

**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> KHVN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> NEW HAVEN	<u>STATE</u> CT		
<u>AIRPORT ELEVATION</u> 13	<u>TDZE</u> 10	<u>SUPERSEDED</u> RNAV (GPS) RWY 20	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 11/10/2016	<u>MAG VAR</u> 13W	<u>EPOCH YEAR</u> 1980
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 8 SEPTEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> 9/8/2022	<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>
SOARS		SORRY		TF	FB	1.00	112.73	11.63	3000
SORRY	IAF	GUUMP		TF	FB	1.00	123.32	6.81	2600
HFD VOR/DME	IAF	GUUMP		TF	FB	1.00	243.81	19.12	2600
GUUMP	IF	ELLVS		TF	FB	1.00	195.92	5.68	1700
ELLVS	FAF	YERNU/2.29 NM TO RW20		TF	FB	0.30	195.91	2.10	
YERNU/2.29 NM TO RW20		RW20	MAP	TF	FO	0.30	195.91	2.29	
RW20	MAP	413 MSL		CA			195.91		
413 MSL		PEPER		DF	FO	1.00			1800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1800 DIRECT PEPER AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. PROFILE STARTS AT GUUMP

3. FAF: 195.91FAF: ELLVSDIST FAF TO MAP: 4.39DIST FAF TO THLD: 4.39

4. MIN ALT: GUUMP 2600, ELLVS 1700, YERNU/2.29 NM TO RW20 920

5. DIST TO THLD FROM OM:MM:IM:150 HAT:420 HAT: 0.97GS ANT:

6. MIN GP INCPT: 1700GP ALT AT PFAF : ELLVS 1700OM:MM:IM:

7. GP ANGLE: 3.5034:1: IS NOT CLEAR20:1: IS CLEARTCH: 55.0

8. MSA FROM: RW20 3100

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SOARS ON V419 SOUTHWEST BOUND AND V91-487 NORTHBOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON HFD VOR/DME ON AIRWAY RADIALS 211 CW 282.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SORRY ON V3-99 WESTBOUND AND V34 NORTHWEST BOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON
HOLD S, RT, 015.91 INBOUND.
CHART FAS OBST: 282 TREE (09-020298) 411654N/0725331W.
CHART VDP AT 1.27 NM TO RW20.
WAAS CHANNEL # 45937
REFERENCE PATH ID: W20A
LTP HAE: -26.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 900-2 3/4, 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
LPV DA	430	1 1/8	420	430	1 1/8	420	430	1 1/8	420	430	1 1/8	420			
LNAV/VNAV DA	522	1 3/8	512	522	1 3/8	512	522	1 3/8	512	522	1 3/8	512			
LNAV MDA	540	1	530	540	1	530	540	1 1/2	530	540	1 1/2	530			
CIRCLING	720	1	707	720	1	707	780	2 1/4	767	880	2 3/4	867			



CHANGES - REASONS

1. AIRPORT ELEVATION CHANGED FROM 12 TO 13 - NEW SURVEY.
2. CHANGED DISTANCE FROM 5 TO 5.68 GUUMP TO ELLVS, FROM 2.43 TO 2.10 ELLVS TO YERNU, AND FROM 2.70 TO 2.29 YERNU TO RW20 - REMOVED DISPLACED THRESHOLD.
3. CHANGED CA LEG ALTITUDE FROM 412 TO 413 - NEW TARGETS EVALUATION/ARP ELEV UPDATE.
4. DELETED "CHART NOTE: DME/DME RNP-0.3 NA" AND ADDED "RNP APCH - GPS" TO PBN REQUIREMENTS NOTE - IAW 8260.19I.
5. DELETED CHART NOTE RWY 14, 32 STRAIGHT-IN AND CIRCLING MINIMUMS NA AT NIGHT - RWY 14/32 CLOSED.
6. REMOVED CHART NOTE "THRESHOLD DISPLACED 353 FT" - NO LONGER DISPLACED PER AIRPORT AND FPT.
7. REMOVED "CHART PROFILE NOTE: VISUAL SEGMENT - OBSTACLES" FROM ADDITIONAL FLIGHT DATA - OBSTACLES CLEARED.
8. ADDED 20:1 IS CLEAR AND 34:1 IS NOT CLEAR TO PROFILE LINE 7 - IAW 8260.19I 8-6-7.
9. REMOVED LP LINES OF MINIMUM AND ADDED LPV AND LNAV/VNAV LINES OF MINIMUM - PER FPT, VGS PENETRATIONS ARE CLEARED.
10. CHANGED LNAV MINIMUMS FROM MDA 580/HAA 570 TO MDA 540/HAA 530, LNAV VISIBILITY CAT C/D FROM 1 5/8 SM TO 1 1/2 SM - NEW CONTROLLING OBSTACLE.
11. UPDATED CIRCLING CAT A/B FROM MDA 720/HAA 708 TO MDA 720/HAA 707, CAT C FROM MDA 780/HAA 768 TO MDA 780/HAA 767, AND CAT D FROM MDA 880/HAA 868 TO MDA 880/HAA 867 - AIRPORT ELEV CHANGE/NEW SURVEY.
12. FAS OBSTACLE IN FLIGHT DATA CHANGED FROM "CHART FAS OBST: 319 TREE 411655N/0725333W" TO "CHART FAS OBST: 282 TREE (09-020298) 411654N/0725331W" - NEW TARGETS EVALUATION, UPDATED AIRPORT SURVEY.
13. UPDATED AND MOVED BACKUP ALTIMETER NOTES TO 8260-9 GENERAL REMARKS - IAW 8260.19I.
14. CHANGED GP ANGLE AND TCH FROM 3.00/57.4 TO 3.50/55 - APT RWY THLD PROJECT/AIRNAV DATA UPDATED.
15. CHANGED DISTANCE FROM FAF TO MAP AND FAF TO THLD FROM 5.13 TO 4.39 - FAF MOVED.
16. CHART VDP TO RWY 20 CHANGED FROM 1.2 TO 1.27 NM - UPDATED TARGETS EVAL/NEW AIRPORT SURVEY.
17. CRC REMAINDER CHANGED FROM B91C76F1 TO 5CE13F4F - LTP/FTP AND FPAP LAT/LON CHANGED.

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZBW, NY TRACON, BOS FPO, HVN ATCT, APT MGR, ATA

FLIGHT CHECKED BY

PENDING

OFFICE

DATE Digitally signed by
CASIMIR L TABAKA
Jul 22, 2022

DEVELOPED BY
LORRI DOWNEY

Digitally signed by
LORRI F DOWNEY

OFFICE
AJV-A432

DATE
04/05/2022

APPROVED BY
CASIMIR TABAKA

May 19, 2022

OFFICE
AJV-A430

DATE

TITLE
MANAGER

Digitally signed by
CASIMIR L TABAKA
Jun 01, 2022

QUALITY
10
CHECKED

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHAVN
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	411617.0380N
LTP/FTP LONGITUDE	0725313.9640W
LTP/FTP ELLIPSOIDAL HEIGHT	-00261
FPAP LATITUDE	411448.0040N
FPAP LONGITUDE	0725319.9585W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.50
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1040
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	5CE13F4F

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00038
FPAP ORTHOMETRIC HEIGHT	+00038

QUALITY
10
CHECKED