

**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.

<b><u>AIRPORT</u></b> MARSHALLTOWN MUNI	<b><u>AIRPORT ID</u></b> KMIW	<b><u>PROCEDURE NAME</u></b> RNAV (GPS) RWY 31	<b><u>ORIGINAL/AMENDMENT</u></b> 1B	<b><u>CITY</u></b> MARSHALLTOWN	<b><u>STATE</u></b> IA
<b><u>AIRPORT ELEVATION</u></b> 975	<b><u>TDZE</u></b> 973	<b><u>SUPERSEDED</u></b> RNAV (GPS) RWY 31	<b><u>ORIGINAL/AMENDMENT</u></b> 1A	<b><u>DATED</u></b> 03/31/2016	<b><u>MAG VAR</u></b> 1E
<b><u>FACILITY</u></b> RNAV	<b><u>COORDINATES OF FACILITIES</u></b>	<b><u>ACTUAL EFFECTIVE DATE</u></b> 28 FEBRUARY 2019	<b><u>REQUIRED EFFECTIVE DATE</u></b> ROUTINE	<b><u>CANCEL/SUSPEND</u></b>	<b><u>EPOCH YEAR</u></b> 2010

**TAA**

<b><u>FROM</u></b>	<b><u>FIX TYPE</u></b>	<b><u>TO</u></b>	<b><u>FIX TYPE</u></b>	<b><u>ALTITUDE</u></b>
1. 216/30 CW 036/30	NOPT	216/15 CW 036/15		3500
1. 216/15 CW 036/15		VUNDY	IF/IAF	2600
2. 036/30 CW 216/30		VUNDY	IF/IAF	2700

**TERMINAL ROUTES**

<b><u>FROM</u></b>	<b><u>FIX TYPE</u></b>	<b><u>TO</u></b>	<b><u>FIX TYPE</u></b>	<b><u>LEG TYPE</u></b>	<b><u>FO/FB</u></b>	<b><u>RNP</u></b>	<b><u>COURSE</u></b>	<b><u>DISTANCE</u></b>	<b><u>ALTITUDE</u></b>
VUNDY	IF/IAF	BEKFY		TF	FB	1.00	306.20	5.93	2600
BEKFY	FAF	JIPTI/2.30 NM TO RW31		TF	FB	0.30	306.13	2.70	
JIPTI/2.30 NM TO RW31		RW31	MAP	TF	FO	0.30	306.13	2.30	
RW31	MAP	1223 MSL		CA			306.13		
1223 MSL		BRIDY		DF	FO	1.00			2700

**MISSED APPROACH**

**MAP:**

LPV: DA  
 LNAV/VNAV: DA  
 LNAV: RW31

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 2700 DIRECT BRIDY AND HOLD.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF (IAF)
2. HOLD SE VUNDY, RT, 306.20 INBOUND, 2600 FT. IN LIEU OF PT (IAF), MAX 6000.
3. FAC: 306.13FAF: BEKFYDIST FAF TO MAP: 5.00DIST FAF TO THLD: 5.00
4. MIN ALT: VUNDY 2600, BEKFY 2600, JIPTI/2.30 NM TO RW31 1740\*
5. DIST TO THLD FROM OM:MM:IM:150 HAT:250 HAT: 0.67GS ANT:
6. MIN GP INCPT: 2600GP ALT AT FAF : BEKFY 2600OM:MM:IM:
7. GP ANGLE: 3.0034:1: IS NOT CLEAR20:1: IS CLEARTCH: 37.2
8. MSA FROM:

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING GRINNELL ALTIMETER SETTING.  
CHART NOTE: RWY 31 HELICOPTER VISIBILITY REDUCTION BELOW 3/4 SM NOT AUTHORIZED.  
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -22C OR ABOVE 54C.  
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRINNELL ALTIMETER SETTING AND INCREASE ALL DA 64 FEET AND ALL MDA 80 FEET; INCREASE LPV AND LNAV/VNAV ALL CATS VISIBILITY 1/8 SM AND LNAV CATS C/D AND CIRCLING CAT D VISIBILITY 1/4 SM.  
CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON  
CHART VDP AT 0.97 NM TO RW31\*  
\*LNAV ONLY  
WAAS CHANNEL #48936  
REFERENCE PATH ID: W31A  
CHART FAS OBST: 1059 TREE 420611N/0925421W.  
HOLD NW, RT, 125.93 INBOUND  
LTP HAE: 264.4 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT D 900-2 3/4, 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	1223	1	250	1223	1	250	1223	1	250	1223	1	250			
LNAV/VNAV DA	1223	1	250	1223	1	250	1223	1	250	1223	1	250			
LNAV MDA	1320	1	347	1320	1	347	1320	1	347	1320	1	347			
CIRCLING	1400	1	425	1440	1	465	1460	1 1/2	485	1840	2 3/4	865			

CHANGES - REASONS

1. REMOVED EQUIPMENT NOTE: DME/DME RNP-0.3 NA - 8260.19H DOCUMENTATION REQUIREMENT.
2. ADDED PBN NAVSPEC EQUIPMENT NOTE: RNP APCH - 8260.19H DOCUMENTATION REQUIREMENT.
3. LINE 7: POPULATED 20:1 BLOCK - 8260.19H DOCUMENTATION REQUIREMENT..
4. ADDED CHART NOTE: CIRCLING RWY 18, 36 NA AT NIGHT - NO OIS SURVEY.
5. INTERMEDIATE SEGMENT VUNDY TO BEKFY CHANGED RNP VALUE FROM 0.50 TO 1.00 - UPDATED ARINC REQUIREMENT.
6. ALTIMETER SETTING NOTE: CHANGED VISIBILITY FROM "MILES" TO "SM" AND "FT" TO "FEET" - .19H PROCEDURE NOTES STANDARDIZATION.

COORDINATED WITH:

A4A ☐

ALPA ☒

AOPA ☒

APA ☐

HAI ☐

NBAA ☒

OTHER: ZAU, ALO APP CON, AMGR

FLIGHT CHECKED BY

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

OFFICE

DATE

Digitally signed by

ROBERT G HAMILTON

Oct 15, 2018

DEVELOPED BY

DAVID A. DOWLING

Digitally signed by

DAVID A DOWLING

Oct 03, 2018

OFFICE

AJV-5422

DATE

09/17/2018

APPROVED BY

JULIE MORGAN

OFFICE

AJV-5420

DATE

TITLE

MANAGER

Digitally signed by

ROBERT G HAMILTON

Oct 15, 2018



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMIW
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	420631.4285N
LTP/FTP LONGITUDE	0925433.4750W
LTP/FTP ELLIPSOIDAL HEIGHT	+02644
FPAP LATITUDE	420725.1485N
FPAP LONGITUDE	0925609.0090W
THRESHOLD CROSSING HEIGHT (TCH)	00037.2
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1224
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0

CRC REMAINDER	074A4EE9
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ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K3
LTP ORTHOMETRIC HEIGHT	+02961
FPAP ORTHOMETRIC HEIGHT	+02961

