

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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HRMNS	FIVE	HRMNS5.HRMNS	FOUR	13 NOV 2014	25 JUN 2015

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 10L: CLIMB HEADING 103.03 TO 540, THEN DIRECT TO RIVRR, THEN ON DEPICTED ROUTE TO HRMNS, THENCE....
TAKEOFF RWY 10R: CLIMB HEADING 103.01 TO 540, THEN DIRECT TO RIVRR, THEN ON DEPICTED ROUTE TO HRMNS, THENCE....
TAKEOFF RWY 28L: CLIMB HEADING 283.03 TO 540, THEN DIRECT TO PEGTY, THEN ON DEPICTED ROUTE TO HRMNS, THENCE....
TAKEOFF RWY 28R: CLIMB HEADING 283.04, INTERCEPT COURSE 268.00 TO PEGTY, THEN ON DEPICTED ROUTE TO HRMNS, THENCE....
....MAINTAIN ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 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

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: TURBOJET AIRCRAFT ONLY.
NOTE: RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.
NOTE: RNAV 1.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: CROSS WANOS AT 250 KIAS.
NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 28L/R, BTG DME MUST BE OPERATIONAL.
RWYS 3, 21: NA - AIR TRAFFIC
RWYS 10L, 10R: STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 540, THEN MINIMUM CLIMB OF 350 FT PER NM TO 3400.
RWYS 28L, 28R: STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 540, THEN MINIMUM CLIMB OF 350 FT PER NM TO 2500.

TAKEOFF OBSTACLES NOTES:

RWY 10L: VEHICLES ON ROAD BEGINNING ABEAM DER, 376 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/78 FT MSL. TREES BEGINNING 1201 FT FROM DER, 753 FT RIGHT OF CENTERLINE, UP TO 75 FT AGL/95 FT MSL.
RWY 10R: POLE 1996 FT FROM DER, 759 FT RIGHT OF CENTERLINE, 54 FT AGL/74 FT MSL.
RWY 28L: TREES 1873 FT FROM DER, 837 FT LEFT OF CENTERLINE, UP TO 75 FT AGL/95 FT MSL.
RWY 28R: BUILDING, ANTENNAS, VEHICLES ON ROAD, BEGINNING 130 FT FROM DER, 257 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/58 FT MSL.

CONTROLLING OBSTACLES:

LOST COMMUNICATIONS PROCEDURES:



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ADDITIONAL FLIGHT DATA:

CHART: TOP ALTITUDE: ASSIGNED BY ATC.
REFERENCE MAG VAR: KPDX 16E EPOCH YR: 2010
DME/DME ASSESSMENT SAT, RNP 2.0 SAT.

AIRPORTS SERVED:

PORTLAND INTL

PORTLAND, OR

COMMUNICATIONS:**FIXES AND/OR NAVAIDS:****REMARKS:****REQUIRED EFFECTIVE DATE:****CHANGES:**

1. ADDED CHART: TOP ALTITUDE: ASSIGNED BY ATC.



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REASONS:

1. ATC REQUEST.



DEPARTURE (DATA RECORD)

DP Name		Number	DP Computer Code				Superseded Number	Dated	Effective Date
HRMNS		FIVE	HRMNS5.HRMNS				FOUR	13 NOV 2014	25 JUN 2015
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW10L (AER)*	453541.28N/1223544.19W*	N	-	-	-	-			*DISPL THLD (1290 FT)
540 MSL			-	VA	119.03	-			CG 500 FT PER NM TO 540
RIVRR	453404.55N/1222822.20W	Y	FB	DF	-	-			CG 350 FT PER NM TO 3400
COSUG	453227.71N/1221930.64W	Y	FB	TF	104.48	6.43			
LEZLI	452819.00N/1221824.77W	Y	FB	TF	169.44	4.22			
HRMNS	445657.80N/1222325.02W	Y	FB	TF	186.47	31.56			
RW10R (AER)	453542.53N/1223717.30W	N	-	-	-	-			
540 MSL			-	VA	119.01	-			CG 500 FT PER NM TO 540
RIVRR	453404.55N/1222822.20W	Y	FB	DF	-	-			CG 350 FT PER NM TO 3400
COSUG	453227.71N/1221930.64W	Y	FB	TF	104.48	6.43			
LEZLI	452819.00N/1221824.77W	Y	FB	TF	169.44	4.22			
HRMNS	445657.80N/1222325.02W	Y	FB	TF	186.47	31.56			
RW28L (AER)	453449.85N/1223502.05W	N	-	-	-	-			
540 MSL			-	VA	299.03	-			CG 500 FT PER NM TO 540
PEGTY	453701.71N/1224017.66W	Y	FB	DF	-	-			CG 350 FT PER NM TO 2500
KELYY	454027.55N/1224845.50W	Y	FB	TF	300.07	6.86			
WANOS	453851.30N/1225615.33W	Y	FB	TF	253.08	5.50		AT 250K	
TOSEH	453229.75N/1225335.44W	Y	FB	TF	163.59	6.63			
HRMNS	445657.80N/1222325.02W	Y	FB	TF	148.86	41.44			
RW28R (AER)*	453502.94N/1223405.84W*	N	-	-	-	-			*DISPL THLD (535 FT)
	453640.48N/1223816.20W		-	VI	299.04	3.35			CG 500 FT PER NM TO 540
PEGTY	453701.71N/1224017.66W	Y	FB	CF	284.00	1.46			RECOMMENDED NAVAID: AVE VORTAC CG 350 FT PER NM TO 2500
KELYY	454027.55N/1224845.50W	Y	FB	TF	300.07	6.86			
WANOS	453851.30N/1225615.33W	Y	FB	TF	253.08	5.50		AT 250K	
TOSEH	453229.75N/1225335.44W	Y	FB	TF	163.59	6.63			
HRMNS	445657.80N/1222325.02W	Y	FB	TF	148.86	41.44			