

**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.

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SUPERSEDED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

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:

- | | | | | | | |
|---|----------------------------|----------------|-----------------------|------------------------|---------|-----|
| 1. PT | SIDE OF COURSE | OUTBOUND | FT WITHIN | MILES OF | (IAF) | |
| 2. HOLD NW AVINE, RT, 132.78 INBOUND, 3000 IN LIEU OF PT (IAF), MAX 6000. | | | | | | |
| 3. FAC: 132.89 | FAF: BEDSE | | DIST FAF TO MAP: 5.23 | DIST FAF TO THLD: 5.23 | | |
| 4. MIN ALT: AVINE 3000, BEDSE 2600 | | | | | | |
| 5. DIST TO THLD FROM OM: | MM: | IM: | 150 HAT: | 200 HAT: 0.51 | GS ANT: | |
| 6. MIN GP INCPT: 2600 | GP ALT AT PFAF: BEDSE 2600 | | | OM: | MM: | IM: |
| 7. GP ANGLE: 3.00 | 34:1: IS CLEAR | 20:1: IS CLEAR | TCH: 40.0 | | | |
| 8. MSA FROM: RW13 2700 | | | | | | |

QUALITY
42
CHECKED

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	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	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

QUALITY
42
CHECKED

AIRPORT ID
CKN

PROCEDURE NAME
RNAV (GPS) RWY 13

ORIGINAL/AMENDMENT
1

CITY
CROOKSTON

STATE
MN

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
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ADDITIONAL PATH POINT RECORD INFORMATION

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

QUALITY
42
CHECKED

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

<u>AIRPORT ID</u>	<u>PROCEDURE NAME</u>	<u>AMDT NO.</u>	<u>CITY</u>	<u>STATE</u>	<u>AIRPORT ELEVATION</u>	<u>FACILITY</u>
CKN	RNAV (GPS) RWY 13	1	CROOKSTON	MN	897	RNAV

PART A: OBSTRUCTION DATA SEGMENTS

FEEDER

FROM GFK VOR/DME **TO** GABSE

RNP 1.00 **DISTANCE** 9.91 **PAT** **MAP** **HAT** **HMAS**

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (27-006065)	475241.00N/0970025.00W	1163	250	50	4D	1000				AT837	3000
TERRAIN	475548.00N/0965903.00W	882 (900)								AS1500	2400

COMPUTATIONS

ALT **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

SEGMENT REMARKS:

FEEDER

FROM TVF VOR/DME **TO** ILUVE

RNP 1.00 **DISTANCE** 21.07 **PAT** **MAP** **HAT** **HMAS**

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (27-001429)	480305.00N/0962222.00W	1446	500	50	5D	1000				AT554	3000
TERRAIN	480518.00N/0961621.00W	1138 (1100)								AS1500	2600

COMPUTATIONS

ALT **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

SEGMENT REMARKS:



INITIAL

FROM

GABSE

TO

AVINE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TOWER (38-000767)	475351.00N/0965722.00W	1154	250	50	4D	1000				AT846	3000
TERRAIN	475603.00N/0965654.00W	859 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM

ILUVE

TO

AVINE

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u>				
1.00	7.00										
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	480151.00N/0963945.00W	1093	215	8	4B	1000				AT907	3000
TERRAIN	480118.00N/0964154.00W	875 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INTERMEDIATE

FROM

AVINE (IF/IAF)

TO

BEDSE

RNP

1.00

DISTANCE

6.39

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	475457.00N/0964200.00W	1076	215	8	4B	500				AT1024	2600
TERRAIN	475657.00N/0964309.00W	872 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

BEDSE

TO

RW13

RNP

0.30

DISTANCE

5.23

PAT

MAP

DA

HAT

200

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				1096

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

BEDSE

TO

RW13

<u>RNP</u> 0.30	<u>DISTANCE</u> 5.23	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 388	<u>HMAS</u>						
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TREE	475148.00N/0963812.00W	999	250	8	4B		23.36:1			AC8	1284

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

BEDSE

TO

RW13

RNP 0.30	DISTANCE 5.23	PAT	MAP RW13	HAT 444	HMAS						
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	475321.00N/0964036.00W	1080				250					1340

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

HOLD-IN-LIEU OF PT

FROM
AVINE

TO
P-5

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u> P-5	<u>MAP</u>		<u>HAT</u>				<u>HMAS</u>		
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	475815.00N/0964427.00W	1067	215	8	4B	1000				AT933	3000
TERRAIN	475815.00N/0964427.00W	866 (900)								AS1500	2400

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LPV

FROM
DA

TO
FAPVJ

<u>RNP</u> 0.30	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u> 930				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				3000
AAO	474242.00N/0962151.00W	1254	215	8	4B	1000					2300
TERRAIN	474321.00N/0962254.00W	1033 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

FAPVU

<u>RNP</u> 0.30	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>			<u>HAT</u>	<u>HMAS</u> 1134				
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				3000
AAO	474242.00N/0962151.00W	1254	215	8	4B	1000					2300
TERRAIN	474321.00N/0962254.00W	1033 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV

FROM

RW13

TO

FAPVU

RNP 0.30-1.00	DISTANCE	PAT	MAP			HAT			HMAS		
											1240
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
							ASC				3000
AAO	474242.00N/0962151.00W	1254	215	8	4B	1000					2300
TERRAIN	474321.00N/0962254.00W	1033 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

AIRPORT ID
CKN

PROCEDURE NAME
RNAV (GPS) RWY 13

AMDT NO.
1

CITY
CROOKSTON

STATE
MN

AIRPORT ELEVATION
897

FACILITY
RNAV

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☐ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
TREE	475130.00N/0963618.00W	1.30	443	1016	215	8	4B	300		SI	1340
CATEGORY B											
TREE	475100.00N/0963442.00W	1.84	463	1019	215	8	4B	300		HAA	1360
CATEGORY C											
TOWER (27-027152)	474750.65N/0963516.60W	2.89	583	1118	250	50	4D	300		AC50	1480

CIRCLING REMARKS:

MSA

CENTER
RW13

RADIUS
25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (27-002161)	475833.70N/0963615.85W	005	8.0	1655	250	50	4D	1000			2700

MSA REMARKS:

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

GFK APP CON, PNM FSS, ZMP ARTCC

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
AWOS-3	CKN	24	CKN		Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
ASOS	GFK	24	GFK	23.12	Y	63

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KCKN 897, KGFK 839
RA = 62.2

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>	
RW35			
RW17			
RW13 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	NPI-G		
RW31 - REIL (PCL), MIRL (PCL), PAPI-4R	NPI-G		

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	894.7	40.0			3.00	30.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	☒	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	☒	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-16C	+54C	-16C	+13.22C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 828 HIGH TEMP 1177.

"VISUAL PORTION OF FINAL" PENETRATIONS

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

PENETRATIONS REMARKS:

PART C: GENERAL REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

RWY 06/24 REMOVED FROM APT.

RWY 17/35 UNMARKED, TURF RWYS.

VISIBILITY NO LOWER THAN 1 SM PER FPT.

TAA NOT ESTABLISHED PER ATC.

100 FT VEGETATION USED PER FPT.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.03
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	134.89
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.83
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.76
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	134.89
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	900

THRESHOLD COORDINATES (IF STR-IN)	475039.66N/0963742.45W
ARP COORDINATES	475027.00N/0963719.96W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 31 DISTANCE 0.38 NM
FAF COORDINATES	475421.06N/0964312.47W
FIX NAME COORDINATES	

REMARKS

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
ALLAN WILL (TEVAR MALONE)	AJV-A33	03/28/2025	AERONAUTICAL INFORMATION SPECIALIST

