

**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.

AIRPORT ID STC	PROCEDURE NAME ILS OR LOC RWY 13	ORIGINAL/AMENDMENT 2	CITY ST CLOUD	STATE MN
AIRPORT ELEVATION 1031	TDZE 1031	SUPERSEDED ILS OR LOC/DME RWY 13	ORIGINAL/AMENDMENT 1B	DATED 08/10/2023
FACILITY I-BPM	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 21 MARCH 2024	REQUIRED EFFECTIVE DATE 03/21/2024	MAG VAR 3E
				EPOCH YEAR 1995
				CANCEL/SUSPEND

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
SIYON/STC 14.51 DME	IF/IAF	OSACA/STC 5.92 DME					132.99	8.60	2800

MISSED APPROACH

MAP:

ILS: DA
LOC: 5.40 NM AFTER OSACA/STC 5.92 DME.

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 5000 DIRECT STC VOR/DME AND ON STC VOR/DME R-312 TO SIYON/STC 14.51 DME AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS (DO NOT CHART):

CLIMB TO 3000 DIRECT ZUXAL AND HOLD. (RNP APCH - GPS REQUIRED)

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. HOLD NW SIYON, RT, 132.99 INBOUND, 5000 FT. IN LIEU OF PT (IAF), MAX 6000.					
3. FAC: 132.99	FAF: OSACA/STC 5.92 DME		DIST FAF TO MAP: 5.40	DIST FAF TO THLD: 5.40	
4. MIN ALT: SIYON/STC 14.51 DME 5000, OSACA/STC 5.92 DME 2800					
5. DIST TO THLD FROM OM: 2800	MM: 34:1	IM: 20:1	150 HAT: 48.7	GS ANT: 985	
6. MIN GS INCPT: 2800	GS ALT AT PFAF: OSACA/STC 5.92 DME 2800		OM: MM: IM:		
7. GS ANGLE: 3.00	34:1	20:1	TCH: 48.7		
8. MSA FROM: STC VOR/DME 3500					

QUALITY
34
CHECKED

EQUIPMENT REQUIREMENTS NOTES:

DME REQUIRED.

NOTES:

CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT SIYON ON V510 EASTBOUND.

CHART NOTE: FOR INOPERATIVE ALS WHEN USING LITTLE FALLS ALTIMETER SETTING, INCREASE S-ILS-13 ALL CATS VISIBILITY TO 7/8 SM.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING, INCREASE DA TO 1307 FEET; INCREASE ALL MDAS 80 FEET AND S-LOC 13 VISIBILITY CATS C AND D 1/8 SM, AND CIRCLING VISIBILITY CATS C AND D 1/4 SM.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC-13 CATS C AND D VISIBILITY TO 1 3/4 SM.

CHART NOTE: DME FROM STC VOR/DME. DME USE REQUIRES SIMULTANEOUS RECEPTION OF I-BPM AND STC DME.

CHART NOTE: VDP NA WHEN USING LITTLE FALLS ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE ZUXAL, LT, 321.00 INBOUND.

CHART FAS OBST: 1378 TOWER (27-026557) 453617N/0940818W.

CHART VDP AT 2.27 DME.

DISTANCE VDP TO THLD 1.75 NM.

CHART IN PLANVIEW: ZUXAL.

MINIMUMS:

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

ALTERNATE: NA ☐ ILS: STANDARD - NA WHEN CONTROL TOWER CLOSED., NA WHEN LOCAL WEATHER NOT AVAILABLE.; LOC: STANDARD - CAT D 900-2 3/4, NA WHEN CONTROL TOWER CLOSED., NA WHEN LOCAL WEATHER NOT AVAILABLE.

<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 13	1231	1/2	200	1231	1/2	200	1231	1/2	200	1231	1/2	200			
S-LOC 13	1640	1/2	609	1640	1/2	609	1640	1 3/8	609	1640	1 3/8	609			
CIRCLING	1640	1	609	1640	1	609	1640	1 3/4	609	1860	2 3/4	829			



CHANGES - REASONS

1. CHANGED PROCEDURE NAME FROM "ILS OR LOC/DME RWY 13" TO "ILS OR LOC RWY 13" - IAW 8260.3E 1-6-2, DME NO LONGER USED IN PROCEDURE NAMING.
2. TERMINAL ROUTES: UPDATED "SIYON/AXN VOR/DME 41.60 DME OSACA/STC VOR/DME 5.84 DME (IF/IAF) 132.99 8.67 2800" TO "SIYON/STC 14.51 DME IF/IAF OSACA/STC VOR/DME 5.92 DME 132.99 8.60 2800" - FIX MAKEUP UPDATED/PFAF MOVED TO ALIGN WITH FINAL AND MISSED.
3. MISSED APPROACH: UPDATED LOC FROM "LOC: STC 0.53 DME FIX" TO "LOC: 5.40 NM AFTER OSACA/STC 5.92 DME" - TIMING REQUIRED TO IDENTIFY MAP DUE TO PROXIMITY OF NAVAID.
4. MISSED APPROACH INSTRUCTIONS: UPDATED FROM "CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 5000 DIRECT STC VOR/DME AND VIA STC VOR/DME R-312 TO SIYON/AXN VOR/DME 41.60 DME AND HOLD" TO "CLIMB TO 2500 THEN CLIMBING LEFT TURN TO 5000 DIRECT STC VOR/DME AND ON STC VOR/DME R-312 TO SIYON/STC 14.51 DME AND HOLD" - DWN DECOMMISSIONED/FIX MAKEUP UPDATED.
5. ALTERNATE MISSED APPROACH: UPDATED FROM "WHEN DIRECTED BY ATC, CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT DWN VORTAC AND HOLD E, RT, 277.00 INBOUND" TO "CLIMB TO 3000 DIRECT ZUXAL AND HOLD" - PER FPT REQUEST/DWN VORTAC DECOM.
6. PROFILE LINE 2: UPDATED FROM "PROFILE STARTS AT SIYON" TO "HOLD NW SIYON, RT, 132.99 INBOUND, 5000 FT. IN LIEU OF PT (IAF), MAX 6000" - HOLDING MOVED DUE TO DWN DECOM.
7. PROFILE LINE 3: UPDATED FAF FROM "OSACA/STC VOR/DME 5.84 DME" TO "OSACA/STC 5.92 DME"; ADDED DIST FAF TO MAP AND UPDATED DIST FAF TO THLD FROM "5.32" TO "5.40" - NAVAID TYPE NOT REQUIRED, DISTANCES ADJUSTED FOR PFAF MOVEMENT.
8. PROFILE LINE 4: MIN ALT UPDATED FROM "SIYON 5000, OSACA 2800" TO "SIYON/STC 14.51 DME 5000, OSACA/STC 5.92 DME 2800" - FORMAT IAW 8260.19I 8-6-7.D.
9. PROFILE LINE 6: GS ALT AT (FAF) UPDATED FROM "OSACA/STC VOR/DME 5.84 DME 2800" TO "OSACA/STC 5.92 DME 2800" - DME UPDATED FOR NEW PFAF LOCATION.
10. NOTES: UPDATED "FOR INOPERATIVE MALSR WHEN USING LITTLE FALLS ALTIMETER SETTING, INCREASE S-ILS-13 ALL CATS VISIBILITY 1/2 MILE" TO "FOR INOPERATIVE ALS WHEN USING LITTLE FALLS ALTIMETER SETTING, INCREASE S-13 ALL CATS VISIBILITY TO 7/8 SM" - IAW 8260.3 TABLE 3-3-1.
11. NOTES: UPDATED "CHART PLANVIEW NOTE: HOLDING NOT REQUIRED AT SIYON VIA V510 EASTBOUND" TO "CHART PLANVIEW NOTE: NOPT FOR ARRIVAL AT SIYON ON V510 EASTBOUND - IAW 8260.19I 8-2-5G.
12. NOTES: UPDATED "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING, INCREASE DA TO 1307 AND ALL MDAS 80 FEET. INCREASE S-LOC 13 CATS C/D AND CIRCLING CATS C/D VISIBILITY 1/4 MILE" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE LITTLE FALLS ALTIMETER SETTING: INCREASE S-ILS 13 DA TO 1307 FEET; INCREASE ALL MDAS 80 FEET AND S-LOC 13 VISIBILITY CAT C AND D 1/8 SM, AND CIRCLING VISIBILITY CAT C AND D 1/4 SM" - NOTE FORMAT UPDATED IAW 8260.19I 8-6-9.F.(4) AND 8-6-11.N.(1).
13. NOTES: ADDED "CHART NOTE: FOR INOPERATIVE ALS, INCREASE S-LOC-13 CATS C AND D VISIBILITY TO 1 3/4 SM" - REQUIRED VISIBILITY INCREASE PER 8260.3E TABLE 3-3-1 IS NOT COVERED BY THE INOP TABLE.
14. NOTES: UPDATED CHART NOTE "DME FROM STC VOR/DME. SIMULTANEOUS RECEPTION OF 1-BPM AND STC DME REQUIRED" TO "DME FROM STC VOR/DME. DME USE REQUIRES SIMULTANEOUS RECEPTION OF I-BPM AND STC DME" - IAW 8260.19I 8-6-9K.
15. ADDITIONAL FLIGHT DATA: UPDATED "ALTERNATE MA HOLDING, HOLD E DWN VORTAC, RT, 277.00 INBOUND" TO "ALTERNATE MA HOLDING, HOLD SE ZUXAL, LT, 321.00 INBOUND" - DWN VORTAC DECOM.
16. ADDITIONAL FLIGHT DATA: REMOVED "CHART ARRIVAL HOLDING AT SIYON/AXN 41.60 DME: HOLD W, RT, 102.651NBOUND, 5000" - ARRIVAL HOLD REPLACED WITH HILO-PT IN PROFILE LINE 2.
17. ADDITIONAL FLIGHT DATA: UPDATED CHART FAS OBST "FROM 1376 TOWER 453616N/0940820W" TO "1378 TOWER (27-026557) 453617N/0940818W" - NEW CONTROLLING OBSTACLE.
18. ADDITIONAL FLIGHT DATA: ADDED "CHART VDP AT 2.27 DME." AND "DISTANCE VDP TO THLD 1.75 NM." - VDP ADDED TO PROCEDURE IAW 8260.3E 2-6-5, DOCUMENTED IAW 8260.19I 8-6-10.M.
19. ADDITIONAL FLIGHT DATA: UPDATED "CHART IN PLANVIEW: DWN VORTAC" TO "CHART IN PLANVIEW: ZUXAL" - ALTERNATE MISSED APPROACH REDESIGNED, TERMINATION FIX CHARTED IAW 8260.19I 8-6-6.H.(2).
20. ADDITIONAL FLIGHT DATA: ADDED "CHART NOTE: VDP NA WHEN USING LITTLE FALLS ALTIMETER SETTING" - IAW 8260.19.8-6-9.3(9).
21. MINIMUMS: LOWERED S-LOC MDA/HAT FROM "1680/649" TO "1640/609" - NEW CONTROLLING OBSTACLE.
22. MINIMUMS: RAISED S-LOC VISIBILITY FOR CAT C FROM "1 1/4" TO "1 3/8" AND CAT D FROM "1 1/2" TO "1 3/8" AND CAT D FROM "1 1/2" TO "1 3/8" - IAW 8260.3 TABLE 3-3-1.
23. MINIMUMS: LOWERED CIRCLING CAT A, B, AND C CMDA/HAA FROM "1680/649" TO "1640/609" - NEW CONTROLLING OBSTACLES.

COORDINATED WITH:

A4A

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ALPA

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AOPA

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APA

☐

HAI

☐

NBAA

☒

OTHER:

ZMP, STC ATCT, STATE AV. DIR

FLIGHT CHECKED BY

PENDING

Digitally signed by

DAVID DANNER

Jan 04, 2024

OFFICE

DATE

DEVELOPED BY

DAVID DANNER (MATTHEW W.TOWNSEND)

Digitally signed by

DAVID DANNER

Jan 04, 2024

OFFICE

AJV-A421

DATE

09/26/2023

APPROVED BY

DAVID DANNER

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DAVID DANNER

Jan 04, 2024

OFFICE

AJV-A421

DATE

03/21/2024

TITLE

MANAGER

QUALITY
34
CHECKED