

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
COPTER ILS STANDARD INSTRUMENT APPROACH PROCEDURE  
TITLE 14 CFR PART 97.35**

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><br>MKT         | <u>PROCEDURE NAME</u><br>COPTER ILS Z OR LOC Z RWY 33 | <u>ORIGINAL/AMENDMENT</u><br>1                   | <u>CITY</u><br>MANKATO                       | <u>STATE</u><br>MN        |
| <u>AIRPORT ELEVATION</u><br>1021 | <u>TDZE</u><br>1021                                   | <u>SUPERSEDED</u><br>COPTER ILS OR LOC RWY 33    | <u>DATED</u><br>12/03/2020                   | <u>MAG VAR</u><br>0E      |
| <u>FACILITY</u><br>I-MKT         | <u>COORDINATES OF FACILITIES</u>                      | <u>ACTUAL EFFECTIVE DATE</u><br>30 NOVEMBER 2023 | <u>REQUIRED EFFECTIVE DATE</u><br>11/30/2023 | <u>EPOCH YEAR</u><br>2025 |
|                                  |   | <u>ORIG-AMENDMENT</u><br>ORIG-D                  | <u>CANCEL/SUSPEND</u>                        |                           |

**TAA**

| <u>FROM</u>         | <u>FIX TYPE</u> | <u>TO</u> | <u>FIX TYPE</u> | <u>ALTITUDE</u> |
|---------------------|-----------------|-----------|-----------------|-----------------|
| 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**

| <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> |
|-------------|-----------------|---------------------------|-----------------|-----------------|--------------|------------|---------------|-----------------|-----------------|
| 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 HAS: 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 H-ILS 33 VISIBILITY TO 3/8 SM, H-LOC 33 TO 1/2 SM, AND PEKPE FIX MINIMUMS H-LOC 33 TO 1/2 SM.

**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

| <b>CATEGORY:</b>    | <b>COPTER</b> |            |                |               |            |                |               |            |                |               |            |                |               |            |                |
|---------------------|---------------|------------|----------------|---------------|------------|----------------|---------------|------------|----------------|---------------|------------|----------------|---------------|------------|----------------|
| <b>FINAL TYPE</b>   | <b>DA/MDA</b> | <b>VIS</b> | <b>HAT/HAA</b> | <b>DA/MDA</b> | <b>VIS</b> | <b>HAT/HAA</b> | <b>DA/MDA</b> | <b>VIS</b> | <b>HAT/HAA</b> | <b>DA/MDA</b> | <b>VIS</b> | <b>HAT/HAA</b> | <b>DA/MDA</b> | <b>VIS</b> | <b>HAT/HAA</b> |
| H-ILS 33            | 1221          | 1/4        | 200            |               | NA         |                |               | NA         |                |               | NA         |                |               |            |                |
| H-LOC 33            | 1480          | 1/4        | 459            |               | NA         |                |               | NA         |                |               | NA         |                |               |            |                |
| PEKPE FIX MINIMUMS* |               |            |                |               |            |                |               |            |                |               |            |                |               |            |                |
| H-LOC 33            | 1380          | 1/4        | 359            |               | NA         |                |               | NA         |                |               | NA         |                |               |            |                |



**CHANGES - REASONS**

1. PROCEDURE NAME: CHANGED FROM "COPTER ILS OR LOC RWY 33" TO "COPTER ILS Z OR LOC Z 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. CHANGED ALL REFERENCES FROM "MKT VOR/DME" TO "MKT DME" – DECOMMISSIONING VOR PORTION OF NAVAID (VOR MON).
4. ADDED TAA FOR PROCEDURE ENTRY – 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. TERMINAL ROUTES: DELETED FEEDER FROM "MKT VOR/DME TO RATEL OM/INT/MKT 4.41 DME" – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
7. MISSED APPROACH POINT: AMENDED ILS FROM "ILS: DH" TO "ILS: DA" AND LOC FROM "LOC: THLD" TO "LOC: 4.27 NM AFTER RATEL OM/INT/MKT 4.41 DME" – IAW 8260.19I PARA 8-6-6.C.1.
8. 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.
9. PROFILE LINE 1: DELETED PROCEDURE TURN – VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN.
10. 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.
11. PROFILE LINE 3: CHANGED FAC FROM "330.52" TO "334.57" AND FAF FROM "RATEL" TO "RATEL OM/INT/MKT 4.41 DME" – PROCEDURE REDESIGN; MAG VAR UPDATE AND IAW 8260.19I PARA 8-6-7.C.1.A.
12. 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.
13. PROFILE LINE 6: CHANGED MIN GS INCPT OM FROM "2441" TO "2427" – 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, INTERMEDIATE AND MISSED APPROACH SEGMENTS; IAW 8260.19I PARA 8-6-8.C.2.
17. CHART NOTE: ADDED "DME FROM MKT DME. DME USE REQUIRES SIMULTANEOUS RECEPTION OF I-MKT AND MKT DME" – ADDED IAW 8260.19I PARA 8-6-9K; I-MKT AND MKT DME FREQUENCIES ARE NOT PAIRED.
18. CHANGED CHART NOTE FROM "FOR INOPERATIVE MALSR INCREASE VISIBILITY TO 1/2 MILE" TO "FOR INOPERATIVE ALS, INCREASE H-ILS 33 VISIBILITY TO 3/8 SM, H-LOC 33 TO 1/2 SM, AND PEKPE FIX MINIMUMS H-LOC 33 TO 1/2 SM" – PEKPE FIX MINIMUMS ADDED AND VISIBILITY VALUES UPDATED IAW 8260.3E PARA 12-3-3 AND TABLES 3-3-1 AND 3-3-3.
19. 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.
20. UPDATED AND MOVED BACKUP ALTIMETER NOTES TO 8260-9 PART C FOR CONTINGENCY NOTES – PRIMARY WEATHER SOURCE ON WMSCR.
21. ADDITIONAL FLIGHT DATA: DELETED "HOLD NW, LT, 149 INBOUND" - VOR MON DECOMMISSIONING MKT VOR AND PROCEDURE REDESIGN; DELETED IAW 8260.19I PARA 8-6-6.G.
22. ADDITIONAL FLIGHT DATA: CHANGED FAS OBSTACLE NOTE FROM "FAS OBST: 1159 WTR TWR 440953/935257" TO "CHART FAS OBST: 1117 TREE (27-070551) 441221N/0935436W" – NEW CONTROLLING OBSTACLE.
23. ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 1.12 DME" AND "DISTANCE VDP TO THLD 0.97 NM" – VDP ESTABLISHED; 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: H-LOC 33 MDA/HAT RAISED FROM "1420/399" TO "1480/459" AND ADDED PEKPE FIX MINIMUMS\* – NEW CONTROLLING OBSTACLE AND 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 7/12/2023:

1: REQUIRED EFFECTIVE DATE: CHANGED FROM ROUTINE TO 11/30/2023.

**COORDINATED WITH:**

A4A  ALPA  AOPA  APA  HAI  NBAA  OTHER: ZMP, AMGR

**FLIGHT CHECKED BY**

PENDING

**OFFICE**

**DATE**

Digitally signed by

DAVID DANNER

Oct 23, 2023

**DEVELOPED BY**

JILL M. SUPPES

**OFFICE**

AJV-A423

**DATE**

07/12/2023

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

