

**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
NORWOOD MEML	KOWD	NORWOOD	MA	8	12 AUGUST 2021

TAKEOFF MINIMUMS:

RWY 17: STANDARD

RWY 10: 400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 335 FT PER NM TO 300.

RWY 28: 400-2 OR STANDARD WITH A MINIMUM CLIMB OF 385 FT PER NM TO 400.

RWY 35: 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 230 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 FT PRIOR TO DER.

TEXTUAL DEPARTURE PROCEDURES:

RWY 10: CLIMB ON HEADING 103.77 TO 1100 BEFORE TURNING NORTH.

RWY 28: CLIMB ON HEADING 274.77 TO 700 BEFORE TURNING NORTH.

RWY 35: CLIMB ON HEADING 320.00 TO 1800 BEFORE TURNING EAST.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 10: VEGETATION BEGINNING 13 FT FROM DER, 302 FT RIGHT OF CENTERLINE, UP TO 12 FT AGL/52 FT MSL. TREES BEGINNING 89 FT FROM DER, 115 FT LEFT OF CENTERLINE, UP TO 69 FT AGL/110 FT MSL. TREE, VEGETATION BEGINNING 130 FT FROM DER, 135 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/60 FT MSL. TREES BEGINNING 662 FT FROM DER, 530 FT RIGHT OF CENTERLINE, UP TO 59 FT AGL/101 FT MSL. TREES BEGINNING 701 FT FROM DER, 132 FT LEFT OF CENTERLINE, UP TO 76 FT AGL/116 FT MSL. TREES BEGINNING 1062 FT FROM DER, 15 FT RIGHT OF CENTERLINE, UP TO 109 FT MSL. TREES BEGINNING 1092 FT FROM DER, 65 FT LEFT OF CENTERLINE, UP TO 120 FT MSL. TREES BEGINNING 1192 FT FROM DER, 79 FT RIGHT OF CENTERLINE, UP TO 112 FT MSL. TREES BEGINNING 1262 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 123 FT MSL. TREES BEGINNING 1496 FT FROM DER, 70 FT LEFT OF CENTERLINE, UP TO 123 FT MSL. TREES BEGINNING 1631 FT FROM DER, 26 FT LEFT OF CENTERLINE, UP TO 126 FT MSL. TREES BEGINNING 2150 FT FROM DER, 32 FT LEFT OF CENTERLINE, UP TO 138 FT MSL. TREES BEGINNING 2431 FT FROM DER, 57 FT RIGHT OF CENTERLINE, UP TO 124 FT MSL. TREES BEGINNING 2530 FT FROM DER, 50 FT RIGHT OF CENTERLINE, UP TO 137 FT MSL. TREES BEGINNING 2724 FT FROM DER, 47 FT LEFT OF CENTERLINE, UP TO 139 FT MSL. TREE 3125 FT FROM DER, 1332 FT LEFT OF CENTERLINE, 146 FT MSL. TREE 3320 FT FROM DER, 443 FT RIGHT OF CENTERLINE, 140 FT MSL. TREES BEGINNING 3539 FT FROM DER, 115 FT RIGHT OF CENTERLINE, UP TO 173 FT MSL. TREES BEGINNING 3786 FT FROM DER, 687 FT RIGHT OF CENTERLINE, UP TO 176 FT MSL. TREE 3792 FT FROM DER, 252 FT LEFT OF CENTERLINE, 147 FT MSL. TREES BEGINNING 3881 FT FROM DER, 918 FT RIGHT OF CENTERLINE, UP TO 177 FT MSL. TREES BEGINNING 3961 FT FROM DER, 63 FT LEFT OF CENTERLINE, UP TO 159 FT MSL. TREES BEGINNING 4011 FT FROM DER, 599 FT RIGHT OF CENTERLINE, UP TO 186 FT MSL. TREES BEGINNING 4117 FT FROM DER, 22 FT RIGHT OF CENTERLINE, UP TO 209 FT MSL. TREES BEGINNING 4122 FT FROM DER, 171 FT LEFT OF CENTERLINE, UP TO 173 FT MSL. TREES BEGINNING 4198 FT FROM DER, 4 FT LEFT OF CENTERLINE, UP TO 182 FT MSL. TREES BEGINNING 4239 FT FROM DER, 286 FT RIGHT OF CENTERLINE, UP TO 222 FT MSL. TREES BEGINNING 4288 FT FROM DER, 295 FT LEFT OF CENTERLINE, UP TO 190 FT MSL. TREES BEGINNING 4623 FT FROM DER, 432 FT RIGHT OF CENTERLINE, UP TO 223 FT MSL. TREES BEGINNING 4676 FT FROM DER, 9 FT RIGHT OF CENTERLINE, UP TO 229 FT MSL. TREES BEGINNING 5471 FT FROM DER, 780 FT LEFT OF CENTERLINE, UP TO 193 FT MSL. TREE 5557 FT FROM DER, 1163 FT LEFT OF CENTERLINE, 202 FT MSL. TREES BEGINNING 5634 FT FROM DER, 708 FT LEFT OF CENTERLINE, UP TO 203 FT MSL. TREE 5754 FT FROM DER, 1124 FT LEFT OF CENTERLINE, 204 FT MSL. TREES BEGINNING 5788 FT FROM DER, 84 FT LEFT OF CENTERLINE, UP TO 208 FT MSL. TREES BEGINNING 5882 FT FROM DER, 107 FT LEFT OF CENTERLINE, UP TO 213 FT MSL. TREE 5932 FT FROM DER, 658 FT LEFT OF CENTERLINE, 217 FT MSL. TREES BEGINNING 5940 FT FROM DER, 12 FT LEFT OF CENTERLINE, UP TO 218 FT MSL. TREES BEGINNING 6075 FT FROM DER, 19 FT LEFT OF CENTERLINE, UP TO 219 FT MSL. TREES BEGINNING 1 NM FROM DER, 130 FT LEFT OF CENTERLINE, UP TO 223 FT MSL. TREES BEGINNING 1 NM FROM DER, 33 FT LEFT OF CENTERLINE, UP TO 227 FT MSL. TREES BEGINNING 1 NM FROM DER, 172 FT RIGHT OF CENTERLINE, UP TO 230 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 147 FT LEFT OF CENTERLINE, UP TO 235 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 261 FT LEFT OF CENTERLINE, UP TO 237 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 42 FT RIGHT OF CENTERLINE, UP TO 239 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 198 FT RIGHT OF CENTERLINE, UP TO 246 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 442 FT LEFT OF CENTERLINE, UP TO 239 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 358 FT RIGHT OF CENTERLINE, UP TO 250 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 34 FT LEFT OF CENTERLINE, UP TO 240 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 130 FT RIGHT OF CENTERLINE, UP TO 253 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 237 FT LEFT OF CENTERLINE, UP TO 243 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 248 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 31 FT RIGHT OF CENTERLINE, UP TO 107 FT AGL/257 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 99 FT LEFT OF CENTERLINE, UP TO 254 FT MSL. POLE 1.9 NM FROM DER, 2146 FT LEFT OF CENTERLINE, 115 FT AGL/355 FT MSL.

NOTE: RWY 17: TREE 42 FT FROM DER, 506 FT LEFT OF CENTERLINE, 33 FT AGL/76 FT MSL. VEGETATION 60 FT FROM DER, 306 FT RIGHT OF CENTERLINE, 5 FT AGL/50 FT MSL. TREE 69 FT FROM DER, 363 FT LEFT OF CENTERLINE, 34 FT AGL/83 FT MSL. VEGETATION BEGINNING 85 FT FROM DER, 434 FT RIGHT OF CENTERLINE, UP TO 12 FT AGL/54 FT MSL. TREES BEGINNING 88 FT FROM DER, 319 FT LEFT OF CENTERLINE, UP TO 42 FT AGL/92 FT MSL. TREE 452 FT FROM DER, 439 FT RIGHT OF CENTERLINE, 25 FT AGL/66 FT MSL. TREES BEGINNING 595 FT FROM DER, 509 FT RIGHT OF CENTERLINE, UP TO 62 FT AGL/103 FT MSL. TREES BEGINNING 928 FT FROM DER, 627 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/93 FT MSL. TREES BEGINNING 1033 FT FROM DER, 450 FT LEFT OF CENTERLINE, UP TO 57 FT AGL/98 FT MSL. TREE 1309 FT FROM DER, 697 FT LEFT OF CENTERLINE, 61 FT AGL/102 FT MSL. TREES BEGINNING 1327 FT FROM DER, 276 FT LEFT OF CENTERLINE, UP TO 71 FT AGL/113 FT MSL. TREE 1363 FT FROM DER, 645 FT RIGHT OF CENTERLINE, 62 FT AGL/104 FT MSL. TREE 1592 FT FROM DER, 745 FT RIGHT OF CENTERLINE, 67 FT AGL/110 FT MSL. TREES BEGINNING 1720 FT FROM DER, 775 FT RIGHT OF CENTERLINE, UP TO 73 FT AGL/117 FT MSL. TREES BEGINNING 1823 FT FROM DER, 244 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/117 FT MSL. TREE 1968 FT FROM DER, 796 FT RIGHT OF CENTERLINE, 77 FT AGL/121 FT MSL. TREES BEGINNING 2044 FT FROM DER, 299 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/127 FT MSL. TREES BEGINNING 2564 FT FROM DER, 479 FT RIGHT OF CENTERLINE, UP TO 97 FT AGL/143 FT MSL. TREE 2627 FT FROM DER, 352 FT LEFT OF CENTERLINE, 77 FT AGL/119 FT MSL. TREES BEGINNING 2716 FT FROM DER, 292 FT LEFT OF CENTERLINE, UP TO 81 FT AGL/124 FT MSL. TREES BEGINNING 2723 FT FROM DER, 141 FT RIGHT OF CENTERLINE, UP TO 104 FT AGL/151 FT MSL. TREES BEGINNING 2787 FT FROM DER, 179 FT LEFT OF CENTERLINE, UP TO 95 FT AGL/137 FT MSL. TREES BEGINNING 2815 FT FROM DER, 877 FT RIGHT OF CENTERLINE, UP TO 110 FT AGL/155 FT MSL. TREES BEGINNING 2939 FT FROM DER, 657 FT RIGHT OF CENTERLINE, UP TO 157 FT MSL. TREES BEGINNING 3153 FT FROM DER, 996 FT RIGHT OF CENTERLINE, UP TO 161 FT MSL. TREES BEGINNING 3297 FT FROM DER, 999 FT RIGHT OF CENTERLINE, UP TO 180 FT MSL.



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NORWOOD MEML	KOWD	NORWOOD	MA	8	12 AUGUST 2021

NOTE: RWY 28: VEGETATION 15 FT FROM DER, 147 FT LEFT OF CENTERLINE, 4 FT AGL/51 FT MSL. VEGETATION BEGINNING 98 FT FROM DER, 14 FT RIGHT OF CENTERLINE, UP TO 7 FT AGL/54 FT MSL. VEGETATION 109 FT FROM DER, 301 FT LEFT OF CENTERLINE, 7 FT AGL/53 FT MSL. TREE 114 FT FROM DER, 196 FT LEFT OF CENTERLINE, 17 FT AGL/62 FT MSL. BUILDING, VEGETATION BEGINNING 162 FT FROM DER, 116 FT LEFT OF CENTERLINE, UP TO 23 FT AGL/71 FT MSL. BUILDING, VEGETATION, POLE BEGINNING 222 FT FROM DER, 198 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/78 FT MSL. VEGETATION 258 FT FROM DER, 375 FT RIGHT OF CENTERLINE, 12 FT AGL/56 FT MSL. TREE 356 FT FROM DER, 170 FT RIGHT OF CENTERLINE, 18 FT AGL/62 FT MSL. TREE 361 FT FROM DER, 238 FT LEFT OF CENTERLINE, 33 FT AGL/81 FT MSL. TREES, POLES, BUILDING, VEHICLES ON ROAD BEGINNING 376 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/86 FT MSL. VEGETATION 487 FT FROM DER, 612 FT RIGHT OF CENTERLINE, 22 FT AGL/67 FT MSL. POLE 511 FT FROM DER, 2 FT RIGHT OF CENTERLINE, 23 FT AGL/73 FT MSL. TREES, VEHICLES ON ROAD, POLE BEGINNING 532 FT FROM DER, 61 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/89 FT MSL. TREES, POLES, VEHICLES ON ROAD BEGINNING 544 FT FROM DER, 18 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/87 FT MSL. TREES, POLES, VEHICLES ON ROAD BEGINNING 600 FT FROM DER, 3 FT LEFT OF CENTERLINE, UP TO 58 FT AGL/104 FT MSL. TREES, VEHICLES ON ROAD BEGINNING 609 FT FROM DER, 121 FT RIGHT OF CENTERLINE, UP TO 67 FT AGL/111 FT MSL. TREES, POLES, VEHICLES ON ROAD BEGINNING 628 FT FROM DER, 32 FT RIGHT OF CENTERLINE, UP TO 74 FT AGL/119 FT MSL. TREES, VEHICLES ON ROAD, POLE BEGINNING 691 FT FROM DER, 23 FT RIGHT OF CENTERLINE, UP TO 77 FT AGL/122 FT MSL. TREES, VEHICLES ON ROAD BEGINNING 753 FT FROM DER, 71 FT RIGHT OF CENTERLINE, UP TO 84 FT AGL/129 FT MSL. TREE, POLE, VEHICLES ON ROAD BEGINNING 810 FT FROM DER, 54 FT RIGHT OF CENTERLINE, UP TO 86 FT AGL/131 FT MSL. TREES, POLES, STACKS, BUILDINGS, VEHICLES ON ROAD BEGINNING 834 FT FROM DER, 7 FT RIGHT OF CENTERLINE, UP TO 86 FT AGL/132 FT MSL. TREE, POLE, STACK, VEHICLES ON ROAD BEGINNING 886 FT FROM DER, 100 FT LEFT OF CENTERLINE, UP TO 116 FT MSL. TREES, VEHICLES ON ROADS, STACKS, POLES BEGINNING 948 FT FROM DER, 6 FT LEFT OF CENTERLINE, UP TO 136 FT MSL. TREES BEGINNING 1634 FT FROM DER, 234 FT LEFT OF CENTERLINE, UP TO 138 FT MSL. TREES, VEHICLES ON ROAD, STACK, POLES, TERRAIN BEGINNING 1662 FT FROM DER, 51 FT LEFT OF CENTERLINE, UP TO 142 FT MSL. TREES, POLES, VEHICLES ON ROAD, BUILDING BEGINNING 1793 FT FROM DER, 53 FT LEFT OF CENTERLINE, UP TO 50 FT AGL/148 FT MSL. TREE 1870 FT FROM DER, 341 FT RIGHT OF CENTERLINE, 161 FT MSL. TREES, VEHICLES ON ROAD, POLE BEGINNING 1884 FT FROM DER, 13 FT RIGHT OF CENTERLINE, UP TO 172 FT MSL. TREES, POLE, VEHICLES ON ROADS, BUILDING BEGINNING 1957 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 156 FT MSL. TREES, VEHICLES ON ROAD, STACKS, BUILDING BEGINNING 2008 FT FROM DER, 19 FT LEFT OF CENTERLINE, UP TO 157 FT MSL. TREES, POLES, VEHICLES ON ROAD BEGINNING 2022 FT FROM DER, 30 FT RIGHT OF CENTERLINE, UP TO 176 FT MSL. TREE, STACKS, VEHICLES ON ROAD BEGINNING 2199 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 163 FT MSL. TREES, STACK BEGINNING 2220 FT FROM DER, 181 FT RIGHT OF CENTERLINE, UP TO 184 FT MSL. TREES, VEHICLES ON ROAD, POLES, STACKS BEGINNING 2237 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 186 FT MSL. TREE 2323 FT FROM DER, 101 FT LEFT OF CENTERLINE, 172 FT MSL. TREE 2330 FT FROM DER, 38 FT LEFT OF CENTERLINE, 173 FT MSL. TREES, STACK, TANK, BUILDINGS, POLES, VEHICLES ON ROAD BEGINNING 2348 FT FROM DER, 38 FT LEFT OF CENTERLINE, UP TO 175 FT MSL. TREES, POLES, STACKS, VEHICLES ON ROADS BEGINNING 2654 FT FROM DER, 44 FT LEFT OF CENTERLINE, UP TO 180 FT MSL. TREES, VEHICLES ON ROAD, POLES BEGINNING 2795 FT FROM DER, 30 FT RIGHT OF CENTERLINE, UP TO 188 FT MSL. TREES, POLE, VEHICLES ON ROAD BEGINNING 2868 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 81 FT AGL/188 FT MSL. VEHICLES ON ROAD BEGINNING 2928 FT FROM DER, 1 FT LEFT OF CENTERLINE, UP TO 90 FT AGL/198 FT MSL. TREES, BUILDINGS, POLES, STACKS BEGINNING 2990 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 198 FT MSL. TREES, POLES, STACK, BUILDINGS BEGINNING 3646 FT FROM DER, 21 FT RIGHT OF CENTERLINE, UP TO 213 FT MSL. TREES BEGINNING 4151 FT FROM DER, 72 FT RIGHT OF CENTERLINE, UP TO 218 FT MSL. TREES BEGINNING 4166 FT FROM DER, 154 FT RIGHT OF CENTERLINE, UP TO 223 FT MSL. TREES BEGINNING 4314 FT FROM DER, 130 FT RIGHT OF CENTERLINE, UP TO 224 FT MSL. TREES, POLE BEGINNING 4363 FT FROM DER, 486 FT RIGHT OF CENTERLINE, UP TO 232 FT MSL. TOWER, POLES, TREES, STACKS, BUILDINGS BEGINNING 4465 FT FROM DER, 72 FT RIGHT OF CENTERLINE, UP TO 157 FT AGL/261 FT MSL. POLE 5446 FT FROM DER, 631 FT LEFT OF CENTERLINE, 225 FT MSL. STACKS, TREES BEGINNING 5558 FT FROM DER, 33 FT LEFT OF CENTERLINE, UP TO 117 FT AGL/234 FT MSL. SPIRES, TREES, BUILDING BEGINNING 5780 FT FROM DER, 773 FT RIGHT OF CENTERLINE, UP TO 262 FT MSL. SPIRE, TREES BEGINNING 6044 FT FROM DER, 2 FT RIGHT OF CENTERLINE, UP TO 143 FT AGL/284 FT MSL. SPIRE, TREES BEGINNING 1.2 NM FROM DER, 298 FT LEFT OF CENTERLINE, UP TO 115 FT AGL/268 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 150 FT RIGHT OF CENTERLINE, UP TO 287 FT MSL. SPIRE, TREES BEGINNING 1.2 NM FROM DER, 36 FT LEFT OF CENTERLINE, UP TO 283 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 38 FT RIGHT OF CENTERLINE, UP TO 300 FT MSL. TREES BEGINNING 1.3 NM FROM DER, 611 FT RIGHT OF CENTERLINE, UP TO 302 FT MSL. TREES BEGINNING 1.3 NM FROM DER, 27 FT RIGHT OF CENTERLINE, UP TO 307 FT MSL. TREES BEGINNING 1.4 NM FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 291 FT MSL. TREES BEGINNING 1.4 NM FROM DER, 142 FT RIGHT OF CENTERLINE, UP TO 318 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 46 FT RIGHT OF CENTERLINE, UP TO 319 FT MSL. TREE 1.5 NM FROM DER, 186 FT LEFT OF CENTERLINE, 294 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 78 FT LEFT OF CENTERLINE, UP TO 296 FT MSL. TREES BEGINNING 1.5 NM FROM DER, 417 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/297 FT MSL. TREES, BUILDING BEGINNING 1.5 NM FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 324 FT MSL. TREE 1.6 NM FROM DER, 1242 FT LEFT OF CENTERLINE, 88 FT AGL/301 FT MSL. TREES, STACK BEGINNING 1.6 NM FROM DER, 134 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/325 FT MSL. BUILDING, TREES, STACK BEGINNING 1.6 NM FROM DER, 78 FT LEFT OF CENTERLINE, UP TO 71 FT AGL/315 FT MSL. TREE 1.6 NM FROM DER, 381 FT RIGHT OF CENTERLINE, 326 FT MSL. TREES, BUILDING, TANK BEGINNING 1.6 NM FROM DER, 117 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/335 FT MSL. TOWER, ANTENNAS, TREE BEGINNING 1.6 NM FROM DER, 720 FT RIGHT OF CENTERLINE, UP TO 132 FT AGL/386 FT MSL. TREE 1.7 NM FROM DER, 1255 FT LEFT OF CENTERLINE, 314 FT MSL.

NOTE: RWY 35: SIGN BEGINNING 20 FT FROM DER, 198 FT LEFT OF CENTERLINE, UP TO 3 FT AGL/50 FT MSL. TREE, VEGETATION BEGINNING 23 FT FROM DER, 276 FT RIGHT OF CENTERLINE, UP TO 25 FT AGL/71 FT MSL. VEGETATION 118 FT FROM DER, 468 FT LEFT OF CENTERLINE, 9 FT AGL/54 FT MSL. TREES BEGINNING 278 FT FROM DER, 559 FT RIGHT OF CENTERLINE, UP TO 49 FT AGL/92 FT MSL. TREE 382 FT FROM DER, 580 FT LEFT OF CENTERLINE, 26 FT AGL/70 FT MSL. TREE 599 FT FROM DER, 588 FT RIGHT OF CENTERLINE, 58 FT AGL/101 FT MSL. TREE 601 FT FROM DER, 478 FT LEFT OF CENTERLINE, 34 FT AGL/78 FT MSL. TREES BEGINNING 636 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 78 FT AGL/123 FT MSL. TREES BEGINNING 683 FT FROM DER, 68 FT RIGHT OF CENTERLINE, UP TO 78 FT AGL/121 FT MSL. TREES BEGINNING 1494 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 128 FT MSL. TREES BEGINNING 2285 FT FROM DER, 148 FT RIGHT OF CENTERLINE, UP TO 132 FT MSL. TREES BEGINNING 2792 FT FROM DER, 421 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/124 FT MSL. TREES BEGINNING 2876 FT FROM DER, 359 FT LEFT OF CENTERLINE, UP TO 125 FT MSL. TREES BEGINNING 2949 FT FROM DER, 516 FT LEFT OF CENTERLINE, UP TO 130 FT MSL. TREES BEGINNING 3123 FT FROM DER, 367 FT LEFT OF CENTERLINE, UP TO 83 FT AGL/133 FT MSL. TREE 3392 FT FROM DER, 1343 FT RIGHT OF CENTERLINE, 137 FT MSL. TREE 3531 FT FROM DER, 1392 FT RIGHT OF CENTERLINE, 144 FT MSL. TREES BEGINNING 3658 FT FROM DER, 1317 FT RIGHT OF CENTERLINE, UP TO 154 FT MSL. TREE 3969 FT FROM DER, 1326 FT RIGHT OF CENTERLINE, 157 FT MSL. TREES BEGINNING 3997 FT FROM DER, 1283 FT RIGHT OF CENTERLINE, UP TO 173 FT MSL. POLE 5686 FT FROM DER, 769 FT RIGHT OF CENTERLINE, 150 FT AGL/211 FT MSL. POLE 5857 FT FROM DER, 936 FT RIGHT OF CENTERLINE, 155 FT AGL/216 FT MSL. TREE 1 NM FROM DER, 2250 FT LEFT OF CENTERLINE, 219 FT MSL. TREE 1.1 NM FROM DER, 2230 FT LEFT OF CENTERLINE, 223 FT MSL. TREE 1.1 NM FROM DER, 2126 FT LEFT OF CENTERLINE, 227 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 1973 FT LEFT OF CENTERLINE, UP TO 234 FT MSL. TREE 1.1 NM FROM DER, 1878 FT LEFT OF CENTERLINE, 244 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 1473 FT LEFT OF CENTERLINE, UP TO 246 FT MSL. TREE 1.2 NM FROM DER, 2017 FT LEFT OF CENTERLINE, 248 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 1377 FT LEFT OF CENTERLINE, UP TO 257 FT MSL. TREES, STACK BEGINNING 1.2 NM FROM DER, 1245 FT LEFT OF CENTERLINE, UP TO 262 FT MSL. TREES BEGINNING 1.2 NM FROM DER, 1239 FT LEFT OF CENTERLINE, UP TO 265 FT MSL. TREES BEGINNING 1.3 NM FROM DER, 2600 FT LEFT OF CENTERLINE, UP TO 282 FT MSL.

CONTROLLING OBSTACLES:

RWY 10: 355 FT MSL POLE 421156.18N/0710709.88W (CEILING/VISIBILITY), 222 FT MSL TREE 421121.22N/0710852.91W (CLIMB GRADIENT/CLIMB-TO ALTITUDE)

RWY 28: 261 FT MSL TOWER 421133.00N/0711142.00W (CLIMB GRADIENT/CLIMB-TO ALTITUDE), 386 FT MSL TOWER 421136.55N/0711258.00W (CEILING), 314 FT MSL TREE 421116.98N/0711300.00W (VISIBILITY)

RWY 35: 282 FT MSL TREE 421239.96N/0711159.26W (CEILING), 274 FT MSL TREE 421243.87N/0711200.57W (VISIBILITY), 262 FT MSL TREE 421236.06N/0711144.94W (CLIMB GRADIENT/CLIMB-TO ALTITUDE).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT:

RWY 10: 869 FT MSL TOWER 421242.00N/0710648.00W

RWY 28: 583 FT MSL AAO 421225.75N/0711520.61W

RWY 35: 1447 FT MSL TOWER 421837.18N/0711411.71W, 1352 FT MSL TOWER 421810.74N/0711304.92W

REMARKS:



AIRPORT	AIRPORT ID	CITY	STATE	AMDT NO	EFFECTIVE DATE
NORWOOD MEML	KOWD	NORWOOD	MA	8	12 AUGUST 2021

FLIGHT INSPECTED BY
Digitally signed by
OFFICE
DATE
JOHN BORDY

jJORGE A MALCUN

Jun 02, 2021

FICO

06/07/2021

DEVELOPED BY
Digitally signed by
OFFICE
DATE
JOHN BORDY

JOHN BORDY (ERIC APPENZELLER)

Jun 02, 2021

AJV-A422

08/22/2020

APPROVED BY
Digitally signed by
OFFICE
DATE
JOHN BORDY

MARLON ROBINSON

Jun 02, 2021

AJV-A420

TITLE

MANAGER

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:
A4A ☐ **ALPA** ☒ **AOPA** ☒ **APA** ☐ **HAI** ☐ **NBAA** ☒ **OTHER:** OWD ATCT, BOS DEP CON, ARPT MGR.

CHANGES - REASONS:

1. CHANGED TAKEOFF MINIMUMS RWY 10 FROM "400-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 310 FT PER NM TO 400" TO "400-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 335 FT PER NM TO 300." - NEW CRITERIA IN 8260.3D.
2. CHANGED TAKEOFF MINIMUMS RWY 17 FROM "300-2 1/2 OR STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 500, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1700 FT PRIOR TO DER." TO "STANDARD" - NO PENETRATION OF THE 40:1 OCS.
3. CHANGED TAKEOFF MINIMUMS RWY 28 FROM "400-2 OR STANDARD WITH A MINIMUM CLIMB OF 385 FT PER NM TO 500" TO "400-2 OR STANDARD WITH A MINIMUM CLIMB OF 385 FT PER NM TO 400." - NEW CRITERIA IN 8260.3D.
4. CHANGED TAKEOFF MINIMUMS RWY 35 FROM "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 230FT PER NM TO 1900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1700 FT PRIOR TO DER." TO "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 230FT PER NM TO 400, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1900 FT PRIOR TO DER." - NEW SURVEY DATA AND NEW TARGETS OBSTACLE EVALUATION.
5. CHANGED RWY 28 TEXTUAL DEPARTURE FROM "CLIMB HEADING 263.77 TO 700 BEFORE TURNING NORTH" TO "CLIMB ON HEADING 274.77 TO 700 BEFORE TURNING NORTH." - TURN TO MITIGATE EXTENDED ICA PENETRATIONS PER NEW TARGETS EVALUATION.
6. CHANGED RWY 10 TEXTUAL DEPARTURE PROCEDURE WORDING FROM "CLIMB HEADING" TO "CLIMB ON HEADING" - IAW 8260.46G, 1-1-5 A (3).
7. CHANGED RWY 35 TEXTUAL DEPARTURE PROCEDURE FROM "TURN LEFT HEADING 315.00 TO 1900 BEFORE TURNING EAST" TO "CLIMB ON HEADING 320.00 TO 1800 BEFORE TURNING EAST" - NEW SURVEY DATA AND NEW TARGETS OBSTACLE EVALUATION.
8. UPDATED TAKEOFF OBSTACLE NOTES - NEW SURVEY DATA AND NEW EVALUATION IN TARGETS 6.2.0/DEPARTURE OBSTACLE GROUPER.
9. UPDATED CONTROLLING OBSTACLES - NEW SURVEY DATA AND TARGETS OBSTACLE EVALUATION.
10. CHANGED OBSTACLE MANDATING ODP ROUTE DEVELOPMENT RWY 28 FROM "1449 FT MSL TOWER 421837.00N/07114412.00W" TO "583 FT MSL AAO 421225.75N/0711520.61W, RWY 10 OBSTACLE ELEVATION CHANGED FROM "870 MSL" TO "869 MSL" SAME LAT/LONG, RWY 35 OBSTACLE CHANGED FROM "1449 FT MSL TOWER 421837.00N/0711412.00W" TO "1447 FT MSL TOWER 421837.18N/0711411.71W". - NEW SURVEY DATA AND NEW TARGETS OBSTACLE EVALUATION.
11. ADDED "BOS DEP CON" TO FACILITIES COORDINATED WITH. - IAW 8260.19I, 8-6-13.
12. APT NAME CHANGED FROM NORWOOD MEMORIAL TO NORWOOD MEML - REVISED 6/20/19 AIRNAV DATA.

05/25/21: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 05/11/21.

1. CHANGED AMDT NO "7A" TO "8" IN HEADING ON PAGE 2 AND 3.
2. CONTROLLING OBSTACLES AND REMARKS SECTIONS MOVED FROM PAGE 3 TO PAGE 2.

QUALITY
48
CHECKED