

**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> 1B9	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> 1	<u>CITY</u> MANSFIELD	<u>STATE</u> MA		
<u>AIRPORT ELEVATION</u> 123	<u>TDZE</u> 121	<u>SUPERSEDED</u> RNAV (GPS) RWY 32	<u>ORIGINAL/AMENDMENT</u> ORIG-B	<u>DATED</u> 10/16/2014	<u>MAG VAR</u> 16W	<u>EPOCH YEAR</u> 1995
<u>FACILITY</u> RNAV	<u>COORDINATES OF FACILITIES</u>	<u>ACTUAL EFFECTIVE DATE</u> 1 DECEMBER 2022	<u>REQUIRED EFFECTIVE DATE</u> ROUTINE	<u>CANCEL/SUSPEND</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>
AVONN		REPOY		TF	FB	1.00	050.76	13.67	3000
WOONS		RAYNM		TF	FO	1.00	114.02	24.15	3000
DUNKK	IAF	RAYNM	NOPT	TF	FB	1.00	247.53	18.14	3000
REPOY	IAF	RAYNM	NOPT	TF	FB	1.00	048.71	5.00	3000
SAVLE	IAF	RAYNM	NOPT	TF	FB	1.00	228.81	5.00	3000
RAYNM	IF/IAF	EASTN		TF	FB	1.00	318.75	7.33	2000
EASTN	FAF	GEONS/1.00 NM TO RW32		TF	FB	0.30	318.64	3.29	
GEONS/1.00 NM TO RW32		RW32	MAP	TF	FO	0.30	318.64	1.00	
RW32	MAP	700 MSL		CA			318.64		700
700 MSL		WHYBE		DF	FO	1.00			3000

MISSED APPROACH

MAP:

LPV: DA
LNAV: RW32

MISSED APPROACH INSTRUCTIONS:

CLIMB TO 700 THEN CLIMBING RIGHT TURN TO 3000 DIRECT WHYBE AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:



PROFILE:

1. PT

SIDE OF COURSE

OUTBOUND

FT WITHIN

MILES OF

(IAF)

2. HOLD SE RAYNM, RT, 318.76 INBOUND, 3000 FT. IN LIEU OF PT (IAF), MAX 6000.

3. FAC: 318.64FAF: EASTNDIST FAF TO MAP: 4.30DIST FAF TO THLD: 4.30

4. MIN ALT: RAYNM 3000, EASTN 2000, GEONS/1.00 NM TO RW32 600

5. DIST TO THLD FROM OM:MM:IM:150 HAT:331 HAT: 0.65GS ANT:

6. MIN GP INCPT: 2000GP ALT AT PFAF : EASTN 2000OM:MM:IM:

7. GP ANGLE: 4.0034:1: IS NOT CLEAR20:1: IS NOT CLEARTCH: 55.0

8. MSA FROM: RW32 2600

PBN REQUIREMENTS NOTE:

RNP APCH - GPS.

NOTES:

CHART NOTE: CIRCLING NA TO RWYS 4 AND 22.
CHART NOTE: PROCEDURE NA AT NIGHT.
CHART NOTE: RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WOONS ON V3-16 SOUTHWEST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT AVONN ON V146 NORTHWEST BOUND.
CHART NOTE: USE TAUNTON ALTIMETER SETTING.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART TAUNTON MUNI - KING FLD ASOS-3.
HOLD E, RT, 268.04 INBOUND.
CHART FAS OBST: 228 TREE (25-046572) 420012N/0711127W.
WAAS CHANNEL # 97644
REFERENCE PATH ID: W32A
LTP HAE: 7.6 M

MINIMUMS:

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

ALTERNATE: NA ☒

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	452	1	331	452	1	331		NA			NA				
LNAV MDA	520	1	399	520	1	399		NA			NA				
CIRCLING	600	1	477	640	1	517		NA			NA				

QUALITY
26
CHECKED

CHANGES - REASONS

1. AIRPORT ELEVATION CHANGED FROM 122 TO 123 - PER LATEST AIRNAV DATA INCLUDING RECENT AIRPORT SURVEY.
2. ADDED PBN REQUIREMENTS NOTE - PER 8260.19I PARA. 8-6-8B(2).
3. REMOVED NOTE 'DME/DME RNP-0.3 NA' - LEGACY NOTE, REPLACED BY PBN REQUIREMENTS NOTE.
4. CHANGED NOTE 'HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NA' TO 'RWY 32 HELICOPTER VISIBILITY REDUCTION BELOW 1 SM NOT AUTHORIZED' - PER 8260.19I PARA. 8-6-11K(3).
5. ADDED '20:1 IS NOT CLEAR' TO FORM - PER 8260.19I PARA. 8-6-7G(3)(A).
6. ADDED INITIAL SEGMENT FROM SAVLE TO RAYNM - ATC REQUESTED FOR INCREASED FLEXIBILITY.
7. ADDED LPV FINAL SEGMENT TO PROCEDURE - AIRPORT OFFICIALS REQUESTED TO ADD VERTICAL GUIDANCE ON FINAL.
8. LENGTHENED RAYNM TO EASTN INTERMEDIATE SEGMENT FROM 6.00 TO 7.33 - EASTN MOVED 1.33 NM NORTHWEST FROM 415649.84N/0710509.41W TO 415733.06N/0710639.56W BASED ON LPV GLIDEPATH ANGLE, TCH, AND PFAF ALTITUDE.
9. ADDED STEPDOWN FIX GEONS AT 1.00 NM TO RW32 LNAV FINAL - PROVIDED 80 FT REDUCTION IN MDA/HAT.
10. ADDED LPV LINE OF MINIMUMS AND ASSOCIATED DATA - REQUESTED BY AIRPORT OFFICIALS/FPT.
11. LOWERED LNAV MDA/HAT FROM 600/479 TO 520/399 - END RESULT FROM ADDING STEPDOWN FIX.
12. LOWERED CIRCLING CAT A MDA/HAA FROM 640/518 TO 600/477 - NEW CONTROLLING OBSTRUCTION AND FULL AMENDMENT ALLOWED FOR LOWERING.
13. CIRCLING CAT B HAT CHANGED FROM 518 TO 517 - DUE TO 1 FT AIRPORT ELEVATION CHANGE FROM 122 TO 123 SINCE LAST AMENDMENT.
14. CA LEG ALTITUDE CHANGED FROM 522 MSL TO 700 MSL AND PUBLISHED IN THE MISSED APPROACH INSTRUCTIONS - NEW EVALUATION AND IAW 8260. 58B, PARA 3-5-2.
15. ADDED MAX HOLD-IN-LIEU ALTITUDE OF 6000 TO PROFILE LINE 2 - PER 8260.19I, PARA 8-6-7B(2).
16. CHANGED DIST FAF TO MAP AND FAF TO THLD FROM 5.63 TO 4.30 - PFAF MOVED 1.33 NM CLOSER TO RUNWAY.
17. ADDED DISTANCE TO 331 HAT: 0.65 TO PROFILE LINE 5 - ADDED LPV FINAL SEGMENT TO PROCEDURE.
18. REMOVED CHART 319 TREES 415621N/0710554W - NEW EVALUATION.
19. ADDED CHART NOTE: CIRCLING NA TO RWYS 4 AND 22 - PER SOP UNPAVED RUNWAYS, REV 2.0 PROCESS 3.2.
20. ADDED PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT AVONN ON V146 NORTHWEST BOUND - TURN AT AVONN EXCEEDS 90 DEGREES PER 8260.58B PARA. 1-2-5A(3) AND 8260.19I PARA. 8-2-5E(2).
21. REMOVED VDA/TCH EASTN TO RW32: 3.08/40 FROM ADDITIONAL FLIGHT DATA - ADDED LPV FINAL AND PER 8260.19I PARA. 8-6-10Q(1).

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ZBW, BOS APP CON, BDR FSS, ARPT MGR

FLIGHT CHECKED BY

JAMES D ARNOLD

*Digitally signed by***RAKE MCGRAW**

Oct 20, 2022

*Digitally signed by***RAKE MCGRAW**

Oct 20, 2022

OFFICE

FPO

DATE

09/23/2022

DEVELOPED BY

RALPH DUMAR

OFFICE

AJV-A423

DATE

05/06/2022

APPROVED BY

MARLON ROBINSON

*Digitally signed by***RAKE MCGRAW**

Oct 20, 2022

OFFICE

AJV-A420

DATE

10/20/2022

TITLE
MANAGER

FAS DATA BLOCK INFORMATION

<u>DATA FIELD</u>	<u>DATA</u>
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	1B9
RUNWAY	RW32
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W32A
LTP/FTP LATITUDE	415952.0520N
LTP/FTP LONGITUDE	0711130.6995W
LTP/FTP ELLIPSOIDAL HEIGHT	+00076
FPAP LATITUDE	420040.0430N
FPAP LONGITUDE	0711311.4095W
THRESHOLD CROSSING HEIGHT (TCH)	00055.0
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	04.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1752
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	BFF2D159

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K6
LTP ORTHOMETRIC HEIGHT	+00364
FPAP ORTHOMETRIC HEIGHT	+00364