

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> KDSM	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 4	<u>CITY</u> DES MOINES	<u>STATE</u> IA		
<u>AIRPORT ELEVATION</u> 958	<u>TDZE</u> 931	<u>SUPERSEDED</u> RNAV (GPS) RWY 5	<u>ORIGINAL/AMENDMENT</u> 3	<u>DATED</u> 08/10/2023	<u>MAG VAR</u> 1E	<u>EPOCH YEAR</u> 2020
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 30 NOVEMBER 2023	<u>REQUIRED EFFECTIVE DATE</u> 11/30/2023	<u>CANCEL/SUSPEND</u>		

TAA

THIS IS A CORRECTED COPY OF A PROCEDURE ORIGINALLY PUBLISHED IN TL 23-23.

FROM	FIX TYPE	TO	FIX TYPE	ALTITUDE
1. 323/30 CW 143/30	NOPT	323/15 CW 143/15		3200
2. 323/15 CW 143/15		DELAY	IF/IAF	3000
3. 143/30 CW 323/30		143/20 CW 323/20		4000
4. 143/20 CW 323/20		DELAY	IF/IAF	3000

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
DELAY	IF/IAF	MAARY		TF	FB	1.00	052.68	6.80	2500
MAARY	FAF	CEDIP/1.60 NM TO RW05		TF	FB	0.30	052.76	3.20	
CEDIP/1.60 NM TO RW05		RW05	MAP	TF	FO	0.30	052.76	1.60	
RW05	MAP	1131 MSL		CA			052.76		
1131 MSL		IOWAA		DF	FO	1.00			3100

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW05

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3100 DIRECT IOWAA AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
34
CHECKED

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2. HOLD SW DELAY, RT, 052.68 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 052.76 FAF: MAARY DIST FAF TO MAP: 4.80 DIST FAF TO THLD: 4.80

4. MIN ALT: DELAY 3000, MAARY 2500, CEDIP/1.60 NM TO RW05 1480

5. DIST TO THLD FROM OM: MM: IM: 150 HAT: 200 HAT: 0.50 GS ANT:

6. MIN GP INCPT: 2500 GP ALT AT PFAF: MAARY 2500 OM: MM: IM:

7. GP ANGLE: 3.00 34:1: IS CLEAR 20:1: IS CLEAR TCH: 55.1

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: * RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING ANKENY RGNL ALTIMETER SETTING).

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -22°C OR ABOVE 54°C.

CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500.

ADDITIONAL FLIGHT DATA:

HOLD NE, LT, 232.97 INBOUND.

CHART FAS OBST: 1066 TREE (19-063900) 413109N/0934202W.

CHART 1226 TOWER 412913N/0934654W.

CHART VDP AT 1.09 NM TO RW05.

WAAS CHANNEL # 69202

REFERENCE PATH ID: W05A

CHART CIRCLING ICON.

LTP HAE: 247.8 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-2 1/2, 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*	1131	2400	200	1131	2400	200	1131	2400	200	1131	2400	200			
LNAV/VNAV DA	1247	2400	316	1247	2400	316	1247	2400	316	1247	2400	316			
LNAV MDA	1320	2400	389	1320	2400	389	1320	3500	389	1320	3500	389			
CIRCLING	1420	1	462	1420	1	462	1600	1 3/4	642	1760	2 1/2	802			

QUALITY
48
CHECKED

CHANGES - REASONS

1. TDZE INCREASED FROM 927 TO 931 - RWY THRESHOLD MOVEMENT
2. FAF CHANGED FROM IHOXY TO MAARY AND INTERMEDIATE LEG LENGTH CHANGED FROM 6.65 NM TO 6.80 NM - RWY THRESHOLD MOVEMENT
3. STEPDOWN CHANGED FROM GOHWY TO CEDIP AND LEG LENGTH CHANGED FROM 3.21 NM TO 3.20 NM - RWY THRESHOLD MOVEMENT
4. FINAL APPROACH COURSE CHANGED FROM 052.77 TO 052.76 - FAF AND SDF FIX CHANGES
5. CA LEG ALTITUDE CHANGED FROM 1177 TO 1131 - LOWEST DA IAW 8260.58B 3-5-2
6. FAF TO MAP DISTANCE CHANGED FROM 4.81 NM TO 4.80 NM - FAF FIX CHANGE
7. CHANGED DISTANCE TO THLD FROM 250 HAT: 0.65 NM TO DISTANCE FROM THLD FROM 200 HAT: 0.50 NM - LOWER MINIMUMS
8. 34:1 SURFACE CHANGED FROM NOT CLEAR TO CLEAR - PENETRATING OBSTACLES REMOVED
9. TCH CHANGED FROM 55.2 FT TO 55.1 FT - RWY THRESHOLD MOVEMENT
10. LTP HAE CHANGED FROM 247.1 M TO 247.8 M - RWY THRESHOLD MOVEMENT
11. PUBLISHED VDP LOCATION CHANGED FROM 1.10 NM TO 1.09 NM - RWY THRESHOLD MOVEMENT
12. FAS DATA BLOCK CHANGES: LTP/FTP COORDINATES FROM 413118.8765N 0934047.1550W TO 413124.1240N 0934037.6065W LTP/FTP ELLIPSOIDAL HEIGHT FROM +02471 TO +02478 FPAP COORDINATES FROM 413211.4860N 0933911.3860W TO 413216.7315N 0933901.8335W TCH FROM 00055.2 TO 00055.1 LENGTH OFFSET FROM 0736 TO 0008 VERTICAL ALERT LIMIT FROM 50.0 TO 35.0 CRC REMAINDER FROM 7AF2AC24 TO 3FADBCEC LTP ORTHOMETRIC HEIGHT FROM +02783 TO +02791 AND FPAP ORTHOMETRIC HEIGHT FROM +02783 TO +02791 - RWY THLD MOVEMENT
13. REMOVED NOTE RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED - 34:1 PENETRATIONS REMOVED
14. REMOVED NOTE INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS - 8260.3E 3-3-2
15. CHANGED INOPERATIVE ALS NOTE FROM INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000 AND LNAV CATS C AND D VISIBILITIES TO RVR 6000 TO INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 4500 - 8260.3E 3-3-2
16. ADDED CHART NOTE *1800 RVR AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA (NA WHEN USING ANKENY RGNL ALTIMETER SETTING) - 8400.13F 2-2 AND 8260.19I 8-6-11K
17. LPV DA/HAT CHANGED FROM 1177/250 TO 1131/200 - CONTROLLING OBSTACLE CHANGE
18. LPV VISIBILITY CHANGED FROM RVR 5000 TO 2400 - 8260.3E 3-3-2
19. LNAV/VNAV DA/HAT CHANGED FROM 1338/411 TO 1247/316 - CONTROLLING OBSTACLE CHANGE
20. LNAV/VNAV VISIBILITY CHANGED FROM RVR 5000 TO 2400 - 8260.3E 3-3-2
21. LNAV HAT CHANGED FROM 393 TO 389 - TDZE CHANGE
22. LNAV CAT A AND B VISIBILITY CHANGED FROM RVR 5000 TO RVR 2400 AND CAT C AND D VISIBILITY CHANGED FROM RVR 5000 TO RVR 3500 - 8260.3E 3-3-2

09/27/23: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 08/07/23.

1. ON PAGE 2 OF THIS FORM, ADDED AN ASTERISK "*" TO THE LPV DA LINE ON MINIMUMS

COORDINATED WITH:

A4A

X

ALPA

X

AOPA

X

APA

X

HAI

NBAA

X

OTHER:

ZMP, ZAU, DSM APP CON, DSM ATCT, IA AERO, AMGR

<u>FLIGHT CHECKED BY</u> PENDING	Digitally signed by JOHN BORDY	OFFICE	DATE	
	Sep 27, 2023			
<u>DEVELOPED BY</u> CASIMIR L. TABAKA (JON NEIDIGH)	Digitally signed by JOHN BORDY	OFFICE AJV-A432	DATE 07/27/2023	
	Sep 27, 2023			
<u>APPROVED BY</u> JOHN BORDY	Digitally signed by JOHN BORDY	OFFICE AJV-A33	DATE 09/27/2023	TITLE MANAGER
	Sep 27, 2023			



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KDSM
RUNWAY	RW05
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W05A
LTP/FTP LATITUDE	413124.1240N
LTP/FTP LONGITUDE	0934037.6065W
LTP/FTP ELLIPSOIDAL HEIGHT	+02478
FPAP LATITUDE	413216.7315N
FPAP LONGITUDE	0933901.8335W
THRESHOLD CROSSING HEIGHT (TCH)	00055.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0008
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	3FADBCEC

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02791
FPAP ORTHOMETRIC HEIGHT	+02791