

**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.

<u>AIRPORT</u> WARROAD INTL MEMORIAL	<u>AIRPORT ID</u> KRRT	<u>PROCEDURE NAME</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> WARROAD	<u>STATE</u> MN
<u>AIRPORT ELEVATION</u> 1076	<u>TDZE</u> 1076	<u>SUPERSEDED</u> ILS OR LOC RWY 31	<u>ORIGINAL/AMENDMENT</u> 1B	<u>DATED</u> 06/23/2016	<u>MAG VAR</u> 4E
<u>FACILITY</u> I-SWE	<u>COORDINATES OF FACILITIES</u> 485653.71N / 0952126.11W	<u>ACTUAL EFFECTIVE DATE</u> 10 SEPTEMBER 2020	<u>REQUIRED EFFECTIVE DATE</u> 09/10/2020	<u>CANCEL/SUSPEND</u>	

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
PUCKT/I-SWE 21.00 DME/RADAR	IAF	HILOD/I-SWE 13.76 DME					314.60	7.24 (I-SWE)	3000
HILOD/I-SWE 13.76 DME	IF	ROADD LOM/I-SWE 6.87 DME					314.60	6.89 (I-SWE)	3000

**MISSED APPROACH**

**MAP:**

ILS: DA  
LOC: 5.80 NM AFTER ROADD LOM/I-SWE 6.87 DME OR AT I-SWE 1.07 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2900 THEN CLIMBING LEFT TURN TO 3000 DIRECT ROADD LOM/I-SWE 6.87 DME AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

1. PT R SIDE OF COURSE 134.60 OUTBOUND 3000 FT WITHIN 10 MILES OF ROADD LOM (IAF)
- 2.
3. FAC: 314.60 FAF: ROADD LOM/I-SWE 6.87 DME DIST FAF TO MAP: 5.80 DIST FAF TO THLD: 5.80
4. MIN ALT: ROADD LOM/I-SWE 6.87 DME 3000
5. DIST TO THLD FROM OM: 5.80 MM: 0.53 IM: 150 HAT: GS ANT: 853
6. MIN GS INCPT: 3000 GS ALT AT FAF: OM: 2997 MM: 1288 IM:
7. GP ANGLE: 3.00 34:1 20:1 TCH: 45.0
8. MSA FROM: SW LOM 2700

**EQUIPMENT REQUIREMENTS NOTES:**

ADF REQUIRED.  
RADAR REQUIRED FOR PROCEDURE ENTRY.



**NOTES:**

CHART NOTE: CIRCLING NA TO RWYS 4 AND 22.  
 CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31 CAT C/D VISIBILITY TO 1 3/8 SM.

**ADDITIONAL FLIGHT DATA:**

CHART CIRCLING ICON.  
 CHART VDP AT 2.50 DME\*.  
 DISTANCE VDP TO THLD 1.43 NM.  
 \* LOC ONLY.  
 FAS OBST: 1295 AAO 485143N/0951550W.  
 HOLD SE, LT, 314.60 INBOUND

**MINIMUMS:**

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

ALTERNATE: NA

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
S-ILS 31	1276	1/2	200	1276	1/2	200	1276	1/2	200	1276	1/2	200			
S-LOC 31	1560	1/2	484	1560	1/2	484	1560	1	484	1560	1	484			
CIRCLING	1560	1	484	1560	1	484	1960	2 3/4	884	1960	3	884			



**CHANGES - REASONS**

AMDT 1B:

1. CHANGED APT ELEV: 1076 TO TDZE: 1076.
2. CHANGED S-ILS 31 DA FROM 1274 TO 1276 AND S-LOC 31 HAT FROM 386 TO 384, CAT C/D VIS 5/8. - TDZE CHANGE.
3. CHANGED CIRCLING FROM CAT A HAA 426, CAT B 466, CAT C MDA 1540/HAA 466, VIS 1 1/2, CAT D MDA 1640/HAA 566, VIS 2 CHANGED TO CIRCLING HAA CAT A 424, CAT B 464, CAT C MDA 1960/HAA 884, VIS 2/34, CAT D MDA 1960/HAA 884, VIS 3. CHARTED CIRCLING ICON. - UPDATED CIRCLING TO MATCH RNAV (GPS) RWY 13.
4. ADDED NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED , USE ROSEAU ALTIMETER SETTING AND INCREASE DA TO 1312 FT; INCREASE ALL MDA 40 FT AND LOC CAT C/D VISIBILITY 1/8 MILE. - ADDED NOTE TO MATCH THE OTHER KRRT PUBLISHED PROCEDURES.
5. ADDED VDP AT 2.19 DME\* DISTANCE VDP TO THLD 1.12 MILES. \*LOC ONLY. - MO 20:1 PENETRATIONS.
6. ADDED PROFILE NOTE: VGSI AND GLIDEPATH NOT COINCIDENT (VGSI ANGLE 3.00/TCH 29). - GS ANGLE/TCH AND VGSI NOT COINCIDENT.

AMDT 2

1. TERMINAL ROUTE BAUDETTE (BDE) TO HILOD REMOVED. - VORMON PROJECT, BDE DECOMMISSIONED.
2. TERMINAL ROUTE ROSEAU (ROX) TO ROADD LOM REMOVED. - VORMON PROJECT, ROX TO BE DECOMMISSIONED.
3. ADDED TERMINAL ROUTE PUCKT (IAF) TO HILOD. - VORMON PROJECT, BDE DECOMMISSIONED.
4. MISSED APPROACH CHANGED FROM "CLIMB TO 3000 THEN LEFT TURN DIRECT ROADD LOM/I-SWE 6.88 DME AND HOLD" TO "CLIMB TO 2900 THEN LEFT TURN DIRECT TOADD LOM/I-SWE 6.87 DME AND HOLD". - IAW 8250.3D THE TURNING MISSED SUB-SEGMENT 15 NM POINT OCCURS AT OR BEFORE THE COMPLETION OF THE TURN.
5. FAF 6.9 DME CHANGED FROM ROADD LOM/I-SWE 6.88 DME TO 6.87 DME. - ROADD LOM MOVED 67.64' NW.
6. DISTANCE TO THLD FROM OM: 5.81 MM: 0.52 CHANGED TO OM: 5.80 MM: 0.53. - ROADD LOM MOVED 67.64' NW.
7. GS ALT AT OM: 3000 MM: 1287 CHANGED TO OM: 2997 MM: 1288 AND GS ANT CHANGED FROM 852 TO 853. - ROADD LOM MOVED 67.64' NW.
8. ADDED NOTE: ADF REQUIRED. - IAW 8260.19H, 8-6-8.
9. ADDED NOTE: RADAR REQUIRED FOR PROCEDURE ENTRY. - IAW 8260.19H, 8-6-8.
10. ADDED NOTE: CIRCLING NA TO RWY 4 AND 22. - RWY 4/22 TURF RWY AND REVISED CRITERIA.
11. ADDED NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC 31 CAT C/D VISIBILITY TO 1 3/8 SM. - NEW VISCHECK RESULTS.
12. FAS OBST: 1194 TREES (BTL-1169) 485158N/0951622W CHANGED TO FAS OBST: 1295 AAO 485143N/0951550W. - NEW LOC FINAL CONTROLLING OBSTACLE.
13. S-LOC 31 MINIMUMS ALL CATS MDA 1460/HAT 384, VISIBILITY CAT C/D 5/8 CHANGED TO ALL CATS MDA 1560/HAT 484, VISIBILITY CAT C/D 1. CIRCLING CAT A/B MDA 1500/HAA 424 CHANGED TO CAT A/B MDA 1560/HAA 484. - NEW LOC FINAL CONTROLLING OBSTACLE.
14. DIST FAF TO MAP AND DIST FAF TO THLD CHANGED FROM 5.81 TO 5.80. - ROADD LOM MOVED 67.64' NW.
15. TCH CHANGED FROM 40 TO 45. - REVISED AIRNAV DATA.
16. VDP CHANGED FROM "VDP AT 2.19 DME\*; DISTANCE VDP TO THLD 1.12 MILES" TO "VDP AT 2.50 DME\*; DISTANCE VDP TO THLD 1.43 NM. - MDA INCREASED.
17. REMOVE PLANVIEW NOTE ADF OR DME REQUIRED. - REVISED CRITERIA.
18. INTERMEDIATE SEGMENT HILOD TO ROADD LOM DISTANCE CHANGED FROM 6.88 TO 6.89. - ROADD LOM MOVED 67.64' NW.
19. LOC MAP CHANGED FROM "5.81 MILES AFTER ROADD LOM OR AT I-SWE 1.07 DME FIX" TO "5.80 NM AFTER ROADD LOM/I-SWE 6.87 DME OR AT I-SWE 1.07 DME". - ROADD LOM MOVED 67.64' NW.
20. MOVED LOCAL ALTIMETER SETTING NOTE TO 8260-9. - TO MATCH RNAV (GPS) RWY 13.

ROADD (SW) LOM 485145.91N/0951430.76W

6/17/20: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 7/25/19.

1. UPDATED ROUTINE TO HARD DATE.

**COORDINATED WITH:**

**A4A**  
  **ALPA**  
  **AOPA**  
  **APA**  
  **HAI**  
  **NBAA**  
 **OTHER:** ZMP ARTCC, AMGR

**FLIGHT CHECKED BY**

PENDING

*Digitally signed by*

**ALLAN WILL**

Jun 17, 2020

**OFFICE**

**DATE**

**DEVELOPED BY**

TOMMY BYRNS

*Digitally signed by*

**TOMMY BYRNS**

Jun 17, 2020

**OFFICE**

AJV-A423

**DATE**

07/25/2019

**APPROVED BY**

MARLON ROBINSON

*Digitally signed by*

**ALLAN WILL**

Jun 17, 2020

**OFFICE**

AJV-A420

**DATE**

**TITLE  
MANAGER**

