

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|--------------|--------------|---------------------|-------------------|------------------|------------------|
| NUBLE | THREE | NUBLE3.NUBLE | TWO | 18 SEP 14 | 10 DEC 15 |

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 11: CLIMB HEADING 110.30 TO INTERCEPT COURSE 068.00 TO AHRON, THEN ON TRACK 121.68 TO PEAACK, THEN ON TRACK 200.90 TO WHYOO, THEN ON TRACK 244.27 TO CROSS ORCHD AT OR ABOVE 10000, THEN ON DEPICTED ROUTE TO NUBLE, THENCE...

TAKEOFF RWY 29: CLIMB HEADING 288.32 TO INTERCEPT 228.08 TO GORHM, THEN ON DEPICTED ROUTE TO NUBLE, THENCE...

...MAINTAIN 3000 OR AS ASSIGNED BY ATC (5000 WHEN TOWER CLOSED, CONTACT BOSTON CENTER). EXPECT CLEARANCE TO FILED ALTITUDE FIVE (5) MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

| Transition Name | Transition Computer Codes | From FIX/NAVAID | To FIX/NAVAID | Course | Distance | MEA | MOCA | Crossing Altitudes/Fixes |
|-----------------|---------------------------|--------------------|---------------|--------------|----------|-------|------|--------------------------|
| BARNES | NUBLE3.BAF | NUBLE | RBELA | TRACK 222.78 | 22.59 | 7000 | 1700 | |
| | | RBELA | COTEE | TRACK 214.76 | 21.52 | 11000 | 1700 | |
| | | COTEE | BAF VORTAC | TRACK 269.84 | 73.84 | 17000 | 3100 | |
| CALVERTON | NUBLE3.CCC | NUBLE | RBELA | TRACK 222.78 | 22.59 | 7000 | 1700 | |
| | | RBELA | JJIMY | TRACK 214.79 | 26.44 | 11000 | 1700 | |
| | | JJIMY | ORW VOR/DME | TRACK 231.42 | 63.96 | 17000 | 2500 | |
| | | ORW VOR/DME | CCC VOR/DME | TRACK 239.18 | 52.17 | 17000 | 2600 | |
| JJIMY | NUBLE3.JJIMY | NUBLE | RBELA | TRACK 222.78 | 22.59 | 7000 | 1700 | |
| | | RBELA | JJIMY | TRACK 214.79 | 26.44 | 11000 | 1700 | |
| NELIE | NUBLE3.NELIE | NUBLE | RBELA | TRACK 222.78 | 22.59 | 7000 | 1700 | |
| | | RBELA | JJIMY | TRACK 214.79 | 26.44 | 11000 | 1700 | |
| | | JJIMY | NELIE | TRACK 262.81 | 74.09 | 17000 | 2600 | |



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PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: FOR TURBOJETS ONLY.

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: RNAV 1.

NOTE: RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

TAKEOFF MINIMUMS:

RWY 11, STANDARD WITH A MINIMUM CLIMB OF 500 FT PER NM TO 576.

RWY 29, STANDARD.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 11, TREE 481 FT FROM DER, 563 FT RIGHT OF CENTERLINE, 32 FT AGL/69 FT MSL. TREE 650 FT FROM DER, 551 FT LEFT OF CENTERLINE, 25 FT AGL/67 FT MSL. TREES BEGINNING 5943 FT FROM DER, 1152 FT LEFT OF CENTERLINE, UP TO 189 FT AGL/230 FT MSL. TREES BEGINNING 1 NM FROM DER, 2025 FT LEFT OF CENTERLINE, UP TO 186 FT AGL/228 FT MSL. TREES BEGINNING 1 NM FROM DER, 1660 FT LEFT OF CENTERLINE, UP TO 209 FT AGL/251 FT MSL.

NOTE: RWY 29, TREES BEGINNING 1301 FT FROM DER, 789 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/122 FT MSL. TREES BEGINNING 2185 FT FROM DER, 830 FT LEFT OF CENTERLINE, UP TO 74 FT AGL/149 FT MSL. TREES BEGINNING 2742 FT FROM DER, 811 FT RIGHT OF CENTERLINE, UP TO 83 FT AGL/180 FT MSL. TREES BEGINNING 3103 FT FROM DER, 1245 FT LEFT OF CENTERLINE, UP TO 114 FT AGL/189 FT MSL. TREES BEGINNING 4218 FT FROM DER, 1382 FT LEFT OF CENTERLINE, UP TO 129 FT AGL/204 FT MSL.

CONTROLLING OBSTACLES:

RWY 11: 251 FT MSL TREE 433850.11N/0701632.59W.

LOST COMMUNICATIONS PROCEDURES:

IF RADIO CONTACT NOT ESTABLISHED WITHIN 2 MINUTES AFTER DEPARTURE, PROCEED ON COURSE VIA NUBLE RNAV ROUTE TO REQUESTED ALTITUDE OR 10000 WHICHEVER IS LOWER.

ADDITIONAL FLIGHT DATA:

REFERENCE MAGNETIC VARIATION: KPWM 15W EPOCH YEAR 2020. DME/DME/IRU ASSESSMENT: SAT (RNP 2.0). RECOMMENDED NAVAID: ACK VOR/DME (15W).

CHART: TOP ALTITUDE: ASSIGNED BY ATC.

AIRPORTS SERVED:

PORTLAND INTL JETPORT

PORTLAND, ME

COMMUNICATIONS:

ATIS, CLEARANCE DELIVERY, GROUND CONTROL, PWM ATCT, PWM DEP CON, ZBW.



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FIXES AND/OR NAVAIDS:

FOSCO.



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REMARKS:

ENVIRONMENTAL COMPLETED IAW FAAO 1050.1E, WITH INM ON FILE.

MAGNETIC VARIATION CHANGE: KPWM 15W EPOCH YEAR 2020.

RNAV PRO EVALUATIONS REQUIRE A DME/DME/IRU ALTITUDE OF 4486 MSL AT PEAKK AND 5195 AT GORHM DUE TO LIMITED NAVAIDS IN THE AREA. ATC REQUIRES AN INITIAL CLIMB TO BE PUBLISHED NO HIGHER THAN 3000 MSL FOR AIRSPACE AND TRAFFIC SEPARATION. ONCE AIRBORNE, AIRCRAFT ARE NORMALLY ASSIGNED HIGHER ALTITUDES. ATC WILL PROVIDE RADAR MONITORING AND NAVIGATIONAL ASSISTANCE AS NEEDED IF TRAFFIC DOES NOT PERMIT AN IMMEDIATE CLIMB ABOVE 3000 MSL.

CHANGES:

1. ALL MAG COURSES CHANGED BY 2 DEGREES.
2. UPDATED TAKEOFF OBSTACLES NOTES FOR BOTH RUNWAYS.
3. UPDATED CONTROLLING OBSTACLES.
4. UNDER ADDITIONAL FLIGHT DATA, ADDED CHART TOP ALTITUDE STATEMENT.

REASONS:

1. AIRPORT MAG VAR (KPWM) CHANGED FROM 17W TO 15W.
- 2-3. UPDATED AIRNAV OBSTACLE DATABASE.
4. PER AFS-400 MEMO "TOP ALTITUDE" INTERIM GUIDANCE, DATED SEPTEMBER 14, 2014.



DEPARTURE (DATA RECORD)

| DP Name | | Number | | DP Computer Code | | | Superseded Number | | Dated | Effective Date |
|-------------|------------------------|--------|-------|------------------|--------|-----------|-------------------|-------|-----------|----------------------------------|
| NUBLE | | THREE | | NUBLE3.NUBLE | | | TWO | | 18 SEP 14 | 10 DEC 15 |
| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS | |
| RW11 (AER) | 433845.10N/0701933.87W | N | - | - | - | - | | | | |
| | 433829.86N/0701548.57W | - | - | VI | 095.30 | 2.74 | | | | CG 500 FT/NM TO 576 |
| AHRON | 434024.11N/0701220.12W | Y | FB | CF | 053.00 | 3.16 | | | | RECOMMENDED NAVAID: ACK VOR/DME. |
| PEAAK | 433902.02N/0700603.67W | Y | FB | TF | 106.68 | 4.76 | | | | |
| WHYOO | 433425.08N/0700643.02W | Y | FB | TF | 185.90 | 4.64 | | | | |
| ORCHD | 432515.59N/0702116.99W | Y | FB | TF | 229.27 | 14.01 | AT/ABOVE 10000 | | | |
| FOSCO | 431615.56N/0703527.32W | Y | FB | TF | 229.05 | 13.71 | | | | |
| NUBLE | 430958.36N/0704259.47W | Y | FB | TF | 221.28 | 8.36 | | | | |
| | | | | | | | | | | |
| RW29 (AER) | 433838.52N/0701756.37W | N | - | - | - | - | | | | |
| | 433915.91N/0702715.08W | - | - | VI | 273.32 | 6.79 | | | | |
| GORHM | 433131.56N/0703411.86W | Y | FB | CF | 213.08 | 9.24 | | | | RECOMMENDED NAVAID: ACK VOR/DME. |
| NUBLE | 430958.36N/0704259.47W | Y | FB | TF | 196.63 | 22.48 | | | | |
| | | | | | | | | | | |
| NUBLE | 430958.36N/0704259.47W | Y | - | IF | - | - | | | | NUBLE3.BAF |
| RBELA | 424957.99N/0705717.96W | Y | FB | TF | 207.78 | 22.59 | | | | |
| COTEE | 422942.23N/0710707.92W | Y | FB | TF | 199.76 | 21.52 | | | | |
| BAF VORTAC | 420943.05N/0724258.32W | Y | FB | TF | 254.84 | 73.84 | | | | |
| | | | | | | | | | | |
| NUBLE | 430958.36N/0704259.47W | Y | - | IF | - | - | | | | NUBLE3.CCC |
| RBELA | 424957.99N/0705717.96W | Y | FB | TF | 207.78 | 22.59 | | | | |
| JJIMY | 422504.09N/0710923.06W | Y | FB | TF | 199.79 | 26.44 | | | | |
| ORW VOR/DME | 413323.05N/0715957.67W | Y | FB | TF | 216.42 | 63.96 | | | | |
| CCC VOR/DME | 405546.62N/0724755.89W | Y | FB | TF | 224.18 | 52.17 | | | | |
| | | | | | | | | | | |
| NUBLE | 430958.36N/0704259.47W | Y | - | IF | - - | | | | | NUBLE3.JJIMY |
| RBELA | 424957.99N/0705717.96W | Y | FB | TF | 207.78 | 22.59 | | | | |
| JJIMY | 422504.09N/0710923.06W | Y | FB | TF | 199.79 | 26.44 | | | | |



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| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS |
|------------|------------------------|---|-------|-------------|--------|--------------|----------|-------|--------------|
| NUBLE | 430958.36N/0704259.47W | Y | - | IF | - | - | | | NUBLE3.NELIE |
| RBELA | 424957.99N/0705717.96W | Y | FB | TF | 207.78 | 22.59 | | | |
| JJIMY | 422504.09N/0710923.06W | Y | FB | TF | 199.79 | 26.44 | | | |
| NELIE | 415627.64N/0724118.88W | Y | FB | TF | 247.81 | 74.09 | | | |

QUALITY
3
CHECKED