

**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><b>AIRPORT ID</b></u> KDSM	<u><b>PROCEDURE NAME</b></u> RNAV (GPS) RWY 5	<u><b>ORIGINAL/AMENDMENT</b></u> 3	<u><b>CITY</b></u> DES MOINES	<u><b>STATE</b></u> IA		
<u><b>AIRPORT ELEVATION</b></u> 958	<u><b>TDZE</b></u> 927	<u><b>SUPERSEDED</b></u> RNAV (GPS) RWY 5	<u><b>ORIGINAL/AMENDMENT</b></u> 2	<u><b>DATED</b></u> 02/01/2018	<u><b>MAG VAR</b></u> 1E	<u><b>EPOCH YEAR</b></u> 2020
<u><b>FACILITY</b></u> RNAV	<u><b>COORDINATES OF FACILITIES</b></u>	<u><b>ACTUAL EFFECTIVE DATE</b></u> 10 AUGUST 2023	<u><b>REQUIRED EFFECTIVE DATE</b></u> 08/10/2023	<u><b>CANCEL/SUSPEND</b></u>		

**TAA**

<u><b>FROM</b></u>	<u><b>FIX TYPE</b></u>	<u><b>TO</b></u>	<u><b>FIX TYPE</b></u>	<u><b>ALTITUDE</b></u>
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**

<u><b>FROM</b></u>	<u><b>FIX TYPE</b></u>	<u><b>TO</b></u>	<u><b>FIX TYPE</b></u>	<u><b>LEG TYPE</b></u>	<u><b>FO/FB</b></u>	<u><b>RNP</b></u>	<u><b>COURSE</b></u>	<u><b>DISTANCE</b></u>	<u><b>ALTITUDE</b></u>
DELAY	IF/IAF	IHOXY		TF	FB	1.00	052.68	6.65	2500
IHOXY	FAF	GOHWY/1.60 NM TO RW05		TF	FB	0.30	052.77	3.21	
GOHWY/1.60 NM TO RW05		RW05	MAP	TF	FO	0.30	052.77	1.60	
RW05	MAP	1177 MSL		CA			052.77		
1177 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:**



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: 052.77FAF: IHOXYDIST FAF TO MAP: 4.81DIST FAF TO THLD: 4.81

4. MIN ALT: DELAY 3000, IHOXY 2500, GOHWY/1.60 NM TO RW05 1460

5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.65GS ANT:

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

7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 55.2

8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.  
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.  
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000 AND LNAV CATS C AND D VISIBILITIES TO RVR 6000.

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 1.10 NM TO RW05.  
WAAS CHANNEL # 69202  
REFERENCE PATH ID: W05A  
CHART CIRCLING ICON.  
LTP HAE: 247.1 M

MINIMUMS:

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

ALTERNATE: NA☐ NA WHEN LOCAL WEATHER NOT AVAILABLE.; STANDARD - CAT D 900-2 1/2

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	1177	5000	250	1177	5000	250	1177	5000	250	1177	5000	250			
LNAV/VNAV DA	1338	5000	411	1338	5000	411	1338	5000	411	1338	5000	411			
LNAV MDA	1320	5000	393	1320	5000	393	1320	5000	393	1320	5000	393			
CIRCLING	1420	1	462	1420	1	462	1600	1 3/4	642	1760	2 1/2	802			



**CHANGES - REASONS**

1. TAA DELAY 323° CW TO 143° INCREASED TO 3200 AND STEPDOWN ARC ADDED 15 NM FROM DELAY AT 3000 - NEW OBSTACLE.
2. FAF MAARY REPLACED WITH IHOXY AND MOVED 951.33 FT SW - RWY EXTENSION AND THRESHOLD MOVEMENT.
3. STEPDOWN CEDIP 1480 REPLACED WITH GOHWY 1460 AND MOVED 946.45 FT SW - RWY EXTENSION AND THRESHOLD MOVEMENT.
4. TCH CHANGED FROM 55.1 TO 55.2 - MATCHES VGS1.
5. VDP CHANGED FROM 1.09 TO 1.10 TO RWY 5 - RWY EXTENSION AND THRESHOLD MOVEMENT.
6. CHANGED CRC REMAINDER IN THE FAS DATA FROM 5405A122 TO 7AF2AC24 - NEW FAF LOCATION.
7. DELETED DME/DME RNP-0.3 NA NOTE AND ADDED PBN NOTE "RNP APCH - GPS" - CURRENT FORMAT
8. REMOVED FARENHEIT TEMPS ON BARO-VNAV NA NOTE - PER 8260.19H FORMAT
9. CHANGED 34:1 IS CLEAR TO 34:1 IS NOT CLEAR - 34:1 PENETRATIONS.
10. ADDED NOTE RWY 5 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED - 34:1 PENETRATIONS.
11. ADDED 20:1 IS CLEAR TO LINE 7 - CURRENT FORMAT.
12. LPV MDA/HAT CHANGED FROM 1131/200 TO 1177/250 - RWY EXTENSION AND THRESHOLD MOVEMENT.
13. LNAV/VNAV MDA/HAT CHANGED FROM 1352/421 TO 1338/411 - RWY EXTENSION AND THRESHOLD MOVEMENT.
14. FAS OBSTACLE CHANGED FROM 1051 TREE (19-031118) 413100N/0934157W TO 1066 TREE (19-063900) 413109N/0934202W - RWY EXTENSION AND THRESHOLD MOVEMENT.
15. ADDED NOTE NA WHEN LOCAL WEATHER NOT AVAILABLE TO ALTERNATE MINIMUMS - FAAO 8260.19I 8-6-11B(4).
16. LPV VISIBILITY CHANGED FROM RVR 2400 TO RVR 5000 - NEW EVALUATION.
17. LNAV/VNAV VISIBILITY CHANGED FROM RVR 4000 TO RVR 5000 - NEW EVALUATION.
18. LNAV CATS A AND B VISIBILITY CHANGED FROM RVR 2400 TO RVR 5000, LNAV CATS C AND D VISIBILITY CHANGED FROM RVR 3500 TO RVR 5000 - NEW EVALUATION.
19. ADDED CHART NOTE INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS - FAAO 8260.19I 8-6-11O(3)(B).
20. DELETED NOTE \*\*RVR 1800 AUTHORIZED WITH USE OF FD OR AP OR HUD TO DA - NO LONGER APPLIES.
21. CHANGED VERTICAL ALERT LIMIT (VAL) FROM 35.0 TO 50.0 - LPV HAT 250.
22. CHANGED NOTE FROM FOR INOPERATIVE MALSR, INCREASE LPV ALL CATS VISIBILITY TO RVR 4000 FT, LNAV/VNAV ALL CATS VISIBILITY TO 1 3/8 MILE, LNAV CATS A AND B VISIBILITIES TO RVR 5500 FT, AND LNAV CATS C AND D VISIBILITIES TO RVR 6000 FT TO FOR INOPERATIVE ALS, INCREASE LNAV/VNAV ALL CATS VISIBILITY TO RVR 6000 AND LNAV CATS C AND D VISIBILITIES TO RVR 6000 - FAAO 8260.19I 8-6-11O(3)(D).
23. FPAP LAT/LONG CHANGED FROM 413216.6225N/0933902.0500W TO 413211.4860N/0933911.3860W - RUNWAY EXTENSION AND THRESHOLD MOVEMENT.
24. IN FAS DATA, LENGTH OFFSET CHANGED FROM 0 TO 0736 - RUNWAY EXTENSION AND THRESHOLD MOVEMENT.

**COORDINATED WITH:**

**A4A** ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZMP, ZAU, DSM APP CON, DSM ATCT, IA AERO, AMGR

**FLIGHT CHECKED BY**

PENDING

*Digitally signed by*  
**DAVID TEFFETELLER**  
Apr 25, 2023

**OFFICE****DATE****DEVELOPED BY**

FRANK MOORE

*Digitally signed by*  
**FRANK MOORE**

**OFFICE**

AJV-A433

**DATE**

03/15/2023

**APPROVED BY**

JOHNNIE BAKER

Apr 18, 2023

**OFFICE**

AJV-A430

**DATE**

**TITLE**  
MANAGER

*Digitally signed by*  
**DAVID TEFFETELLER**  
Apr 25, 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	413118.8765N
LTP/FTP LONGITUDE	0934047.1550W
LTP/FTP ELLIPSOIDAL HEIGHT	+02471
FPAP LATITUDE	413211.4860N
FPAP LONGITUDE	0933911.3860W
THRESHOLD CROSSING HEIGHT (TCH)	00055.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0736
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	7AF2AC24

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02783
FPAP ORTHOMETRIC HEIGHT	+02783

