# 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.

**PROCEDURE NAME** AIRPORT ID GFK

RNAV (GPS) RWY 27R

ORIGINAL/AMENDMENT

CITY

STATE

**AIRPORT ELEVATION** 

**TDZE** 

3

**GRAND FORKS** 

ND

845

**SUPERSEDED** 

**ORIGINAL/AMENDMENT** 2A

**DATED** 03/26/2020 MAG VAR 6E

**EPOCH YEAR** 1985

**FACILITY RNAV** 

843

RNAV (GPS) RWY 27R **COORDINATES OF FACILITIES** 

**ACTUAL EFFECTIVE DATE** 31 OCTOBER 2024

REQUIRED EFFECTIVE DATE 10/31/2024

**CANCEL/SUSPEND** 

**TERMINAL ROUTES** 

| FROM                   | FIX TYPE | <u>TO</u>              | FIX TYPE | LEG TYPE | FO/FB RNP |      | COURSE | DISTANCE | ALTITUDE |
|------------------------|----------|------------------------|----------|----------|-----------|------|--------|----------|----------|
| GFK VOR/DME            |          | URBAH                  |          | TF       | FO        | 1.00 | 084.72 | 11.56    | 2800     |
| EYWUS                  | IAF      | URBAH                  | NOPT     | TF       | FB        | 1.00 | 174.79 | 10.94    | 2800     |
| JIXIR                  | IAF      | URBAH                  | NOPT     | TF       | FB        | 1.00 | 353.17 | 8.24     | 2800     |
| URBAH                  | IF/IAF   | JMKNG                  |          | TF       | FB        | 1.00 | 264.20 | 6.10     | 2400     |
| JMKNG                  | FAF      | ROKKS/1.55 NM TO RW27R |          | TF       | FB        | 0.30 | 264.10 | 3.20     |          |
| ROKKS/1.55 NM TO RW27R |          | RW27R                  | MAP      | TF       | FO        | 0.30 | 264.10 | 1.55     |          |
| RW27R                  | MAP      | 1043 MSL               |          | CA       |           |      | 264.10 |          |          |
| 1043 MSL               |          | DUCEV                  |          | DF       | FO        | 1.00 |        |          | 4000     |

## MISSED APPROACH

MAP:

LPV: DA LNAV/VNAV: DA LNAV: RW27R

## **MISSED APPROACH INSTRUCTIONS:**

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

#### ALTERNATE MISSED APPROACH INSTRUCTIONS:

## PROFILE:

8. MSA FROM:

**FT WITHIN** SIDE OF COURSE OUTBOUND **MILES OF** (IAF)

2. HOLD E URBAH, RT, 264.20 INBOUND, 2800 FT. IN LIEU OF PT (IAF), MAX 6000.

**3. FAC:** 264.10 FAF: JMKNG **DIST FAF TO MAP:** 4.75 **DIST FAF TO THLD:** 4.75

MIN ALT: URBAH 2800. JMKNG 2400. ROKKS/1.55 NM TO RW27R 1380

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

MIN GP INCPT: 2400 **GP ALT AT PFAF: JMKNG 2400** IM: OM: MM:

GP ANGLE: 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 44.0

RW27R 3000

AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE

GFK RNAV (GPS) RWY 27R 3 GRAND FORKS ND

## PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

## NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING CKN ALTIMETER SETTING. CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C. CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVAL ON GFK VOR/DME AIRWAY RADIALS 360 CW 160.

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CKN ALTIMETER SETTING AND INCREASE LPV DA TO 1104 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE LNAV/VNAV DA TO 1178 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C/D 3/8 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM.

## **ADDITIONAL FLIGHT DATA:**

HOLD W, RT, 083.77 INBOUND.
CHART FAS OBST: 956 CONTROL\_TOWER (38-022326) 475656N/0971026W.
CHART 1289 TOWER (27-026881) 475739N/0970235W.
CHART VDP AT 1.04 NM TO RW27R.
WAAS CHANNEL # 78104
REFERENCE PATH ID: W27A
CHART CIRCLING ICON.
LTP HAE: 230.1 M

## MINIMUMS:

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

ALTERNATE: NA STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

| <b>CATEGORY:</b> | Α      |            |         | В      |            |         | С      |            |         | D      |            |         | E      |            |         |
|------------------|--------|------------|---------|--------|------------|---------|--------|------------|---------|--------|------------|---------|--------|------------|---------|
| FINAL TYPE       | DA/MDA | <u>VIS</u> | HAT/HAA |
| LPV DA           | 1043   | 3/4        | 200     | 1043   | 3/4        | 200     | 1043   | 3/4        | 200     | 1043   | 3/4        | 200     |        |            |         |
| LNAV/VNAV DA     | 1117   | 7/8        | 274     | 1117   | 7/8        | 274     | 1117   | 7/8        | 274     | 1117   | 7/8        | 274     |        |            |         |
| LNAV MDA         | 1220   | 1          | 377     | 1220   | 1          | 377     | 1220   | 1          | 377     | 1220   | 1          | 377     |        |            |         |
| CIRCLING         | 1260   | 1          | 415     | 1300   | 1          | 455     | 1400   | 1 1/2      | 555     | 1420   | 2          | 575     |        |            |         |



AIRPORT ID PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE **GFK** RNAV (GPS) RWY 27R **GRAND FORKS** ND 3

#### **CHANGES - REASONS**

1. TERMINAL ROUTES: CHANGED FEEDER FROM GFK VOR/DME COURSE AND DISTANCE FROM 084.71/11.71 TO 084.72/11.56 – IF/IAF URBAH MOVED 906 FT W. 2. TERMINAL ROUTES: CHANGED INITIAL SEGMENT FROM EYWUS COURSE FROM 174.01 TO 174.79 – IF/IAF MOVED 906 FT W.

- 3. TERMINAL ROUTES: CHANGED INITIAL SEGMENT FROM JIXIR COURSE FROM 354.21 TO 353.17 IF/IAF MOVED 906 FT W.
- 4. TERMINAL ROUTES: CHANGED INTERMEDIATE SEGMENT FROM URBAH COURSE AND DISTANCE FROM 264.21/6.31 TO 264.20/6.10 FAF MOVED 376 FT E BASED ON 3.00/44 GPA/TCH CALCULATION.
- 5. TERMINAL ROUTES: ADDED SDF (ROKKS) TO LNAV FINAL TO LOWER LNAV MINIMUMS/PER FPT CHECKLIST.
- 6. TERMINAL ROUTES: CHANGED CÀ LEG FROM "RW27R TO 1093 MSL" TO "RW27R TO 1043 MSL" LOWERED LPV DA.
- 7. MISSED APPROACH: ADDED "LNAV/VNAV: DA" TO MAP LNAV/VNAV MINIMUMS ADDED TO PROCEDURE IAW FPT CHECKLIST.
- 8. PROFILE LINE 2: UPDATED HIL COURSE FROM 264.21 TO 264.20 FAF MOVED 376 FT E.
- 9. PROFILE LINE 3: UPDATED DIST FAF TO MAP/ DIST FAF TO THLD FROM 4.69 TO 4.75 FAF MOVED 376 FT E BASED ON 3.00/44 GPA/TCH CALCULATION.
- 10. PROFILE LINE 4: ADDED "ROKKS/1.55 NM TO RW27R 1380" TO MIN ALT ROKKS SDF ADDED TO LNAV FINAL; IAW 8260.19J 8-6-7 D(3).
- 11. PROFILE LINE 5: CHANGED HAT FROM "250 HAT: 0.63" TO "200 HAT: 0.49" LOWERED LPV DA.
- 12. PROFILE LINE 7: UPDATED TCH FROM 48 TO 44 PER FPT CHECKLIST: TO MATCH VGSI TCH.
- 13. PROFILE LINE 8: LOWERED MSA FROM 3300 TO 3000 CONTROLLING OBSTACLE ELEVATION CHANGED FROM 2226 MSL TO 1964 MSL.
- 14. PBN REQUIREMENTS NOTE: CHANGED NOTE FROM "RNP APCH" TO "RNP APCH GPS" IAW 8260.19J 8-6-8 D(5) A1.
- 15. NOTES: ADDED "CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21C OR ABOVE 54C" LNAV/VNAV LINES OF MINIMA ADDED: IAW 8260.19J 8-6-10R. 16. NOTES: CHANGED CHART PLANVIEW NOTE FROM "PROCEDURE NA FOR ARRIVAL ON GFK VOR/DME AIRWAY RADIALS 071 CW 160" TO "PROCEDURE NA FOR ARRIVAL ON GFK VOR/DME AIRWAY RADIALS 360 CW 160" - IAW 8260.3.
- 17. NOTES: UPDATED CHART NOTE FROM "VDP NA WHEN USING CROOKSTON ALTIMETER SETTING" TO "BARO-VNAV AND VDP NA WHEN USING CKN ALTIMETER SETTING" LNAV/VNAV LINE OF MINIMA ADDED; APPLICATION OF LOCATION ID IAW 8260.19J.
- 18. NOTES: UPDATED CHART NOTE FROM "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 VISIBILITY 1/4 SM" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CKN ALTIMETER SETTING AND INCREASE LPV DA TO 1104 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE LNAV/VNAV DA TO 1178 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C/D 3/8 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM" - IAW 8260.3E; BACKUP ALTIMETER NOTES TO REMAIN PUBLISHED ON CHART PER FPT.
- 19. ADDITIONAL FLIGHT DATA: CHANGED NOTE FROM "CHART VDP AT 1.78 NM TO RW27R\*" TO "CHART VDP AT 1.04 NM TO RW27R" LNAV MDA LOWERED FROM 1460 TO 1200 AND VGSI TCH CHANGED FROM 48 TO 44.
- 20. ADDITIONAL FLIGHT DATA: DELETED "\*LNAV ONLY" AND ASTERISK FROM PROFILE LINE 4 NO LONGER REQUIRED IAW 8260.19J 8-6-11 M(2)
- 21. ADDITIONAL FLIGHT DATA: CHANGED FAS OBST FROM "FAS OBST: 1044 AAO 475739N/0970454W" TO "CHART FAS OBST: 954 CONTROL TOWER (38-029804) 475656N/0971026W" NEW LNAV FINAL CONTROLLING OBSTACLE
- 22. ADDITIONAL FLIGHT DATA: CHANGED CHARTED OBSTACLE FROM "1084 TOWER 475621N/0970312W" TO "1289 TOWER (27-026881) 475739N/0970235W" NEW 7:1 EXCLUDED OBSTACLE.
- 23. ADDITIONAL FLIGHT DATA: CHANGED MISSED APPROACH HOLDING FROM "HOLD W, RT, 083.78 INBOUND" TO "HOLD W, RT, 083.77 INBOUND" PROCEDURE REDESIGN.
- 24. MINIMUMS: LOWERED LPV DA/HAT ALL CATS FROM 1093/250 TO 1043/200 FORMER CONTROLLING OBSTACLE REMOVED BY AIRPORT.
- 25. MINIMUMS: LOWERED LPV VISIBILITIES ALL CATS FROM 1 TO 3/4 IAW 8260.3E VISIBILITY TABLES.
- 26. MINIMUMS: ADDED LNAV/VNAV MINIMUMS DA/HAT ALL CATS 1117/274; VISIBILITY 7/8 SM LNAV/VNAV MINIMUMS ADDED.
- 27. MINIMUMS: LOWERED LNAV MDA/HAT ALL CATS FROM 1460/617 TO 1220/377 FORMER CONTROLLING OBSTACLE REMOVED BY AIRPORT: STEPDOWN FIX ADDED.
- 28. MINIMUMS: LOWERED LNAV VISIBILITIES CATS C AND D FROM 1 3/4; 2 IAW 8260.3E VISIBILITY TABLES.
- 29. MINIMUMS: LOWERED CIRCLING MDA/HAT CAT A FROM 1460/615 TO 1260/415; CAT B FROM 1460/615 TO 1300/455; CAT C FROM 1460/615 TO 1400/555; CAT D FROM 1460/615 TO 1420/575 -LNAV MINIMUMS LOWERED.
- 30. MINIMUMS: LOWERED CIRCLING CAT C VISIBILITY FROM 1 3/4 TO 1 1/2 IAW 8260.3E VISIBILITY TABLES.
- 31. FAS DATA BLOCK INFORMATION: CHANGED LTP/FTP LAT/LONG FROM 475708.6060N/0971003.9370W TO 475708.5995N/0971004.0145W UPDATED AIRNAY DATA.
- 32. FAS DATA BLOCK INFORMATION: LOWERED THRESHOLD CROSSING HEIGHT (TCH) FROM 00048.0 TO 00044.0 PROCEDURE TCH SET TO VGSI TCH.
- 33. FAS DATA BLOCK INFORMATION: CHANGED LENGTH OFFSET: VERTICAL ALERT LIMIT (VAL) FROM 1472; 50.0 TO 0704; 35.0 LPV HAT LOWERED FROM 250 TO 200.
- 34. FAS DATA BLOCK INFORMATION: CRC REMAINDER CHANGED FROM 687264E8 TO 559AEABD UPDATED AIRNAV DATA.



**AIRPORT ID** PROCEDURE NAME ORIGINAL/AMENDMENT CITY STATE **GFK** RNAV (GPS) RWY 27R 3 **GRAND FORKS** ND **COORDINATED WITH:** ALPA X <u>Α4Α</u> χ AOPA X APA X NBAA χ HAI OTHER: ZMP, GFK APP CON, GFK ATCT, ARPT MGR **FLIGHT CHECKED BY OFFICE** DATE Digitally signed by **PENDING** JOSEPH L ZEDER Jul 25, 2024 **DEVELOPED BY** OFFICE DATE CASIMIR L. TABAKA (HOPE N. DENTON) AJV-A432 05/06/2024 Digitally signed by JOSEPH L ZEDER Jul 25, 2024 Digitally signed by **APPROVED BY** OFFICE DATE TITLE CASIMIR L. TABAKA AJV-A432 MANAGER JOSEPH L ZEDER Jul 25, 2024 **FAS DATA BLOCK INFORMATION DATA FIELD** DATA **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 475708.5995N LTP/FTP LONGITUDE 0971004.0145W LTP/FTP ELLIPSOIDAL HEIGHT +02301 FPAP LATITUDE 475708.6045N **FPAP LONGITUDE** 0971216.5655W THRESHOLD CROSSING HEIGHT (TCH) 00044.0 TCH UNITS SELECTOR (METERS OR FEET USED) F **GLIDEPATH ANGLE (GPA)** 03.00 **COURSE WIDTH AT THRESHOLD** 106.75 LENGTH OFFSET 0704 **HORIZONTAL ALERT LIMIT (HAL)** 40.0 VERTICAL ALERT LIMIT (VAL) 35.0 **CRC REMAINDER** 559AEABD ADDITIONAL PATH POINT RECORD INFORMATION **ICAO CODE** K3 LTP ORTHOMETRIC HEIGHT +02569 **FPAP ORTHOMETRIC HEIGHT** +02569