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 MOUNTAIN VILLAGE

AIRPORT ID PAMO

PROCEDURE NAME RNAV (GPS) RWY 20 **ORIGINAL/AMENDMENT**

CITY MOUNTAIN VILLAGE **STATE** ΑK

TDZE

SUPERSEDED

ORIGINAL/AMENDMENT

DATED

MAG VAR

EPOCH YEAR

AIRPORT ELEVATION 339

339

RNAV (GPS) RWY 20

1C

10/12/2017

10E

2020

FACILITY RNAV

COORDINATES OF FACILITIES

ACTUAL EFFECTIVE DATE 30 JANUARY 2020

REQUIRED EFFECTIVE DATE ROUTINE

CANCEL/SUSPEND

TAA

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	ALTITUDE
1. 113/30 CW 293/30	NOPT	113/10 CW 293/10		3900
2. 113/10 CW 293/10		BOPNE	IF/IAF	2600
3. 293/30 CW 023/30		293/10 CW 023/10		2900
4. 293/10 CW 023/10		ZAVAT	IAF	2600
5. 023/30 CW 113/30		023/10 CW 113/10		3800
6. 023/10 CW 113/10		WERIM	IAF	2600

TERMINAL ROUTES

FROM	FIX TYPE	<u>TO</u>	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
WERIM	IAF	BOPNE	NOPT	TF	FB	1.00	112.52	8.00	2600
ZAVAT	IAF	BOPNE	NOPT	TF	FB	1.00	292.95	8.00	2600
BOPNE	IF/IAF	CATOE		TF	FB	1.00	202.73	6.00	2100
CATOE	FAF	NICRI/3.00 NM TO RW20		TF	FB	0.30	202.63	2.44	
NICRI/3.00 NM TO RW20		RW20	MAP	TF	FO	0.30	202.63	3.00	
RW20	MAP	740 MSL		CA			202.63		740
740 MSL		AGEPE		DF	FO	1.00			3000



AIRPORT AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE

MOUNTAIN VILLAGE PAMO RNAV (GPS) RWY 20 2 MOUNTAIN VILLAGE AK

MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA LNAV: RW20

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 740 THEN CLIMBING RIGHT TURN TO 3000 DIRECT AGEPE AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

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

2. HOLD NE BOPNE, RT, 202.73 INBOUND, 2600 FT. IN LIEU OF PT (IF/IAF), MAX 6000.

3. FAC: 202.63 **FAF:** CATOE **DIST FAF TO MAP:** 5.44 **DIST FAF TO THLD:** 5.44

4. MIN ALT: BOPNE 2600, CATOE 2100, NICRI/3.00 NM TO RW20 1320*

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.53 GS ANT:

6. MIN GP INCPT: 2100 **GP ALT AT FAF**: CATOE 2100 **OM**: **MM**: **IM**:

7. GP ANGLE: 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 30.0

8. MSA FROM:

LTP HAE: 113 M

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -22°C OR ABOVE 54°C. CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

ADDITIONAL FLIGHT DATA:

699 AAO 620957N/1633348W
CHART CIRCLING ICON.
CHART VDP AT 0.74 NM TO RW20*
*LNAV ONLY
WAAS CHANNEL #60944
REFERENCE PATH ID: W20A
CHART FAS OBST: 347 BUILDING 620543N/1634107W.
HOLD NW, RT, 131.84 INBOUND

AIRPORT AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE
MOUNTAIN VILLAGE PAMO RNAV (GPS) RWY 20 2 MOUNTAIN VILLAGE AK

MINIMUMS:

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

ALTERNATE: NA STANDARD

CATEGORY:		Α			В			С			D			E	
FINAL TYPE	DA/MDA	<u>VIS</u>	HAT/HAA												
LPV DA	539	1	200	539	1	200	539	1	200	539	1	200			
LNAV/VNAV DA	589	1	250	589	1	250	589	1	250	589	1	250			
LNAV MDA	600	1	261	600	1	261	600	1	261	600	1	261			
CIRCLING	700	1	361	840	1	501	840	1 1/2	501	900	2	561			

CHANGES - REASONS

- 1. AIRPORT MAGVAR CHANGED FROM 14E TO 10E MAGVAR OUT OF TOLERANCE, IAW 8260.19H PARA 2-5-3B.
- 2. CURRENT 'Y' TAA CONFIGURATION WAS UPDATED TO A 'T' CONFIGURATION; NEW COURSES/ALTITUDES/OBSTACLES ACCORDINGLY IAW 8260.58A SECTION 2-4.
- 3. TERMINAL ROUTE CHANGED FROM WERMA-TO-BORME/128.55M/8.2NM/2600' TO WERIM-TO-BOPNE/112.52M/8.0NM/2600' SEE NOTE 2. ABOVE.
- 4. TERMINAL ROUTE CHANGED FROM ZAVIP-TO-BORME/268.96M/8.2NM/2600' TO ZAVAT-TO-BOPNE/292.95M/8.0NM/2600' SEE NOTE 2. ABOVE.
- 5. TERMINAL ROUTE CHANGED FROM BORME-TO-CATOE/198.71M/5.10NM/2000' TO BOPNE-TO-CATOE/202.73M/6.00NM/2100' IAW 8260.58A PARA 3-4-1.
- 6. TERMINAL ROUTE CHANGED FROM CATOE-TO-NICRI/198.63M/2.12NM TO CATOE-TO-NICRI/202.63M/2.44NM IAW 8260.58A CHAPTER 3 SECTIONS 3-1 THROUGH 3-4.
- 7. TERMINAL ROUTE CHANGED FROM NICRI-TO-RW20/198.63M/3.00NM TO NICRI-TO-RW20/202.63M/3.00NM SEE NOTE 1. ABOVE.
- 8. TERMINAL ROUTE CHANGED FROM RW20-TO-740 MSL (NO HEADING GIVEN) TO RW20-TO-740 MSL/202.63M SEE NOTE 1 ABOVE.
- 9. NEW LINES OF MINIMA (LPV AND LNAV/VNAV) AND ASSOCIATED NOTES ADDED PERMITS LOWER MINIMA; WAAS PROJECT.
- 10. VDP ADDED PER 8260.3D PARA 2-6-5; VISUAL OBSTACLES NO LONGER EXIST.
- 11. MISSED APPROACH: CLIMB-IN-HOLD NOW REQUIRED MISSED APPROACH SURFACE DOES NOT REACH WITHIN 1000' OF HOLDING ALTITUDE, IAW 8260.3D PARA'S 2-8-9, 2-1-3, 3-2-2B, AND 17-7-3.
- 12. ADDITIONAL FLIGHT DATA: CHART FAS OBSTACLE CHANGED FROM 360 BUSH 620709N/1634018W TO 347 BLDG 620543N/1634107W IAW TARGETS AND MAP STUDY.
- 13. ADDITIONAL FLIGHT DATA: ADDED CHART CIRCLING ICON NEW CIRCLING CRITERIA APPLIED.
- 14. ADDED CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE (ANGLE)/TCH (FEET)) IAW 8260.19H PARA 8-6-9M(1).
- 15. "WHEN LOCAL ALTIMER SETTING NOT RECEIVED..." NOTE REMOVED MOVED TO BACK OF 8260-9 IAW 8260.19H PARA 8-6-9F(3).
- 16. AIRCRAFT CATEGORIES C/D ADDED ALLOWS LARGER AIRCRAFT TO FLY PRACTICE APPROACHES.
- 17. INCREASED CAT B CIRCLING MDA FROM 800 TO 840 SEE 13 ABOVE.
- 18. ADDED MAXIMUM HOLDING PATTERN IN-LIEU-OF-PT ALTITUDE OF 6000 AT BRUNI 6000 IS THE MAXIMUM ALTITUDE FOR THAT AIRSPEED, IAW 8260.3D TABLE 17-2-1; NOW LISTED IAW 8260.19H PARA 8-6-7B(2).
- 19. PFAF ALTITUDE INCREASED FROM 2000 TO 2100 INTERMEDIATE SEGMENT REQUIRES 1200 AIRSPACE FLOOR/300 AIRSPACE BUFFER IAW 8260.19H PARA 4-1-3.
- 20. STEPDOWN ALTITUDE INCREASED FROM 1300 TO 1320 FOR DESCENT GRADIENT IAW 8260.3D PARA 2-6-2A AND 2-6-2B.
- 21. ADDITIONAL FLIGHT DATA: FINAL 7:1 OBSTACLE CHANGED FROM 656 AAO TO 699 AAO (SAME L/L) SPOT ALTITUDES NO LONGER ACCEPTABLE.
- 22. ADDED 20:1 IS CLEAR SEE NOTE 10. ABOVE; IAW 8260.19H PARA 8-6-7G(3).
- 23. REMOVED PROFILE NOTE: VISUAL SEGMENT OBSTACLES SEE NOTE 10. ABOVE.
- 24. REMOVED ALTERNATE MINIMUMS NOTE IAW 8260.3D PARA 3-4-1.

COORDINATED WITH: A4A ALPA X AOPA X	APA HAI NBAA X	OTHER: ZAN, AMGR		
FLIGHT CHECKED BY ANTHONY D VALLERA	Digitally signed by ALLAN WILL	OFFICE FICO	<u>DATE</u> 11/7/19	
DEVELOPED BY MARK CIARLONE MARK CIARLONE	Nov 13, 2019	<u>OFFICE</u> AJV-A423	<u>DATE</u> 11/08/2018	
APPROVED BY JULIE MORGAN Mar 07, 2019	Digitally signed by CASIMIR L TABAKA	OFFICE A42	<u>DATE</u>	<u>TITLE</u> MANAGER

PROCEDURE NAME RNAV (GPS) RWY 20 ORIGINAL/AMENDMENT
2

<u>CITY</u> MOUNTAIN VILLAGE STATE AK

<u>AIRPORT</u> MOUNTAIN VILLAGE PAMO

Apr 30, 2019

AIRPORT AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE

MOUNTAIN VILLAGE PAMO RNAV (GPS) RWY 20 2 MOUNTAIN VILLAGE AK

FAS DATA BLOCK INFORMATION

DATA FIELDDATAOPERATION TYPE0SBAS SERVICE PROVIDER IDENTIFIER0AIRPORT IDENTIFIERPAMORUNWAYRW20APPROACH PERFORMANCE DESIGNATOR0

ROUTE INDICATOR

REFERENCE PATH DATA SELECTOR 0

REFERENCE PATH IDENTIFIER (APPROACH ID) W20A

 LTP/FTP LATITUDE
 620555.7755N

 LTP/FTP LONGITUDE
 1634038.4790W

LTP/FTP ELLIPSOIDAL HEIGHT +01130

 FPAP LATITUDE
 620440.8730N

 FPAP LONGITUDE
 1634220.3750W

THRESHOLD CROSSING HEIGHT (TCH) 00030.0

TCH UNITS SELECTOR (METERS OR FEET USED) F

GLIDEPATH ANGLE (GPA) 03.00

COURSE WIDTH AT THRESHOLD 106.75

LENGTH OFFSET 1680

HORIZONTAL ALERT LIMIT (HAL) 40.0

VERTICAL ALERT LIMIT (VAL) 35.0

CRC REMAINDER 4301CCBC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE PA
LTP ORTHOMETRIC HEIGHT +01034
FPAP ORTHOMETRIC HEIGHT +01034