

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
ILS STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.29**

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.

<b>AIRPORT ID</b> MKT	<b>PROCEDURE NAME</b> ILS Y OR LOC Y RWY 33	<b>ORIGINAL/AMENDMENT</b> 2	<b>CITY</b> MANKATO	<b>STATE</b> MN
<b>AIRPORT ELEVATION</b> 1021	<b>TDZE</b> 1021	<b>SUPERSEDED</b> ILS OR LOC RWY 33	<b>DATED</b> 10/07/2021	<b>MAG VAR</b> 0E
<b>FACILITY</b> I-MKT	<b>COORDINATES OF FACILITIES</b>	<b>ACTUAL EFFECTIVE DATE</b> 30 NOVEMBER 2023	<b>REQUIRED EFFECTIVE DATE</b> 11/30/2023	<b>EPOCH YEAR</b> 2025
				<b>CANCEL/SUSPEND</b>

**TAA**

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 245/30 CW 065/30	NOPT	ANIMY	IF/IAF	2900
2. 065/30 CW 155/30		BIGIW	IAF	3200
3. 155/30 CW 245/30		FATIT	IAF	2900

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
BIGIW	IAF	ANIMY	NOPT	TF	FB	1.00	064.58	5.00	2900
FATIT	IAF	ANIMY	NOPT	TF	FB	1.00	244.72	5.00	2900
ANIMY	IF/IAF	RATEL OM/INT/MKT 4.41 DME		TF	FB	1.00	334.65	6.73	2500

**MISSED APPROACH**

**MAP:**

ILS: DA  
LOC: 4.27 NM AFTER RATEL OM/INT/MKT 4.41 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2900 DIRECT ANIMY AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD SE ANIMY, RT, 334.65 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.
- FAC: 334.57 FAF: RATEL OM/INT/MKT 4.41 DME DIST FAF TO MAP: 4.27 DIST FAF TO THLD: 4.27
- MIN ALT: ANIMY 2900, RATEL OM/INT/MKT 4.41 DME 2500, PEKPE/MKT 1.63 DME 1480
- DIST TO THLD FROM OM: 4.27 MM: IM: 150 HAT: GS ANT: 936
- MIN GS INCPT: 2500 GS ALT AT PFAF: OM: 2427 MM: IM:
- GS ANGLE: 3.00 34:1: 20:1: TCH: 47.5
- MSA FROM:



**PBN REQUIREMENTS NOTE:**

RNP APCH - GPS.

**NOTES:**

CHART NOTE: DME FROM MKT DME. DME USE REQUIRES SIMULTANEOUS RECEPTION OF I-MKT AND MKT DME.  
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE PEKPE FIX MINIMUMS S-LOC 33 CATS C/D VISIBILITY TO 1 SM.  
 CHART SPEED ICON IN PLANVIEW AT BIGIW: MAX 210 KIAS.

CHART SPEED ICON IN PLANVIEW AT FATIT: MAX 210 KIAS.

**ADDITIONAL FLIGHT DATA:**

CHART FAS OBST: 1117 TREE (27-070551) 441221N/0935436W.  
 CHART VDP AT 1.12 DME.  
 DISTANCE VDP TO THLD 0.97 NM.  
 \*DME FROM MKT DME.

**MINIMUMS:**

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

ALTERNATE: NA

<u>CATEGORY:</u>	<u>A</u>			<u>B</u>			<u>C</u>			<u>D</u>			<u>E</u>		
<u>FINAL TYPE</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>	<u>DA/MDA</u>	<u>VIS</u>	<u>HAT/HAA</u>
S-ILS 33	1221	1/2	200	1221	1/2	200	1221	1/2	200	1221	1/2	200			
S-LOC 33	1480	1/2	459	1480	1/2	459	1480	7/8	459	1480	7/8	459			
CIRCLING	1480	1	459	1480	1	459	1600	1 1/2	579	1600	2	579			
<b>PEKPE FIX MINIMUMS*</b>															
S-LOC 33	1380	1/2	359	1380	1/2	359	1380	5/8	359	1380	5/8	359			
CIRCLING	1460	1	439	1480	1	459	1600	1 1/2	579	1600	2	579			



**CHANGES - REASONS**

1. PROCEDURE NAME: CHANGED FROM "ILS OR LOC RWY 33" TO "ILS Y OR LOC Y RWY 33" - IAW 8260.3E PARA 1-6-2.D AND 1-6-4.
2. UPDATED MAG VAR/EPOCH YEAR FROM "4E/1985" TO "0E/2025" AND ADDED 4 DEGREES TO ALL APPLICABLE TERMINAL ROUTE COURSES – NEW MAG VAR/UPDATED AIRNAV DATA.
3. ADDED TAA FOR PROCEDURE ENTRY – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
4. TERMINAL ROUTES: REMOVED ALL GROUND BASED INITIALS/FEEDERS FROM PROCEDURE – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
5. TERMINAL ROUTES: ADDED "BIGIW TO ANIMY" RNAV INITIAL SEGMENT, "FATIT TO ANIMY" RNAV INITIAL SEGMENT, AND "ANIMY TO RATEL OM/INT/MKT 4.41 DME" RNAV INTERMEDIATE/INITIAL SEGMENT – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
6. MISSED APPROACH: CHANGED FROM "ILS: AT THE DH" TO "ILS: DA" – IAW 8260.19I PARA 8-6-6.C.(1).
7. MISSED APPROACH INSTRUCTIONS: CHANGED FROM "CLIMB TO 2000, THEN CLIMBING RIGHT TURN TO 2700 DIRECT MKT VOR/DME AND HOLD" TO "CLIMB TO 1500 THEN CLIMBING RIGHT TURN TO 2900 DIRECT ANIMY AND HOLD" – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
8. PROFILE LINE 1: DELETED PROCEDURE TURN – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
9. PROFILE LINE 2: ADDED "HOLD SE ANIMY, RT, 334.65 INBOUND, 2900 FT IN LIEU OF PT (IAF), MAX 6000" – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
10. PROFILE LINE 3: CHANGED FAC FROM "330.52" TO "334.57" – PROCEDURE REDESIGN; MAG VAR UPDATE.
11. PROFILE LINE 4: CHANGED FROM "RATEL 2500" TO "ANIMY 2900, RATEL OM/INT/MKT 4.41 DME 2500, PEKPE/MKT 1.63 DME 1480" – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
12. PROFILE LINE 5: DELETED DIST TO THLD FROM MM "48" – UPDATED AIRNAV DATA.
13. PROFILE LINE 6: CHANGED MIN GS INCPT OM FROM "2441" TO "2427" AND DELETED MM "1218" – NEW DESIGN TCH.
14. PROFILE LINE 7: CHANGED TCH FROM "45" TO "47.5" – NEW DESIGN TCH AIRNAV DATA.
15. PROFILE LINE 8: DELETED MSA – PROCEDURE REDESIGN; TAA ADDED.
16. PBN REQUIREMENTS NOTE: ADDED "RNP APCH – GPS" – GPS REQUIRED FOR TAA, INITIAL AND MISSED APPROACH SEGMENTS; IAW 8260.19I PARA 8-6-8.C.2.
17. UPDATED AND MOVED BACKUP ALTIMETER NOTES TO 8260-9 PART C FOR CONTINGENCY USE – PRIMARY WEATHER SOURCE ON WMSCR.
18. ADDED CHART NOTE "FOR INOPERATIVE ALS, INCREASE PEKPE FIX MINIMUMS S-LOC 33 CATS C/D VISIBILITY TO 1 SM" – PEKPE FIX MINIMUMS AND VISIBILITY VALUES ADDED IAW 8260.3E TABLES 3-3-1, 3-3-3, AND 3-3-4.
19. ADDED CHART NOTES: "CHART SPEED ICON IN PLANVIEW AT BIGIW: MAX 210 KIAS" AND "CHART SPEED ICON IN PLANVIEW AT FATIT: MAX 210 KIAS" - TO ACCOMMODATE VECTOR LENGTH OF SEGMENT AND IAW 8260.19I PARA 4-6-10.G.
20. DELETED CHART NOTE: "VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {3.00} TCH {49})" – PROCEDURE REDESIGN/NEW DESIGN TCH; VGSI AND ILS GLIDEPATH ARE COINCIDENT.
21. ADDITIONAL FLIGHT DATA: DELETED "HOLD NW, LT, 149 INBOUND" – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN/RNAV MISSED APPROACH SEGMENT UTILIZED; DELETED IAW 8260.19I PARA 8-6-6.G.
22. ADDITIONAL FLIGHT DATA: CHANGED FAS OBST FROM "1164 WTR TWR 440953/0935257" TO "1117 TREE (27-070551) 441221N/0935436W" – PROCEDURE REDESIGN; NEW FAS OBSTACLE.
23. ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 1.12 DME" AND "DISTANCE VDP TO THLD 0.97 NM" – NO 20:1 PENETRATIONS EXIST.
24. ADDITIONAL FLIGHT DATA: ADDED "DME FROM MKT DME" – STEPDOWN FIX ADDED AND IAW 8260.19I PARA 8-6-11.N.3.D.
25. MINIMUMS: S-LOC 33 MDA/HAT RAISED FROM "1420/399" TO "1480/459" AND CAT C/D VISIBILITY FROM "5/8" TO "7/8" – PROCEDURE REDESIGN; NEW CONTROLLING OBSTACLE AND VISIBILITY VALUES UPDATE IAW 8260.3E TABLE 3-3-1.
26. MINIMUMS: INCREASED S-LOC CIRCLING MDA/HAA CAT A FROM "1460/439" TO "1480/459" – PROCEDURE REDESIGN; STRAIGHT-IN ADJUSTMENT NEEDED.
27. MINIMUMS: ADDED PEKPE FIX MINIMUMS\* – DUAL MINIMUMS ADDED FOR DME EQUIPPED AIRCRAFT IAW 8260.19I PARA 8-6-11.N.

10/18/2023: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 4/24/2023:  
1: REQUIRED EFFECTIVE DATE: CHANGED FROM ROUTINE TO 11/30/2023.

**COORDINATED WITH:**

A4A  ALPA  AOPA  APA  HAI  NBAA  OTHER: ZMP, AMGR

Digitally signed by  
**DAVID DANNER**

**FLIGHT CHECKED BY**  
PENDING

**OFFICE** **DATE**  
Oct 23, 2023

**DEVELOPED BY**  
JASON KRETSCHMER (JILL M. SUPPES)

**OFFICE** **DATE**  
AJV-A423 04/24/2023

Digitally signed by  
**DAVID DANNER**  
Oct 23, 2023

**APPROVED BY**  
JASON KRETSCHMER

**OFFICE**  
AJV-A421

**DATE** Digitally signed by  
**DAVID DANNER**  
Oct 23, 2023

**TITLE**  
MANAGER

