

**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> APN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> ALPENA	<u>STATE</u> MI
<u>AIRPORT ELEVATION</u> 690	<u>TDZE</u> 690	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u>
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 7W <u>EPOCH YEAR</u> 1985 <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>
STENZ	IAF	GRYDR	NOPT	TF	FB	1.00	156.59	6.50	3000
TRSKO	IAF	GRYDR	NOPT	TF	FB	1.00	336.70	6.50	3000
GRYDR	IF/IAF	MILSS		TF	FB	1.00	066.64	6.10	2500
MILSS	FAF	LEETZ/1.86 NM TO RW07		TF	FB	0.30	066.73	3.64	
LEETZ/1.86 NM TO RW07		RW07	MAP	TF	FO	0.30	066.73	1.86	
RW07	MAP	952 MSL		CA			066.73		
952 MSL		MUNCN		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW07

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT MUNCN AND HOLD, CONTINUE CLIMB-IN-HOLD TO 3000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SW GRYDR, RT, 066.64 INBOUND, 3000 FT. IN LIEU OF PT (IF/IAF), MAX 6000.
- FAC: 066.73 FAF: MILSS DIST FAF TO MAP: 5.50 DIST FAF TO THLD: 5.50
- MIN ALT: GRYDR 3000, MILSS 2500, LEETZ/1.86 NM TO RW07 1340
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 262 HAT: 0.64 GS ANT: IM:
- MIN GP INCPT: 2500 GP ALT AT PFAF: MILSS 2500 OM: MM:
- GP ANGLE: 3.00 34:1: IS NOT CLEAR 20:1: IS CLEAR TCH: 58.0
- MSA FROM: RW07 3500



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING PZQ ALTIMETER SETTING.
CHART NOTE: RWY 07 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -18°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PZQ ALTIMETER SETTING AND INCREASE LPV DA TO 1007 FEET; INCREASE LNAV/VNAV DA TO 1039 FEET; INCREASE ALL MDAS 60 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART PIKE EAST MOA.

HOLD NE, RT, 246.95 INBOUND.
CHART FAS OBST: 823 ANTENNA (26-060973) 450513N/0833406W.
CHART VDP AT 1.05 NM TO RW07.
WAAS CHANNEL # 82746
LTP HAE: 173.7 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - 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	952	1	262	952	1	262	952	1	262	952	1	262			
LNAV/VNAV DA	984	1	294	984	1	294	984	1	294	984	1	294			
LNAV MDA	1080	1	390	1080	1	390	1080	1 1/8	390	1080	1 1/8	390			
CIRCLING	1140	1	450	1140	1	450	1220	1 1/2	530	1300	2	610			

CHANGES - REASONS

ORIGINAL PROCEDURE.



AIRPORT ID
APN

PROCEDURE NAME
RNAV (GPS) RWY 7

ORIGINAL/AMENDMENT
ORIG

CITY
ALPENA

STATE
MI

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA

OTHER: ZMP, APN APP CON, AMGR

FLIGHT CHECKED BY

MICHAEL A GREENWOOD

OFFICE

AJF

DATE

10/30/2024

DEVELOPED BY

CASIMIR L. TABAKA (HOPE N. DENTON)

OFFICE

AJV-A432

DATE

06/19/2024

APPROVED BY

CASIMIR L. TABAKA

OFFICE

AJV-A432

DATE

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

DATA FIELD

DATA

OPERATION TYPE
SBAS SERVICE PROVIDER IDENTIFIER
AIRPORT IDENTIFIER
RUNWAY
APPROACH PERFORMANCE DESIGNATOR
ROUTE INDICATOR
REFERENCE PATH DATA SELECTOR
REFERENCE PATH IDENTIFIER (APPROACH ID)
LTP/FTP LATITUDE
LTP/FTP LONGITUDE
LTP/FTP ELLIPSOIDAL HEIGHT
FPAP LATITUDE
FPAP LONGITUDE
THRESHOLD CROSSING HEIGHT (TCH)
TCH UNITS SELECTOR (METERS OR FEET USED)
GLIDEPATH ANGLE (GPA)
COURSE WIDTH AT THRESHOLD
LENGTH OFFSET
HORIZONTAL ALERT LIMIT (HAL)
VERTICAL ALERT LIMIT (VAL)

0
0
KAPN
RW07
0
0
W07A
450433.7375N
0833400.1150W
+01737
450518.5360N
0833211.4205W
00058.0
F
03.00
106.75
1216
40.0
50.0

CRC REMAINDER

8D5CCE41

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE
LTP ORTHOMETRIC HEIGHT
FPAP ORTHOMETRIC HEIGHT

K5
+02102
+02102



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

<u>AIRPORT ID</u> APN	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 7	<u>AMDT NO.</u> ORIG	<u>CITY</u> ALPENA	<u>STATE</u> MI	<u>AIRPORT ELEVATION</u> 690	<u>FACILITY</u> RNAV
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PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM STENZ **TO** GRYDR

RNP 1.00 DISTANCE 6.50 PAT MAP HAT HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	445736.00N/0834842.00W	1172	215	8	4B	1000				AT828	3000
TERRAIN	445733.00N/0834842.00W	971 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:

INITIAL

FROM TRSKO **TO** GRYDR

RNP 1.00 DISTANCE 6.50 PAT MAP HAT HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (26-002392)	445409.12N/0834614.81W	1438	50	20	2C	1000				AT562	3000
TERRAIN	445451.00N/0834642.00W	1000 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:



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RNAV

INTERMEDIATE

FROM
GRYDR (IF/IAF)

TO
MILSS

RNP
1.00

DISTANCE
6.10

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	445736.00N/0834842.00W	1172	215	8	4B	500				AT828	2500
TERRAIN	445724.00N/0834836.00W	958 (1000)								AS1500	2500

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LPV

FROM
MILSS

TO
RW07

RNP
0.30

DISTANCE
5.50

PAT

MAP
DA

HAT
262

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (26-062038)	450418.37N/0833425.11W	758	20	3	1A		34.00:1			MA12	952

COMPUTATIONS

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

SEGMENT REMARKS:



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FACILITY
RNAV

FINAL: LNAV/VNAV

FROM MILSS **TO** RW07

RNP 0.30 **DISTANCE** 5.50 **PAT** **MAP** DA **HAT** 294 **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
ANTENNA (26-060973)	450512.61N/0833406.10W	823	20	3	1A	161					984

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV

FROM MILSS **TO** LEETZ/1.86 NM TO RW07

RNP 0.30 **DISTANCE** 3.64 **PAT** **MAP** **HAT** **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	450254.00N/0833942.00W	1014	215	8	4B	250				RA60	1340

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV STEPDOWN

FROM LEETZ/1.86 NM TO RW07 **TO** RW07

RNP 0.30 **DISTANCE** 1.86 **PAT** **MAP** RW07 **HAT** 390 **HMAS**

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
ANTENNA (26-060973)	450512.61N/0833406.10W	823	20	3	1A	250					1080

COMPUTATIONS

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

SEGMENT REMARKS:



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RNAV

MISSED APPROACH: LNAV/VNAV

FROM DA **TO** MUNCN

RNP
0.30-1.00

DISTANCE

PAT

MAP

HAT

HMAS
823

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
TOWER (26-001561)	450922.63N/0832803.71W	1158	20	3	1A	1000				SA-119	2100
TERRAIN	450839.00N/0832845.00W	751 (800)								AS1500	2300

COMPUTATIONS

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

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM RW07 **TO** MUNCN

RNP
0.30-1.00

DISTANCE

PAT

MAP

HAT

HMAS
973

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
TOWER (26-001561)	450922.63N/0832803.71W	1158	20	3	1A	1000				SA-119	2100
TERRAIN	450839.00N/0832845.00W	751 (800)								AS1500	2300

COMPUTATIONS

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

SEGMENT REMARKS:



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PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

APN APP CON, ZMP ARTCC, LAN FSS

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
ASOS	APN	24	APN	0	Y	0

<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>SERVICE-A</u>	<u>ADJUSTMENTS</u>
AWOS-3	PZQ	24	PZQ	22.46	Y	55

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KAPN 690, KPZQ 670
RA = 54.4.

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
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<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>
RW07 - MIRL (PCL), REIL (PCL), PAPI-4L	NPI-G	
RW25 - MIRL (PCL), REIL (PCL), PAPI-4L	NPI-G	
RW01 - MALSR (PCL), HIRL (PCL), PAPI-4L	PIR-G	
RW19 - HIRL (PCL), REIL (PCL), PAPI-4L	PIR-G	

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	689.5	58.0			3.00	49.4

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-18C	+54C	-23C	+13.63C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2019-2023).
CRITICAL LOW TEMPERATURE BASED ON EFFECTIVE GPA.
DESCENT RATE (FPM): STANDARD TEMP 964 HIGH TEMP 1272.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	LPV, LNAV/VNAV, LNAV
34:1	
756 TREE (26-062110) 450427.9000N/0833424.5000W (19.15)	738 TREE (26-070256) 450430.3000N/0833416.7300W (18.92)
738 TREE (26-063374) 450428.8900N/0833416.8900W (16.52)	751 TREE (26-028483) 450426.4300N/0833425.4800W (10.16)



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734 TREE (26-070682) 450427.7000N/0833417.3400W (9.91)						731 TREE (26-066992) 450425.9000N/0833414.2900W (9.78)
723 TREE (26-029365) 450431.3200N/0833414.6500W (9.24)						723 TREE (26-028493) 450427.7900N/0833412.0200W (8.75)
748 TREE (26-070309) 450427.6100N/0833426.5000W (7.07)						758 TREE (26-062038) 450418.3700N/0833425.1100W (5.76)
742 TREE (26-028494) 450424.2800N/0833421.5600W (5.09)						724 TREE (26-066991) 450426.8900N/0833414.3900W (4.08)
727 TREE (26-094068) 450426.7300N/0833416.5300W (2.94)						722 TREE (26-070634) 450427.8600N/0833415.0000W (2.42)
725 TREE (26-094069) 450429.4800N/0833418.4200W (1.61)						

PENETRATIONS REMARKS:

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

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

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

100 FT VEGETATION HEIGHT USED PER FPT.

ORDER 8260.3 CHAPTER 2 APPLIED TO 1063 AAO 450118N/0834045W.

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	3.31
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	059.73
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	800
DISTANCE FROM	THLD	TO 1500FT POINT	5.10
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.76
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	059.73
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	800

THRESHOLD COORDINATES (IF STR-IN)

450433.74N/0833400.12W

ARP COORDINATES

450441.10N/0833337.10W

RUNWAY APCH END AND DIST FURTHEST FROM ARP

RUNWAY 1 DISTANCE 0.79 NM

FAF COORDINATES

450147.52N/0834042.54W

FIX NAME COORDINATES

REMARKS



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FACILITY
RNAV

PART E: PREPARED BY

NAME

CASIMIR L. TABAKA (HOPE N. DENTON)

OFFICE

AJV-A432

DATE

06/19/2024

TITLE

AERONAUTICAL INFORMATION SPECIALIST