

**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> MWL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>ORIGINAL/AMENDMENT</u> ORIG	<u>CITY</u> MINERAL WELLS	<u>STATE</u> TX
<u>AIRPORT ELEVATION</u> 974	<u>TDZE</u> 947	<u>SUPERSEDED</u>	<u>ORIGINAL/AMENDMENT</u> NONE	<u>DATED</u> 6E
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u>	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>MAG VAR</u> 2000
			<u>CANCEL/SUSPEND</u>	<u>EPOCH YEAR</u>

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>
AWOLU	IAF	INULE		TF	FB	1.00	219.57	7.00	3500
MOKAC	IAF	INULE		TF	FB	1.00	039.55	7.00	3500
INULE	IF	CEBIB		TF	FB	1.00	129.52	5.40	2800
CEBIB	FAF	RW13	MAP	TF	FO	0.30	129.56	5.79	
RW13	MAP	1400 MSL		CA			129.56		1400
1400 MSL		MOKAC		DF	FO	1.00			3500

MISSED APPROACH

MAP:

LPV: DA
LNAV/VNAV: DA
LNAV: RW13

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 1400 THEN CLIMBING RIGHT TURN TO 3500 DIRECT MOKAC AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT	SIDE OF COURSE	OUTBOUND	FT WITHIN	MILES OF	(IAF)
2. PROFILE STARTS AT INULE					
3. FAC: 129.56	FAF: CEBIB		DIST FAF TO MAP: 5.79	DIST FAF TO THLD: 5.79	
4. MIN ALT: INULE 3500, CEBIB 2800					
5. DIST TO THLD FROM OM:	MM:	IM:	150 HAT:	250 HAT: 0.75	GS ANT:
6. MIN GP INCPT: 2800	GP ALT AT PFAF: CEBIB 2800			OM:	MM:
7. GP ANGLE: 3.00	34:1: IS NOT CLEAR	20:1: IS CLEAR	TCH: 40.0		IM:
8. MSA FROM: RW13 3600					



PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING RWYS 17, 35 NA AT NIGHT.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -8C OR ABOVE 54C.
CHART NOTE: RWY 13 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.

ADDITIONAL FLIGHT DATA:

HOLD SW, RT, 039.55 INBOUND.
CHART FAS OBST: 1349 TOWER (48-011396) 324840N/0980613W.
CHART VDP AT 2.01 NM TO RW13.
WAAS CHANNEL # 65747
REFERENCE PATH ID: W13A
LTP HAE: 250.5 M

MINIMUMS:

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

ALTERNATE: NA ☐ STANDARD - CAT C 800-2 1/4, CAT D 800-2 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	1197	1	250	1197	1	250	1197	1	250	1197	1	250			
LNAV/VNAV DA	1198	1	251	1198	1	251	1198	1	251	1198	1	251			
LNAV MDA	1600	1	653	1600	1	653	1600	1 7/8	653	1600	1 7/8	653			
CIRCLING	1600	1	626	1600	1	626	1740	2 1/4	766	1740	2 1/2	766			

CHANGES - REASONS

COORDINATED WITH:

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

FLIGHT CHECKED BY

COLTON CROWDER

Digitally signed by

CASEY D HILL

Mar 12, 2025

OFFICE

AJF

DATE

03/07/2025

DEVELOPED BY

JOHN BORDY (COLE NESBITT)

Digitally signed by

CASEY D HILL

Mar 12, 2025

OFFICE

AJV-33

DATE

07/24/2024

APPROVED BY

JOHN BORDY

Digitally signed by

CASEY D HILL

Mar 12, 2025

OFFICE

AJV-33

DATE

TITLE

MANAGER



FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KMWL
RUNWAY	RW13
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W13A
LTP/FTP LATITUDE	324712.6100N
LTP/FTP LONGITUDE	0980348.9500W
LTP/FTP ELLIPSOIDAL HEIGHT	+02505
FPAP LATITUDE	324608.8205N
FPAP LONGITUDE	0980235.0145W
THRESHOLD CROSSING HEIGHT (TCH)	00040.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1016
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	C3A1C44C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K4
LTP ORTHOMETRIC HEIGHT	+02795
FPAP ORTHOMETRIC HEIGHT	+02795



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD**

AIRPORT ID
MWL

PROCEDURE NAME
RNAV (GPS) RWY 13

AMDT NO.
ORIG

CITY
MINERAL WELLS

STATE
TX

AIRPORT ELEVATION
974

FACILITY
RNAV

PART A: OBSTRUCTION DATA SEGMENTS

INITIAL

FROM
AWOLU

TO
INULE

RNP
1.00

DISTANCE
7.00

PAT

MAP

HAT

HMAS

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	325436.00N/0980821.00W	1408	215	8	4B	1000				AT1092	3500
TERRAIN	325545.00N/0980809.00W	1197 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

INITIAL

FROM
MOKAC

TO
INULE

RNP
1.00

DISTANCE
7.00

PAT

MAP

HAT

HMAS

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
AAO	324921.00N/0981912.00W	1559	215	8	4B	1000				AT941	3500
TERRAIN	325048.00N/0981336.00W	1135 (1100)								AS1500	2600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

QUALITY
6
CHECKED

INTERMEDIATE

FROM

INULE

TO

CEBIB

RNP

1.00

DISTANCE

5.40

PAT

MAP

HAT

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
AAO	325233.00N/0981012.00W	1418	215	8	4B	500				AT882	2800
TERRAIN	325233.00N/0981012.00W	1217 (1200)								AS1500	2700

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LPV

FROM

CEBIB

TO

RW13

RNP

0.30

DISTANCE

5.79

PAT

MAP

DA

HAT

250

HMAS

OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE (48-044894)	324719.06N/0980401.75W	964	50	20	2C		34.00:1			AC20	1197

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV/VNAV

FROM

CEBIB

TO

RW13

<u>RNP</u> 0.30	<u>DISTANCE</u> 5.79	<u>PAT</u>	<u>MAP</u> DA	<u>HAT</u> 251	<u>HMAS</u>						
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC			MA1	1198

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

FINAL: LNAV

FROM

CEBIB

TO

RW13

RNP 0.30	DISTANCE 5.79	PAT	MAP RW13	HAT 653	HMAS						
OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TOWER (48-011396)	324840.00N/0980613.00W	1349	50	20	2C	250					1600

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LPV

FROM

DA

TO

MOKAC

<u>RNP</u>	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u>			
0.30										997	
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				3500
TOWER (48-003965)	324917.00N/0980937.00W	1566	500	50	5D	1000					2600
TERRAIN	324921.00N/0981915.00W	1358 (1400)								AS1500	2900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSED APPROACH: LNAV/VNAV

FROM

DA

TO

MOKAC

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 1037			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
TANK (48-010056)	324706.67N/0980320.54W	1089	20	3	1A		ASC				1100
TOWER (48-003965)	324917.00N/0980937.00W	1566	500	50	5D	1000					2600
TERRAIN	324921.00N/0981915.00W	1358 (1400)								AS1500	2900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

MISSSED APPROACH: LNAV

FROM

RW13

TO

MOKAC

<u>RNP</u> 0.30-1.00	<u>DISTANCE</u>	<u>PAT</u>	<u>MAP</u>				<u>HAT</u>	<u>HMAS</u> 1500			
<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				3500
TOWER (48-003965)	324917.00N/0980937.00W	1566	500	50	5D	1000					2600
TERRAIN	324921.00N/0981915.00W	1358 (1400)								AS1500	2900

COMPUTATIONS

ALT

KIAS

KTAS

HAA

VKTW

TR

BA

DTA

COURSE CHANGE

DVEB

VEB OCS

RF CENTER FIX/DISTANCE

SEGMENT REMARKS:

CIRCLING

☐ ALL CATS

☒ CAT A

☒ CAT B

☒ CAT C

☒ CAT D

☐ CAT E

☐ NOT AUTHORIZED

OBSTRUCTION	COORDINATES	RADIUS	HAA	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
CATEGORY A											
TREE	324609.00N/0980515.00W	1.30	626	1106	215	8	4B	300		SI	1600
CATEGORY B											
TOWER (48-134484)	324611.75N/0980521.47W	1.84	626	1110	250	50	4D	300		SI/AC50	1600
CATEGORY C											
TOWER (48-011396)	324840.00N/0980613.00W	2.89	766	1349	50	20	2C	300		XP91	1740
CATEGORY D											
TOWER (48-011396)	324840.00N/0980613.00W	3.78	766	1349	50	20	2C	300		XP91	1740

CIRCLING REMARKS:

CAT C/D ADJUSTED TO MATCH CURRENTLY PUBLISHED CIRCLING.

MSA

CENTER

RW13

RADIUS

25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (48-027495)	330414.00N/0980035.00W	003	17.2	2547	50	20	2C	1000			3600

MSA REMARKS:



NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:

PART B: SUPPLEMENTAL DATA

COMMUNICATIONS WITH

ZFW ARTCC, FTW FSS

<u>WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
ASOS	MWL	24	MWL	0	Y	0
<u>BACK-UP WX SERVICE</u>	<u>LOCATION</u>	<u>HRS OPERATION</u>	<u>ALTIMETER SOURCE</u>	<u>DISTANCE</u>	<u>WMSCR</u>	<u>ADJUSTMENTS</u>
AWOS-3T	GDJ	24	GDJ	23.66	Y	84

WX REMARKS:

RASS PRESSURE PATTERNS THE SAME
KMWL 974 KGDJ 767
RA = 83.1

<u>PRIMARY NAVAID</u>	<u>MONITOR POINT</u>	<u>HRS OPERATION</u>	<u>CAT</u>
<u>APPROACH AND RUNWAY LIGHTING SYSTEM</u>	<u>RUNWAY MARKINGS</u>	<u>RUNWAY VISUAL RANGE</u>	
RW17 - MIRL (PCL), PAPI-2R	BSC-F		
RW35 - MIRL (PCL), PAPI-2L	BSC-F		
RW13 - MIRL (PCL), PAPI-4L	NPI-F		
RW31 - MIRL (PCL), PAPI-4L	PIR-F		

<u>GLIDESLOPE ANGLE</u>	<u>ELEV RWY THRESHOLD</u>	<u>TCH</u>	<u>ELEV GS ANTENNA</u>	<u>DISTANCE FROM RWY</u>	<u>VGSI ANGLE</u>	<u>TCH</u>
3.00	917.0	40.0			3.00	40.0

FINAL APPROACH COURSE AIMING

RUNWAY THRESHOLD	X	FT FROM THRESHOLD	DISPLACED THRESHOLD DISTANCE	300
ON CENTERLINE	X	FT FROM CENTERLINE		

CRITICAL TEMPERATURES

<u>CRITICAL LOW</u>	<u>CRITICAL HIGH</u>	<u>ACT</u>	<u>APT ISA</u>
-8C	+54C	-8C	+13.07C

CRITICAL TEMPERATURE REMARKS:

AVERAGE COLD TEMPERATURE DERIVED FROM 5-YEAR HISTORY (2019-2023).
CRITICAL LOW TEMPERATURE BASED ON ACT.
DESCENT RATE (FPM): STANDARD TEMP 967 HIGH TEMP 1276.

"VISUAL PORTION OF FINAL" PENETRATIONS

FINAL TYPE	CIRCLING RWY 17
20:1	
946 TREE (48-044892) 324720.5200N/0980350.0700W (13.35)	



<u>AIRPORT ID</u> MWL	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 13	<u>AMDT NO.</u> ORIG	<u>CITY</u> MINERAL WELLS	<u>STATE</u> TX	<u>AIRPORT ELEVATION</u> 974	<u>FACILITY</u> RNAV
FINAL TYPE	LPV, LNAV/VNAV, LNAV					
34:1						
964 TREE (48-044894) 324719.0600N/0980401.7500W (16.7)				946 TREE (48-044895) 324716.6500N/0980357.3200W (11.6)		
943 TREE (48-045950) 324718.1600N/0980357.5200W (5.04)				938 TREE (48-044896) 324716.2600N/0980357.1900W (4.66)		
<u>PENETRATIONS REMARKS:</u>						
RWY 17/35 lack OIS survey. Visual surfaces assumed penetrated.						

HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS

and/or

5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS

<u>PENETRATIONS REMARKS:</u>

PART C: GENERAL REMARKS:

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE GDJ ALTIMETER SETTING AND INCREASE LPV DA TO 1281 FEET. INCREASE LNAV/VNAV DA TO 1282 FEET. INCREASE ALL MDAS 100 FEET AND LNAV VISIBILITY CAT B/C/D 1/4 SM, AND CIRCLING VISIBILITY CAT B/C/D 1/4 SM.

CHART NOTE: BARO-VNAV AND VDP NA WHEN USING GDJ ALTIMETER SETTING.

75 FT VEG USED PER FPT

PER FPT: AIRPORT MANAGEMENT REQUESTS MINIMUM VISIBILITY BE NO LOWER THAN 1 SM FOR RPZ PURPOSES.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.
ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.

PART D: AIRSPACE

DOCKET #

ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE

DISTANCE FROM	THLD	TO 1000FT POINT	3.56
WIDTH OF	FINAL	SEGMENT AT 1000FT POINT	1.20
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1000FT POINT	135.56
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1000FT POINT	1100
DISTANCE FROM	THLD	TO 1500FT POINT	5.39
WIDTH OF	FINAL	SEGMENT AT 1500FT POINT	1.76
TRUE COURSE OF	FINAL	SEGMENT CONTAINING 1500FT POINT	135.56
HIGH TERRAIN IN	FINAL	SEGMENT CONTAINING 1500FT POINT	1100

THRESHOLD COORDINATES (IF STR-IN)	324712.61N/0980348.95W
ARP COORDINATES	324653.78N/0980336.63W
RUNWAY APCH END AND DIST FURTHEST FROM ARP	RUNWAY 31 DISTANCE 0.60 NM
FAF COORDINATES	325121.09N/0980837.35W
FIX NAME COORDINATES	

REMARKS

THLD DISPLACED 300FT, ACTUAL COORDINATES: 324714.73N/0980351.41W

PART E: PREPARED BY

NAME	OFFICE	DATE	TITLE
JOHN BORDY (COLE NESBITT)	AJV-33	07/24/2024	AERONAUTICAL INFORMATION SPECIALIST

