

**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> MUT	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 24	<u>ORIGINAL/AMENDMENT</u> ORIG-C	<u>CITY</u> MUSCATINE	<u>STATE</u> IA
<u>AIRPORT ELEVATION</u> 547	<u>TDZE</u> 545	<u>SUPERSEDED</u> RNAV (GPS) RWY 24	<u>DATED</u> 08/10/2023	<u>MAG VAR</u> 1W
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 14 MAY 2026	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>EPOCH YEAR</u> 2000
			<u>CANCEL/SUSPEND</u>	

TAA

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>ALTITUDE</u>
1. 150/30 CW 330/30		EDAGE	IF/IAF	3100
2. 330/30 CW 060/30	NOPT	ZAGES	IAF	3100
3. 060/30 CW 150/30	NOPT	WILTI	IAF	3300

TERMINAL ROUTES

<u>FROM</u>	<u>FIX TYPE</u>	<u>TO</u>	<u>FIX TYPE</u>	<u>LEG TYPE</u>	<u>FO/FB</u>	<u>RNP</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>ALTITUDE</u>
ZAGES	IAF	EDAGE	NOPT	TF	FB	1.00	329.69	5.00	3100
WILTI	IAF	EDAGE	NOPT	TF	FB	1.00	149.61	5.00	3100
EDAGE	IF/IAF	JOLIX		TF	FB	1.00	239.65	6.03	2300
JOLIX	FAF	YELDU/2.10 NM TO RW24		TF	FB	0.30	239.58	3.17	
YELDU/2.10 NM TO RW24		RW24	MAP	TF	FO	0.30	239.58	2.10	
RW24	MAP	812 MSL		CA			239.58		
812 MSL		IZBUF		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW24

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 3000 DIRECT IZBUF AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

QUALITY
13
CHECKED

PROFILE:

1.	PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)									
2.	HOLD NE EDAGE, RT, 239.65 INBOUND, 3100 IN LIEU OF PT (IAF), MAX 6000.														
3.	FAC:	239.58	FAF:	JOLIX	DIST FAF TO MAP:	5.27	DIST FAF TO THLD:	5.27							
4.	MIN ALT:	EDAGE 3100, JOLIX 2300, YELDU/2.10 NM TO RW24 1260													
5.	DIST TO THLD FROM OM:		MM:		IM:		150 HAT:		267 HAT:	0.67	GS ANT:				
6.	MIN GP INCPT:	2300	GP ALT AT PFAF:	JOLIX 2300					OM:		MM:			IM:	
7.	GP ANGLE:	3.00	34:1:	IS CLEAR	20:1:	IS CLEAR	TCH:	54.8							
8.	MSA FROM:														

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16°C OR ABOVE 54°C.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 SM, AND LNAV CATS C/D VISIBILITY TO 1 1/8 SM.
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IOW ALTIMETER SETTING AND INCREASE LPV DA TO 883 FEET; INCREASE LNAV/VNAV DA TO 1024 FEET AND ALL VISIBILITIES 1/4 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM.
CHART NOTE: BARO-VNAV AND VDP NA WHEN USING IOW ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

HOLD SW, RT, 059.36 INBOUND.
FAS OBST: 680 TREE 412530N/0910618W.
CHART VDP AT 1.15 NM TO RW24.
WAAS CHANNEL # 99701
REFERENCE PATH ID: W24A
LTP HAE: 132.1 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 1000-3, 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	812	1/2	267	812	1/2	267	812	1/2	267	812	1/2	267			
LNAV/VNAV DA	953	3/4	408	953	3/4	408	953	3/4	408	953	3/4	408			
LNAV MDA	960	1/2	415	960	1/2	415	960	3/4	415	960	3/4	415			
CIRCLING	1080	1	533	1200	1	653	1200	1 3/4	653	1500	3	953			



CHANGES - REASONS

1. ALL CHANGES FROM P-NOTAMS ORIG A AND ORIG B INCORPORATED INTO THE FORM. - IAW 8260.19K.
2. TAA: CHANGED 150/30 CW 330/30-EDAGE AND 330/30 CW 060/30-ZAGES ALTITUDE FROM 3000 TO 3100. - CONTROLLING OBST DICTATES RAISE IN ALTITUDE.
3. TERMINAL ROUTES: CHANGED ZAGES-EDAGE AND WILTJ-EDAGE ALTITUDE FROM 3000 TO 3100. - CONTROLLING OBST DICTATES RAISE IN ALTITUDE.
4. PROFILE LINE 2: CHANGED ALTITUDE FROM 3000 TO 3100. - STRAIGHT-IN TAA ALTITUDE RAISED DUE TO OBST.
5. PROFILE LINE 4: REMOVED " * * LNAV ONLY FROM YELDU DESCRIPTION. - IAW 8260.19K.
6. PROFILE LINE 5: ADDED 267 HAT: 0.67. - IAW 8260.19K.
7. NOTES: REMOVED SECONDARY ALTIMETER INOP ALS NOTE. - IAW 8260.3G.
8. PBN REQUIREMENTS NOTE: CHANGED FROM RNP APCH TO RNP APCH-GPS. - IAW 8260.19K.
9. NOTES: CHANGED BARO-VNAV NOTE FROM "-16C (4F) OR ABOVE 48C (118F)" TO "-16C OR ABOVE 54C" . - IAW 8260.19K AND NEW EVALUATION COMPLETED.
10. NOTES: CHANGED FROM "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IOWA CITY ALTIMETER STTING AND INCREASE LPV DA TO 992 AND ALL VISIBILITIES 1/8 SM; INCREASE LNAV/VNAV DA TO 1030 FEET AND ALL VISIBILITIES 1/4 SM; INCREASE ALL MDA 80 FEET AND LNAV CATS C AND D VISIBILITY 1/4 SM AND CIRCLING CAT C VISIBILITY 1/4 SM" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE IOW ALTIMETER SETTING AND INCREASE LPV DA TO 883 FEET; INCREASE LNAV/VNAV DA TO 1024 FEET AND ALL VISIBILITIES 1/4 SM. INCREASE ALL MDAS 80 FEET AND LNAV VISIBILITY CAT C/D 1/4 SM, AND CIRCLING VISIBILITY CAT C 1/4 SM". - IAW 8260.3G, 8260.19K.
11. NOTES: CHANGED FROM FOR INOP ALS, INCREASE LPV ALL VISIBILITIES TO 1 SM, INCREASE LNAV/VNAV ALL CATS AND LNAV CATS C VISIBILITY TO 1 1/8 SM, AND INCREASE LNAV CAT D VISIBILITY TO 1 1/4 SM" TO "FOR INOPERATIVE ALS, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, LNAV/VNAV ALL CATS VISIBILITY TO 1 1/8 SM, AND LNAV CATS C/D VISIBILITY TO 1 1/8 SM". - IAW 8260.3G.
12. NOTES: CHANGED FROM "FOR INOPERATIVE ALS WHEN USING IOWA CITY ALTIMETER SETTING, INCREASE LPV ALL VISIBILITIES TO 1 SM, LNAV/VNAV ALL VISIBILITIES TO 1 3/8 SM, LNAV CATS A AND B VISIBILITY TO 1 SM, AND LNAV CATS C AND D VISIBILITY TO 1 3/8 SM" TO "FOR INOPERATIVE ALS WHEN USING IOW ALTIMETER SETTING, INCREASE LPV ALL CATS VISIBILITY TO 1 SM, AND LNAV/VNAV ALL CATS AND LNAV CATS C/D VISIBILITY TO 1 3/8 SM". - IAW 8260.3G, 8260.19K.
13. NOTES: CHANGED FROM "BARO-VNAV AND VDP NA WHEN USING IOWA CITY ALTIMETER SETTING" TO "BARO-VNAV AND VDP NA WHEN USING IOW CITY ALTIMETER SETTING". - IAW 8260.19K.
14. ADDITIONAL FLIGHT DATA: CHANGED FAS OBST FROM 608 TREE 412238N/0910725W TO 680 TREE 412530N/0910618W. - NEW EVAL COMPLETED WITH NEW CONTROLLING OBST.
15. ADDITIONAL FLIGHT DATA: REMOVED CHART CIRCLING ICON, ROUTE TYPE QUALIFIER 1: J, ROUTE TYPE QUALIFIER 2: S, ROUTE TYPE A, R, DIST TO THLD FROM 267 HAT: 0.68 NM, AND ALT 2 AT YELDU 1270. - NO LONGER REQUIRED AND IAW 8260.19K.
16. ADDITIONAL FLIGHT DATA: CHANGED FROM "CHART VDP AT 1.15 MILES TO RWY 24.* *LNAV ONLY" TO "CHART VDP AT 1.15 NM TO RW24". - IAW 8260.19K.
17. MINS: CHANGED LNAV/VNAV FROM 950/405 TO 953/408. - SLIGHT DIFFERENCE EVALUATION SOFTWARE; SAME OBST HEIGHT/LOCATION.
18. MINS: CHANGED LNAV CAT D VIS FROM 1SM TO 3/4SM. - IAW 8260.3G.
19. MINS: CHANGED CIRCLING CATS A/B VIS FROM 1 1/4SM TO 1SM. - IAW 8260.3G.
20. FAS DATA: CHANGED CRC FROM BD2E5C0B TO 2AC42851. - LTP CHANGED FROM 412212.6625N/0910814.4825W TO 412212.6630N/0910814.4815W, FPAP CHANGED FROM 412144.0000N/091 0916.5800W TO 412126.0785N/0910955.3695W, COURSE WIDTH AT THRESHOLD CHANGED FROM 104.75 TO 106.75, AND OFFSET CHANGED FROM 0016 TO 1072.

COORDINATED WITH:

A4A

ALPA

X

AOPA

X

APA

X

HAI

NBAA

OTHER: QUAD CITY ATCT, ZAU, AMGR

FLIGHT CHECKED BY

SUSANNA ROBERTS

Digitally signed by

RAKE MCGRAW

Mar 09, 2026

OFFICE

AJF

DATE

03/08/2026

DEVELOPED BY

RAKE MCGRAW (ANDRE TUCKER)

Digitally signed by

RAKE MCGRAW

Mar 09, 2026

OFFICE

AJV-A431

DATE

01/05/2026

APPROVED BY

RAKE MCGRAW

Digitally signed by

RAKE MCGRAW

Mar 09, 2026

OFFICE

AJV-A422

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMUT
RUNWAY	RW24
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W24A
LTP/FTP LATITUDE	412212.6630N
LTP/FTP LONGITUDE	0910814.4815W
LTP/FTP ELLIPSOIDAL HEIGHT	+01321
FPAP LATITUDE	412126.0785N
FPAP LONGITUDE	0910955.3695W
THRESHOLD CROSSING HEIGHT (TCH)	00054.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1072
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	2AC42851

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+01650
FPAP ORTHOMETRIC HEIGHT	+01650

