

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 ID</u> KHRF	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> HAMILTON	<u>STATE</u> MT		
<u>AIRPORT ELEVATION</u> 3636	<u>TDZE</u>	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>	<u>MAG VAR</u> 13E	<u>EPOCH YEAR</u> 2025
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> CONCURRENT WITH KHRF RNAV (GPS) RWY 17, ORIG	<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>
WEDAK	IAF	OBLIE		TF	FB	1.00	319.45	5.45	9900
OBLIE		GARPE		TF	FB	1.00	319.40	5.46	7800
GARPE	IF	ECENE		TF	FB	1.00	359.74	3.14	7300
ECENE		DIGEY		TF	FB	1.00	359.75	3.14	6800
DIGEY	FAF	YOGIN/3.12 NM TO BOPSE		TF	FB	0.30	004.42	3.12	
YOGIN		BOPSE	MAP	TF	FO	0.30	004.42	3.12	
BOPSE	MAP	4036 MSL		CA			004.42		
4036 MSL		ACAFI		DF	FB	1.00			
ACAFI		ILUGE		TF	FB	1.00	353.84	7.39	
ILUGE		MEXUE		TF	FB	1.00	008.24	12.14	
MEXUE		MSO VOR/DME		TF	FO	1.00	332.20	14.41	11200

MISSED APPROACH

MAP:
BOPSE

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 11200 DIRECT ACAFI AND ON TRACK 353.84 TO ILUGE AND TRACK 008.24 TO MEXUE AND TRACK 332.20 TO MISSOULA VOR/DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



AIRPORT ID
KHRF

PROCEDURE NAME
RNAV (GPS)-A

ORIGINAL/AMENDMENT
ORIG

CITY
HAMILTON

STATE
MT

COORDINATED WITH:

A4A ☐ ALPA ☐ AOPA ☒ APA ☐ HAI ☐ NBAA ☒ OTHER: ZLC, GEG APP CON, AMGR

FLIGHT CHECKED BY
PENDING

Digitally signed by
DONALD H LANIER
Jul 09, 2021

OFFICE
FICO

DATE

DEVELOPED BY
KELLY DEAN

Digitally signed by
KELLY D DEAN
Jun 09, 2021

OFFICE
AJV-A431

DATE
05/05/2021

APPROVED BY
LONNIE EVERHART

Digitally signed by
DONALD H LANIER
Jul 09, 2021

OFFICE
AJV-A430

DATE

TITLE
MANAGER



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

<u>AIRPORT ID</u> KHRF	<u>PROCEDURE NAME</u> RNAV (GPS)-A	<u>AMDT NO.</u> ORIG	<u>CITY</u> HAMILTON	<u>STATE</u> MT	<u>AIRPORT ELEVATION</u> 3636	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM
WEDAK

TO
OBLIE

<u>RNP</u>	<u>DISTANCE</u> 5.45	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					<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	455157.00N/1140715.00W	7632	164	98	4E	1000				PR370 AT898	9900
												2.TERRAIN	455224.00N/1140733.00W	6955 (7000)								AS1500	8500

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL: STEPDOWN

FROM
OBLIE

TO
GARPE

<u>RNP</u>	<u>DISTANCE</u> 5.46	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>					<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	455936.00N/1140639.00W	5506	164	98	4E	1000				AT1294	7800
												4.TERRAIN	455936.00N/1140639.00W	5305 (5300)								AS1500	6800

COMPUTATIONS

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

SEGMENT REMARKS:



INTERMEDIATE

FROM
GARPE

TO
ECENE

RNP	DISTANCE 3.14	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	460500.00N/1140842.00W		5558	164	98	4E	500				PR320 AT922	7300
6.TERRAIN	460500.00N/1140842.00W		5357 (5400)								AS1500	6900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM
ECENE

TO
DIGEY

RNP	DISTANCE 3.14	PAT	MAP	HAT			HMAS					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
5.AAO	460500.00N/1140842.00W		5558	164	98	4E	500				PR320 AT422	6800
7.TERRAIN	460651.00N/1140821.00W		5134 (5100)								AS1500	6600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:



FINAL: LNAV

FROM

DIGEY

TO

YOGIN/3.12 NM TO BOPSE

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	3.12											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
8.AAO	461007.66N/1140856.32W		4199	50	20	2C	250				PR200 DG719 XL12	5380

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	IR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM

YOGIN

TO

BOPSE

<u>RNP</u>	<u>DISTANCE</u> 3.12	<u>PAT</u>	<u>MAP</u> BOPSE	<u>HAT</u>			<u>HMAS</u>					
<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>
9.TREE (30-069500)	461339.41N/1140727.43W		3881	20	3	1A	250					4140

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	IR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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SEGMENT REMARKS:



MISSED APPROACH : LNAV

FROM
BOPSE

TO
MSO VOR/DME

RNP	DISTANCE	PAT	MAP	HAT			HMAS 4140					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				11200
10.TOWER (30-020632)	464808.72N/1135824.30W		6313	500	125	5E	1000				PR350	7700
11.TERRAIN	464809.00N/1135824.00W		6017 (6000)								AS1500	7500

COMPUTATIONS

ALT	KIAS	KTAS	HAA	VKTW	TR	BA	DTA	COURSE CHANGE	DVEB	VEB OCS	RF CENTER FIX/DISTANCE
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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											
12.TREE	461345.08N/1140641.35W	1.36	604	3929	50	20	2C	300			4240
CATEGORY B											
13.TREE	461310.40N/1140631.18W	1.94	624	3949	50	20	2C	300			4260

CIRCLING REMARKS:

MSA

CENTER	RADIUS
ARP KHRF	25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	AAO	455327.00N/1141745.00W	185	23.1	10216	164	98	4E	1000			11300

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
GEG APP CON, ZLC ARTCC

WX SERVICE AWOS-3P	LOCATION KHRF	HRS OPERATION 24	ALTIMETER SOURCE KHRF	DISTANCE 0	SERVICE-A Y	ADJUSTMENTS 0
BACK-UP WX SERVICE	LOCATION	HRS OPERATION	ALTIMETER SOURCE	DISTANCE	SERVICE-A	ADJUSTMENTS

WX REMARKS:
PER FPT - NO BACKUP ALTIMETER SOURCE.

PRIMARY NAVAID	MONITOR POINT	HRS OPERATION	CAT
APPROACH AND RUNWAY LIGHTING SYSTEM		RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW16 - MIRL (PCL), PAPI-2L (PCL)		BSC-G	
RW34 - MIRL (PCL), PAPI-2L (PCL)		BSC-G	
RW17 - MIRL (PCL), PAPI-2L (PCL)		NPI-G	
RW35 - MIRL (PCL), PAPI-2L (PCL)		NPI-G	

GLIDESLOPE ANGLE	ELEV RWY THRESHOLD	TCH	ELEV GS ANTENNA	DISTANCE FROM RWY	VGSI ANGLE	TCH
FINAL APPROACH COURSE AIMING						
RUNWAY THRESHOLD	☐	0 FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE			
ON CENTERLINE	☐	747 FT L OF CENTERLINE				

CRITICAL TEMPERATURES

CRITICAL LOW	CRITICAL HIGH	ACT	APT ISA
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CRITICAL TEMPERATURE REMARKS:



"VISUAL PORTION OF FINAL" PENETRATIONS

Final Type	CIRCLING RWY 35
20:1	
3756 TREE (30-069855) 461438.04N/1140725.89W (21.6)	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - CIRCLING ONLY PROCEDURE NOT ALIGNED WITH RUNWAY.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

PROCEDURE DESIGN MANDATED BY FPT.

MISSED APPROACH PROCEEDS TO MSO VDME DUE TO CLIMB IN HOLD (CIH) AT MEXUE CREATES EXCESSIVE MINIMUM INCREASE TO ELIMINATE CIH PENETRATION OBSTACLE.

CIRCLING RESTRICTION TO RWY 16/34 MANDATED BY FPT DUE TO POSSIBLE DELAY REMOVING RWY 16/34. NOTE TO BE REMOVED BY P-NOTAM WHEN RWY 16/34 CHANGES COMPLETE.

NOTIONAL TREES ADDED FOR CIRCLING OBSTACLES DUE TO OBSTACLES LOCATED OUTSIDE SURVEYED AREA IAW CRITERIA. SURVEYED OBSTACLES DO APPEAR AROUND AREA. HOWEVER, TO AVOID CONFUSION AND APPLY WORST CASE, 50 FT TREES ADDED ON CONTOUR LINES.

CURRENT DEVELOPMENT DOES NOT PROVIDE FOR PARALLEL TAXIWAY FOR THE FULL LENGTH OF RWY 17/35. PROPOSED FURTURE CONSTRUCTION IS PLANNED WHEN RWY 16/34 CHANGES ARE COMPLETED.

ORDER 8260.3 CHAPTER 2 APPLIED TO 4643 AAO 460827.00N/1140827.00W.
ORDER 8260.3 CHAPTER 2 APPLIED TO 3909 TREE 461139.64N/1140814.91W.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



AIRPORT ID KHRF	PROCEDURE NAME RNAV (GPS)-A	AMDT NO. ORIG	CITY HAMILTON	STATE MT	AIRPORT ELEVATION 3636	FACILITY RNAV
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	MAP	TO 1000FT POINT	0.90			
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20			
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	017.42			
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	4200			
DISTANCE FROM	MAP	TO 1500FT POINT	4.03			
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.20			
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	017.42			
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	4200			
THRESHOLD COORDINATES (IF STR-IN)						
ARP COORDINATES	461525.80N/1140725.84W					
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 35 DISTANCE 0.43 NM					
FAF COORDINATES	460905.52N/1141017.86W					
FIX NAME COORDINATES	MAP BOPSE: 461502.31N/1140736.48W					
REMARKS						
RWY 16/34 NOT CONSIDERED DUE TO RUNWAY BEING DISMANTLED STARTING 10/7/2021.						

QUALITY
20
CHECKED

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

Electronic Version

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PART E: PREPARED BY

<u>NAME</u> KELLY DEAN	<u>OFFICE</u> AJV-A431	<u>DATE</u> 05/05/2021	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
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