

U.S. DEPARTMENT OF TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION  
**TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated.  
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City, State	Airport	Effective Date	Amdt. No.
CHICAGO, IL	CHICAGO O'HARE INTL	15 OCTOBER 2015	20

**TAKEOFF MINIMUMS:**

**RWY 4L, 4R, 9L, 9R, 10C, 10L, 10R, 14L, 14R, 22L, 22R, 32R, STANDARD.**

**RWY 27L, STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1400 FT PRIOR TO DER.**

**RWY 27R, STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1800.**

**RWY 28C, STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700.**

**RWY 28L, STANDARD WITH MINIMUM CLIMB OF 235 FT PER NM TO 1000, 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.**

**RWY 28R, STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700.**

**RWY 32L, STANDARD WITH MINIMUM CLIMB OF 240 FT PER NM TO 1700.**

**TEXTUAL DEPARTURE PROCEDURES:**

**VISUAL CLIMB OVER AIRPORT:**

**TAKEOFF OBSTACLE NOTES:**

**NOTE: RWY 4L, TOWER ON BUILDING 3301 FT FROM DER, 1207 FT RIGHT OF CENTERLINE, 109 FT AGL/750 FT MSL.**

**NOTE: RWY 4R, TAXIING AIRCRAFT 152 FT FROM DER, 328 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/735 FT MSL. TREES 809 FT FROM DER, 611 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/675 FT MSL.**

**NOTE: RWY 9L, BUILDING 2771 FT FROM DER, 1233 FT RIGHT OF CENTERLINE, 94 FT AGL/745 FT MSL.**

**NOTE: RWY 9R, POLE 876 FT FROM DER, 688 FT RIGHT OF CENTERLINE, 29 FT AGL/673 FT MSL.**

**NOTE: RWY 10C, GLIDESLOPE ANTENNA 1170 FT FROM DER, 777 FT LEFT OF CENTERLINE, 41 FT AGL/694 FT MSL.**

**NOTE: RWY 10L, TAXIING AIRCRAFT 32 FT FROM DER, 440 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/735 FT MSL. SIGN AND TOWER ON BUILDING BEGINNING 2517 FT FROM DER, 731 FT RIGHT OF CENTERLINE, UP TO 88 FT AGL/732 FT MSL. TOWER 3957 FT FROM DER, 1289 FT RIGHT OF CENTERLINE, 127 FT AGL/771 FT MSL.**

**NOTE: RWY 10R, FENCES BEGINNING 10 FT FROM DER, 44 FT RIGHT OF CENTERLINE, UP TO 12 FT AGL/665 FT MSL. BUSH, FENCES, AND POLES BEGINNING 34 FT FROM DER, 195 FT LEFT OF CENTERLINE, UP TO 26 FT AGL/686 FT MSL. TREES BEGINNING 2202 FT FROM DER, 587 FT RIGHT OF CENTERLINE, UP TO 71 FT AGL/724 FT MSL. TOWER 4381 FT FROM DER, 1537 FT RIGHT OF CENTERLINE, 138 FT AGL/738 FT MSL.**

**NOTE: RWY 14L, TAXIING AIRCRAFT 99 FT FROM DER, 362 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/729 FT MSL. POLES BEGINNING 981 FT FROM DER, 744 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/684 FT MSL. SIGN 1291 FT FROM DER, 723 FT RIGHT OF CENTERLINE, 32 FT AGL/682 FT MSL.**

**NOTE: RWY 14R, TAXIING AIRCRAFT 1105 FT FROM DER, 766 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/736 FT MSL.**

**NOTE: RWY 22R, TAXIING AIRCRAFT 34 FT FROM DER, 429 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/736 FT MSL.**

**NOTE: RWY 27L, TAXIING AIRCRAFT 70 FT FROM DER, 407 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/740 FT MSL. POLE 5553 FT FROM DER, 1833 FT LEFT OF CENTERLINE, 143 FT AGL/805 FT MSL.**

**NOTE: RWY 27R, OBSTRUCTION LIGHT ON TANK 1509 FT FROM DER, 887 FT LEFT OF CENTERLINE, 56 FT AGL/726 FT MSL. ELEVATOR 2778 FT FROM DER, 1021 FT LEFT OF CENTERLINE, 111 FT AGL/776 FT MSL.**

**NOTE: RWY 28C, TREES BEGINNING 2373 FT FROM DER, 696 FT LEFT OF CENTERLINE, UP TO 89 FT AGL/768 FT MSL. TREES 2559 FT FROM DER, 256 FT RIGHT OF CENTERLINE, UP TO 58 FT AGL/737 FT MSL.**

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**NOTE: RWY 28L**, TERRAIN AND BUSH BEGINNING 5 FT FROM DER, 352 FT RIGHT OF CENTERLINE, UP TO 4 FT AGL/692 FT MSL. POLES BEGINNING 244 FT FROM DER, 471 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/707 FT MSL. RAILROAD BEGINNING 590 FT FROM DER, 639 FT LEFT OF CENTERLINE, UP TO 23 FT AGL/700 FT MSL. POLES AND TREES BEGINNING 1500 FT FROM DER, 721 FT LEFT OF CENTERLINE, UP TO 79 FT AGL/758 FT MSL.

**NOTE: RWY 32L**, POLE 1993 FT FROM DER, 790 FT LEFT OF CENTERLINE, 45 FT AGL/716 FT MSL.

**CONTROLLING OBSTACLES:**

**RWY 27L:** 812 FT MSL POLE 415844.00N/0875620.00W.

**RWY 27R:** 1468 FT MSL TOWER 420042.49N/0880206.93W.

**RWY 28C:** 1413 FT MSL TOWER 415926.00N/0880139.00W.

**RWY 28L:** 852 FT MSL TANK 415732.96N/0875658.25W.

**RWY 28R:** 1413 FT MSL TOWER 415926.00N/0880139.00W.

**RWY 32L:** 1413 FT MSL TOWER 415926.00N/0880139.00W.



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**REMARKS:**

1. DEPARTURE ROUTES THAT WOULD AUTHORIZE STANDARD TAKEOFF MINIMUMS WITH A 200 FT PER NM CLIMB GRADIENT AND MEET ATC FLOW REQUIREMENTS CAN NOT BE CONSTRUCTED FOR RWY 27L, 27R, 28C, 28L, 28R, AND 32L. NON-STANDARD CLIMB GRADIENTS PUBLISHED TO MITIGATE 40:1 PENETRATIONS PER ATC REQUEST.
2. ATC REQUESTS TO OPT OUT OF VCOA REQUIREMENT DUE TO TRAFFIC VOLUME AND COMPLEXITY.
3. AIRBUS 380 (80 FT AGL) USED AS WORST CASE FOR TAXIING AIRCRAFT.
4. RWY 27L CLIMB GRADIENT ROUNDED UP TO 220 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 213 FT PER NM).
5. RWY 27R CLIMB GRADIENT ROUNDED UP TO 220 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 216 FT PER NM).
6. RWY 28C CLIMB GRADIENT ROUNDED UP TO 220 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 217 FT PER NM).
7. RWY 28L CLIMB GRADIENT ROUNDED UP TO 235 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 234 FT PER NM).
8. RWY 28R CLIMB GRADIENT ROUNDED UP TO 220 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 219 FT PER NM).
9. RWY 32L CLIMB GRADIENT ROUNDED UP TO 240 FT PER NM FOR PUBLICATION (COMPUTED VALUE IS 237 FT PER NM).

**FLIGHT INSPECTED BY:**

WILLIAM SETTLEMIRE  
*Digitally signed by*  
**JACOB POWERS**  
Aug 17, 2015

7/19/2015

**REQUIRED EFFECTIVE DATE:**

ROUTINE

**DEVELOPED BY:**

PETER GUIMOND  
*Digitally signed by*  
**PETER R GUIMOND** AJV-5413  
Mar 26, 2015

03/26/2015

**APPROVED BY:**

GEORGE GONZALEZ  
*Digitally signed by*  
**JACOB POWERS** AJV-5420  
Aug 17, 2015

**COORDINATED WITH:**

ATA, ALPA, APA, AOPA, NBAA, ZAU, ORD APP CON, ORD ATCT, ARPT MGR

**CHANGES:**

1. ADDED TAKEOFF MINIMUMS AND TAKEOFF OBSTACLE NOTES FOR RWY 10R AND 28L. ADDED CONTROLLING OBSTACLE TO RWY 28L.
2. AMENDED RWY 27L TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900 TO READ STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1400 FT PRIOR TO DER.
3. AMENDED RWY 27R TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 228 FT PER NM TO 1800 TO READ STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1800.
4. AMENDED RWY 28C TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 236 FT PER NM TO 1800 TO READ STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700.
5. AMENDED RWY 28R TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 222 FT PER NM TO 1700 TO READ STANDARD WITH MINIMUM CLIMB OF 220 FT PER NM TO 1700.
6. AMENDED RWY 32L TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 240 FT PER NM TO 1800 TO READ STANDARD WITH MINIMUM CLIMB OF 240 FT PER NM TO 1700.
7. DELETED TAKEOFF OBSTACLE NOTES FOR RWY 28R. AMENDED TAKEOFF OBSTACLE NOTES FOR RWY 4L, 4R, 9R, 10L, 10C, 14L, 14R, 22R, 27L, 27R, 28C, AND 32L.
8. AMENDED CONTROLLING OBSTACLES FOR RWY 27L, 27R, AND 32L.

**REASONS:**

1. CENTRAL FPT REQUEST, RWY SCHEDULED TO OPEN 10/15/15.
2. NEW OBSTACLE STUDY. RUNWAY REDUCTION OPTION ADDED IAW CURRENT DOCUMENTATION POLICY.
- 3, 4, 5, 6. NEW OBSTACLE STUDY.
7. NEW OBSTACLE STUDY. GROUPED AND FORMATTED IAW CURRENT DOCUMENTATION POLICY.
8. NEW OBSTACLE STUDY. FORMATTED IAW CURRENT DOCUMENTATION POLICY.

