

**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> KHCO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> HALLOCK	<u>STATE</u> MN		
<u>AIRPORT ELEVATION</u> 820	<u>TDZE</u> 820	<u>SUPERSEDED</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 01/03/2019	<u>MAG VAR</u> 5E	<u>EPOCH YEAR</u> 2000
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TAA

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 045/30 CW 225/30	NOPT	FESNI	IF/IAF	3300
2. 225/30 CW 045/30		FESNI	IF/IAF	3300

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
FESNI	IF/IAF	HUTLU		TF	FB	1.00	134.76	5.00	2400
HUTLU	FAF	JUXIV/1.50 NM TO RW13		TF	FB	0.30	134.82	3.33	
JUXIV/1.50 NM TO RW13		RW13	MAP	TF	FO	0.30	134.82	1.50	
RW13	MAP	1020 MSL		CA			134.82		
1020 MSL		HOGEB		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT HOGEB AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
16
CHECKED

PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD NW FESNI, RT, 134.76 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAF: 134.82FAF: HUTLUDIST FAF TO MAP: 4.83DIST FAF TO THLD: 4.83

4. MIN ALT: FESNI 3300, HUTLU 2400, JUXIV/1.50 NM TO RW13 1340

5. DIST TO THLD FROM OM:MM:IM:150 HAT:200 HAT: 0.49GS ANT:

6. MIN GP INCPT: 2400GP ALT AT FAF : HUTLU 2400OM:MM:IM:

7. GP ANGLE: 3.0034:1: IS CLEAR20:1: IS CLEARTCH: 45.0

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: BARO-VNAV NA WHEN USING GRAFTON ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRAFTON ALTIMETER SETTING AND INCREASE LPV DA TO 1082 FEET; INCREASE LNAV/VNAV DA TO 1161 FEET; INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C 1/4 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 315.05 INBOUND.
CHART FAS OBST: 929 TREE 484544N/0965608W.
WAAS CHANNEL # 40333
REFERENCE PATH ID: W13A
CHART CIRCLING ICON.
LTP HAE: 222.3 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	1020	1	200	1020	1	200	1020	1	200		NA				
LNAV/VNAV DA	1099	1	279	1099	1	279	1099	1	279		NA				
LNAV MDA	1180	1	360	1180	1	360	1180	1	360		NA				
CIRCLING	1380	1	560	1380	1	560	1380	1 1/2	560		NA				



CHANGES - REASONS

1. INCORPORATED CHANGES FROM P-NOTAM FOR AMDT ORIG-A AND ORIG-B INTO FORM - IAW 8260.19I PARA 8-3-4.C (3).
2. ADDED TAA AND ASSOCIATED INFORMATION - NALCO FEEDER AND ZOMTA INITIAL ROUTES REMOVED FROM TERMINAL ROUTES PER FPT REQUEST.
3. REPLACED IF/IAF HML VORTAC IN TERMINAL ROUTES WITH FIX FESNI AND UPDATED COURSE/DISTANCE FROM "125.42/4.70" TO "134.76/5.00" - NEW IF/IAF FIX FESNI CREATED PER FPT REQUEST DUE TO VOR MON OF HML VOR.
4. UPDATED CA LEG IN TERMINAL ROUTES FROM "1068 MSL" TO "1020 MSL" - IAW 8260.58B 3-5-2 (B).
5. AMENDED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 4000 DIRECT HOGEB AND HOLD." TO "CLIMB TO 2800 DIRECT HOGEB AND HOLD." - PER FPT AND ATC REQUEST.
6. ADDED "MAX 6000" TO PROFILE LINE 2 - IAW 8260.19I PARA 8-6-7.B (2).
7. PROFILE LINE 2: CHANGED "HOLD NW HML VORTAC, RT, 125.42 INBOUND, 2800 FT IN LIEU OF PT (IAF)" TO "HOLD NW FESNI, RT, 134.76 INBOUND, 3300 FT. IN LIEU OF PT (IAF), MAX 6000." - FPT REQUEST DUE TO VOR MON OF HML VOR.
8. PROFILE LINE 4: REPLACED "HML VORTAC 2800" WITH "FESNI 3300" - PER FPT REQUEST DUE TO VOR MON OF HML VOR.
9. CHANGED "DISTANCE TO THLD FROM 250 HAT: 0.64 NM" TO "DISTANCE TO THLD FROM 200 HAT: 0.49" AND RELOCATED FROM ADDITIONAL FLIGHT DATA TO PROFILE LINE 5 - IAW 8260.19I, 8-6-7.E.
10. PROFILE LINE 7: ADDED "20:1: IS CLEAR" - IAW 8260.19I PARA 8-6-7.G (3).
11. REMOVED MSA DATA FROM LINE 8 - REPLACED WITH TAA
12. REPLACED "RNP APCH" WITH "RNP APCH - GPS" TO PBN REQUIREMENTS NOTE - IAW 8260.19I PARA 8-6-8.B (2)
13. DELETED NOTE "CHART NOTE: BARO-VNAV NA" - QGS FIX BY FUNCTION OBSTACLES LISTED AS ACCEPTABLE WITHIN NEW EVALUATION.
14. REMOVED LNAV ONLY* FROM ADDITIONAL FLIGHT DATA - NO LONGER REQUIRED.
15. ADDED NOTE: "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C." - IAW 8260.19I PARA 8-6-9.R.
16. CHANGED LPV DA/HAT ALL CATS FROM "1070/250" TO "1020/200"- NO POFZ PENETRATIONS PER NEW TARGETS EVALUATION.
17. CHANGED LNAV/VNAV DA/HAT ALL CATS FROM "1213/393" TO "1099/279"- NEW CONTROLLING OBSTACLE ON FINAL PER TARGETS EVALUATION.
18. AMENDED LNAV/VNAV VIS ALL CATS FROM 1 3/8 SM TO 1 SM - IAW 8260.3D CH. 3 TABLE 3-3-1.
19. AMENDED CRC REMAINDER FROM "8B7BB537" TO "7DBDC379" - FPAP COORDINATES AND VERTICAL ALERT LIMIT (VAL) UPDATED.
20. UPDATED "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRAFTON, ND ALTIMETER SETTING AND INCREASE ALL DA 63FT AND ALL MDA 80-FT; INCREASE LNAV/VNAV ALL CATS VISIBILITY 1/8 MILE; LNAV CAT C VISIBILITY 3/8 MILE; CIRCLING CAT C VISIBILITY 1/4 MILE." TO "CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRAFTON ALTIMETER SETTING AND INCREASE LPV DA TO 1082 FEET; INCREASE LNAV/VNAV DA TO 1157 FEET; INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C 1/4 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM." - IAW 8260.19I 8-6-9.F (4).
21. ADDED "CHART NOTE: BARO-VNAV NA WHEN USING GRAFTON ALTIMETER SETTING." - IAW 8260.19I, 8-6-9.E (8-9).

COORDINATED WITH:

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

FLIGHT CHECKED BY

JEREMY LEIGHTON

*Digitally signed by***ALLAN WILL***Sep 02, 2021
Digitally signed by***ALLAN WILL***Sep 02, 2021
Digitally signed by***ALLAN WILL***Sep 02, 2021***OFFICE**

FICO

DATE

08/31/2021

DEVELOPED BY

ALLAN WILL (LEAH JENSEN)

OFFICE

AJV-A423

DATE

07/28/2021

APPROVED BY

MARLON ROBINSON

OFFICE

AJV-A420

DATE**TITLE
MANAGER**

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KHCO
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	484525.0000N
LTP/FTP LONGITUDE	0965654.0890W
LTP/FTP ELLIPSOIDAL HEIGHT	+02223
FPAP LATITUDE	484416.9060N
FPAP LONGITUDE	0965527.3560W
THRESHOLD CROSSING HEIGHT (TCH)	00045.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1528
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	7DBDC379

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02494
FPAP ORTHOMETRIC HEIGHT	+02494



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

<u>AIRPORT ID</u> KHCO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>AMDT NO.</u> 1	<u>CITY</u> HALLOCK	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 820	<u>FACILITY</u> RNAV
---------------------------	--	----------------------	------------------------	--------------------	---------------------------------	-------------------------

PART A: OBSTRUCTION DATA SEGMENTS

STRAIGHT-IN AREA

FROM
045/30 CW 225/30

TO
FESNI

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<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>
TOWER (38-000485)	485944.00N/0972429.00W		2236	250	50	4D	1000					3300
TERRAIN	485300.00N/0975154.00W		1167 (1200)								AS1500	2700

<u>COMPUTATIONS</u>	<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
---------------------	------------	-------------	-------------	------------	-------------	-----------	-----------	------------	----------------------	-------------	----------------	-------------------------------

SEGMENT REMARKS:

STRAIGHT-IN AREA

FROM
225/30 CW 045/30

TO
FESNI

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<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>
TOWER (27-001454)	483516.00N/0962942.00W		1377	100	20	3C	1000				AT923	3300
TERRAIN	485833.00N/0963651.00W		1122 (1100)								AS1500	2600

<u>COMPUTATIONS</u>	<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
---------------------	------------	-------------	-------------	------------	-------------	-----------	-----------	------------	----------------------	-------------	----------------	-------------------------------

SEGMENT REMARKS:



INTERMEDIATE

FROM

FESNI (IF/IAF)

TO

HUTLU

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	5.00											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	484942.00N/0970027.00W		1008	164	98	4E	500				AC98 AT794	2400
TERRAIN	484948.00N/0970051.00W		803 (800)								AS1500	2300

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

SEGMENT REMARKS:

FINAL: LPV

FROM

HUTLU

TO

RW13

<u>RNP</u>	<u>DISTANCE</u> 4.83	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 200			<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>
								ASC				1020

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

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

HUTLU

TO

RW13

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	4.83		DA		279							
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE	484543.50N/0965607.50W		929	50	20	2C	150				AC20	1099

COMPUTATIONS

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

SEGMENT REMARKS:

FINAL: LNAV

FROM

HUTLU

TO

JUXIV/1.50 NM TO RW13

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
	3.33											
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	484814.68N/0965946.55W		1008	50	3	2A	250				RA62 DG20	1340

COMPUTATIONS

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

SEGMENT REMARKS:



FINAL: LNAV STEPDOWN

FROM

JUXIV/1.50 NM TO RW13

TO

RW13

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>			<u>HMAS</u>				
	1.50		RW13			360					
<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	484543.50N/0965607.50W	929	50	20	2C	250					1180

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

FESNI

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>
WINDMILL (38-021003)	485948.00N/0971430.00W	1121	500	50	5D	1000				AT1179	3300
TERRAIN	485742.00N/0971954.00W	803 (800)								AS1500	2300

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

HOGEB

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
854												
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				2800
AAO	483530.00N/0964112.00W		1188	164	98	4E	1000					2200
TERRAIN	483621.00N/0964154.00W		974 (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

HOGEB

RNP	DISTANCE	PAT	MAP	HAT			HMAS					
945												
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				2800
AAO	483530.00N/0964112.00W		1188	164	98	4E	1000					2200
TERRAIN	483621.00N/0964154.00W		974 (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

HOGEB

RNP	DISTANCE	PAT	MAP	HAT			HMAS 1080					
OBSTRUCTION	COORDINATES		ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
								ASC				2800
AAO	483530.00N/0964112.00W		1188	164	98	4E	1000					2200
TERRAIN	483621.00N/0964154.00W		974 (1000)								AS1500	2500

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

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											
TOWER (27-000415)	484631.00N/0965638.00W	1.30	560	1028	250	50	4D	300		AC50	1380
CATEGORY B											
TOWER (27-000415)	484631.00N/0965638.00W	1.83	560	1028	250	50	4D	300		AC50	1380
CATEGORY C											
TOWER (27-000415)	484631.00N/0965638.00W	2.88	560	1028	250	50	4D	300		AC50	1380

CIRCLING REMARKS:

CENTER

RADIUS

REMARKS:



<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>
KHCO	RNAV (GPS) RWY 13	1	HALLOCK	MN	820	RNAV

NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:



PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH
MSP ARTCC

<u>WX SERVICE</u> AWOS-3	<u>LOCATION</u> KHCO	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KHCO	<u>DISTANCE</u> 0	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 0
<u>BACK-UP WX SERVICE</u> AWOS-3	<u>LOCATION</u> KGAF	<u>HRS OPERATION</u> 24	<u>ALTIMETER SOURCE</u> KGAF	<u>DISTANCE</u> 26.94	<u>SERVICE-A</u> Y	<u>ADJUSTMENTS</u> 62

WX REMARKS:
RASS PRESSURE PATTERNS THE SAME
KHCO 820, KGAF 821
RA = 61.7.

<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>
RW13 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)		NPI-G	
RW31 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)		NPI-G	

<u>GLIDESLOPE ANGLE</u> 3.00	<u>ELEV RWY THRESHOLD</u> 818.3	<u>TCH</u> 45.0	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u> 3.00	<u>TCH</u> 42.3
---------------------------------	------------------------------------	--------------------	------------------------	--------------------------	---------------------------	--------------------

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	<input checked="" type="checkbox"/>	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE
ON CENTERLINE	<input checked="" type="checkbox"/>	FT FROM CENTERLINE	

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u> -16C	<u>CRITICAL HIGH</u> +54C	<u>ACT</u> -16C	<u>APT ISA</u> +13.38C
-----------------------------	------------------------------	--------------------	---------------------------

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.

100' VEGETATION USED.

VGS PENETRATIONS FIX BY FUNCTION:
823 NAVAID (27-026173) 484525.97N/0965653.15W (3.49)
823 NAVAID (27-026174) 484524.57N/0965655.72W (3.41)

MISSED APPROACH ALTITUDE OF 2800 PER FPT AND ATC REQUEST.

VDP IS NOT PUBLISHABLE DUE TO: VDP IS LOCATED WITHIN .5 NM FROM FINAL FIX.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



<u>AIRPORT ID</u> KHCO	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>AMDT NO.</u> 1	<u>CITY</u> HALLOCK	<u>STATE</u> MN	<u>AIRPORT ELEVATION</u> 820	<u>FACILITY</u> RNAV
---------------------------	--	----------------------	------------------------	--------------------	---------------------------------	-------------------------

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	3.26
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	139.82
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	900
DISTANCE FROM	THLD	TO 1500FT POINT	4.83
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	2.13
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	139.82
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	900

THRESHOLD
COORDINATES
(IF STR-IN)

484525.00N/0965654.09W

ARP COORDINATES

484509.83N/0965634.81W

RUNWAY APCH END
AND DIST FURTHEST
FROM ARP

RUNWAY 13 DISTANCE 0.33 NM

FAF
COORDINATES

484906.13N/0970136.39W

FIX NAME
COORDINATES

IF/IAF FESNI: 485255.06N/0970629.64W

REMARKS

TAA STRAIGHT-IN:
045/30 CW 225/30 TO FESNI.
225/30 CW 045/30 TO FESNI.

QUALITY
16
CHECKED

FAA Form 8260-9 / (11/16) Supersedes Previous Edition

Electronic Version

Page 10 of 11

PART E: PREPARED BY

<u>NAME</u> ALLAN WILL (LEAH JENSEN)	<u>OFFICE</u> AJV-A423	<u>DATE</u> 07/28/2021	<u>TITLE</u> AERONAUTICAL INFORMATION SPECIALIST
---	---------------------------	---------------------------	---

