

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> GFK	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 9L	<u>ORIGINAL/AMENDMENT</u> 2	<u>CITY</u> GRAND FORKS	<u>STATE</u> ND
<u>AIRPORT ELEVATION</u> 845	<u>TDZE</u> 845	<u>SUPERSEDED</u> RNAV (GPS) RWY 9L	<u>ORIGINAL/AMENDMENT</u> 1A	<u>DATED</u> 03/26/2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 31 OCTOBER 2024	<u>REQUIRED EFFECTIVE DATE</u> 10/31/2024	<u>MAG VAR</u> 6E
				<u>EPOCH YEAR</u> 1985
				<u>CANCEL/SUSPEND</u>

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
GFK VOR/DME		DUCEV		TF	FO	1.00	263.25	11.29	4000
UNIZY	IAF	DUCEV	NOPT	TF	FB	1.00	022.59	27.99	4000
BISCA	IAF	DUCEV	NOPT	TF	FB	1.00	109.48	6.13	4000
DUCEV	IF/IAF	ARIDE		TF	FB	1.00	083.77	5.84	2500
ARIDE	FAF	BALEE/1.60 NM TO RW09L		TF	FB	0.30	083.90	3.45	
BALEE/1.60 NM TO RW09L		RW09L	MAP	TF	FO	0.30	083.90	1.60	
RW09L	MAP	1045 MSL		CA			083.90		
1045 MSL		URBAH		DF	FO	1.00			2800

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW09L

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 2800 DIRECT URBAH AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. HOLD W DUCEV, RT, 083.77 INBOUND, 4000 FT. IN LIEU OF PT (IAF), MAX 6000.					
3. FAC: 083.90	FAF: ARIDE		DIST FAF TO MAP: 5.06	DIST FAF TO THLD: 5.06	
4. MIN ALT: DUCEV 4000, ARIDE 2500, BALEE/1.60 NM TO RW09L 1400					
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	200 HAT: 0.49	GS ANT:
6. MIN GP INCPT: 2500	GP ALT AT PFAF: ARIDE 2500			OM:	MM:
7. GP ANGLE: 3.00	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 45.0		IM:
8. MSA FROM: RW09L 3000					

QUALITY
8
CHECKED

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 ARRIVALS AT GFK VOR/DME ON V55 NORTHEAST BOUND.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CKN ALTIMETER SETTING AND INCREASE LPV DA TO 1106 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE LNAV/VNAV DA TO 1156 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM.

ADDITIONAL FLIGHT DATA:

CHART: TDZE 845

HOLD E, RT, 264.20 INBOUND.
CHART FAS OBST: 938 TREE (38-027144) 475718N/0971313W.
CHART VDP AT 0.97 NM TO RW09L.
WAAS CHANNEL # 58104
REFERENCE PATH ID: W09A
CHART CIRCLING ICON.
LTP HAE: 230.8 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	1045	3/4	200	1045	3/4	200	1045	3/4	200	1045	3/4	200			
LNAV/VNAV DA	1095	3/4	250	1095	3/4	250	1095	3/4	250	1095	3/4	250			
LNAV MDA	1200	1	355	1200	1	355	1200	1	355	1200	1	355			
CIRCLING	1260	1	415	1300	1	455	1400	1 1/2	555	1420	2	575			

CHANGES - REASONS

1. TDZE CHANGED FROM 843 TO 845 – UPDATED AIRNAV DATA.
2. TERMINAL ROUTES: CHANGED IF/IAF SEGMENT FROM DUCEV COURSE AND DISTANCE FROM 083.78/6.29 TO 083.77/5.84 – FAF MOVED 2733 FT WEST.
3. TERMINAL ROUTES: CHANGED LNAV SDF DISTANCE FROM “BALEE/1.70 NM TO RW09L” TO “BALEE/1.60 NM TO RW09L” – SDF MOVED 1899 FT WEST/STABILIZED DESCENT.
4. TERMINAL ROUTES: CHANGED LNAV FINAL LENGTH FROM ARIDE TO SDF FROM 3.32 TO 3.45 – SDF MOVED 1899 FT WEST/STABILIZED DESCENT.
5. TERMINAL ROUTES: LOWERED CA LEG ALTITUDE FROM 1093 TO 1045 – LOWERED LPV DA.
6. PROFILE LINE 2: UPDATED HIL INBOUND COURSE FROM 083.78 TO 083.77 – FAF MOVED 2733 FT WEST.
7. PROFILE LINE 3: UPDATED DIST FAF TO MAP/ DIST FAF TO THLD FROM 5.02 TO 5.06 – FAF AND SDF LOCATIONS UPDATED BASED ON 3.00/45 GPA/TCH CALCULATION.
8. PROFILE LINE 5: CHANGED HAT FROM “250 HAT: 0.67” TO “200 HAT: 0.49” – LOWERED LPV DA; IAW 8260.19J E(3)/CURRENT CRITERIA/RWY MARKINGS.
9. PROFILE LINE 7: UPDATED TCH FROM 38.7 TO 45.0 – PER FPT CHECKLIST AND TO MATCH VGSI.
10. PROFILE LINE 8: LOWERED MSA FROM 3300 TO 3000 – CONTROLLING OBSTACLE ELEVATION CHANGED FROM 2226' TO 1964'.
11. PBN REQUIREMENTS NOTES: CHANGED NOTE FROM “RNP APCH” TO “RNP APCH – GPS” – IAW 8260.19J 8-6-8 D(5) A1.
12. NOTES: UPDATED CHART NOTE FROM “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C” TO “FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -21°C OR ABOVE 54°C” – 4-YEAR WEATHER HISTORY NOW AVAILABLE; CALCULATION BASED ON ACT (2020-2023).
13. NOTES: CHANGED 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 CAT C VISIBILITY 3/8 SM, CAT D VISIBILITY 1/8 SM AND CIRCLING CAT C 1/4 SM” TO “WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CKN ALTIMETER SETTING AND INCREASE LPV DA TO 1106 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE LNAV/VNAV DA TO 1156 FEET AND ALL VISIBILITIES 1/8 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM” – APPLICATION OF LOCATION ID IAW 8260.19J AND VISIBILITIES IAW 8260.3E.
14. ADDITIONAL FLIGHT DATA: CHANGED NOTE FROM “CHART VDP AT 1.06 NM TO RW09L*” TO “CHART VDP AT 0.97 NM TO RW09L” – LNAV MDA LOWERED FROM 1220 TO 1200 AND VGSI TCH CHANGED FROM 39 TO 45.
15. ADDITIONAL FLIGHT DATA: DELETED “*LNAV ONLY” AND ASTERISK FROM PROFILE LINE 4 - NO LONGER REQUIRED IAW 8260.19J 8-6-11 M(2).
16. ADDITIONAL FLIGHT DATA: UPDATED FAS OBST FROM “CHART FAS OBST: 959 TREE 475745N/0971153W” TO “CHART FAS OBST: 938 TREE (38-027144) 475718N/0971313W” – NEW OBSTACLE EVALUATION.
17. ADDITIONAL FLIGHT DATA: RAISED LTP HAE FROM 229.7 TO 230.8 – UPDATED RUNWAY SURVEY DATA.
18. ADDITIONAL FLIGHT DATA: ADDED "CHART: TDZE 845" - TCH CHANGED FROM 843 TO 845 PER AIRNAV.
19. MINIMUMS: LOWERED LPV DA/HAT ALL CATS FROM 1093/250 TO 1045/200 – NO 34:1 PENETRATION/200' HAT ALLOWED IAW 8260.3E; FPT REQUESTED.
20. MINIMUMS: LOWERED LPV VIS ALL CATS FROM 1 TO 3/4 - UPDATED IAW 8260.3E VISIBILITY TABLES.
21. MINIMUMS: LOWERED LNAV/VNAV DA/HAT ALL CATS FROM 1238/395 TO 1095/250 – NO PENETRATION/MINIMUM HAT IAW 8260.58C; FPT REQUESTED.
22. MINIMUMS: LOWERED LNAV/VNAV VIS ALL CATS FROM 1 1/2 TO 3/4 - UPDATED IAW 8260.3E VISIBILITY TABLES.
23. MINIMUMS: LOWERED LNAV MDA/HAT ALL CATS FROM 1220/377 TO 1200/355 – NEW CONTROLLING OBSTACLE; LOWERED PER FPT REQUEST.
24. MINIMUMS: LOWERED LNAV CAT D VIS FROM 1 1/4 TO 1 – UPDATED IAW 8260.3E VISIBILITY TABLES.
25. MINIMUMS: RAISED CIRCLING CAT D MDA/HAT FROM 1400/555 TO 1420/575 - RUNWAY EXTENSION EVALUATION IDENTIFIES NEW CONTROLLING OBSTACLE.
26. FAS DATA: CRC REMAINDER CHANGED FROM "C3492732" TO "8CAB62DE" – LTP/FTP COORDINATES CHANGED FROM "475708.6135N/0971105.7175W" TO "475708.6070N/0971142.4435W"; LTP/FTP ELLIPSOIDAL HEIGHT CHANGED FROM “+02297” TO “+02308”; FPAP COORDINATES CHANGED FROM "475708.6075N/0970853.1665W" TO "475708.5915N/0970929.8925W"; LENGTH OFFSET CHANGED FROM "1472" TO "0704"; AND VERTICAL ALERT LIMIT (VAL) CHANGED FROM “50.0” TO “35.0”.
27. ADDITIONAL PATH POINT RECORD INFORMATION: LTP/FPAP ORTHOMETRIC HEIGHT CHANGED FROM “+02565” TO “+02576” - LTP/FTP HEIGHT CHANGED.

COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER: ZMP, GFK APP CON, ATCT, ARPT MGR

FLIGHT CHECKED BY

PENDING

Digitally signed by
JOSEPH L ZEDER
Jul 25, 2024

OFFICE

OFFICE
AJV-A432

DATE

DATE
04/26/2024

DEVELOPED BY

CASIMIR L. TABAKA (HOPE N. DENTON)

Digitally signed by
JOSEPH L ZEDER
Jul 25, 2024

APPROVED BY

CASIMIR L. TABAKA

Digitally signed by
JOSEPH L ZEDER
Jul 25, 2024

OFFICE
AJV-A432

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGFK
RUNWAY	RW09L
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	475708.6070N
LTP/FTP LONGITUDE	0971142.4435W
LTP/FTP ELLIPSOIDAL HEIGHT	+02308
FPAP LATITUDE	475708.5915N
FPAP LONGITUDE	0970929.8925W
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	0704
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	8CAB62DE

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02576
FPAP ORTHOMETRIC HEIGHT	+02576

