Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: SID	Estimated Chart Date: 02/25/2021	APWS Task ID: 765A964E4B0E4A509ADB26AC8600D09F	APWS Project ID: E60DA5C75C7A41BA9E34F7976FA30C36
Procedure: SID KALAE (RNAV) ONE MOLOKAI HI PHMK		Enroute: YES	Specialist: Sweeting, Dexter		Agreement Number:
Airport ID: PHMK			Airport City: KAUNAKAKAI		State: HI
Facility ID:	Facility Type:	Flight Inspection Remark Type: Hold FC Slot			

Procedure Comments:
ORIGINAL PROCEDURE

ACTIVE DATA USED FOR MKK VORTAC AND LNY VORTAC

CONTACT: DONALD LANIER 405-954-8242

8260-2: LOKIE
12/16/2020: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 12/04/2020.
1. ADDED EN ROUTE HIGH TO REQUIRED CHARTING.

Data as of: 12/16/2020 11:49:22 CST

FIPC BASIC FORM

PROCEDURE:	AIRPORT NAME:	AIRPORT ID:	SPECIAL CONTROL NO:
SID KALAE (RNAV) ONE MOLOKAI HI PHMK	MOLOKAI	PHMK	PG-07-115-20

FAC ID: KALAE1	CITY: KAUNAKAKAI	ST: HI	ORIG CHART DATE: 12/31/2020

DFL TYPE:	THIRD PARTY:	EST. TIME ON SITE:	REIMB. NUMBER:	PTS TASK ID:
PROC/B	☐ YES	1.0	AC0683	

PREFLIGHT NOTES

REVIEWER: edward w mesa	DATE: 12/03/2020
COMMENTS:	CHECK ONE: ☒ FLT CK REQ ☐ NFCR ☐ REJECT

	YES	NO
CPV COMPLETE?	X	

PROCEDURE RESULTS

INSPECTION DATE:	CREW #:	N #:	INSTRUMENT PROCEDURE STATUS:	ARINC CODING:
12/03/2020	VN283	N89	☒ SAT ☐ SAT W/CHANGES ☐ UNSAT	☐ SAT ☒ SAT/GOLD ☐ UNSAT

FLIGHT INSPECTOR SIGNATURE:	PRINTED NAME:	NOTAM INITIATED?
edward w mesa @ 12/03/2020 15:58	MESA, EDWARD WILLIAM	☐ YES ☒ NO

FLIGHT INSPECTOR REMARKS:

IN-FLIGHT OBSTACLE REPORT

OBSTRUCTION ID #:	COORDINATES OR LOCATION:	GNSS ALTITUDE (MSL):	BAROMETRIC ALTITUDE (MSL):	HEIGHT ABOVE GROUND LEVEL:

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION
WESTERN SERVICE AREA

CATEGORICAL EXCLUSION DECLARATION

Ellison Onizuka Kona International Airport at Keahole
Molokai Airport
Hilo International Airport Kahului Airport
Kahului Airport

MULTIPLE PROCEDURES

Description of Action:

The Federal Aviation Administration (FAA) is proposing to amend procedures and implement new procedures at the following airports in Hawai'i:

1. **Ellison Onizuka Kona International Airport at Keahole (PHKO) in Kailua-Kona on the Island of Hawai'i.**
2. **Molokai Airport (PHMK) in Kaunakakai on the Island of Molokai.**
3. **Hilo International Airport (PHTO) in Hilo on the Island of Hawai'i.**
4. **Kahului Airport (PHOG) in Kahului on the Island of Maui.**

The proposed amendments and new procedures are a result of the Performance Based Navigation (PBN) Full Work Group (FWG) Design Meetings whose members include airline industry members, PBN, and the Honolulu Control Facility (HCF). The Mission Statement of the FWG was to:

> ***"Provide RNAV SIDs, STARs, and RNPs for the Hawaiian Islands that take advantage of and provide NextGen RNAV capabilities for safety and facility, system, and user benefits, Supports Operational Contingency Plan (OCP) requirements, and to the extent possible, incorporate previous Full Work Group efforts and resources expended."***

The procedures to be implemented and/or amended are listed below by

airport. Ellison Onizuka Kona International Airport at Keahole:

1. **Implement the ONIZU ONE DEPARTURE Area Navigation (RNAV) procedure.**
    a. **Departs from Runways (RWYs) 17 and 35.**
    b. **Four transitions will direct aircraft:**
        i. **BARBY: north-northeast,**
        ii. **JULLE: northwest,**
        iii. **MAKEN: north, and**
        iv. **UPP VORTAC: east-northeast.**

Molokai Airport:

1. **Amend the RNAV (Global Positioning System [GPS])-B approach procedure.**
2. **Implement the MAULA ONE DEPARTURE (RNAV) procedure.**
    a. **Departs from RWY 5.**
    b. **Four transitions will direct aircraft:**
        i. **EELIO: southeast,**
        ii. **ALANA: west,**
        iii. **LNY VORTAC: south-southeast, and**
        iv. **LOKIE: northwest.**
3. **Implement the KALAE ONE DEPARTURE (RNAV) procedure.**
    a. **Departs from RWYS 17 and 23.**
    b. **Will have the same four transitions as the MAULA ONE DEPARTURE (RNAV) procedure.**

Hilo International Airport:

1. **Amend the Instrument Landing System (ILS) or Localizer (LOC) RWY 26 approach procedure.**
2. **Amend the RNAV (GPS) RWY 21 approach procedure.**
3. **Amend the RNAV (GPS) RWY 26 approach procedure.**
4. **Implement the LYCHI ONE ARRIVAL (RNAV) procedure.**
    a. **Connects to:**
        i. **ILS or LOC RWY 26 approach procedure,**
        ii. **RNAV (GPS) RWY 21 approach procedure, and**
        iii. **RNAV (GPS) RWY 26 approach procedure.**
    b. **Four transitions will direct aircraft:**
        i. **BARBY: from the north-northwest,**
        ii. **CHINE: from the west,**
        iii. **NOMEA: from the north, and**
        iv. **POHOU: from the west-northwest**
    c. **Procedure will be limited to turboprop aircraft.**
5. **Implement the PPKEO ONE DEPARTURE (RNAV).**
    a. **Departs from all runways.**
    b. **Four transitions will direct aircraft:**
        i. **BARBY: north-northeast,**
        ii. **LAVAS: west and connects to the LAVAS ONE ARRIVAL (RNAV) procedure,**
        iii. **PAIKO: west, and**
        iv. **UPP VORTAC: east.**

Kahului Airport:

1. **Amend the ILS or LOC RWY 2 approach procedure.**
2. **Implement the Very High Frequency Omnidirectional Radio Range (VOR)/Distance Measuring Equipment (DME) RWY 2 approach procedure.**

The FAA Guidance for Noise Screening of Air Traffic Actions (December 2012) was used to complete the analysis of potential effects due to the change in aircraft noise exposure level, as a result, of implementing the proposed action. The Traffic Test (TRAF Test) is used to determine if the number of operations on a particular route or procedure is high enough to generate noise levels that exceed noise screening thresholds. The TRAF Test considers aircraft types and the altitudes flown. The TRAF Test was used to evaluate the new procedures and amended procedures. Based on the results of the TRAF Test, potential noise impacts are not expected based on the number of operations on the new procedures; therefore, it is determined that further noise screening is not required.

Declaration of Exclusion:

FAA reviewed the above referenced proposed action, and the undersigned determined it to be categorically excluded from further environmental documentation according to FAA Order 1050.1F, "Environmental Impacts: Policies and Procedures." The implementation of this action will not result in any extraordinary circumstances in accordance with FAA Order 1050.1F.

Basis for this Determination:

The Aircraft Procedure Initial Environmental Review was completed and reviewed by the Western Service Center. This review was conducted in accordance with policies and procedures in Department of Transportation Order 5610.1C, "Procedures for Considering Environmental Impacts" and FAA Order 1050.1F.

The proposed procedure meets the following categorical exclusions contained in FAA Order 1050.1F:

> **5-6.5.i. Establishment of new or revised air traffic control procedures conducted at 3,000 feet or more above ground level (AGL); procedures conducted below 3,000 feet AGL that do not cause traffic to be routinely routed over noise sensitive areas; modifications to currently approved procedures conducted below 3,000 feet AGL that do not significantly increase noise over noise sensitive areas; and increases in minimum altitudes and landing minima.**

Facility Manager Review/Concurrence

Signature: DAVID A SAKASEGAWA Digitally signed by DAVID A SAKASEGAWA Date: 2019.11.27 11:08:59 -10'00'

Name: David Sakasegawa
Acting Air Traffic Manager
Honolulu Control Facility (HCF)

Service Area Environmental Specialist Review/Concurrence

Signature: _____

Name: Ryan Weller
Environmental Protection Specialist, Operations Support Group,
Western Service Center, AJV-W25

Service Area Director Review/Concurrence, if necessary

Signature: _____

Name: Shawn M. Kozica
Manager, Operations Support Group
Western Service Center, AJV-W2

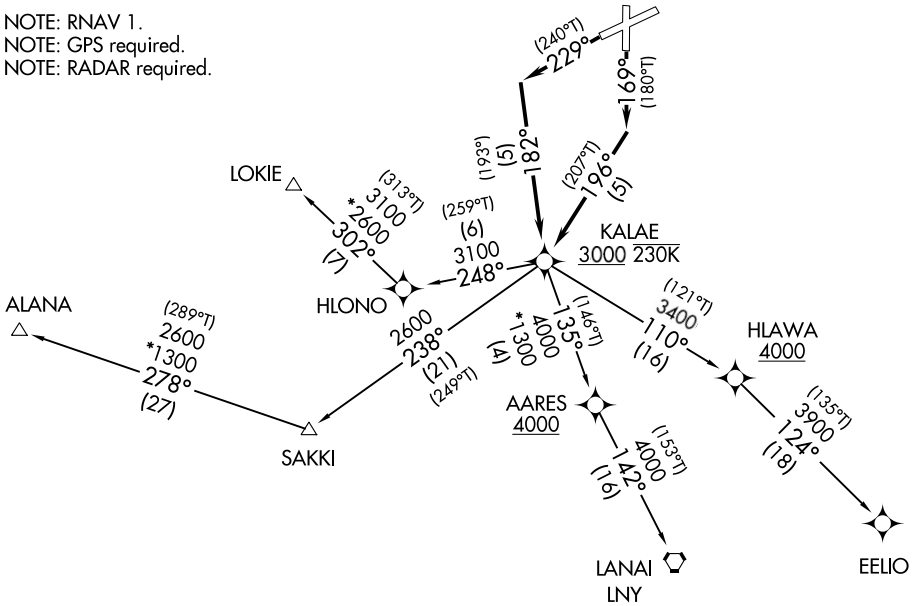
KALAE ONE DEPARTURE (RNAV)

ATIS
128.2
GND CON
121.9
MOLOKAI TOWER★
125.7 306.2
HCF CENTER
124.1 317.5

TOP ALTITUDE: 5000

PROTOTYPE-NOT FOR NAVIGATION

NOTE: RNAV 1.
NOTE: GPS required.
NOTE: RADAR required.



TAKEOFF MINIMUMS

Rwys 5, 35: N/A: Air Traffic.
Rwy 17: Standard with minimum climb of 500' per NM to 3000.
Rwy 23: Standard with minimum climb of 415' per NM to 1900.

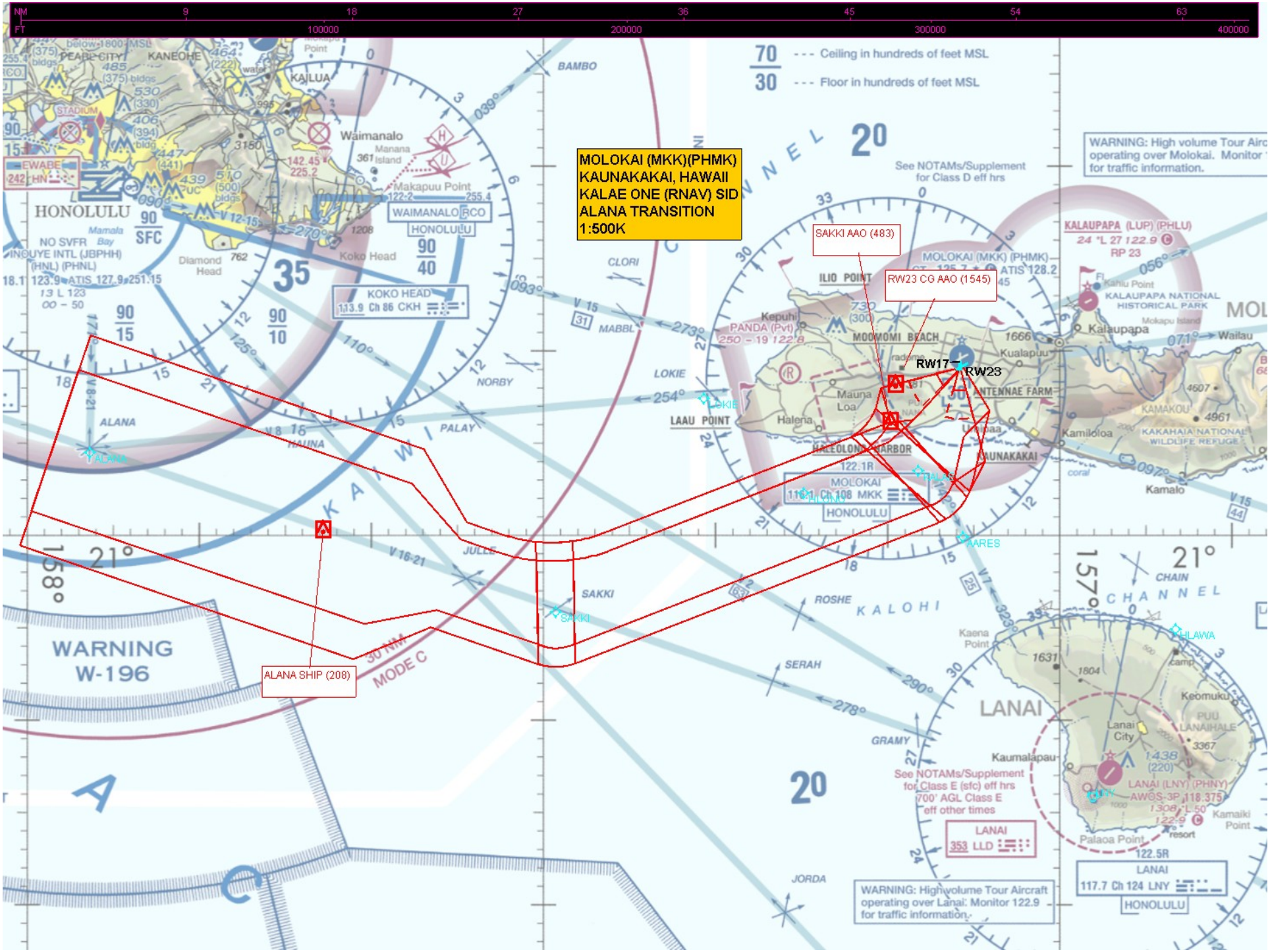
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

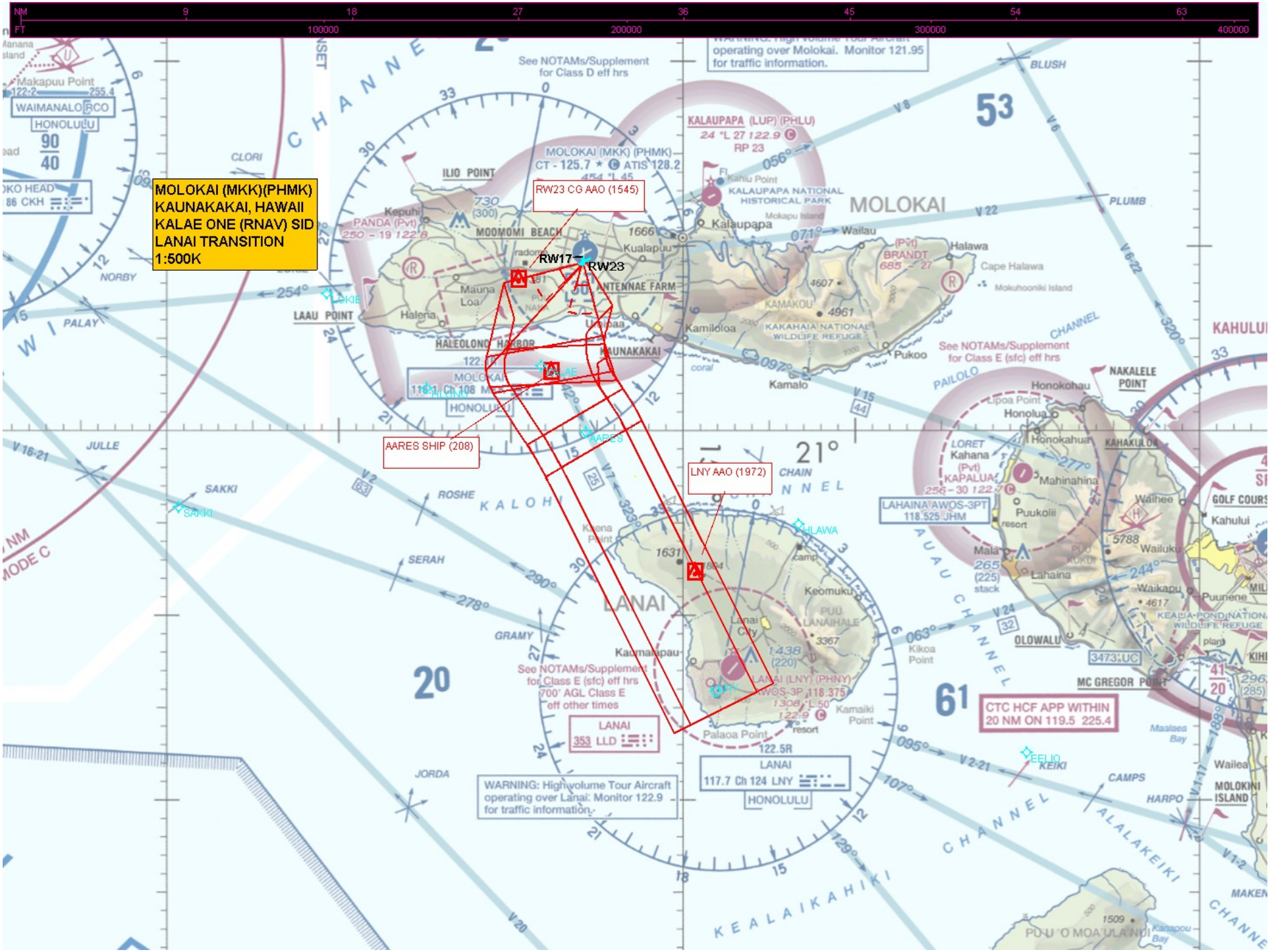
TAKEOFF RWY 17: Climb on heading 169° to intercept course 196° to cross KALAE at or above 3000 and at or below 230K, thence . . . .
TAKEOFF RWY 23: Climb on heading 229° to intercept course 182° to cross KALAE at or above 3000 and at or below 230K, thence . . . .

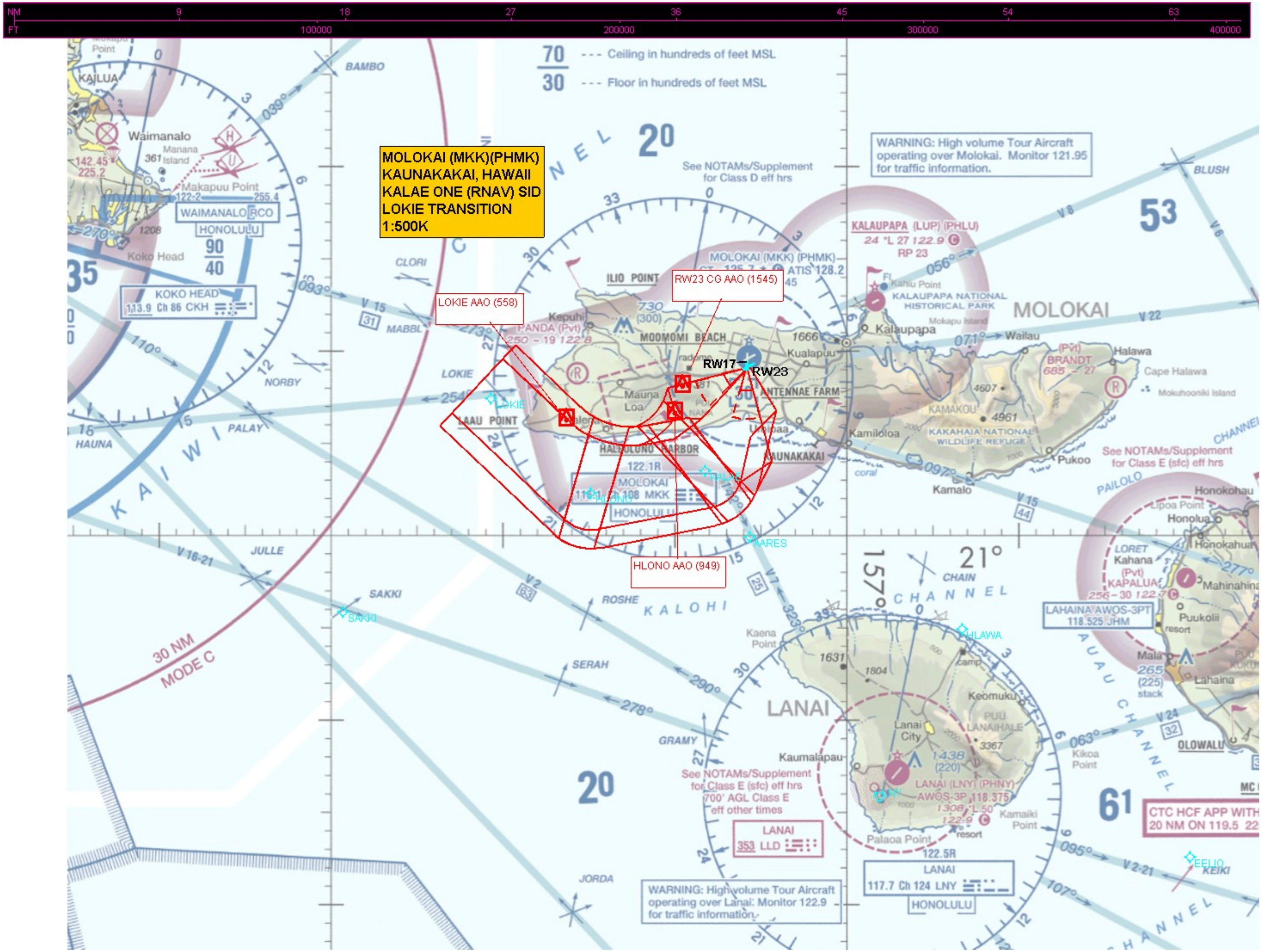
. . . . (transition) maintain 5000, expect filed altitude five minutes after departure.

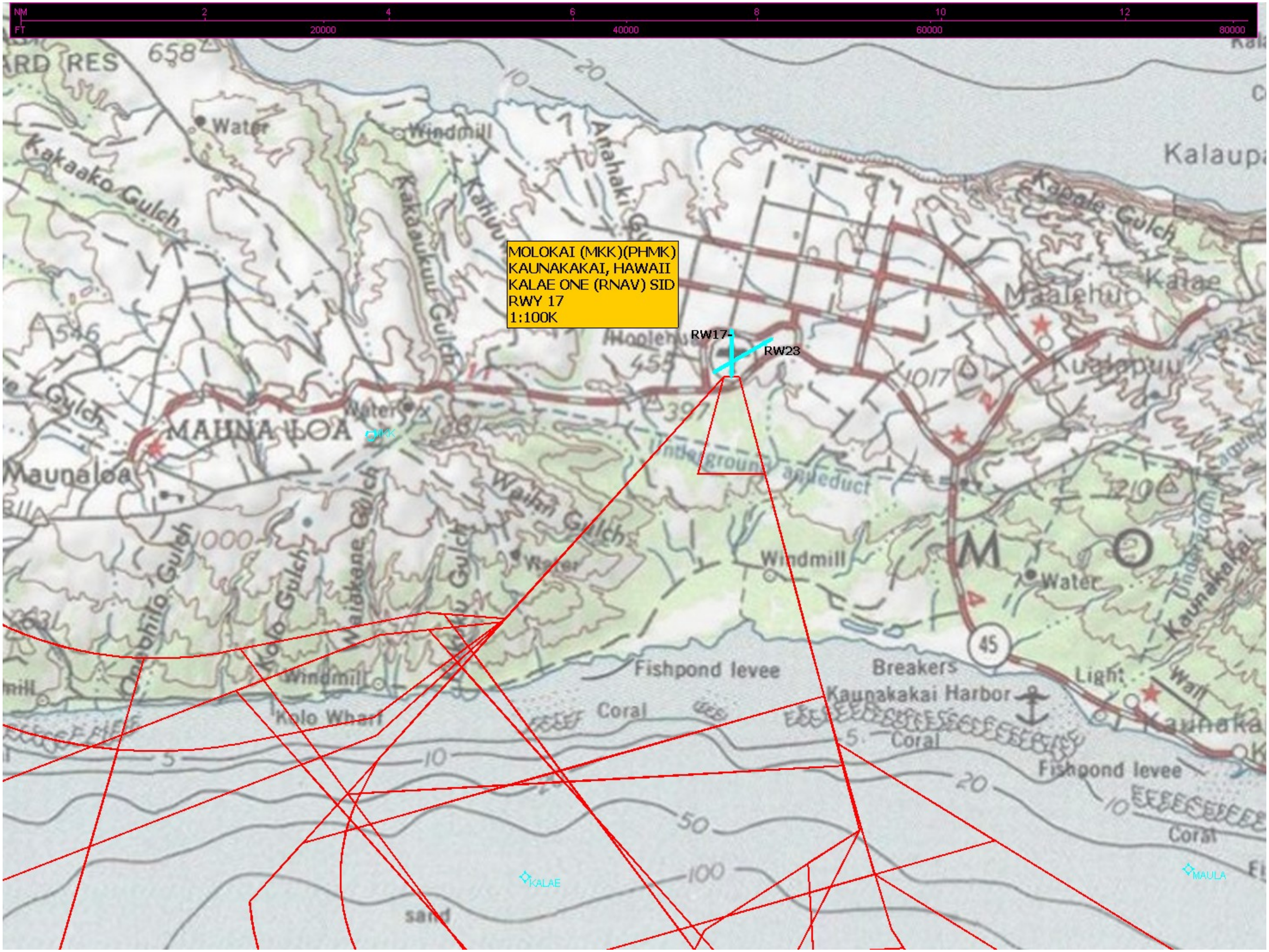
ALANA TRANSITION (KALAE1.ALANA)
EELIO TRANSITION (KALAE1.EELIO)
LANAI TRANSITION (KALAE1.LNY)
LOKIE TRANSITION (KALAE1.LOKIE)

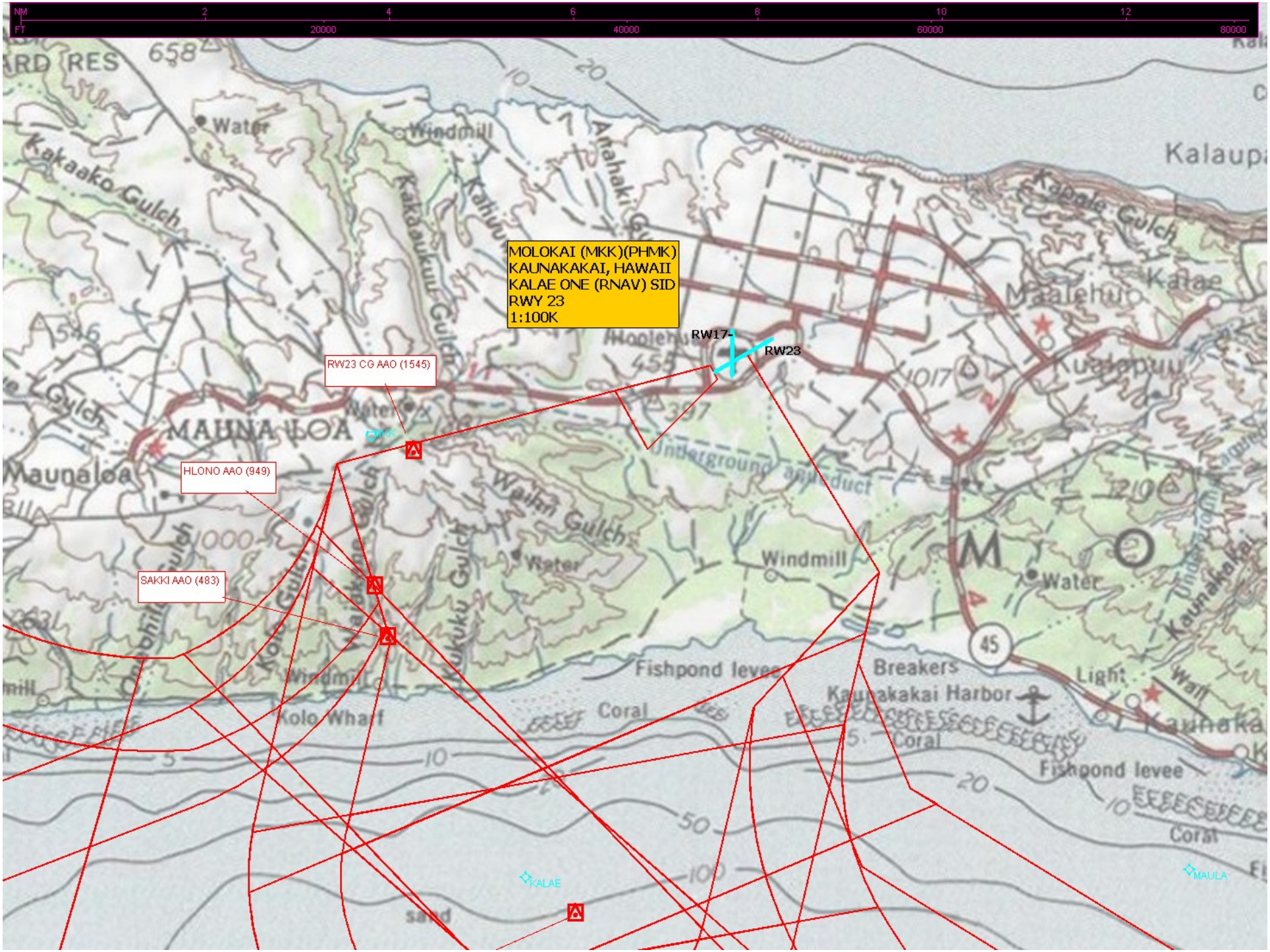

MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
KALAE ONE (RNAV) SID
ALANA TRANSITION
1:500K
SAKKI AAO (483)
RW23 CG AAO (1545)
RW17
RW23
ALANA SHIP (208)
WARNING
W-196
30 NM
MODE C
70 --- Ceiling in hundreds of feet MSL
30 --- Floor in hundreds of feet MSL
See NOTAMs/Supplement for Class D eff hrs
WARNING: High volume Tour Aircraft operating over Molokai. Monitor 122.9 for traffic information.
See NOTAMs/Supplement for Class E (sfc) eff hrs 700' AGL Class E eff other times
WARNING: High volume Tour Aircraft operating over Lanai: Monitor 122.9 for traffic information.
HONOLULU
KOKO HEAD
WAIMANALO RCO
MOLOKAI
LANAI
KALAUPAPA (LUP) (PHLU)
KALAUPAPA NATIONAL HISTORICAL PARK
MOMOMI BEACH
ILIO POINT
KAUNAKAKAI
HALEOLONO HARBOR
LAAU POINT
KAMAKOU
KAKAHAIA NATIONAL WILDLIFE REFUGE
LANAI (LNY) (PHNY)
KEOMUKU
KAUMALAPAU
LANAI CITY
PALAOA POINT
CHANNEL
KALOHI
ALANA
LOKIE
CLORI
MABBL
NORBY
PALAY
HAINA
JULLE
SAKKI
ROSHE
SERAH
GRAMY
JORDA
AARES
HLAWA


MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
KALAE ONE (RNAV) SID
EELIO TRANSITION
1:500K
RW23 CG AAO (1545)
RW17
RW23
HLAWA AAO (1237)
EELIO AAO (2828)
NM
FT
100000
200000
300000
400000
MOLOKAI (MKK) (PHMK)
CT - 125.7 ATIS 128.2
KALAUPAPA (LUP) (PHLU)
MOLOKAI
LANAI
LANAI (LNY) (PHNY)
CTC HCF APP WITHIN
20 NM ON 119.5
See NOTAMs/Supplement
for Class D eff hrs
WARNING: High volume Tour Aircraft
operating over Lanai: Monitor 122.9
for traffic information.
LAHAINA AWOS-3PT
118.525 JHM
LANAI
117.7 Ch 124 LNY
HONOLULU
EELIO
HLAWA
ARES
LOKIE
SAKKI


MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
KALAE ONE (RNAV) SID
LANAI TRANSITION
1:500K
RW23 CG AAO (1545)
AARES SHIP (208)
LNY AAO (1972)
MOLOKAI
LANAI
KALAUPAPA (LUP) (PHLU)
MOLOKAI (MKK) (PHMK)
CT - 125.7 ATIS 128.2
LANAI (LNY) (PHNY)
HONOLULU
LAHAINA AWOS-3PT
118.525 JHM
See NOTAMs/Supplement for Class D eff hrs
See NOTAMs/Supplement for Class E (sfc) eff hrs
See NOTAMs/Supplement for Class E (sfc) eff hrs 700' AGL Class E eff other times
WARNING: High volume Tour Aircraft operating over Molokai. Monitor 121.95 for traffic information.
WARNING: High volume Tour Aircraft operating over Lanai: Monitor 122.9 for traffic information.
CTC HCF APP WITHIN 20 NM ON 119.5 225.4
KALAUPAPA NATIONAL HISTORICAL PARK
KAKAHAIA NATIONAL WILDLIFE REFUGE
KEALAIKAHIKI CHANNEL
AUAU CHANNEL
KALOHI CHANNEL
53
21
20
61


MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
KALAE ONE (RNAV) SID
LOKIE TRANSITION
1:500K
NM 9 18 27 36 45 54 63
FT 100000 200000 300000 400000
70 --- Ceiling in hundreds of feet MSL
30 --- Floor in hundreds of feet MSL
LOKIE AAO (558)
RW23 CG AAO (1545)
HLONO AAO (949)
RW17
RW23
WARNING: High volume Tour Aircraft operating over Molokai. Monitor 121.95 for traffic information.
See NOTAMs/Supplement for Class D eff hrs
MOLOKAI (MKK) (PHMK)
KALAUPAPA (LUP) (PHLU)
MOLOKAI
LANAI
WARNING: High volume Tour Aircraft operating over Lanai. Monitor 122.9 for traffic information.
See NOTAMs/Supplement for Class E (sfc) eff hrs 700' AGL Class E eff other times
LANAI (LNY) (PHNY)
LAHAINA AWOS-3PT 118.525 JHM
CTC HCF APP WITH 20 NM ON 119.5
30 NM MODE C
WAIMANALO RCO
HONOLULU
KOKO HEAD 113.9 Ch 86 CKH
MOLOKAI 116.1 Ch 108 MKK
LANAI 117.7 Ch 124 LNY
LOKIE
SAKKI
AARES
HLAWA
EELIO


NM 2 4 6 8 10 12
FT 20000 40000 60000 80000
MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
KALAE ONE (RNAV) SID
RWY 17
1:100K
RW17
RW23
MKK
KALAE
MAULA
MAUNA LOA
Maunaloa
Kakaako Gulch
Kahuu
Anahaki Gulch
Kakaukuu Gulch
Hoolehua
Maalehu
Kalae
Kualapuu
Kalaupa
Kapale Gulch
Underground aqueduct
Waihii Gulch
Windmill
Water
Kolo Wharf
Fishpond levee
Breakers
Kaunakakai Harbor
Coral
Light
Kaunakakai
sand
45


MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
KALAE ONE (RNAV) SID
RWY 23
1:100K
RW17
RW23
RW23 CG AAO (1545)
HLONO AAO (949)
SAKKI AAO (483)
MAUNALOA
Maunaloa
Kakaako Gulch
Kakaaukuu Gulch
Kahuu Gulch
Anahaki Gulch
Kapaale Gulch
Kalaupa
Kalae
Maalehuo
Kuaiopuu
Waikan Gulch
Kolo Gulch
Underground aqueduct
Windmill
Water
Kolo Wharf
Fishpond levee
Coral
Breakers
Kaunakakai Harbor
Light
Wall
Kaunakaka
KALAE
MAULA
sand
45


FOR FLIGHTS AT OR BELOW 9000' MSL SEE HONOLULU VFR TERMINAL AREA INSET
EXAMPLES OF CLASS B ALTITUDES
70 --- Ceiling in hundreds of feet MSL
30 --- Floor in hundreds of feet MSL
MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
MOLOKAI VORTAC (MKK)
HOLDING PAT 3
1:500K
WARNING: High volume Tour Aircraft operating over Molokai. Monitor 121.95 for traffic information.
See NOTAMs/Supplement for Class D eff hrs
MOLOKAI VORTAC R-056 (PAT 3) AAO (1795)
KALAUPAPA (LUP) (PHLU)
KALAUPAPA NATIONAL HISTORICAL PARK
MOLOKAI
MOLOKAI (MKK) (PHMK)
ILIO POINT
MOOMOMI BEACH
ANTENNAE FARM
Kualapuu
Kaunakakai
HALEOLONO HARBOR
122.1R
MOLOKAI
116.1 Ch 108 MKK
HONOLULU
KAMAKOU
KAKAHAIA NATIONAL WILDLIFE REFUGE
Kamiloloa
Pukoo
Kamalo
LAAU POINT
LANAI
Lanai City
Keomuku
Kaumalapau
Palaoa Point
Kaena Point
Kikoa Point
Kamaiki Point
LANAI (LNY) (PHNY)
AWOS-3P 118.375
See NOTAMs/Supplement for Class E (sfc) eff hrs
700' AGL Class E eff other times
LANAI
353 LLD
122.5R
LANAI
117.7 Ch 124 LNY
HONOLULU
WARNING: High volume Tour Aircraft operating over Lanai. Monitor 122.9 for traffic information.
CHANNEL
KALOHI
BAMBO
CLORI
MABBL
LOKIE
NORBY
PALAY
JULLE
SAKKI
ROSHE
SERAH
GRAMY
JORDA
LAHAINA AWOS-3PT
118.525 JHM


MOLOKAI (MKK)(PHMK)
KAUNAKAKAI, HAWAII
MOLOKAI VORTAC (MKK)
HOLDING PAT 4
1:500K
FOR FLIGHTS AT OR BELOW 9000' MSL SEE HONOLULU VFR TERMINAL AREA INSET
EXAMPLES OF CLASS B ALTITUDES
70 --- Ceiling in hundreds of feet MSL
30 --- Floor in hundreds of feet MSL
WARNING: High volume Tour Aircraft operating over Molokai. Monitor 121.95 for traffic information.
See NOTAMs/Supplement for Class D eff hrs
MOLOKAI (MKK) (PHMK)
ILIO POINT
MOOMOMI BEACH
ANTENNAE FARM
HALEOLONO HARBOR
MOLOKAI
122.1R
116.1 Ch 108 MKK
HONOLULU
KALAUPAPA (LUP) (PHLU)
KALAUPAPA NATIONAL HISTORICAL PARK
MOLOKAI
Kalaupapa
Wailau
Kamiloloa
KAMAKOU
KAKAHAIA NATIONAL WILDLIFE REFUGE
Pukoo
Kamalo
MOLOKAI VORTAC R-254 (PAT 4) AAO (1615)
LANAI
Kaena Point
Keomuku
Lanai City
Kaumalapau
PUU LANAIHALE
LANAI (LNY) (PHNY)
AWOS-3P 118.375
Palaoa Point
Kamaiki Point
resort
122.5R
LANAI
117.7 Ch 124 LNY
HONOLULU
See NOTAMs/Supplement for Class E (sfc) eff hrs 700' AGL Class E eff other times
LANAI
353 LLD
WARNING: High volume Tour Aircraft operating over Lanai: Monitor 122.9 for traffic information.
LAHAINA AWOS-3PT 118.525 JHM
BAMBO
CLORI
MABBL
NORBY
PALAY
LOKIE
LAAU POINT
JULLE
SAKKI
ROSHE
SERAH
GRAMY
JORDA
KALOHI CHANNEL
157°
21°
CHANNEL