

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
LAWRENCE	TWO	LWM2.LWM	ONE	06/17/2021	29Dec2022
<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DP ROUTE DESCRIPTION:**TAKEOFF RWY 5:** CLIMB ON HEADING 053.17 TO 1100, THEN AS ASSIGNED BY ATC, THENCE ...**TAKEOFF RWY 14, 23, 32:** CLIMB ON HEADING AS ASSIGNED BY ATC, THENCE ...

...EXPECT RADAR VECTORS TO ASSIGNED ROUTE/NAVAID/FIX. MAINTAIN 2000. EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
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PROCEDURAL DATA NOTES:

NOTE: NON RNAV EQUIPPED AIRCRAFT CAN EXPECT VECTORS ON ASSIGNED ROUTE.

NOTE: BLZZR DEPARTURES EXPECT VECTORS ON BOS R-273.

NOTE: BRUWN DEPARTURES EXPECT VECTORS ON BOS R-159.

NOTE: CELTK DEPARTURES EXPECT VECTORS ON BOS R-114.

NOTE: HYLND DEPARTURES EXPECT VECTORS ON BOS R-350.

NOTE: PATSS DEPARTURES EXPECT VECTORS ON BOS R-260.

NOTE: REVSS DEPARTURES EXPECT VECTORS ON BOS R-285.

NOTE: SSOXS DEPARTURES EXPECT VECTORS ON BOS R-177.

PBN REQUIREMENTS NOTES:**EQUIPMENT REQUIREMENT NOTES:**

RADAR REQUIRED.

DME REQUIRED: BLZZR, BRUWN, HYLND, PATSS, REVSS DEPARTURES.

TAKEOFF MINIMUMS:**RWY 5,** 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 435 FT PER NM TO 500.**RWY 14,** 300-1 OR STANDARD WITH MINIMUM CLIMB OF 625 FT PER NM TO 600.**RWY 23,** 300-1 OR STANDARD WITH MINIMUM CLIMB OF 350 FT PER NM TO 400.**RWY 32,** STANDARD.**TAKEOFF OBSTACLES NOTES:**

SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

CONTROLLING OBSTACLES:**RWY 5:** 327 FT MSL TREE 424336.98N/0710620.14W (CLIMB GRADIENT/CLIMB GRADIENT TERMINATION ALTITUDE), 354 FT MSL TREE 424415.80N/0710600.36W (CEILING), 352 FT MSL TREE 424415.62N/0710557.40W (VISIBILITY).**RWY 14:** 417 FT MSL POLE 424226.30N/0710633.63W.**RWY 23:** 294 FT MSL STACK 424218.00N/0710829.00W.**OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:****RWY 5** - 868 FT MSL TOWER 424622.00N/0710601.00W.

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MSA:**LOST COMMUNICATIONS PROCEDURES:****ADDITIONAL FLIGHT DATA:**

CHART: TOP ALTITUDE: 2000

CHART: BOS R-273/35.3 DME AT BLZZR.

CHART: BOS R-159/56.6 DME AT BRUWN.

CHART: BOS R-114/39.8 DME AND LFV R-005/15.2 DME AT CELTK.

CHART: BOS R-350/28.4 DME AT HYLND.

CHART: BOS R-260/36.0 DME AT PATSS.

CHART: BOS R-285/36.5 DME AT REVSS

CHART: BOS R-177/33.1 DME AND PVD R-091131.4 DME AT SSOXS.

CHART: BOS R-048/31.0 DME AT LBSTA.

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KLWM	LAWRENCE	MA

COMMUNICATIONS:

CHART: ATIS, CLEARANCE DELIVERY, GROUND CONTROL, TOWER

FIXES AND/OR NAVAIDS:

ACK VOR/DME, BAF VORTAC, BOS VOR/DME, CAM VOR/DME, CTR VOR/DME, ENE VOR/DME, LFV VOR/DME, MVY VOR/DME, PVD VOR/DME, SEY VOR/DME, SYR VORTAC, BLZZR, BOSOX, BRUWN, BURDY, BUZRD, CELTK, DUNKK, FREDO, FRILL, GLYDE, HANAA, HYLND, LBSTA, MANCH, NELIE, PATSS, PEASE, REVSS, SSOXS

REMARKS:

MINIMUM CLIMB GRADIENT OF 625 FEET PER NAUTICAL MILE TO 600 FOR RWY 14 APPROVED PER AFS.

FLIGHT INSPECTED BYPROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021
SUBJECT: GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION**OFFICE** **DATE**

Digitally signed by

JASON KRETSCHMER

Aug 05, 2022

DEVELOPED BY

JASON KRETSCHMER (HENRY BRADSHAW)

Digitally signed by

JASON KRETSCHMER

Aug 05, 2022

OFFICE **DATE**

AJV-A421

APPROVED BY

MARLON ROBINSON

Digitally signed by

JASON KRETSCHMER

Aug 05, 2022

OFFICE **DATE**

AJV-A420

TITLE

MANAGER

REQUIRED EFFECTIVE DATE

ROUTINE

COORDINATED WITH:**A4A** ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** ARPT MGR, ZBW, BOS APP CON, LWM ATCT**CHANGES - REASONS:**

1. FIXES AND/OR NAVAIDS: ADDED FIX "MANCH" AND "PEASE" - FPT REQUEST FOR ATC COORDINATION.
2. MOVED AND UPDATED "NOTE: RADAR REQUIRED" FROM PROCEDURAL DATA NOTES TO "RADAR REQUIRED" IN EQUIPMENT REQUIREMENT NOTES. - 8260.46H, APPENDIX D, SECTION 2, 6.
3. MOVED AND UPDATED "DME REQUIRED" FROM FIXES BLZZR, BRUWN, PATSS, AND REVSS IN PROCEDURAL DATA NOTES TO "DME REQUIRED: BLZZR, BRUWN, HYLND, PATSS, REVSS

QUALITY
12
CHECKED

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DEPARTURES" IN EQUIPMENT REQUIREMENT NOTES - 8260.46H, APPENDIX D, SECTION 2, 6.

4. UPDATED "ATIS, CLEARANCE DELIVERY, GROUND CONTROL, TOWER, DEPARTURE CONTROL" TO "CHART: ATIS, CLEARANCE DELIVERY, GROUND CONTROL, TOWER" - 8260.46H, APPENDIX D, SECTION 2, 14.

5. ADDED "MINIMUM CLIMB GRADIENT OF 625 FEET PER NAUTICAL MILE TO 600 FOR RWY 14 APPROVED PER AFS." - ADDED APPROVAL DATA

