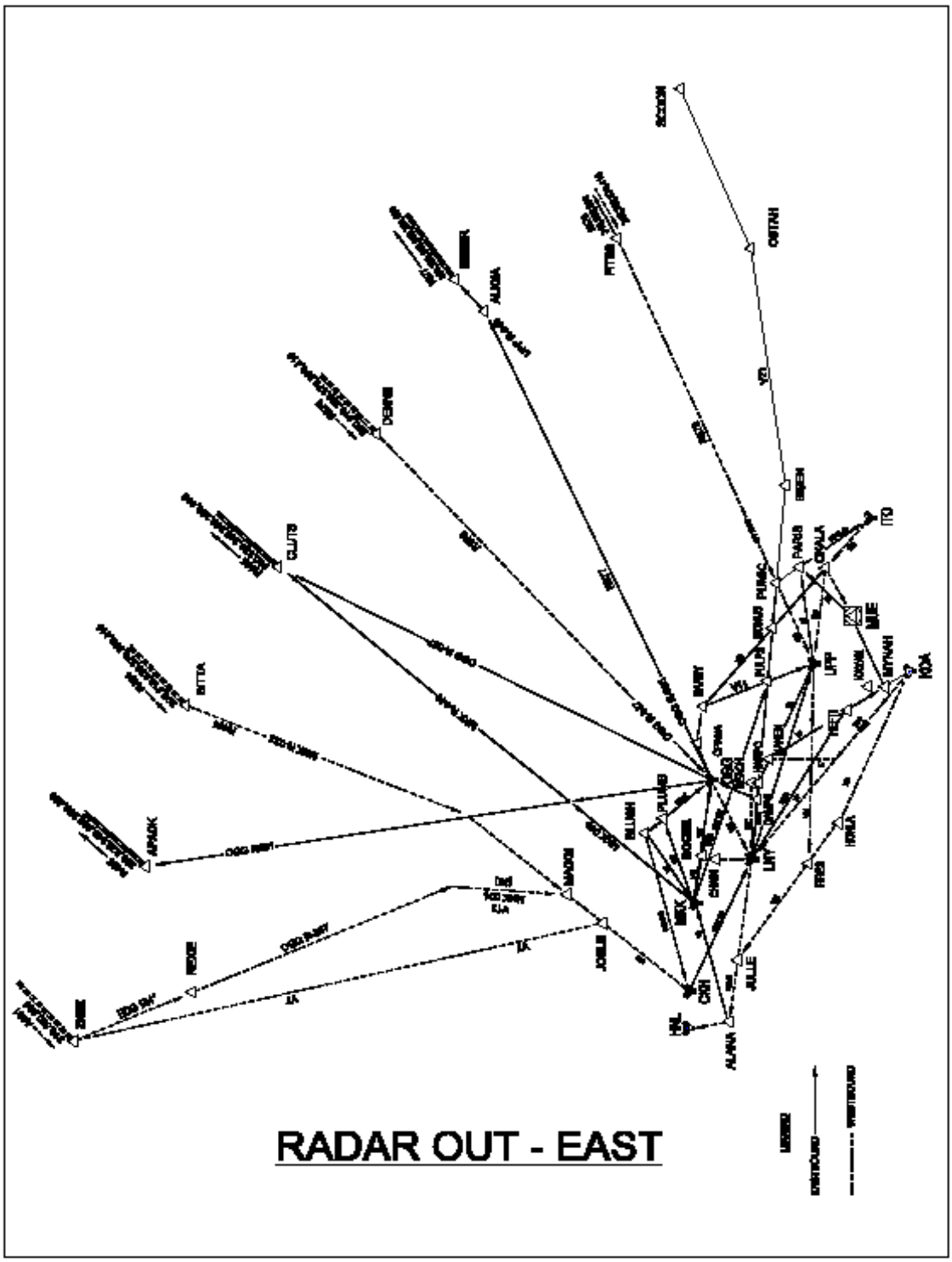
As of 8/20/15

APPENDIX 16. Automation Procedures and System Information

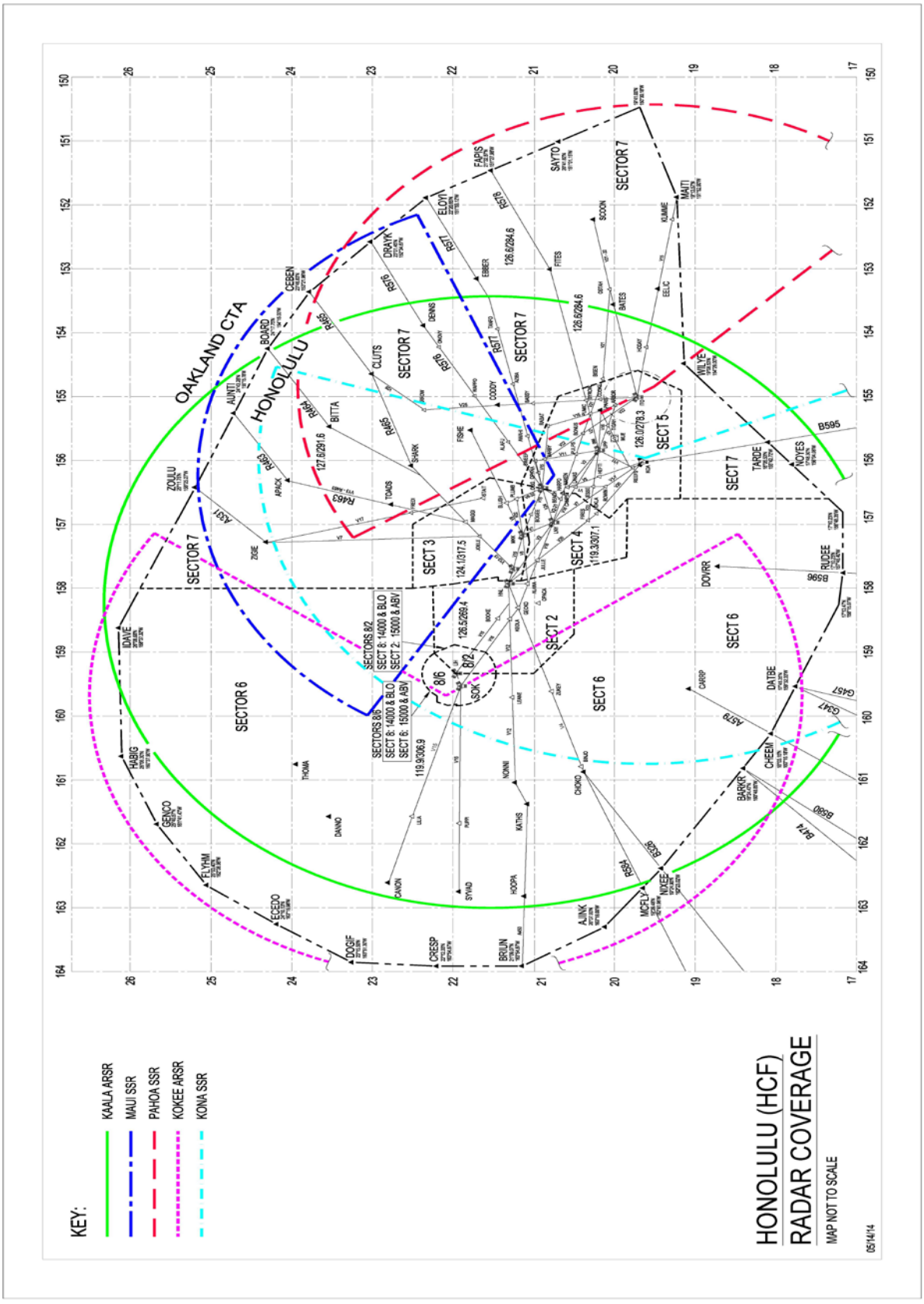
RADAR OUT – WEST



APPENDIX 16. Automation Proceudures and System Information
RADAR OUT – EAST



APPENDIX 17. HCF Radar Coverage – Long Range



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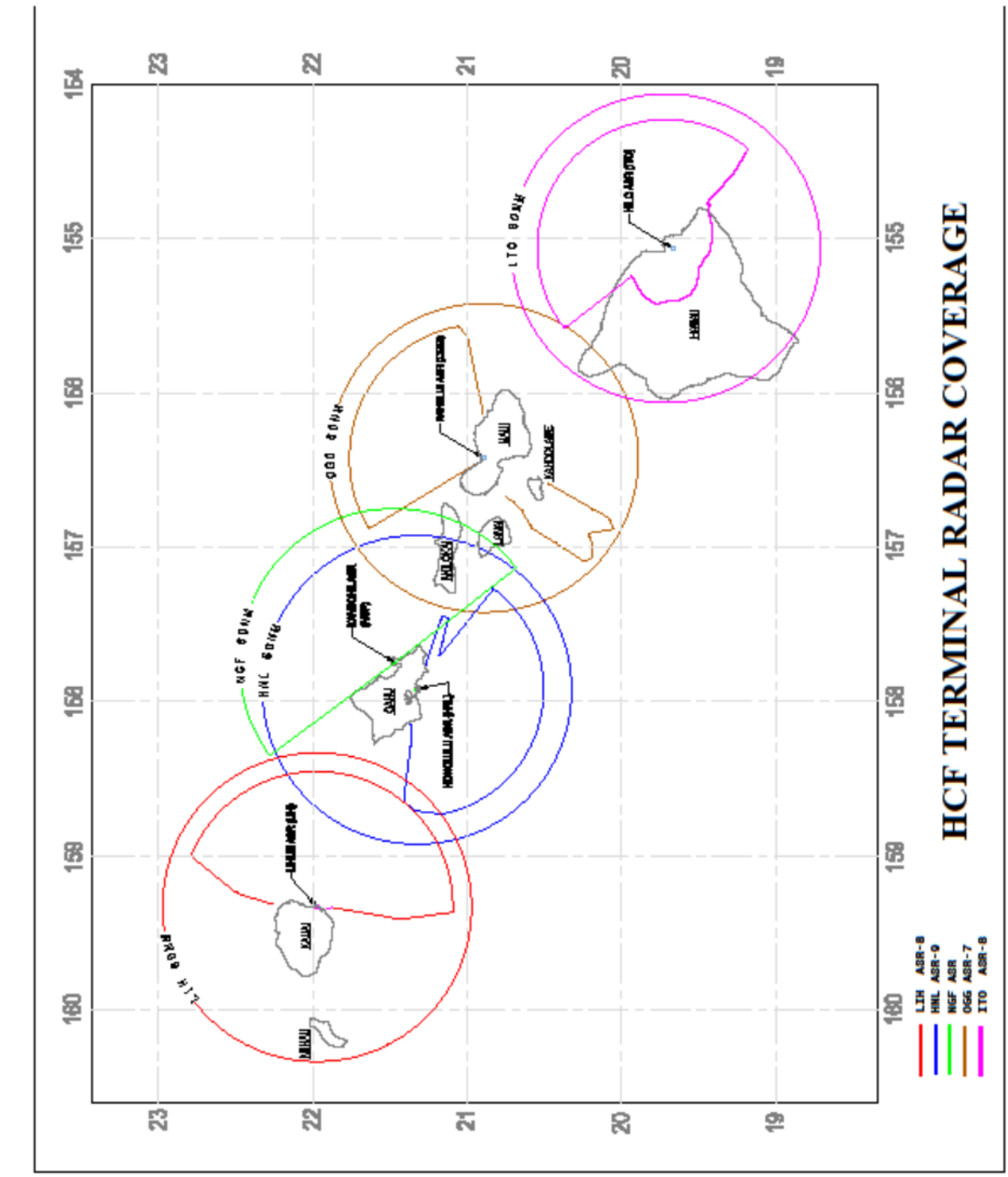
APPENDIX 18. HCF Radar Coverage – Terminal



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APPENDIX 19. Honolulu Control Facility Frequencies for Inbound Aircraft

FIX		FREQUENCIES
ZOULU/ZIGIE AUNTI/APACK BOARD/BITTA CEBEN/CLUTS CEBEN/SHARK CEBEN/FISHE TARDE/KOA	)))))))	127.6/291.6
DRAYK/DENNS ELOYI/EBBER FAPIS/FITES SAYTO/SCOON	))))	126.6/284.6
WEST AND SOUTHWEST OF HONOLULU	)))	119.9/306.9

ARINC SHALL ASSIGN INBOUND AIRCRAFT THE APPROPRIATE FREQUENCY AND REQUEST THEY CONTACT HONOLULU CONTROL FACILITY 10 MINUTES PRIOR TO THE OCEANIC INGRESS FIXES.

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APPENDIX 20. Sector Frequencies and Indirect Access

APPROACH CONTROL

HONOLULU	H	118.3	269.0
HONOLULU	V	119.1	239.05
HONOLULU	L	124.8	317.6
HONOLULU	Spare	120.9	338.2
HILO		119.7	269.2
MAUI	R9	119.5	225.4
MAUI	R10	120.2	322.4
NGF		125.0	263.5
LIH	Spare	134.0	319.2

ENROUTE SECTORS

2	KAALA	126.5	269.4
3	HALEAKALA	124.1	317.5
4	HALEAKALA	119.3	307.1
5	HALEAKALA	126.0	278.3
6	KOKEE	119.9	306.9
7	HALEAKALA	127.6	291.6
	HAMAKUA	126.6	284.6
8	KAALA	135.4	327.1

OTHERS

ARINC	131.95	
HNL AFSS	122.6	272.7

TOWERS

HONOLULU	Local Ctl	118.1	257.8
HONOLULU	Ground Ctl	121.9	348.6
HONOLULU	Clearance	121.4	281.4
HONOLULU	Backup	123.9	273.575
BKH		126.2	360.2
BSF		126.3	236.6
KOA		120.3	254.3
ITO		118.1	263.1
LIH		118.9	263.1
MKK		125.7	306.2
OGG		118.7	279.6
NGF		120.7	360.2
NGF (Backup)			349.9
HHI		126.3	241.0
JRF		132.6	340.2

ATIS

HNL	127.9	251.15
KOA	127.4	
LIH	127.2	
MKK	128.2	
OGG	128.6	

OTHERS

HULA DANCER	127.0	266.4
HULA DANCER (Backup)	132.4	336.8
PMRF	322.85	

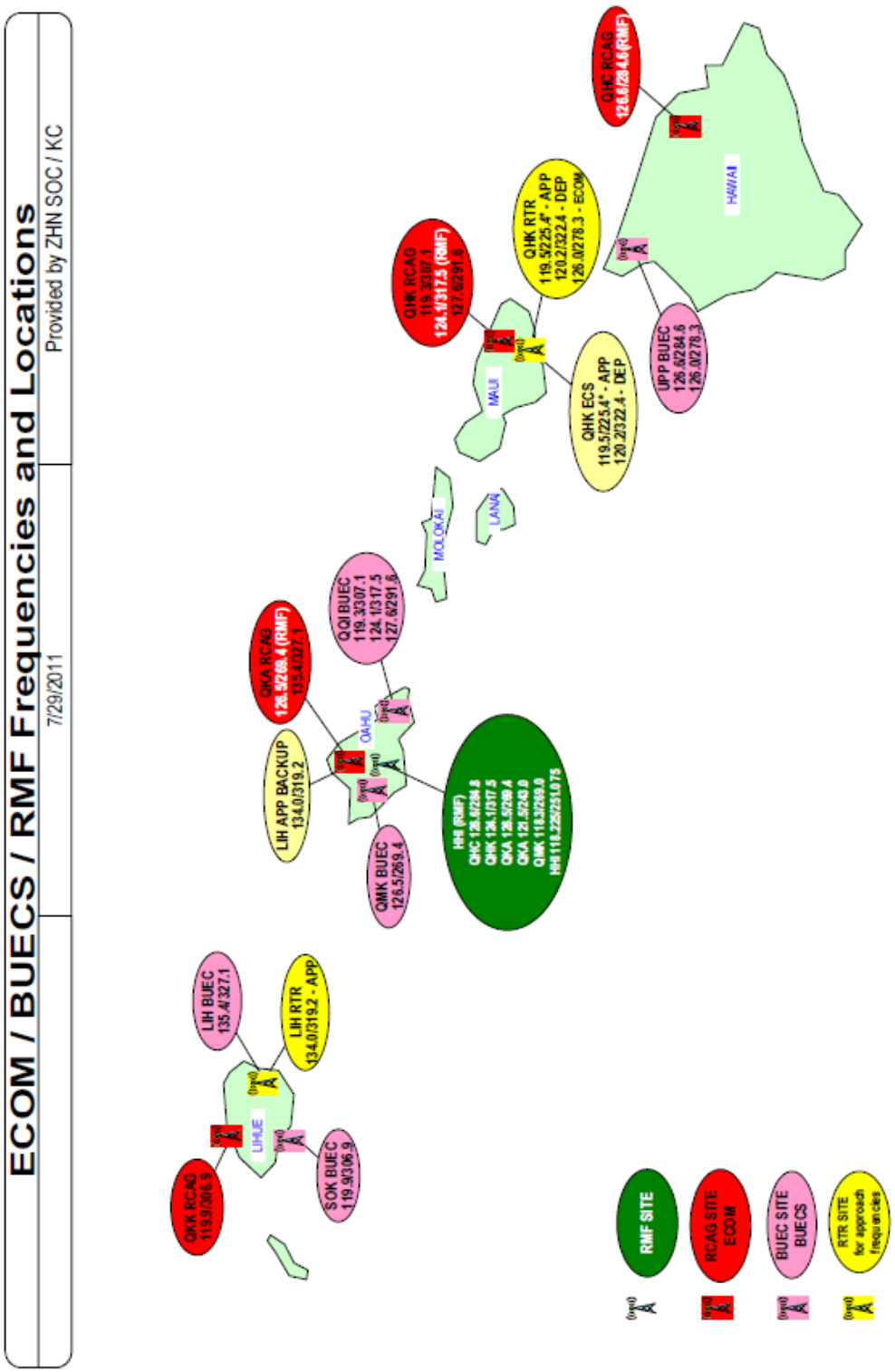
APPENDIX 20. Sector Frequencies and Indirect Access

TOWERS	RING	HOT
ITO	252	264
OGG	251	254
KOA	253	274
LIH	243	263
MKK	260	
JHM	262	
JRF	322	
BKH	415	
BSF	441	
HHI	417	
NGF	323	423
LC		213
LA	217	214
CD		215
HNL CLR	216	
CAB SUP	212	
AIR DEFENSE		
BAL		412
HUL	413	419

INTRA-FACILITY		0= Ring In-House
Sector 2		
R2	702	38
D2	302	36
A2	202	58
Sector 3		
R3	703	28
D3	303	24
A3	203	57
C3	503	40
Sector 4		
R4	704	32
D4	304	35
A4	204	59
C4	504	51
Sector 5		
R5	705	31
D5	305	23
A5	205	21
Sector 6		
R6	706	30
D6	306	39
C6	506	60
A6	206	41

1=Override Outside		
Sector 7		
R7	707	26
D7	307	34
A7	207	25
Sector 8		
R8	708	63
OGG APPCH		
R9	709	49
D9	309	29
COORD	509	83
R10	710	20
D10	310	37
TRACON		
RH	74	75
RL	75	80
RV	78	78
RV	79	76
RW	35	81
DL	38	77
DV	508	33
MISCELLANEOUS		
OSIC	901	55
CTR SUP	904	22
TRA SUP	902	
TMC	903	42
MCC		69
FD-1	331	44

APPENDIX 21. Primary and BUEC Frequencies and Locations



APPENDIX 21. Primary and BUEC Frequencies and Locations

POSITION	VHF	UHF	PRIMARY	BUEC
2	126.5	269.4	QKA (M/S)	QMK
3	124.1	317.5	QHK (M/S)	QQI
4	119.3	307.1	QHK (M/S)	QQI
5	126.0	278.3	QHK ((M/S)	UPP
6	119.9	306.9	QKK (M/S)	SOK
7	126.6	284.6	QHC (M/S)	UPP
	127.6	291.6	QHK m/s)	QQI
8	135.4	327.1	QKA (M/S)	LIH
OGG - 9	119.5	225.4	QHK RTR (M/S)	QHK RCAG
OGG - 10	120.2	322.4	QHK RTR (M/S)	QHK RCAG
LIH	134.0	319.2	LIH (M/S)	QKA
HNL APCH			PRIMARY	BACKUP
H	118.3	269.0	HNL RTR (M/S)	QMK + Dual Path
W	120.9	338.2	QMK RTR (M/S)	HNL RTR
V	119.1	239.05	QMK RTR (M/S)	HNL RTR
L	124.8	317.6	HNL RTR (M/S)	Dual Path
HNL TOWER			PRIMARY	
LC	118.1	257.8	HNL RTR (M/S)	
GC	121.9	348.6	HNL RTR (M/S)	
CD	121.4	281.4	HNL RTR (M/S)	
Backup	123.9	273.575	HNL RTR (M/S)	
ATIS *	127.9	251.15	QMK (Xmt ONLY)	HNL RTR (M/S)

LEGEND		ATIS Description:
HNL RTR	Honolulu	Main & standby transmitters at QMK and HNL RTR (no receive at either site)
QHK RCAG	Haleakala	
QHK RTR	Haleakala	
QMK	Mauna Kapu	
QQI	Waimanalo	Main & standby receivers at HNL-Z only (no transmit)
SOK	South Kauai	
LIH	Lihue	
UPP	Upolu Point	
QHC	Hamakua	
Dual Path	HCF & RMF	

APPENDIX 22. Dep Release Times/Acft Entering the Central Pacific Route System

ZIGIE A331 • SEDAR W-189 HOT	HNL	10' <OGG 20'<KOA 20'<ITO 19'<LIH	OGG	16' <HNL 22'<KOA 23'<ITO 23'<LIH	KOA	7' <HNL 1'<OGG 13'<ITO 13'<LIH	ITO	5' <HNL 0'<OGG 10'<KOA 11'<LIH	LIH	5' <HNL 0'<OGG 9'<KOA 11'<ITO
W-189 COLD		5'<LIH		9'<LIH		0'<LIH		0'<LIH		21' <HNL 17'<OGG 26'<KOA
APACK A332 • HEMLO R463 • ALCOA W-189 HOT	HNL	7' <OGG 15'<KOA 15'<ITO 20'<LIH	OGG	17' <HNL 21'<KOA 21'<ITO 25'<LIH	KOA	8' <HNL 2'<OGG 12'<ITO 16'<LIH	ITO	7' <HNL 1'<OGG 10'<KOA 15'<LIH	LIH	3' <HNL 0'<OGG 6'<KOA 7'<ITO
W-189 COLD		15'<LIH		16'<LIH		7'<LIH		5'<LIH		15' <HNL 11'<OGG 19'<KOA
CLUTS R465 • CINNY W-189 HOT	HNL	5' <OGG 10'<KOA 10'<ITO 21'<LIH	OGG	20' <HNL 18'<KOA 15'<ITO 30'<LIH	KOA	15' <HNL 5'<OGG 10'<ITO 23'<LIH	ITO	15' <HNL 7'<OGG 13'<KOA 25'<LIH	LIH	2' <HNL 0'<OGG 0'<KOA 0'<ITO
W-189 COLD		18'<LIH		27'<LIH		23'<LIH		22'<LIH		8' <HNL 0'<OGG 6'<KOA
EBBER R577 • ELKEY W-189 HOT	HNL	0' <OGG 3'<KOA 0'<ITO 22'<LIH	OGG	22' <HNL 15'<KOA 9'<ITO 33'<LIH	KOA	20' <HNL 8'<OGG 6'<ITO 30'<LIH	ITO	26' <HNL 15'<OGG 17'<KOA 36'<LIH	LIH	0' <HNL 0'<OGG 0'<KOA 0'<ITO
W-189 COLD		22'<LIH		38'<LIH		31'<LIH		38'<LIH		0' <HNL 0'<OGG 0'<KOA
FITES R578 • FICKY W-189 HOT	HNL	0' <OGG 1'<KOA 0'<ITO 22'<LIH	OGG	23' <HNL 13'<KOA 5'<ITO 33'<LIH	KOA	22' <HNL 10'<OGG 2'<ITO 32'<LIH	ITO	31' <HNL 19'<OGG 20'<KOA 41'<LIH	LIH	0' <HNL 0'<OGG 0'<KOA 0'<ITO
W-189 COLD		23'<LIH		35'<LIH		34'<LIH		43'<LIH		0' <HNL 0'<OGG 0'<KOA
SCOON W-189 HOT	HNL	0' <OGG 0'<KOA 0'<ITO 23'<LIH	OGG	23' <HNL 11'<KOA 0'<ITO 34'<LIH	KOA	23' <HNL 11'<OGG 0'<ITO 33'<LIH	ITO	36' <HNL 23'<OGG 23'<KOA 45'<LIH	LIH	0' <HNL 0'<OGG 0'<KOA 0'<ITO
W-189 COLD		23'<LIH		35'<LIH		35'<LIH		45'<LIH		0' <HNL 0'<OGG 0'<KOA

NOTE – *The information on the Sector 3 bay headers contain the release times to be used when W189 is active. For release times when W189 is NOT active, refer to the chart on the ACE/IDS.*

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APPENDIX 23. Composite Route System Separation Standards

A. General. This provides additional guidance in the application of the composite separation standards. The basic separation criteria for the composite route system are contained in Order JO 7110.65, Air Traffic Control, Chapter 8, Section 9 and in the Pacific Chart Supplement.

B. Procedures.

1. Area of application. Composite standards may be applied within the Central East Pacific Route System airspace. (See Figures 21-1, 21-2, 21-3, 21-4, and 21-5.)

a. Between 100 NM north of R463 and 100 NM south of R578.

NOT -: *SCOON and ZIGIE are fixes used for transition into and out of the composite system. Another composite route may NOT be established within the area of application; i.e., traffic may NOT be assigned a parallel route 50 NM north of R463 or south of R578.*

b. 100 NM beyond the above parameters when the routes are flexed to avoid missile impact and stationary ALTRV areas.

NOTE - *The maximum distance a route may be flexed is 200 NM.*

2. Altitude assignments. Flight levels normally assigned for flights within the composite system shall be in accordance with Figure 20-1.

3. Separation Standards.

a. Composite Separation is the combination of 50 NM lateral Separation or 1000 feet vertical separation.

b. Reduced Vertical Separation Minimum (RVSM) is 1000 feet vertical separation between RVSM approved aircraft and may be applied within the Oakland Oceanic FIR between FL290 and FL410. Non-RVSM aircraft operating within this airspace between FL290 and FL390 require approval. The letter “W” in the equipment field of an ICAO flight plan indicates an RVSM approved aircraft.

c. Required Navigation Performance 10 (RNP-10) lateral separation of 50 NM between approved RNP-10 aircraft and 75 NM between approved RNP-10 aircraft and other aircraft may be applied within the Oakland Oceanic FIR. The letter “R” in the equipment field of an ICAO flight plan indicates an RNP-10 approved aircraft.

FIG 23-1.

Composite Route System Separation Standards

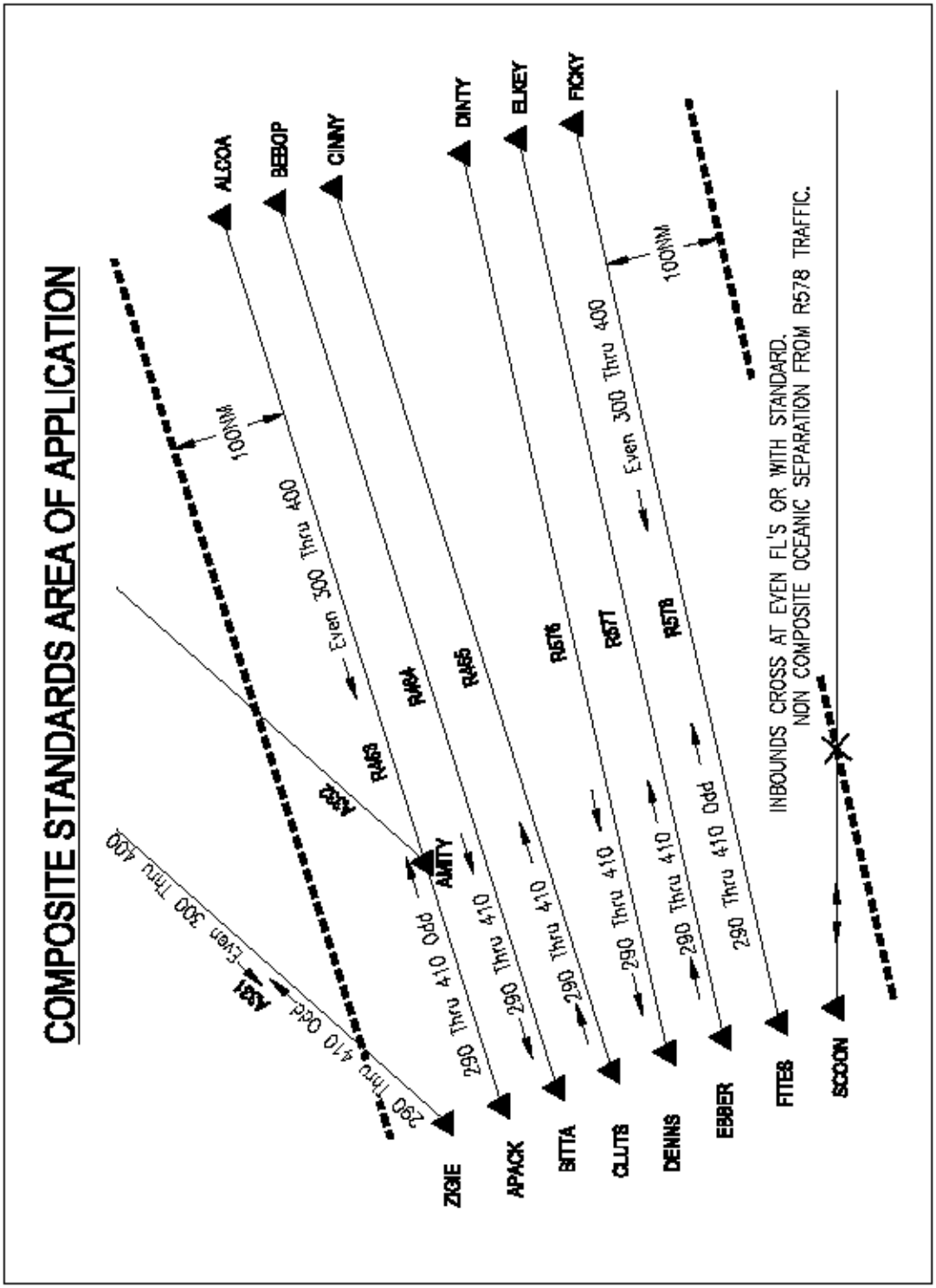


FIG 23-2.
Composite Route System Separation Standards

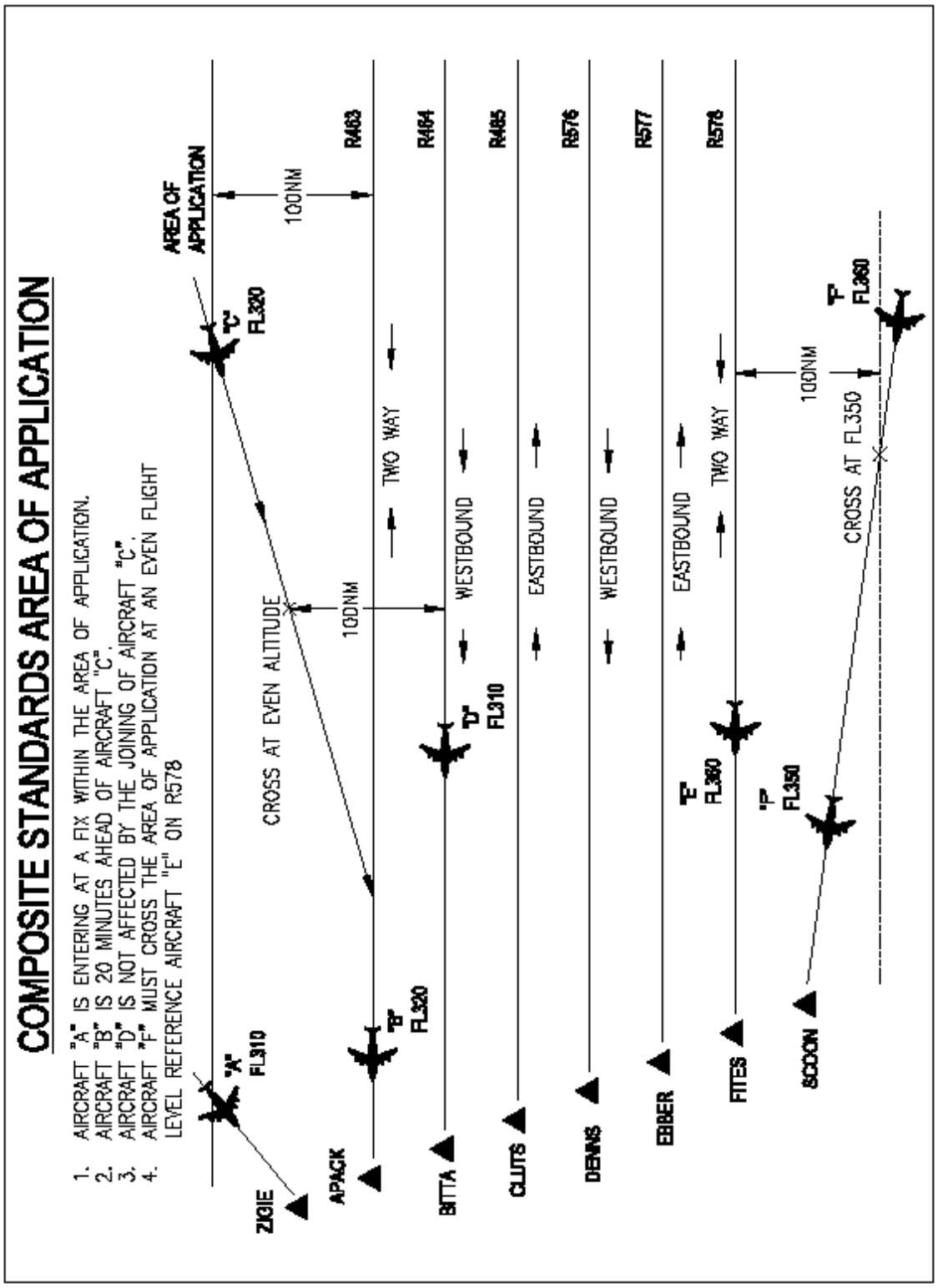


FIG 23-3.
Composite Route System Separation Standards

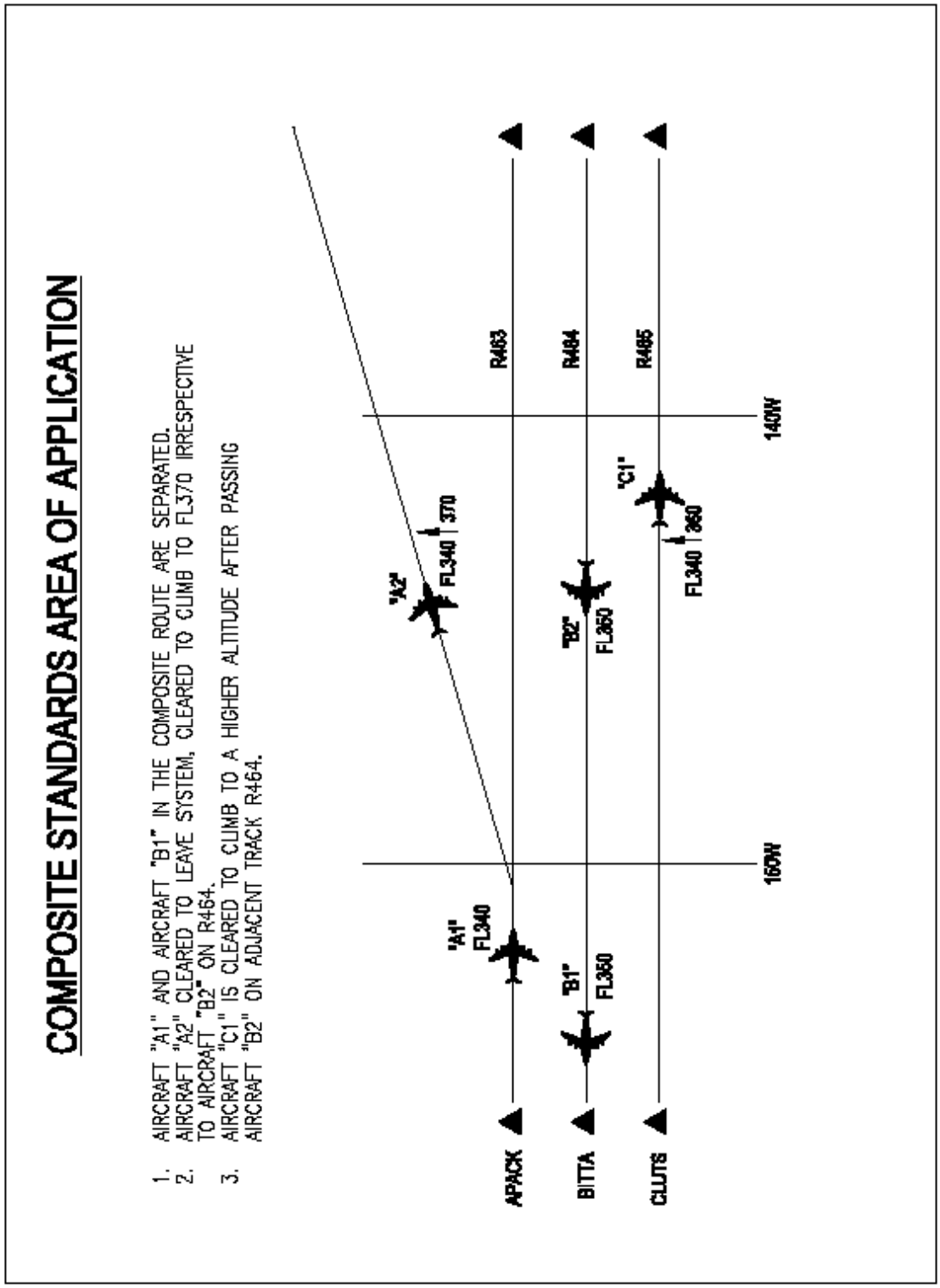


FIG 23-4.
Composite Route System Separation Standards

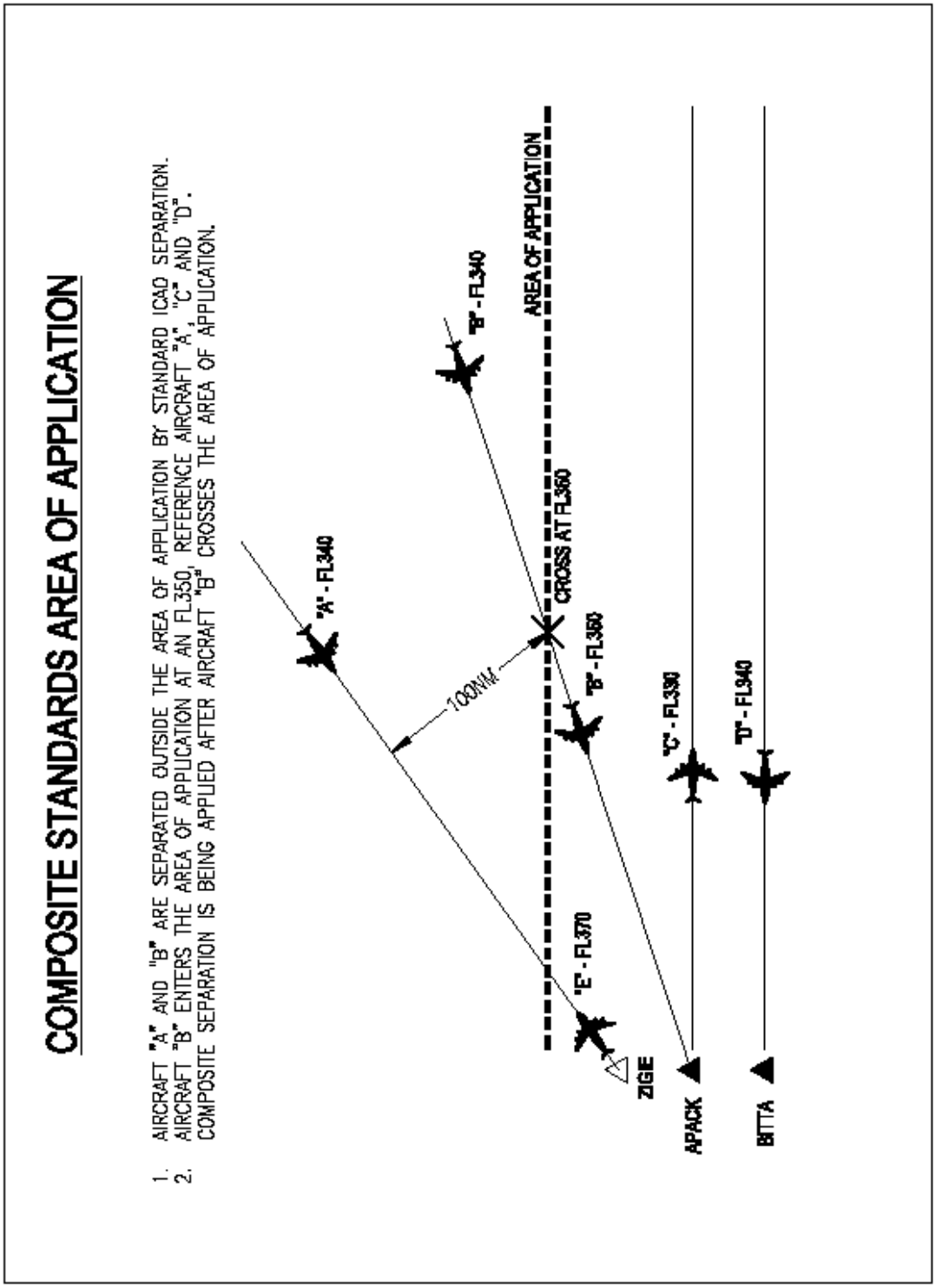
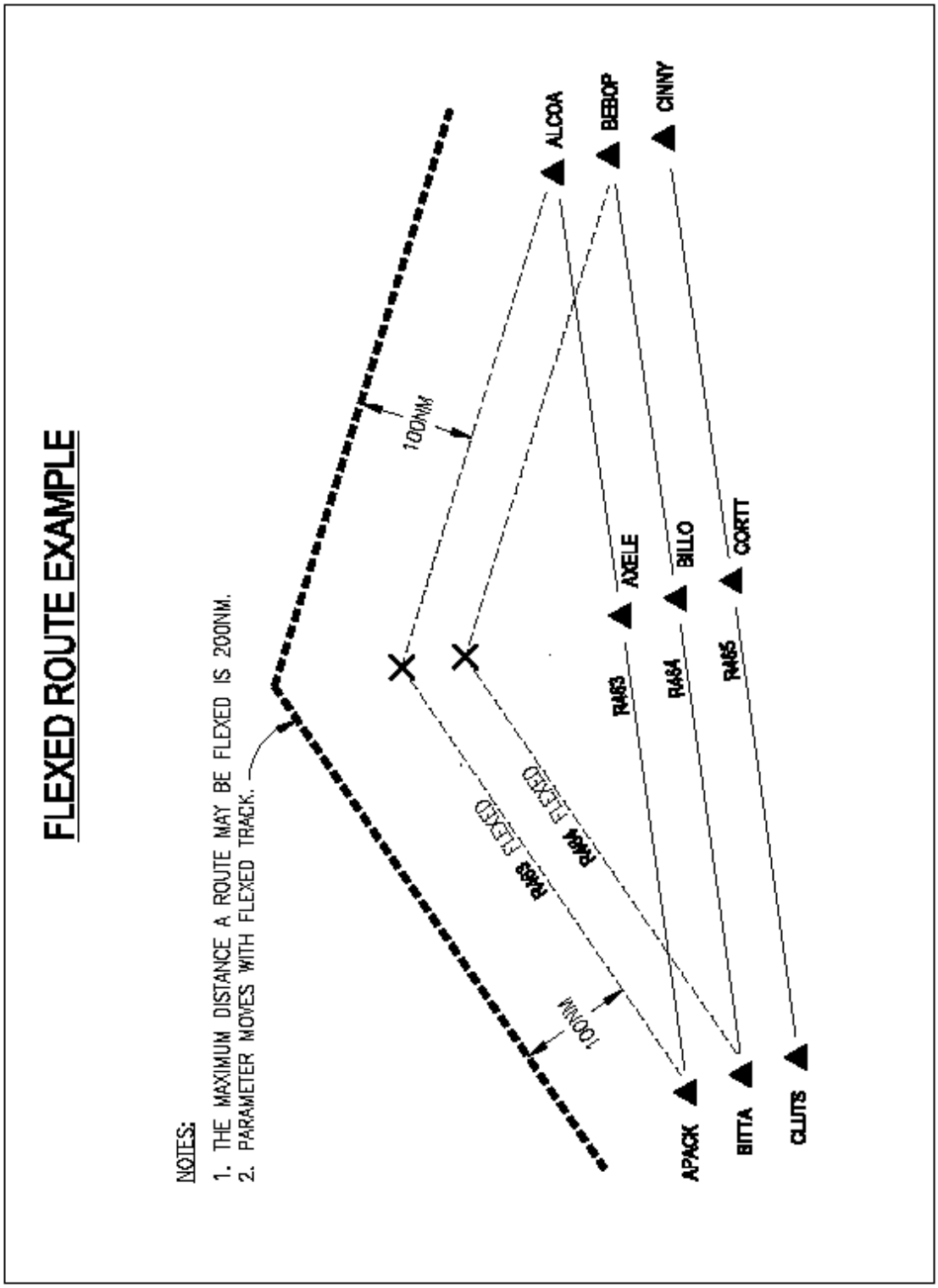


FIG 23-5.
Composite Route System Separation Standards



APPENDIX 24. Automated Information Transfer (AIT) Procedures

Automated Information Transfer (AIT) may be used between sectors as follows:

NOTE - *This procedure is optional.*

1. The first sector initiates a handoff to an intermediate sector.

2. At the intermediate sector's discretion, they may accept the handoff and then immediately initiate a handoff to a third sector. They are indicating that they are approving a point out by doing this. If the intermediate sector opts to work the aircraft, they should NOT initiate a handoff to the third sector until after they are in communications with the aircraft.

3. Upon completion of the handoff to the third sector, the first sector may switch the aircraft directly to the third sector. This is also optional. If the first sector does not wish to wait for the third sector to accept the handoff, they may switch the aircraft to the intermediate sector.

NOTE - *The third sector will have control of the aircraft from BOTH sectors as outlined in the TRANSFER OF CONTROL section in this document.*

4. AIT may be used in the following situations:

   a. HNL-ITO between Sectors L/3/4.

   b. LIH-OGG between Sectors 2/3/4.

   c. NGF/W189-ITO between Sectors 3/4/5.

   d. LIH-CLUTS between Sectors 2/3/7.

   e. OGG-APACK or ZIGIE between Sectors 10/3/7.

   f. OGG-EBBER or FITES between Sectors 10/5/7.

   g. Oceanic arrivals to OGG between Sectors 7/5/10.

   h. Oceanic arrivals to ITO between Sectors 7/5/ITO Approach.

   i. Oceanic arrivals to HNL (over LNY) between Sectors 7/5/4.

   j. VFR arrivals to HNL Approach between Sectors 3/L/V.

   k. JULLE /SAKKI arrivals between Sectors 4/H/V.

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APPENDIX 25. Scratch Pad Coordination

A. Speed control.

1. Speeds will be depicted in increments of 10 knots. *Example: 25K=250 knots.*

2. "+" indicates coordinates speed or greater. *Example: 25K+/250+ = 250 knots or greater.*

3. "-" indicates coordinate speed or less. *Example: 25k-/250- = 250 knots or less.*

B. Radar vector headings.

1. Headings will be depicted in 5-degree variations, using "H" or "V" either before or after the three-digit heading.

a. *Example: V260/260V = 260 degree heading.*

b. *Example: H275/275H = 275 degree heading.*

2. Headings may also be depicted as a number of degrees and direction from the normal route of flight. These turns must be in increments of 5 degrees with a minimum of 10 degrees.

a. *Example: 10L = 10 degrees left of course.*

b. *Example: 20R = 20 degrees right of course.*

c. A heading followed by "/" indicates a heading to be flown until joining assigned route of flight.

C. RNAV Optimized Profile Descent Arrivals (OPD). Use the following scratch pad coordination for aircraft on an OPD:

1. D8L – OPD designed for HNL runway 8L.

2. D4R – OPD designed for HNL runway 4R.

3. HK2 – OGG HAIKU arrival to runway 2.

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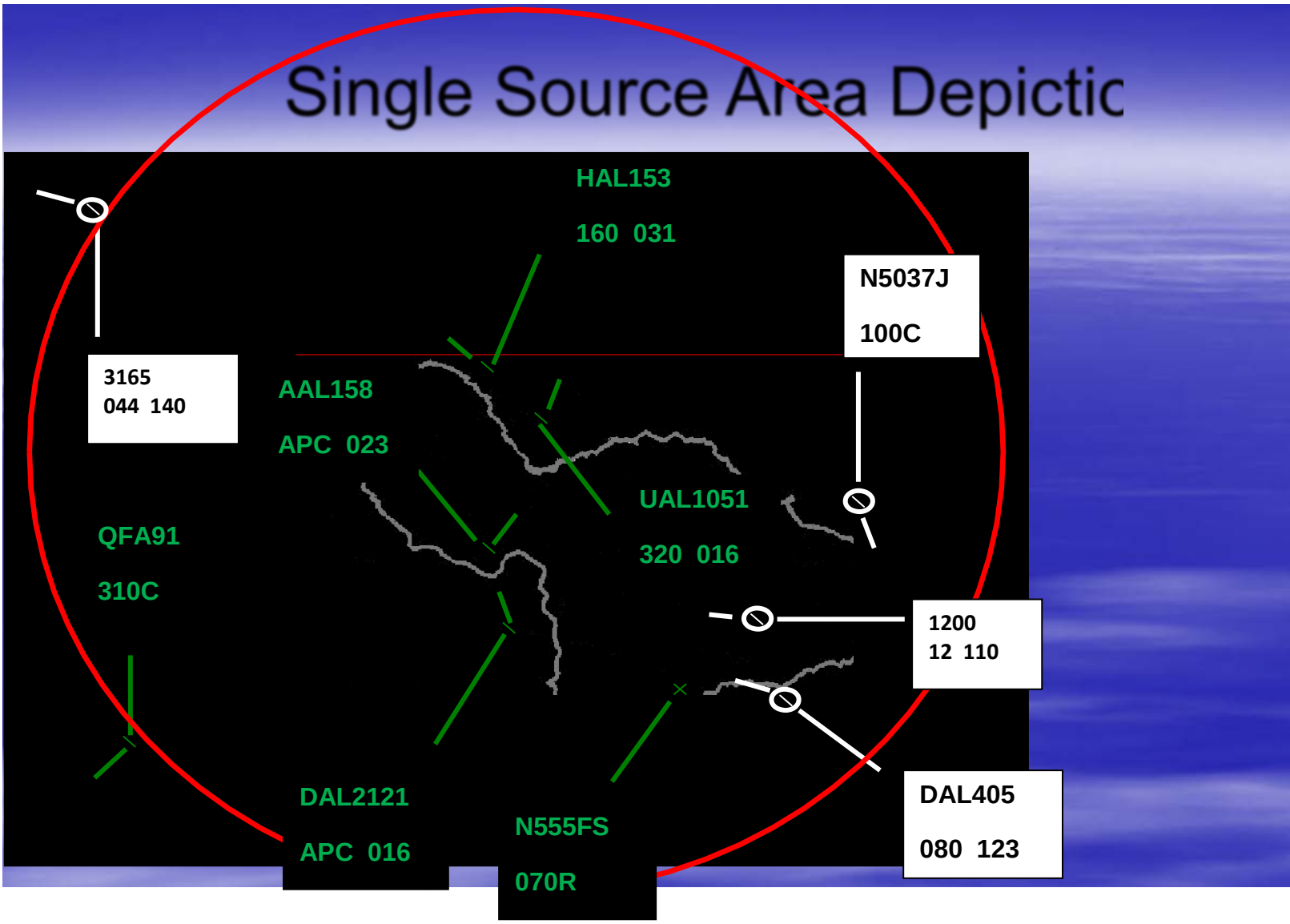
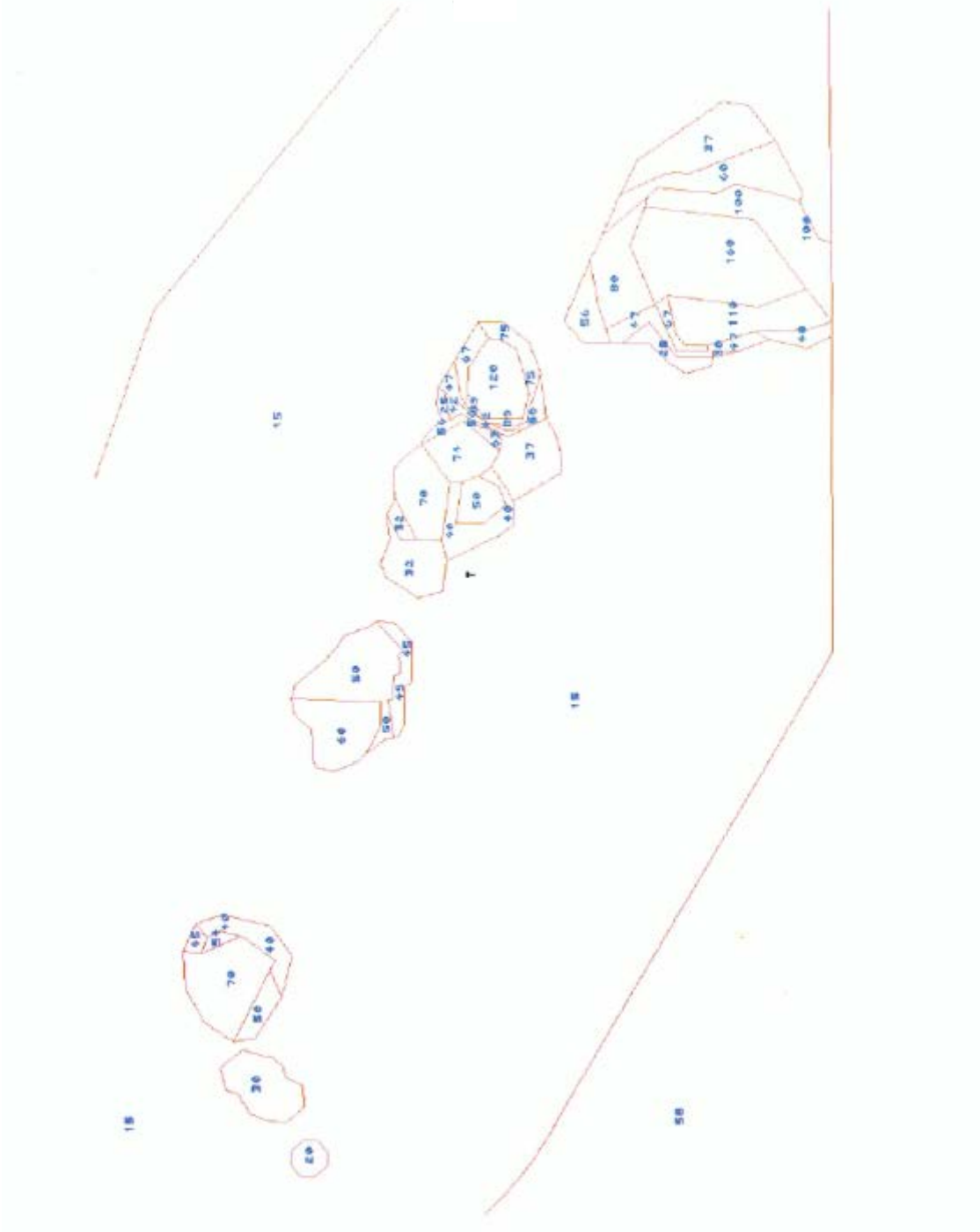
APPENDIX 26. Maui Approach: Single Source Area Depiction

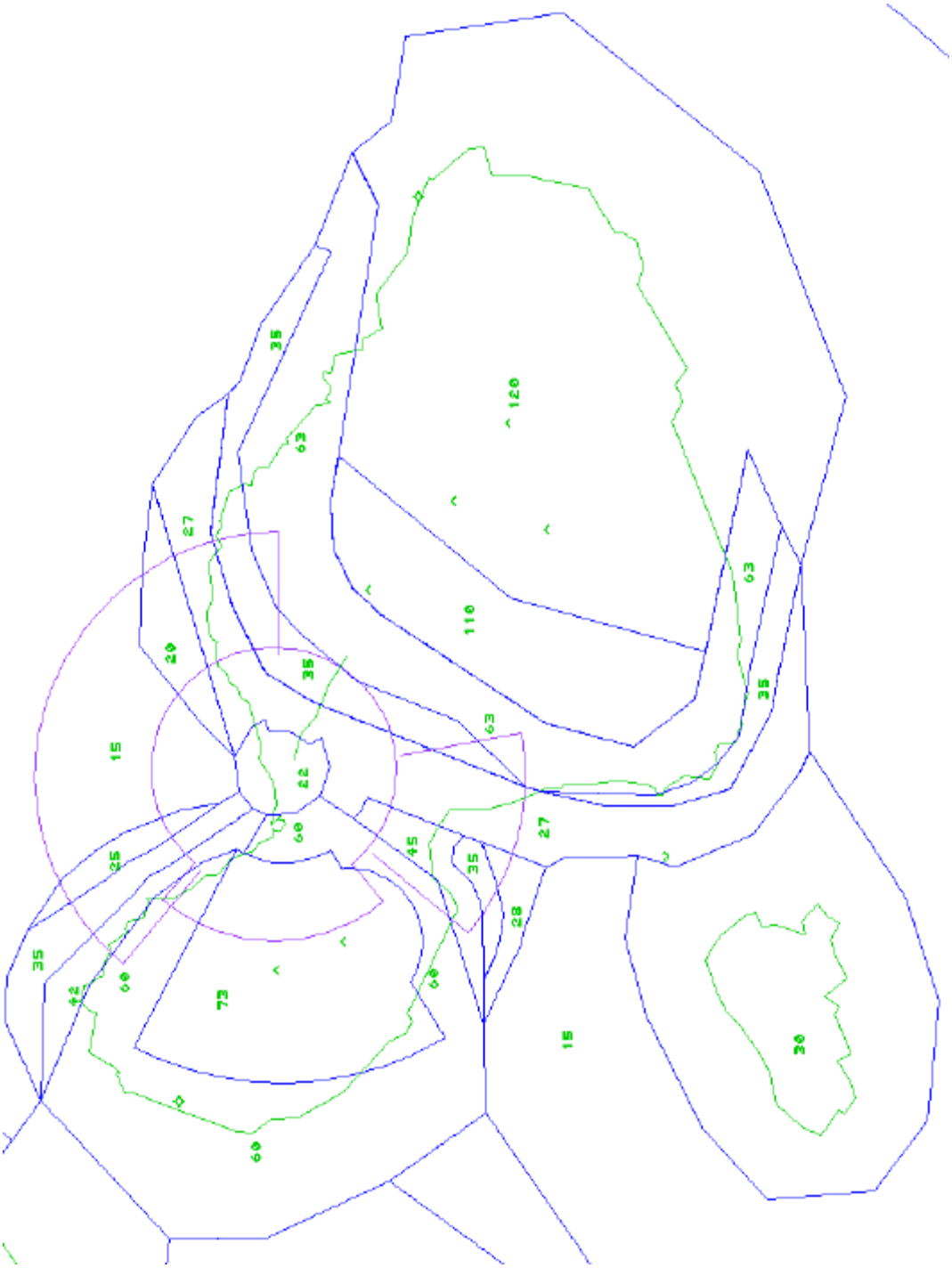


In Mosaic Area:	QFA91
In SSA with adapted source reporting:	AAL158; DAL2121; UAL 1051; HAL153
In SSA with adapted source NOT reporting:	DAL405, N5037J, BCN 1200
In the area where the SSA color changes occur but outside 3 NM separation area (partial data block)	BCN 3165
Primary only target inside SSA:	N555FS

APPENDIX 27. HCF Minimum IFR Altitude Map.

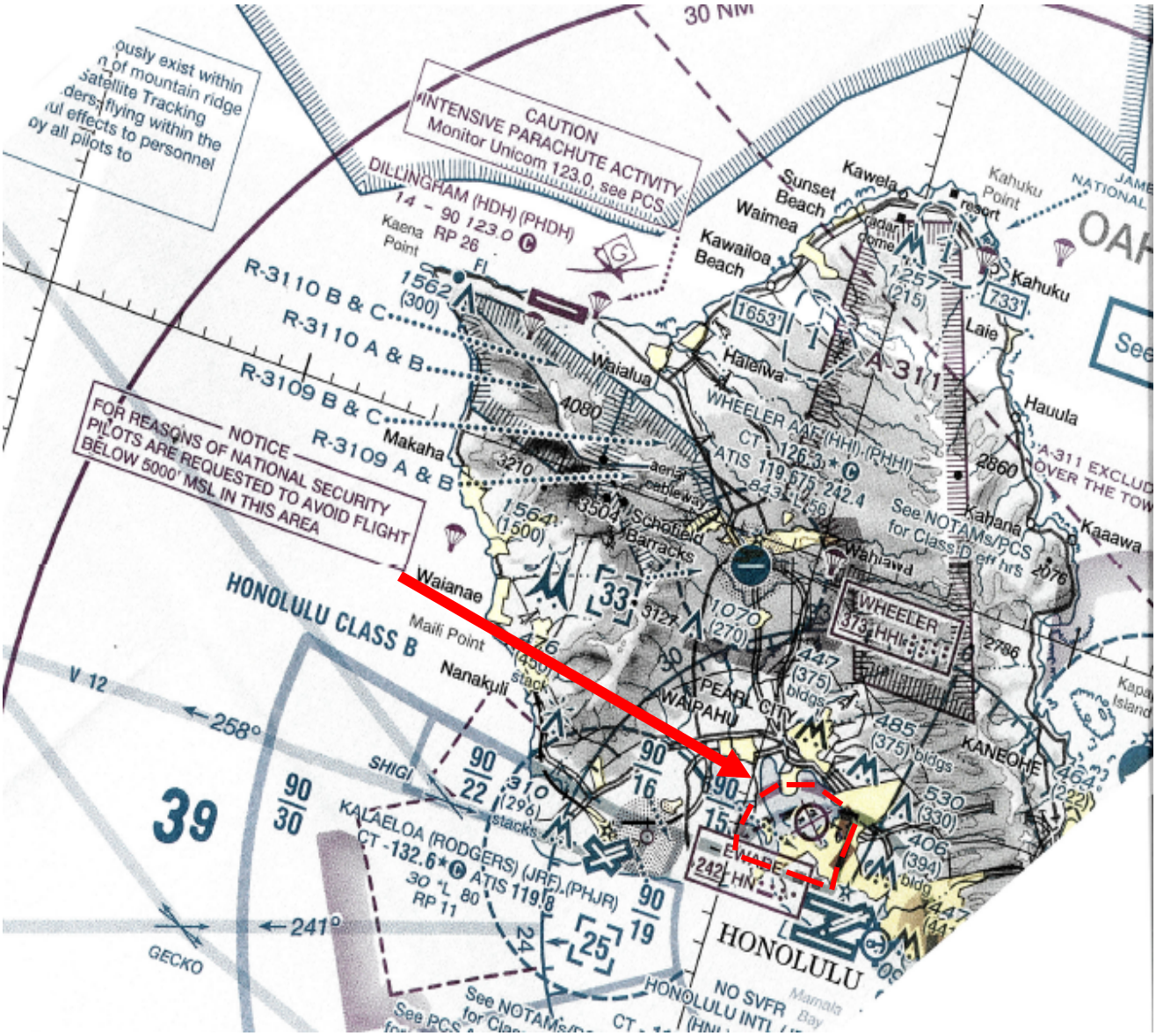


APPENDIX 28. Maui MVA Map



APPENDIX 29. NATIONAL SECURITY AREA

For reasons of national security, pilots are requested to avoid flight below 5000 ft MSL in this area (Ford Island).



APPENDIX 30. ASDE-X

A. ASDE-X Definitions.

1. Arrival – An aircraft on final that has not crossed the threshold of the arrival runway.

2. Lander – An aircraft that has crossed the threshold of the arrival runway.

3. Departure – An aircraft that has commenced takeoff roll and has met minimum speed parameters.

4. Alert – An alert that is generated from an actual situation that ASDE-X safety logic has predicted will result in an imminent collision based on the set parameters.

5. Nuisance Alert – True alerts depicting actual situations that occur during normal operations. An actual target (WILDLIFE1, helicopters, etc.) that creates a real alert of a known situation that is not an unsafe operation.

6. False Alert – Alerts that do not represent the actual airport situation. These alerts generally result from equipment performance issues or physical obstructions (buildings, new construction, etc.) that create erroneous tracks that ASDE-X interprets as targets.

B. Procedures. The procedures, responsibilities and configurations for ASDE-X are as follows:

1. Tower Frontline Manager/Controller-in-Charge (FLM/CIC).

a. Ensure Status. The FLM/CIC must ensure that the operational status of ASDE-X is known to all operations personnel. When a change in ASDE-X status (i.e. online or offline) is made, all operational personnel on position must be notified verbally. When ASDE-X is offline, log it on FAA Form 7230-1, Daily Record of Facility Operation, and post the status on the ACE-IDS/Tower Status Information Area (SIA) page in the dedicated box. The FLM/CIC must ensure that all outages are carried over on to applicable logs.

b. Monitor Alerts and Ensure Corrective Action. The FLM/CIC must ensure that operations personnel monitor the ASDE-X and comply with all alerts in accordance with provisions of this Notice and the JO 7110.65. Document all alerts on the Daily Record of Facility Operation. If the alert is determined to be a false or nuisance alert, note it as such along with a brief description of the event. Treat alerts as false if the origin cannot be determined.

NOTE - *The purpose of logging ASDE-X alerts is to track the reliability and performance of the system. Do not use the quality assurance review process for ASDE-X false or nuisance alerts. Submit an Observation form when deemed necessary.*

c. Runway configuration. The FLM/CIC is responsible for ensuring that ASDE-X is set for the appropriate runway configuration.

d. Limited configuration. The LIMITED configuration disables all alerts except arrivals/departures to a closed runway. This configuration must only be selected to temporarily inhibit persistent false alerts caused by random events or circumstances of short duration are not considered persistent false alerts. The determination of persistent false alerts is at the discretion of the FLM. When LIMITED CONFIGURATION is selected, notify System Operations Center (SOC) and document it in the FAA Form 7230-4.

e. Rain mode. When moderate to extreme precipitation moves to within1 nautical mile of the airport boundary, select ASDE-X RAIN MODE to avoid the potential of false alerts. Use the TCW to determine the location and intensity (blue for moderate, red for extreme) of precipitation. Reset to NORMAL MODE when the precipitation has moved to outside 1 nautical mile of the airport boundary.

f. Watch checklist. ASDE-X status must be checked at the beginning of each shift and included in the facility watch checklist. As a minimum, the following items must be reviewed:

(1) ASDE-X operational status.

(2) Runway configuration.

(3) Presentation of ASDE-X data on all appropriate displays.

(4) When test button is activated, the aural alert is heard and the speaker volume is adequate.

g. ASDE-X Status Information Area. Display the current ASDE-X state on the SIA as one of the following:

(1) NML – Normal operation configuration.

(2) RAIN – Rain mode configuration.

(3) LMTD – Limited configuration.

(4) OTS – Out-of-Service, if offline.

h. Runway closure. Indicate a runway closure by using the Select Close/Open Runway category. The runway must be closed to departures and arrivals for an extended period of time. An “X” will be placed on each end of the closed runway graphic. Ensure the closed runway status is indicated on the SIA.

i. Temporary track drop. ASDE-X false targets may be temporarily track dropped after positive verification has been ensured by pilot/vehicle operator position report or controller visual observation. When a false target is temporarily dropped, document it on the FAA Form 7230-4.

j. Radar only mode. In the event of Multilateration (MLAT) failure, ASDE-X will default automatically to radar only mode. No action is required by the operator to enable radar-only mode. Targets entering the coverage area after MLAT failure will not be automatically tagged.

k. FAA Form 7230-4 Entries. Log alerts other than false/nuisance alerts as QAR items. For false alerts and nuisance alerts, include aircraft that alerted.

2. Local Control, Local Assist and Ground Control must:

a. Monitor the status of the system.

b. Monitor alerts and assist with corrective action.

3. Ensure the FLM/CIC verifies false targets before temporarily dropping tracks.

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APPENDIX 31. Automated Surface Observatioin System (ASOS) Controller Equipment Information Display System (ACE-IDS)

A. The ACE-IDS is an integrated information display system used for the dissemination of:

1. Real time weather data.

2. Airport status.

3. NOTAMS.

1. TMU information.

2. Equipment status.

B. The system also provides controllers with information needed for air traffic control. This data includes but is not limited to:

1. Maps, charts.

2. Lists of frequencies and dial codes.

1. Published airport information and instrument procedures.

2. Major air traffic documents, e.g., Air Traffic Publications, local orders, and Letters of Agreement (LOA).

C. The Status Information Area (SIA) page on each controller ACE-IDS workstation provides quick access to:

1. A position relief checklist.

3. Emergency procedures.

4. All available airport weather.

5. Frequencies pertinent to that area of specialization.

6. Instrument approaches, departures, and arrivals pertinent to that area of specialization.

7. An area of specialization main menu.

8. A video map of the sector associated with the particular SIA.

9. Airport information pages pertinent to the sector associated with the particular SIA.

D. The weather displayed in the SIA represents the weather information normally included in the ATIS of that specific airport including the runway and approach in use.

E. The ASOS data for a specific airport is displayed on a page separate from the SIA.

F. The ACE-IDS at the HCF is used in lieu of conventional positions binders.

ACE-IDS USE PROCEDURES.

A. "Notice of Change" alerts shall be acknowledged in a timely manner.

B. Information deemed necessary to display in the specific area "Miscellaneous" page shall be input at the Flight Data position in that area.

ACE-IDS CLOCK PROCEDURES.

A. The ACE-IDS time source is derived from its server (GPS).

B. The clock display on the ACE-IDS is certified for ATC use.

C. Should a discrepancy exist between the MCW/TCW Clock and the ACE-IDS Clock, the MCW/TCW source takes precedence.

D. The clock size shall be limited to a maximum size not to exceed one quarter of the display area.

APPENDIX 32. TARMAC DELAY PROGRAM

When a request is made by a pilot-in-command of an aircraft to return to the ramp, gate or alternate deplaning area due to the "Three-hour Tarmac Rule":

A. Provide the requested services as soon as operationally practical, or

NOTE: Coordinate with SDOT Ramp Control to determine to which gate, ramp or alternate area the aircraft will be taken. SDOT Ramp Control is responsible for making this determination.

B. Advise the pilot-in-command that the requested service cannot be accommodated because it would create a significant disruption to air traffic operations.

NOTE 1: A significant disruption of service may include the following which would result in delays of 15 minutes or more. Accommodating a tarmac delay aircraft would require airborne holding, would preclude the use of a runway for arrivals or departures, would place other aircraft in jeopardy of violating the "Three-hour Tarmac Rule;" would displace departure aircraft already in a reportable delay status, would result in a diversion or the airborne holding of more than three aircraft.

NOTE 2: In determining the impact of air traffic operations, consider the following: Operational complexity; low visibility operations; surface operations; other arrival/ departure runways; taxi routes; ramp areas; multiple runway crossings;taxiway/runway closures and/or airport construction; location of alternatedeplanement areas; if applicable.

PHRASEOLOGY –
(Identification) TAXI TO *(ramp, gate, or alternate deplaning area)* VIA *(route).*
Or
(Identification) EXPECT A *(NUMBER)* MINUTE DELAY DUE TO *(ground and/or landing and/or departing)* TRAFFIC.
Or
(Identification) UNABLE DUE TO OPERATIONAL DISRUPTION.

REFERENCE –
N JO 7110.524, Enhancing Airline Passenger Protections (Three-hour Tarmac Rule)

C. Notification Requirement.

1. When a tarmac taxi request is received, ensure that the TMC or the OSIC is aware of the request.

2. The TMC or OSIC must notify the ATCSCC of the tarmac delay request.

3. If an aircraft has exceeded the "Three-hour Tarmac Rule," the OSIC must notify the Washington Operations Center (WOC) through the ROC as soon as possible. Notification should include the date and time of the occurrence and the identification of the aircraft involved.

D. Records and Retention. When a facility is notified that an aircraft has exceeded the "Three-hour Tarmac Rule," all available records pertinent to that event, to include flight plan data, voice recordings, data recordings and facility logs, must be retained for 1 year.

NOTE - *Tarmac Delay Requests require a Quality Assurance Review (QAR)*

E. Definitions.

1. Tarmac Delay – The holding of an aircraft on the ground either before departure or after landing with no opportunity for its passengers to deplane.

2. Tarmac Delay Aircraft – An aircraft whose pilot-in-command has requested to taxi to the ramp, gate or alternate area to comply with the "Three-hour Tarmac Rule."

3. Tarmac Delay Request – A request by the pilot-in-command to taxi to the ramp, gate or alternate deplaning location to comply with the "Three-hour Tarmac Rule."

4. Three-hour Tarmac Rule – Rule that relates to Department of Transportation (DOT) requirements placed on airlines when tarmac delays are anticipated to reach 3 hours.

APPENDIX 33. Tower Data Link System (TDLS)

A. General. These procedures are in addition to those outlined in FAA Orders JO 7110.65, JO 7210.3 and Chapter 6 of this SOP.

B. Procedures.

1. The TDLS Application Specialist (TAS) must:

a. Coordinate any PDC/ATIS shutdowns with the Tower FLM/CIC prior to a shutdown being implemented.

b. Ensure that PDC is in the MANUAL mode with PDR suppression capability turned OFF.

2. Digital ATIS (D-ATIS) Procedures, Flight Data/Clearance Delivery must:

a. Update D-ATIS at least hourly.

b. Ensure all information is accurate before sending.

c Update ATIS code in the ACE/IDS.

d. If the D-ATIS is not operating properly,

(1) Notify the Tower FLM/CIC.

(2) Send a DANA message.

(3) Record and broadcast a Manual ATIS.

e. Ensure the Unit (VSU) is speaking clearly and intelligibly.

f. When using FREE TEXT, use only approved abbreviations.

3. Pre-departure Clearance (PDC) Program. Clearance Delivery must:

a. Enter appropriate information as PDC options permit.

b. Ensure that any remarks added in the free text portion of the message are understandable prior to transmission.

c. Review all clearances for accuracy and route integrity. Do not transmit PDC flight plans with PDRs that do not reconnect to the filed route of flight.

d. Advise Ground Control when a revision is received for a clearance that has already been issued.

e. Transmit verbally:

(1) All revised or amended flight plan.

(2) All Full Route Clearance.

(3) Flow control, TM and Center reroutes.

f. For inter-island and westbound oceanic flights, write the 4 digit time in block 18 of the OFDPS strip after PDC flight plan has been processed.

g. Ensure a PDC acknowledgement is received before forwarding strips to GC.

h. For eastbound oceanic flights:

(1) Issue the following: Option 4 instruction, “CTC CLNC 121.4 W/ BCN CODE FOR ALT ASGN”.

(2) Place a check mark in block 17 after PDC flight plan has been processed, write the 4 digit time in block 18 when the final altitude has been assigned.

i. For non-oceanic military or westbound military aircraft, issue the Option 4 instruction: “LVG HIK, ADV HNL ATC BCN & ATIS CODES”.

j. When advised by CD that a revised flight plan has been received, round Control must write in red in block 26 (below the route of flight) of the departure strip the letters “REV”. The affected aircraft must be instructed to call Clearance Delivery for the revision. GC may, at his/her option, issue the revised clearance.

APPENDIX 34. Local Use Call Signs and MEARTS ID

CALLSIGN	MEARTS ID
AIR	AIR
ALI'I	AL
ATLAS	AT
BANDIT	BT
BLADE	BD
BLUE	BL
CANOE	CN
CHOPPER8	CH8
CLAW	CL
DAKINE	DK
DRAGN	DG
EAGLE	EG
GMCOK	GM
HANK	HK
HELICOPTER	H
HILLCLIMBER	HC
IDAHO	ID
IWA	IW
KEOKI	KK
KULA	KL
LAVA	LV
MAKANI KAI	MK
MAUI AIR	MA
MAVERICK	MV
MYTAI	MT
NOVICTOR	NV
OUTCAST	OC
PAC HELO	PH
PACIFIC WARBIRD	WB
POLICE	POL
PRIMO	PR
RAPTR	RA
SHAKA	SH
SHARK	SK
STEEK	ST
SUNSHINE	SS
SWEETPEA	SP

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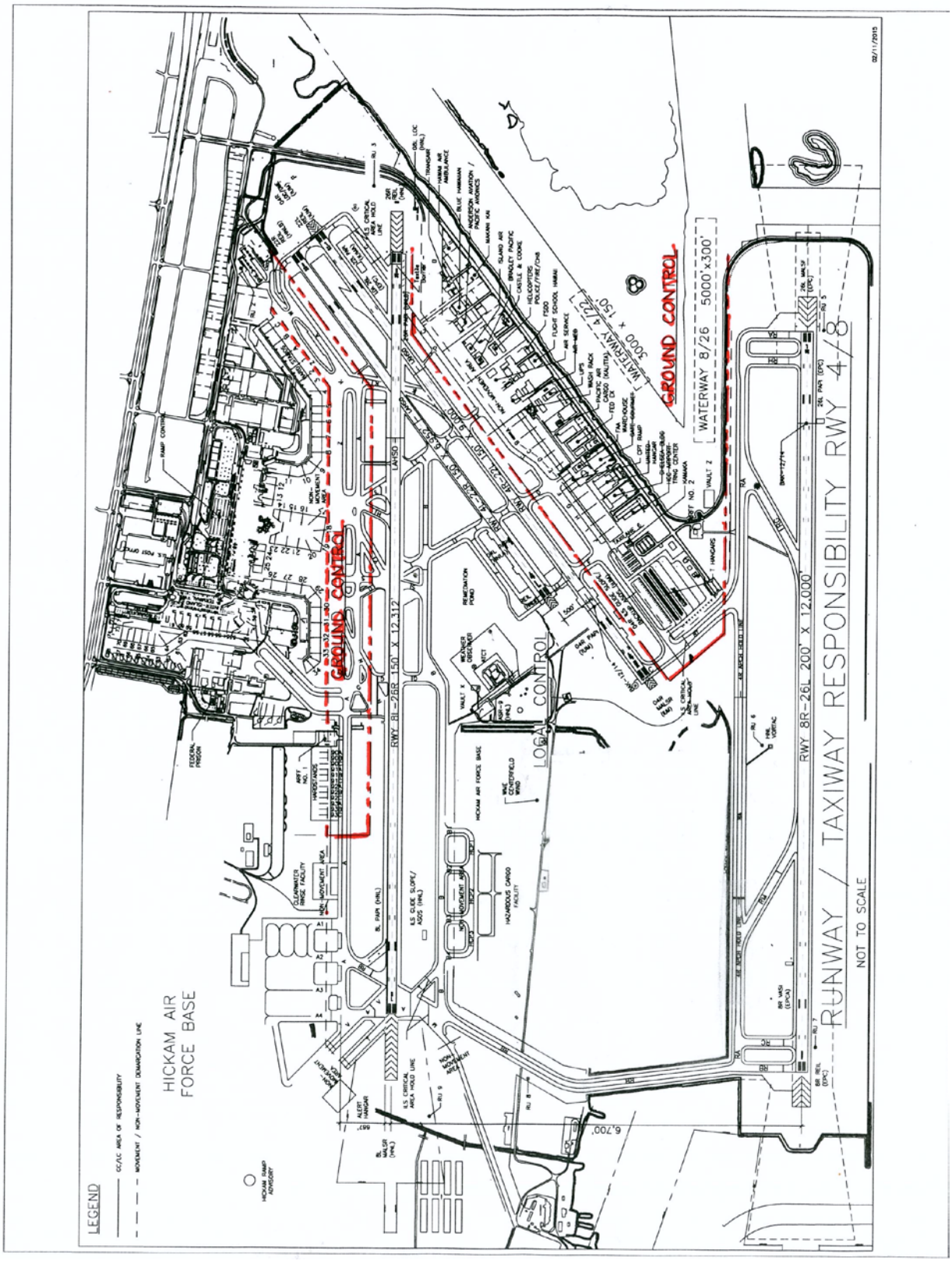
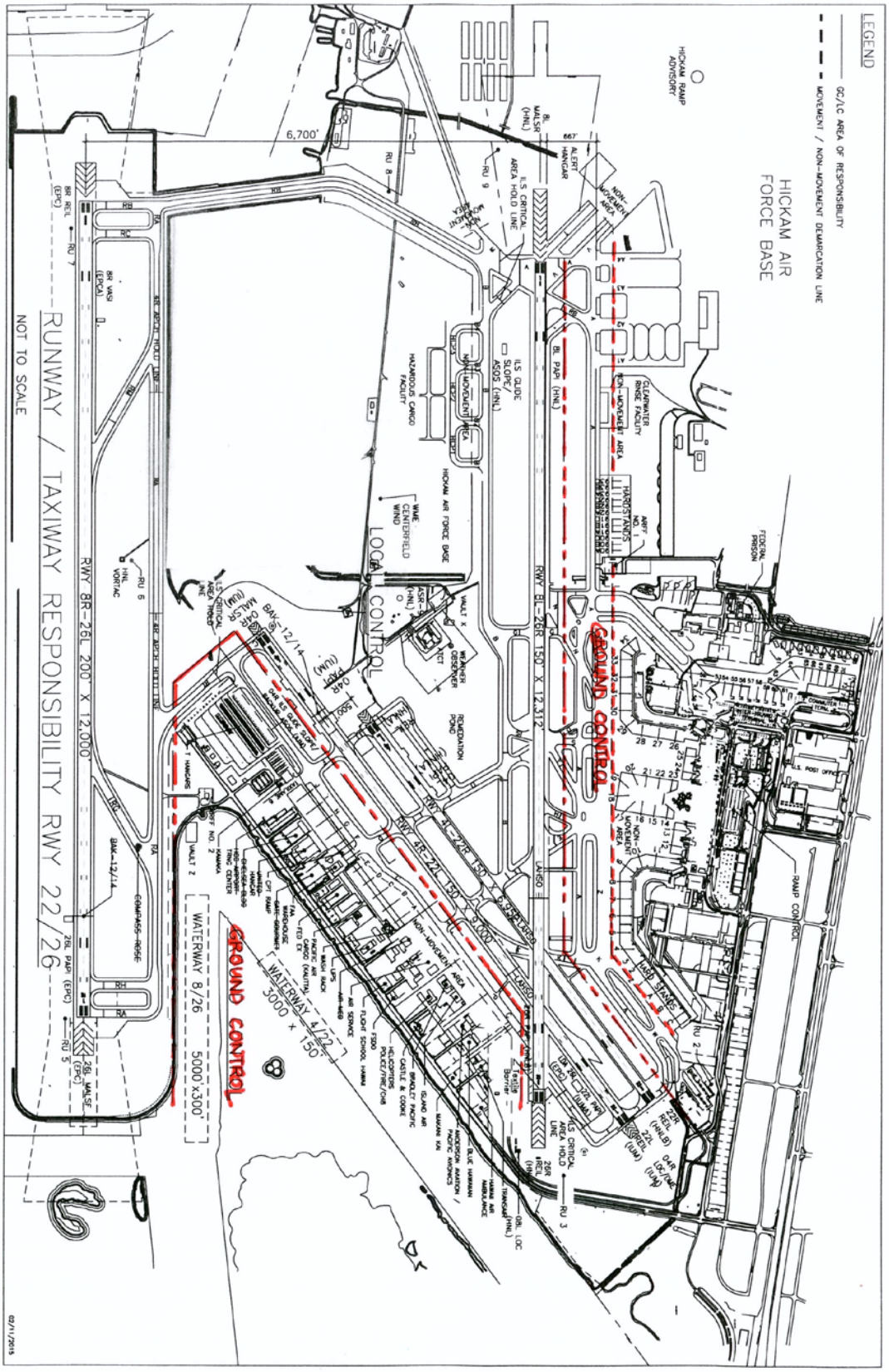
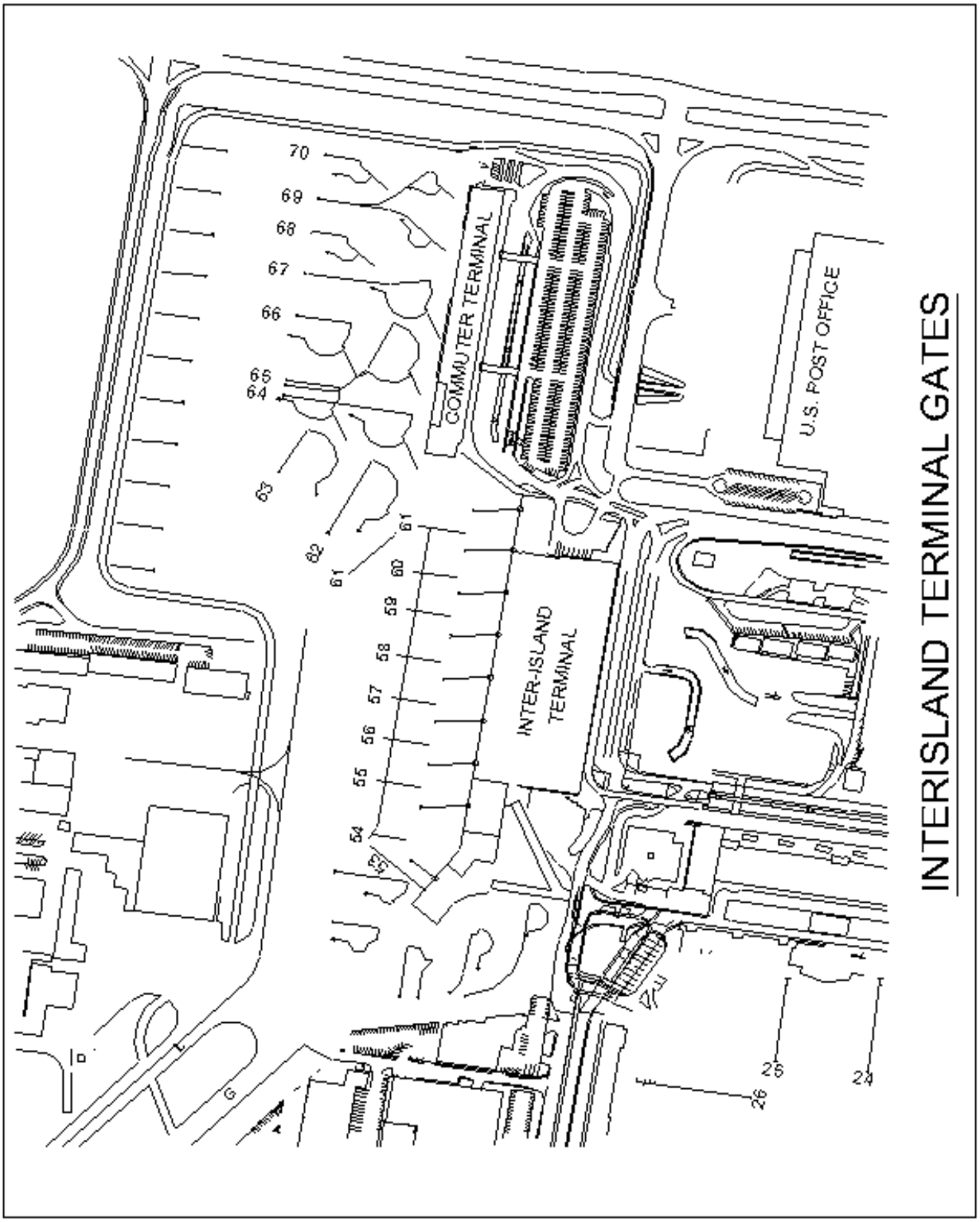
APPENDIX 35. Runway/Taxiway Responsibility- Runways 4/8



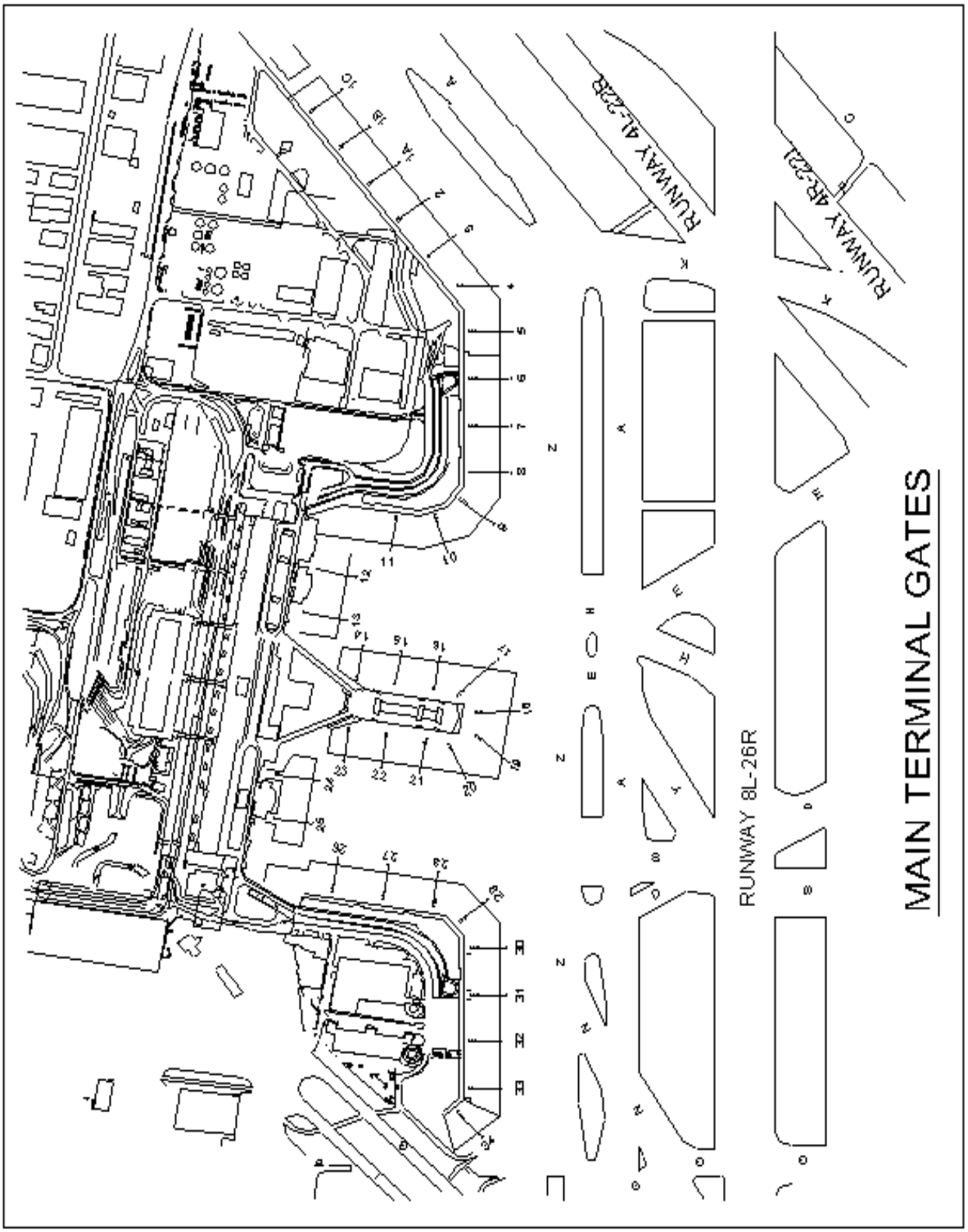
APPENDIX 36. Runway/Taxiway Responsibility- Runways 22/26



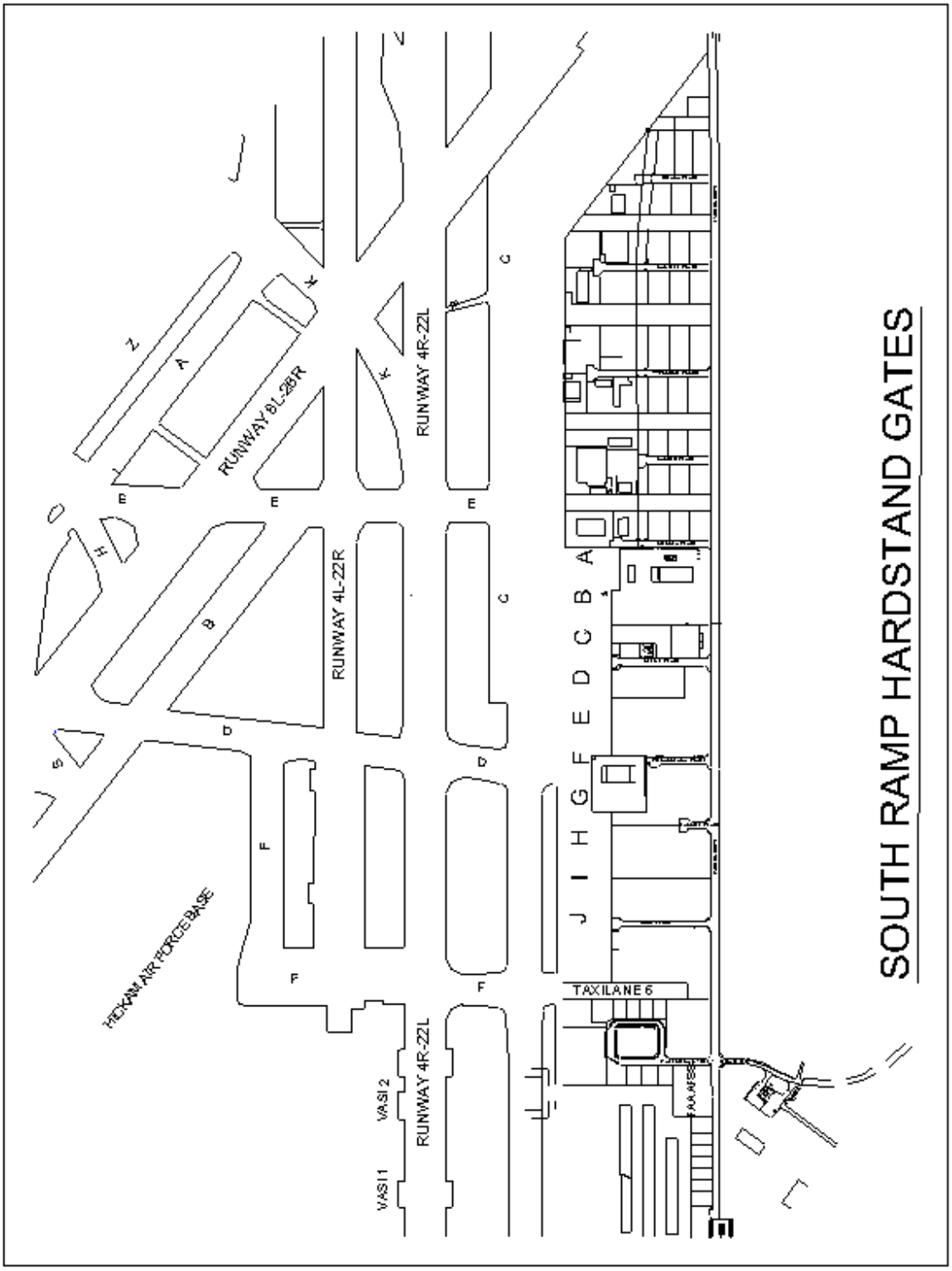
APPENDIX 37. Inter-Island and Terminal Gates



APPENDIX 38. Main Terminal Gates



APPENDIX 39. South Ramp Hardstand Gates



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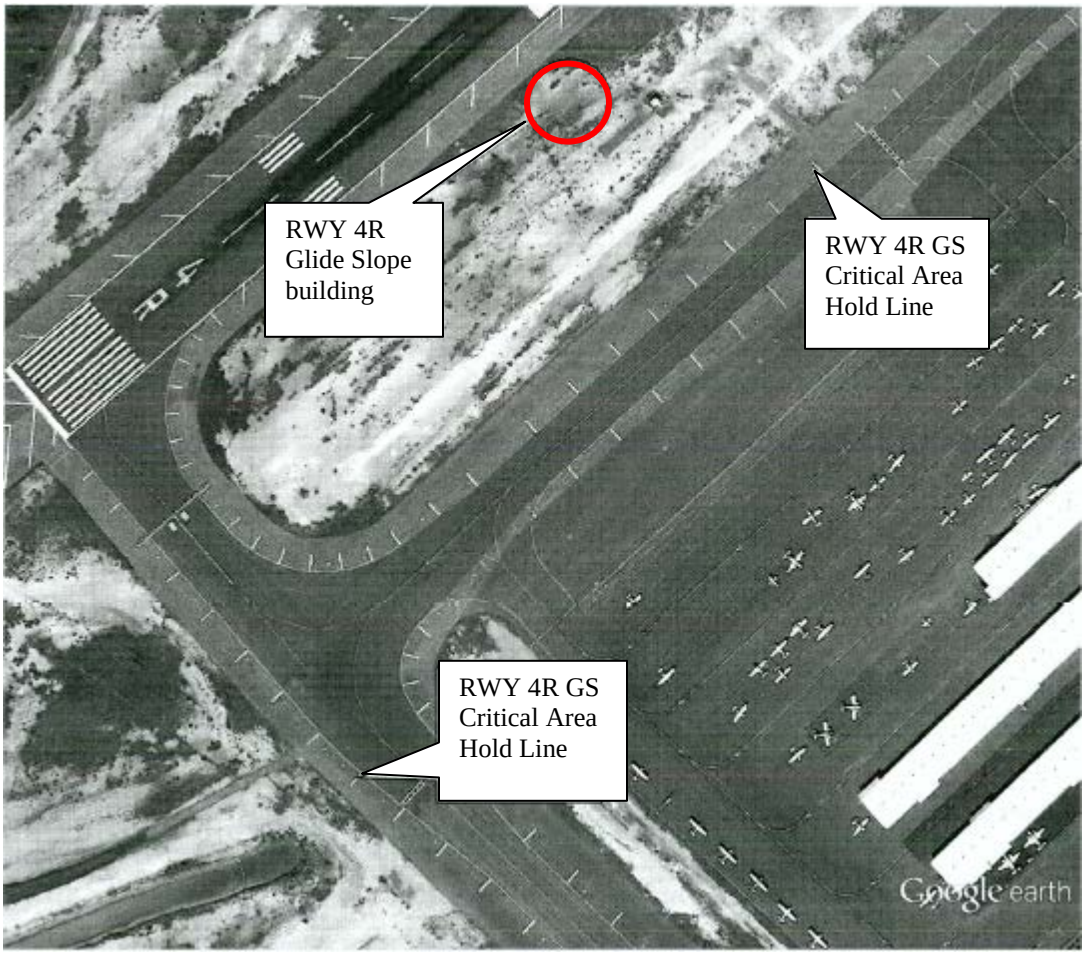
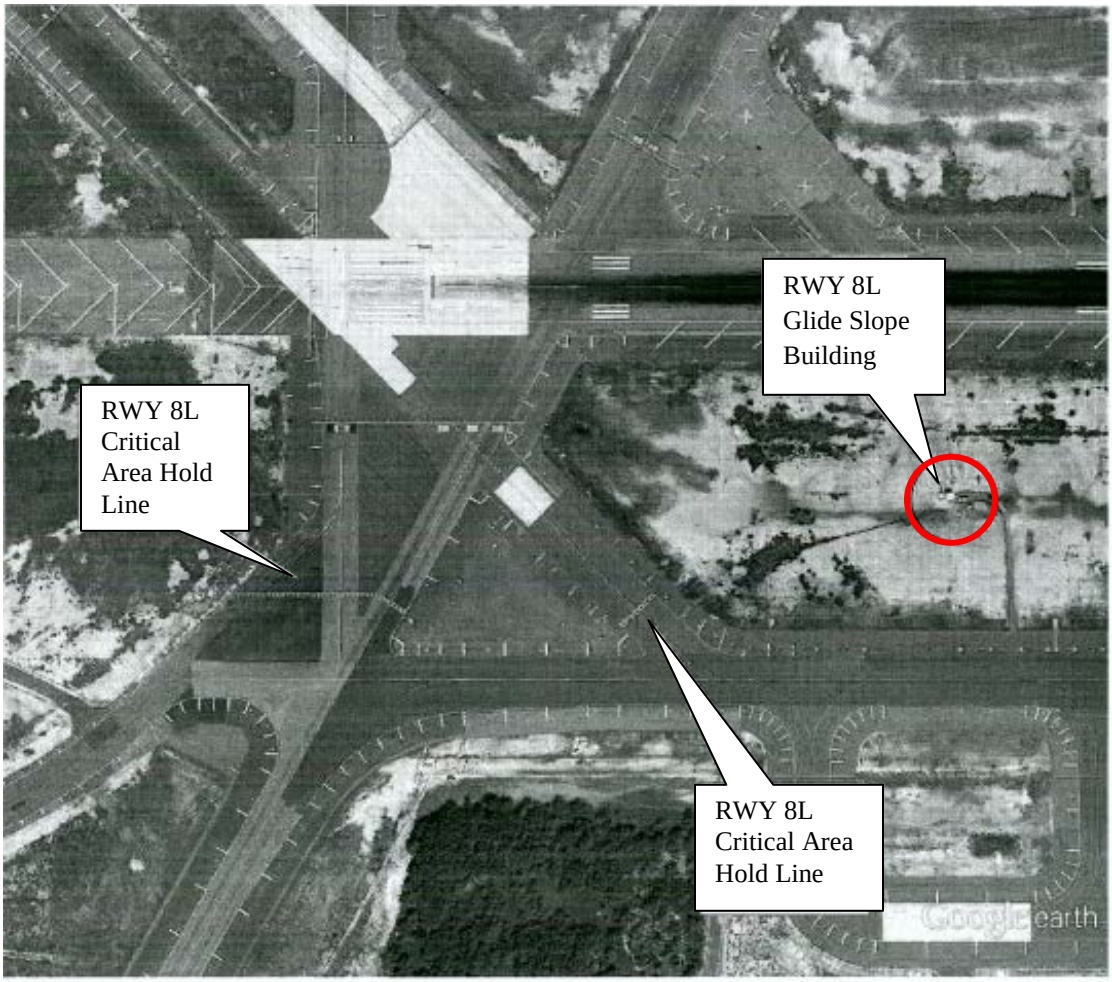
Appendix 40. RWY 4R Glide Slope Critical Area

- Glide slope building circled in red
- Critical area hold lines on TWY C and TWY RT

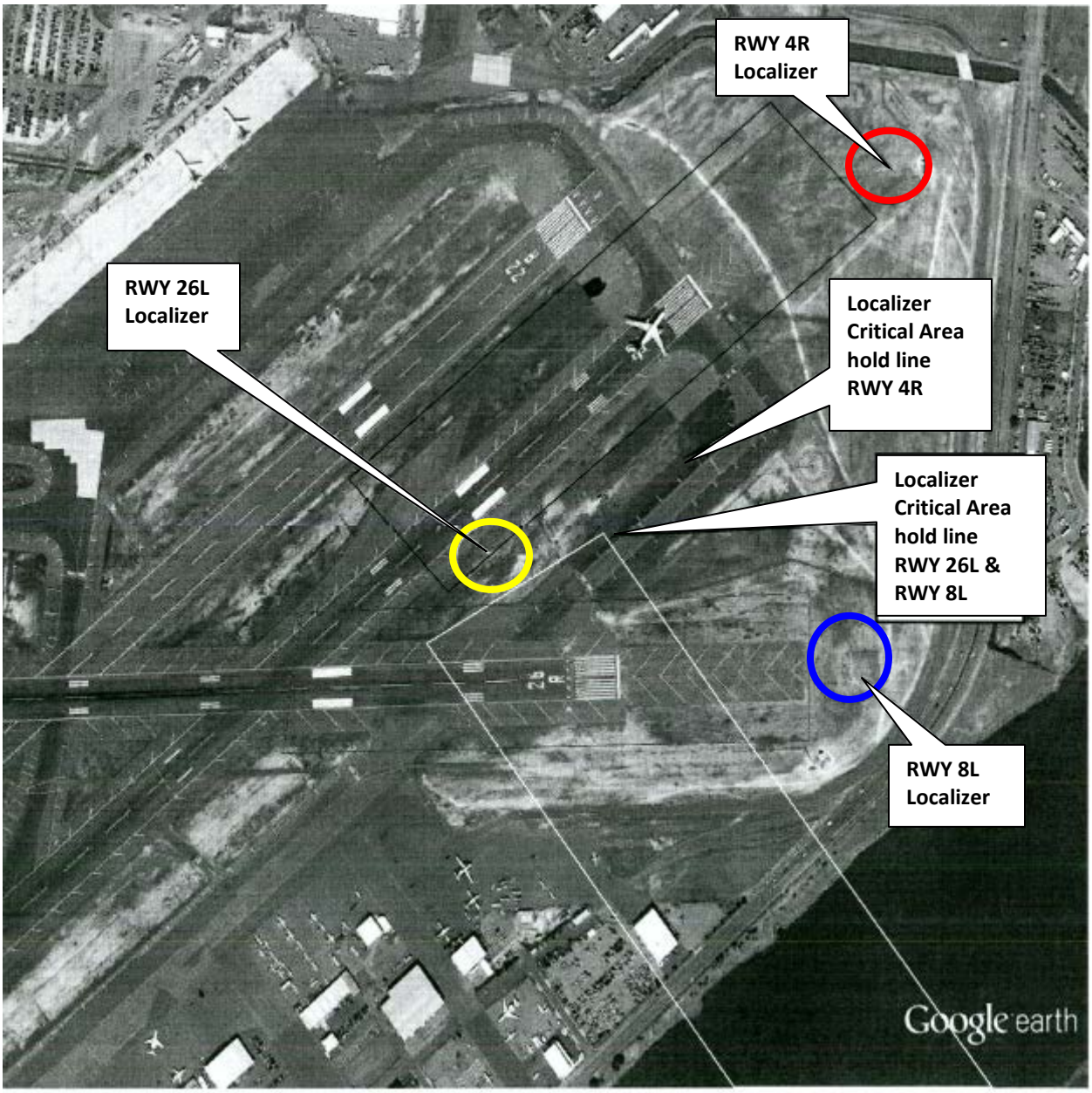


Appendix 41. RWY 8L Glide Slope Critical Area



Appendix 42. Localizer Critical Area

Red: RWY 4R Blue: RWY 8L Yellow: RWY26L



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APPENDIX 43. Runway Lighting Panel and Rotating Beacon

A. General. This provides additional guidance in the operation of the runway lighting panel for the airport lighting at Honolulu International Airport.

B. Procedures.

1. Between Sunset & Sunrise (Night), select "NIGHT" and the applicable visibility to turn on the runway lights, taxiway lights and the rotating beacon. The rotating beacon should automatically turn on when "NIGHT" is selected. The runway and taxiway lights may also be individually selected and changed as necessary.

2. Between Sunrise & Sunset (Day), select "Day" and the applicable visibility to adjust the runway lights, taxiway lights, LAHSO lights and rotating beacon as follows:

a. Selecting visibility > 5M, or 3M-5M, will **turn off** the runway lights, taxiway lights and rotating beacon.

b. Selecting visibility 2M<3M, will turn on the runway lights only.

c. Selecting visibility 1M<2M, or <1M, will turn on the runway lights, taxiway lights and the rotating beacon (indicating the airport is below VFR minima).

REMINDER: Should the visibility drop below 3 miles between Sunrise & Sunset, the rotating beacon must be individually selected and turned on, or option c above selected. When visibility increases to 3 miles or more, deselect "BEACON" to turn off the rotating beacon. The high intensity bulbs in the rotating beacon take approximately 10 minutes to cool after being turned off before they can be turned on again.

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APPENDIX 44. Line Up and Wait (LUAW)

A. General. This provides guidance in the application of Line Up and Wait (LUAW) procedures at Honolulu Control Facility (HCF).

B. Consolidating positions.

1. When conducting line up and wait (LUAW) operations, Local Control (LC) position must not be consolidated/combined with any other non-local control position. LC can be combined with either local control positions including Local Assist (LA) position.

2. The Front Line Manager/CIC position should not be combined with any other position.

C. Staffing. To the extent staffing permits, the LA position shall be staffed, shall actively monitor LC position and assist in minimizing the potential for surface errors and land-over incidents.

NOTE - *Assistance may include, but not be limited to annotating and updating aircraft positions on the flight strips, and/or arranging departure flight strips according to intended takeoff psn..*

D. Procedures.

1. Authorize an aircraft to LUAW when takeoff clearance cannot be issued because of traffic. Issue traffic information to any aircraft so authorized. Traffic information may be omitted when the traffic is another aircraft which has landed on or is taking off the runway and is clearly visible to the holding aircraft. Do not use conditional phrases such as LUAW behind landing traffic" or "after the departing aircraft." First state the runway number, followed by LUAW clearance.

PHRASEOLOGY – *RUNWAY (number), LINE UP AND WAIT*

2. When the safety logic system is inoperative, or in the limited configuration:

a. Do not issue a landing clearance to an aircraft requesting a full stop, touch and go, stop and go, option or unrestricted low approach on the same runway with an aircraft that is holding in position or taxiing to LUAW until the aircraft in position starts takeoff roll.

b. Do not authorize an aircraft to LUAW if an aircraft has been cleared to land, touch and go, stop and go, option or unrestricted low approach on the same runway.

PHRASEOLOGY – *RUNWAY (number), CONTINUE, TRAFFIC HOLDING IN POSITION.*

EXAMPLE – *"Hawaiian Two Heavy, Runway Eight Left, continue, traffic holding in position"*

3. When the safety logic system is in the full core alert mode:

a. LC may issue a landing clearance, full stop, touch and go, stop and go, option, or unrestricted low approach to an arriving aircraft with an aircraft holding in position or taxing to LUAW on the same runway except when reported weather conditions are less than ceiling 800 feet or visibility less than 2 miles.

EXAMPLE – *"American Five Heavy, Runway Eight Left, cleared to land, traffic will be a Boeing Seven Seventeen holding in position."*

b. LC may authorize an aircraft to LUAW when an aircraft has been cleared to land, touch and go, stop and go, option or unrestricted low approach on the same runway provided traffic issued in accordance with Paragraph 4.

4. When an aircraft is authorized to LUAW, inform it of the closest traffic requesting a full stop, touch and go, stop and go, option or unrestricted low approach to the same runway.

PHRASEOLOGY – *RUNWAY (number), LINE UP AND WAIT, TRAFFIC (type aircraft and position).*

EXAMPLE – *"Aloha Nine Twelve, Runway Eight Left, line up and wait. Traffic Boeing Seven Thirty-Seven, 6-mile final."*

5. Inform the closest aircraft that is requesting a full stop, touch and go, stop and go, option or unrestricted low approach when there is traffic authorized to LUAW on the same rwy.

EXAMPLE –

"Delta Fifteen Heavy, Runway Eight Left, continue, traffic holding in position."
"Delta Fifteen Heavy, Runway Eight Left, cleared to land, Traffic holding in position."

6. Do not authorize an aircraft to LUAW when the departure point is not visible from the tower unless the aircraft's position can be verified by ASDE.

7. Do not authorize an aircraft LUAW at an intersection between sunset and sunrise.

8. Do not authorize an aircraft to LUAW at any time when the intersection is not visible from the tower.

9. Do not authorize aircraft to simultaneously LUAW on the same runway, between sunrise and sunset, unless the local assist/local monitor position is staffed.

10. When authorizing an aircraft to LUAW at an intersection, state the runway intersection

PHRASEOLOGY – *RUNWAY (number) AT (taxiway designator), LINE UP AND WAIT.*

11. When two or more aircraft call the tower ready for departure, one or more at the full length of a runway and one or more at an intersection, state the location of the aircraft at the full length of the runway when authorizing that aircraft to LUAW.

PHRASEOLOGY – *RUNWAY (number), FULL LENGTH, LINE UP AND WAIT.*

EXAMPLE – *"Air Shuttle Fourteen, Runway Eight Left, full length, line up and wait."*

NOTE 1 - *The controller need not state the location of the aircraft departing the full length of the runway if there are not aircraft holding for departure at an intersection for that same runway.*

NOTE2 - *If an aircraft responds without its call sign, verify that the intended aircraft received and responded to the instruction.*

12. When aircraft are authorized to LUAW on runways that intersect, traffic must be exchanged between aircraft and the aircraft that is authorized to line up and wait, depart, or arrive to the intersecting runway(s).

EXAMPLE –
"Air Spur Eighty Six Sixty Eight, Runway Four Right at Foxtrot, line up and wait, traffic holding Runway Eight Left."

"Moku Sixteen Twenty, Runway Eight Left at Lima, line up and wait, traffic holding Runway Four Right."

Or, when issuing traffic information to an arrival aircraft and an aircraft that is holding on runway(s) that intersect(s*),*

"November Niner Three Alfa, Runway Four Right at Foxtrot, line up and wait, traffic landing Runway Eight Left."

"United Thirty Five Heavy, Runway Eight Left, cleared to land. Traffic holding in position Runway Four Right."

Or, when issuing traffic information to a departing aircraft and an aircraft that is holding on runway(s) that intersect(s*):*

"Maui One, Runway Eight Left at Lima, line up and wait, traffic departing Runway Four Right."
"November Niner Three Alfa, Runway Four Right at Foxtrot, cleared for takeoff, traffic holding in position Runway Eight Left."

13. When LC delivers or amends an ATC clearance to an aircraft holding in position on a runway, an additional clearance shall be issued to prevent the possibility of the aircraft beginning takeoff roll. In such cases, append the clearance with, "HOLD IN POSITION".

14. Do not issue clearances to small aircraft to LUAW on the same runway behind a departing heavy jet aircraft to apply the necessary intervals.

15. LUAW shall not be used when there is no-radio (NORDO) arrival aircraft in tower's airspace.

16. The FLM/CIC shall update the LUAW status in the ACE/IDS.

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APPENDIX 45. Opposite Direction Operations (ODO)

These procedures apply to same runway (8L/26R, 8R/26L, 4L/22R, 4R/22L) and parallel runway ODO at HIA between an arrival and a departure and an arrival and an arrival.

1. Definition. Opposite Direction Operations are IFR/VFR operations conducted to the same or parallel runways where an aircraft is operating in a reciprocal direction of another aircraft arriving, departing, or conducting an approach.

2. Responsibilities.

a. Approach Control and Tower share the responsibilities to coordinate ODO and issue traffic advisories as herein prescribed.

b. Local Control/Local Assist is responsible to apply the cutoff point(s) between ODO arriving and departing aircraft IAW paragraphs 3c(1) and 3c(2).

c. Approach Control H position is responsible to apply the cutoff point(s) between successive ODO arrivals IAW paragraph 3c(3).

d. A turn away from ODO traffic must ensure appropriate lateral separation.

3. Procedures for Aircraft Receiving IFR Services.

a. General.

(1) These procedures are applicable only when Approach Control radar is operational.

(2) When the Tower's Radar Display is out of service, Approach Control will be responsible to ensure all (arrival and departure) cutoff points are met.

(3) A memory aid must be used by the TRACON and Tower controllers during ODO.

(a) Local Control must place the yellow-colored "ODO" strip on the console in a visible area until any ODO is complete.

(b) Approach Control must use/post the yellow "ODO" magnet at the position until the ODO is complete.

(4) ODO procedures are applicable when two aircraft will execute approaches to opposite ends of the same runway, or an aircraft will depart prior to an arrival on an opposite direction approach to the same or parallel runway.

(5) Traffic advisories must be issued to both arriving and departing aircraft.

EXAMPLE –
"Opposite direction traffic (distance) mile final, (type aircraft)."
"Opposite direction traffic departing runway (number), (type aircraft)."

"Opposite direction traffic (position), (type aircraft)."

(6) Do not allow opposite direction same runway operations with opposing traffic inside the cutoff point unless an emergency situation exists.

(7) Do not allow opposite direction practice approaches, except in the case of Flight Check, cutoff points in paragraph 3c must be applied.

(8) Use of visual separation is not authorized for aircraft receiving IFR services that are conducting ODO to the SAME runway.

(9) When conducting an opposite direction circling maneuver, the aircraft is no longer considered an ODO when the provisions of FAA JO 7110.65, paragraph 5-5-7, Passing or Diverging, may be applied.

(10) Parallel Runway Operations. IFR aircraft conducting ODO to parallel runways 4/22 and 8/26:

a Ensure that a turn away from opposing traffic is issued to provide appropriate lateral separation.

b Use of visual separation is authorized once a turn away from opposing traffic is issued.

c Traffic advisories must be issued to both aircraft.

b. Coordination

(1) Local Assist/or Local Control must verbally request opposite direction departures with Approach Control.

(2) Approach Control must verbally request opposite direction arrivals with Local Assist/or Local Control.

(3) All coordination must be accomplished on a recorded line and must contain the phrase "OPPOSITE DIRECTION." Initial coordination must also include the call sign, aircraft type and departure or arrival runway.

c. Cutoff Procedures. For aircraft receiving IFR services and conducting ODO:

(1) Departure vs Arrival (SAME Runway). A departing aircraft must be airborne and issued a turn to avoid conflict prior to an arriving aircraft reaching:

a A point **14** flying miles from the threshold of the runway of intended landing, when either the arriving or departing aircraft is a turbojet or turboprop; or

b A point ten **10** flying miles from the threshold of the runway of intended landing for all other aircraft.

c An aircraft performing a low approach, touch-and-go, stop-and-go, or missed approach must be considered a departure at the threshold.

(2) Departure vs Arrival (PARALLEL Runway). A departing aircraft must be airborne and issued a turn to avoid conflict prior to an arriving aircraft reaching:

a A point **14** flying miles from the threshold of the runway of intended landing, when either the arriving or departing aircraft is a turbojet or turboprop; or

b A point ten **10** flying miles from the threshold of the runway of intended landing for all other aircraft.

c An aircraft performing a low approach, touch-and-go, stop-and-go, or missed approach must be considered a departure at the threshold.

d The following combinations of ODO Arrival vs Departure using parallel runways is NOT authorized:

1 Departure runway 8R / Arrival runway 26R.

2 Departure runway 26R / Arrival runway 8R.

(3) Arrival vs Arrival (SAME runway). An arriving aircraft must cross the runway threshold prior to the following ODO arriving aircraft reaching:

a A point **5** flying miles from the threshold of the runway of intended landing regardless of aircraft type; or

b If an aircraft is established in the traffic pattern, prior to the second arriving aircraft turning base leg.

(4) Arrival vs Arrival (PARALLEL runway 8R/26L vs 8L/26R) No ODO cutoff requirement.

d. Procedures for VFR/VFR and VFR/IFR Operations:

(1) Ensure VFR aircraft are issued a turn to avoid conflict with opposing IFR/VFR traffic.

(2) If coordination with another position is required, LC must state the phrase "Opposite Direction."

(3) When conducting ODO with VFR aircraft, LC must use an appropriate memory aid (yellow ODO strip).

(4) LC must issue traffic to both aircraft and indicate the direction that the departure will turn (arrival/departure) or the location of the opposing aircraft on final (arrival/arrival).

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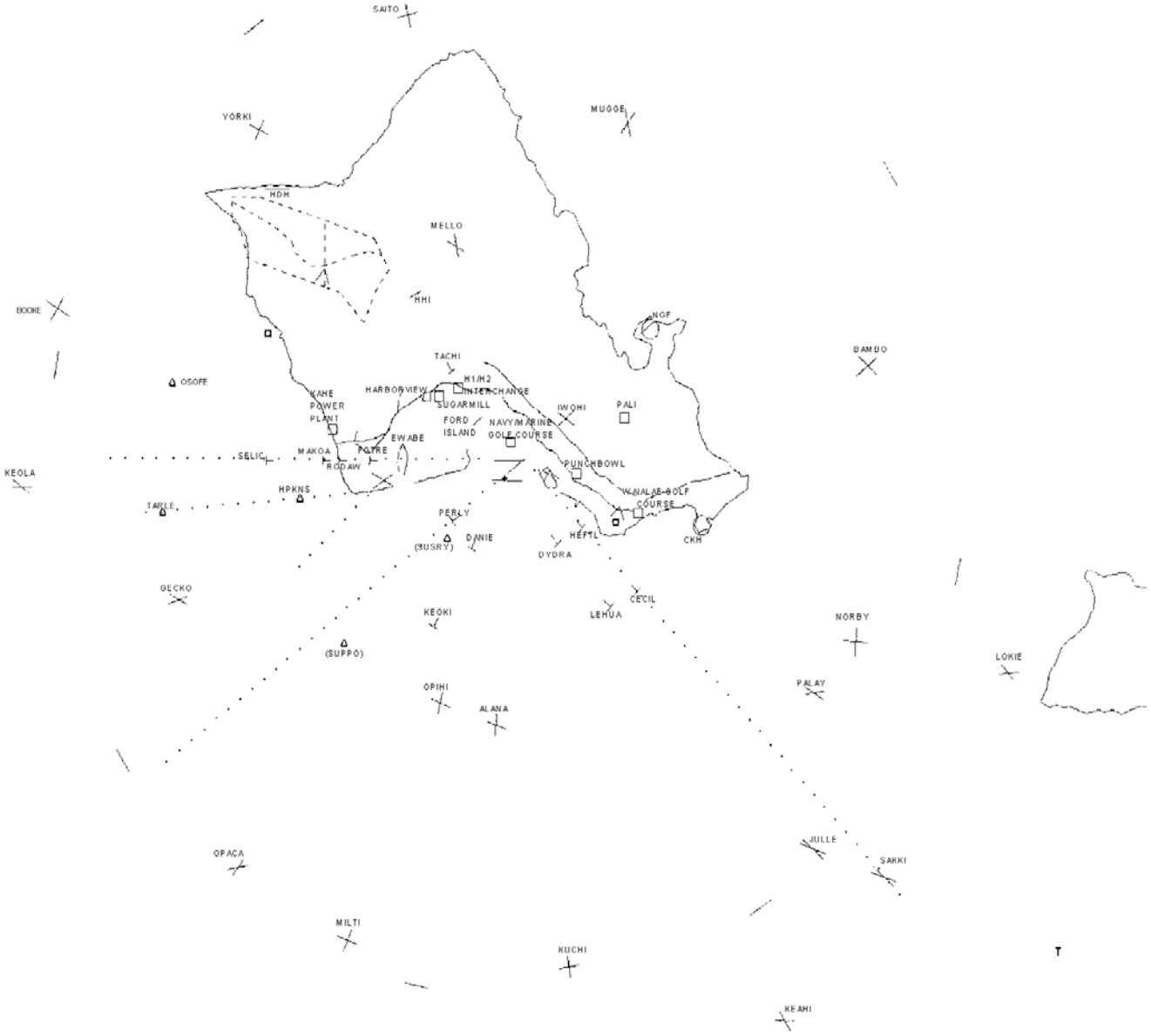
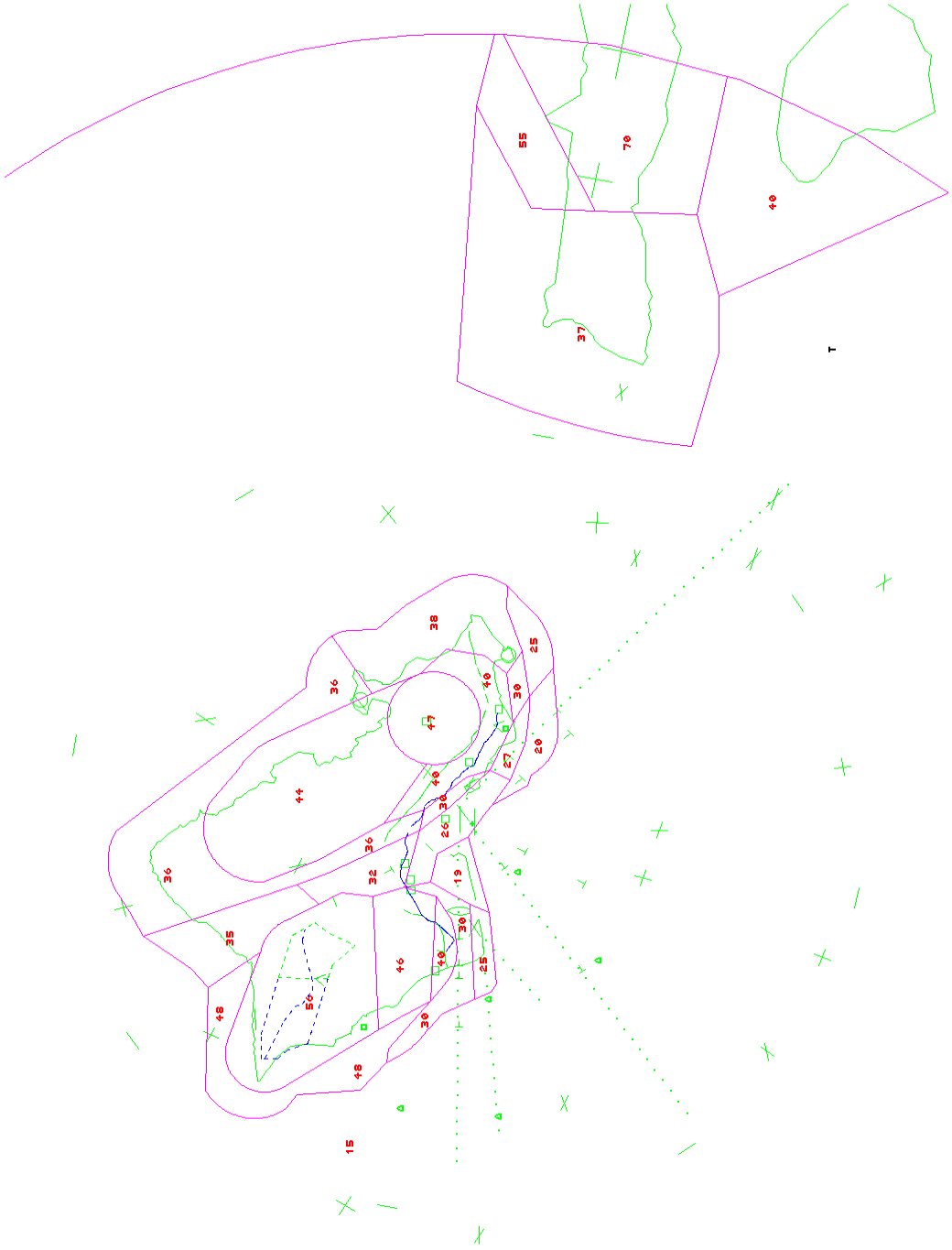
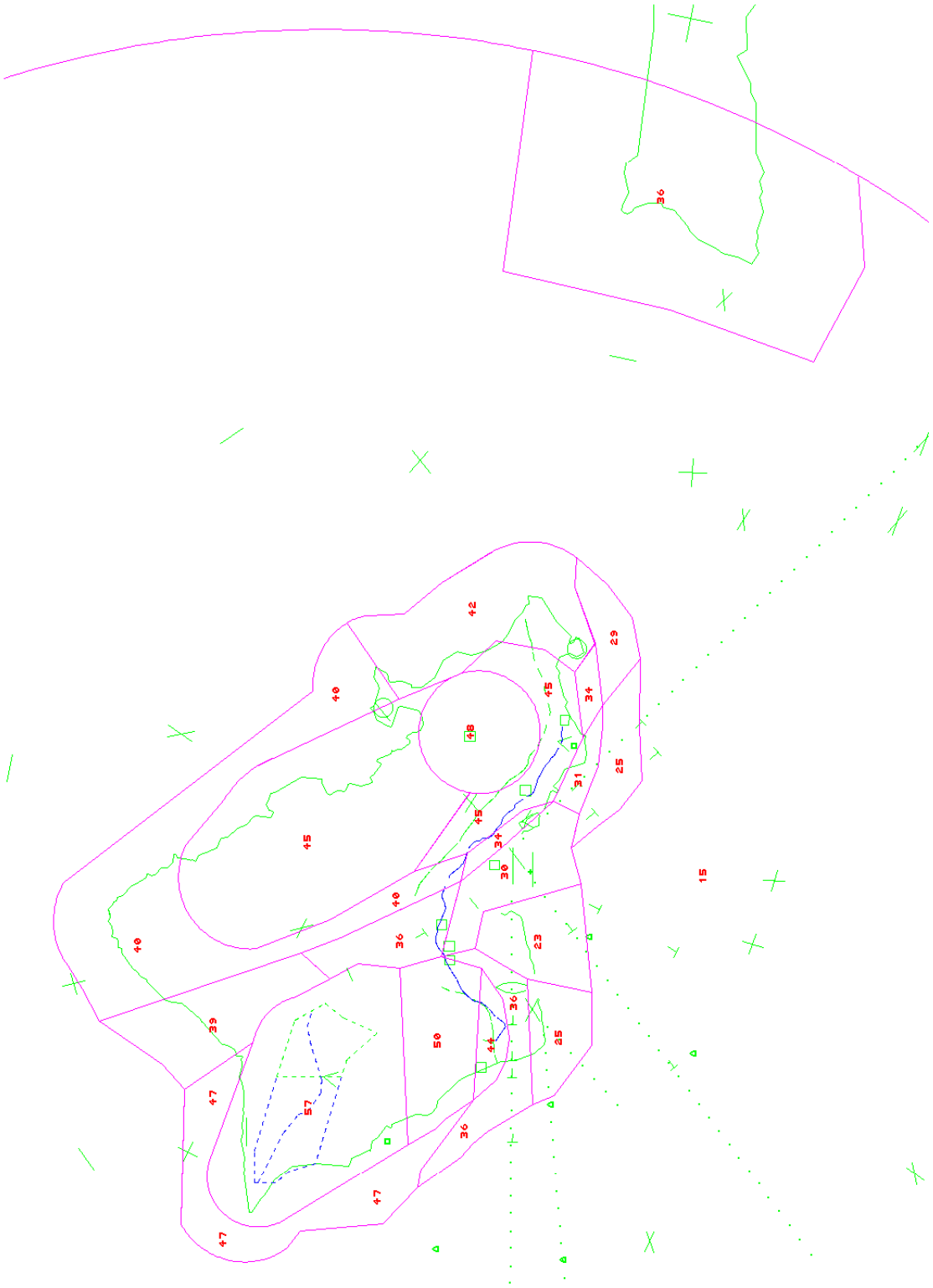
APPENDIX 46. Honolulu Video Map



APPENDIX 47. Honolulu MVA Map (ASR-9)



APPENDIX 48. Honolulu MVA Map (ARSR-4)



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APPENDIX 49. MOSAIC OPERATING PROCEDURES.

The OSIC/CIC must ensure MOSAIC is activated/deactivated as follows:

A. Priority of personnel to perform these procedures at the MCW.

1. Air Traffic Control Specialist.

2. Operations Supervisor (FLM)/CIC on duty.

B. Turning MOSAIC on.

1. Notify the OSIC.

2. At MCW keyboard, enter F7, W enter.

3. Verify MOSAIC MODE is on.

a. Check Systems Data Area. The word “MOSAIC” will appear.

b. In the event “MOSAIC” is absent, do not use the target information.

C. Turning MOSAIC off.

1. Notify the OSIC.

2. At MCW keyboard, enter F7W HNL <ENTER>. (Enables ASR-9 single site sensor).

D. There shall be one departure heading for all IFR aircraft departing HNL, when TRACON is utilizing MOSAIC, to comply with increased separation requirements. This does not preclude a controller from requesting a heading when the situation warrants.

E. For each period TOWER and TRACON is operating under MOSAIC, the OSIC must:

1. Determine whether traffic/safety advisories and sequencing/separation services can be provided to VFR aircraft without impacting services to IFR aircraft. Consider such items as traffic, time of day, weather conditions, runway configuration and duration of MOSAIC.

2. Ascertain which heading to use for departures to ensure they remain clear of the adjacent inbound airspace by the required 2 ½ miles. Wind may have an effect on this determination.

F. If the FLM determines providing the above mentioned services to VFR aircraft will impact IFR traffic, the FLM may discontinue services to VFR aircraft until traffic is no longer a factor. The FLM must also ensure an ATIS is made to reflect the current situation.

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APPENDIX 50. MOSAIC SEPARATION AND PROCEDURES

The following standards and operating procedures are applicable:

A. A beacon target must be displayed as a virgule (/); a primary target will initially be displayed as a period (.). When the MEARTS operational program recognizes the target asvalid and determines that it is eligible to become a track, the period will change to a plus (+). Separation minima must be based from the center of the virgule symbol in accordance with JO 7110.65.

B. Radar separation standard, 5 NM, is required in accordance with JO 7110.65, paragraph 5-5-4, b.1. Provisions of paragraph 5-5-4, a.1, 3 NM separation do not apply.

C. Mode C automatic altitude readout may be used for vertical separation.

D. Use vertical separation of 1,000 feet between IFR and between VFR aircraft when passing below a heavy aircraft. Use 500 feet vertical separation between VFR aircraft and other VFR aircraft and between VFR aircraft and IFR aircraft when heavy aircraft are not involved.

E. Passing and Diverging radar separation. 5 NM is required when aircraft are on same or crossing courses. The provisions of JO 7110.65, paragraph 5-5-7a, Passing and Diverging (Terminal) do not apply. When aircraft are on opposite courses as defined in paragraph 1-2-2, vertical separation may be discontinued in accordance with procedures contained in paragraph 5-5-7b, Passing and Diverging (En Route) as follows:

1. You are in communication with both aircraft involved, and

2. You tell the pilot of one aircraft about the other aircraft, including position, direction, type, and

3. One pilot reports having seen the other aircraft and that the aircraft have passed each other, and

4. You have observed that the radar targets have passed each other, and

5. You have advised the pilots if either aircraft is classified as a heavy aircraft.

F. Adjacent airspace radar separation. 2 ½ NM is required in accordance with JO 7110.65, paragraph 5-5-10, a.3. (a).

G. Edge of scope. 5 NM required in accordance with JO 7110.65, paragraph 5-5-11, c.1. The provisions of JO 7110.65, paragraph 5-5-11, a.3., 3 NM separation do not apply.

H. Departure radar separation. 5 NM is required. The provisions of JO 7110.65, paragraph 5-8-3, Successive or Simultaneous Departures, 15 degree course divergence within 1 mile of the runway end do not apply.

I. Arrival and departure radar separation. 5 NM is required. The provisions of JO 7110.65, paragraph 5-8-4, 2 NM separation, do not apply.

J. The provisions of visual separation apply in accordance with JO 7110.65, paragraph 7-2-1, a. (Terminal); Visual Separation, paragraph 7-4-1, Visual approach, paragraph 7-4-2, Vectors for Visual Approach.

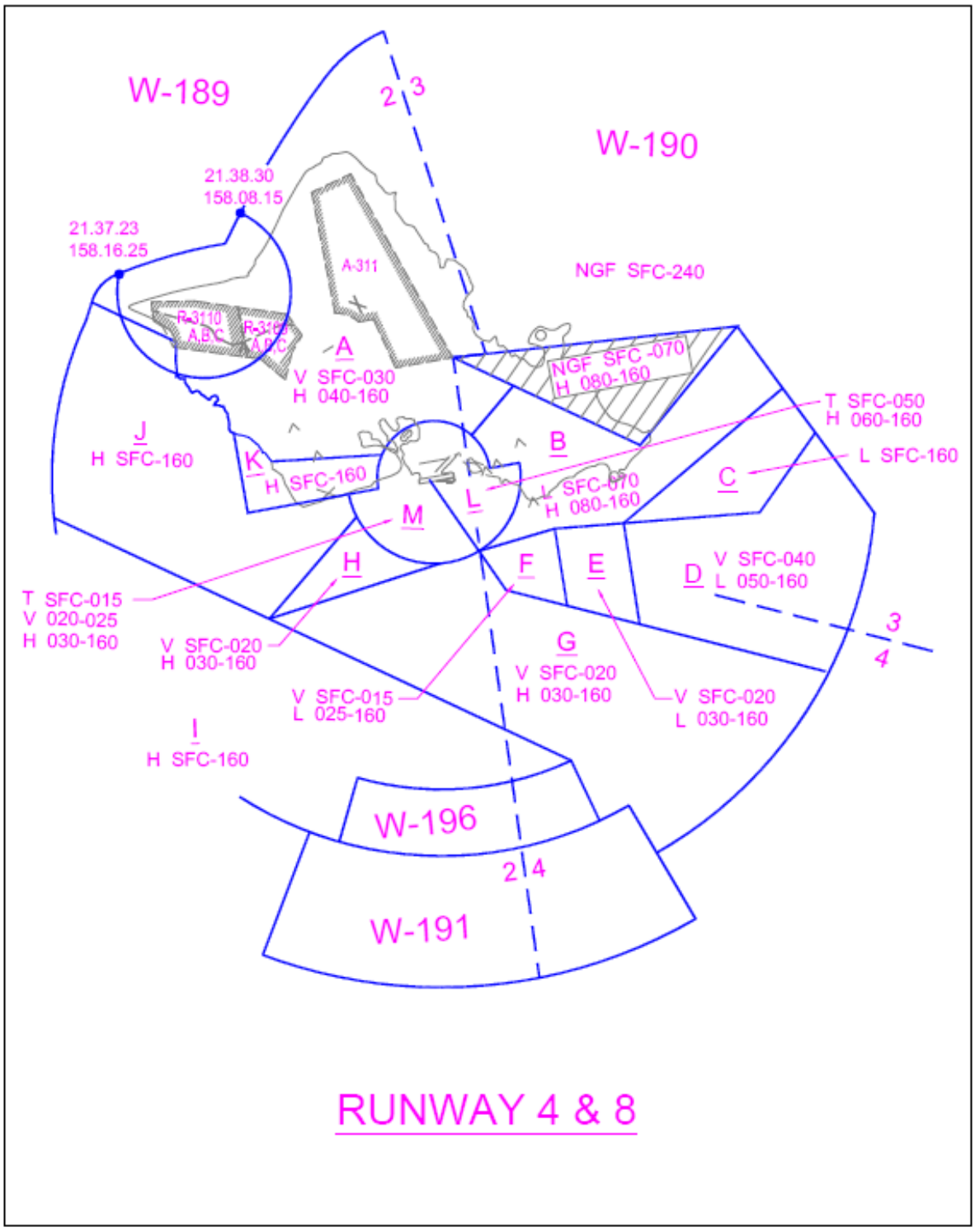
K. Terminal Minimum Safe Altitude Warning (MSAW) and Conflict Alert (CA) will be utilized.

L. The radar map will be aligned to True North.

M. Separation, sequencing, safety alerts and traffic advisories must be provided for all VFR aircraft operating in Class B airspace, unless these services causes excessive delays to IFR aircraft.

N. Flow Control will be established by the OSIC/CIC, as needed.

APPENDIX 51. Airspace Sector Chart – Runways 4/8



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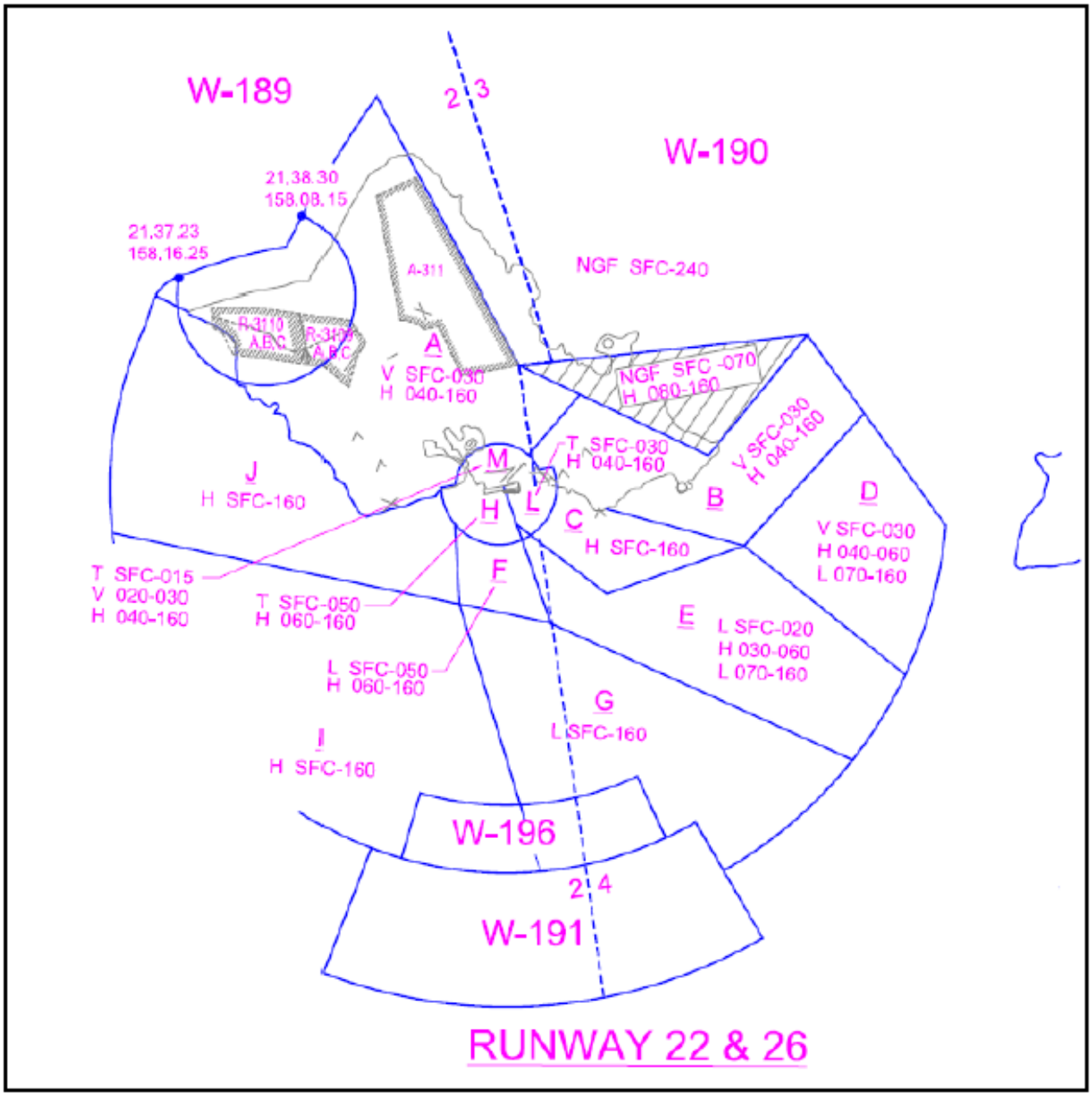
APPENDIX 52. Airspace Sector Chart – Runways 22/26



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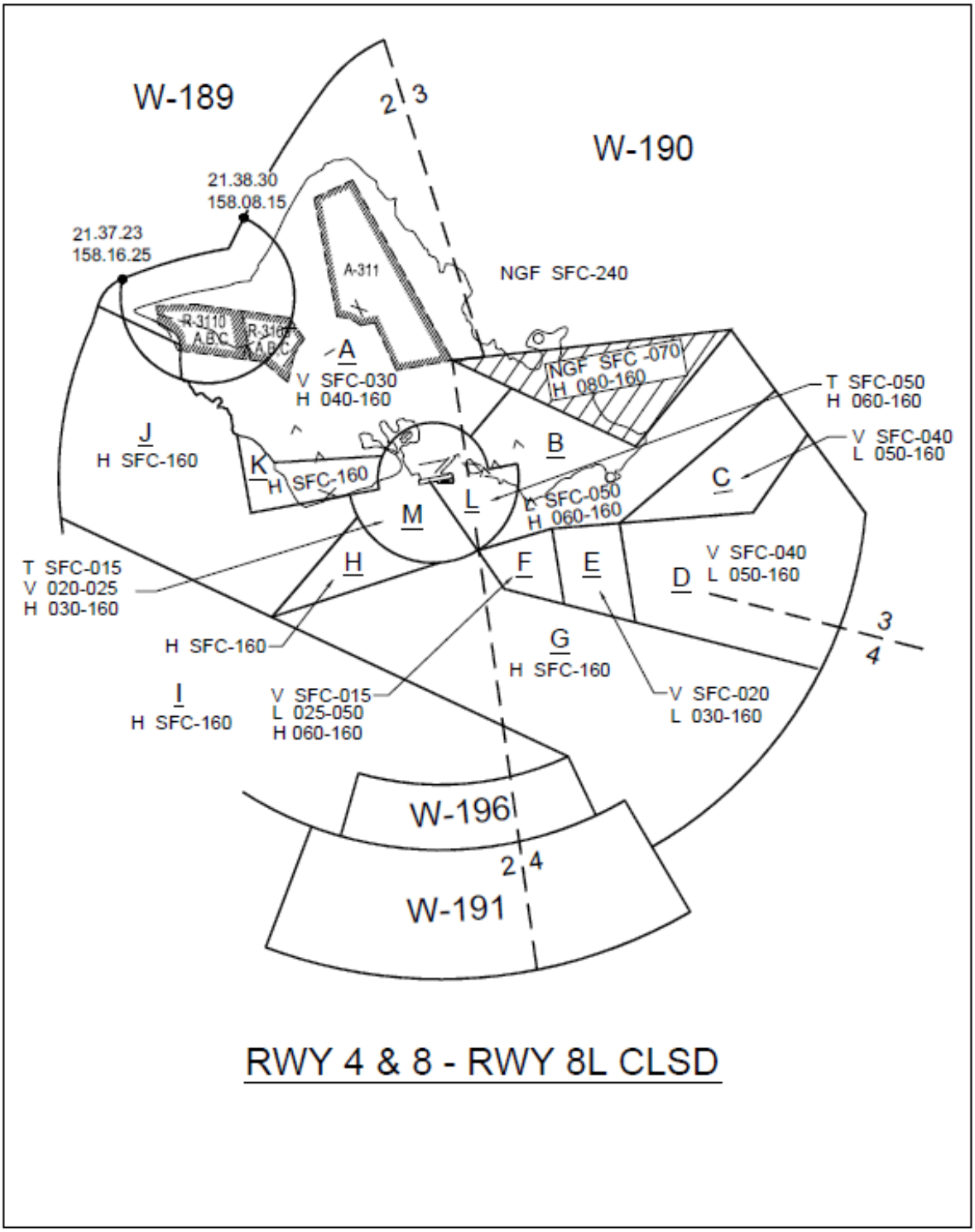
APPENDIX 53. Airspace Sector Chart – Runways 8L Closed



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