

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)
TITLE 14 CFR PART 97.37**

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>AIRPORT</u>	<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>	<u>AMDT NO</u>	<u>ACTUAL EFFECTIVE DATE</u>
GENERAL EDWARD LAWRENCE LOGAN INTL	KBOS	BOSTON	MA	15	7 OCTOBER 2021

TAKEOFF MINIMUMS:

RWY 32, 33R: NA - ENVIRONMENTAL.

RWY 4R, 15L, 15R: STANDARD.

RWY 4L: 300-1 OR STANDARD WITH MINIMUM CLIMB OF 369 FT PER NM TO 300.

RWY 9: 300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 266 FT PER NM TO 300.

RWY 14: STANDARD WITH MINIMUM CLIMB OF 233 FT PER NM TO 1100.

RWY 22L: 300-1 OR STANDARD IF TOWER REPORTS NO TALL VESSELS IN THE DEPARTURE AREA.

RWY 22R: 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 300.

RWY 27: STANDARD WITH MINIMUM CLIMB OF 487 FT PER NM TO 1000.

RWY 33L: 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 232 FT PER NM TO 400, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2100 FEET PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

RWY 4L: CLIMB ON HEADING 034.73 TO 500 BEFORE TURNING LEFT.

RWY 4R: CLIMB ON HEADING 034.74 TO 500 BEFORE TURNING LEFT.

RWY 22L: CLIMB ON HEADING 214.74 TO 800 BEFORE TURNING RIGHT.

RWY 22R: CLIMB ON HEADING 214.74 TO 900 BEFORE TURNING RIGHT.

RWY 33L: CLIMB ON HEADING 330.17 TO 700 BEFORE TURNING LEFT.

VISUAL CLIMB OVER AIRPORT:



AIRPORT
GENERAL EDWARD LAWRENCE
LOGAN INTL

AIRPORT ID
KBOS

CITY
BOSTON

STATE
MA

AMDT NO
15

EFFECTIVE DATE
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TAKEOFF OBSTACLE NOTES:

NOTE: RWY 4L: SHIPS BEGINNING 693 FT FROM DER, ON CENTERLINE, UP TO 50 FT MSL. POLE, TREE BEGINNING 1803 FT FROM DER, 724 FT RIGHT OF CENTERLINE, UP TO 56 FT AGL/65 FT MSL. TREES BEGINNING 1989 FT FROM DER, 27 FT RIGHT OF CENTERLINE, UP TO 74 FT MSL. TREE 2091 FT FROM DER, 91 FT LEFT OF CENTERLINE, 65 FT AGL/77 FT MSL. TREES BEGINNING 2152 FT FROM DER, 33 FT LEFT OF CENTERLINE, UP TO 81 FT MSL. TREES BEGINNING 2279 FT FROM DER, 101 FT RIGHT OF CENTERLINE, UP TO 57 FT AGL/77 FT MSL. TREES BEGINNING 2401 FT FROM DER, 211 FT LEFT OF CENTERLINE, UP TO 82 FT MSL. TREES, POLE BEGINNING 3656 FT FROM DER, 1068 FT LEFT OF CENTERLINE, UP TO 120 FT MSL. STACK 3763 FT FROM DER, 1142 FT LEFT OF CENTERLINE, 123 FT MSL. TREES, STACKS, VEHICLES ON ROAD BEGINNING 3796 FT FROM DER, 627 FT LEFT OF CENTERLINE, UP TO 154 FT MSL. TREES BEGINNING 4021 FT FROM DER, 791 FT LEFT OF CENTERLINE, UP TO 156 FT MSL. TREE 4085 FT FROM DER, 1069 FT LEFT OF CENTERLINE, 159 FT MSL. STACKS, TREES, VEHICLES ON ROAD BEGINNING 4087 FT FROM DER, 476 FT LEFT OF CENTERLINE, UP TO 160 FT MSL. TREES, POLE, BUILDING BEGINNING 4264 FT FROM DER, 638 FT LEFT OF CENTERLINE, UP TO 166 FT MSL.

NOTE: RWY 4R: SHIPS BEGINNING 578 FT FROM DER, ON CENTERLINE, UP TO 50 FT MSL. POLE, TREES BEGINNING 1806 FT FROM DER, 731 FT LEFT OF CENTERLINE, UP TO 56 FT AGL/65 FT MSL. VEHICLES ON ROAD 1842 FT FROM DER, 964 FT RIGHT OF CENTERLINE, 62 FT MSL. VEHICLES ON ROAD 1948 FT FROM DER, 984 FT RIGHT OF CENTERLINE, 66 FT MSL. TREES BEGINNING 1992 FT FROM DER, 380 FT LEFT OF CENTERLINE, UP TO 74 FT MSL. TREES BEGINNING 2282 FT FROM DER, 691 FT LEFT OF CENTERLINE, UP TO 57 FT AGL/77 FT MSL.

NOTE: RWY 9: LIGHTING 11 FT FROM DER, 150 FT RIGHT OF CENTERLINE, 17 FT MSL. LIGHTING 11 FT FROM DER, 149 FT LEFT OF CENTERLINE, 16 FT MSL. SHIPS BEGINNING 761 FT FROM DER, ON CENTERLINE, UP TO 65 FT MSL. TANK 5904 FT FROM DER, 1456 FT LEFT OF CENTERLINE, 114 FT AGL/211 FT MSL. TANK 5924 FT FROM DER, 1455 FT LEFT OF CENTERLINE, 205 FT MSL.

NOTE: RWY 14: LIGHTING 10 FT FROM DER, 127 FT LEFT OF CENTERLINE, 20 FT MSL. LIGHTING 10 FT FROM DER, 127 FT RIGHT OF CENTERLINE, 21 FT MSL. TERRAIN 82 FT FROM DER, 479 FT LEFT OF CENTERLINE, 26 FT MSL. ANTENNA 480 FT FROM DER, 321 FT LEFT OF CENTERLINE, 68 FT MSL. NAVAID 497 FT FROM DER, 317 FT LEFT OF CENTERLINE, 71 FT MSL. SHIP RIG 5439 FT FROM DER, 1822 FT RIGHT OF CENTERLINE, 176 FT MSL.

NOTE: RWY 15L: SIGN 8 FT FROM DER, 281 FT RIGHT OF CENTERLINE, 5 FT AGL/17 FT MSL.

NOTE: RWY 15R: LIGHTING 1 FT FROM DER, ON CENTERLINE, 16 FT MSL.

NOTE: RWY 22L: LIGHTING 40 FT FROM DER, 253 FT RIGHT OF CENTERLINE, 20 FT MSL. POLE 395 FT FROM DER, ON CENTERLINE, 15 FT AGL/31 FT MSL. SHIP RIG, TOWER BEGINNING 2440 FT FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 176 FT MSL. CRANE 3675 FT FROM DER, 439 FT RIGHT OF CENTERLINE, 145 FT AGL/145 FT MSL. CRANES, VEHICLES ON ROAD BEGINNING 3720 FT FROM DER, 447 FT RIGHT OF CENTERLINE, UP TO 147 FT MSL.

NOTE: RWY 22R: SHIP RIG 4064 FT FROM DER, 8 FT RIGHT OF CENTERLINE, 176 FT MSL. SHIP RIG 4585 FT FROM DER, 1534 FT LEFT OF CENTERLINE, 176 FT MSL. VEHICLES ON ROAD 1 NM FROM DER, 1850 FT RIGHT OF CENTERLINE, 208 FT MSL. STACK 1.4 NM FROM DER, 2796 FT RIGHT OF CENTERLINE, 238 FT AGL/263 FT MSL. STACK 1.4 NM FROM DER, 2793 FT RIGHT OF CENTERLINE, 260 FT MSL.

NOTE: RWY 27: SIGN 18 FT FROM DER, 139 FT LEFT OF CENTERLINE, 18 FT MSL. BUILDING 1211 FT FROM DER, 750 FT RIGHT OF CENTERLINE, 50 FT MSL. TREE 1617 FT FROM DER, 820 FT RIGHT OF CENTERLINE, 59 FT MSL. POLE, LIGHTING BEGINNING 1690 FT FROM DER, 750 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/100 FT MSL. BUILDING 1.2 NM FROM DER, 1178 FT LEFT OF CENTERLINE, 238 FT MSL. BUILDING 1.2 NM FROM DER, 988 FT LEFT OF CENTERLINE, 240 FT MSL. BUILDING 1.2 NM FROM DER, 971 FT LEFT OF CENTERLINE, 230 FT AGL/242 FT MSL. BUILDINGS BEGINNING 1.2 NM FROM DER, 1040 FT LEFT OF CENTERLINE, UP TO 243 FT MSL. BUILDINGS BEGINNING 1.2 NM FROM DER, 533 FT LEFT OF CENTERLINE, UP TO 248 FT MSL. BUILDINGS, STACK BEGINNING 1.3 NM FROM DER, 501 FT LEFT OF CENTERLINE, UP TO 250 FT MSL. BUILDINGS BEGINNING 1.3 NM FROM DER, 137 FT RIGHT OF CENTERLINE, UP TO 250 FT AGL/260 FT MSL. BUILDING 1.3 NM FROM DER, 185 FT LEFT OF CENTERLINE, 252 FT MSL. BUILDINGS BEGINNING 1.3 NM FROM DER, 112 FT LEFT OF CENTERLINE, UP TO 251 FT AGL/261 FT MSL. BUILDING 1.3 NM FROM DER, 95 FT RIGHT OF CENTERLINE, 259 FT AGL/269 FT MSL. BUILDINGS BEGINNING 1.3 NM FROM DER, 118 FT LEFT OF CENTERLINE, UP TO 259 FT AGL/269 FT MSL. CRANES, BUILDINGS BEGINNING 1.4 NM FROM DER, 62 FT RIGHT OF CENTERLINE, UP TO 411 FT MSL. BUILDING 1.4 NM FROM DER, 106 FT LEFT OF CENTERLINE, 261 FT AGL/271 FT MSL. BUILDING 1.5 NM FROM DER, 207 FT LEFT OF CENTERLINE, 267 FT AGL/278 FT MSL. ANTENNA, BUILDINGS BEGINNING 1.6 NM FROM DER, 2984 FT RIGHT OF CENTERLINE, UP TO 414 FT MSL. BUILDINGS BEGINNING 1.6 NM FROM DER, 2511 FT RIGHT OF CENTERLINE, UP TO 484 FT MSL. BUILDING 1.6 NM FROM DER, 2655 FT RIGHT OF CENTERLINE, 548 FT AGL/560 FT MSL. BUILDING 1.6 NM FROM DER, 2468 FT RIGHT OF CENTERLINE, 635 FT MSL. BUILDINGS, ANTENNAS, STACK, BUILDING TOWER BEGINNING 1.6 NM FROM DER, 1533 FT RIGHT OF CENTERLINE, UP TO 615 FT AGL/639 FT MSL. BUILDINGS, POLES, ANTENNAS BEGINNING 1.8 NM FROM DER, 1114 FT RIGHT OF CENTERLINE, UP TO 677 FT AGL/690 FT MSL. BUILDINGS, ANTENNA BEGINNING 1.9 NM FROM DER, 1507 FT RIGHT OF CENTERLINE, UP TO 701 FT AGL/720 FT MSL. BUILDING TOWER, BUILDINGS, CRANE BEGINNING 2 NM FROM DER, 1775 FT RIGHT OF CENTERLINE, UP TO 698 FT AGL/730 FT MSL. CRANE 2.2 NM FROM DER, 1690 FT RIGHT OF CENTERLINE, 512 FT MSL.

NOTE: RWY 33L: TREE 248 FT FROM DER, 377 FT RIGHT OF CENTERLINE, 16 FT AGL/27 FT MSL. BUILDING 1346 FT FROM DER, 705 FT RIGHT OF CENTERLINE, 41 FT AGL/51 FT MSL. TANKS BEGINNING 1677 FT FROM DER, 925 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/67 FT MSL. BUILDING 1933 FT FROM DER, 862 FT LEFT OF CENTERLINE, 70 FT MSL. BUILDINGS BEGINNING 1946 FT FROM DER, 602 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/73 FT MSL. TREES BEGINNING 2119 FT FROM DER, 52 FT RIGHT OF CENTERLINE, UP TO 82 FT MSL. TREES BEGINNING 2214 FT FROM DER, 43 FT RIGHT OF CENTERLINE, UP TO 72 FT AGL/84 FT MSL. TREES BEGINNING 2328 FT FROM DER, 35 FT RIGHT OF CENTERLINE, UP TO 85 FT MSL. TREE 2437 FT FROM DER, 1033 FT RIGHT OF CENTERLINE, 96 FT MSL. TREE 2448 FT FROM DER, 928 FT RIGHT OF CENTERLINE, 99 FT MSL. SIGNS, TANK BEGINNING 3015 FT FROM DER, 860 FT RIGHT OF CENTERLINE, UP TO 73 FT AGL/101 FT MSL. TREE 3969 FT FROM DER, 567 FT LEFT OF CENTERLINE, 63 FT AGL/118 FT MSL. TREE 3987 FT FROM DER, 594 FT LEFT OF CENTERLINE, 122 FT MSL. BUILDING 4364 FT FROM DER, 1080 FT LEFT OF CENTERLINE, 64 FT AGL/129 FT MSL. TREES BEGINNING 4511 FT FROM DER, 1142 FT LEFT OF CENTERLINE, UP TO 134 FT MSL. BUILDING, STACK BEGINNING 4925 FT FROM DER, 1491 FT LEFT OF CENTERLINE, UP TO 151 FT MSL. BRIDGE 1.3 NM FROM DER, 2564 FT LEFT OF CENTERLINE, 262 FT AGL/262 FT MSL.

QUALITY
5
CHECKED

AIRPORT	AIRPORT ID	CITY	STATE	AMDT NO	EFFECTIVE DATE
GENERAL EDWARD LAWRENCE LOGAN INTL	KBOS	BOSTON	MA	15	7 OCTOBER 2021

CONTROLLING OBSTACLES:**RWY 4L:** 198 FT MSL TREE 422323.77N/0710017.02W.**RWY 9:** 211 FT MSL TANK 422204.30N/0705803.73W.**RWY 14:** 876 FT MSL BUILDING 422057.45N/0710430.58W.**RWY 22L:** 176 FT MSL SHIP RIG 422041.00N/0710053.00W.**RWY 22R:** 176 FT MSL SHIP RIG 422051.00N/0710110.00W.**RWY 27:** 876 FT MSL BUILDING 422057.45N/0710430.58W (CLIMB-TO ALTITUDE). 720 FT MSL BUILDING 422117.13N/0710323.41W (CLIMB GRADIENT).**RWY 33L:** 262 FT MSL BRIDGE 422308.76N/0710248.14W.**OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:****RWY 4L, 4R, 22L, 22R, 33L:** 925 FT MSL BUILDING 422049.80N/0710457.08W**REMARKS:**

1. 434 MSL WINDMILL AT 421902.93N/0710457W THAT WAS NOT IN THE DATABASE (2005-ANE-995-OE AND 2005-ANE-998-OE) WAS NEVER CONSTRUCTED PER EASTERN FPT.
2. VCOA NOT ESTABLISHED FOR AIRCRAFT DEPARTING RWY 27 PER ATC REQUEST (CARRIED OVER FROM AMDT 13).
3. RWY 22L: EASTERN FPT CONFIRMS ATC HAS PROCEDURES TO MONITOR TALL VESSEL TRAFFIC.
4. EASTERN FPT CONFIRMS THAT SHIPS ARE NOT A FACTOR FOR RWY 15L/15R DUE TO UNNAVIGABLE WATERS

FLIGHT INSPECTED BY

STEPHEN BAUER

*Digitally signed by***JOHN BORDY**

Jul 07, 2021

OFFICE

FICO

DATE

06/24/2021

DEVELOPED BY

ANTHONY CAPPABIANCO

*Digitally signed by***JOHN BORDY**

Jul 07, 2021

OFFICE

AJV-A422

DATE

02/25/2021

APPROVED BY

MARLON ROBINSON

*Digitally signed by***JOHN BORDY**

Jul 07, 2021

OFFICE

AJV-A420

DATE**TITLE**

MANAGER

REQUIRED EFFECTIVE DATE:

ROUTINE

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

1. RWY 4L TAKEOFF MINIMUMS CHANGED FROM "300-1 OR STANDARD WITH MINIMUM CLIMB OF 358 FT PER NM TO 300" TO "300-1 OR STANDARD WITH MINIMUM CLIMB OF 369 FT PER NM TO 300" - NEW OBSTACLE EVALUATION.
2. RWY 9 TAKEOFF MINIMUMS CHANGED FROM "300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 272 FT PER NM TO 300" TO "300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 266 FT PER NM TO 300" - NEW CONTROLLING OBSTACLE.
3. RWY 14 TAKEOFF MINIMUMS CHANGED FROM "300-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 225 FT PER NM TO 300, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1600 FEET PRIOR TO DER" TO "STANDARD WITH MINIMUM CLIMB OF 233 FT PER NM TO 1100" - SECTOR ROUTING REMOVED, NEW CONTROLLING OBSTACLE.
4. RWY 22R TAKEOFF MINIMUMS CHANGED FROM "400-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 500" TO "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 300" - NEW OBSTACLE EVALUATION.
5. RWY 27 TAKEOFF MINIMUMS CHANGED FROM "STANDARD WITH MINIMUM CLIMB OF 477 FT PER NM TO 1300" TO "STANDARD WITH MINIMUM CLIMB OF 487 FT PER NM TO 1000" - NEW CONTROLLING OBSTACLES.
6. RWY 33L TAKEOFF MINIMUMS CHANGED FROM "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 224 FT PER NM TO 400, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FEET PRIOR TO DER" TO "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 232 FT PER NM TO 400, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 2100 FEET PRIOR TO DER" - NEW OBSTACLE EVALUATION.
7. ADDED RWY 4R TEXTUAL DEPARTURE PROCEDURE "CLIMB ON HEADING 034.74 TO 500 BEFORE TURNING LEFT" - MAINTAIN STANDARD TAKEOFF MINIMUMS.
8. REMOVED RWY 14 TEXTUAL DEPARTURE PROCEDURE - CHANGED TAKEOFF MINIMUMS TO REMOVE NEED FOR SECTORIZED DEPARTURE.
9. CHANGED RWY 22L TEXTUAL DEPARTURE PROCEDURE FROM "CLIMB HEADING 214.74 TO 800 BEFORE TURNING RIGHT" TO "CLIMB ON HEADING 214.74 TO 800 BEFORE TURNING RIGHT" - 8260.46G 1-1-5.A(3).
10. CHANGED RWY 22R TEXTUAL DEPARTURE PROCEDURE FROM "CLIMB HEADING 214.74 TO 900 BEFORE TURNING RIGHT" TO "CLIMB ON HEADING 214.74 TO 900 BEFORE TURNING RIGHT" - 8260.46G 1-1-5.A(3).

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11. CHANGED RWY 33L TEXTUAL DEPARTURE PROCEDURE FROM "CLIMB HEADING 330.17 TO 700 BEFORE TURNING LEFT" TO "CLIMB ON HEADING 330.17 TO 700 BEFORE TURNING LEFT" - 8260.46G 1-1-5.A(3).
12. UPDATED RWY 4L, 4R, 9, 14, 15L, 15R, 22L, 22R, 27, 33L TAKEOFF OBSTACLE NOTES - NEW OBSTACLE EVALUATION.
13. CHANGED RWY 4L TEXTUAL DEPARTURE PROCEDURE FROM "CLIMB ON A HEADING BETWEEN 291.00 CLOCKWISE TO 214.00 FROM DEPARTURE END OF RUNWAY, OR MINIMUM CLIMB OF 210 FT PER NM TO 1100 FOR ALL OTHER COURSES" TO "CLIMB ON HEADING 034.73 TO 500 BEFORE TURNING LEFT" - TO MITIGATE DIVERSE B OBSTACLES.
14. CHANGED RWY 9 CONTROLLING OBSTACLES FROM "217 FT MSL OBSTACLE LIGHT 422204.27N/0705804.01W" TO "211 FT MSL TANK 422204.30N/0705803.73W" - NEW OBSTACLE EVALUATION.
15. CHANGED RWY 14 CONTROLLING OBSTACLES FROM "176 FT MSL SHIP RIG 422009.00N/0705945.00W" TO "876 FT MSL BUILDING 422057.45N/0710430.58W" - NEW OBSTACLE EVALUATION.
16. CHANGED RWY 22R CONTROLLING OBSTACLES FROM "265 FT MSL STACK 422018.01N/0710204.79W (CLIMB-TO ALTITUDE, CEILING, VISIBILITY). 176 FT MSL SHIP RIG 422051.00N/0710110.00W (CLIMB GRADIENT)" TO "176 FT MSL SHIP RIG 422051.00N/0710110.00W" - NEW OBSTACLE EVALUATION, SECTOR REMOVED.
17. CHANGED RWY 27 CONTROLLING OBSTACLES FROM "925 FT MSL BUILDING 422049.80N/0710457.08W (CLIMB-TO ALTITUDE). 643 FT MSL BUILDING 422120.28N/0710307.73W (CLIMB GRADIENT)" TO 876 FT MSL BUILDING 422057.45N/0710430.58W (CLIMB-TO ALTITUDE). 720 FT MSL BUILDING 422117.13N/0710323.41W (CLIMB GRADIENT)" - NEW OBSTACLE EVALUATION.
18. CHANGED OBSTACLES MANDATING ODP ROUTE DESCRIPTION FROM "RWY 4L, 14, 33L: 925 FT MSL BUILDING 422049.80N/0710457.08W" TO "RWY 4L, 4R, 22L, 22R, 33L: 925 FT MSL BUILDING 422049.80N/0710457.08W" - CHANGED RUNWAYS REQUIRING TEXTUAL ROUTE DESCRIPTION.

