# 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.

**PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE AIRPORT ID** RNAV (GPS) RWY 27 **HAGERSTOWN** 2 MD **KHGR AIRPORT ELEVATION TDZE SUPERSEDED ORIGINAL/AMENDMENT DATED MAG VAR EPOCH YEAR** 703 701 RNAV (GPS) RWY 27 06/22/2017 1A 11W 2015

FACILITY COORDINATES OF FACILITIES ACTUAL EFFECTIVE DATE REQUIRED EFFECTIVE DATE CANCEL/SUSPEND

RNAV 5 OCTOBER 2023 10/5/2023

#### **TERMINAL ROUTES**

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	LEG TYPE	FO/FB	RNP	<u>COURSE</u>	DISTANCE	ALTITUDE
ZUPUX	IF/IAF	NOLIN		TF	FB	1.00	266.60	7.00	2900
NOLIN	FAF	WORUL/1.90 NM TO RW27		TF	FB	0.30	271.60	4.88	
WORUL/1.90 NM TO RW27		RW27	MAP	TF	FO	0.30	271.60	1.90	
RW27	MAP	901 MSL		CA			271.60		
901 MSL		COVUK		DF	FO	1.00			3600

#### MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA LNAV: RW27

# **MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3600 DIRECT COVUK AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3600.

#### **ALTERNATE MISSED APPROACH INSTRUCTIONS:**

OVALITY 10 CHECKED AIRPORT ID<br/>KHGRPROCEDURE NAME<br/>RNAV (GPS) RWY 27ORIGINAL/AMENDMENT<br/>2CITY<br/>HAGERSTOWNSTATE<br/>MD

PROFILE:

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

2. HOLD E ZUPUX, RT, 266.60 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.

**3. FAC:** 271.60 **FAF:** NOLIN **DIST FAF TO MAP:** 6.78 **DIST FAF TO THLD:** 6.78

**4. MIN ALT:** ZUPUX 4000, NOLIN 2900, WORUL/1.90 NM TO RW27 1340

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.50 GS ANT:

**6. MIN GP INCPT:** 2900 **GP ALT AT PFAF**: NOLIN 2900 **OM**: **MM**: **IM**:

**7. GP ANGLE**: 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 55.1

**8. MSA FROM:** RW27 3700

# PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

## NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -13°C OR ABOVE 54°C.

#### **ADDITIONAL FLIGHT DATA:**

HOLD W, RT, 091.33 INBOUND.
CHART FAS OBST: 838 TREE (24-023213) 394313N/0774314W.
1039 AAO 394319N/0773345W.
CHART P-40, R-4009.
CHART VDP AT 1.00 NM TO RW27.
WAAS CHANNEL # 86911

REFERENCE PATH ID: W27A CHART CIRCLING ICON. LTP HAE: 174.7 M

**MINIMUMS:** 

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

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

CATEGORY:	Α		В		С			D			E				
FINAL TYPE	DA/MDA	<u>VIS</u>	HAT/HAA	<u>DA/MDA</u>	<u>VIS</u>	HAT/HAA	<u>DA/MDA</u>	<u>VIS</u>	HAT/HAA	DA/MDA	<u>VIS</u>	HAT/HAA	DA/MDA	<u>VIS</u>	HAT/HAA
LPV DA	901	1/2	200	901	1/2	200	901	1/2	200	901	1/2	200			
LNAV/VNAV DA	986	1/2	285	986	1/2	285	986	1/2	285	986	1/2	285		ONALIZ	
LNAV MDA	1060	1/2	359	1060	1/2	359	1060	5/8	359	1060	5/8	359		CHECKED 10	
CIRCLING	1160	1	457	1160	1	457	1200	1 1/2	497	1300	2	597		2011	

AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	<u>CITY</u>	<u>STATE</u>
KHGR	RNAV (GPS) RWY 27	2	HAGERSTOWN	MD

# **CHANGES - REASONS**

- 1. TERMINAL ROUTES: REMOVED THS VORTAC FEEDER FROM PROCEDURE THS VOR MON NATL PROGRAM.
- 2. TERMINAL ROUTES: CHANGED CA ALTITUDE FROM 886 MSL TO 901 MSL BASED ON LPV MINIMA.
- 3. CHANGED PRIMARY MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 3600 DIRECT COVUK AND HOLD" TO "CLIMB TO 3600 DIRECT COVUK AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3600"
  -NEW TERRAIN EVALUATION.
- 4. PROFILE LINE 2: ADDED MAX HOLDING 6000 REQUIRED IN CURRENT CRITERIA, IAW 8260.19I, 8-6-7, B(2).
- 5. PROFILE LINE 4: REMOVED "\*" FROM "ZUPUX 4000, NOLIN 2900, WORUL/1.90 NM TO RW27 1340" NO LONGER REQUIRED PER CURRENT CRITERIA.
- 6. PROFILE LINE 5: ADDED "200 HAT: 0.50" PER 8260.19I, PARA 8-6-7E(3).
- 7. PROFILE LINE 7: ADDED 20:1 IS CLEAR NO PENETRATIONS EXIST.
- 8. REMOVED CHART NOTE "DME/DME RNP-0.3 NA" AND ADDED "RNP APCH GPS" TO PBN REQUIREMENTS NOTE PER 8260.19I PARA 8-6-8 B(2).
- 9. CHANGED CHART NOTE FROM "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -14°C (7°F) OR ABOVE 54°C (130°F)" TO "FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -13°C OR ABOVE 54°C" FAHRENHEIT VALUES NO LONGER REQUIRED, NEW EVALUATION WITH UPDATED CRITICAL TEMPERATURES.
- 10. MOVED BACKUP ALTIMETER NOTE AND "CHART NOTE: BARO-VNAV AND VDP NA WHEN USING MARTINSBURG ALTIMETER SETTING" FROM 8260-3 TO 8260-9 PART C: GENERAL REMARKS AS CONTINGENCY NOTE 8260.19I, 8-6-9F(3).10.
- 11. REMOVED CHART NOTE "RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" NO PENETRATIONS EXIST.
- 12. REMOVED "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT THS VORTAC ON AIRWAY RADIALS 068 CW 170" THS VORTAC REMOVED FROM PROCEDURE, THS VOR MON NATL PROGRAM.
- 13. REMOVED "\*LNAV ONLY" FROM NOTES NO LONGER REQUIRED BY CURRENT CRITERIA.
- 14. ADDITIONAL FLIGHT DATA: CHANGED CHART FAS OBST FROM "839 TREE 394310N/0774247W" TO "838 TREE (24-023213) 394313N/0774314W" NEW CONTROLLING OBSTACLE.
- 15. ADDITIONAL FLIGHT DATA: CHANGED 7:1 OBSTACLE FROM "1020 AAO 394314N/0773349W" TO "1039 AAO 394319N/0773345W" NEW TERRAIN EVALUATON.
- 16. ADDITIONAL FLIGHT DATA: UPDATED FROM "CHART VDP AT 1.13 NM TO RW27\*" TO "CHART VDP AT 1.00 NM TO RW27" UPDATED CALCULATION BASED OFF NEW MINIMUMS.
- 17. CHANGED LNAV/VNAV ALL CATS DA/HAT FROM 1035/334 TO 986/285 AND ALL CATS VISIBILITY FROM 5/8 SM TO 1/2 SM NEW CONTROLLING OBSTACLE AND PER UPDATED 8260.3E VIS TABLES.
- 18. CHANGED LNAV ALL CATS MDA/HAA FROM 1100/399 TO 1060/359 AND CATS C AND D VISIBILITY FROM 3/4 SM TO 5/8 SM NEW CONTROLLING OBSTACLE AND PER UPDATED 8260.3E VIS TABLES.
- 19. CHANGED CIRCLING CAT D MDA/HAA FROM 1320/617 TO 1300/597 NEW CONTROLLING OBSTACLE.
- 20. CRC REMAINDER CHANGED FROM "B667C376" TO "E31BB1CB" FPAP COORDINATES CHANGED FROM "394221.7500N/0774443.6900W" TO "394221.7615N/0774443.6875W".
- 21. CHANGES FROM P-NOTAMS FOR AMDT 1A INCORPORATED INTO FORM REQUIRED IAW 8260.19I PARA 8-3-4C(3).
- 22. DELETED CHART NOTE: "CIRCLING TO RWY 20 NA AT NIGHT" 20:1 PENETRATION IS LIT.

7/24/2023: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 3/3/2023. ADDED 10/5/2023 TO REQUIRED EFFECTIVE DATE.

COORDINATED WITH:

A4A X ALF	PAX AOPAX	] APA 🗌 🛚 H	<u>hai</u>	OTHER: ZDC, KHGR A	ATCT, ARPT MGR, PC	OTOMAC TRACON, ATA	
FLIGHT CHECI PENDING	KED BY			Digitally signed by CASIMIR L TABAKA Jul 24, 2023	OFFICE	DATE	
DEVELOPED B CASIMIR L. TA	SY BAKA (SILVIA YOUNG	i)	•	signed by L TABAKA	OFFICE AJV-A432	<b>DATE</b> 03/03/2023	
APPROVED BY CASIMIR TABA	ΚΔ	Digitally signed by CASIMIR L TABAK Jun 21, 2023		1, 2023	<b>OFFICE</b> AJV-A432	DATE	TITLE MANAGER

ONALITY 10 CHECKED **FAS DATA BLOCK INFORMATION DATA DATA FIELD OPERATION TYPE** 0 SBAS SERVICE PROVIDER IDENTIFIER 0 AIRPORT IDENTIFIER **KHGR RUNWAY** RW27 APPROACH PERFORMANCE DESIGNATOR 0 **ROUTE INDICATOR** REFERENCE PATH DATA SELECTOR 0 REFERENCE PATH IDENTIFIER (APPROACH ID) W27A LTP/FTP LATITUDE 394236.4740N LTP/FTP LONGITUDE 0774249.8175W LTP/FTP ELLIPSOIDAL HEIGHT +01747 FPAP LATITUDE 394221.7615N **FPAP LONGITUDE** 0774443.6875W THRESHOLD CROSSING HEIGHT (TCH) 00055.1 F TCH UNITS SELECTOR (METERS OR FEET USED) **GLIDEPATH ANGLE (GPA)** 03.00 **COURSE WIDTH AT THRESHOLD** 106.75 **LENGTH OFFSET** 0616 HORIZONTAL ALERT LIMIT (HAL) 40.0 **VERTICAL ALERT LIMIT (VAL)** 35.0 **CRC REMAINDER** E31BB1CB ADDITIONAL PATH POINT RECORD INFORMATION ICAO CODE K6 LTP ORTHOMETRIC HEIGHT +02089

PROCEDURE NAME

RNAV (GPS) RWY 27

+02089

**AIRPORT ID** 

**KHGR** 

**FPAP ORTHOMETRIC HEIGHT** 

OVALITY 10 CHECKED

ORIGINAL/AMENDMENT

<u>CITY</u>

**HAGERSTOWN** 

**STATE** 

MD