

**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.

AIRPORT ID CKN	PROCEDURE NAME RNAV (GPS) RWY 13	ORIGINAL/AMENDMENT 1	CITY CROOKSTON	STATE MN
AIRPORT ELEVATION 897	TDZE 896	SUPERSEDED RNAV (GPS) RWY 13	DATED 11/04/2021	MAG VAR 2E
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 27 NOVEMBER 2025	REQUIRED EFFECTIVE DATE ROUTINE	EPOCH YEAR 2030
				CANCEL/SUSPEND

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
GFK VOR/DME		GABSE		TF	FB	1.00	108.02	9.91	3000
TVF VOR/DME		ILUVE		TF	FB	1.00	267.26	21.07	3000
GABSE	IAF	AVINE	NOPT	TF	FB	1.00	042.69	7.00	3000
ILUVE	IAF	AVINE	NOPT	TF	FB	1.00	222.87	7.00	3000
AVINE	IF/IAF	BEDSE		TF	FB	1.00	132.78	6.39	2600
BEDSE	FAF	RW13	MAP	TF	FO	0.30	132.89	5.23	
RW13	MAP	1096 MSL		CA			132.89		
1096 MSL		FAPVU		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT FAPVU AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

- PT **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- HOLD NW AVINE, RT, 132.78 INBOUND, 3000 IN LIEU OF PT (IAF), MAX 6000.
- FAC:** 132.89 **FAF:** BEDSE **DIST FAF TO MAP:** 5.23 **DIST FAF TO THLD:** 5.23
- MIN ALT:** AVINE 3000, BEDSE 2600
- DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **200 HAT:** 0.51 **GS ANT:**
- MIN GP INCPT:** 2600 **GP ALT AT PFAF:** BEDSE 2600 **OM:** **MM:** **IM:**
- GP ANGLE:** 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 40.0
- MSA FROM:** RW13 2700



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART NOTE: CIRCLING NA TO RWYS 17 AND 35.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING GFK ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GFK VOR/DME ON AIRWAY RADIALS 071 CW 160.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GFK ALTIMETER SETTING AND INCREASE LPV DA TO 1159 FEET. INCREASE LNAV/VNAV DA TO 1347 FEET AND ALL VISIBILITIES 1/4 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C 1/8 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 313.09 INBOUND.
FAS OBST: 1080 AAO 475321N/0964036W.
CHART VDP AT 1.30 NM TO RW13.
WAAS CHANNEL # 72704
REFERENCE PATH ID: W13A
LTP HAE: 245.7 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												
LPV DA	1096	1	200	1096	1	200	1096	1	200		NA				
LNAV/VNAV DA	1284	1 1/8	388	1284	1 1/8	388	1284	1 1/8	388		NA				
LNAV MDA	1340	1	444	1340	1	444	1340	1 3/8	444		NA				
CIRCLING	1340	1	443	1360	1	463	1480	1 1/2	583		NA				



CHANGES - REASONS

1. INCORPORATED PREVIOUS P-NOTAMS INTO AMENDMENT 1.
2. TERMINAL ROUTES: CHANGED GFK VOR/DME TO GABSE COURSE/DISTANCE FROM "093.40/10.89" TO "108.02/9.91" & GABSE TO AVINE COURSE/DISTANCE FROM "037.73/5.00" TO "042.69/7.00" - RELOCATED GABSE (IAF) 2NM SW TO EXTEND LEG LENGTHS TO SUPPORT RADAR VECTORS & MAGVAR UPDATED FROM 7E/1980 TO 2E/2030.
3. TERMINAL ROUTES: CHANGED TVF VOR/DME TO ILUVE COURSE/DISTANCE FROM "258.73/22.55" TO "267.26/21.07" & ILUVE TO AVINE COURSE/DISTANCE FROM "217.86/5.00" TO "222.87/7.00" - RELOCATED ILUVE (IAF) 2NM NE TO EXTEND LEG LENGTHS TO SUPPORT RADAR VECTORS & MAGVAR UPDATED FROM 7E/1980 TO 2E/2030.
4. TERMINAL ROUTES: CHANGED AVINE TO BEDSE COURSE/DISTANCE FROM "127.79/6.47" TO "132.78/6.39" ; CHANGED BEDSE TO RW13 COURSE/DISTANCE FROM "127.87/5.15" TO "132.89/5.23" - BEDSE FIX LOCATION MOVED TO ESTABLISH NEW PFAF LOCATION FOR GPA 3.00/TCH 40 PROCEDURE ALIGNMENT & MAGVAR UPDATED FROM 7E/1980 TO 2E/2030.
5. TERMINAL ROUTES: ADDED CA LEG WITH COURSE 132.89 AND DF LEG TO FAPVU- IAW 8260.58C PARA 3-5-2B.
6. PROFILE: CHANGED DIST FAF TO MAP & DIST FAF TO THLD FROM "5.15" TO "5.23"- BEDSE (FAF) RELOCATED 462.9 FT FOR GPA 3.00/ TCH 40 FINAL ALIGNMENT.
7. PROFILE: HAT CHANGED FROM "250 HAT: 0.66" TO 200 HAT: 0.51" - LOWERED LPV MINIMUMS DUE TO FPT REQUEST AND NEW SURVEY DATA.
8. PROFILE : ADDED "20:1: IS CLEAR" - IAW 8260-19J PARA 8-6-7G(3).
9. PBN REQUIREMENTS: CHANGED FROM "RNP APCH" TO "RNP APCH - GPS" - IAW 8260.58C TABLE 1-2-1.
10. CHANGED NOTE FROM: "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C (4°F) OR ABOVE 54°C (130°F)." TO " CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C OR ABOVE 54C." - IAW 8260-19J PARA 8-6-10R.
11. CHANGED CIRCLING NOTE FROM "NOTE: CIRCLING RWYS 6, 24,17,35 NA AT NIGHT." TO "NOTE: CIRCLING NA TO RWYS 17 AND 35." - RWY 17/35 IS A TURF RUNWAY & RWY 06/24 HAS BEEN REMOVED PER FPT.
12. NOTES: CHANGED NOTE FROM "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GFK VOR/DME ON AIRWAY RADIALS 038 CW 143." TO "CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GFK VOR/DME ON AIRWAY RADIALS 071 CW 160." - RNAV RESTRICTION OF NO MORE THAN 90 DEGREE TURN FOR A FEEDER ROUTE PER 8260.58C PARA 1-2-5A(3).
13. NOTES: CHANGED BACKUP ALTIMETER NOTE FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRAND FORKS ALTIMETER SETTING AND INCREASE LPV DA TO 1208 AND LNAV/VNAV DA TO 1272 FEET; INCREASE ALL MDA'S 80 FEET AND CIRCLING CAT C VISIBILITY 1/4 SM." TO "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GFK ALTIMETER SETTING AND INCREASE LPV DA TO 1159 FEET. INCREASE LNAV/VNAV DA TO 1347 FEET AND ALL VISIBILITIES 1/4 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C 1/8 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM." - UPDATED OBSTACLE EVALUATION WITH NEW CONTROLLING OBSTACLES, VISIBILITY IAW 8260.3G TABLES 3-3-1, 3-3-3, 3-3-4, 3-3-7, AND 8260.19J 8-6-10(F)(4).
14. ADDITIONAL FLIGHT DATA: CHANGED FAS OBST FROM "1099 AAO 475351N/0964039W" TO "1080 AAO 475321N/0964036W" - IDENTIFIED NEW CONTROLLING OBSTACLE.
15. ADDITIONAL FLIGHT DATA: ADDED NOTE "CHART VDP AT 1.30 NM TO RW13." - IAW 8260.3G 2-6-5.
16. ADDITIONAL FLIGHT DATA: CHANGED HOLDING INBOUND COURSE FROM "308.10" TO "313.09" - MAGVAR UPDATED FROM 7E/1980 TO 2E/2030 AND IAW 8260.19J PARA 8-6-11B.
17. MINIMUMS: CHANGED LPV ALL CATS DA/VIS/HAT FROM "1146/1/250" TO "1096/1/200"; LNAV/VNAV ALL CATS DA/VIS/HAT FROM "1210/1/314" TO "1284/1 1/8 /388" - UPDATED SURVEY & NEW CONTROLLING OBSTACLES.
18. AIRPORT ELEVATION CHANGED FROM "900" TO "897"- UPDATED AIRNAV DATA INCORPORATED.
19. UPDATED AIRPORT MAGVAR FROM "7E/1980" TO "2E/2030". - IAW 8260.19J SECTION 2-5.
20. CHANGED CRC REMAINDER FROM "3D9AD347" TO "7240F816" - FPAP CHANGED FROM "474936.7400N/0963608.8400W" TO "474936.7310N/0963608.8705W" ; LTP CHANGED FROM "475039.6545N/0963742.4470W" TO "475039.6550N/0963742.4485W" & VAL CHANGED FROM "50.0" TO "35.0".
21. NOTES: CHANGED CHART NOTE FROM "BARO-VNAV NA WHEN USING GRAND FORKS ALTIMETER SETTING." TO "BARO-VNAV AND VDP NA WHEN USING GFK ALTIMETER SETTING." - IAW 8260.19J PARA 8-6-10 E(8)(9).
22. PROFILE LINE 2: CHANGED INBOUND COURSE FROM 127.79 TO 132.78 AND ADDED MAX HOLDING 6000 - MAGVAR UPDATED FROM 7E/1980 TO 2E/2030 AND IAW 8260.19J 8-6-7B(2).

COORDINATED WITH:

A4A
 ALPA
 AOPA
 APA
 HAI
 NBAA
 OTHER: GFK APP CON, ZMP ARTCC, AMGR

FLIGHT CHECKED BY

MARC WEBBER

Digitally signed by

ALLAN WILL

Aug 20, 2025

OFFICE

AJF

DATE

08/19/2025

DEVELOPED BY

ALLAN WILL (TEVAR MALONE)

Digitally signed by

ALLAN WILL

Aug 20, 2025

OFFICE

AJV-A33

DATE

03/28/2025

APPROVED BY

KYLE THOMPSON

Digitally signed by

ALLAN WILL

Aug 20, 2025

OFFICE

AJV-A33

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KCKN
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	475039.6550N
LTP/FTP LONGITUDE	0963742.4485W
LTP/FTP ELLIPSOIDAL HEIGHT	+02457
FPAP LATITUDE	474936.7310N
FPAP LONGITUDE	0963608.8705W
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	1440
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER 7240F816

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02727
FPAP ORTHOMETRIC HEIGHT	+02727

