

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
TITLE 14 CFR PART 97.33

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<u>AIRPORT</u> HANA	<u>AIRPORT ID</u> PHHN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 8	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> HANA	<u>STATE</u> HI	
<u>AIRPORT ELEVATION</u> 78	<u>TDZE</u> 78	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 11E	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
OGG VORTAC	IAF	OPANA		TF	FB	1.00	069.00	13.00	4800
OPANA	IF	ZOMPU		TF	FB	1.00	134.46	7.43	2500
ZOMPU	FAF	UREAS	MAP	TF	FO	0.30	108.88	5.52	
UREAS	MAP	478 MSL		CA			108.88		
478 MSL		GPYLE		DF	FO	1.00			2500

MISSED APPROACH

MAP:

LNAV: UREAS

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 DIRECT GPYLE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2. PROFILE STARTS AT OPANA

3. FAC: 108.88 FAF: ZOMPU DIST FAF TO MAP: 5.52 DIST FAF TO THLD: 6.26

4. MIN ALT: OPANA 4800, ZOMPU 2500

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: GS ANT:

6. MIN GP INCPT: GP ALT AT FAF : OM: MM: IM:

7. GP ANGLE: 34:1: IS NOT CLEAR 20:1: IS NOT CLEAR TCH:

8. MSA FROM: UREAS 11200



PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA S OF RWY 8-26.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 8 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, PROCEDURE NA.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART PLANVIEW NOTE: FINAL APPROACH COUSE OFFSET 29.86 DEGREES.
FAS OBST: 879 AAO 204834N/1560446W.
1401 AAO 204933N/1560446W.
FAC CROSSES RWY C/L EXTENDED 4500 FT FROM THLD.
HOLD E, RT, 259.11 INBOUND

MINIMUMS:

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: NA ☒

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
LNAV MDA	1500	1 1/4	1422	1500	1 1/2	1422		NA			NA				
CIRCLING	1500	1 1/4	1422	1500	1 1/2	1422		NA			NA				

CHANGES - REASONS

ORIGINAL PROCEDURE - FPT REQUEST.

- 06/03/19: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/03/18.
1. MIN ALT AT OPANA INCREASED FROM 4500 TO 4800 FEET FOR A CONSISTENT ANGLE OF DESCENT.
 2. TERMINAL ROUTE OPANA TO ZOMPU COURSE, DIST AND MIN ALT CHANGED FROM 132.84/7.90/2600 TO 134.46/7.43/2500.
 3. REMOVED FINAL SDF ZEDOS BASED ON LOWEST ATTAINABLE MDA OF 1500 FEET.
 4. REMOVED VDA FROM PROCEDURE BASED ON FLYABILITY ISSUES.
 5. DIST FROM ZOMPU TO UREAS CHANGED FROM 5.00 NM TO 5.52 NM TO MAINTAIN A CONSISTENT ANGLE OF DESCENT.

12/11/19: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 07/11/19.
TERMINAL ROUTES: ADDED "IAF" IN FIX TYPE FROM OGG VORTAC TO OPANA AND DELETED "NOPT" FROM OGG VORTAC TO OPANA.



COORDINATED WITH:

A4A ☐ ALPA ☒ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: APT MGR, ST. AV DIR, HNL FSS, ATA

FLIGHT CHECKED BY
ROSS NILS LARSON

Digitally signed by
WARDELL HENNING
Dec 18, 2019

OFFICE
FIOG

DATE
10/31/2019

DEVELOPED BY
WARDELL HENNING (ANTHONY KACZKA)

Digitally signed by
WARDELL HENNING
Dec 18, 2019

OFFICE
AJV-A432

DATE
12/03/2018

APPROVED BY
PATRICK MULQUEEN

Digitally signed by
WARDELL HENNING
Dec 18, 2019

OFFICE

DATE

TITLE
MANAGER



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

AIRPORT	AIRPORT ID	PROCEDURE NAME	AMDT NO.	CITY	STATE	AIRPORT ELEVATION	FACILITY
HANA	PHHN	RNAV (GPS) RWY 8	ORIG	HANA	HI	78	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM
OGG VORTAC

TO
OPANA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	13.00											
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
1.AAO	205336.00N/1561903.00W		1424	164	98	4E	1000				AT2246 PR130	4800
2.TERRAIN	205336.00N/1561903.00W		1224 (1200)								AS1500	2700

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
-----	------	------	-----	------	----	----	-----	---------------	------	---------	------------------------

SEGMENT REMARKS:

INTERMEDIATE: LNAV

FROM
OPANA

TO
ZOMPU

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					
	7.43											
<u>OBSTRUCTION</u>	<u>COORDINATES</u>		<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
3.AAO	205045.00N/1560936.00W		1280	164	98	4E	500				AC98 PR190	2100
4.TERRAIN	205048.00N/1560936.00W		1033 (1000)								AS1500	2500

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
-----	------	------	-----	------	----	----	-----	---------------	------	---------	------------------------

SEGMENT REMARKS:



FINAL: LNAV

FROM

ZOMPU

TO

UREAS

RNP	DISTANCE	PAT	MAP	HAT				HMAS				
	5.52		UREAS	1422								
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	204834.00N/1560446.00W		879	50	20	2C	250				PR190 MA180	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH : LNAV

FROM

UREAS

TO

GPYLE

RNP	DISTANCE	PAT	MAP	HAT				HMAS				
				1210								
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
6.TREE	204609.97N/1560143.35W		1489	50	20	2C		ASC				2500
7.TREE	204609.97N/1560143.35W		1489	50	20	2C	1000					2500
8.TERRAIN	204606.00N/1560057.00W		787 (800)								AS1500	2300

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☐ CAT C

☐ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
9.TREE	204700.31N/1560232.73W	1.30	1422	529	50	20	2C	300		SI	1500
CATEGORY B											
10.TREE	204731.40N/1560300.70W	1.82	1422	799	50	20	2C	300		SI	1500

CIRCLING REMARKS:

MSA

CENTER

UREAS

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	204236.00N/1561512.00W	237	13.4	10197	164	98	4E	1000			11200

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

VDA NOT ESTABLISHED BASED ON FLYABILITY ISSUES.



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
MAUI APP CON, OGG TOWER, HNL FSS

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
AWOS	PHHN	24	PHHN	0	N	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

WX REMARKS:

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW08 - MIRL, PAPI-2L		NPI-F	
RW26 - MIRL		NPI-F	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
					3.60	26.4

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input type="checkbox"/>	4500	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>		FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
--------------	---------------	-----	---------

CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	LNAV FINAL		
20:1			
95 VEGETATION (15-020779) 204743.13N/1560113.57W (15.21)		117 TREE (15020780) 204742.31N/1560118.42W (14.2)	
88 VEGETATION (15-020887) 204746.03N/1560113.19W (10.00)		109 TREE (15-020888) 204746.12N/1560118.16W (7.42)	
100 VEGETATION (15-021244) 204743.82N/1560116.31W (7.21)		110 TREE (15-020781) 204745.99N/1560119.44W (2.35)	
Final Type	LNAV FINAL		
34:1			
486 TREE (15-020845) 204733.92N/1560240.57W (164.39)		373 TREE (15-020878) 204740.11N/1560226.50W (90.64)	
375 TREE (15-020961) 204746.31N/1560241.19W (51.63)		131 TREE (15-020889) 204743.60N/1560124.55W (21.51)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or
5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - OSTACLES PENETRATE 20:1 SURFACE..

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

VEGETATION: 100 FT PER FPT CHECKLIST.

ALTERNATE ALTIMETER SOURCE NOT AVAILABLE PER FPT.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1401 AAO 204933.00N/1560446.00W.

ORDER 8260.3, VOLUME 1, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

<div>AIRPORT</div> <div>HANA</div>	<div>AIRPORT ID</div> <div>PHHN</div>	<div>PROCEDURE NAME</div> <div>RNAV (GPS) RWY 8</div>	<div>AMDT NO.</div> <div>ORIG</div>	<div>CITY</div> <div>HANA</div>	<div>STATE</div> <div>HI</div>	<div>AIRPORT ELEVATION</div> <div>78</div>	<div>FACILITY</div> <div>RNAV</div>
PART D: AIRSPACE							
DOCKET #							
ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE							
DISTANCE FROM	THLD	TO 1000FT POINT	3.00				
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20				
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	119.88				
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	718				
DISTANCE FROM	MAP	TO 1500FT POINT	4.80				
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95				
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	119.88				
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	718				
THRESHOLD COORDINATES (IF STR-IN)	204744.31N/1560110.98W						
ARP COORDINATES	204744.29N/1560051.98W						
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 26 DISTANCE 0.30 NM						
FAF COORDINATES	205029.93N/1560704.79W						
FIX NAME COORDINATES							
REMARKS							

QUALITY

18

CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

Page 6 of 7

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
WARDELL HENNING (ANTHONY KACZKA)	AJV-A432	12/03/2018	AERONAUTICAL INFORMATION SPECIALIST

