

**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.

AIRPORT ID KOA/PHKO	PROCEDURE NAME RNAV (GPS) RWY 35	ORIGINAL/AMENDMENT 3	CITY KAILUA-KONA	STATE HI		
AIRPORT ELEVATION 49	TDZE 45	SUPERSEDED RNAV (GPS) RWY 35	ORIGINAL/AMENDMENT 2A	DATED 11/30/2023	MAG VAR 11E	EPOCH YEAR 1985
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE	REQUIRED EFFECTIVE DATE 02/20/2025	CANCEL/SUSPEND		

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>
KOA VORTAC		HASOG		TF	FO	1.00	174.55	11.66	2700
UJGEM	IAF	HASOG	NOPT	TF	FB	1.00	083.74	12.03	2700
HASOG	IF/IAF	HALOA		TF	FB	1.00	353.81	7.66	1700
HALOA	FAF	RW35	MAP	TF	FO	0.30	353.81	5.03	
RW35	MAP	500 MSL		CA			353.81		500
500 MSL		AMERY		DF	FO	1.00			5000

MISSED APPROACH

MAP:

LNAV/VNAV: DA
LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 500 THEN CLIMBING LEFT TURN TO 5000 DIRECT AMERY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)	
2. HOLD S HASOG, LT, 353.81 INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 6000.						
3. FAC: 353.81	FAF: HALOA		DIST FAF TO MAP: 5.03	DIST FAF TO THLD: 5.03		
4. MIN ALT: HASOG 2700, HALOA 1700						
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	328 HAT: 0.86	GS ANT:	
6. MIN GP INCPT: 1700	GP ALT AT PFAF: HALOA 1700			OM:	MM:	IM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 59.8			
8. MSA FROM: RW35 14700						



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA E OF RWY 17-35.
CHART NOTE: WAAS VNAV NA.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 18°C OR ABOVE 54°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON KOA VORTAC AIRWAY RADIAL 158.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 113.67 INBOUND.
FAS OBST: 208 SHIP 193903N/1560312W.
CHART VDP AT 1.13 NM TO RW35.
CHART CIRCLING ICON.

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LNAV/VNAV DA	373	1	328	373	1	328	373	1	328	373	1	328	373	1	328
LNAV MDA	460	1	415	460	1	415	460	1 1/8	415	460	1 1/8	415	460	1 1/8	415
CIRCLING	520	1	471	520	1	471	520	1 1/2	471	600	2	551	600	2	551

CHANGES - REASONS

- TDZE ELEVATION CHANGED FROM "38" TO "45" - AIRPORT CONSTRUCTION, NEW DATA.
- TERMINAL ROUTES: UPDATED KOA VORTAC TO HASOG RNP FROM "2.00" TO "1.00" - IAW 8260.19I 4-6-10F.
- TERMINAL ROUTES: UPDATED FROM "HASOG TO HOXLY, DISTANCE 7.00" TO "HASOG TO HALOA, DISTANCE 7.66" - FAF MOVED .66 NM NORTH, FAF NAME CHANGE.
- TERMINAL ROUTES: UPDATED FROM "HOXLY TO RW35, COURSE 353.82" TO "HALOA TO RW35, COURSE 353.81" - FAF MOVED .66 NM NORTH, FAF NAME CHANGE.
- TERMINAL ROUTES: UPDATED RW35 TO 500 MSL COURSE FROM "353.82" TO "353.81" - FAF MOVED.
- PROFILE LINE 3: UPDATED FROM "FAC: 353.82, FAF: HOXLY" TO "FAC: 353.81, FAF: HALOA" - FAF NAME CHANGE, FAF MOVED.
- PROFILE LINE 4: UPDATED MIN ALT FROM " HASOG 2700, HOXLY 1700" TO "HASOG 2700, HALOA 1700" - FAF NAME CHANGE.
- PROFILE LINE 5: UPDATED FROM "329 HAT: 0.84" TO "328 HAT: 0.86" - HAT VALUE AND DISTANCE TO THRESHOLD CHANGE.
- PROFILE LINE 6: UPDATED GP ALT AT PFAF FROM "HOXLY 1700" TO "HALOA 1700" - FAF NAME CHANGE.
- PROFILE LINE 7: UPDATE TCH FROM "60.0" TO "59.8" - TCH CHANGE.
- PROFILE LINE 8: UPDATED MSA FROM "RW35 14900" TO "RW35 14700" CONTROLLING OBSTACLE CHANGE.
- NOTES: UPDATE CHART NOTE FROM "CIRCLING NA EAST OF RWY 17-35" TO "CIRCLING NA E OF RWY 17-35" - IAW 8260.19J 8-6-12 O (5).
- NOTES: UPDATED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 17°C OR ABOVE 54°C" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 18°C OR ABOVE 54°C" - CALCULATION BASED ON 5 YEAR STUDY.
- NOTES: REMOVED "CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET})" - VGSI AND RNAV GLIDEPATH COINCIDENT.
- NOTES: UPDATED FROM "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL AT KOA VORTAC ON B595 NORTHBOUND" TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON KOA VORTAC AIRWAY RADIAL 158" - IAW 8260.19J 8-2-5 G (2).
- ADDITIONAL FLIGHT DATA: UPDATED FROM "CHART FAS OBST: 169 TREE 194340N/1560211W" TO "FAS OBST: 208 SHIP 193903N/1560312W" - UPDATED FAS OBSTACLE.
- ADDITIONAL FLIGHT DATA: UPDATED FROM "CHART VDP AT 0.98 NM TO RW35" TO "CHART VDP AT 1.13 NM TO RW35" - UPDATED VDP LOCATION, REMOVED *.
- ADDITIONAL FLIGHT DATA: REMOVED " *LNAV ONLY" - NO LONGER REQUIRED PER IAW 8260.19J PARA 8-6-11.M (2).
- MINIMUMS: UPDATED LNAV/VNAV ALL CATS DA FROM "366" TO "373" - TDZE CHANGE.
- MINIMUMS: UPDATED LNAV ALL CATS MDA / HAT FROM "420 / 382" TO "460 / 415" - UPDATED CONTROLLING OBSTACLE, TDZE CHANGE.



COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER: ZHN CERAP, KOA ATCT, HNL FSDO, AMGR, USAF

FLIGHT CHECKED BY

PENDING

DEVELOPED BY
DANIEL WESTON

APPROVED BY
RAKE MCGRAW

Digitally signed by

RAKE MCGRAW
Jan 13, 2025

OFFICE

DATE

Digitally signed by

DANIEL L WESTON
Oct 23, 2024

OFFICE
AJV-A422

DATE
08/14/2024

Digitally signed by

RAKE MCGRAW
Jan 13, 2025

OFFICE
AJV-A422

DATE

TITLE
MANAGER



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

AIRPORT ID
KOA/PHKO

PROCEDURE NAME
RNAV (GPS) RWY 35

AMDT NO.
3

CITY
KAILUA-KONA

STATE
HI

AIRPORT ELEVATION
49

FACILITY
RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM
KOA VORTAC

TO
HASOG

RNP
1.00

DISTANCE
11.66

PAT

MAP

HAT

HMAS

<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>
TREE	194342.00N/1560030.00W	634	215	8	4B	2000					2700
TERRAIN	194248.00N/1560036.00W	501 (500)								AS1500	2000

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM
UJGEM

TO
HASOG

RNP
1.00

DISTANCE
12.03

PAT

MAP

HAT

HMAS

<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>
SHIP	193123.26N/1560353.27W	208	50	20	2C	1000				AT1492	2700
WATER	193123.26N/1560353.27W	0 (0)								AS1500	1500

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE

FROM

HASOG (IF/IAF)

TO

HALOA

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.66										
<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>
SHIP	193123.26N/1560353.27W	208	50	20	2C	500				AT992	1700
WATER	193730.00N/1560539.00W	0 (0)								AS1500	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

HALOA

TO

RW35

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
0.30	5.03		DA			328					
<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>
TREE	194348.00N/1560209.00W	169	215	8	4B	161				AC8 MA35	373

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV

FROM

HALOA

TO

RW35

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
0.30	5.03		RW35		415						
<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>
SHIP	193902.98N/1560312.43W	208	50	20	2C	250					460

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

HOLD-IN-LIEU OF PT

FROM

HASOG

TO

P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u>				
		P-5									
<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>
SHIP	193123.26N/1560353.27W	208	50	20	2C	1000				AT1492	2700
WATER	192945.00N/1560000.00W	0 (0)								AS1500	1500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

AMERY

RNP 0.30-1.00	DISTANCE	PAT	MAP		HAT				HMAS 212		
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
SHIP	194427.00N/1560351.00W	208	50	20	2C		ASC				5000
TREE	194633.00N/1560115.00W	247	215	8	4B	1000					1300
TERRAIN	194633.00N/1560115.00W	196 (200)								AS1500	1700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW35

TO

AMERY

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>		<u>HAT</u>		<u>HMAS</u> 360				
<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>
							ASC				5000
TREE	194633.00N/1560115.00W	247	215	8	4B	1000					1300
TERRAIN	194633.00N/1560115.00W	196 (200)								AS1500	1700

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											
SHIP	194427.00N/1560351.00W	1.30	471	208	50	20	2C	300			520
CATEGORY B											
SHIP	194427.00N/1560351.00W	1.81	471	208	50	20	2C	300			520
CATEGORY C											
SHIP	194427.00N/1560351.00W	2.84	471	208	50	20	2C	300			520
CATEGORY D											
SHIP	194427.00N/1560351.00W	3.70	551	208	50	20	2C	300		HAA	600
CATEGORY E											
SHIP	194427.00N/1560351.00W	4.63	551	208	50	20	2C	300		HAA	600

CIRCLING REMARKS:

MSA

CENTER	RADIUS
RW35	25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	192851.00N/1553636.00W	110	29.0	13622	215	8	4B	1000			14700

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

TAA NOT DEVELOPED PER ATC AND FPT REQUEST.

LPV NOT DEVELOPED DUE TO NO WAAS COVERAGE.

50' VEGETATION, 60' SHIP, AND 208' SHIP USED TO MAINTAIN CONTINUITY WITH PREVIOUS PROCEDURE.

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

KAILUA-KONA TOWER, HNL ARTCC, HNL FSS

WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS
ASOS	KOA/PHKO	24	KOA/PHKO	0	Y	0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

WX REMARKS:

NO SUITABLE BACK UP ALTIMETER AVAILABLE.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW17 - MALSR (PCL), HIRL (PCL), PAPI-4L		PIR-G	
RW35 - HIRL (PCL), PAPI-4L		PIR-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
3.00	39.0	59.8			3.00	59.8

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
+18C	+54C	+18C	+14.9C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2019-2023).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 1420 HIGH TEMP 1659.

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:



PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

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	3.13
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	004.81
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	100
DISTANCE FROM	THLD	TO 1500FT POINT	4.83
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.95
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	004.81
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	100

THRESHOLD COORDINATES (IF STR-IN)	194404.74N/1560245.59W
ARP COORDINATES	194439.31N/1560242.52W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 17 DISTANCE 0.58 NM
FAF COORDINATES	193902.98N/1560312.43W
FIX NAME COORDINATES	

REMARKS

NO ADDITIONAL AIRSPACE REQUIRED.

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
DANIEL WESTON	AJV-A422	08/14/2024	AERONAUTICAL INFORMATION SPECIALIST

