

**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> MAHNOMEN COUNTY	<u>AIRPORT ID</u> 3N8	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1A	<u>CITY</u> MAHNOMEN	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1246	<u>TDZE</u> 1246	<u>SUPERSEDED</u> RNAV (GPS) RWY 35	<u>ORIGINAL/AMENDMENT</u> 1	<u>DATED</u> 08/20/2015	<u>MAG VAR</u> 2E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 21 MAY 2020	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2015

TERMINAL ROUTES **THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 20-09.**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
APRIW	IAF	IXRUG	NOPT	TF	FB	1.00	060.52	23.66	3500
STARR	IAF	IXRUG	NOPT	TF	FB	1.00	357.21	36.98	3500
IXRUG	IF/IAF	HUSTU		TF	FB	1.00	346.21	3.55	2800
HUSTU	FAF	WOTPA/1.70 NM TO RW35		TF	FB	0.30	346.20	3.06	
WOTPA/1.70 NM TO RW35		RW35	MAP	TF	FO	0.30	346.20	1.70	
RW35	MAP	1496 MSL		CA			346.20		
1496 MSL		ZUMIM		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW35

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3500 DIRECT ZUMIM AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

- 1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2. HOLD S IXRUG, RT, 346.21 INBOUND, 3500 FT. IN LIEU OF PT (IAF), MAX 6000.
- 3. **FAC:** 346.20 **FAF:** HUSTU **DIST FAF TO MAP:** 4.76 **DIST FAF TO THLD:** 4.76
- 4. **MIN ALT:** IXRUG 3500, HUSTU 2800, WOTPA/1.70 NM TO RW35 1820*
- 5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **250 HAT:** 0.66 **GS ANT:**
- 6. **MIN GP INCPT:** 2800 **GP ALT AT FAF :** HUSTU 2800 **OM:** **MM:** **IM:**
- 7. **GP ANGLE:** 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 40.0
- 8. **MSA FROM:** RW35 3200

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

- CHART NOTE: CIRCLING NA TO RWYS 9 AND 27.
- CHART NOTE: BARO-VNAV AND VDP NA WHEN USING FOSSTON ALTIMETER SETTING.
- CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°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 STARR ON V510 SOUTHEAST BOUND.
- CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FOSSTON ALTIMETER SETTING AND INCREASE ALL DA TO 1549 FEET; INCREASE ALL MDA 60 FEET. ←

ADDITIONAL FLIGHT DATA:

- CHART CIRCLING ICON.
- CHART VDP AT 0.98 NM TO RW35*
- *LNAV ONLY
- WAAS CHANNEL #56532
- REFERENCE PATH ID: W35A
- CHART FAS OBST: 1333 TREE 471327N/0955537W.
- HOLD N, RT, 166.15 INBOUND
- LTP HAE: 351.8 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	1496	1	250	1496	1	250		NA			NA					
LNAV/VNAV DA	1496	1	250	1496	1	250		NA			NA					
LNAV MDA	1600	1	354	1600	1	354		NA			NA					
CIRCLING	1640	1	394	1700	1	454		NA			NA					



CHANGES - REASONS

1. REMOVED FEEDER FROM PKD VOR/DME FROM TERMINAL ROUTES - PKD VORMON DECOMMISSIONING
2. PROFILE LINE 2 ADDED MAX 6000 - HOLDING PATTERN AT IXRUG HAS A MAXIMUM HOLD OF 6000.
3. PROFILE LINE 7 ADDED 20:1 IS CLEAR - RWY 17 20:1 VISUAL AREA IS CLEAR.
4. REMOVED CHART NOTE: DME/DME RNP-0.3 NA AND ADDED PBN EQUIPMENT REQUIREMENTS NOTE: RNP APCH - 8260.19H 8-6-8 B
5. CHANGED CHART NOTE FROM FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17C (2F) OR ABOVE 54C (130F) TO FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 54°C - 8260.19H 8-6-9
6. REMOVED CHART NOTE: NIGHT LANDING: RWY 9, 27 NA AND ADDED CHART NOTE: CIRCLING NA TO RWYS 9 AND 27 - RWY 9 AND 27 ARE TURF AND NO RAPT CONSENSUS FOR A TURF RUNWAY.
7. CHANGED CHART NOTE FROM: CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FOSSTON ALTIMETER SETTING AND INCREASE ALL DA 53 FEET AND ALL MDA 60 FEET, AND INCREASE LNAV CAT C/D VISIBILITY 1/8 MILE TO CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FOSSTON ALTIMETER SETTING AND INCREASE ALL DA TO 1549 FEET; INCREASE ALL MDA 60 FEET, AND INCREASE LNAV CAT C/D VISIBILITY 1/8 SM. - IAW 8260.19H SM IS USED TO DESCRIBE VISIBILITY VICE MILE.
8. REMOVED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON PKD VOR/DME AIRWAY RADIALS 303 CW 359 - PKD DECOMMISSIONING AND ROUTE REMOVED.

4/13/2020: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 2/20/2020.

1.CHANGED CHART NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FOSSTON ALTIMETER SETTING AND INCREASE ALL DA TO 1549 FEET; INCREASE ALL MDA 60 FEET, AND INCREASE LNAV CAT C/D VISIBILITY 1/8 SM." TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE FOSSTON ALTIMETER SETTING AND INCREASE ALL DA TO 1549 FEET; INCREASE ALL MDA 60 FEET."

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZMP, AMGR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by **DATE**

WARDELL HENNING

Apr 13, 2020

DEVELOPED BY

WARDELL HENNING (TYLER MITCHELL)

Digitally signed by

WARDELL HENNING

Apr 13, 2020

OFFICE

AJV-A432

DATE

11/22/2019

APPROVED BY

GEORGE DAVIS

Digitally signed by

WARDELL HENNING

Apr 13, 2020

OFFICE

AJV-A430

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	3N8
RUNWAY	RW35
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W35A
LTP/FTP LATITUDE	471518.6665N
LTP/FTP LONGITUDE	0955541.3395W
LTP/FTP ELLIPSOIDAL HEIGHT	+03518
FPAP LATITUDE	471645.8320N
FPAP LONGITUDE	0955608.1450W
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	1712
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	26BBF5F2

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+03788
FPAP ORTHOMETRIC HEIGHT	+03788

