

**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 HCA/PAHC	PROCEDURE NAME RNAV (GPS) RWY 20	ORIGINAL/AMENDMENT 1	CITY HOLY CROSS	STATE AK
AIRPORT ELEVATION 75	TDZE 75	SUPERSEDED RNAV (GPS) RWY 19	DATED 10/12/2017	MAG VAR 10E
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE	REQUIRED EFFECTIVE DATE ROUTINE	EPOCH YEAR 2025
			CANCEL/SUSPEND	

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 111/30 CW 291/30	NOPT	111/10 CW 291/10		4300
2. 111/10 CW 291/10		NUANC	IF/IAF	2700
3. 291/30 CW 021/30		291/13 CW 021/13		4800
4. 291/13 CW 021/13		UTIDY	IAF	3400
5. 021/30 CW 111/30		021/15 CW 111/15		4000
6. 021/15 CW 111/15		AVOXY	IAF	2700

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
UTIDY	IAF	NUANC	NOPT	TF	FB	1.00	291.47	7.00	2700
AVOXY	IAF	NUANC	NOPT	TF	FB	1.00	111.09	7.00	2700
NUANC	IF/IAF	HOKRI		TF	FB	1.00	201.28	3.21	2400
HOKRI		SUMJE		TF	FB	1.00	201.22	2.72	1900
SUMJE	FAF	UHIGO/2.66 NM TO RW20		TF	FB	0.30	201.19	2.95	
UHIGO/2.66 NM TO RW20		RW20	MAP	TF	FO	0.30	201.19	2.66	
RW20	MAP	420 MSL		CA			201.19		
420 MSL		GODHY		DF	FB	1.00			
GODHY		NUANC		TF	FO	1.00	350.95	6.71	2700



MISSED APPROACH

MAP:

LP: RW20
LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

CLIMBING LEFT TURN TO 2700 DIRECT GODHY AND ON TRACK 350.95 TO NUANC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. HOLD N NUANC, RT, 201.28	INBOUND, 2700 FT. IN LIEU OF PT (IAF), MAX 8000.				
3. FAC: 201.19	FAF: SUMJE		DIST FAF TO MAP: 5.61	DIST FAF TO THLD: 5.61	
4. MIN ALT: NUANC 2700, HOKRI 2400, SUMJE 1900, UHIGO/2.66 NM TO RW20 960					
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:					

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA W OF RWY 2-20.
CHART NOTE: RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANVIK ALTIMETER SETTING AND INCREASE ALL MDAS 120 FEET, LNAV ALL VISIBILITIES 1/2 SM, LP VISIBILITIES CATS C AND D 3/8 SM, AND CIRCLING VISIBILITIES CATS B, C, AND D 1/2 SM.
CHART NOTE: STRAIGHT-IN AND CIRCLING RWY 20 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

SUMJE TO RW20 3.00/40

CHART FAS OBST: 689 TOWER (02-020032) 621204N/1594654W, 160 TREE (02-131215) 621302N/1594401W.
WAAS CHANNEL # 60948
REFERENCE PATH ID: W20A
LTP HAE: 32.4 M



MINIMUMS:

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

ALTERNATE: NA CAT A, B 900-2, CAT C 900-2 1/2, CAT D 900-2 3/4, NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
	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
LP MDA	420	1	345	420	1	345	420	1	345	420	1	345			
LNAV MDA	940	1	865	940	1 1/4	865	940	2 1/2	865	940	2 1/2	865			
CIRCLING	940	1 1/4	865	940	1 1/4	865	940	2 1/2	865	940	2 3/4	865			



CHANGES - REASONS

1. TAA: REPLACED "103/30 CW 193/30 TO 103/10 CW 193/10" AND "193/30 CW 283/30 TO 193/10 CW 283/10" WITH "111/30 CW 291/30 TO 111/10 CW 291/10" AND CHANGED ALTITUDE FROM 4200/4700 RESPECTIVELY TO 4300; ADDED NOPT TO FIX TYPE- DUE TO MAGVAR CHANGE AND FPT.
2. TAA: CHANGED "103/10 CW 283/10 TO NUANC" TO "111/10 CW 291/10 TO NUANC" AND DECREASED ALTITUDE FROM 3400 TO 2700 - DUE TO MAGVAR CHANGE AND FPT.
3. TAA: CHANGED "283/30 CW 013/30 TO 283/15 CW 013/15" TO "291/30 CW 021/30 TO 291/13 CW 021/13" AND INCREASED ALTITUDE FROM 4700 TO 4800 - DUE TO MAGVAR CHANGE AND FPT.
4. TAA: CHANGED "283/15 CW 013/15 TO WEJYY" TO "291/13 CW 021/13 TO UTIDY" AND DECREASED ALTITUDE FROM 4100 TO 3400 - DUE TO MAGVAR CHANGE AND FPT.
5. TAA: CHANGED "013/30 CW 103/30 TO 013/15 CW 103/15" TO "021/30 CW 111/30 TO 021/15 CW 111/15" - DUE TO MAGVAR CHANGE AND FPT.
6. TAA: CHANGED "013/15 CW 103/15 TO IBEBB" TO "021/15 CW 111/15 TO AVOXY" AND DECREASED ALTITUDE FROM 3200 TO 2700 - DUE TO MAGVAR CHANGE AND FPT.
7. TERMINAL ROUTES: REPLACED INITIAL LEG "WEJYY TO NUANC" WITH "UTIDY TO NUANC" AND CHANGED COURSE AND DISTANCE FROM "283.41 AND 5.00" TO "291.47 AND 7.00" - DUE TO MAGVAR CHANGE AND FPT.
8. TERMINAL ROUTES: REPLACED INITIAL LEG "IBEBB TO NUANC" WITH "AVOXY TO NUANC" AND CHANGED COURSE AND DISTANCE FROM "103.14 AND 5.00" TO "111.09 AND 7.00" - DUE TO MAGVAR CHANGE AND FPT.
9. TERMINAL ROUTES: CHANGED INITIAL/INTERMEDIATE LEG NUANC TO HOKRI COURSE AND DISTANCE FROM "193.28 AND 3.00" TO "201.28 AND 3.21". HOKRI MOVED 1275 FEET SOUTH FROM 621851.56N/1593641.54W TO 621840.82N/1593655.53W - DUE TO MAGVAR CHANGE AND FPT.
10. TERMINAL ROUTES: CHANGED INTERMEDIATE STEPDOWN LEG HOKRI TO SUMJE COURSE AND DISTANCE FROM "193.23 AND 3.00" TO "201.22 AND 2.72". HOKRI MOVED 1275 FEET SOUTH FROM 621851.56N/1593641.54W TO 621840.82N/1593655.53W - DUE TO MAGVAR CHANGE AND FPT.
11. TERMINAL ROUTES: REPLACED FINAL LEG "SUMJE TO NEYBI" WITH FINAL STEPDOWN LEG "SUMJE TO UHIGO/2.66 NM TO RW20" AND CHANGED COURSE AND DISTANCE FROM "193.18 AND 5.29" TO "201.19 AND 2.95" - DUE TO MAGVAR CHANGE AND FPT.
12. TERMINAL ROUTES: ADDED NEW FINAL LEG "UHIGO/2.66 NM TO RW20 TO RWY20". MAP CHANGED FROM "NEYBI" TO "RWY20" AND COURSE AND DISTANCE FROM "193.18 AND 5.29" TO "201.19 AND 2.66" - DUE TO MAGVAR CHANGE AND FPT.
13. TERMINAL ROUTES: CHANGED MISSED APPROACH CA LEG MISSED APPROACH POINT, ALTITUDE AND COURSE FROM "NEYBI, 475 MSL AND 193.18" TO "RW20, 475 MSL AND 201.19" - DUE TO MAGVAR CHANGE AND FPT.
14. TERMINAL ROUTES: CHANGED MISSED APPROACH DF LEG FROM: "475 MSL TO NUANC" TO "475 MSL TO GODHY". GODHY ADDED - DUE TO FPT.
15. TERMINAL ROUTES: ADDED MISSED APPROACH TF LEG "GODHY TO NUANC" WITH COURSE, DISTANCE AND ALTITUDE OF "350.95, 6.71 AND 2700" - DUE TO FPT.
16. MISSED APPROACH: CHANGED MAP FROM "LNAV: NEYBI" TO "LP: RW20 AND LNAV: RW20" - DUE TO FPT.
17. MISSED APPROACH: CHANGED MISSED APPROACH INSTRUCTIONS FROM: "CLIMBING LEFT TURN TO 2700 DIRECT NUANC AND HOLD" TO "CLIMBING LEFT TURN TO 2700 DIRECT GODHY AND ON TRACK 350.95 TO NUANC AND HOLD". GODHY ADDED - DUE TO FPT.
18. PROFILE LINE 2: UPDATED FROM "HOLD N NUANC, RT, 193.28 INBOUND, 2700 FT, IN LIEU OF PT (IAF), MAX 14000" TO "HOLD N NUANC, RT, 201.28 INBOUND, 2700 FT, IN LIEU OF PT (IAF), MAX 8000" - PER 8260.19J, PARA 8-6-7. B (2) AND FPT.
19. PROFILE LINE 3: UPDATED FAC FROM "193.18" TO "201.19" AND DIST FAF TO MAP AND DIST FAF TO THLD FROM "5.29" AND "5.53" TO "5.61" AND "5.61", RESPECTIVELY. FIX HOKRI RELOCATED FROM 621851.56N/1593641.54W TO 621840.82N/1593655.53W - DUE TO FPT AND FAF MOVE TO MAINTAIN 3.00 GPA.
20. PROFILE LINE 4: UPDATED MIN ALT FROM "NUANC 2700, HOKRI 2400, SUMJE 1900" TO "NUANC 2700, HOKRI 2400, SUMJE 1900, UHIGO/2.66 NM TO RW20 960". FIX UHIGO/2.66 NM TO RW20 ADDED AS FINAL STEPDOWN FIX AND FIX HOKRI RELOCATED - PER FPT AND FAF MOVED TO MAINTAIN 3.00 GPA.
21. PROFILE LINE 7: ADDED "IS NOT CLEAR" TO 20:1. BOTH 20:1 AND 34:1 PENETRATIONS PRESENT - PER 8260.19J, PARA 8-6-7. G. (3).
22. PBN REQUIREMENTS NOTE: REPLACED "DME/DME RNP-0.3 NA" WITH "RNP APCH-GPS" - PER 8260.19J, PARA 8-6-8 D.
23. UPDATED CHART NOTE FROM: PROCEDURE NA AT NIGHT TO: STRAIGHT-IN AND CIRCLING RWY 20 NA AT NIGHT. - 8260.19J 8-6-12 O(2)(G); 20:1 PENETRATIONS.
24. NOTES: UPDATED CHART NOTE: "RWY 1, 19 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" TO "RWY 20 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED" DUE TO MAGVAR CHANGE.
25. NOTES: REPLACED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANVIK ALTIMETER SETTING AND INCREASE ALL MDAS 120 FEET, AND INCREASE VISIBILITY CAT B/C ¼ SM AND LNAV CAT D ½ SM" WITH "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANVIK ALTIMETER SETTING AND INCREASE ALL MDAS 120 FEET, LNAV ALL VISIBILITIES 1/2 SM, LP VISIBILITIES CATS C AND D 3/8 SM AND CIRCLING VISIBILITIES CATS B, C, AND D 1/2 SM" - DUE TO NEW CALCULATION.
26. NOTES: UPDATED "CHART NOTE: CIRCLING NA WEST OF RWY 1-19" TO "CHART NOTE: CIRCLING NA W OF RWY 2-20" - DUE TO MAGVAR CHANGE.
- 27.
28. ADDITIONAL FLIGHT DATA: UPDATED CHART FAS OBST FROM "706 TOWER 621205N/1594654W" TO "689 TOWER (02-020032) 621204N/1594654W, 160 TREE (02-131215) 621204N/1594401W"- NEW CONTROLLING OBSTACLES.
29. ADDITIONAL FLIGHT DATA: REMOVED "CHART PROFILE NOTE: VISUAL SEGMENTS - OBSTACLES" - PER 8260.19J, PARA 8-6-11. O. (2).
30. ADDITIONAL FLIGHT DATA: ADDED (VDA)/TCH "SUMJE TO RW20 3.00/40" - PER 8260.19J, PARA 8-6-11. O. (1).
31. ADDITIONAL FLIGHT DATA: ADDED "WAAS CHANNEL # 56248" - PER 8260.19J, PARA 8-6-11. J. (1).
32. ADDITIONAL FLIGHT DATA: ADDED "LTP HAE: 32.4 M" - PER 8260.19J, PARA 8-6-11. J. (3).
33. MINIMUMS: CHANGED ALTERNATE MINIMUMS FROM "CAT A, B 1000-2, CAT C 1000-2 ¾, CAT D 1000-3, NA WHEN LOCAL WEATHER NOT AVAILABLE" TO "CAT A, B 900-2, CAT C 900-2 ½, CAT D 900-2 ¾, NA WHEN LOCAL WEATHER NOT AVAILABLE" - LOWERING OF CIRCLING MINIMUMS.
34. MINIMUMS: ADDED LP MINIMUMS PER FPT AND 8260.19J, PARA 8-6-12. I. (3).
35. MINIMUMS: REDUCED LNAV MINIMUMS MDA/VIS/HAT CATS A FROM "1020/1 1/4/945" TO "940/1/865", CAT B FROM 1020/1 1/4/945 TO "940/1 1/4/865", CAT C 1020/2 3/4/945 TO "940/2 1/2/865" AND CAT D FROM "1020/3/945" TO "940/2 1/2/865" - REDESIGN AND NEW OBSTACLES.
36. MINIMUMS: REDUCED CIRCLING MINIMUMS MDA/VIS/HAT CATS A AND B FROM "1020/1 1/4/945" TO "940/1 1/4/865", CAT C FROM "1020/2 3/4/945" TO "940/2 1/2/865" AND CAT D FROM "1020/3/945" TO "940/2 3/4/865" - REDESIGN AND NEW OBSTACLES.
37. FAS DATA ADDED - LP MINIMUMS ADDED.
38. ADDITIONAL FLIGHT DATA: ADDED: REFERENCE PATH IDENTIFIER W20A - 8260.19J APPENDIX K 4(I).

5/14/2024: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 3/15/2024.

1. WAAS CHANNEL # CHANGED FROM: 56248 TO: 60948.
2. CA ALTITUDE CHANGED FROM: 475 MSL TO: 420 MSL.



COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA

OTHER: ZAN, AMGR, ENA FSS, ATA

FLIGHT CHECKED BY
JAMES DAVID ARNOLD

OFFICE
FIOG

DATE
05/13/2024

DEVELOPED BY
ROBERT G HAMILTON (STEVEN W. WASHKO)

OFFICE
AJV-A433

DATE
03/15/2024

APPROVED BY
ROBERT G HAMILTON

OFFICE
AJV-A433

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	PAHC
RUNWAY	RW20
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W20A
LTP/FTP LATITUDE	621134.7260N
LTP/FTP LONGITUDE	1594608.0620W
LTP/FTP ELLIPSOIDAL HEIGHT	+00324
FPAP LATITUDE	621018.6425N
FPAP LONGITUDE	1594746.1970W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	00.0

CRC REMAINDER 545AC7F6

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	PA
LTP ORTHOMETRIC HEIGHT	+00227
FPAP ORTHOMETRIC HEIGHT	+00227



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

<u>AIRPORT ID</u> HCA/PAHC	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 20	<u>AMDT NO.</u> 1	<u>CITY</u> HOLY CROSS	<u>STATE</u> AK	<u>AIRPORT ELEVATION</u> 75	<u>FACILITY</u> RNAV
-------------------------------	--	----------------------	---------------------------	--------------------	--------------------------------	-------------------------

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM 111/30 CW 291/30	TO 111/10 CW 291/10
---------------------------------	-------------------------------

RNP DISTANCE PAT MAP HAT HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	620530.00N/1585357.00W	2126	215	8	4B	2000				AT174	4300
TERRAIN	624542.00N/1591154.00W	1909 (1900)								AS1500	3400

COMPUTATIONS

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

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM 111/10 CW 291/10	TO NUANC
---------------------------------	--------------------

RNP DISTANCE PAT MAP HAT HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	622633.00N/1591636.00W	1382	215	8	4B	1000					2400
TERRAIN	622636.00N/1591639.00W	1181 (1200)								AS1500	2700

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

LEFT BASE AREA

FROM
291/30 CW 021/30

TO
291/13 CW 021/13

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	620509.00N/1585412.00W	2674	215	8	4B	2000				AT126	4800
TERRAIN	620509.00N/1585412.00W	2473 (2500)								AS1500	4000

COMPUTATIONS

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

SEGMENT REMARKS:

LEFT BASE AREA

FROM
291/13 CW 021/13

TO
UTIDY

RNP **DISTANCE** **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	621136.00N/1585827.00W	1129	215	8	4B	2000				AT271	3400
TERRAIN	621409.00N/1590754.00W	1837 (1800)								AS1500	3300

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

RIGHT BASE AREA

FROM
021/30 CW 111/30

TO
021/15 CW 111/15

RNP DISTANCE 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>
AAO	622045.00N/1603909.00W	1434	215	8	4B	2000				AT566	4000
TERRAIN	621918.00N/1603003.00W	1784 (1800)								AS1500	3300

COMPUTATIONS

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

SEGMENT REMARKS:

RIGHT BASE AREA

FROM
021/15 CW 111/15

TO
AVOXY

RNP DISTANCE 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>
AAO	622609.00N/1601112.00W	1211	215	8	4B	1000				AT489	2700
TERRAIN	622609.00N/1601118.00W	1010 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

INITIAL

FROM
UTIDY

TO
NUANC

RNP
1.00

DISTANCE
7.00

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	621957.00N/1592230.00W	1303	215	8	4B	1000				AT397	2700
TERRAIN	621957.00N/1592230.00W	1102 (1100)								AS1500	2600

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM
AVOXY

TO
NUANC

RNP
1.00

DISTANCE
7.00

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	622109.00N/1593051.00W	775	215	8	4B	1000				AT925	2700
TERRAIN	622154.00N/1592942.00W	374 (400)								AS1500	1900

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

INTERMEDIATE

FROM
NUANC (IF/IAF)

TO
HOKRI

RNP
1.00

DISTANCE
3.21

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	621754.00N/1592921.00W	1132	215	8	4B	500				AT768	2400
TERRAIN	622106.00N/1593051.00W	574 (600)								AS1500	2100

COMPUTATIONS

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

SEGMENT REMARKS:

INTERMEDIATE: STEPDOWN

FROM
HOKRI

TO
SUMJE

RNP
1.00

DISTANCE
2.72

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	621721.00N/1594024.00W	276	215	8	4B	500				AT1124	1900
TERRAIN	621721.00N/1594024.00W	75 (100)								AS1500	1600

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

FINAL: LP

FROM
SUMJE

TO
UHIGO/2.66 NM TO RW20

RNP 0.30 **DISTANCE** 2.95 **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	621530.00N/1594103.00W	273	215	8	4B	250				RA120 DG317	960

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LP STEPDOWN

FROM
UHIGO/2.66 NM TO RW20

TO
RW20

RNP 0.30 **DISTANCE** 2.66 **PAT** **MAP** RW20 **HAT** 345 **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (02-131215)	621301.78N/1594401.00W	160	20	3	1A	250					420

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV

FROM
SUMJE

TO
UHIGO/2.66 NM TO RW20

RNP 0.30 **DISTANCE** 2.95 **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	621530.00N/1594103.00W	273	215	8	4B	250				RA120 DG317	960

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

FINAL: LNAV STEPDOWN

FROM
UHIGO/2.66 NM TO RW20

TO
RW20

RNP
0.30

DISTANCE
2.66

PAT

MAP
RW20

HAT
865

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>
TOWER (02-020032)	621203.93N/1594654.03W	689	20	3	1A	250					940

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
NUANC

TO
P-5

RNP

DISTANCE

PAT
P-5

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>
AAO	622051.00N/1592740.00W	1113	215	8	4B	1000				AT587	2700
TERRAIN	622051.00N/1592742.00W	912 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

MISSED APPROACH: LP

FROM RW20 **TO** NUANC

RNP 0.30-1.00 **DISTANCE** **PAT** **MAP** **HAT** **HMAS** 320

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				2700
AAO	621754.00N/1592921.00W	1132	215	8	4B	1000					2200
TERRAIN	621754.00N/1592921.00W	931 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM RW20 **TO** NUANC

RNP 0.30-1.00 **DISTANCE** **PAT** **MAP** **HAT** **HMAS** 840

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				2700
AAO	621754.00N/1592921.00W	1132	215	8	4B	1000					2200
TERRAIN	621754.00N/1592921.00W	931 (900)								AS1500	2400

COMPUTATIONS

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

SEGMENT REMARKS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

CIRCLING ALL CATS CAT A CAT B CAT C CAT D CAT E NOT AUTHORIZED

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>RADIUS</u>	<u>HAA</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
CATEGORY A											
TREE (02-130561)	620948.61N/1594621.97W	1.30	865	169	20	10	1B	300		SI	940
CATEGORY B											
TREE (02-130561)	620948.61N/1594621.97W	1.81	865	169	20	10	1B	300		SI	940
CATEGORY C											
TREE (02-130561)	620948.61N/1594621.97W	2.84	865	169	20	10	1B	300		SI	940
CATEGORY D											
AAO	621324.00N/1593942.00W	3.71	865	273	215	8	4B	300		SI	940

CIRCLING REMARKS:

MSA/ESA

CENTER

RADIUS

REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZAN ARTCC, ENA FSS

WX SERVICE
AWOS-3P

LOCATION
HCA/PAHC

HRS OPERATION
24

ALTIMETER SOURCE
HCA/PAHC

DISTANCE
0

SERVICE-A
Y

ADJUSTMENTS
0

BACK-UP WX SERVICE
AWOS-3P

LOCATION
ANV/PANV

HRS OPERATION
24

ALTIMETER SOURCE
ANV/PANV

DISTANCE
29.95

SERVICE-A
Y

ADJUSTMENTS
101

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
PAHC 75, PANV 297
RA = 100.1.

PRIMARY NAVAID

MONITOR POINT

HRS OPERATION

CAT

<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW02 - MIRL (PCL)	BSC-G	
RW20 - MIRL (PCL)	BSC-G	

GLIDESLOPE ANGLE
3.00

ELEV RWY THRESHOLD
74.5

TCH
40.0

ELEV GS ANTENNA

DISTANCE FROM RWY

VGSI ANGLE

TCH

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD
ON CENTERLINE

FT FROM THRESHOLD
FT FROM CENTERLINE

DISPLACED THRESHOLD DISTANCE

CRITICAL TEMPERATURES

CRITICAL LOW

CRITICAL HIGH

ACT

APT ISA

CRITICAL TEMPERATURE REMARKS:

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	LP AND LNAV
34:1	
134 TREE (02-130063) 621146.0600N/1594544.2300W (19.21)	142 TREE (02-244640) 621149.2400N/1594542.2800W (17.67)
140 TREE (02-129443) 621149.7800N/1594546.6000W (17.41)	116 TREE (02-129509) 621144.8300N/1594601.6300W (16.9)
128 TREE (02-129948) 621145.5900N/1594547.0200W (16.43)	136 TREE (02-129441) 621148.9700N/1594545.5300W (14.71)
134 TREE (02-129437) 621147.4400N/1594542.2000W (14.22)	104 TREE (02-129382) 621143.4000N/1594601.4800W (8.45)
137 TREE (02-128958) 621154.0200N/1594553.1000W (8.24)	111 TREE (02-130875) 621143.2200N/1594550.8200W (8.23)

QUALITY
21
CHECKED

115 TREE (02-130420) 621146.7000N/1594556.6100W (7.5)	118 TREE (02-129941) 621147.0500N/1594553.2500W (7.18)
113 TREE (02-129033) 621146.5200N/1594558.1900W (7.1)	109 TREE (02-130873) 621145.4300N/1594559.4400W (6.79)
93 TREE (02-130365) 621141.0200N/1594605.8000W (6.65)	110 TREE (02-130878) 621143.8100N/1594551.9300W (6.52)
110 TREE (02-247636) 621145.6100N/1594558.1100W (6.37)	107 TREE (02-130868) 621145.4700N/1594601.2100W (5.96)
117 TREE (02-246596) 621148.1500N/1594556.3700W (5.62)	134 TREE (02-128957) 621151.2300N/1594543.3200W (5.33)
91 TREE (02-130363) 621140.6000N/1594604.7800W (4.99)	112 TREE (02-130421) 621147.4300N/1594559.0900W (4.42)
124 TREE (02-129438) 621148.3000N/1594545.0100W (4.04)	95 TREE (02-129877) 621142.0100N/1594602.7600W (3.93)
118 TREE (02-130059) 621147.4600N/1594550.1600W (3.91)	85 TREE (02-130812) 621138.6000N/1594603.8900W (3.47)
116 TREE (02-129950) 621148.9500N/1594557.3600W (3.28)	112 TREE (02-130534) 621145.9300N/1594551.4600W (2.76)
85 TREE (02-130232) 621137.7300N/1594558.5900W (1.87)	119 TREE (02-129316) 621150.9000N/1594557.3100W (1.26)
92 TREE (02-129880) 621142.3800N/1594603.3000W (0.37)	84 BUILDING (02-130235) 621140.1200N/1594606.2500W (0.28)
FINAL TYPE	LP, LNAV, AND CIRCLING RWY 20
20:1	
136 TREE (02-130357) 621140.2900N/1594605.7600W (44.48)	111 TREE (02-130814) 621139.1400N/1594605.5600W (24.24)
100 TREE (02-131185) 621138.5700N/1594608.3900W (19.19)	110 TREE (02-241054) 621140.3900N/1594606.1900W (18.58)
99 TREE (02-241785) 621138.4800N/1594607.1100W (17.01)	98 TREE (02-130697) 621138.5900N/1594605.9400W (14.1)
96 TREE (02-130694) 621138.3000N/1594605.5300W (12.86)	89 TREE (02-131096) 621136.1700N/1594603.4000W (12.51)
104 TREE (02-130361) 621140.8800N/1594606.2400W (10.51)	83 TREE (02-131090) 621135.7500N/1594603.2700W (8.18)
86 TREE (02-131183) 621137.9100N/1594606.6300W (5.9)	106 TREE (02-240305) 621139.5900N/1594555.8800W (5.42)
137 TREE (02-130425) 621144.6900N/1594548.2400W (4.88)	92 TREE (02-130817) 621139.6900N/1594606.9500W (4.55)
117 TREE (02-129387) 621144.5200N/1594602.9700W (3.67)	87 TREE (02-130698) 621138.0000N/1594603.8200W (3.06)
130 TREE (02-130296) 621143.8600N/1594548.2800W (1.54)	96 TREE (02-130368) 621140.9600N/1594605.3900W (1.12)
110 TREE (02-129380) 621141.1700N/1594554.3700W (0.7)	94 TREE (02-130360) 621138.4100N/1594557.4700W (0.5)
PENETRATIONS REMARKS:	

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

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

<u>PENETRATIONS REMARKS:</u>



AIRPORT ID
HCA/PAHC

PROCEDURE NAME
RNAV (GPS) RWY 20

AMDT NO.
1

CITY
HOLY CROSS

STATE
AK

AIRPORT ELEVATION
75

FACILITY
RNAV

PART C: GENERAL REMARKS:

VDP NOT ESTABLISHED - OBSTACLES PENETRATE 20:1 SURFACE.

60 FOOT VEGETATION HEIGHT USED, PER FPT.

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	4.61
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	211.19
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	600
DISTANCE FROM	THLD	TO 1500FT POINT	10.34
WIDTH OF	INTERMEDIATE	SEGMENT AT 1500FT POINT	4.00
TRUE COURSE OF	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	211.28
HIGH TERRAIN IN	INTERMEDIATE	SEGMENT CONTAINING 1500FT POINT	600

THRESHOLD COORDINATES (IF STR-IN)

621134.73N/1594608.06W

ARP COORDINATES

621117.90N/1594629.80W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

RUNWAY 2 DISTANCE 0.33 NM

FAF COORDINATES

621621.81N/1593956.29W

FIX NAME COORDINATES

REMARKS

IAF UTIDY 621746.98N 1592032.58W 30 NM RADIUS
IAF AVOXY 622501.82N 1594613.07W 30 NM RADIUS
IF/IAF NUANC 622124.99N 1593321.28W 30 NM RADIUS

PART E: PREPARED BY

NAME

ROBERT G HAMILTON (STEVEN W. WASHKO)

OFFICE

AJV-A433

DATE

03/15/2024

TITLE

AERONAUTICAL INFORMATION SPECIALIST

