

**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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
PORTLAND, OR	PORTLAND-HILLSBORO	1 FEBRUARY 2018	7A

TAKEOFF MINIMUMS:

RWY 13L, 20, STANDARD.

RWY 2, STANDARD WITH MINIMUM CLIMB OF 215 FT PER NM TO 1900 OR 600-2 1/2 FOR CLIMB IN VISUAL CONDITIONS.

RWY 13R, 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 233 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 1800 FT PRIOR TO DER.

RWY 31L, STANDARD WITH MINIMUM CLIMB OF 242 FT PER NM TO 2700 OR 600-2 1/2 FOR CLIMB IN VISUAL CONDITIONS.

RWY 31R, STANDARD WITH MINIMUM CLIMB OF 230 FT PER NM TO 2700 OR 600-2 1/2 FOR CLIMB IN VISUAL CONDITIONS.

TEXTUAL DEPARTURE PROCEDURES:

RWY 13L, 13R: CLIMBING RIGHT TURN DIRECT UBG VOR/DME THENCE...

RWY 2, 20, 31L, 31R: CLIMBING LEFT TURN DIRECT UBG VOR/DME THENCE...

...CONTINUE CLIMB IN UBG VOR/DME HOLDING PATTERN (HOLD WEST, RIGHT TURNS, 108.00 INBOUND) TO CROSS UBG VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE.

VISUAL CLIMB OVER AIRPORT:

RWY 2, 31L, 31R: OBTAIN ATC APPROVAL FOR VCOA WHEN REQUESTING IFR CLEARANCE. CLIMB IN VISUAL CONDITIONS TO CROSS PORTLAND-HILLSBORO AIRPORT AT OR ABOVE 700 THEN PROCEED DIRECT UBG VOR/DME...

...CONTINUE CLIMB IN UBG VOR/DME HOLDING PATTERN (HOLD WEST, RIGHT TURNS, 108.00 INBOUND) TO CROSS UBG VOR/DME AT OR ABOVE MEA FOR DIRECTION OF FLIGHT BEFORE PROCEEDING ON COURSE.

TAKEOFF OBSTACLE NOTES:

NOTE: RWY 2, FENCE 35 FT FROM DER, 498 FT LEFT OF CENTERLINE, 4 FT AGL/212 FT MSL.
FENCE 70 FT FROM DER, 378 FT RIGHT OF CENTERLINE, 8 FT AGL/214 FT MSL.
FENCE 163 FT FROM DER, 333 FT LEFT OF CENTERLINE, 11 FT AGL/219 FT MSL.
VEHICLES ON ROAD 246 FT FROM DER, 252 FT RIGHT OF CENTERLINE, 218 FT MSL.
VEHICLES ON ROAD 452 FT FROM DER, 1 FT RIGHT OF CENTERLINE, 220 FT MSL.
TREE 1793 FT FROM DER, 608 FT RIGHT OF CENTERLINE, 270 FT MSL.
TANK AND BUILDING BEGINNING 2423 FT FROM DER, 895 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/274 FT MSL.
BUILDING 2668 FT FROM DER, 798 FT LEFT OF CENTERLINE, 67 FT AGL/279 FT MSL.

NOTE: RWY 13L, NAVAID 10 FT FROM DER, 20 FT RIGHT OF CENTERLINE, 1 FT AGL/207 FT MSL.
SIGN 60 FT FROM DER, 202 FT LEFT OF CENTERLINE, 2 FT AGL/208 FT MSL.
TREES BEGINNING 2518 FT FROM DER, 270 FT LEFT OF CENTERLINE, UP TO 302 FT MSL.
TREE 2741 FT FROM DER, 523 FT LEFT OF CENTERLINE, 323 FT MSL.
TREES BEGINNING 2776 FT FROM DER, 264 FT LEFT OF CENTERLINE, UP TO 329 FT MSL.
TREES BEGINNING 3303 FT FROM DER, 259 FT LEFT OF CENTERLINE, UP TO 330 FT MSL.
TREE 3385 FT FROM DER, 360 FT LEFT OF CENTERLINE, 337 FT MSL.
TOWER 4794 FT FROM DER, 781 FT LEFT OF CENTERLINE, 160 FT AGL/350 FT MSL.

NOTE: RWY 13R, POLE 38 FT FROM DER, 150 FT LEFT OF CENTERLINE, 4 FT AGL/200 FT MSL.
SIGN 72 FT FROM DER, 299 FT RIGHT OF CENTERLINE, 5 FT AGL/201 FT MSL.
TREE 1030 FT FROM DER, 754 FT RIGHT OF CENTERLINE, 260 FT MSL.
TREE 1103 FT FROM DER, 613 FT LEFT OF CENTERLINE, 234 FT MSL.
TREES BEGINNING 1835 FT FROM DER, 172 FT LEFT OF CENTERLINE, UP TO 307 FT MSL.
TREE 2458 FT FROM DER, 434 FT RIGHT OF CENTERLINE, 263 FT MSL.
TREE 2617 FT FROM DER, 230 FT RIGHT OF CENTERLINE, 274 FT MSL.
TREES BEGINNING 2666 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 290 FT MSL.
TREES BEGINNING 3343 FT FROM DER, 146 FT RIGHT OF CENTERLINE, UP TO 316 FT MSL.
TREE 3388 FT FROM DER, 124 FT RIGHT OF CENTERLINE, 320 FT MSL.
TREE 3417 FT FROM DER, 154 FT RIGHT OF CENTERLINE, 321 FT MSL.
TREE 3490 FT FROM DER, 578 FT RIGHT OF CENTERLINE, 322 FT MSL.
TREES BEGINNING 3529 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 326 FT MSL.
TREE 3625 FT FROM DER, 218 FT LEFT OF CENTERLINE, 308 FT MSL.
TREES BEGINNING 3736 FT FROM DER, 12 FT LEFT OF CENTERLINE, UP TO 328 FT MSL.
TREES BEGINNING 3844 FT FROM DER, 8 FT RIGHT OF CENTERLINE, UP TO 334 FT MSL.
TREES BEGINNING 4454 FT FROM DER, 506 FT RIGHT OF CENTERLINE, UP TO 342 FT MSL.
TREE 5186 FT FROM DER, 639 FT RIGHT OF CENTERLINE, 343 FT MSL.
TREE 5264 FT FROM DER, 704 FT RIGHT OF CENTERLINE, 348 FT MSL.

QUALITY
3
CHECKED

**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.

CITY, STATE	AIRPORT	EFFECTIVE DATE	AMDT NO
PORTLAND, OR	PORTLAND-HILLSBORO	1 FEBRUARY 2018	7A

NOTE: RWY 20, POLES AND FENCE BEGINNING 14 FT FROM DER, 261 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/229 FT MSL.
POLE, TREE, AND BUILDINGS BEGINNING 215 FT FROM DER, 418 FT LEFT OF CENTERLINE, UP TO 34 FT AGL/236 FT MSL.
TREES BEGINNING 767 FT FROM DER, 611 FT LEFT OF CENTERLINE, UP TO 290 FT MSL.
TREES BEGINNING 772 FT FROM DER, 417 FT RIGHT OF CENTERLINE, UP TO 52 FT AGL/250 FT MSL.
TREES AND POLE BEGINNING 823 FT FROM DER, 411 FT RIGHT OF CENTERLINE, UP TO 53 FT AGL/253 FT MSL.
TREES AND POLE BEGINNING 1139 FT FROM DER, 454 FT LEFT OF CENTERLINE, UP TO 294 FT MSL.
TREE 2430 FT FROM DER, 671 FT RIGHT OF CENTERLINE, 280 FT MSL.
TREES BEGINNING 2514 FT FROM DER, 31 FT LEFT OF CENTERLINE, UP TO 311 FT MSL.
TREE 4822 FT FROM DER, 337 FT LEFT OF CENTERLINE, 327 FT MSL.

NOTE: RWY 31L, TREES BEGINNING 1663 FT FROM DER, 625 FT RIGHT OF CENTERLINE, UP TO 271 FT MSL.

NOTE: RWY 31R, NAVAID 10 FT FROM DER, 20 FT LEFT OF CENTERLINE, 4 FT AGL/201 FT MSL.
SIGN 20 FT FROM DER, 162 FT RIGHT OF CENTERLINE, 5 FT AGL/202 FT MSL.
BUSH 116 FT FROM DER, 193 FT LEFT OF CENTERLINE, 205 FT MSL.
TREES, POLE, AND TOWER BEGINNING 1259 FT FROM DER, 138 FT RIGHT OF CENTERLINE, UP TO 272 FT MSL.

CONTROLLING OBSTACLES:

RWY 2: 1404 FT MSL AAO 453958.33N/1225558.82W

RWY 13R: 351 FT MSL TREE 453120.61N/1225602.57W

RWY 31L, 31R: 379 FT MSL TREE 453352.72N/1225810.28W (CG); 2020 FT MSL AAO 453219.10N/1231215.50W (CTA)

VISUAL CLIMB AREA OBSTACLE: 410 FT MSL TREE 453439.45N/1225536.60W

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: 2053 FT MSL TOWER 453121.42N/1224511.35W

REMARKS:

RETAINED ROUTE TO UBG VOR/DME AND CLIMB IN HOLD TO ENROUTE ALTITUDE DUE TO ATC REQUIREMENT DUE TO PROXIMITY TO KPDX.

FLIGHT INSPECTED BY:

CHARLES D. CUNNINGHAM
(FLIGHT INSPECTION NOT REQUIRED)

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2017

OFFICE SYMBOL:
FICO

DATE:
02/03/2015

DEVELOPED BY:

LUCAS MCCLOUD

Digitally signed by
LUCAS MCCLOUD
Aug 08, 2017

OFFICE SYMBOL:
AJV-5422

DATE:
07/31/2017

APPROVED BY:

JULIE MORGAN

Digitally signed by
ROBERT G HAMILTON
Aug 21, 2017

OFFICE SYMBOL:
AJV-5420

DATE:

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OTHER:

ARPT MGR, HIO ATCT, ZSE, PDX APP CON, WFPT

CHANGES - REASONS:

1. CHANGED RWY 31L TAKEOFF MINIMUMS CG FROM 240 TO 242 (SAME CONTROLLING OBS) - NEW TARGETS-CALCULATED REQ'D CG.
2. TAKEOFF OBSTACLE NOTES: OBSTACLES REGROUPED VIA DEPARTURE OBSTACLE GROUPER - PER TARGETS BUILD AND CURRENT OBS DB.
3. OBSTACLE MANDATING ODP ROUTE DEVELOPMENT UPDATED FROM 2049 FT TO 2053 FT MSL TOWER (SAME COORDS) - PER OBS DB.
4. VCOA OBS REMOVED FROM RWYS 2, 31L/31R AND RESTATED AS 'VISUAL CLIMB AREA OBSTACLE: 410 FT MSL TREE 453439.45N/1225536.60W'

THIS IS A MINOR AMENDMENT AND DOES NOT QUALIFY AS A PERIODIC REVIEW.

FLIGHT INSPECTION REVIEW NOT REQUIRED - PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-333) MEMO, MAY 30, 2017.

QUALITY
3
CHECKED