## 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 Ceillings are in feet above airport elevation. Distances ere in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated

 City, State
 Airport
 Effective Date
 Amdt. No.

 SEATTLE, WA
 BOEING FIELD/KING COUNTY INTL
 31 MAY 2012
 7

### **TAKEOFF MINIMUMS:**

RWY 13L STANDARD WITH MINIMUM CLIMB OF 663 FT PER NM TO 500 OR 500-2 3/4 WITH MINIMUM CLIMB OF 250 FT PER NM TO 800, OR 1100-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 13R STANDARD WITH MINIMUM CLIMB OF 504 FT PER NM TO 900 OR 500-1 3/4 WITH MINIMUM CLIMB OF 386 FT PER NM TO 900, OR 1100-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 31L STANDARD WITH MINIMUM CLIMB OF 480 FT PER NM TO 500 OR 300-1 1/4 WITH MINIMUM CLIMB OF 265 FT PER NM TO 900, OR 1100-3 FOR CLIMB IN VISUAL CONDITIONS.

RWY 31R STANDARD WITH MINIMUM CLIMB OF 371 FT PER NM TO 500 OR 400-2 WITH MINIMUM CLIMB OF 240 FT PER NM TO 800, OR 1100-3 FOR CLIMB IN VISUAL CONDITIONS.

#### **TEXTUAL DEPARTURE PROCEDURES:**

RWY 13L: CLIMBING RIGHT TURN THENCE...

RWY 13R: CLIMBING RIGHT TURN THENCE...

RWY 31L: CLIMBING LEFT TURN THENCE...

RWY 31R: CLIMBING LEFT TURN THENCE...

.....ALL AIRCRAFT CLIMB DIRECT TO SEA VORTAC, CONTINUE CLIMB IN SEA VORTAC HOLDING PATTERN (HOLD E, LEFT TURNS, 290.00 INBOUND) TO CROSS SEA VORTAC AT OR ABOVE 3000. FOR CLIMB IN VISUAL CONDITIONS CROSS BOEING FIELD/ KING COUNTY INTL AIRPORT AT OR ABOVE 1000, THEN CLIMB TO 3000 VIA SEA R-344 TO SEA VORTAC, CONTINUE CLIMB IN SEA VORTAC HOLDING PATTERN (HOLD E, LEFT TURNS, 290.00 INBOUND) TO CROSS SEA VORTAC AT OR ABOVE 3000. WHEN EXECUTING VCOA, NOTIFY ATC PRIOR TO DEPARTURE.

#### **TAKEOFF OBSTACLE NOTES:**

NOTE: RWY13L, HANGAR 402 FT FROM DER, 411 FT LEFT OF CENTERLINE 16 FT AGL/ 32 FT MSL. BUILDING 621 FT FROM DER, 526 FT LEFT OF CENTERLINE 16 FT AGL/ 51 FT MSL. TREES BEGINNING 2475 FT FROM DER, 353 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/ 362 FT MSL.

NOTE: RWY 13R, TRAIN ON TRACKS 197 FT FROM DER, 379 FT LEFT OF CENTERLINE, 23 FT AGL/ 48 FT MSL. OBSTRUCTION LIGHT ON DME 552 FT FROM DER, 304 FT RIGHT OF CENTERLINE, 16 FT AGL/ 38 FT MSL. AIRCRAFT 521 FT FROM DER, 576 FT RIGHT OF CENTERLINE, UP TO 64 FT AGL/ 96 FT MSL. TREES BEGINNING 602 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FT AGL/ 411 FT MSL. VEHICLES ON ROAD, 621 FT FROM DER, 657 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/ 64 FT MSL. OBSTRUCTION LIGHT ON FLOODLIGHT 837 FT FROM DER, 607 FT RIGHT OF CENTERLINE, 16 FT AGL/ 61 FT MSL. OBSTRUCTION LIGHT ON POLES, 1277 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 16 FT AGL/ 55 FT MSL. POLES 1333 FT FROM DER, 251 FT LEFT OF CENTERLINE, UP TO 16 FT AGL/ 64 FT MSL. POWERLINE, 1338 FT FROM DER, 294 FT LEFT OF CENTERLINE, 16 FT AGL/ 82 FT MSL. POWER POLE, 4014 FT FROM DER, 910 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/ 134 FT MSL.

NOTE: RWY 31L, AIRPLANE ON TAXIWAY 28 FT FROM DER, 327 FT LEFT OF CENTERLINE, UP TO 64 FT AGL/ 96 FT MSL. OBSTRUCTION LIGHT ON BLAST FENCE, 249 FT FROM DER, 452 FT LEFT OF CENTERLINE, 16 FT AGL/ 26 FT MSL. OBSTRUCTION LIGHT ON BUILDING 1217 FT FROM DER, 626 FT LEFT OF CENTERLINE, UP TO 16 FT AGL/ 101 FT MSL. VENT ON BUILDING 1244 FT FROM DER, 446 FT RIGHT OF CENTERLINE, 16 FT AGL/ 59 FT MSL. TREES BEGINNING 1456 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FT AGL/ 313 FT MSL. POWERLINE 2507 FT FROM DER, 439 FT RIGHT OF CENTERLINE, 100 FT AGL/ 132 FT MSL. LIGHT STANDARD 2980 FT FROM DER, 876 FT RIGHT OF CENTERLINE, 16 FT AGL/ 99 FT MSL. FLOODLIGHTS, 3499 FT FROM DER, 1023 FT RIGHT OF CENTERLINE, UP TO 164 FT AGL/ 199 FT MSL. FLAGPOLE 3763 FT FROM DER, 1278 FT RIGHT OF CENTERLINE, UP TO 131 FT AGL/ 196 FT MSL. STACK, 3792 FT FROM DER, 543 FT RIGHT OF CENTERLINE, UP TO 16 FT AGL/ 120 FT MSL.

NOTE: RWY 31R, AIRPLANE ON TAXIWAY 5 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 64 FT AGL/ 96 FT MSL. WEATHER ROD ON OBSTRUCTION LIGHTS, 214 FT FROM DER, 99 FT LEFT OF CENTERLINE, UP TO 16 FT AGL/ 51 FT MSL. OBSTRUCTION LIGHT ON GLIDESLOPE, 527 FT FROM DER, 101 FT LEFT OF CENTERLINE, UP TO 16 FT AGL/ 44 FT MSL. HANGARS 854 FT FROM DER, 405 FT RIGHT OF CENTERLINE, UP TO 16 FT AGL/ 57 FT MSL. ANTENNA ON BUILDING 1425 FT FROM DER, 516 FT RIGHT OF CENTERLINE, 32 FT AGL/ 81 FT MSL. OBSTRUCTION LIGHT ON BUILDING, 2495 FT FROM DER, 1002 FT LEFT OF CENTERLINE, UP TO 16 FT AGL/ 101 FT MSL. TREES BEGINNING 2734 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FT AGL/ 362 FT MSL. VEHICLES ON ROAD BEGINNING 469 FT FROM DER, 252 FT RIGHT OF CENTERLINE, 15 FT AGL/ 208 FT MSL. TREES BEGINNING 1691 FT FROM DER, 229 FT RIGHT OF CENTERLINE, UP TO 98 FT AGL/ 282 FT MSL. TREE 3238 FT FROM DER, 330 FT LEFT OF CENTERLINE, 98 FT AGL/ 288 FT MSL. FLAGPOLE 5040 FT FROM DER, 902 FT RIGHT OF CENTERLINE, 131 FT AGL/ 196 FT MSL. TRANSMISSION TOWER 1.5 NM FROM DER, 2390 FT RIGHT OF CENTERLINE, 229 FT AGL/ 350 FT MSL.

#### **CONTROLLING OBSTACLES:**

RWY 13L: 330 FT MSL TREE 473120.03N/1221716.56W, 493 FT MSL TREE 473008.69N/1221607.63W, 479 FT MSL TREE 472957.80N/1221559.24W, 480 FT MSL TREE 472928.68N/1221819.43W.

RWY 13R: 493 FT MSL TREE 473008.69N/1221607.63W, 479 FT MSL TREE 472957.80N/1221559.24W, 460 FT MSL TREE 472858.75N/1221750.96W, 443 FT MSL TOWER 473014.20N/1221903.50W.

RWY 31L: 264 FT MSL TREE 473307.25N/1221852.21W, 313 FT MSL TREE 473332.72N/1221859.82W, 280 FT MSL TREE 473326.84N/1221910.43W, 642 FT AAO 473408.02N/1222256.78W.

RWY 31R: 264 FT MSL TREE 473307.25N/1221852.21W, 362 FT MSL TREE 473342.30N/1221854.04W, 362 FT MSL TREE 473348.20N/1221859.79W, 642 FT AAO 473408.02N/122256.78W.

VCOA: 642 FT MSL TOWER 473013.00N/1222012.00W, 696 FT MSL CONTROL TOWER 472720.55N/1221805.18W.



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HOLDING: RWY 13L/R, RWY 31L/R, VCOA 1368 FT AAO 471854.00N/1215815.00W.

OBSTACLE MANDATING ODP ROUTE DEVELOPMENT: RWY 13L, 13R, 31L, 31R 13,934 FT MSL AAO 465157.00N/1214621.00W.

**REMARKS:** 

