

**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>AIRPORT ID</b> 1B9	<b>PROCEDURE NAME</b> RNAV (GPS) RWY 32	<b>ORIGINAL/AMENDMENT</b> 3	<b>CITY</b> MANSFIELD	<b>STATE</b> MA
<b>AIRPORT ELEVATION</b> 123	<b>TDZE</b> 121	<b>SUPERSEDED</b> RNAV (GPS) RWY 32	<b>DATED</b> 06/12/2025	<b>MAG VAR</b> 16W
<b>FACILITY</b> RNAV	<b>COORDINATES OF FACILITIES</b>	<b>ACTUAL EFFECTIVE DATE</b>	<b>REQUIRED EFFECTIVE DATE</b> ROUTINE	<b>EPOCH YEAR</b> 1995
				<b>CANCEL/SUSPEND</b>

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
AVONN		REPOY		TF	FB	1.00	050.77	13.67	3000
WOONS		RAYNM		TF	FO	1.00	114.01	24.16	3000
DUNKK	IAF	RAYNM	NOPT	TF	FB	1.00	247.54	18.14	3000
REPOY	IAF	RAYNM	NOPT	TF	FB	1.00	048.69	5.00	3000
SAVLE	IAF	RAYNM	NOPT	TF	FB	1.00	228.77	5.00	3000
RAYNM	IF/IAF	EASTN		TF	FB	1.00	318.73	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/VNAV: 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. <b>PT</b> | <b>SIDE OF COURSE</b>  | <b>OUTBOUND</b>                   | <b>FT WITHIN</b>        | <b>MILES OF</b>  | (IAF)                    |      |                |            |
| 2.           | HOLD SE RAYNM, RT, 318.73 INBOUND, 3000 IN LIEU OF PT (IAF), MAX 6000. |                                   |                         |                  |                          |      |                |            |
| 3.           | <b>FAC:</b> 318.64   | <b>FAF:</b> EASTN                 | <b>DIST FAF TO MAP:</b> | 4.30             | <b>DIST FAF TO THLD:</b> | 4.30 |                |            |
| 4.           | <b>MIN ALT:</b> RAYNM 3000, EASTN 2000, GEONS/1.00 NM TO RW32 600      |                                   |                         |                  |                          |      |                |            |
| 5.           | <b>DIST TO THLD FROM OM:</b>   | <b>MM:</b>                        | <b>IM:</b>              | <b>150 HAT:</b>  | <b>269 HAT:</b>          | 0.51 | <b>GS ANT:</b> |            |
| 6.           | <b>MIN GP INCPT:</b> 2000  | <b>GP ALT AT PFAF:</b> EASTN 2000 |                         |                  | <b>OM:</b>               |      | <b>MM:</b>     | <b>IM:</b> |
| 7.           | <b>GP ANGLE:</b> 4.00  | <b>34:1:</b> IS CLEAR             | <b>20:1:</b> IS CLEAR   | <b>TCH:</b> 55.0 |                          |      |                |            |
| 8.           | <b>MSA FROM:</b> RW32 2600   |                                   |                         |                  |                          |      |                |            |

**PBN REQUIREMENTS NOTE:**

RNP APCH - GPS.

**NOTES:**

CHART NOTE: CIRCLING NA TO RWYS 4 AND 22.  
 CHART NOTE: CIRCLING RWY 14 NA AT NIGHT.  
 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -15°C OR ABOVE 54°C.  
 CHART NOTE: BARO-VNAV NA WHEN USING OWD ALTIMETER SETTING.  
 CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT AVONN ON V146 NORTHWEST BOUND AND V268 AND T358 SOUTHWEST BOUND.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT WOONS ON V3 AND T224 SOUTHWEST BOUND.  
 CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT DUNKK ON V141 SOUTHWEST BOUND.  
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OWD ALTIMETER SETTING: INCREASE LPV DA TO 432 FEET; INCREASE LNAV/VNAV DA TO 427 FEET; INCREASE ALL MDAS 40 FEET.

**ADDITIONAL FLIGHT DATA:**

HOLD E, RT, 268.04 INBOUND.  
 FAS OBST: 238 TREE 420006N/0711130W.  
 WAAS CHANNEL # 97644  
 REFERENCE PATH ID: W32A  
 LTP HAE: 7.6 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			
	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	395	7/8	274	395	7/8	274		NA			NA					
LNAV/VNAV DA	390	7/8	269	390	7/8	269		NA			NA					
LNAV MDA	500	1	379	500	1	379		NA			NA					
CIRCLING	600	1	477	600	1	477		NA			NA					



**CHANGES - REASONS**

1. CHANGED ALL INSTANCES OF "GEONS/1.05 NM TO RW32" TO "GEONS/1.00 NM TO RW32" - RELOCATION OF GEONS DUE TO LOWERING LNAV SDF ALTITUDE AT GEONS.
2. TERMINAL ROUTES: AVONN TO REPOY, CHANGED COURSE FROM 050.76 TO 050.77 - RELOCATION OF REPOY TO ALIGN 90 DEGREE TURN AT RAYNM.
3. TERMINAL ROUTES: WOONS TO RAYNM, CHANGED COURSE FROM 114.02 TO 114.01 AND DISTANCE FROM 24.15 TO 24.16 - RELOCATION OF RAYNM TO ALIGN INTERMEDIATE WITH FINAL.
4. TERMINAL ROUTES: DUNKK TO RAYNM, CHANGED COURSE FROM 247.53 TO 247.54 - RELOCATION OF RAYNM TO ALIGN INTERMEDIATE WITH FINAL.
5. TERMINAL ROUTES: REPOY TO RAYNM, CHANGED COURSE FROM 048.71 TO 048.69 - RELOCATION OF REPOY TO ALIGN 90 DEGREE TURN AT RAYNM AND RELOCATION OF RAYNM TO ALIGN INTERMEDIATE WITH FINAL.
6. TERMINAL ROUTES: SAVLE TO RAYNM, CHANGED COURSE FROM 228.81 TO 228.77 - RELOCATION OF SAVLE TO ALIGN 90 DEGREE TURN AT RAYNM AND RELOCATION OF RAYNM TO ALIGN INTERMEDIATE WITH FINAL.
7. TERMINAL ROUTES: RAYNM TO EASTN, CHANGED COURSE FROM 318.75 TO 318.73 - RELOCATION OF RAYNM TO ALIGN INTERMEDIATE WITH FINAL.
8. TERMINAL ROUTES: EASTN TO GEONS, CHANGED DISTANCE FROM 3.25 TO 3.29 - RELOCATION OF GEONS DUE TO LOWERING LNAV SDF ALTITUDE AT GEONS.
9. TERMINAL ROUTES: GEONS TO RW32, CHANGED DISTANCE FROM 1.05 TO 1.00 - RELOCATION OF GEONS DUE TO LOWERING LNAV SDF ALTITUDE AT GEONS.
10. PROFILE LINE 2: CHANGED COURSE INBOUND FROM 318.76 TO 318.73 - REALIGNED TO NEW INTERMEDIATE COURSE.
11. PROFILE LINE 4: LOWERED ALTITUDE AT GEONS FROM 620 TO 600 - NEW OBSTACLE EVALUATION.
12. NOTES: DELETED "PROCEDURE NA AT NIGHT" AND ADDED "CIRCLING RWY 14 NA AT NIGHT" - 20:1 PENETRATIONS ARE PRESENT FOR RWY 14 BUT NOT FOR RWY 32.
13. NOTES: CHANGED "PROCEDURE NA FOR ARRIVALS AT WOONS ON V3 SOUTHWEST BOUND" TO "PROCEDURE NA FOR ARRIVALS AT WOONS ON V3 AND T224 SOUTHWEST BOUND" - T224 OVERLIES V3. WOONS IS USED ON BOTH, AND SAME 90 DEGREE TURN LIMIT APPLIES.
14. NOTES: REFORMATTED "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OWD ALTIMETER SETTING: INCREASE LPV DA TO 432 FEET, LNAV/VNAV DA TO 427 FEET, AND ALL MDAS 40 FEET" TO "WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE OWD ALTIMETER SETTING: INCREASE LPV DA TO 432 FEET; INCREASE LNAV/VNAV DA TO 427 FEET; INCREASE ALL MDAS 40 FEET" - MINOR UPDATE TO LATEST FORMAT.
15. ADDITIONAL FLIGHT DATA: DELETED "CHART CIRCLING ICON" - NO LONGER REQUIRED, IFP GROUP MEMO, REMOVAL OF CIRCLING ICONS.
16. ADDITIONAL FLIGHT DATA: CHANGED "CHART FAS OBST" TO "FAS OBST" - LATEST GUIDANCE FROM CRT TO NOT CHART ASSUMED VEGETATION.

**COORDINATED WITH:**

**A4A** 
**ALPA** 
**AOPA** 
**APA** 
**HAI** 
**NBAA** 
**OTHER:** ZBW, BOS APP CON, BDR FSS, AMGR

**FLIGHT CHECKED BY**

**OFFICE**

**DATE**

**DEVELOPED BY**  
RICHARD BRUCE

**OFFICE**  
AJV-A422

**DATE**  
01/14/2026

**APPROVED BY**  
BEV L BORDY

**OFFICE**  
AJV-A420

**DATE**

**TITLE**  
MANAGER



AIRPORT ID  
1B9

PROCEDURE NAME  
RNAV (GPS) RWY 32

ORIGINAL/AMENDMENT  
3

CITY  
MANSFIELD

STATE  
MA

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



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

<u>AIRPORT ID</u> 1B9	<u>PROCEDURE NAME</u> RNAV (GPS) RWY 32	<u>AMDT NO.</u> 3	<u>CITY</u> MANSFIELD	<u>STATE</u> MA	<u>AIRPORT ELEVATION</u> 123	<u>FACILITY</u> RNAV
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**PART A: OBSTRUCTION DATA SEGMENTS**

**FEEDER**

<u>FROM</u> AVONN	<u>TO</u> REPOY
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<u>RNP</u> 1.00	<u>DISTANCE</u> 13.67	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
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OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
WINDMILL (25-022121)	414445.86N/0710701.27W	631	500	50	5D	1000				AT1369	3000
TERRAIN	414506.00N/0710621.00W	396 (400)								AS1500	1900

**COMPUTATIONS**

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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**SEGMENT REMARKS:**

**FEEDER**

<u>FROM</u> WOONS	<u>TO</u> RAYNM
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<u>RNP</u> 1.00	<u>DISTANCE</u> 24.16	<u>PAT</u>	<u>MAP</u>	<u>HAT</u>	<u>HMAS</u>
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OBSTRUCTION	COORDINATES	ELEV MSL	HORZ	VERT	AC	ROC	OCS	CG	CGTA	ADJUSTMENTS	MIN ALT
TREE	415803.00N/0713130.00W	632	215	8	4B	1000				AT1368	3000
TERRAIN	415548.00N/0713036.00W	498 (500)								AS1500	2000

**COMPUTATIONS**

<u>ALT</u>	<u>KIAS</u>	<u>KTAS</u>	<u>HAA</u>	<u>VKTW</u>	<u>TR</u>	<u>BA</u>	<u>DTA</u>	<u>COURSE CHANGE</u>	<u>DVEB</u>	<u>VEB OCS</u>	<u>RF CENTER FIX/DISTANCE</u>
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**SEGMENT REMARKS:**



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**INITIAL**

**FROM**  
DUNKK

**TO**  
RAYNM

**RNP**  
1.00

**DISTANCE**  
18.14

**PAT**

**MAP**

**HAT**

**HMAS**

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
TOWER (25-000174)	415336.00N/0705633.00W	409	500	50	5D	1000				AT1591	3000
TERRAIN	420230.00N/0704524.00W	141 (100)								AS1500	1600

**COMPUTATIONS**

**ALT    KIAS    KTAS    HAA    VKTW    TR    BA    DTA    COURSE CHANGE    DVEB    VEB OCS    RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

**INITIAL**

**FROM**  
REPOY

**TO**  
RAYNM

**RNP**  
1.00

**DISTANCE**  
5.00

**PAT**

**MAP**

**HAT**

**HMAS**

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
TOWER (25-000610)	414952.78N/0710447.46W	493	50	20	2C	1000				AT1507	3000
TERRAIN	414924.00N/0710018.00W	209 (200)								AS1500	1700

**COMPUTATIONS**

**ALT    KIAS    KTAS    HAA    VKTW    TR    BA    DTA    COURSE CHANGE    DVEB    VEB OCS    RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**INITIAL**

**FROM**  
SAVLE

**TO**  
RAYNM

**RNP**  
1.00

**DISTANCE**  
5.00

**PAT**

**MAP**

**HAT**

**HMAS**

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
TOWER (25-000174)	415336.00N/0705633.00W	409	500	50	5D	1000				AT1591	3000
TERRAIN	415239.00N/0705639.00W	134 (100)								AS1500	1600

**COMPUTATIONS**

**ALT    KIAS    KTAS    HAA    VKTW    TR    BA    DTA    COURSE CHANGE    DVEB    VEB OCS    RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

**INTERMEDIATE**

**FROM**  
RAYNM (IF/IAF)

**TO**  
EASTN

**RNP**  
1.00

**DISTANCE**  
7.33

**PAT**

**MAP**

**HAT**

**HMAS**

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
AAO	415533.00N/0710506.00W	453	215	8	4B	500				AT1047	2000
TERRAIN	415533.00N/0710506.00W	252 (300)								AS1500	1800

**COMPUTATIONS**

**ALT    KIAS    KTAS    HAA    VKTW    TR    BA    DTA    COURSE CHANGE    DVEB    VEB OCS    RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**FINAL: LPV**

**FROM**  
EASTN

**TO**  
RW32

**RNP**  
0.30

**DISTANCE**  
4.30

**PAT**

**MAP**  
DA

**HAT**  
274

**HMAS**

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
TREE (25-025711)	415954.10N/0711123.82W	182	20	3	1A		25.50:1			SA-12 MA24	395

**COMPUTATIONS**

**ALT      KIAS      KTAS      HAA      VKTW      TR      BA      DTA      COURSE CHANGE      DVEB      VEB OCS      RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

**FINAL: LNAV/VNAV**

**FROM**  
EASTN

**TO**  
RW32

**RNP**  
0.30

**DISTANCE**  
4.30

**PAT**

**MAP**  
DA

**HAT**  
269

**HMAS**

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
TREE	420006.00N/0711130.00W	238	215	8	4B	142				AC8 MA2	390

**COMPUTATIONS**

**ALT      KIAS      KTAS      HAA      VKTW      TR      BA      DTA      COURSE CHANGE      DVEB      VEB OCS      RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

LNAV/VNAV OCS 17.55:1.



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**FINAL: LNAV**

**FROM**  
EASTN

**TO**  
GEONS/1.00 NM TO RW32

RNP  
0.30

DISTANCE  
3.29

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	415833.00N/0710700.00W	310	50	20	2C	250				RA40	600

**COMPUTATIONS**

ALT   KIAS   KTAS   HAA   VKTW   TR   BA   DTA   COURSE CHANGE   DVEB   VEB OCS   RF CENTER FIX/DISTANCE

**SEGMENT REMARKS:**

**FINAL: LNAV STEPDOWN**

**FROM**  
GEONS/1.00 NM TO RW32

**TO**  
RW32

RNP  
0.30

DISTANCE  
1.00

PAT

MAP  
RW32

HAT  
379

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>
TREE	420006.00N/0711130.00W	238	215	8	4B	250					500

**COMPUTATIONS**

ALT   KIAS   KTAS   HAA   VKTW   TR   BA   DTA   COURSE CHANGE   DVEB   VEB OCS   RF CENTER FIX/DISTANCE

**SEGMENT REMARKS:**



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**HOLD-IN-LIEU OF PT**

**FROM**  
RAYNM

**TO**  
P-5

RNP

DISTANCE

PAT  
P-5

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>
STACK (25-000467)	414807.00N/0704715.00W	419	100	20	3C	1000				AT1581	3000
TERRAIN	415021.00N/0705848.00W	200 (200)								AS1500	1700

**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**  
WHYBE

RNP  
0.30-1.00

DISTANCE

PAT

MAP

HAT

HMAS  
171

<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>
TREE (25-044157)	415953.75N/0711118.31W	206	20	3	1A		ASC				3000
TOWER (25-020008)	420544.10N/0711348.60W	878	250	50	4D	1000					1900
TERRAIN	420327.00N/0711903.00W	436 (400)								AS1500	1900

**COMPUTATIONS**

ALT   KIAS   KTAS   HAA   VKTW   TR   BA   DTA   COURSE CHANGE   DVEB   VEB OCS   RF CENTER FIX/DISTANCE

**SEGMENT REMARKS:**



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**MISSED APPROACH: LNAV/VNAV**

**FROM** DA **TO** WHYBE

**RNP**  
0.30-1.00

**DISTANCE**

**PAT**

**MAP**

**HAT**

**HMAS**  
248

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
TREE	420024.00N/0711030.00W	248	215	8	4B		ASC				3000
TOWER (25-020008)	420544.10N/0711348.60W	878	250	50	4D	1000					1900
TERRAIN	420327.00N/0711903.00W	436 (400)								AS1500	1900

**COMPUTATIONS**

**ALT** **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**

**MISSED APPROACH: LNAV**

**FROM** RW32 **TO** WHYBE

**RNP**  
0.30-1.00

**DISTANCE**

**PAT**

**MAP**

**HAT**

**HMAS**  
400

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>CG</b>	<b>CGTA</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
							ASC				3000
TOWER (25-020008)	420544.10N/0711348.60W	878	250	50	4D	1000					1900
TERRAIN	420327.00N/0711903.00W	436 (400)								AS1500	1900

**COMPUTATIONS**

**ALT** **KIAS** **KTAS** **HAA** **VKTW** **TR** **BA** **DTA** **COURSE CHANGE** **DVEB** **VEB OCS** **RF CENTER FIX/DISTANCE**

**SEGMENT REMARKS:**



**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**CIRCLING**  ALL CATS  CAT A  CAT B  CAT C  CAT D  CAT E  NOT AUTHORIZED

<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>RADIUS</b>	<b>HAA</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
CATEGORY A											
TREE	415930.00N/0711315.00W	1.30	477	288	215	8	4B	300			600
CATEGORY B											
TOWER (25-024615)	415949.40N/0710914.30W	1.81	477	294	20	3	1A	300			600

**CIRCLING REMARKS:**

**MSA**

**CENTER** RW32 **RADIUS** 25

<b>SECTOR</b>	<b>OBSTRUCTION</b>	<b>COORDINATES</b>	<b>BEARING</b>	<b>DISTANCE</b>	<b>ELEV MSL</b>	<b>HORZ</b>	<b>VERT</b>	<b>AC</b>	<b>ROC</b>	<b>OCS</b>	<b>ADJUSTMENTS</b>	<b>MIN ALT</b>
360-360	TOWER (25-000622)	420310.71N/0714904.37W	293	28.2	1571	20	3	1A	1000			2600

**MSA REMARKS:**

**NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:**

**PART B: SUPPLEMENTAL DATA**

**COMMUNICATIONS WITH**

BOS APP CON, BDR FSS, ZBW ARTCC

<b>WX SERVICE</b>	<b>LOCATION</b>	<b>HRS OPERATION</b>	<b>ALTIMETER SOURCE</b>	<b>DISTANCE</b>	<b>WMSCR</b>	<b>ADJUSTMENTS</b>
AWOS-3PT	1B9	24	1B9		Y	0
<b>BACK-UP WX SERVICE</b>	<b>LOCATION</b>	<b>HRS OPERATION</b>	<b>ALTIMETER SOURCE</b>	<b>DISTANCE</b>	<b>WMSCR</b>	<b>ADJUSTMENTS</b>
ASOS	OWD	24	OWD	11.43	Y	37

**WX REMARKS:**

RASS PRESSURE PATTERNS THE SAME.  
1B9 123, OWD 49.  
RA = 36.7.

**PRIMARY NAVAID** **MONITOR POINT** **HRS OPERATION** **CAT**

<b>APPROACH AND RUNWAY LIGHTING SYSTEM</b>	<b>RUNWAY MARKINGS</b>	<b>RUNWAY VISUAL RANGE</b>
RW22		
RW04		
RW14 - MIRL (PCL)	BSC-G	
RW32 - MIRL (PCL), PAPI-4L (PCL)	NPI-G	

QUALITY  
21  
CHECKED

**AIRPORT ID**  
1B9

**PROCEDURE NAME**  
RNAV (GPS) RWY 32

**AMDT NO.**  
3

**CITY**  
MANSFIELD

**STATE**  
MA

**AIRPORT ELEVATION**  
123

**FACILITY**  
RNAV

**GLIDESLOPE ANGLE**  
4.00

**ELEV RWY THRESHOLD**  
119.4

**TCH**  
55.0

**ELEV GS ANTENNA**

**DISTANCE FROM RWY**

**VGSI ANGLE**  
4.00

**TCH**  
37.7

**FINAL APPROACH COURSE AIMING**

RUNWAY THRESHOLD  
ON CENTERLINE

FT FROM THRESHOLD  
FT FROM CENTERLINE

DISPLACED THRESHOLD DISTANCE 237

**CRITICAL TEMPERATURES**

**CRITICAL LOW**  
-15C

**CRITICAL HIGH**  
+54C

**ACT**  
-15C

**APT ISA**  
+14.76C

**CRITICAL TEMPERATURE REMARKS:**

AVERAGE COLD TEMPERATURE DERIVED FROM STANDARD -30C ISA DEVIATION.  
CRITICAL LOW TEMPERATURE BASED ON ACT.  
DESCENT RATE (FPM): STANDARD TEMP 947 HIGH TEMP 1125.

**"VISUAL PORTION OF FINAL" PENETRATIONS**

FINAL TYPE	CIRCLING RWY 14:
20:1	
215 TREE (25-044162) 420015.55N/0711222.17W (14.33)	181 TREE (25-037782) 420014.80N/0711212.59W (12.85)
215 TREE (25-047415) 420017.10N/0711221.54W (12.11)	218 TREE (25-037787) 420018.41N/0711221.86W (10.52)
191 TREE (25-046576) 420016.00N/0711215.52W (10.26)	226 TREE (25-037788) 420019.28N/0711223.77W (10.08)
219 TREE (25-040152) 420016.30N/0711224.57W (8.65)	181 TREE (25-047414) 420011.48N/0711217.06W (7.68)
202 TREE (25-044797) 420013.95N/0711222.67W (4.10)	190 TREE (25-043848) 420012.89N/0711220.19W (2.88)
177 TREE (25-037783) 420015.06N/0711214.39W (2.42)	221 TREE (25-037790) 420016.89N/0711226.85W (1.79)
218 TREE (25-044163) 420017.43N/0711225.57W (1.39)	205 TREE (25-045738) 420015.00N/0711223.68W (1.03)
223 TREE (25-043843) 420019.20N/0711225.80W (0.84)	

**PENETRATIONS REMARKS:**

**HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS**

and/or

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

**PENETRATIONS REMARKS:**

QUALITY  
21  
CHECKED

AIRPORT ID  
1B9

PROCEDURE NAME  
RNAV (GPS) RWY 32

AMDT NO.  
3

CITY  
MANSFIELD

STATE  
MA

AIRPORT ELEVATION  
123

FACILITY  
RNAV

**PART C: GENERAL REMARKS:**

VDP NOT ESTABLISHED - VDP IS LOCATED WITHIN 0.5 NM FROM FINAL FIX.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

RWY 04-22 IS TURF.

VEGETATION HEIGHT: 100 FT.

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**

<b>DISTANCE FROM</b>	THLD	<b>TO 1000FT POINT</b>	2.18
<b>WIDTH OF</b>	FINAL	<b>SEGMENT AT 1000FT POINT</b>	1.20
<b>TRUE COURSE OF</b>	FINAL	<b>SEGMENT CONTAINING 1000FT POINT</b>	302.64
<b>HIGH TERRAIN IN</b>	FINAL	<b>SEGMENT CONTAINING 1000FT POINT</b>	100
<b>DISTANCE FROM</b>	THLD	<b>TO 1500FT POINT</b>	3.50
<b>WIDTH OF</b>	FINAL	<b>SEGMENT AT 1500FT POINT</b>	1.39
<b>TRUE COURSE OF</b>	FINAL	<b>SEGMENT CONTAINING 1500FT POINT</b>	302.64
<b>HIGH TERRAIN IN</b>	FINAL	<b>SEGMENT CONTAINING 1500FT POINT</b>	100

**THRESHOLD COORDINATES (IF STR-IN)**

415952.05N/0711130.70W

**ARP COORDINATES**

420003.17N/0711152.95W

**RUNWAY APCH END AND DIST FURTHEST FROM ARP**

RUNWAY 32 DISTANCE 0.37 NM

**FAF COORDINATES**

415733.06N/0710639.56W

**FIX NAME COORDINATES**

**REMARKS**

THLD DISPLACED 237FT, ACTUAL COORDINATES: 415950.79N/0711128.06W

**PART E: PREPARED BY**

NAME

RICHARD BRUCE

OFFICE

AJV-A422

DATE

01/14/2026

TITLE

AERONAUTICAL INFORMATION SPECIALIST

