

**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.

AIRPORT GRAND RAPIDS/ITASCA CO- GORDON NEWSTROM FLD	AIRPORT ID KGPZ	PROCEDURE NAME RNAV (GPS) RWY 34	ORIGINAL/AMENDMENT ORIG-C	CITY GRAND RAPIDS	STATE MN
AIRPORT ELEVATION 1356	TDZE 1356	SUPERSEDED RNAV (GPS) RWY 34	ORIGINAL/AMENDMENT ORIG-B	DATED 04/07/2011	MAG VAR 2E
FACILITY RNAV	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE 25 APRIL 2019	REQUIRED EFFECTIVE DATE ROUTINE	CANCEL/SUSPEND	EPOCH YEAR 1995

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
GPZ VOR/DME		ADIER		TF	FO	1.00	165.11	8.37	2900
NEBBS	IAF	ADIER	NOPT	TF	FB	1.00	007.26	7.66	2900
ADIER	IF/IAF	DIKKA		TF	FB	1.00	343.67	6.04	2900
DIKKA	FAF	RW34	MAP	TF	FO	0.30	343.64	4.60	
RW34	MAP	1683 MSL		CA			343.64		
1683 MSL		EMIDY		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW34

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT EMIDY AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF (IAF)				
2.	HOLD S ADIER, RT, 343.67 INBOUND, 2900 FT. IN LIEU OF PT (IAF), MAX 6000.							
3. FAF:	343.64	FAF: DIKKA	DIST FAF TO MAP: 4.60	DIST FAF TO THLD: 4.60				
4. MIN ALT:	ADIER 2900, DIKKA 2900							
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	327 HAT: 0.83	GS ANT:			
6. MIN GP INCPT: 2900	GP ALT AT FAF : DIKKA 2900		OM:		MM:		IM:	
7. GP ANGLE: 3.04	34:1: IS CLEAR	20:1: IS CLEAR	TCH: 60.0					
8. MSA FROM:	RW34 3200							

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 10 AND 28.
 CHART NOTE: CIRCLING NA FOR CAT D E OF RWY 16-34.
 CHART NOTE: CIRCLING RWY 5 NA AT NIGHT.
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -17°C OR ABOVE 49°C.
 CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
 CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 SM, INCREASE LNAV CATS C AND D VISIBILITY TO 1 3/8 SM.
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GPZ VOR/DME ON V430 WESTBOUND.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
 CHART VDP AT 1.41 NM TO RW34*
 *LNAV ONLY
 WAAS CHANNEL #86412
 REFERENCE PATH ID: W34A
 FAS OBST: 1550 AAO 470826N/0932925W.
 1600 AAO 470736N/0932728W.
 HOLD N, RT, 163.57 INBOUND
 LTP HAE: 384 M



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

ALTERNATE: NA STANDARD

CATEGORY:	A			B			C			D			E		
	FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS									
LPV DA	1683	1/2	327	1683	1/2	327	1683	1/2	327	1683	1/2	327			
LNAV/VNAV DA	1928	1 1/2	572	1928	1 1/2	572	1928	1 1/2	572	1928	1 1/2	572			
LNAV MDA	1860	1/2	504	1860	1/2	504	1860	1	504	1860	1	504			
CIRCLING	1900	1	544	1900	1	544	1900	1 1/2	544	2000	2	644			



CHANGES - REASONS

1. PREVIOUSLY CHARTED P-NOTAM FDC 0/3218 INCORPORATED ON THIS FORM: ORIG-A - "LNAV/VNAV DA 1927/HAT 572 ALL CATS, VISIBILITY 1 1/2 ALL CATS. DELETE NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBINGS ALTIMETER SETTING AND INCREASE ALL DA 68 FEET AND ALL MDA 80 FEET, INCREASE LNAV/VNAV ALL CATS, LNAV CAT D, AND CIRCLING CAT C VISIBILITY 1/4 MILE. CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBING ALTIMETER SETTING AND INCREASE ALL DA 68 FEET AND ALL MDA 80 FEET, INCREASE LNAV/VNAV ALL CATS, LNAV CAT D VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 1/4 MILE." - FDC 0/3218, NEW CONTROLLING OBSTACLE IN LNAV/VNAV FINAL AND CIRCLING CAT C/D: 1600 MSL TOWER (27-020498) 471035.70N/0933148.82W (2C).
2. PREVIOUSLY CHARTED P-NOTAM FDC 1/6907 INCORPORATED ON THIS FORM: ORIG-B - "LPV DA 1682/HAT 327 ALL CATS. CHART NOTE: FOR INOPERATIVE MALSR INCREASE LPV ALL CATS VISIBILITY TO 1 MILE. CHANGE CHART NOTE TO READ: FOR INOPERATIVE MALSR WHEN USING HIBBING ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 1/4 MILE. CHANGE CHART NOTE TO READ: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE HIBBING ALTIMETER SETTING AND INCREASE ALL DA 68 FEET AND ALL MDA 80 FEET, INCREASE LPV ALL CATS, LNAV/VNAV ALL CATS, LNAV CAT D VISIBILITY 1/4 MILE AND CIRCLING CAT C VISIBILITY 1/4 MILE." - FDC 1/6907: NEW OBSTACLE IN LPV FINAL, KGPZ0005 1397 TREE 471133N/0933025W.
3. INCORPORATED NOTAM 8/4848, UPDATED CHART NOTES FROM "CIRCLING TO RWY 10-28 AND 5-23 NA AT NIGHT" TO "CIRCLING RWY 5 NA AT NIGHT" AND "CIRCLING NA TO RWYS 10 AND 28" - RWY 10-28 IS TURF, RWY 5 HAS 20:1 PENS, RWY 23 NO LONGER HAS 20:1 PENS.
4. CHANGED FAS OBSTACLE FROM "1470 TREE 471100N/0932954W" TO "1550 AAO 470826N/0932925W" - NEW FINAL LNAV CONTROLLING OBSTACLE - AAOS APPLIED TO FINAL SEGMENTS, NO CHANGE TO LNAV MDA MINIMUMS.
5. ADDED 7:1 OBSTACLE - AAOS APPLIED TO FINAL SEGMENTS, NO CHANGE TO LNAV MDA MINIMUMS.
6. GS ANGLE CHANGED FROM 3.00 TO 3.04 - IPDS CALCULATED, GROUND TRACK REMAINS UNCHANGED.
7. CHANGED VDP FROM 1.43 TO 1.41 - IAW FAAO 8260.3, CHAPTER 3.
8. ADDED 20:1 IS CLEAR TO BLOCK #7 - IAW FAAO 8260.19, CATS A/B VISUAL SURFACE IS CLEAR.
9. UPDATED AIRPORT ELEVATION/TDZE FROM 1355 TO 1356, RAISED ALL DAS ONE FOOT, CHANGED LNAV/CIRCLING HAT/HAAS BY ONE FOOT - UPDATED SURVEY DATA.
10. UPDATED INOP "MALSR" LIGHTING NOTE TO "FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO 1 5/8 SM, INCREASE LNAV CATS C/D VISIBILITY TO 1 3/8 SM" - IAW FAAO 8260.19, CHAPTER 8.
11. REMOVED BACK-UP ALTIMETER INOP MALSR LIGHTING NOTE TO BACK OF FORM 8260-9 - NO LONGER REQUIRED.
12. ADDED CHART NOTE: RNP APCH NOTE AND DELETE CHART NOTE: DME/DME RNP-0.3 NA - IAW FAAO 8260.19, CHAPTER 8 AND FAAO 8250.58, CHAPTER 1.
13. UPDATED BARO-VNAV TEMPERATURE NOTE FROM NA BELOW "-17C (2F) OR ABOVE 46C (114F)" TO "-17C OR ABOVE 49C" REMOVED FAHRENHEIT TEMPS AND UPDATED UPPER TEMP PER FAAO 8260.19, CHAPTER 8 AND FAAO 8260.58 CALCULATORS.
14. CHANGED RNP VALUES OF FEEDER FROM 2.0 TO 1.0 AND INTERMEDIATE FROM 0.5 TO 1.0 - IAW FAAO 8260.58, TABLE 1-2-1.
15. ADDED CHART CIRCLING ICON AND INCREASED CIRCLING CAT D FROM MDA 1920/HAA 565 VISIBILITY 2 SM TO MDA 2400/HAA 1044 VISIBILITY 3 SM - IAW FAAO 8260.3, CHAPTER 2.
16. REMOVED BACK-UP ALTIMETER NOTE TO BACK OF FORM 8260-9 - NO LONGER REQUIRED.
17. FAS DATA BLOCK INFORMATION LTP LATITUDE CHANGED FROM 471157.8300N TO 471157.8295N - CURRENT SIAP AUTO-ROUNDED VALUE IAW 8260.19, APPENDIX E.
18. FAS DATA BLOCK INFORMATION LTP LONGITUDE CHANGED FROM 0933026.7900W TO 0933026.7815W - CURRENT SIAP AUTO-ROUNDED VALUE IAW 8260.19, APPENDIX E.
19. FAS DATA BLOCK INFORMATION FPAP LATITUDE CHANGED FROM 471253.3000N TO 471324.0945N - ROUNDED VALUE IAW 8260.19, APPENDIX E.
20. FAS DATA BLOCK INFORMATION FPAP LONGITUDE CHANGED FROM 0933047.6600W TO 0933059.2455W - ROUNDED VALUE IAW 8260.19, APPENDIX E.
21. FAS DATA BLOCK INFORMATION GLIDE PATH ANGLE CHANGED FROM 3.00 TO 3.04 - CURRENT SIAP CALCULATED VALUE.
22. FAS DATA BLOCK INFORMATION UPDATED: CRC REMAINDER CHANGED FROM 7C201DC3 TO 49D8A493; AND LENGTH OFFSET FROM 0016 TO 992 - CODING CHANGED DUE TO LTP/FPAP LATITUDE/LONGITUDE CHANGES AND IAW FAAO 8260.19, APPENDIX E.
23. FAS DATA BLOCK INFORMATION CHANGED VERTICAL ALERT LIMIT FROM 35.0 TO 50.0 - LPV HAT WAS RAISED TO VALUE OVER 250 FT PER PREVIOUSLY CHARTED P-NOTAM FDC 1/6907 - NEW VALUE IS 50.0 IAW FAAO 8260.19, APPENDIX E.
24. UPDATED ALTERNATE MINIMUMS NOTE, REMOVED "@NA WHEN LOCAL WEATHER NOT AVAILABLE" AND ADDED "STANDARD" - CONTINGENCY ALTIMETER IS KHIB.
25. ADDED GLUE LEG TO MISSED APPROACH - IAW FAAO 8260.58, NO CHANGE TO GROUND TRACK.
26. CHANGED CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT GPZ VOR/DME FROM "V430 WESTBOUND AND V161 NORTHBOUND" TO "ON V430 WESTBOUND" IAW FAAO 8260.19 AND V161 NO LONGER CONNECTS WITH GPZ VOR/DME.
27. ADDED CHART NOTE: CIRCLING NA FOR CAT D E OF RWY 16-34 - TO MITIGATE TO 400+ FT CIRCLING CAT D INCREASE FROM AERONAUTICAL STUDY NUMBER 2018-AGL-16537-OE FOR ANTENNA TOWER/KAXE REPLACEMENT TOWER AT 2035 FT AMSL.
28. REMOVED CHART NOTE: BARO-VNAV AND VDP NA WHEN USING HIBBING ALTIMETER SETTING TO BACK OF FORM 8260-9 - NO LONGER REQUIRED.
29. UPDATED PROFILE LINE #5 FROM 326 HAT: 0.84 TO 327 HAT: 0.83 - PER TARGETS SOFTWARE.

PDF EDIT: 11/08/2018

1. REMOVED THE NEW CIRCLING CRITERIA NOTE FROM PART C: GENERAL REMARKS - KNOWN SIAP ERROR.



AIRPORT

GRAND RAPIDS/ITASCA CO-GORDON
NEWSTROM FLD

AIRPORT ID

KGPZ

PROCEDURE NAME

RNAV (GPS) RWY 34

ORIGINAL/AMENDMENT

ORIG-C

CITY

GRAND RAPIDS

STATE

MN

COORDINATED WITH:

A4A ALPA AOPA APA HAI NBAA OTHER: ZMP, AMGR.

FLIGHT CHECKED BY

JOHN R CLOUGH

DEVELOPED BY

WILLIAM HANBY

APPROVED BY

JULIE MORGAN

OFFICE

FICO

OFFICE

AJV-5422

OFFICE

AJV-5420

DATE

1/3/19

DATE

08/22/2018

DATE

Digitally signed by

ALLAN WILL

Feb 12, 2019

Digitally signed by

WILLIAM HANBY

Nov 08, 2018

Digitally signed by

ALLAN WILL

Feb 12, 2019

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KGPZ
RUNWAY	RW34
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W34A
LTP/FTP LATITUDE	471157.8295N
LTP/FTP LONGITUDE	0933026.7815W
LTP/FTP ELLIPSOIDAL HEIGHT	+03840
FPAP LATITUDE	471324.0945N
FPAP LONGITUDE	0933059.2455W
THRESHOLD CROSSING HEIGHT (TCH)	00060.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.04
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0992
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	49D8A493

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+04132
FPAP ORTHOMETRIC HEIGHT	+04132

