

**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</u> MINERAL WELLS RGNL	<u>AIRPORT ID</u> KMWL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG-A	<u>CITY</u> MINERAL WELLS	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 974	<u>TDZE</u> 974	<u>SUPERSEDED</u> RNAV (GPS) RWY 31	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>DATED</u> 11/10/2016	<u>MAG VAR</u> 6E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 10 OCTOBER 2019	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u> 2000

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>
CEOLA	POINT	NABIE		TF	FB	1.00	178.64	12.10	4000
MQP VORTAC	POINT	HEAST		TF	FO	1.00	128.56	7.97	3000
NABIE	IAF	HEAST	NOPT	TF	FB	1.00	248.07	7.00	3000
GUNFE	IAF	HEAST	NOPT	TF	FB	1.00	007.98	7.00	3000
HEAST	IF/IAF	CUTIS		TF	FB	1.00	309.69	7.40	2500
CUTIS	FAF	RW31	MAP	TF	FO	0.30	309.63	4.63	
RW31	MAP	1600 MSL		CA			309.63		1600
1600 MSL		HEAST		DF	FO	1.00			4000

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW31

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 4000 DIRECT HEAST AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

- 1. **PT** **SIDE OF COURSE** **OUTBOUND** **FT WITHIN** **MILES OF (IAF)**
- 2. HOLD SE HEAST, RT, 309.69 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 4000.
- 3. **FAC:** 309.63 **FAF:** CUTIS **DIST FAF TO MAP:** 4.63 **DIST FAF TO THLD:** 4.63
- 4. **MIN ALT:** HEAST 3000, CUTIS 2500
- 5. **DIST TO THLD FROM OM:** **MM:** **IM:** **150 HAT:** **200 HAT:** 0.46 **GS ANT:**
- 6. **MIN GP INCPT:** 2500 **GP ALT AT FAF :** CUTIS 2500 **OM:** **MM:** **IM:**
- 7. **GP ANGLE:** 3.00 **34:1:** IS CLEAR **20:1:** IS CLEAR **TCH:** 52.8
- 8. **MSA FROM:** RW31 3600

PBN REQUIREMENTS NOTE:

RNP APCH.

NOTES:

CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -9°C OR ABOVE 54°C.
CHART NOTE: CIRCLING RWYS 17, 35 NA AT NIGHT.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 0.98 NM TO RW31*
*LNAV ONLY
WAAS CHANNEL #70639
REFERENCE PATH ID: W31A
FAS OBST: 1088 AAO 324355N/0980023W.
LTP HAE: 267.5 M

MINIMUMS:

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

ALTERNATE: NA STANDARD - NA WHEN LOCAL WEATHER NOT AVAILABLE.

CATEGORY:	A			B			C			D			E		
	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	1174	3/4	200	1174	3/4	200	1174	3/4	200	1174	3/4	200			
LNAV/VNAV DA	1224	3/4	250	1224	3/4	250	1224	3/4	250	1224	3/4	250			
LNAV MDA	1340	1	366	1340	1	366	1340	1	366	1340	1	366			
CIRCLING	1420	1	446	1460	1	486	1740	2 1/4	766	1740	2 1/2	766			



CHANGES - REASONS

1. REMOVED JEN VORTAC FROM FEEDER ROUTE - FACILITY BEING DECOMMISSIONED PER VOR MON.
2. MOVED NOTE "BARO-VNAV AND VDP NA WHEN USING GRANBURY REGIONAL ALTIMETER SETTING." TO PART C - REMARKS - LOCAL ALTIMETER SOURCE ON WMSCR AND DEEMED RELIABLE.
3. MOVED NOTE "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GRANBURY REGIONAL ALTIMETER SETTING AND INCREASE LPV DA TO 1256 FEET AND ALL VISIBILITIES 1/8 SM; LNAV/VNAV DA TO 1306 FEET AND ALL VISIBILITIES 3/8 SM; INCREASE ALL MDA 100 FEET AND LNAV VISIBILITY CAT C/D 3/8 MILE, AND CIRCLING VISIBILITY CAT C/D 1/4 MILE." TO PART C - REMARKS - LOCAL ALTIMETER SOURCE ON WMSCR AND DEEMED RELIABLE.
4. REMOVED FAHRENHEIT VALUES FROM BARO-VNAV TEMPERATURES - IAW 8260.19H 8-6-9 S.
5. REMOVED DME/DME RNP-0.3 NA NOTE AND ADDED RNP APPROACH TO PBN REQUIREMENTS NOTE - IAW 8260.19H 1-1-5 F (14) AND 8-6-8 B (1).
6. ADDED "MAX 4000" TO HOLD-IN-LIEU ON LINE 2 - PER .19H PARA 8-6-7B (2).
7. CHANGED NOTE "CIRCLING TO RWY 17 NA AT NIGHT" TO "CIRCLING RWYS 17, 35 NA AT NIGHT" - NO SURVEY. UNABLE TO VERIFY VISUAL SURFACES CLEAR.
8. ADDED 20:1 IS CLEAR TO LINE 7- 8260.19H 8-6-7 G (3).

COORDINATED WITH:

A4A **ALPA** **AOPA** **APA** **HAI** **NBAA** **OTHER:** ZFW, DFW ATCT, AMGR, STATE AVIATION DIRECTOR

FLIGHT CHECKED BY

PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

DATE

DEVELOPED BY

DONALD H. LANIER (ARTHUR ULVESTAD)

Digitally signed by

DONALD H LANIER

Digitally signed by

DONALD H LANIER

May 10, 2019

OFFICE

AJV-A431

DATE

04/08/2019

APPROVED BY

LONNIE EVERHART

Digitally signed by
DONALD H LANIER

May 10, 2019

OFFICE

AJV-A430

DATE

TITLE
MANAGER



FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMWL
RUNWAY	RW31
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W31A
LTP/FTP LATITUDE	324635.1700N
LTP/FTP LONGITUDE	0980305.5500W
LTP/FTP ELLIPSOIDAL HEIGHT	+02675
FPAP LATITUDE	324738.9495N
FPAP LONGITUDE	0980419.5030W
THRESHOLD CROSSING HEIGHT (TCH)	00052.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1048
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	C20167A1

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02966
FPAP ORTHOMETRIC HEIGHT	+02966

