

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
GRAPHIC DEPARTURE PROCEDURES (DP)**

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>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
OFARO	TWO	OFARO2.OFARO	ONE	09/18/2014	11/10/2016

<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DP ROUTE DESCRIPTION:**

**RWY 12:** CLIMB HEADING 120.02 TO 1750, THEN DIRECT JEXIT, THENCE...

**RWY 30:** CLIMB HEADING 300.03 TO 2700, THEN LEFT TURN DIRECT JEXIT, THENCE...

...THEN ON TRACK 124.04 TO OFARO, THEN ON TRANSITION. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

**TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):**

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
EPHRATA	ORAFO2.EPH	OFARO	KRIST	062.29	9.10	5200		
			EPH VORTAC	062.27	16.14	5200		
QUINT	OFARO2.QUINT	OFARO	QUINT	116.70	6.51	4300		
ZAXUL	OFARO2.ZAXUL	OFARO	ZAXUL	170.69	7.16	4400		

**PROCEDURAL DATA NOTES:**

- NOTE:** RNAV 1
- NOTE:** GPS REQUIRED.
- NOTE:** DEPARTURES MAY BE RESTRICTED TO CROSS KRIST AT OR ABOVE 7000.

**TAKEOFF MINIMUMS:**

- RWY 12:** STANDARD WITH MINIMUM CLIMB OF 550 FT PER NM TO 3200.
- RWY 30:** STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 4000.

**TAKEOFF OBSTACLES NOTES:**

**NOTE: RWY 12,** TERRAIN 25 FT FROM DER, 194 FT LEFT OF CENTERLINE, 1234 FT MSL. SIGN 68 FT FROM DER, 474 FT LEFT OF CENTERLINE, 1237 FT MSL. BUILDING BEGINNING 133 FT FROM DER, 399 FT RIGHT OF CENTERLINE, UP TO 19 FT AGL/1237 FT MSL. TERRAIN 171 FT FROM DER, 340 FT LEFT OF CENTERLINE, 1241 FT MSL. TERRAIN 317 FT FROM DER, 486 FT LEFT OF CENTERLINE, 1247 FT MSL. AGRICULTURAL EQUIPMENT 435 FT FROM DER, 575 FT LEFT OF CENTERLINE, 37 FT AGL/1260 FT MSL. TREE 1190 FT FROM DER, 815 FT LEFT OF CENTERLINE, 1301 FT MSL.

**NOTE: RWY 30,** TERRAIN 66 FT FROM DER, 411 FT RIGHT OF CENTERLINE, 1219 FT MSL. VEHICLES ON ROAD, 201 FT FROM DER, 535 FT LEFT OF CENTERLINE, 1224 FT MSL. TRANSMISSION TOWER 304 FT FROM DER, 274 FT LEFT OF CENTERLINE, 42 FT AGL/1253 FT MSL. BUILDING 1185 FT FROM DER, 480 FT RIGHT OF CENTERLINE, 40 FT AGL/1247 FT MSL. TERRAIN BEGINNING 1.4 NM FROM DER, 2496 FT RIGHT OF CENTERLINE, UP TO 1518 FT MSL. TERRAIN 1.4 NM FROM DER, 2729 FT RIGHT OF CENTERLINE, 1546 FT MSL. POLE 1.4 NM FROM DER, 2257 FT RIGHT OF CENTERLINE, 43 FT AGL/1574 FT MSL. TERRAIN BEGINNING 1.4 NM FROM DER, 2490 FT RIGHT OF CENTERLINE, UP TO 1586 FT MSL. TERRAIN BEGINNING 1.5 NM FROM DER, 410 FT RIGHT OF CENTERLINE, UP TO 1606 FT MSL. TERRAIN BEGINNING 1.5 NM FROM DER, 136 FT RIGHT OF CENTERLINE, UP TO 1651 FT MSL. TERRAIN 1.5 NM FROM DER, 10 FT LEFT OF CENTERLINE, 1449 FT



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MSL. TERRAIN BEGINNING 1.5 NM FROM DER, 402 FT RIGHT OF CENTERLINE, UP TO 1670 FT MSL. TRANSMISSION TOWER, POLE, AND TERRAIN BEGINNING 1.5 NM FROM DER, 820 FT RIGHT OF CENTERLINE, UP TO 65 FT AGL/1666 FT MSL. TERRAIN BEGINNING 1.5 NM FROM DER, 1252 FT RIGHT OF CENTERLINE, UP TO 1672 FT MSL. TERRAIN BEGINNING 1.5 NM FROM DER, 521 FT RIGHT OF CENTERLINE, UP TO 1682 FT MSL. TERRAIN, TRANSMISSION TOWER, AND POLE BEGINNING 1.6 NM FROM DER, 80 FT RIGHT OF CENTERLINE, UP TO 1690 FT MSL. TRANSMISSION TOWER, POLE, AND TERRAIN BEGINNING 1.8 NM FROM DER, 186 FT LEFT OF CENTERLINE, UP TO 65 FT AGL/1590 FT MSL. TERRAIN 1.9 NM FROM DER, 1516 FT RIGHT OF CENTERLINE, 1565 FT MSL.

**CONTROLLING OBSTACLES:**

**RWY 12:** 2679 FT MSL AAO 472050.55N/1200832.20W.  
**RWY 30:** 4799 FT MSL AAO 471953.03N/1202329.56W.

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**

REFERENCE MARVAR: KEAT 15E EPOCH YEAR: 2015.  
DME/DME ASSESSMENT: NOT CONDUCTED.  
**CHART TOP ALTITUDE:** ASSIGNED BY ATC.  
**CHART SPEED ICON:** MAXIMUM SPEED 250 KIAS AT JEXIT.

**AIRPORTS SERVED:**

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
PANGBORN MEMORIAL	WENATCHEE	WA

**COMMUNICATIONS:**

ASOS, UNICOM, SEATTLE CENTER

**FIXES AND/OR NAVAIDS:**

EAT VOR/DME.



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**REMARKS:**

1. RWY 12 CLIMB GRADIENT ROUNDED UP TO 550 FT PER NM FOR PUBLICATION (COMPUTED VALUE 545 FT PER NM).
2. RWY 30 CLIMB GRADIENT ROUNDED UP TO 500 FT PER NM FOR PUBLICATION TO CONSTRUCT AND OIS THAT WOULD AVOID HIGH TERRAIN WEST AND NORTHWEST OF THE AIRPORT (COMPUTED VALUE 441 FT PER NM).

**FLIGHT INSPECTED BY:**

**OFFICE SYMBOL:**

**DATE:**

PENDING

**COORDINATED WITH:**

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

**OTHER:**

ZSE, AMGR

**CHANGES - REASONS:**

1. ADDED 4 DEGREES TO ALL MAGNETIC HEADINGS - AIRPORT MAGVAR UPDATED FROM 19E TO 15E.
2. AMENDED RWY 30 VA LEG TERMINATION ALTITUDE FROM 4500 TO 2700 - NEW OBSTACLE STUDY. AVOID HIGH TERRAIN TO NORTHWEST OF AIRPORT.
3. AMENDED RWY 12 TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1750 TO READ STANDARD WITH MINIMUM CLIMB OF 550 FT PER NM TO 3200 - NEW OBSTACLE STUDY.
4. AMENDED RWY 30 TAKEOFF MINIMUMS FROM STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 4500 TO READ STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 4000 - NEW OBSTACLE STUDY.
5. AMENDED RWY 12 AND RWY 30 TAKEOFF OBSTACLE NOTES - GROUPED AND FORMATTED IN ACCORDANCE WITH CURRENT POLICY.
6. ADDED TOP ALTITUDE ASSIGNED BY ATC - ATC REQUEST.
7. AMENDED OFARO TO QUINT MEA FROM 4600 TO 4300 - NEW OBSTACLE STUDY USING RNP 1.0 OIS CONSTRUCTION (SEGMENT IS WITHIN 30 MILES OF AIRPORT).
8. AMENDED OFARO TO ZAXUL MEA FROM 5000 TO 4400 - NEW OBSTACLE STUDY USING RNP 1.0 OIS CONSTRUCTION (SEGMENT IS WITHIN 30 MILES OF AIRPORT).
9. ADDED 250 KIAS MAX SPEED ICON AT JEXIT - REDUCE SIZE OF RWY 30 OBSTACLE IDENTIFICATION SURFACE TO AVOID HIGH TERRAIN.



**FEDERAL AVIATION ADMINISTRATION  
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DEPARTURE (DATA RECORD)**

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>				
OFARO	TWO	OFARO2.OFARO	ONE	09/18/2014	11/10/2016				
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
RW12 (AER)	472420.69N/1201302.18W	N	-	-	-	-			
1750 MSL		-	-	VA	135.02	-			CG 550 FT/NM TO 3200
JEXIT	472041.74N/1200609.15W	Y	FB	DF	-	-		AT/BELOW 250K	
OFARO	471710.15N/1200139.33W	Y	FB	TF	139.04	4.67			
RW30 (AER)	472331.82N/1201150.26W	N	-	-	-	-			CG 540 FT/NM TO 5100
2700 MSL		-	-	VA	315.03	-			
JEXIT	472041.74N/1200609.15W	Y	FB	DF	-	-		AT/BELOW 250K	
OFARO	471710.15N/1200139.33W	Y	FB	TF	139.04	4.67			
OFARO	471710.15N/1200139.33W	Y	-	IF	-	-			OFARO2.EPH
KRIST	471909.51N/1194836.50W	Y	FB	TF	077.29	9.10			
EPH VORTAC	472240.51N/1192526.41W	Y	FB	TF	077.27	16.14			
OFARO	471710.15N/1200139.33W	Y	-	IF	-	-			OFARO2.QUINT
QUINT	471250.29N/1195431.59W	Y	FB	TF	131.70	6.51			
OFARO	471710.15N/1200139.33W	Y	-	IF	-	-			OFARO2.ZAXUL
ZAXUL	471002.58N/1200241.75W	Y	FB	TF	185.69	7.16			

