

**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>
KMKE	MILWAUKEE	WI	9	5 OCTOBER 2023

TAKEOFF MINIMUMS:

RWY 1L, 1R, 7L, 13, 19L, 19R, 25L, 25R: STANDARD.
RWY 7R: 300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 293 FT/NM TO 1100.
RWY 31: 300-1 3/8 OR STANDARD WITH MINIMUM CLIMB OF 255 FT/NM TO 1000.

TEXTUAL DEPARTURE PROCEDURES:

VISUAL CLIMB OVER AIRPORT:

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 1L: FENCE 147 FT FROM DER, 391 FT LEFT OF CENTERLINE, 8 FT AGL/678 FT MSL. LIGHT POLES 410 FT FROM DER, 1 FT RIGHT OF CENTERLINE, 13 FT AGL/685 FT MSL. VEHICLE ON ROAD 485 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, 686 FT MSL. VEHICLE ON ROAD 494 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, 687 FT MSL. VEHICLE ON ROAD BEGINNING 514 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 687 FT MSL. POLE 575 FT FROM DER, 594 FT LEFT OF CENTERLINE, 17 FT AGL/689 FT MSL. LIGHT POLES 625 FT FROM DER, 1 FT RIGHT OF CENTERLINE, 21 FT AGL/692 FT MSL. LIGHT POLES 824 FT FROM DER, ON CENTERLINE, 20 FT AGL/694 FT MSL. POLE, TREE, LIGHT POLES, UTILITY BUILDING BEGINNING 1859 FT FROM DER, 1 FT RIGHT OF CENTERLINE, UP TO 21 FT AGL/734 FT MSL. LIGHT POLES 1928 FT FROM DER, 8 FT LEFT OF CENTERLINE, 21 FT AGL/727 FT MSL. TREE 2011 FT FROM DER, 966 FT RIGHT OF CENTERLINE, 738 FT MSL. TREE, POLES BEGINNING 2154 FT FROM DER, 835 FT RIGHT OF CENTERLINE, UP TO 751 FT MSL. POLES BEGINNING 2354 FT FROM DER, 682 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/754 FT MSL. TREES BEGINNING 2384 FT FROM DER, 920 FT LEFT OF CENTERLINE, UP TO 785 FT MSL. TREES BEGINNING 2772 FT FROM DER, 431 FT LEFT OF CENTERLINE, UP TO 790 FT MSL. TREE 3724 FT FROM DER, 84 FT RIGHT OF CENTERLINE, 780 FT MSL. TREES BEGINNING 3777 FT FROM DER, 101 FT RIGHT OF CENTERLINE, UP TO 782 FT MSL.

NOTE: RWY 1R: LIGHT POLES 10 FT FROM DER, 54 FT RIGHT OF CENTERLINE, 2 FT AGL/671 FT MSL. LIGHT POLES 10 FT FROM DER, 55 FT LEFT OF CENTERLINE, 2 FT AGL/671 FT MSL. SIGN 75 FT FROM DER, 249 FT LEFT OF CENTERLINE, 5 FT AGL/672 FT MSL. ANTENNA 579 FT FROM DER, 601 FT LEFT OF CENTERLINE, 51 FT AGL/718 FT MSL. TOWER 581 FT FROM DER, 600 FT LEFT OF CENTERLINE, 53 FT AGL/719 FT MSL. TREE 3596 FT FROM DER, 729 FT RIGHT OF CENTERLINE, 761 FT MSL. TREES BEGINNING 3724 FT FROM DER, 600 FT RIGHT OF CENTERLINE, UP TO 778 FT MSL. TREES BEGINNING 4101 FT FROM DER, 213 FT RIGHT OF CENTERLINE, UP TO 794 FT MSL. TREES BEGINNING 4499 FT FROM DER, 979 FT RIGHT OF CENTERLINE, UP TO 795 FT MSL.

NOTE: RWY 7L: LIGHT POLES 35 FT FROM DER, 88 FT RIGHT OF CENTERLINE, 3 FT AGL/676 FT MSL. BUILDING 320 FT FROM DER, 455 FT RIGHT OF CENTERLINE, 25 FT AGL/696 FT MSL. BUILDING 1262 FT FROM DER, 735 FT LEFT OF CENTERLINE, 21 FT AGL/721 FT MSL. POLE 1324 FT FROM DER, 453 FT LEFT OF CENTERLINE, 31 FT AGL/733 FT MSL. POLES BEGINNING 1341 FT FROM DER, 58 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/711 FT MSL. TREE, POLES BEGINNING 1407 FT FROM DER, 47 FT LEFT OF CENTERLINE, UP TO 739 FT MSL. VEHICLE ON ROAD 1441 FT FROM DER, 292 FT RIGHT OF CENTERLINE, 713 FT MSL. TREE, VEHICLE ON ROAD BEGINNING 1466 FT FROM DER, 112 FT RIGHT OF CENTERLINE, UP TO 718 FT MSL. TREE, POLES, VEHICLE ON ROAD BEGINNING 1472 FT FROM DER, 214 FT LEFT OF CENTERLINE, UP TO 746 FT MSL. TREES, POLES, VEHICLES ON ROAD BEGINNING 1538 FT FROM DER, 49 FT LEFT OF CENTERLINE, UP TO 754 FT MSL. POLE 1583 FT FROM DER, 223 FT RIGHT OF CENTERLINE, 40 FT AGL/732 FT MSL. POLE 1664 FT FROM DER, 51 FT RIGHT OF CENTERLINE, 40 FT AGL/734 FT MSL. TREES, POLES, VEHICLE ON ROAD, SIGNS, BUILDINGS BEGINNING 1882 FT FROM DER, 94 FT LEFT OF CENTERLINE, UP TO 759 FT MSL. TREES, POLES, BUILDING, SIGNS BEGINNING 2195 FT FROM DER, 14 FT LEFT OF CENTERLINE, UP TO 771 FT MSL. POLE 2256 FT FROM DER, 221 FT RIGHT OF CENTERLINE, 35 FT AGL/739 FT MSL. POLES, TREES, BUILDING BEGINNING 2297 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 42 FT AGL/752 FT MSL. TREES, POLES BEGINNING 2591 FT FROM DER, 42 FT LEFT OF CENTERLINE, UP TO 775 FT MSL. POLES, TREE BEGINNING 2885 FT FROM DER, 38 FT RIGHT OF CENTERLINE, UP TO 44 FT AGL/757 FT MSL. TREES, POLE, SIGN BEGINNING 2891 FT FROM DER, 13 FT LEFT OF CENTERLINE, UP TO 777 FT MSL. POLE 3166 FT FROM DER, 361 FT RIGHT OF CENTERLINE, 66 FT AGL/772 FT MSL. TREES BEGINNING 3685 FT FROM DER, 961 FT LEFT OF CENTERLINE, UP TO 781 FT MSL. TREES BEGINNING 3813 FT FROM DER, 97 FT RIGHT OF CENTERLINE, UP TO 785 FT MSL.

NOTE: RWY 7R: SIGN 34 FT FROM DER, 286 FT LEFT OF CENTERLINE, 3 FT AGL/671 FT MSL. POLE 700 FT FROM DER, 538 FT RIGHT OF CENTERLINE, 39 FT AGL/707 FT MSL. POLE 706 FT FROM DER, 543 FT RIGHT OF CENTERLINE, 41 FT AGL/709 FT MSL. VEHICLES ON ROAD, TREES, POLES BEGINNING 753 FT FROM DER, 203 FT RIGHT OF CENTERLINE, UP TO 711 FT MSL. RAILROAD, POLE, TREES BEGINNING 922 FT FROM DER, 64 FT RIGHT OF CENTERLINE, UP TO 712 FT MSL. POLE 1051 FT FROM DER, 199 FT LEFT OF CENTERLINE, 39 FT AGL/708 FT MSL. RAILROAD, TREES, POLES BEGINNING 1086 FT FROM DER, 77 FT LEFT OF CENTERLINE, UP TO 712 FT MSL. TREES BEGINNING 1415 FT FROM DER, 685 FT LEFT OF CENTERLINE, UP TO 732 FT MSL. TREES BEGINNING 1810 FT FROM DER, 895 FT RIGHT OF CENTERLINE, UP TO 746 FT MSL. TREE 2241 FT FROM DER, 870 FT RIGHT OF CENTERLINE, 752 FT MSL. TREE 2300 FT FROM DER, 337 FT LEFT OF CENTERLINE, 735 FT MSL. TREES BEGINNING 2310 FT FROM DER, 327 FT RIGHT OF CENTERLINE, UP TO 755 FT MSL. TREE 2347 FT FROM DER, 815 FT RIGHT OF CENTERLINE, 759 FT MSL. TREES BEGINNING 2364 FT FROM DER, 224 FT LEFT OF CENTERLINE, UP TO 743 FT MSL. TREES BEGINNING 2389 FT FROM DER, 177 FT RIGHT OF CENTERLINE, UP TO 763 FT MSL. STACK 1.1 NM FROM DER, 2098 FT RIGHT OF CENTERLINE, 217 FT AGL/930 FT MSL. STACK 1.2 NM FROM DER, 1166 FT LEFT OF CENTERLINE, 180 FT AGL/891 FT MSL.

NOTE: RWY 13: SIGN 49 FT FROM DER, 471 FT RIGHT OF CENTERLINE, 4 FT AGL/671 FT MSL. SIGN 81 FT FROM DER, 405 FT LEFT OF CENTERLINE, 10 FT AGL/678 FT MSL. TREE 701 FT FROM DER, 581 FT LEFT OF CENTERLINE, 697 FT MSL. VEHICLES ON ROAD, POLES, TREES, TRANSMISSION LINE, VEGETATION BEGINNING 703 FT FROM DER, 23 FT LEFT OF CENTERLINE, UP TO 712 FT MSL. TREE, POLE BEGINNING 1136 FT FROM DER, 56 FT RIGHT OF CENTERLINE, UP TO 707 FT MSL. POLE 1186 FT FROM DER, 144 FT RIGHT OF CENTERLINE, 41 FT AGL/709 FT MSL. RAILROAD, POLE, TREES BEGINNING 1262 FT FROM DER, 134 FT RIGHT OF CENTERLINE, UP TO 711 FT MSL. ANTENNA, TREE BEGINNING 1371 FT FROM DER, 43 FT RIGHT OF CENTERLINE, UP TO 59 FT AGL/730 FT MSL. TREE 1690 FT FROM DER, 119 FT LEFT OF

CENTERLINE, 717 FT MSL. TREE 1844 FT FROM DER, 306 FT LEFT OF CENTERLINE, 718 FT MSL. TREES BEGINNING 1905 FT FROM DER, 166 FT LEFT OF CENTERLINE, UP TO 721 FT MSL. TREES BEGINNING 2034 FT FROM DER, 137 FT LEFT OF CENTERLINE, UP TO 746 FT MSL. TREES BEGINNING 2224 FT FROM DER, 57 FT LEFT OF CENTERLINE, UP TO 752 FT MSL. TREE 2333 FT FROM DER, 255 FT RIGHT OF CENTERLINE, 737 FT MSL. TREE 2397 FT FROM DER, 42 FT RIGHT OF CENTERLINE, 739 FT MSL. TREES BEGINNING 2453 FT FROM DER, 164 FT RIGHT OF CENTERLINE, UP TO 749 FT MSL.

NOTE: RWY 19L: TOWER, ANTENNA BEGINNING 1837 FT FROM DER, 558 FT RIGHT OF CENTERLINE, UP TO 71 FT AGL/749 FT MSL. TREES BEGINNING 1869 FT FROM DER, 795 FT LEFT OF CENTERLINE, UP TO 753 FT MSL. TREES BEGINNING 2181 FT FROM DER, 739 FT LEFT OF CENTERLINE, UP TO 761 FT MSL.

NOTE: RWY 19R: TREES BEGINNING 2392 FT FROM DER, 1035 FT RIGHT OF CENTERLINE, UP TO 821 FT MSL.

NOTE: RWY 25L: LIGHTING 10 FT FROM DER, 4 FT LEFT OF CENTERLINE, 1 FT AGL/730 FT MSL. BUILDING 2790 FT FROM DER, 1223 FT RIGHT OF CENTERLINE, 55 FT AGL/812 FT MSL.

NOTE: RWY 25R: LIGHT POLES 32 FT FROM DER, 89 FT LEFT OF CENTERLINE, 3 FT AGL/674 FT MSL. LIGHT POLES 33 FT FROM DER, 88 FT RIGHT OF CENTERLINE, 3 FT AGL/673 FT MSL. FENCE 183 FT FROM DER, 386 FT LEFT OF CENTERLINE, 12 FT AGL/684 FT MSL. BUILDING 627 FT FROM DER, 363 FT RIGHT OF CENTERLINE, 33 FT AGL/704 FT MSL. POLES BEGINNING 1139 FT FROM DER, 127 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/706 FT MSL. POLE 1274 FT FROM DER, 141 FT LEFT OF CENTERLINE, 31 FT AGL/706 FT MSL. TREE 1302 FT FROM DER, 222 FT LEFT OF CENTERLINE, 715 FT MSL. TREES, SIGNS BEGINNING 1302 FT FROM DER, 100 FT LEFT OF CENTERLINE, UP TO 717 FT MSL. TREES BEGINNING 1314 FT FROM DER, 91 FT RIGHT OF CENTERLINE, UP TO 711 FT MSL. SIGN, POLE BEGINNING 1398 FT FROM DER, 137 FT LEFT OF CENTERLINE, UP TO 68 FT AGL/748 FT MSL. POLE 1608 FT FROM DER, 301 FT RIGHT OF CENTERLINE, 43 FT AGL/720 FT MSL. TREE 4188 FT FROM DER, 169 FT RIGHT OF CENTERLINE, 777 FT MSL.

NOTE: RWY 31: LIGHT POLES 13 FT FROM DER, 40 FT LEFT OF CENTERLINE, 1 FT AGL/672 FT MSL. POLES, FENCE, VEHICLE ON ROAD BEGINNING 30 FT FROM DER, 162 FT RIGHT OF CENTERLINE, UP TO 31 FT AGL/707 FT MSL. TREE, FENCE, POLES, VEHICLE ON ROAD BEGINNING 326 FT FROM DER, 6 FT RIGHT OF CENTERLINE, UP TO 710 FT MSL. FENCE 473 FT FROM DER, 3 FT LEFT OF CENTERLINE, 12 FT AGL/683 FT MSL. POLES BEGINNING 583 FT FROM DER, 27 FT LEFT OF CENTERLINE, UP TO 31 FT AGL/703 FT MSL. TREES BEGINNING 976 FT FROM DER, 435 FT RIGHT OF CENTERLINE, UP TO 753 FT MSL. TREE 1334 FT FROM DER, 579 FT RIGHT OF CENTERLINE, 755 FT MSL. TREES, POLE BEGINNING 1352 FT FROM DER, 272 FT RIGHT OF CENTERLINE, UP TO 759 FT MSL. TREES, BUILDING, POLES BEGINNING 1462 FT FROM DER, 199 FT RIGHT OF CENTERLINE, UP TO 765 FT MSL. TREE 1589 FT FROM DER, 280 FT LEFT OF CENTERLINE, 711 FT MSL. TREE 1634 FT FROM DER, 196 FT LEFT OF CENTERLINE, 712 FT MSL. TREE 1774 FT FROM DER, 163 FT LEFT OF CENTERLINE, 716 FT MSL. TREES, POLES BEGINNING 1797 FT FROM DER, 60 FT RIGHT OF CENTERLINE, UP TO 766 FT MSL. TREE 1921 FT FROM DER, 145 FT LEFT OF CENTERLINE, 725 FT MSL. TREE 2131 FT FROM DER, 60 FT LEFT OF CENTERLINE, 728 FT MSL. TREE 2170 FT FROM DER, 17 FT LEFT OF CENTERLINE, 730 FT MSL. TREE 2381 FT FROM DER, 131 FT LEFT OF CENTERLINE, 734 FT MSL. TREES, POLES, TRANSMISSION LINE, BUILDING BEGINNING 2386 FT FROM DER, 46 FT RIGHT OF CENTERLINE, UP TO 768 FT MSL. TREES BEGINNING 2769 FT FROM DER, 212 FT RIGHT OF CENTERLINE, UP TO 777 FT MSL. TREES BEGINNING 2930 FT FROM DER, 518 FT RIGHT OF CENTERLINE, UP TO 784 FT MSL. TREES BEGINNING 3019 FT FROM DER, 34 FT RIGHT OF CENTERLINE, UP TO 785 FT MSL. TRANSMISSION LINE 5295 FT FROM DER, 1206 FT RIGHT OF CENTERLINE, 90 FT AGL/804 FT MSL. TANK 1.1 NM FROM DER, 741 FT RIGHT OF CENTERLINE, UP TO 167 FT AGL/885 FT MSL.

CONTROLLING OBSTACLES:

RWY 7R: 891 FT MSL STACK 425721.00N/0875146.00W (VISIBILITY), 930 FT MSL STACK 425648.86N/0875138.47W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE) (CEILING).
RWY 31: 885 FT MSL TANK 425819.28N/0875512.44W.

REMARKS:

100 FT VEGETATION HEIGHT USED PER FPT.

FLIGHT INSPECTED BY

JAMES ONIEAL

Digitally signed by

RAKE MCGRAW

Aug 10, 2023

OFFICE

FPO

DATE

08/04/2023

DEVELOPED BY

RALPH DUMAR

Digitally signed by

RALPH DUMAR

Jul 10, 2023

OFFICE

AJV-A422

DATE

05/10/2023

APPROVED BY

MARLON J. ROBINSON

Digitally signed by

RAKE MCGRAW

Aug 10, 2023

OFFICE

AJV-A420

DATE

10/05/2023

TITLE

MANAGER

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒

OTHER:

MKE APP CON, ATCT, AMGR

CHANGES - REASONS:

1. CHANGED TAKEOFF MINIMUMS RWY 7R FROM '300-1½ OR STD. W/MIN. CLIMB OF 290' PER NM TO 1100' TO '300-1 1/2 OR STANDARD WITH MINIMUM CLIMB OF 293 FT/NM TO 1100' - EVALUATED IN TARGETS VS. IAPA YIELDS A HIGHER REQUIRED CLIMB GRADIENT.
2. CHANGED TAKEOFF MINIMUMS RWY 31 FROM '300-1½ OR STD. W/MIN. CLIMB OF 255' PER NM TO 1000' TO '300-1 3/8 OR STANDARD WITH MINIMUM CLIMB OF 255 FT/NM TO 1000' - EVALUATED IN TARGETS VS. IAPA ALLOWS FOR A LOWER VISIBILITY REQUIREMENT AND MATCHES MITCHELL EIGHT SID.
3. UPDATED TAKEOFF OBSTACLES TO CURRENT CRITERIA - EVALUATED IN TARGETS AND DEPARTURE OBSTACLE GROUPER.
4. ADDED 'RWY 7L: STANDARD' TO TAKEOFF MINIMUMS - INADVERTENTLY OMITTED FROM AMDT 8 8260-15A FORM ALTHOUGH IS LISTED IN IFP

AIRPORT ID
KMKE

CITY
MILWAUKEE

STATE
WI

AMDT NO
9

ACTUAL EFFECTIVE DATE
5 OCTOBER 2023

DEPARTURES UNDER AMDT 8A.

5. CHANGED RWY 7R CONTROLLING OBSTACLES FROM 930 FT MSL ROD ON OL STK 425648.86N/0875138.47W TO RWY 7R: 891 FT MSL STACK 425721.00N/0875146.00W (VISIBILITY), 930 FT MSL STACK 425648.86N/0875138.47W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE) (CEILING) - TARGETS BUILD IDENTIFIED NEW CONTROLLING OBSTRUCTION FURTHER FROM DEPARTURE END. FORMAT PER 8260.46J. APPENDIX D PARA. I(1).

