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.

| AIRPORT | AIRPORT ID | CITY | STATE | AMDT NO | ACTUAL EFFECTIVE DATE |
|------------------------|------------|---------|-------|---------|-----------------------|
| LAURENCE G HANSCOM FLD | KBED | BEDFORD | MA | 6A | 19 MAY 2022 |

TAKEOFF MINIMUMS:

RWY 5, 29: STANDARD

RWY 11: 300-1 OR STANDARD WITH MINIMUM CLIMB OF 258 FT PER NM TO 400. RWY 23: 300-1 7/8 OR STANDARD WITH MINIMUM CLIMB OF 439 FT PER NM TO 400.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES: NOTE: RWY 5: TREES, VEGETATION, BUILDING BEGINNING 44 FT FROM DER, 309 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/166 FT MSL.

FENCE 152 FT FROM DER, 248 FT RIGHT OF CENTERLINE, 6 FT AGL/132 FT MSL. TREES BEGINNING 255 FT FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/171 FT MSL. TREE 857 FT FROM DER, 203 FT RIGHT OF CENTERLINE, 31 FT AGL/157 FT MSL. TREE 964 FT FROM DER, 113 FT RIGHT OF CENTERLINE, 34 FT AGL/161 FT MSL. TREES, POLES BEGINNING 1153 FT FROM DER, 386 FT RIGHT OF CENTERLINE, UP TO 197 FT MSL. TREES BEGINNING 1195 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 46 FT AGL/173 FT MSL. TREE 1443 FT FROM DER, 433 FT LEFT OF CENTERLINE, 176 FT MSL. TREE 1648 FT FROM DER, 402 FT LEFT OF CENTERLINE, 184 FT MSL. TREE 1680 FT FROM DER, 213 FT LEFT OF CENTERLINE, 198 FT MSL. TREES. POLE BEGINNING 1681 FT FROM DER. 117 FT RIGHT OF CENTERLINE. UP TO 201 FT MSL. TREES BEGINNING 1761 FT FROM DER, 57 FT LEFT OF CENTERLINE, UP TO 202 FT MSL. TREES BEGINNING 2049 FT FROM DER, 56 FT LEFT OF CENTERLINE, UP TO 210 FT MSL. TREES BEGINNING 2400 FT FROM DER, 263 FT RIGHT OF CENTERLINE, UP TO 209 FT MSL. TREES BEGINNING 2475 FT FROM DER, 515 FT RIGHT OF CENTERLINE, UP TO 221 FT MSL. TREES BEGINNING 2594 FT FROM DER, 133 FT RIGHT OF CENTERLINE, UP TO 229 FT MSL. TREES BEGINNING 2663 FT FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 91 FT AGL/214 FT MSL. TREES BEGINNING 2838 FT FROM DER, 10 FT LEFT OF CENTERLINE, UP TO 224 FT MSL. TREE 2859 FT FROM DER, 415 FT RIGHT OF CENTERLINE, 230 FT MSL. TREES BEGINNING 2910 FT FROM DER, 235 FT RIGHT OF CENTERLINE, UP TO 231 FT MSL. TREES BEGINNING 3233 FT FROM DER, 42 FT LEFT OF CENTERLINE, UP TO 231 FT MSL. TREES BEGINNING 3328 FT FROM DER. 2 FT RIGHT OF CENTERLINE, UP TO 232 FT MSL. TREES BEGINNING 3719 FT FROM DER, 7 FT RIGHT OF CENTERLINE, UP TO 235 FT MSL. NOTE: RWY 11: SIGN 81 FT FROM DER, 237 FT RIGHT OF CENTERLINE, 7 FT AGL/126 FT MSL. TREE 1431 FT FROM DER, 683 FT RIGHT OF CENTERLINE, 166 FT MSL. TREE 1672 FT FROM DER. 898 FT RIGHT OF CENTERLINE. 181 FT MSL. TREE 1874 FT FROM DER, 954 FT LEFT OF CENTERLINE, 180 FT MSL. TREE 1885 FT FROM DER, 959 FT RIGHT OF CENTERLINE, 219 FT MSL TREES. BUILDING BEGINNING 2108 FT FROM DER, 456 FT RIGHT OF CENTERLINE, UP TO 231 FT MSL. TREE 2244 FT FROM DER, 266 FT LEFT OF CENTERLINE, 182 FT MSL. TREES BEGINNING 2311 FT FROM DER, 117 FT LEFT OF CENTERLINE, UP TO 197 FT MSL. TREE 2981 FT FROM DER, 421 FT LEFT OF CENTERLINE, 199 FT MSL. TREE 3302 FT FROM DER, 99 FT LEFT OF CENTERLINE, 206 FT MSL. NOTE: RWY 23: SIGN 2 FT FROM DER, 303 FT RIGHT OF CENTERLINE, 133 FT MSL. VEHICLES ON ROAD BEGINNING 534 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 152 FT MSL. BUILDING 614 FT FROM DER, 620 FT LEFT OF CENTERLINE, 22 FT AGL/151 FT MSL. TREE 855 FT FROM DER, 696 FT LEFT OF CENTERLINE, 166 FT MSL. TERRAIN 982 FT FROM DER, 338 FT RIGHT OF CENTERLINE, 162 FT MSL. POLE, TREE BEGINNING 1052 FT FROM DER, 378 FT LEFT OF CENTERLINE, UP TO 41 FT AGL/180 FT MSL. TREES, POLE BEGINNING 1090 FT FROM DER, 558 FT LEFT OF CENTERLINE, UP TO 188 FT MSL. TREE, POLE BEGINNING 1241 FT FROM DER, 573 FT LEFT OF CENTERLINE, UP TO 48 FT AGL/197 FT MSL. TREE 1281 FT FROM DER, 741 FT LEFT OF CENTERLINE, 221 FT MSL TREES BEGINNING 1420 FT FROM DER, 138 FT RIGHT OF CENTERLINE, UP TO 232 FT MSL. TREES, BUILDING BEGINNING 1588 FT FROM DER, 88 FT LEFT OF CENTERLINE, UP TO 259 FT MSL. TREES BEGINNING 2149 FT FROM DER, 545 FT LEFT OF CENTERLINE, UP TO 268 FT MSL. TREES BEGINNING 2464 FT FROM DER, 523 FT LEFT OF CENTERLINE, UP TO 277 FT MSL. TREES BEGINNING 2830 FT FROM DER, 659 FT LEFT OF CENTERLINE, UP TO 283 FT MSL. TREES, BUILDING BEGINNING 3549 FT FROM DER, 261 FT LEFT OF CENTERLINE, UP TO 286 FT MSL.



| AIRPORT LAURENCE G HANSCOM FLD | <u>AIRPORT ID</u> KBED | <u>CITY</u> BEDFORD | <u>STATE</u> MA | AMDT NO 6A | EFFECTIVE DATE 19 MAY 2022 |
|---|--|---|---------------------------------|---------------|--------------------------------------|
| TREES BEGINNING 3813 FT FROM DE TREE 4089 FT FROM DER, 39 FT RIGH TREES BEGINNING 4164 FT FROM DE TREE 4443 FT FROM DER, 89 FT RIGH TREE 4549 FT FROM DER, 810 FT RIGH TREES BEGINNING 4588 FT FROM DE | IT OF CENTERLINE, 236 FT R, 131 FT LEFT OF CENTER IT OF CENTERLINE, 244 FT HT OF CENTERLINE, 252 F1 | MSL. RLINE, UP TO 302 FT MSL. MSL. F MSL. | | | 15 WIXT 2022 |
| TREE 4902 FT FROM DER, 912 FT RIG TREE 4904 FT FROM DER, 602 FT RIG TREES BEGINNING 5089 FT FROM DE TREE 5381 FT FROM DER, 1368 FT RI TREES BEGINNING 5387 FT FROM DE TREES BEGINNING 5392 FT FROM DE | HT OF CENTERLINE, 264 F1 R, 686 FT RIGHT OF CENTE GHT OF CENTERLINE, 276 F R, 384 FT RIGHT OF CENTE R, 176 FT LEFT OF CENTEF | 「MSL. ERLINE, UP TO 272 FT MSL. T MSL. ERLINE, UP TO 291 FT MSL. RLINE, UP TO 308 FT MSL. | | | |
| TREE 5571 FT FROM DER, 1263 FT RI- TREES BEGINNING 5664 FT FROM DE TREES, BUILDING BEGINNING 5719 F TREES BEGINNING 5912 FT FROM DE TREES, BUILDINGS BEGINNING 5990 TREES BEGINNING 6045 FT FROM DE | R, 46 FT LEFT OF CENTERL T FROM DER, 246 FT RIGHT R, 393 FT LEFT OF CENTER FT FROM DER, 174 FT RIGH R, 99 FT LEFT OF CENTERL | LINE, UP TO 310 FT MSL. OF CENTERLINE, UP TO 310 FT RLINE, UP TO 319 FT MSL. IT OF CENTERLINE, UP TO 326 F LINE, UP TO 321 FT MSL. | T MSL. | | |
| TREES, BUILDING BEGINNING 1 NM F TREES, BUILDING BEGINNING 1 NM F TREE, BUILDING BEGINNING 1 NM FR TREES, BUILDINGS BEGINNING 1 NM TREES, BUILDINGS, TOWER BEGINNI TREES BEGINNING 1.1 NM FROM DEF | ROM DER, 40 FT RIGHT OF OM DER, 306 FT RIGHT OF FROM DER, 6 FT RIGHT OF NG 1 NM FROM DER, 69 FT R, 94 FT LEFT OF CENTERLI | CENTERLINE, UP TO 339 FT MSI CENTERLINE, UP TO 345 FT MSI CENTERLINE, UP TO 361 FT MSI LEFT OF CENTERLINE, UP TO 70 NE, UP TO 373 FT MSL. | L. L.) FT AGL/364 FT | MSL. | |
| TREES BEGINNING 1.4 NM FROM DEF TREE 1.5 NM FROM DER, 509 FT LEFT NOTE: RWY 29: SIGN 12 FT FROM DE TREE 391 FT FROM DER, 487 FT LEFT POLES, TREES BEGINNING 1109 FT F | OF CENTERLINE, 366 FT M R, 274 FT RIGHT OF CENTE OF CENTERLINE, 20 FT AG | ISL. RLINE, 8 FT AGL/135 FT MSL. GL/153 FT MSL. | | | |

TREE 1207 FT FROM DER, 776 FT RIGHT OF CENTERLINE, 182 FT MSL.

TREE 1735 FT FROM DER, 887 FT RIGHT OF CENTERLINE, 183 FT MSL. TREE 2571 FT FROM DER, 899 FT RIGHT OF CENTERLINE, 200 FT MSL.

TREES BEGINNING 2678 FT FROM DER, 50 FT RIGHT OF CENTERLINE, UP TO 106 FT AGL/243 FT MSL.

TREES BEGINNING 4126 FT FROM DER, 229 FT RIGHT OF CENTERLINE, UP TO 62 FT AGL/246 FT MSL.

CONTROLLING OBSTACLES:

RWY 11: 285 FT MSL ANTENNA 422820.28N/0711519.06W (CLIMB GRADIENT, CLIMB-TO ALTITUDE AND CEILING), 282 FT MSL TOWER 422820.29N/0711519.06W (VISIBILITY). RWY 23: 283 FT MSL TREE 422719.05N/0711758.98W (CLIMB GRADIENT AND CLIMB-TO ALTITUDE), 389 FT MSL TREE 422639.16N/0711823.88W (CEILING), 389 FT MSL TREE 422615.98N/0711832.87W (VISIBILITY).

REMARKS:

| | Digitally signed by | | | |
|----------------------------|---------------------|--------------------------|----------------|---------|
| FLIGHT INSPECTED BY | CASIMIR L TABAKA | OFFICE | DATE | |
| JORGE A MALCUN | Jan 13, 2022 | FPO | 01/12/2022 | |
| | | | | |
| DEVELOPED BY Digitally sig | gned by | OFFICE | DATE | |
| STEVEN WINNER STEVEN E | WINNER | AJV-A422 | 10/22/2021 | |
| Dec 10, | 2021 | | | |
| APPROVED BY | Digitally signed by | OFFICE | DATE | TITLE |
| MARLON ROBINSON | CASIMIR L TABAKA | AJV-A420 | | MANAGER |
| | Dec 15, 2021 | | | |
| REQUIRED EFFECTIVE DATE: | | | | |
| ROUTINE | | | | NAL /N |
| COORDINATED WITH: | | | | QUALITY |
| | | OTHER: ZBW, BOS APP CON, | BED ATCT, AMGR | 29 |
| | | | | CHECKEY |

| AIRPORT | AIRPORT ID | CITY | <u>STATE</u> | AMDT NO | EFFECTIVE DATE |
|------------------------|------------|---------|--------------|---------|----------------|
| LAURENCE G HANSCOM FLD | KBED | BEDFORD | MA | 6A | 19 MAY 2022 |

CHANGES - REASONS:

1. TAKEOFF MINS: CHANGED RWY 11 FROM "RWY 11, 300-11/4 OR STANDARD WITH MINIMUM CLIMB OF 251 FT PER NM T0 400. OR

ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NOT LATER THAN 2100 FT PRIOR TO DER." TO "RWY 11: 300-1 OR STANDARD WITH MINIMUM CLIMB OF 258 FT PER NM TO 400." - UPDATED OBSTACLE DATA AND EVALUATION AND CLEARS FDC 1/8813.

2. TAKEOFF MINS: CHANGED RWY 23 FROM "RWY 23, 300-2 OR STANDARD WITH MINIMUM CLIMB OF 426 FT PER NM TO 500 " TO "RWY 23: 300-1 7/8 OR STANDARD WITH MINIMUM CLIMB OF 439 FT PER NM TO 400." - UPDATED OBSTACLE DATA AND EVALUATION.

3. UPDATED TAKEOFF OBSTACLE NOTES. - UPDATED OBSTACLE DATA AND EVALUATION.

4. CONTROLLING OBSTACLES: CHANGED RWY 11 FROM "285 FT MSL TOWER 422820.28N/0711519.06W TO "285 FT MSL ANTENNA

422820.28N/0711519.06W (CLIMB GRADIENT, CLIMB-TO ALTITUDE AND CEILING), 282 FT MSL TOWER 422820.29N/0711519.06W (VISIBILITY)." -UPDATED OBSTACLE DATA AND EVALUATION.

5. CONTROLLING OBSTACLES: CHANGED RWY 23 FROM "283 FT MSL TREE 422719.05N/0711758.98W. 366 FT MSL TREE 422631.69N/0711858.58W." TO "283 FT MSL TREE 422719.05N/0711758.98W (CLIMB GRADIENT AND CLIMB-TO ALTITUDE), 389 FT MSL TREE 422639.16N/0711823.88W (CEILING), 389 FT MSL TREE 422615.98N/0711832.87W (VISIBILITY)." - UPDATED OBSTACLE DATA AND ÉVALUATION.