

MOLOKAI TOWER *
125.7306 .2

HCF CENTER
124.1317 .5

Chan 86


## TAKEOFF MINIMUMS

Rwy 17, 23, 35: NA-ATC.
Rwy 5: 300-1 with minimum climb of $325^{\prime}$ per NM to 1500 or standard with minimum climb of $540^{\prime}$ per NM to 800.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climbing left turn to 5000 on heading $360^{\circ}$ and CKH VORTAC R-075 to BLUSH INT/CKH 58 DME.

## TAKEOFF MINIMUMS

Rwys 17, 23, 35: NA-ATC.
Rwy 5: 300-1 with minimum climb of $325^{\prime}$ per NM to 1500 or standard with minimum climb of $540^{\prime}$ per NM to 800.

NOTE: DME required. NOTE: Chart not to scale


## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climbing leff turn heading $340^{\circ}$ and MKK VORTAC R-030 to HAPAI/MKK 10 DME, thence. . . .
. . . . on assigned transition.
BAMBO TRANSITION (HAPAI3.BAMBO): From over HAPAI/MKK 10 DME on MKK VORTAC 10 DME Arc CCW to DAKKL/MKK 10 DME, then on MKK R-300 to BAMBO/MKK 25 DME. LOKIE TRANSITION (HAPAI3.LOKIE): From over HAPAI/MKK 10 DME on MKK VORTAC 10 DME Arc CCW to LOKIE INT/MKK 10 DME.
MOLOKAI TRANSITION (HAPAI3.MKK): From over HAPAI/MKK 10 DME, left turn heading $180^{\circ}$ and MKK R-030 to MKK VORTAC.




## HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

| CITY/AIRPORT | HOT SPOT | DESCRIPTION* |
| :---: | :---: | :---: |
| HONOLULU, HI |  |  |
| DANIEL K INOUYE INTL (HNL) (PHNL) | HS 1 | Aircraft Idg Rwy 04R and exiting left onto Twy K, sometimes fail to hold short of Rwy 04L-22R and Rwy 08L-26R. When holding short, ATC is aware the aircraft tail is encroaching the Idg rwy. |
|  | HS 2 | Aircraft proceeding north or south on Twy E and instructed to turn onto Twy B sometimes miss the turn onto Twy B and enter Rwy 08L-26R or 04L-22R without clearance. |
|  | HS 3 | Twy V, Twy T, Twy A and Twy J in close proximity to Rwy 08L. |
|  | HS 4 | Minimal distance between rwy hold short lines between Rwy 04L-22R/Rwy 04R-22L. |
| KAHULUI, HI |  |  |
| KAHULUI (OGG) (PHOG) | HS 1 | Ruy 05, Twy A, Twy F, and Twy G. |
|  | HS 2 | Rwy 02-20, Twy E and the ramp. |
|  | HS 3 | Twy A, Rwy 05-23 |
| KAILUA/KONA, HI |  |  |
| ELLISON ONIZUKA KONA INTL | HS 1 | Extensive helicopter operations on Twy A abeam ramp K. |
| AT KEAHOLE (KOA) (PHKO) | HS 2 | Extensive helicopter operations on Twy A south of Twy C. |
| KAUNAKAKAI, HI |  |  |
| MOLOKAI (MKK)(PHMK) | HS 1 | Area not visible from control tower. |


| APP CRS <br> $\mathbf{0 0 1}$ | Rwy Idg | N/A <br> TDZE <br> ADt Elev |
| :---: | :--- | :---: |
|  | N/A |  |
| A54 |  |  |

## RNAV (GPS)-B MOLOKAI (MKK)(PHMK)

## RNP APCH.

V Circling to Rwy 17, 23 NA at night.
A Circling NA east of Rwy 35 and southeast of Rwy 23.

MISSED APPROACH: Climb to 1200 then climbing left turn 4000 direct GAKCU and hold, continue climb-in-hold to 4000.


| VORTAC MKK |
| :---: | :---: | :--- | :--- |
| $\mathbf{1 1 6 . 1}$ |
| Chan $\mathbf{1 0 8}$ |

## VOR or TACAN-A <br> MOLOKAI (MKK) (PHMK)

| $\boldsymbol{\nabla}$ | Circling Rwy 17, 23 NA at night. |
| :--- | :--- |
| $\boldsymbol{A}$ |  |

## A IFR ALTERNATE AIRPORT MINIMUMS

Pilots must review the IFR Alternate Minimums Notes to determine alternate airport suitability.
ANA designation on the approach chart means that pilots may not use that approach as an alternate due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Approaches with the ANA designation are not listed in this section. A designation on the approach chart indicates that the approach procedure has non-standard minimums (for aircraft other than helicopters) or restrictions (for all users) for its use as an alternate.

Alternate Minima (ref: 14 CFR 91.169)

|  | Precision Approach | Non-Precision Approach |
| :---: | :---: | :---: |
| Standard | $\mathbf{6 0 0 - 2}$ | $\mathbf{8 0 0 - 2}$ |
| ANon-Standard or restrictions | As indicated below | As indicated below |
| Helicopters | For the selected approach: <br> Ceiling: 200' above published ceiling <br> Visibility: the greater of 1 SM visibility or the published visibility |  |
| US Military <br> (USA/USN/USAF) | See Service Regulations |  |

Note: For alternate airport flight planning purposes, precision approach operations include: ILS, PAR, and
GLS, and Non-Precision approach operations include: NDB, VOR, LOC, TACAN, LDA, SDF, ASR, RNAV (GPS) and RNAV (RNP).

NAME
ALTERNATE MINIMUMS

## BABELTHUAP ISLAND, PW

PALAU INTL (ROR) (PTOR)..............NDB Rwy $9{ }^{1}$ RNAV (GPS) Rwy 9 RNAV (GPS) Rwy 27
NA except standard for operators with approved weather reporting service.
${ }^{1}$ Categories A, B, 900-2; Category C, 900-21/2; Category D, 900-23/4.

## GUAM, GU

GUAM
INTL (GUM) (PGUM).............ILS or LOC Rwy 6L ${ }^{1}$ ILS or LOC Rwy 6R ${ }^{1}$ RNAV (GPS) Y Rwy 24L ${ }^{2}$ RNAV (GPS) Y Rwy 24R ${ }^{3}$ RNAV (RNP) Z Rwy 24L ${ }^{4}$
RNAV (RNP) Z Rwy 24R ${ }^{5}$
VOR or TACAN Rwy $\mathbf{2 4 R}^{\mathbf{6}}$
${ }^{1}$ LOC, Categories A, B, 1200-2;
Categories C, D, 1200-3.
${ }^{2}$ Categories A, B, 900-2; Category C, 900-23/4.
${ }^{3}$ Categories A, B, 900-2; Category C, 900-21/2.
${ }^{4}$ Categories A, B, C, D, 900-3.
${ }^{5}$ Categories A, B, C, D, 800-2 $1 / 2$.
${ }^{6}$ Categories A, B, 900-2; Categories C, D 900-2½.
HANA, HI
HANA (HNM) (PHHN)
RNAV (GPS) Rwy 26
Category A, 900-2; Category B, 1100-2.

## NAME

ALTERNATE MINIMUMS
HILO, HI
HILO INTL (ITO) (PHTO)........ILS or LOC Rwy $\mathbf{2 6}^{\mathbf{1 2}}$ RNAV (GPS) Rwy $21^{3}$ RNAV (GPS) Rwy $26^{3}$ VOR-B ${ }^{3}$
VOR/DME or TACAN Rwy $26^{3}$
VOR/DME or TACAN-A ${ }^{3}$
${ }^{1} \mathrm{NA}$ when control tower closed.
${ }^{2}$ LOC, Category C, 900-21/4; Category D, 1300-3.
${ }^{3}$ Category C, 900-21/4; Category D, 1300-3.

## HONOLULU, HI

DANIEL K INOUYE
INTL (HNL) (PHNL) ........................LOC Rwy 4R ${ }^{1}$ LOC Rwy 8L ${ }^{1}$
RNAV (GPS) Rwy 4L ${ }^{2}$
RNAV (GPS) Rwy 8R ${ }^{3}$
RNAV (GPS) Y Rwy 4R ${ }^{4}$
RNAV (GPS) Y Rwy 8L ${ }^{5}$
VOR or TACAN Rwy 4R
VOR or TACAN-A ${ }^{1}$
VOR or TACAN-B ${ }^{1}$
${ }^{1}$ Category C, 800-21/4; Category D, 1400-3.
${ }^{2}$ Category C, 900-21/4; Category D, 1400-3; Category E, 2000-3.
${ }^{3}$ Category C, $900-21 / 4$; Category D, 1400-3; Category E, 2100-3.
${ }^{4}$ Category D, 1300-3.
${ }^{5}$ Category C, 900-21/4; Category D, 1300-3.
${ }^{6}$ Category C, 900-21/4; Category D, 1400-3.

NAME
ALTERNATE MINIMUMS
KAHULUI，HI
KAHULUI（OGG）
（PHOG）
ILS Y or LOC Y Rwy $\mathbf{2}^{12}$
ILS Z or LOC Z Rwy $2^{12}$ RNAV（GPS）Rwy $20^{3}$ RNAV（GPS）Rwy $23^{4}$
RNAV（GPS）Y Rwy $2^{35}$
VOR Z or TACAN Rwy $\mathbf{2 0}^{\mathbf{3}}$
${ }^{1}$ NA when control tower closed．
${ }^{2}$ LOC，Category D，1100－3；Category E，1700－3．
${ }^{3}$ Category D，1100－3．
${ }^{4}$ Category D，1200－3．
${ }^{5} \mathrm{NA}$ when local weather not available．

## KAILUA／KONA，HI

ELLISON ONIZUKA KONA INTL AT KEAHOLE（KOA）（PHKO）．．．．．．．ILS or LOC Rwy $17^{1}$

LOC BC Rwy $35^{2}$
RNAV（GPS）Rwy $35^{2}$ RNAV（GPS）Y Rwy $17^{2}$ VOR or TACAN Rwy $17^{2}$ VOR or TACAN Rwy $\mathbf{3 5}^{\mathbf{2}}$
${ }^{1}$ NA when control tower closed．
${ }^{2} \mathrm{NA}$ when local weather not available．

KAPOLEI，OAHU ISLAND，HI<br>KALAELOA（JOHN RODGERS<br>FLD）（JRF）（PHJR）．．．．．．．．．．．．．．．．．．．．．．．．．NDB Rwy 4R1<br>RNAV（GPS）Rwy 4R ${ }^{2}$<br>${ }^{1}$ Category C， $800-2 \frac{1}{4}$ ；Category D， $800-2^{1} / 2$.<br>${ }^{2} \mathrm{NA}$ when local weather not available．<br>KAUNAKAKAI，HI<br>MOLOKAI（MKK）（PHMK）．．．．．．．．．．．．RNAV（GPS）－B ${ }^{12}$<br>VOR or TACAN－A ${ }^{3}$<br>${ }^{1}$ NA when local weather not available．<br>${ }^{2}$ Category C，1200－3；Category D，1500－3．<br>${ }^{3}$ Categories A，B，1500－2；Categories C，D，1500－3．

KOSRAE，FM
KOSRAE（TTK）（PTSA）．．．．．．．．．．RNAV（GPS）Rwy $5^{1}$
RNAV（GPS）Rwy $\mathbf{2 3}^{2}$
${ }^{1}$ NA except standard for operators with approved weather reporting service．
${ }^{2}$ NA except categories $A, B$ ，standard，Category C， 800－2 $1 / 4$ ，Category D 800－2 $1 / 2$ ，for operators with approved weather reporting service．

LANAI CITY，HI
LANAI（LNY）（PHNY）． RNAV（GPS）Rwy $3^{12}$ VOR or TACAN or GPS－A ${ }^{3}$
${ }^{1} \mathrm{NA}$ when local weather not available．
${ }^{2}$ Category C，900－21／2．
${ }^{3} \mathrm{NA}$ when local weather not received except for operators with approved weather reporting service．

NAME
ALTERNATE MINIMUMS
LIHUE，HI
LIHUE（LIH）（PHLI）．．．．．．．．．．．．．．．．ILS or LOC Rwy 35 ${ }^{1}$ RNAV（GPS）Rwy $17^{23}$ RNAV（GPS）Y Rwy $21^{23}$ RNAV（GPS）Y Rwy $35^{4}$ RNAV（RNP）Z Rwy $21^{5}$ VOR or TACAN Rwy $21^{2}$
${ }^{1} \mathrm{NA}$ when control tower closed．
${ }^{2} \mathrm{NA}$ when local weather not available．
${ }^{3}$ Categories C，D，800－2 $1 / 2$ ．
${ }^{4}$ Category C，800－21／4；Category D，800－21／2．
${ }^{5}$ RNP 0．30，Categories A，B，C，D，1000－4．
${ }^{6}$ Category B， $900-2$ ；Category C，1000－23／4； Category D，1000－3．

## MIDWAY ATOLL，QM

HENDERSON
FLD（MDY）（PMDY）．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．NDB Rwy 6 NDB Rwy 24 RNAV（GPS）Rwy 6 RNAV（GPS）Rwy 24
NA except standard for operators with approved weather reporting service．

## PAGO PAGO，AS

PAGO PAGO
INTL（PPG）（NSTU）．．．．．．．．．．．．．．．ILS or LOC Rwy $5^{1}$ RNAV（GPS）Rwy $5^{2}$ RNAV（GPS）Rwy $\mathbf{2 3}^{2}$ VOR or TACAN－B ${ }^{2}$
${ }^{1}$ ILS，Categories A，B，C，D，900－2； LOC，Category C，800－2½；Category D，900－23／4．
${ }^{2}$ Category C， $800-2^{11 / 4}$ ；Category D， $900-2 \frac{3}{4}$ ．

## POHNPEI ISLAND，FM

POHNPEI INTL（PNI）（PTPN） $\qquad$ NDB－A ${ }^{1}$ RNAV（GPS）Rwy $27^{2}$ RNAV（GPS）X Rwy $9^{1}$ RNAV（RNP）Y Rwy $9^{3}$
${ }^{1}$ Categories A，B，1000－2；Categories C，D，1000－3．
${ }^{2}$ Category D，800－21／4．
${ }^{3}$ Categories A，B，C，D，1000－4．

## ROTA ISLAND，CQ

BENJAMIN TAISACAN MANGLONA
INTL（GRO）（PGRO）．．．．．．．．．．．．．．RNAV（GPS）Rwy 9
RNAV（GPS）Rwy 27 NDB Rwy $9^{1}$ NDB Rwy 27
NA except standard for operators with approved weather reporting service．
${ }^{1}$ Categories A，B，1200－2；Categories C，D， 1200－3．

## SAIPAN ISLAND，CQ

FRANCISCO C ADA／
SAIPAN INTL（GSN）（PGSN） NDB Y Rwy 7
Category D，800－21／4．

TINIAN ISLAND，CQ
FRANCISCO MANGLONA BORJA
TINIAN INTL（TNI）（PGWT）．．．．．．RNAV（GPS）Rwy 8
RNAV（GPS）Rwy 26
NA when local weather not available．
Category D，800－2½．

## WENO ISLAND，FM

CHUUK INTL（TKK）（PTKK）． NDB Rwy $4^{1}$ NDB Rwy $\mathbf{2 2}^{23}$ RNAV（GPS）Rwy $4^{24}$ RNAV（GPS）Rwy $\mathbf{2 2}^{25}$
${ }^{1}$ NA except for operators with approved weather reporting service．Categories A，B，C，D，800－2½．
${ }^{2}$ NA except standard for operators with approved weather reporting service．
${ }^{3}$ Categories C，D，800－21／2．
${ }^{4}$ Categories A，B，C，D，800－3．
${ }^{5}$ Categories A，B， $900-2$ ；Category C， $900-21 / 2$ ； Category D，900－23／4．

## YAP ISLAND，FM

YAP INTL（T11）（PTYA）
NDB Rwy $7^{1}$
NDB Rwy $\mathbf{2 5}^{2}$
NDB／DME Rwy $\mathbf{2 5}^{\mathbf{2}}$
${ }^{1}$ Category D，800－21／4；
${ }^{2}$ Categories A，B，1000－2；Categories C，D，1000－3．

# VIFR TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES 

Civil Airports and Selected Military Airports


#### Abstract

ALL USERS：Airports that have Departure Procedures（DPs）designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude，and／or airports that have civil IFR takeoff minimums other than standard， are listed below．Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified．An entry may also be listed that contains only Takeoff Obstacle Notes．Altitudes，unless otherwise indicated，are minimum altitudes in MSL．

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures（ODPs）and are textually described below，or published separately as a graphic procedure．If the ODP is published as a graphic procedure，its name will be listed below，and it can be found in either this volume（civil），or the applicable military volume，as appropriate．Users will recognize graphic obstacle DPs by the term＂（OBSTACLE）＂included in the procedure title；e．g．，TETON TWO （OBSTACLE）．If not specifically assigned an ODP，SID，or RADAR vector as part of an IFR clearance，an ODP may be required to be flown for obstacle clearance，even though not specifically stated in the IFR clearance．When doing so in this manner，ATC should be informed when the ODP being used contains a specified route to be flown，restrictions before turning，and／or altitude restrictions．

Some ODPs，which are established solely for obstacle avoidance，require a climb in visual conditions to cross the airport，a fix，or a NAVAID in a specified direction，at or above a specified altitude．These procedures are called Visual Climb Over Airport（VCOA）．To ensure safe and efficient operations，the pilot must verbally request approval from ATC to fly the VCOA when requesting their IFR clearance．

At some locations where an ODP has been established，a diverse vector area（DVA）may be created to allow RADAR vectors to be used in lieu of an ODP．DVA information will state that headings will be as assigned by ATC and climb gradients，when applicable，will be published immediately following the specified departure procedure．

Graphic DPs designed by ATC to standardize traffic flows，ensure aircraft separation and enhance capacity are referred to as ＂Standard Instrument Departures（SIDs）＂．SIDs also provide obstacle clearance and are published under the appropriate airport section．ATC clearance must be received prior to flying a SID．

CIVIL USERS NOTE：Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows：（1）For aircraft，other than helicopters，having two engines or less－one statute mile visibility．（2）For aircraft having more than two engines－one－half statute mile visibility．（3）For helicopters－one－half statute mile visibility．These standard minima apply in the absence of any different minima listed below．


MILITARY USERS NOTE：Civil（nonstandard）takeoff minima are published below．For military takeoff minima，refer to appropriate service directives．

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ANDERSEN AFB（UAM）（PGUA）
YIGO，GU
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES （23110）（USAF）
TAKEOFF OBSTACLE NOTES：
Rwy 6L，terrain at DER，222＇right of centerline，618＇MSL．
Terrain 3＇from DER，501＇left of centerline，620＇MSL．
Terrain 41＇from DER， 500 ＇left of centerline，619＇MSL．
Terrain 46＇from DER，512＇left of centerline，619＇MSL．
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BABELTHUAP ISLAND，PW
PALAU INTL（ROR）（PTRO）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 2 31DEC09（23222）（FAA）
TAKEOFF MINIMUMS：
Rwy 27，300－11／s or std w／min climb of $320^{\prime}$ per NM to 500 ．
DEPARTURE PROCEDURE：
Rwy 27，climb on heading 271 to 600 before turning right．
TAKEOFF OBSTACLE NOTES：
Rwy 9，trees beginning 19＇from DER，317＇right of centerline，up to 26＇AGL／188＇MSL．
Tree 89＇from DER，271＇left of centerline，178＇MSL．
Vegetation，trees beginning 107＇from DER，131＇left of centerline，up to 187＇MSL．
Tree 390＇from DER，320＇right of centerline，34＇AGL／191＇MSL．
Rwy 27，trees beginning 23＇from DER，296＇right of centerline，up to 17＇AGL／180＇MSL．
Tree 238＇from DER，382＇right of centerline，184＇MSL．
Trees beginning 439＇from DER， $372^{\prime}$ right of centerline，up to 46＇AGL／206＇MSL．
Tree 824＇from DER，465＇left of centerline，47＇AGL／205＇MSL．
Tree 1757＇from DER，258＇right of centerline，232＇MSL．
Trees beginning 4512＇from DER，486＇right of centerline，up to 356＇MSL．
Tree 5708＇from DER，652＇right of centerline，43＇AGL／371＇MSL．
Tree 5736＇from DER，670＇right of centerline，363＇MSL

TAKEOFF MINIMUMS，（OBSTACLE）DEPARTURE PROCEDURES，AND DIVERSE VECTOR AREA（RADAR VECTORS）

BUCHOLZ AAF (KWA) (PKWA)
KWAJALEIN USAKA, MI
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 02DEC21 (21336) (USA)
TAKEOFF OBSTACLE NOTES:
Rwy 6, RADAR antenna $10^{\prime}$ from DER, $244^{\prime}$ left of centerline, $13^{\prime}$ AGL/28' MSL. Terrain 201' from DER, 546 ' left of centerline, $30^{\prime}$ MSL.

GUAM, GU
GUAM INTL (GUM) (PGUM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 25JAN24 (24025) (FAA)
TAKEOFF MINIMUMS:
Rwy 6L, 400-13/4 or std w/min climb of $450 / \mathrm{NM}$ to 800.
Rwy 6 R, $400-1 / 8$ or std w/min climb of $522^{\prime} / \mathrm{NM}$ to 900 .
Rwy 24L, std w/min climb of $280^{\prime} / \mathrm{NM}$ to 1700 .
Rwy 24R, std w/min climb of 286 /NM to 1700.
DEPARTURE PROCEDURE:
Rwys 6L/R, climb on heading $063^{\circ}$ to 1000 before turning southeast.
TAKEOFF OBSTACLE NOTES:
Rwy 6L, terrain 11' from DER, 300' left of centerline, 306' MSL.
Vegetation, terrain beginning 159 ' from DER, $316^{\prime}$ left of centerline, up to $312^{\prime}$ MSL.
Terrain beginning $196^{\prime}$ from DER, $316^{\prime}$ right of centerline, up to $315^{\prime}$ MSL.
Terrain 321 ' from DER, $452^{\prime}$ left of centerline, $315^{\prime}$ MSL.
Terrain 328' from DER, $563^{\prime}$ right of centerline, $322^{\prime}$ MSL.
Terrain 378 ' from DER, 333 ' left of centerline, 317' MSL.
Terrain beginning 426' from DER, $374^{\prime}$ right of centerline, up to $326^{\prime}$ MSL.
Trees, terrain beginning $432^{\prime}$ from DER, $336^{\prime}$ left of centerline, up to $352^{\prime}$ MSL.
Terrain beginning 528' from DER, $443^{\prime}$ right of centerline, up to $332^{\prime}$ MSL.
Trees beginning 599' from DER, $387^{\prime}$ left of centerline, up to 361 ' MSL.
Terrain beginning 611' from DER, 430 ' right of centerline, up to 337 ' MSL.
Terrain 700' from DER, 586' right of centerline, $341^{\prime}$ MSL.
Trees, terrain beginning $711^{\prime}$ from DER, $348^{\prime}$ left of centerline, up to $371^{\prime}$ MSL.
Terrain 768' from DER, 644' right of centerline, 344 ' MSL.
Terrain beginning 774' from DER, 465 ' right of centerline, up to 345 ' MSL.
Trees, terrain beginning $802^{\prime}$ from DER, 358 ' left of centerline, up to 376 ' MSL.
Terrain 853 ' from DER, $688^{\prime}$ right of centerline, 348 ' MSL.
Fences, terrain beginning $885^{\prime}$ from DER, 447 ' right of centerline, up to 9 ' AGL/358' MSL.
Tree, terrain, fences, pole, sign beginning 993' from DER, 409' right of centerline, up to 371' MSL.
Trees, pole, terrain beginning $1050^{\prime}$ from DER, $375^{\prime}$ left of centerline, up to $380^{\prime}$ MSL.
Trees, traverse ways, sign, poles, terrain, fences beginning 1194' from DER, 359' right of centerline, up to $385^{\prime}$ MSL.
Trees, terrain beginning $1215^{\prime}$ from DER, $341^{\prime}$ left of centerline, up to $392^{\prime}$ MSL.
Trees, terrain, poles, fences, traverse ways beginning $1328^{\prime}$ from DER, $339^{\prime}$ right of centerline, up to 390' MSL.
Trees, terrain beginning 1482 ' from DER, $318^{\prime}$ left of centerline, up to 407 ' MSL.
Trees, terrain, fences, poles, traverse ways beginning $1524^{\prime}$ from DER, $329^{\prime}$ right of centerline, up to $395^{\prime}$ MSL.
CON'T

GUAM, GU (CON'T)
GUAM INTL (GUM) (PGUM) (CON'T)
Rwy 6L (CON'T), trees, terrain, vegetation beginning 1649' from DER, 79' left of centerline, up to 411' MSL.
Trees, terrain, fences, buildings, poles, traverse way beginning 1701' from DER, 71 ' right of centerline, up to 399' MSL.
Tree 1861 ' from DER, 618 ' left of centerline, $415^{\prime}$ MSL.
Trees, terrain beginning 1861 ' from DER, $3^{\prime}$ left of centerline, up to $417^{\prime}$ MSL.
Tree, fences beginning 1914' from DER, $733^{\prime}$ right of centerline, up to 404' MSL.
Trees, terrain, building, fences beginning 1933' from DER, 110' right of centerline, up to 406' MSL
Trees, terrain, traverse way, building, fences, pole beginning 1986' from DER, $68^{\prime}$ right of centerline, up to $413^{\prime}$ MSL.
Trees, buildings, terrain, fences, poles, traverse way beginning 2056' from DER, $78^{\prime}$ ' right of centerline, up to 423' MSL.
Trees, building, fence, pole beginning 2271' from DER, 463' right of centerline, up to 427' MSL
Trees, terrain, fences, buildings, traverse ways, poles, vertical structure beginning 2301' from DER, 301' right of centerline, up to 435 ' MSL.
Trees, terrain beginning 2418' from DER, 294' left of centerline, up to 419' MSL.
Trees, terrain beginning 2611' from DER, 297' left of centerline, up to 423' MSL.
Trees, terrain beginning 2761' from DER, $302^{\prime}$ left of centerline, up to 426' MSL.
Trees beginning 2908' from DER, 504' left of centerline, up to 427' MSL.
Trees, building beginning 2918' from DER, 497' right of centerline, up to 437' MSL
Trees, terrain, vegetation, transmission lines, poles beginning $2924^{\prime}$ from DER, $15^{\prime}$ left of centerline, up to 434' MSL.
Transmission lines, trees, fences, terrain, buildings, poles, traverse ways, signs, tanks, walls, vegetation beginning 2933
from DER, 2' right of centerline, up to 67' AGL/469' MSL.
Poles, trees, transmission line beginning $3770^{\prime}$ from DER, $7^{\prime}$ ' left of centerline, up to $86^{\prime}$ AGL/436' MSL.
Trees, buildings, vegetation, traverse way, pole, rig, terrain beginning $4058^{\prime}$ from DER, 45 ' right of centerline, up to 473 '
MSL.
Trees, poles, fences, buildings beginning 4683 ' from DER, $578^{\prime}$ right of centerline, up to 474 ' MSL.
Trees, poles beginning $5048^{\prime}$ from DER, $254^{\prime}$ right of centerline, up to $480^{\prime}$ MSL.
Pole, trees, building beginning 5205' from DER, $266^{\prime}$ ' right of centerline, up to $34^{\prime}$ AGL/516' MSL.
Trees, pole beginning $5486^{\prime}$ from DER, $378^{\prime}$ right of centerline, up to $536^{\prime}$ MSL
Trees, buildings beginning $5635^{\prime}$ from DER, $492^{\prime}$ right of centerline, up to $556^{\prime}$ MSL.
Trees, poles, buildings beginning 5767 ' from DER, $640^{\prime}$ ' right of centerline, up to 576' MSL.
Trees, poles beginning 1.1 NM from DER, 697' right of centerline, up to 622' MSL.
Rwy $6 R$, terrain beginning $0^{\prime}$ ' from DER, $110^{\prime}$ left of centerline, up to $302^{\prime}$ MSL.
Light poles 9 ' from DER, 159 ' left of centerline, 1' AGL/303' MSL.
Signs beginning $58^{\prime}$ from DER, $280^{\prime}$ left of centerline, up to 4' AGL/304' MSL.
Trees beginning $139^{\prime}$ from DER, $442^{\prime}$ right of centerline, up to $378^{\prime}$ MSL.
Trees, terrain beginning $163^{\prime}$ from DER, 408 ' right of centerline, up to $390^{\prime}$ MSL.
Trees, terrain beginning 616' from DER, $408^{\prime}$ right of centerline, up to $405^{\prime}$ MSL.
Trees, pole, terrain beginning $939^{\prime}$ from DER, $276^{\prime}$ right of centerline, up to 407' MSL.
Trees, terrain beginning $1110^{\prime}$ from DER, $449^{\prime}$ right of centerline, up to $414^{\prime}$ MSL.
Trees beginning 1231 ' from DER, 572 ' right of centerline, up to 417 ' MSL.
Trees, terrain beginning 1291 ' from DER, 406 ' right of centerline, up to $424^{\prime}$ MSL.
Trees, terrain, fences, buildings, poles, traverse ways, wall beginning $1648^{\prime}$ from DER, on and right of centerline, up to 432 ' MSL.
Terrain 1853 ' from DER, $10^{\prime}$ left of centerline, $348^{\prime}$ MSL.
Fences beginning 1884' from DER, 27' left of centerline, up to 9' AGL/358' MSL.
Pole, fences, sign beginning 2073' from DER, $20^{\prime}$ ' left of centerline, up to 14 ' AGL/362' MSL.
Trees, sign, pole, fences beginning 2194' from DER, $12^{\prime}$ left of centerline, up to $385^{\prime}$ MSL.
Trees, pole, fences beginning 2328' from DER, on and left of centerline, up to 390' MSL.
Trees, fences beginning $2524^{\prime}$ from DER, $24^{\prime}$ left of centerline, up to 395 ' MSL.
Tree 2903' from DER, $20^{\prime}$ left of centerline, 397' MSL.
Tree, fence beginning 2932' from DER, $12^{\prime}$ left of centerline, up to $406^{\prime}$ MSL.
Trees, fences beginning 3033' from DER, on and left of centerline, up to 409' MSL.
Buildings, trees, fences, poles beginning 3208' from DER, 6' right of centerline, up to 29' AGL/435' MSL.
Trees, fences, buildings beginning $3298^{\prime}$ from DER, $16^{\prime}$ ' right of centerline, up to $444^{\prime}$ MSL.
Transmission line, buildings, traverse way, trees, fences, poles, vertical structure beginning $3359^{\prime}$ from DER, 5 ' right of centerline, up to $76^{\prime}$ AGL/482' MSL.
Tree $3363^{\prime}$ from DER, $1081^{\prime}$ left of centerline, $414^{\prime}$ MSL.
Trees beginning 3430' from DER, $220^{\prime}$ left of centerline, up to $415^{\prime}$ MSL.
Trees beginning $3524^{\prime}$ from DER, $60^{\prime}$ ' left of centerline, up to $417^{\prime}$ MSL.
Transmission lines, trees, buildings, fences, traverse ways, poles, signs, terrain beginning $3571^{\prime}$ from DER, $20^{\prime}$ right of centerline, up to 81' AGL/486' MSL.
Tree $3590^{\prime}$ from DER, $1430^{\prime}$ left of centerline, 419' MSL.
Tree 3609' from DER, 338' left of centerline, 421' MSL.
Trees beginning $3616^{\prime}$ from DER, $57^{\prime}$ ' left of centerline, up to $425^{\prime}$ MSL.
Tree 3920' from DER, $1257^{\prime}$ left of centerline, 427' $^{\prime}$ MSL.
Trees beginning $3924^{\prime}$ from DER, $37^{\prime}$ left of centerline, up to $434^{\prime}$ MSL.
Trees, poles, buildings, tanks, transmission line, traverse ways beginning 4375' from DER, 56 ' right of centerline, up to $516^{\prime}$ MSL.
Trees, transmission lines, pole beginning 4427' from DER, $42^{\prime}$ left of centerline, up to 446 ' MSL.
Trees, buildings, pole, traverse way beginning 4681' from DER, 179' right of centerline, up to $522^{\prime}$ MSL.
Trees, buildings, poles beginning 4792' from DER, 29' right of centerline, up to $554^{\prime}$ MSL.
Trees, poles beginning 4814' from DER, $23^{\prime}$ left of centerline, up to $456^{\prime}$ MSL.
Trees, poles, traverse ways, buildings beginning 5014' from DER, 590' right of centerline, up to 568' MSL.
Trees, vegetation beginning 5058 ' from DER, $9^{\prime}$ left of centerline, up to $473^{\prime}$ MSL.
Trees, buildings, pole beginning $5218^{\prime}$ from DER, $16^{\prime}$ right of centerline, up to $585^{\prime}$ MSL.
CON'T

GUAM，GU（CON＇T）
GUAM INTL（GUM）（PGUM）（CON＇T）
Rwy 6R（CON＇T），trees，buildings，pole beginning 5418＇from DER，19＇right of centerline，up to 597＇MSL．
Trees，pole beginning $5684^{\prime}$ from DER， $54^{\prime}$ right of centerline，up to $615^{\prime}$ MSL．
Tree 5814＇from DER，2036＇right of centerline， $636^{\prime}$ MSL．
Poles，trees beginning 5850＇from DER， $113^{\prime}$ right of centerline，up to 41＇AGL／654＇MSL．
Trees，pole beginning 5965 ＇from DER， 529 ＇right of centerline，up to $660^{\prime}$ MSL
Buildings，trees，poles，terrain beginning 1 NM from DER， $26^{\prime}$ right of centerline，up to 90＇AGL／702＇MSL．
Tree 1．1 NM from DER， 150 ＇left of centerline，479＇MSL．
Rwy 24L，light poles，terrain beginning 10 ＇from DER， $85^{\prime}$＇right of centerline，up to 2＇AGL／233＇MSL．
Light poles 11 ＇from DER，4＇left of centerline，1＇AGL／232＇MSL．
Signs beginning 59＇from DER，282＇right of centerline，up to 3＇AGL／239＇MSL．
Tree 1416 ＇from DER， 365 ＇left of centerline， $269^{\prime}$ MSL．
Tree 1511＇from DER，405＇left of centerline，270＇MSL．
Tree 1578 ＇from DER， $333^{\prime}$ left of centerline，273＇MSL．
Rwy 24R，light poles，sign beginning $12^{\prime}$ from DER，2＇right of centerline，up to 2＇AGL／235＇MSL．
HANA，HI
HANA（HNM）（PHHN）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
ORIG 01SEP05（05244）（FAA）
DEPARTURE PROCEDURE：
Use LINDBERG DEPARTURE．
HILO，HI
HILO INTL（ITO）（PHTO）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 6 22DEC05（05356）（FAA）
DEPARTURE PROCEDURE：
Use PARIS DEPARTURE．
DIVERSE VECTOR AREA（RADAR VECTORS）
AMDT 1 26MAY16（16147）（FAA）
Rwys 3，8，heading as assigned by ATC．
Rwy 21，heading as assigned by ATC；requires minimum climb of $300^{\prime}$ per NM to 1300.
Rwy 26，heading as assigned by ATC；requires minimum climb of 420＇per NM to 2800.
HONOLULU，HI
DANIEL K INOUYE INTL（HNL）（PHNL）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 8B 08NOV18（18312）（FAA）
DEPARTURE PROCEDURE：
Use HONOLULU DEPARTURE
TAKEOFF OBSTACLE NOTES：
Rwy 4L，multiple lights beginning 630＇from DER， $236^{\prime}$ left of centerline， $102^{\prime}$ right of centerline，up to $84^{\prime}$ AGL／92＇MSL． Light on building 669＇from DER， $394^{\prime}$ left of centerline，29＇AGL／37＇MSL．
Stack on building $2488^{\prime}$ from DER， $219^{\prime}$ right of centerline $72^{\prime}$ AGL／80＇MSL．
Multiple trees beginning 1253＇from DER，209＇left of centerline， 935 ＇right of centerline，up to 64＇AGL／72＇MSL．
Bush 450＇from DER， 234 ＇left of centerline， $14^{\prime}$ AGL／ $22^{\prime}$ MSL．
Rwy 4R，stack on building， $2442^{\prime}$ from DER， $283^{\prime}$ left of centerline， $72^{\prime}$ AGL／80＇MSL．
Multiple trees beginning 1206＇from DER，711＇left of centerline，433＇right of centerline，up to 64＇AGL／72＇MSL．
Multiple lights beginning 1072＇from DER，399＇left of centerline，504＇right of centerline，up to 36＇AGL／44＇MSL．
Pole 2110＇from DER，951＇left of centerline，59＇AGL／67＇MSL．
Rwy 22L，multiple bushes beginning 265＇from DER，396＇right of centerline，up to 17＇AGL／31＇MSL．
Tree $1065^{\prime}$ from DER，499＇right of centerline， $30^{\prime}$ AGL／38＇MSL
Rwy 22R，rod on OL ASR 1451＇from DER，827＇right of centerline，76＇AGL／84＇MSL．
Tree $853^{\prime}$ from DER， 308 ＇right of centerline， $43^{\prime}$ AGL／51＇MSL．
Rwy 26L，ship 1．1 NM from DER，on centerline，208＇AGL／208＇MSL．
Rwy 26R，multiple light poles beginning 2120＇from DER， $813^{\prime}$ right of centerline，up to $105^{\prime}$ AGL／111＇MSL．
DIVERSE VECTOR AREA（RADAR VECTORS）
AMDT 2 25FEB21（21056）（FAA）
Rwys 4L／R，heading as assigned by ATC；requires min．climb of 490＇per NM to 2100 ，do not exceed 180 K until established on assigned heading．
Rwy 8L，heading as assigned by ATC；requires min．climb of $360^{\prime}$ per NM to 1700.
Rwy 8R，heading as assigned by ATC；requires min．climb of 305 ＇per NM to 500.
Rwys 22L／R，heading as assigned by ATC；requires min．climb of $320^{\prime}$ per NM to 3700 ．
Rwy 26L，heading as assigned by ATC；requires min．climb of $360^{\prime}$ per NM to 3700 ．
Rwy 26R，heading as assigned by ATC；requires min．climb of 430 ＇per NM to 4400 ．

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TAKEOFF MINIMUMS，（OBSTACLE）DEPARTURE PROCEDURES，AND DIVERSE VECTOR AREA（RADAR VECTORS）
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## KAHULUI，HI

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KAHULUI（OGG）（PHOG）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 7 29MAY14（14149）（FAA）
TAKEOFF MINIMUMS：
Rwy 23，NA－ATC．
DEPARTURE PROCEDURE：
Rwy 2，climb on a heading \(316^{\circ} \mathrm{CW} 052^{\circ}\) from DER to 10600 before proceeding on course．
Rwy 5，climb on a heading \(312^{\circ} \mathrm{CW} 040^{\circ}\) from DER to 10700 before proceeding on course．
Rwy 20，climb on heading \(185^{\circ}\) from DER to 11000 before proceeding on course．
TAKEOFF OBSTACLE NOTES：
Rwy 2，bush and trees beginning 190＇from DER，363＇left of centerline，up to 60＇AGL／79＇MSL．
Bushes and obstruction light on building beginning 339＇from DER， \(289^{\prime}\) right of centerline，up to 20＇AGL／25＇MSL．
Rwy 5，tree 2359＇from DER， \(512^{\prime}\) left of centerline，56＇AGL／75＇MSL．
Fence 20＇from DER，304＇right of centerline，11＇AGL／31＇MSL．
Bushes，trees and fence beginning \(228^{\prime}\) from DER， 300 ＇right of centerline，up to 76 ＇AGL／95＇MSL．
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DIVERSE VECTOR AREA（RADAR VECTORS）
AMDT 2 05OCT23（23278）（FAA）
Rwys 2,5 ，heading as assigned by ATC．
Rwy 20，heading as assigned by ATC；requires min climb of 490＇／NM to 5000 ．

## KAILUA－KONA，HI

ELLISON ONIZUKA KONA INTL AT KEAHOLE（KOA）（PHKO）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 5A 29MAR18（18088）（FAA）
DEPARTURE PROCEDURE：
Rwy 17，climb on heading $174^{\circ}$ to 500 then climbing right turn heading $357^{\circ}$ and KOA R－327 to MYNAH INT for assigned route．
Rwy 35，eastbound climb on heading $354^{\circ}$ to intercept MUE R－246 for assigned route；northwest bound climb heading $354^{\circ}$ to 500 then climbing left turn to assigned route．
TAKEOFF OBSTACLE NOTES：
Rwy 17，obstruction light on AMOM at DER，350＇right of centerline，25＇AGL／62＇MSL．
Rwy 35，tree 1606＇from DER，7211＇right of centerline，15＇AGL／94＇MSL．
DIVERSE VECTOR AREA（RADAR VECTORS）
AMDT 1 15OCT15（15288）（FAA）
Rwys 17，35，heading as assigned by ATC．
KALAUPAPA，HI
KALAUPAPA（LUP）（PHLU）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
ORIG 10MAR11（11069）（FAA）
DEPARTURE PROCEDURE：
Use KALAUPAPA ONE DEPARTURE．

## KAMUELA，HI

WAIMEA－KOHALA（MUE）（PHMU）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 1 17MAR05（05076）（FAA）
TAKEOFF MINIMUMS：
Rwy 4，400－2 or std．with a min．climb of 240 ＇per NM to 3100.
DEPARTURE PROCEDURE：
Rwy 4，climb via heading $041^{\circ}$ to 3100 then climbing right turn via heading $080^{\circ}$ and MUE VOR／DME R－057 to 6000 to VELLA INT，then as assigned．
Rwy 22，climb via heading $233^{\circ}$ and MUE VOR／DME R－234 to 5000 to JASON INT，then as assigned．
TAKEOFF OBSTACLE NOTES：
Rwy 4，windsock 158＇from DER，299＇right of centerline，25＇AGL／2702＇MSL
Fence 2754＇from DER，323＇right of centerline，12＇AGL／2741＇MSL．
Tree 5200＇from DER， 179 ＇right of centerline， 50 ＇AGL／2817＇MSL．
Tree 5331＇from DER，110＇left of centerline，50＇AGL／2829＇MSL．
Tree 1．3 NM from DER，739＇right of centerline，50＇AGL／2864＇MSL．
Tree 1．3 NM from DER，1741＇left of centerline，50＇AGL／2889＇MSL．
Antenna 1．8 NM from DER，1094＇left of centerline 152＇AGL／2992＇MSL．
Rising terrain beginning 1．5 NM from DER，3．9 NM left of centerline，up to 13796＇MSL．
Rwy 22，cactus at DER，191＇left of centerline，10＇AGL／2668＇MSL．
Tree at DER，353＇right of centerline，50＇AGL／2687＇MSL．
Bush 673＇from DER，186＇left of centerline，30＇AGL／2673＇MSL．
Pole 1058＇from DER， 124 ＇left of centerline， $20^{\prime}$ AGL／2683＇MSL．
Rapidly rising terrain beginning 1．5 NM from DER，4209＇left of centerline，up to $5513^{\prime}$ MSL．

TAKEOFF MINIMUMS，（OBSTACLE）DEPARTURE PROCEDURES，AND DIVERSE VECTOR AREA（RADAR VECTORS）


## KAUNAKAKAI，HI

MOLOKAI（MKK）（PHMK）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 6 19MAY14（14149）（FAA）
DEPARTURE PROCEDURE：
Use KAUNAKAKAI DEPARTURE．
DIVERSE VECTOR AREA（RADAR VECTORS）
AMDT 1 15OCT15（15288）（FAA）
Rwy 17，heading as assigned by ATC．
Rwy 23，heading as assigned by ATC；requires minimum climb of 460＇per NM to 2000.
KOSRAE，FM
KOSRAE（TTK）（PTSA）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
ORIG－A 12MAR09（09071）（FAA）
CAUTION：Ships with masts to 200＇traverse harbor entrance located on west side of runway． DEPARTURE PROCEDURE：
Rwy 5，left turn．
Rwy 23，right turn，climb to 2000 or above before turning east．

## LANAI CITY，HI

LANAI（LNY）（PHNY）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES
AMDT 5 27AUG09（09239）（FAA）
TAKEOFF MINIMUMS：
Rwy 3，400－1 or std．w／min．climb of $370^{\prime}$ per NM to 2700 or $2500-3$ for climb in visual conditions． DEPARTURE PROCEDURE：
Rwy 3，climb heading $033^{\circ}$ to 1720 before turning left．Climb heading $300^{\circ}$ or $180^{\circ}$ to intercept route or airway，then continue as cleared．Maintain maximum 210 kts until turn is completed or for climb in visual conditions cross LNY VORTAC eastbound at or above 3700.
Rwy 21，climb heading $213^{\circ}$ to assigned altitude．Eastbound－climb westbound to cross LNY VORTAC eastbound at or above 2700 and climb as cleared．Westbound－climb direct LNY VORTAC then via assigned route．
TAKEOFF OBSTACLE NOTES：
Rwy 3，multiple poles，trees，and terrain beginning 2108＇from DER，1011＇left of centerline，up to 200＇AGL／2202＇MSL． Rwy 21，lighted windsock 8＇from DER，191＇right of centerline，30＇AGL／1323＇MSL．
TAKEOFF MINIMUMS，（OBSTACLE）DEPARTURE PROCEDURES，AND $\nabla$ DIVERSE VECTOR AREA（RADAR VECTORS）
DEPARTURE PROCEDURE：
Use KAUAI DEPARTURE．
TAKEOFF OBSTACLE NOTES：
Rwy 3，NAVAID 85＇from DER，418＇left of centerline，8＇AGL／85＇MSL．
Trees beginning $221^{\prime}$ from DER， $188^{\prime}$ right of centerline，up to $35^{\prime}$ AGL／88＇MSL．
Trees beginning 240＇from DER，19＇right of centerline，up to 43＇AGL／95＇MSL．
Trees beginning 250＇from DER， $7^{\prime}$＇left of centerline，up to $34^{\prime}$ AGL／93＇MSL．
Trees beginning $395^{\prime}$ from DER， $38^{\prime}$ left of centerline，up to $34^{\prime}$ AGL／94＇MSL．
Trees beginning 415＇from DER，39＇left of centerline，up to 39＇AGL／95＇MSL．
Trees beginning 431＇from DER， 38 ＇left of centerline，up to 34 ＇AGL／103＇MSL．
Trees beginning 473 ＇from DER， 14 ＇left of centerline，up to 50 ＇AGL／107＇MSL．
Tree 541 ＇from DER， $4^{\prime}$＇right of centerline， 54 ＇AGL／103＇MSL．
Trees beginning 548 ＇from DER， $8^{\prime}$ right of centerline，up to 56＇AGL／104＇MSL．
Tree 972 ＇from DER， 676 ＇left of centerline， 68 ＇AGL／115＇MSL．
Tree 1563 ＇from DER， $538^{\prime}$ left of centerline， $90^{\prime}$ AGL／127＇MSL．
Tree $1750^{\prime}$ from DER， $783^{\prime}$ left of centerline，120＇AGL／165＇MSL
Rwy 17，light poles 4＇from DER， 6 ＇left of centerline，2＇AGL／94＇MSL．
Tree 135 ＇from DER， 272 ＇right of centerline， $10^{\prime}$ AGL／95＇MSL．
Trees beginning 857＇from DER， 565 ＇right of centerline，up to 45 ＇AGL／131＇MSL．
Tree 1289＇from DER，734＇right of centerline，57＇AGL／132＇MSL
Rwy 21，light poles $9^{\prime}$ from DER， 54 ＇left of centerline，3＇AGL／154＇MSL．
Light poles 9＇from DER， $55^{\prime}$ right of centerline，3＇AGL／155＇MSL．
Terrain $33^{\prime}$ from DER， 457 ＇right of centerline，156＇MSL．
Pole 192＇from DER，546＇left of centerline， $44^{\prime}$ AGL／183＇MSL．
Pole $366^{\prime}$ from DER， 550 ＇left of centerline， $46^{\prime}$ AGL／184＇MSL．
Tree，pole beginning 497＇from DER， $563^{\prime}$＇left of centerline，up to 70 ＇AGL／206＇MSL．
Trees beginning $1148^{\prime}$ from DER， $231^{\prime}$＇right of centerline，up to 42＇AGL／203＇MSL．
Tree 1457＇from DER， 185 ＇right of centerline，67＇AGL／212＇MSL．
Trees beginning $1466^{\prime}$ from DER， $53^{\prime}$ right of centerline，up to 77＇AGL／230＇MSL．
Trees beginning 1510＇from DER，62＇right of centerline，up to 87＇AGL／241＇MSL．
Tree $1536^{\prime}$ from DER， 3 ＇left of centerline， 70 ＇AGL／208＇MSL．
Tree，pole beginning 1660 ＇from DER， $9^{\prime}$＇right of centerline，up to 96 ＇AGL／248＇MSL．
Trees beginning 1903＇from DER，267＇left of centerline，up to 68＇AGL／217＇MSL．
Tree 2017＇from DER，280＇left of centerline， 70 ＇AGL／218＇MSL．
Trees beginning 2029＇from DER，296＇left of centerline，up to 73＇AGL／221＇MSL．
Trees beginning 2212＇from DER，337＇left of centerline，up to 82＇AGL／227＇MSL．
Tree 3102＇from DER，442＇left of centerline，107＇AGL／231＇MSL．
Trees beginning 2．1 NM from DER，2126＇left of centerline，up to 3＇AGL／896＇MSL．
Tree 2．2 NM from DER，2973＇left of centerline， $25^{\prime}$ AGL／947＇MSL．
Trees beginning 2．2 NM from DER，2747＇left of centerline，up to 212＇AGL／1329＇MSL．
Tree 2．3 NM from DER，3671＇left of centerline，2＇AGL／1474＇MSL．
Tree 2．4 NM from DER，4032＇left of centerline， $100^{\prime}$ AGL／1488＇MSL．
Trees beginning 2．4 NM from DER，2595＇left of centerline，up to 100＇AGL／1488＇MSL．
Trees beginning 2．5 NM from DER，3483＇left of centerline，up to 23＇AGL／1294＇MSL．
Rwy 35，fence 40＇from DER，308＇right of centerline，13＇AGL／94＇MSL．
Tree 106＇from DER，435＇right of centerline，19＇AGL／100＇MSL．
Trees beginning 203＇from DER，379＇right of centerline，up to 51＇AGL／131＇MSL．

DIVERSE VECTOR AREA（RADAR VECTORS）
AMDT 1 15OCT15（15288）（FAA）
Rwys 3,17 ，heading as assigned by ATC．
Rwy 21，heading as assigned by ATC；requires min．climb of 400 ＇per NM to 4500 ．
Rwy 35，heading as assigned by ATC；requires min．climb of $230^{\prime}$ per NM to 700 ．
MAJURO ATOLL，MH
AMATA KABUA INTL（MAJ）（PKMJ）
TAKEOFF MINIMUMS AND（OBSTACLE）DEPARTURE PROCEDURES ORIG 08APR10（21224）（FAA）
TAKEOFF OBSTACLE NOTES：
Rwy 7，antenna on building 215 ＇from DER， $446^{\prime}$ left of centerline， $48^{\prime}$ AGL／54＇MSL．
Obstruction light on AMOM 44＇from DER，269＇left of centerline，33＇AGL／39＇MSL．
Obstruction light on WSK 10＇from DER，245＇right of centerline，23＇AGL／29＇MSL．
Tree 934＇from DER，243＇left of centerline，39＇AGL／45＇MSL．
Bush $555^{\prime}$ from DER， 187 ＇right of centerline， $17^{\prime}$ AGL／23＇MSL．
Rwy 25，obstruction light on WSK 11＇from DER， 246 ＇left of centerline，23＇AGL／29＇MSL．
Post $51^{\prime}$ from DER，252＇right of centerline，8＇AGL／14＇MSL．
Tree 996＇from DER， $39^{\prime}$ left of centerline， $31^{\prime}$ AGL／37＇MSL．
Tree $563^{\prime}$ from DER， $5^{\prime}$ right of centerline，20＇AGL／26＇MSL．
Bushes beginning 207＇from DER，from $124^{\prime}$ left to 207＇right of centerline，up to 14＇AGL／20＇MSL．
Vehicle on roadway 130 ＇from DER，241＇right of centerline，15＇AGL／20＇MSL．

## TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

## PAGO PAGO, AS

PAGO PAGO INTL (PPG) (NSTU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG-A 12MAR09 (09071) (FAA)
TAKEOFF MINIMUMS:
Rwy 23, std. w/ min. climb of 320 ' per NM to 800, or 2700-3 for climb in visual conditions. Rwy 26, NA-obstacles.
DEPARTURE PROCEDURE:
Rwys 5, 8, climbing right turn southbound between TUT R-090 clockwise to R-180 to 2800, then proceed on course. Rwy 23, climbing left turn heading $150^{\circ}$ southbound between TUT R-090 clockwise to R-180 to 2800, then proceed on course. For climb in visual conditions: cross Pago Pago Intl airport at or above 2600 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 5, bush 1' from DER, 237' right of centerline, 3' AGL/12' MSL.
Bush 379' from DER, 362' left of centerline, 14' AGL/23' MSL.
Ship 998' from DER, 57' right of centerline, 150' AGL/150' MSL.
Rwy 8, bush 689' from DER, $360^{\prime}$ ' left of centerline, $15^{\prime}$ AGL/23' MSL.
Ship 1435 ' from DER, 304' left of centerline, 150' AGL/150' MSL.
Rwy 23, multiple trees beginning $352^{\prime}$ from DER, $173^{\prime}$ left of centerline, up to 20' AGL/132' MSL.
Multiple trees beginning 881 ' from DER, 296' right of centerline, up to 20' AGL/172' MSL.
Multiple trees and poles beginning 1.6 NM from DER, 38' right of centerline, up to 367' AGL/554' MSL.
Tree 2.3 NM from DER, $2126^{\prime}$ left of centerline, $20^{\prime}$ AGL/387' MSL.
POHNPEI ISLAND, FM
POHNPEI INTL (PNI) (PTPN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 27APR17 (17117) (FAA)
TAKEOFF MINIMUMS:
Rwy $27,300-1 \frac{1}{2}$ or std. w/min. climb of 215 ' per NM to 300 , or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than $1400^{\prime}$ prior to DER.
DEPARTURE PROCEDURE:
Rwy 9, Climb on a heading between $264^{\circ} \mathrm{CW} 083^{\circ}$ from DER to 2600 before proceeding on course.
Rwy 27, Climb on a heading between $264^{\circ} \mathrm{CW} 083^{\circ}$ from DER to 2600 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 27, fence 92 ' from DER, left to right of centerline, up to 9' AGL/15' MSL.
Tree 1.2 NM from DER, $1175^{\prime}$ left of centerline, $62^{\prime}$ AGL/203' MSL.
CAUTION: Rwy 27, ships with maximum height of 150 ' MSL may traverse Pohnpei channel 400' off DER, closing airport at times.

## ROTA ISLAND, CQ

BENJAMIN TAISACAN MANGLONA INTL (GRO) (PGRO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 06FEB14 (14037) (FAA)
DEPARTURE PROCEDURE:
Rwy 9, climb heading $090^{\circ}$ to 1400 before turning.
Rwy 27, climb heading $270^{\circ}$ to 2200 before turning southbound.
TAKEOFF OBSTACLE NOTES:
Rwy 9, tree 514' from DER, 418' left of centerline, up to 30' AGL/638' MSL.
Rwy 27, tree 1203' from DER, 581' left of centerline, up to $30^{\prime}$ AGL/618' MSL.

## SAIPAN ISLAND, CQ

FRANCISCO C ADA/SAIPAN INTL (GSN) (PGSN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 12MAR09 (09071) (FAA)
DEPARTURE PROCEDURE:
Rwys 7, 25, climb on runway heading to 1600 before climbing on course.
TINIAN ISLAND, CQ
FRANCISCO MANGLONA BORJA/TINIAN INTL (TNI) (PGWT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 27AUG09 (23222) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees beginning 694' from DER, 507' left of centerline, up to 100' AGL/363' MSL.
Multiple trees beginning 569' from DER, 471' right of centerline, up to 100' AGL/389' MSL.
Rwy 26, multiple trees beginning 743' from DER, 508' right of centerline, up to 100' AGL/363' MSL.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND
DIVERSE VECTOR AREA (RADAR VECTORS) DIVERSE VECTOR AREA (RADAR VECTORS)

## WENO ISLAND, FM

CHUUK INTL (TKK) (PTKK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 11FEB10 (10042) (FAA)
DEPARTURE PROCEDURE:
Rwy 4, climb heading $041^{\circ}$ to 1100 before proceeding on course.
Rwy 22, climb heading $221^{\circ}$ to 1500 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
Rwy 4, bush 205' from DER, 203' right of centerline, 7' AGL/17' MSL.
Rwy 22, bush 5' from DER, 241' right of centerline, 14' AGL/24' MSL.
Bush $221^{\prime}$ from DER, $85^{\prime}$ right of centerline, $7^{\prime}$ AGL/17' MSL.
CAUTION: Ships with superstructure to 150 ' traverse channels west of runway 4/22.

## WHEELER AAF (HHI) (PHHI)

WAHIAWA, HI
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 07SEP23 (23250) (USA)
TAKEOFF MINIMUMS:
Rwy 6, 300-1 w/min climb of $357 / \mathrm{NM}$ to 3600 or std w/min climb of $473^{\prime} / \mathrm{NM}$ to 2900. Rwy 24, NA-Obstacles.
DEPARTURE PROCEDURE:
Rwy 6, climbing right turn to hdg $150^{\circ}$ to intercept CKH VORTAC R-294 to CKH VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 6, pylon 5417' from DER, $33^{\prime}$ right of centerline, $90^{\prime}$ AGL/979' MSL.
Pylon 3192' from DER, 858 ' left of centerline, 100' AGL/972' MSL.
Pylon 3182' from DER, 845 ' left of centerline, 100' AGL/972' MSL.
Pylon 4800' from DER, 113' left of centerline, $90^{\prime}$ AGL/966' MSL.
Pylon 3954' from DER, 644' left of centerline, 100' AGL/962' MSL.
Pylon 3612' from DER, 357 ' left of centerline, $90^{\prime}$ AGL/959' MSL.
Pylon 2802' from DER, 512' left of centerline, 90 ' AGL/956' MSL.

## YAP ISLAND, FM

YAP INTL (T11) (PTYA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 08DEC94 (94342) (FAA)
DEPARTURE PROCEDURE:
Rwy 7, climbing right turn to 1500 via $090^{\circ}$ bearing from YP NDB/DME, then climb on course.
Rwy 25, climb to 500, then climb on course.

TAKEOFF MINIMUMS, (OBSTACLE) DEPARTURE PROCEDURES, AND DIVERSE VECTOR AREA (RADAR VECTORS)

ATIS
128.2

GND CON
121.9

MOLOKAI TOWER *
$125.7 \quad 306.2$
HCF CENTER
124.1317 .5

TAKEOFF RUNWAY 5: Climbing leff turn heading $340^{\circ}$ to 1000 then climbing left turn direct MKK VORTAC, thence. . . .
TAKEOFF RUNWAY 17: Climb heading $169^{\circ}$ to 1300 then climbing right turn direct MKK VORTAC, thence. . . .
TAKEOFF RUNWAY 23: Climbing left turn heading $170^{\circ}$ to 1700 then climbing right turn direct MKK VORTAC, thence. . . .
TAKEOFF RUNWAY 35: Climb heading $349^{\circ}$ to 1000 then climbing leff turn direct MKK VORTAC, thence. . . .
VCOA RUNWAYS 5 and 23: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Molokai Airport southwest bound at or above 1800 on MKK R-067 to MKK VORTAC, thence. . . .
. . . . climb in MKK VORTAC hold pattern to cross MKK at or above MEA/MCA for route of flight.

## TAKEOFF OBSTACLES NOTES

Rwy 5: Rising terrain and vehicles on roadway beginning 14' from DER, 238' right of centerline, up to 17' AGL/476' MSL.
Vehicles on roadway beginning $28^{\prime}$ from DER, $484^{\prime}$ left of centerline, up to 17' AGL/509' MSL.
Multiple fences and bushes beginning $49^{\prime}$ from DER, $95^{\prime}$ left of centerline, up to 21' AGL/480' MSL.
Multiple fences and bushes beginning $437^{\prime}$ from DER, $65^{\prime}$ right of centerline, up to 31' AGL/490' MSL.
Multiple trees and bushes beginning $735^{\prime}$ from DER, 496' left of centerline, up to $27^{\prime}$ AGL/551'MSL.
Multiple bushes and vehicles on roadway beginning 950' from DER, left and right of centerline, up to 17' AGL/552' MSL.
Electrical system 1367' from DER, 78' right of centerline, $35^{\prime}$ AGL/528' MSL.
Multiple towers, poles and trees beginning 1887' from DER, 33' right of centerline, up to 43' AGL/602' MSL.
Multiple towers, poles and trees beginning 2386' from DER, 644' left of centerline, up to 60' AGL/617' MSL.
Rwy 17: Bush 46' from DER, $266^{\prime}$ right of centerline, $13^{\prime}$ AGL/443' MSL.
Vehicles on roadway beginning $124^{\prime}$ from DER, $505^{\prime}$ left of centerline, up to 17' AGL/443' MSL.
Vehicles on roadway beginning 484' from DER, 590' right of centerline, up to $17^{\prime}$ AGL/443' MSL.
Rwy 23: Trees beginning 691' from DER, 491' left of centerline, up to 77' AGL/470' MSL. Trees beginning 1.9 NM from DER, $2279^{\prime}$ left of centerline, up to $60^{\prime}$ AGL/880' MSL. Trees beginning 2.2 NM from DER, $541^{\prime}$ left of centerline, up to $60^{\prime} \mathrm{AGL} /$ 1208 $^{\prime} \mathrm{MSL}$.
Rwy 35: Bush $28^{\prime}$ from DER, $288^{\prime}$ left of centerline, $12^{\prime}$ AGL/461' MSL.
Bush $48^{\prime}$ from DER, $118^{\prime}$ right of centerline, $14^{\prime} \mathrm{AGL} / 463^{\prime} \mathrm{MSL}$.
Fence beginning $70^{\prime}$ from DER, on centerline through $35^{\prime}$ left of centerline, $4^{\prime}$ AGL/460' MSL.
Multiple bushes vehicles on roadway and trees beginning $107^{\prime}$ from DER, $48^{\prime}$ right of centerline, up to $65^{\prime}$ AGL/514' MSL.
Bushes beginning $133^{\prime}$ from DER, $34^{\prime}$ left of centerline, up to $26^{\prime}$ AGL/489' MSL.
Bushes beginning $1170^{\prime}$ from DER, $259^{\prime}$ right of centerline, up to $15^{\prime} \mathrm{AGL} / 514^{\prime} \mathrm{MSL}$.
Trees beginning $2286^{\prime}$ from DER, $407^{\prime}$ right of centerline, up to $90^{\prime} \mathrm{AGL} / 615^{\prime} \mathrm{MSL}$.
Trees beginning $2942^{\prime}$ from DER, $75^{\prime}$ right of centerline, up to $123^{\prime} \mathrm{AGL} / 648^{\prime} \mathrm{MSL}$.

