

**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 ID</u>	<u>CITY</u>	<u>STATE</u>	<u>AMDT NO</u>	<u>ACTUAL EFFECTIVE DATE</u>
KAKR	AKRON	OH	2A	

TAKEOFF MINIMUMS:

RWY 7: 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 230 FT PER NM TO 1400 OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1800 FT PRIOR TO DER.
RWY25: 300-1 5/8 OR STANDARD WITH MINIMUM CLIMB OF 705 FT PER NM TO 1500.

TEXTUAL DEPARTURE PROCEDURES:

RWY 25: CLIMB ON HEADING 248.97 TO 2600 BEFORE TURNING RIGHT.

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 7: TERRAIN 45 FT FROM DER, 257 FT RIGHT OF CENTERLINE, 1073 FT MSL. VEHICLES ON ROAD 62 FT FROM DER, 460 FT RIGHT OF CENTERLINE, 1090 FT MSL. VEHICLES ON ROAD 90 FT FROM DER, 358 FT RIGHT OF CENTERLINE, 1091 FT MSL. VEHICLES ON ROAD BEGINNING 179 FT FROM DER, 397 FT RIGHT OF CENTERLINE, UP TO 1095 FT MSL. TERRAIN 196 FT FROM DER, 493 FT LEFT OF CENTERLINE, 1068 FT MSL. FENCE 251 FT FROM DER, 544 FT LEFT OF CENTERLINE, 7 FT AGL/1077 FT MSL. TREE, TERRAIN, VEHICLES ON ROAD, VEGETATION, FENCE BEGINNING 295 FT FROM DER, ON CENTERLINE, UP TO 1126 FT MSL. FENCE 372 FT FROM DER, 490 FT LEFT OF CENTERLINE, 8 FT AGL/1080 FT MSL. VEHICLES ON ROAD, TERRAIN BEGINNING 397 FT FROM DER, 317 FT LEFT OF CENTERLINE, UP TO 1088 FT MSL. POLE, TERRAIN, VEHICLES ON ROAD BEGINNING 476 FT FROM DER, 104 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/1106 FT MSL. TREE, TERRAIN, VEHICLES ON ROAD BEGINNING 566 FT FROM DER, 7 FT LEFT OF CENTERLINE, UP TO 1134 FT MSL. POLE, TERRAIN BEGINNING 572 FT FROM DER, 114 FT RIGHT OF CENTERLINE, UP TO 1127 FT MSL. POLES, TERRAIN, VEHICLES ON ROAD BEGINNING 654 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 32 FT AGL/1141 FT MSL. TREES, VEHICLES ON ROAD, POLES, TERRAIN, BUILDING, FENCE, SIGN BEGINNING 692 FT FROM DER, 75 FT LEFT OF CENTERLINE, UP TO 1171 FT MSL. TREE, VEHICLES ON ROAD BEGINNING 905 FT FROM DER, 256 FT RIGHT OF CENTERLINE, UP TO 1162 FT MSL. TREES, VEHICLES ON ROAD, TERRAIN, POLES, BUILDINGS BEGINNING 944 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 1177 FT MSL. TREES, VEHICLES ON ROAD, TERRAIN, FENCE, POLE, BUILDING BEGINNING 985 FT FROM DER, 2 FT RIGHT OF CENTERLINE, UP TO 1175 FT MSL. TREES, VEHICLES ON ROAD, SIGN, BUILDING, TERRAIN BEGINNING 1273 FT FROM DER, 13 FT LEFT OF CENTERLINE, UP TO 1178 FT MSL. TREES, TERRAIN, POLES, FENCE, VEHICLES ON ROAD, BUILDING BEGINNING 1432 FT FROM DER, 11 FT LEFT OF CENTERLINE, UP TO 1192 FT MSL. TREE, VEHICLES ON ROAD, TERRAIN, FENCE, POLE BEGINNING 1459 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 1181 FT MSL. TREES, BUILDINGS, VEHICLES ON ROAD, POLES, FENCE BEGINNING 1857 FT FROM DER, 18 FT RIGHT OF CENTERLINE, UP TO 1192 FT MSL. TREES, TERRAIN, FENCE, VEHICLES ON ROAD, BUILDINGS, POLES, VEGETATION BEGINNING 1887 FT FROM DER, 6 FT LEFT OF CENTERLINE, UP TO 1198 FT MSL. TREES, VEHICLES ON ROAD, BUILDINGS, POLES BEGINNING 2277 FT FROM DER, 4 FT RIGHT OF CENTERLINE, UP TO 1195 FT MSL. TREES, BUILDINGS, POLES BEGINNING 2727 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 1197 FT MSL. BUILDING 6043 FT FROM DER, 460 FT LEFT OF CENTERLINE, 123 FT AGL/1213 FT MSL. TREE 1.1 NM FROM DER, 701 FT RIGHT OF CENTERLINE, 1247 FT MSL. TREES BEGINNING 1.1 NM FROM DER, 200 FT RIGHT OF CENTERLINE, UP TO 1258 FT MSL. TREE 1.2 NM FROM DER, 301 FT RIGHT OF CENTERLINE, 1254 FT MSL.

NOTE: RWY 25: TREE 53 FT FROM DER, 497 FT RIGHT OF CENTERLINE, 1091 FT MSL. VEHICLES ON ROAD, TERRAIN BEGINNING 66 FT FROM DER, 69 FT RIGHT OF CENTERLINE, UP TO 1092 FT MSL. TREE, VEHICLES ON ROAD, TERRAIN BEGINNING 100 FT FROM DER, 3 FT RIGHT OF CENTERLINE, UP TO 1101 FT MSL. VEHICLES ON ROAD 133 FT FROM DER, 33 FT LEFT OF CENTERLINE, 1093 FT MSL. TREES, FENCE, TERRAIN BEGINNING 170 FT FROM DER, 292 FT RIGHT OF CENTERLINE, UP TO 1119 FT MSL. VEHICLES ON ROAD BEGINNING 199 FT FROM DER, 130 FT LEFT OF CENTERLINE, UP TO 1094 FT MSL. TREES, TERRAIN BEGINNING 215 FT FROM DER, 235 FT RIGHT OF CENTERLINE, UP TO 1124 FT MSL. VEHICLES ON ROAD BEGINNING 264 FT FROM DER, 225 FT LEFT OF CENTERLINE, UP TO 1095 FT MSL. VEHICLES ON ROAD 375 FT FROM DER, 403 FT LEFT OF CENTERLINE, 1096 FT MSL. TREE 503 FT FROM DER, 541 FT LEFT OF CENTERLINE, 1108 FT MSL. TREE 573 FT FROM DER, 473 FT RIGHT OF CENTERLINE, 1142 FT MSL. TREES, TERRAIN, VEHICLES ON ROAD, FENCE, NAVAID, VEGETATION BEGINNING 594 FT FROM DER, 23 FT RIGHT OF CENTERLINE, UP TO 1165 FT MSL. TREES BEGINNING 614 FT FROM DER, 493 FT LEFT OF CENTERLINE, UP TO 1122 FT MSL. TREES, FENCE, VEHICLES ON ROAD, VEGETATION, TANK BEGINNING 687 FT FROM DER, 3 FT LEFT OF CENTERLINE, UP TO 1156 FT MSL. TREES, VEGETATION, VEHICLES ON ROAD BEGINNING 1405 FT FROM DER, ON CENTERLINE, UP TO 1166 FT MSL. TREES, VEGETATION BEGINNING 1590 FT FROM DER, 103 FT RIGHT OF CENTERLINE, UP TO 1168 FT MSL. TREES, VEGETATION BEGINNING 1612 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 1192 FT MSL. POLE, TREE, VEHICLES ON ROAD, VEGETATION BEGINNING 1671 FT FROM DER, 61 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/1157 FT MSL. TREES, VEGETATION BEGINNING 1679 FT FROM DER, 12 FT RIGHT OF CENTERLINE, UP TO 1208 FT MSL. TREES, VEGETATION, POLES BEGINNING 1737 FT FROM DER, 52 FT LEFT OF CENTERLINE, UP TO 1172 FT MSL. TREES, VEGETATION, TERRAIN, FENCE, BUILDING BEGINNING 1745 FT FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 1221 FT MSL. TREE 1785 FT FROM DER, 406 FT LEFT OF CENTERLINE, 1176 FT MSL. TREE, VEGETATION, TERRAIN, POLES, FENCE, VEHICLES ON ROAD, BUILDING BEGINNING 1786 FT FROM DER, 6 FT LEFT OF CENTERLINE, UP TO 1185 FT MSL. TREES, TERRAIN, VEGETATION, VEHICLES ON ROAD, BUILDINGS, POLES, FENCE, SIGNS, TOWER BEGINNING 1948 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 64 FT AGL/1228 FT MSL. TREE, VEGETATION, TERRAIN, POLE BEGINNING 2056 FT FROM DER, 76 FT LEFT OF CENTERLINE, UP TO 1215 FT MSL. TREES, VEGETATION, VEHICLES ON ROAD, TERRAIN, POLE BEGINNING 2103 FT FROM DER, 17 FT LEFT OF CENTERLINE, UP TO 1225 FT MSL. TREES, BUILDINGS, VEGETATION, TERRAIN, VEHICLES ON ROAD, POLES,

AIRPORT ID

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EFFECTIVE DATE

FENCE, STACK, TANK, SIGN BEGINNING 2349 FT FROM DER, 6 FT LEFT OF CENTERLINE, UP TO 1227 FT MSL. ANTENNA 1.3 NM FROM DER, 440 FT LEFT OF CENTERLINE, 307 FT AGL/1339 FT MSL. TOWER 1.3 NM FROM DER, 215 FT LEFT OF CENTERLINE, 305 FT AGL/1343 FT MSL.

CONTROLLING OBSTACLES:

RWY 7: 1258 FT MSL TREE 410256.21N/0812602.75W (CEILING, CLIMB GRADIENT, CLIMB-TO ALTITUDE), 1254 FT MSL TREE 410301.94N/0812558.12W (VISIBILITY).

RWY 25: 1221 FT MSL TREE 410200.11N/0812906.02W (CLIMB GRADIENT), 1228 FT MSL TREE 410157.56N/0812907.23 (CLIMB-TO ALTITUDE), 1343 FT MSL TOWER 410119.58N/0813014.38W (CEILING, VISIBILITY).

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 25: 2048 FT MSL TOWER 410352.70N/0813458.30W, 2041 FT MSL TOWER 410320.46N/0813537.03W.

REMARKS:

APPROVAL LETTER FOR 705 FT/NM CLIMB GRADIENT.
100 FT MAXIMUM VEGETATION HEIGHT PER FPT.

FLIGHT INSPECTED BY**OFFICE****DATE**

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO DATED 07/07/2021, SUBJECT: GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

Digitally signed by

ALLAN WILL

DEVELOPED BY

Digitally signed by

OFFICE**DATE**

Jun 07, 2022

RALPH DUMAR

RALPH DUMAR

AJV-A423

05/13/2022

Jun 03, 2022

APPROVED BY**OFFICE****DATE****TITLE**

MARLON ROBINSON

Digitally signed by

ALLAN WILL

AJV-A420

MANAGER

Jun 07, 2022

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ☒

ALPA ☒

AOPA ☒

APA ☒

HAI ☐

NBAA ☒

OTHER: ZOB, CLE APP CON, AMGR

CHANGES - REASONS:

1. REMOVED ALL REFERENCES TO RWY 01/19 - RUNWAY DECOMMISSIONED.
2. TAKEOFF MINIMUMS RWY 25: RAISED REQUIRED CLIMB GRADIENT FROM 685 FT PER NM TO 705 FT PER NM - CALCULATION DIFFERENCE BETWEEN IAPA AND TARGETS SOFTWARE WITH NO CHANGE IN CONTROLLING OBSTRUCTION.
3. UPDATED TAKEOFF OBSTACLE NOTES - PER 8260.46H APPENDIX D, SECTION 1, PARA. 9 AND DEPARTURE OBSTACLE GROUPER TOOL.
4. CONTROLLING OBSTACLES: UPDATED OBSTACLES, ELEVATIONS, LAT/LONGS, AND ADDED APPLICABLE AREAS AFFECTED TO EACH OBSTACLE - PER 8260.46H APPENDIX D, SECTION 1, PARA. 10.
5. ADDED 2041 FT MSL TOWER AS A SECOND OBSTACLE MANDATING ODP ROUTE DEVELOPMENT - BECAUSE OF PROXIMITY TO THE FIRST OBSTACLE 2048 FT MSL TOWER.

QUALITY
8
CHECKED