

**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SUPERSEDED NUMBER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>
NORWOOD	FIVE	OWD5.OWD	FOUR	02/23/2023	21 Mar 2024
<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 10: CLIMB ON HEADING 103.77 TO 1100, THEN AS ASSIGNED BY ATC, THENCE...

TAKEOFF RWY 17: CLIMB ON ASSIGNED HEADING THENCE...

TAKEOFF RWY 28 CLIMB ON HEADING 283.77 TO 700 THEN AS ASSIGNED BY ATC, THENCE...

TAKEOFF RWY 35: CLIMB ON HEADING 280 CW 330 AS ASSIGNED BY ATC, THENCE...

...FOR RADAR VECTORS TO ASSIGNED ROUTE/NAVAID/FIX. MAINTAIN 2000. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL WITHIN TEN (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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PBN REQUIREMENT NOTES:**EQUIPMENT REQUIREMENT NOTES:**

RADAR REQUIRED.

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

PROCEDURAL DATA NOTES:

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.

TAKEOFF MINIMUMS:

RWY 17: STANDARD

RWY 10: 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 440 FT PER NM TO 300.

RWY 28: STANDARD WITH MINIMUM CLIMB OF 385 FT PER NM TO 400.

RWY 35: STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 1800.

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:**RWY 10:** 203 FT MSL POLE 421145.33N/0710911.94W (CLIMB GRADIENT/CLIMB-TO ALTITUDE), 355 FT MSL POLE 421156.18N/0710709.88W (CEILING/VISIBILITY).**RWY 28:** 261 FT MSL TOWER 421133.00N/0711142.00W.**RWY 35:** 262 FT MSL TREE 421236.06N/0711144.94W.**MSA:**

MSA FROM BOS VOR/DME 215-305 2500, 305-215 2000



LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:
CHART: BOS R-273/35.3 DME AT BLZZR.
CHART: BOS R-159/56.6 DME AT BRUWN.
CHART: BOS R-114/39.8 AND LFV R-005/15.2 DME AT CELTK.
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-091/31.4 DME AT SSOXS.
CHART: BOS R-048/31 DME AT LBSTA.
CHART: BAF R-107/24.9 DME AT ONEPS.
CHART: TOP ALTITUDE: 2000.
AIRPORT MV: OWD 15W/1980.

AIRPORTS SERVED:

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KOWD	NORWOOD	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, HYLND, LBSTA, MANCH, ONEPS, PATSS, PEASE, REVSS, SSOXS.

REMARKS:

ABBREVIATED AMENDMENT.
RW28 CG/CGTA BASED ON 1448 FT MSL TOWER (25-000031). OBSTACLE IS REMOVED FROM OBSTACLE EVALUATION AREA (OEA) ONCE CG/CGTA IS APPLIED, AND GEOMETRY OF OEA CHANGES, 261 FT MSL TREE (25-000403) IS IDENTIFIED AS CONTROLLING OBSTACLE, AND IS MOST ADVERSE OBSTACLE REMAINING IN OEA ONCE CG/CGTA IS APPLIED TO MITIGATE 1448 FT MSL TOWER.

FLIGHT INSPECTED BY

DANIEL KIRBY	<u>SIGNATURE</u> Digitally signed by JOHN BORDY Nov 17, 2023	<u>OFFICE</u> FPO	<u>DATE</u> 11/15/2023
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DEVELOPED BY

RAKE MCGRAW (NICHOLAS PRATER)	<u>SIGNATURE</u> NICHOLAS A PRATER Digitally signed by NICHOLAS A PRATER Date: 2023.06.20 11:12:38 -05'00'	<u>OFFICE</u> AJV-A422	<u>DATE</u> 06/20/2023
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APPROVED BY

JOHN BORDY	<u>SIGNATURE</u> Digitally signed by JOHN BORDY Nov 17, 2023	<u>OFFICE</u> AJV-A33	<u>DATE</u> 11/17/2023	<u>TITLE</u> MANAGER
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REQUIRED EFFECTIVE DATE

ROUTINE

COORDINATED WITH:

A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** BOSTON ARTCC (ZBW), BOSTON APP CON (A90), OWD ATCT, AMGR.

CHANGES - REASONS:

- CHANGED RWY 10 REQUIRED CG FROM 335 FT PER NM TO 300 TO 440 FT PER NM TO 300 - NEW CONTROLLING OBSTACLE.
- ADDED MSA BOS VOR/DME 215-305 2500, 305-215 2000 - IAW 8260.46J APPENDIX D, SECTION 2 PARA 2-2(K); MSA SECTORIZATION MATCHES KBOS CONVENTIONAL PROCEDURES THAT USE BOS VOR/DME TO DEFINE MSA.
- CHANGED RUNWAY 35 TAKEOFF MINIMUMS FROM "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 230 FT PER NM TO 400, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A



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NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FT PRIOR TO DER." TO STANDARD WITH MINIMUM CLIMB OF 260 FT PER NM TO 1800" AND REMOVED CEILING AND VISIBILITY OBSTACLES. - IAW 8260.46J TABLE 2-1-1 AND CURRENT OBSTACLE EVALUATION.

4. REMOVED RUNWAY 28 CEILING AND VISIBILITY AND ASSOCIATED OBSTACLES. - IAW 8260.46J TABLE 2-1-1 AND CURRENT OBSTACLE EVALUATION.

