

**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</u> ALPENA COUNTY RGNL	<u>AIRPORT ID</u> KAPN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> ALPENA	<u>STATE</u> MI	
<u>AIRPORT ELEVATION</u> 690	<u>TDZE</u> 683	<u>SUPERSEDED</u> RNAV (GPS) RWY 19	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 06/03/2010	<u>MAG VAR</u> 7W	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 15 AUGUST 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<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>
APN VORTAC		UFORE		TF	FO	1.00	005.90	11.98	2500
RNAND	IAF	UFORE	NOPT	TF	FB	1.00	108.96	5.01	2500
UFORE	IF/IAF	LOGOQ		TF	FB	1.00	186.80	6.10	2500
LOGOQ	FAF	NOFHY/1.80 NM TO RW19		TF	FB	0.30	186.80	3.67	
NOFHY/1.80 NM TO RW19		RW19	MAP	TF	FO	0.30	186.80	1.80	
RW19	MAP	933 MSL		CA			186.80		
933 MSL		JEGOB		DF	FO	1.00			2800

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW19

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2800 DIRECT JEGOB AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)

2. HOLD N UFORE, RT, 186.80 INBOUND, 2500 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 186.80

FAF: LOGOQ

DIST FAF TO MAP: 5.47

DIST FAF TO THLD: 5.47

4. MIN ALT: UFORE 2500, LOGOQ 2500, NOFHY/1.80 NM TO RW19 1300\*

5. DIST TO THLD FROM OM:

MM:

IM:

150 HAT:

250 HAT: 0.63

GS ANT:

6. MIN GP INCPT: 2500

GP ALT AT FAF : LOGOQ 2500

OM:

MM:

IM:

7. GP ANGLE: 3.00

34:1: IS CLEAR

20:1: IS CLEAR

TCH: 50.0

8. MSA FROM: RW19 3500

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.  
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT APN VORTAC ON V78 SOUTHEAST BOUND.

ADDITIONAL FLIGHT DATA:

CHART: PIKE WEST MOA  
CHART CIRCLING ICON.  
CHART VDP AT 1.12 NM TO RW19\*  
\*LNAV ONLY  
WAAS CHANNEL #53717  
REFERENCE PATH ID: W19A  
CHART FAS OBST: 823 ANTENNA 450513N/0833406W.  
HOLD S, RT, 006.80 INBOUND  
LTP HAE: 171.7 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD

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	933	3/4	250	933	3/4	250	933	3/4	250	933	3/4	250			
LNAV/VNAV DA	1020	1 1/4	337	1020	1 1/4	337	1020	1 1/4	337	1020	1 1/4	337			
LNAV MDA	1080	1	397	1080	1	397	1080	1 1/8	397	1080	1 1/8	397			
CIRCLING	1140	1	450	1140	1	450	1220	1 1/2	530	1280	2	590			



CHANGES - REASONS

1. INCREASED LNAV MDA/HAT FROM 1020/337 TO 1080/397 AND CIRCLING CAT A MDA/HAA FROM 1120/430 TO 1140/450 - NEW CONTROLLING OBSTACLES IDENTIFIED. INCORPORATES CHANGES FROM FDC NOTAM 8/0631.
2. CHANGED FEEDER ROUTE APN VORTAC TO UFORE RNP FROM 2.00 TO 1.00, AND INTERMEDIATE ROUTE UFORE TO LOGOQ RNP FROM 0.50 TO 1.00 - PER 8260.58A, PARA 1-2-4 (C).
3. REMOVED CHART NOTE: DME/DME RNP-0.3 NA, AND ADDED RNP APCH TO EQUIPMENT NOTES - PER 8260.19H, PARA 8-6-8.
4. REVISED CHART NOTE: FOR UNCOMPENSTED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 46C (116F), TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C - REMOVED THE FAHRENHEIT VALUES PER 8260.19H, PARA 8-6-9 (S). HIGH TEMPERATURE VALUE RECOMPUTED IN ACCORDANCE WITH FAAO 8260.58.
5. INCREASED LNAV CATS C/D VISIBILITIES FROM 1 TO 1 1/8 - PER 8260.3D VISIBILITY TABLES.
6. DELETED CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA - VISUAL SURFACES CLEAR OF OBSTACLES.
7. AMENDED VDP FROM 0.95 NM TO RW19 TO 1.12 NM FROM RW19 - COMPUTED USING AMENDED LNAV MDA.
8. AMENDED CHART FAS OBST FROM 750 TREE TO 823 ANTENNA IN ADDITIONAL FLIGHT DATA - NEW CONTROLLING OBSTACLE IDENTIFIED IN LNAV STEPDOWN.
9. ADDED CHART CIRCLING ICON - IN ACCORDANCE WITH FAAO 8260.19H. CONTROLLING OBSTACLES WILL BE VERIFIED ON VOR RWY 19, AMDT 16 WITH THE SAME CHART DATE.
10. AMENDED CAT C CIRCLING MDA/HAA FROM 1140/450 TO 1220/530 AND CAT D CIRCLING MDA/HAA FROM 1240/550 TO 1280/590 - NEW CONTROLLING OBSTACLES IDENTIFIED IN LARGER CIRCLING AREAS.
11. FAS DATA: CRC REMAINDER CHANGED FROM A054889D3 TO 66F9D700 - COMPUTED USING UPDATED ELLIPSOIDAL HEIGHT.

COORDINATED WITH:

A4A ☒ALPA ☒AOPA ☒APA ☒HAI ☐NBAA ☒OTHER: AMGR, APN APP CON, ZMP, APN ATCT

<u>FLIGHT CHECKED BY</u>		<u>OFFICE</u>	<u>DATE</u>	
GLEN B FREEMAN	Digitally signed by		5/14/19	
	<b>DONALD H LANIER</b>	FICO		
	May 21, 2019			
<u>DEVELOPED BY</u>		<u>OFFICE</u>	<u>DATE</u>	
WARDELL HENNING (TODD BOWLING)	Digitally signed by		02/20/2019	
	<b>DONALD H LANIER</b>	AJV-A432		
	May 21, 2019			
<u>APPROVED BY</u>		<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
PATRICK MULQUEEN	Digitally signed by			
	<b>DONALD H LANIER</b>	AJV-A430		MANAGER
	May 21, 2019			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KAPN
RUNWAY	RW19
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W19A
LTP/FTP LATITUDE	450522.6565N
LTP/FTP LONGITUDE	0833341.3650W
LTP/FTP ELLIPSOIDAL HEIGHT	+01717
FPAP LATITUDE	450353.5700N
FPAP LONGITUDE	0833340.9300W
THRESHOLD CROSSING HEIGHT (TCH)	00050.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0008
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	66F9D700

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K5
LTP ORTHOMETRIC HEIGHT	+02082
FPAP ORTHOMETRIC HEIGHT	+02082

