

**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</u> GRAND FORKS INTL	<u>AIRPORT ID</u> KGFK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 27R	<u>ORIGINAL/AMENDMENT</u> 2A	<u>CITY</u> GRAND FORKS	<u>STATE</u> ND	
<u>AIRPORT ELEVATION</u> 845	<u>TDZE</u> 843	<u>SUPERSEDED</u> RNAV (GPS) RWY 27R	<u>ORIGINAL/AMENDMENT</u> 2	<u>DATED</u> 03/12/2009	<u>MAG VAR</u> 6E	<u>EPOCH YEAR</u> 1985
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 26 MARCH 2020	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>		

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
GFK VOR/DME		URBAH		TF	FO	1.00	084.71	11.71	2800
EYWUS	IAF	URBAH	NOPT	TF	FB	1.00	174.01	10.94	2800
JIXIR	IAF	URBAH	NOPT	TF	FB	1.00	354.21	8.24	2800
URBAH	IF/IAF	JMKNK		TF	FB	1.00	264.21	6.31	2400
JMKNK	FAF	RW27R	MAP	TF	FO	0.30	264.10	4.69	
RW27R	MAP	1093 MSL		CA			264.10		
1093 MSL		DUCEV		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
LNAV: RW27R

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 4000 DIRECT DUCEV AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4000.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
2. HOLD E URBAH, RT, 264.21 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 264.10 FAF: JMKNG DIST FAF TO MAP: 4.69 DIST FAF TO THLD: 4.69
4. MIN ALT: URBAH 2800, JMKNG 2400
5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 250 HAT: 0.63 GS ANT:
6. MIN GP INCPT: 2400 GP ALT AT FAF : JMKNG 2400 OM: MM: IM:
7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 48.0
8. MSA FROM: RW27R 3300

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: VDP NA WHEN USING CROOKSTON ALTIMETER SETTING.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GFK VOR/DME AIRWAY RADIALS 071 CW 160.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CROOKSTON ALTIMETER SETTING AND INCREASE ALL DA 62 FEET AND ALL MDA 80 FEET. INCREASE LNAV AND CIRCLING CAT C AND D VISIBLTY 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.78 NM TO RW27R*
*LNAV ONLY
WAAS CHANNEL #78104
REFERENCE PATH ID: W27A
FAS OBST: 1044 AAO 475739N/0970454W.
CHART: 1084 TOWER 475621N/0970312W.
HOLD W, RT, 083.78 INBOUND
LTP HAE: 230.1 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	1093	1	250	1093	1	250	1093	1	250	1093	1	250			
LNAV MDA	1460	1	617	1460	1	617	1460	1 3/4	617	1460	2	617			
CIRCLING	1460	1	615	1460	1	615	1460	1 3/4	615	1460	2	615			



CHANGES - REASONS

1. ADDED PBN REQUIREMENT NOTE: RNP APPROACH - PER 8260.19H, PARA. 8-6-8B(1).
2. REMOVED NOTE "DME/DME RNP-0.3 NA" - PER 8260.19H, PARA. 1-1-5F(14).
3. REMOVED NOTE 'VISIBILITY REDUCTION BY HELICOPTERS NA' - PREVIOUS 34:1/20:1 PENETRATIONS NO LONGER APPLY.
4. REPLACED 'MILE' WITH 'SM' IN BACK-UP ALTIMETER NOTE - 8260.19H EXAMPLES.
5. CHANGED PROCEDURE TCH FROM 45 TO 48 - WILL MATCH NEWLY INSTALLED PAPI SYSTEM TCH.
6. ADDED VDP AT 1.78 NM TO RWY27R - PREVIOUS 34:1/20:1 PENETRATIONS NO LONGER APPLY.
7. ADDED NOTE 'VDP NA WHEN USING CROOKSTON ALTIMETER SETTING' - PER 8260.19H 8-6-9E(9).
8. ADDED CIRCLING ICON - NEW CIRCLING ADDED THAT MATCHES UPDATED AND FLIGHT CHECKED RNAV (GPS) 17R CIRCLING.
9. LINE 7: CHANGED 34:1 IS NOT CLEAR TO 34:1 IS CLEAR AND ADDED 20:1 IS CLEAR - PREVIOUS 34:1/20:1 PENETRATIONS NO LONGER APPLY.
10. ADDITIONAL FLIGHT DATA: CHANGED FAS OBSTACLE FROM 1149 AAO 475749N/0970516W TO 1044 AAO 475739N/0970454W - NEW OBSTACLE DETERMINED BY TARGETS BUILD RESULT.
11. ADDITIONAL FLIGHT DATA: CHANGED 7:1 OBSTACLE FROM 1326 TOWER 475745N/0970313W TO 1084 TOWER 475621N/0970312W - NEW OBSTACLE DETERMINED BY TARGETS BUILD RESULT.
12. ADDED 'STANDARD' TO ALTERNATE MINIMUMS STATEMENT - MISSING ON AMDT 2 FORM.
13. FAS DATA: CHANGED LTP/FTP LAT/LONG FROM 475708.6055N/0971003.9405W TO 475708.6060N/0971003.9370W - PER AIRNAV DATA PULL.
14. FAS DATA: CHANGED FPAP LAT/LONG FROM 475708.6000N/0971216.4900W TO 475708.5990N/0971216.4880W - TARGETS RESULT FROM CHANGE IN LTP LAT/LONG.
15. FAS DATA: CHANGED TCH FROM 44.6 TO 48 - WILL MATCH NEWLY INSTALLED PAPI SYSTEM TCH.
16. FAS DATA: CRC REMAINDER CHANGED FROM E2F54D30 TO 687264E8 - RESULT OF COORDINATES AND TCH CHANGES LISTED ABOVE.
17. CHANGED PLANVIEW NOTE 'PROCEDURE NA FOR ARRIVAL ON GFK VOR/DME AIRWAY RADIALS 071 CW 095' TO 'PROCEDURE NA FOR ARRIVAL ON GFK VOR/DME AIRWAY RADIALS 071 CW 160' - TURN FROM V 181 NORTHWEST BOUND EXCEEDS 90 DEGREE LIMITATION FOR ENROUTE TRANSITIONS TO RNAV APPROACHES.

COORDINATED WITH:

A4A☒ALPA☒AOPA☒APA☒HAI☐NBAA☒OTHER: ZMP, GFK APP CON, GFK ATCT, ARPT MGR

FLIGHT CHECKED BY BRANDON VANDERSCHAAF	Digitally signed by DAVID DANNER Feb 10, 2020	OFFICE FICO	DATE 2/5/20	
DEVELOPED BY RALPH DUMAR	Digitally signed by RALPH DUMAR Dec 10, 2019	OFFICE AJV-A422	DATE 11/13/2019	
APPROVED BY MARLON ROBINSON	Digitally signed by DAVID DANNER Feb 10, 2020	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	KGFK
RUNWAY	RW27R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W27A
LTP/FTP LATITUDE	475708.6060N
LTP/FTP LONGITUDE	0971003.9370W
LTP/FTP ELLIPSOIDAL HEIGHT	+02301
FPAP LATITUDE	475708.5990N
FPAP LONGITUDE	0971216.4880W
THRESHOLD CROSSING HEIGHT (TCH)	00048.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1472
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	687264E8

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02569
FPAP ORTHOMETRIC HEIGHT	+02569

