

**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SUPERSEDED NUMBER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>ACTUAL EFFECTIVE DATE</u>
WHAMY	FIVE	WHAMY5.WHAMY	FOUR	11/13/2014	31OCT2024
<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 type="checkbox"/>	<input checked="" type="checkbox"/>

DP ROUTE DESCRIPTION:

TAKEOFF RWY 10L: CLIMB ON HEADING 103.03 TO INTERCEPT COURSE 082.15 TO RIVRR, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE...
TAKEOFF RWY 10R: CLIMB ON HEADING 103.01 TO INTERCEPT COURSE 077.86 TO RIVRR, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE...
TAKEOFF RWY 28L: CLIMB DIRECT PEGTY, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE...
TAKEOFF RWY 28R: CLIMB ON HEADING 283.04 TO INTERCEPT COURSE 269.12 TO PEGTY, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE...

...ON TRANSITION, MAINTAIN ATC ASSIGNED ALTITUDE. 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>
KIMBERLY	WHAMY5.IMB	WHAMY	IMB VOR/DME	TRACK 093.82	103.19	10000	8200	
KOATA	WHAMY5.KOATA	WHAMY	KOATA	TRACK 113.02	169.35	15000	9200	

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT

PROCEDURAL DATA NOTES:

NOTE: JET AIRCRAFT ONLY

TAKEOFF MINIMUMS:

RWY 10L, 10R: STANDARD WITH MINIMUM CLIMB 500 FT/NM TO 540, THEN MINIMUM CLIMB 205 FT/NM TO 6200
RWY 28L: STANDARD WITH MINIMUM CLIMB OF 350 FT/NM TO 540
RWY 28L: STANDARD WITH MINIMUM CLIMB OF 300 FT/NM TO 540

TAKEOFF OBSTACLES NOTES:

SEE FORM 8260-15A TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

CONTROLLING OBSTACLES:

RWY 10L, 10R: 4682 FT MSL AAO 451739.00N/1220230.00W

MSA:

MSA FROM KPDX 5800

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:
DME/DME ASSESSMENT SAT, RNP 2.0 SAT.
CHART: TOP ALTITUDE: ASSIGNED BY ATC.
AIRPORT MV: PDX 16E/2010.
CHART SPEED ICON MANDATORY SPEED 250 KIAS AT RUTGE.
CHART: AT OR ABOVE 5000 AT RUTGE.

AIRPORTS SERVED:			
AIRPORT ID	CITY		STATE
KPDX	PORTLAND		OR

COMMUNICATIONS:
CHART: D-ATIS, CLNC DEL, CPDLC, GND CON, TWR.

FIXES AND/OR NAVAIDS:
COSUG, HADIS, KELLY, RUTGE, TOSEH

REMARKS:

MEA WHAMY TO IMB VOR/DME REDUCED FROM FL230 TO 10000 AND WHAMY TO KOATA FROM FL230 TO 15000 FOR DME/DME EVAL.
RWY 10L/R LNAV ENGAGEMENT CLIMB GRADIENT REQUIRED TO ENSURE LNAV ENGAGEMENT TO MEET MINIMUM REQUIRED CLIMB-TO INTERCEPT LEG LENGTH.
RWY 28L/R LNAV ENGAGEMENT CLIMB GRADIENT REQUIRED TO ENSURE LNAV ENGAGEMENT ALTITUDE REACHED PRIOR TO ATT/FIX ERROR AT FIX PEGTY.
MSA CONTROLLING OBSTACLE: 4728 MSL AAO 455300.00N/1220324.00W

FLIGHT INSPECTED BY	SIGNATURE	Digitally signed by	OFFICE	DATE	
	WENDI S GIMA	ROBERT G HAMILTON	FPO	08/30/2024	
		Sep 03, 2024			
DEVELOPED BY	SIGNATURE		OFFICE	DATE	
	Digitally signed by				
RICHARD E. CHRISTENSEN	RICHARD E. CHRISTENSEN		AJV-A431	06/26/2024	
	Jul 08, 2024				
APPROVED BY	SIGNATURE	Digitally signed by	OFFICE	DATE	TITLE
		ROBERT G HAMILTON	AJV-A431		MANAGER
ERIC N SUSKI					
REQUIRED EFFECTIVE DATE		Sep 03, 2024			
ROUTINE					

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

OTHER: ZSE, ATCT, ST AERO, AMGR

CHANGES - REASONS:
1. FIX NAME CHANGED FROM WANOS TO RUTGE AND REMOVED WANOS NOTE IN PROCEDURAL DATA - ATC REQUEST; SIMILAR-SOUNDING NAME WHAMY NEARBY.
2. DP ROUTE DESCRIPTION TAKEOFF RWY 10L CHANGED FROM "CLIMB HEADING 103.03 TO 540, THEN DIRECT TO RIVRR, THEN ON DEPICTED ROUTE TO WHAMY, THENCE" TO "CLIMB ON HEADING 103.03 TO INTERCEPT COURSE 082.15 TO RIVRR, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE" - ATC/FPT REQUEST.
3. DP ROUTE DESCRIPTION TAKEOFF RWY 10R CHANGED FROM "CLIMB HEADING 103.01 TO 540, THEN DIRECT RIVRR, THEN ON DEPICTED ROUTE TO WHAMY, THENCE" TO "CLIMB ON HEADING 103.01 TO INTERCEPT COURSE 077.86 TO RIVRR, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE" - ATC/FPT REQUEST.
4. DP ROUTE DESCRIPTION TAKEOFF RWY 28L CHANGED FROM "CLIMB HEADING 283.03 TO 540, THEN DIRECT TO PEGTY, THEN ON DEPICTED ROUTE TO WHAMY, THENCE" TO "CLIMB DIRECT PEGTY, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE" - ATC/FPT REQUEST.
5. DP ROUTE DESCRIPTION TAKEOFF RWY 28R CHANGED FROM "CLIMB HEADING 283.04, INTERCEPT COURSE 268.00 TO PEGTY, THEN ON DEPICTED ROUTE TO WHAMY, THENCE" TO "CLIMB ON HEADING 283.04 TO INTERCEPT COURSE 269.12 TO PEGTY, THEN ON DEPICTED ROUTE TO CROSS WHAMY AT OR ABOVE 10000, THENCE" - ATC/FPT REQUEST.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
WHAMY	FIVE	WHAMY5.WHAMY	FOUR	11/13/2014	31OCT2024
<p>6. DP ROUTE DESCRIPTION THENCE INSTRUCTIONS CHANGED FROM "VIA (TRANSITION), MAINTAIN ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE" TO "ON TRANSITION, MAINTAIN ATC ASSIGNED ALTITUDE. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE." - ATC/FPT REQUEST AND VIA NO LONGER USED AND 'MAINTAIN "ATC" ASSIGNED ALTITUDE' ADDED IAW 8260.46J 3-1-1L(6).</p> <p>7. TRANSITION ROUTE: WHAMY TO IMB VOR/DME MEA LOWERED FROM FL230 TO 10000, AND WHAMY TO KOATA FROM FL230 TO 15000 - NEW DME/DME/IRU RESULTS.</p> <p>8. TRANSITION ROUTE: RIELY TRANSITION REMOVED FROM PROCEDURE - PER ATC/FPT REQUEST.</p> <p>9. PROCEDURAL DATA NOTES: MOVED "RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT" TO EQUIPMENT REQUIREMENT NOTES, COMBINED AND MOVED "RNAV 1" AND "DME/DME/IR OR GPS" TO PBN REQUIREMENT NOTES, "CROSS WANOS AT 250 KIAS" FIX NAME CHANGED TO RUTGE AND MOVED NOTE TO ADDITIONAL FLIGHT DATA AS "CHART SPEED ICON MANDATORY SPEED 250 KIAS AT RUTGE" - IAW 8260.46J, APP E, SECTION 1, PARA 2, AND 8260.46J, PARA 2-1-1E(4)(B).</p> <p>10. PROCEDURAL DATA NOTES: REMOVED NOTES DESIGNATING BTG, UBG AND DSD AS CRITICAL DMES - NEW DME/DME/IRU RESULTS.</p> <p>11. TAKEOFF MINIMUMS: REMOVED "RWY 3, 21: NA AIR TRAFFIC" - IAW 8260.46J APPENDIX E, SECTION 1, PARA 2H(1).</p> <p>12. TAKEOFF MINIMUMS RWYS 10L/R CHANGED FROM: "STANDARD WITH A MINIMUM CLIMB OF 500' PER NM TO 540', THEN A MINIMUM CLIMB OF 350' PER NM TO 6600" TO "STANDARD WITH MINIMUM CLIMB 500 FT/NM TO 540, THEN MINIMUM CLIMB 205 FT/NM TO 6200" - NEW OBSTACLE EVALUATION RESULTS, AND LNAV ENGAGEMENT CG REQUIRED FOR VI LEG LENGTH.</p> <p>13. TAKEOFF MINIMUMS RWYS 28L CHANGED FROM: "STANDARD WITH A MINIMUM CLIMB OF 500' PER NM TO 540', THEN A MINIMUM CLIMB OF 350' PER NM TO 2500" TO "STANDARD WITH MINIMUM CLIMB OF 350 FT/NM TO 540" - NEW OBSTACLE EVALUATION RESULTS, AND LNAV ENGAGEMENT CG REQUIRED FOR ATT/FIX ERROR AT FIX PEGTY.</p> <p>14. TAKEOFF MINIMUMS RWYS 28R CHANGED FROM: "STANDARD WITH A MINIMUM CLIMB OF 500' PER NM TO 540', THEN A MINIMUM CLIMB OF 350' PER NM TO 2500" TO "STANDARD WITH MINIMUM CLIMB OF 300 FT/NM TO 540 - NEW OBSTACLE EVALUATION RESULTS, AND LNAV ENGAGEMENT CG REQUIRED FOR ATT/FIX ERROR AT FIX PEGTY.</p> <p>15. TAKEOFF OBSTACLE NOTES: REMOVED AND ADDED "SEE FORM 8260-15A TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)" - IAW 8260.46J APP E, SECTION 1, PARA 2I.</p> <p>16. CONTROLLING OBSTACLES: ADDED RWY 10L, 10R: 4682 FT MSL AAO 451739.00N/1220230.00W - NEW OBSTACLE EVALUATION RESULTS.</p> <p>17. MSA: ADDED MSA FROM KPDX 5800 - NEW OBSTACLE EVALUATION RESULTS, IAW 8260.46J, APP E, SECTION 1, PARA 2A.</p> <p>18. ADDITIONAL FLIGHT DATA: ADDED "CHART: AT OR ABOVE 5000 AT RUTGE" - PER ACT/FPT REQUEST.</p> <p>19. ADDITIONAL FLIGHT DATA: REMOVED NOTES REGARDING UBG, BTG AND DSD CRITICAL DMES - NEW DME/DME EVALUATION SHOWS NO CRITICAL DME.</p> <p>20. ADDITIONAL FLIGHT DATA: CHANGED MAGVAR FORMAT STATEMENT FROM "REFERENCE MAG VAR: KPDX 16E, EPOCH YEAR 2010" TO "AIRPORT MV: PDX 16E/2010" - IAW MEMO 283 DATED 7/15/2022.</p> <p>21. COMMUNICATIONS: CHANGED FROM "PDX ATIS, PDX CLNC DEL, PDX GND CON, PORTLAND TOWER, PORTLAND DEP CON" "CHART D-ATIS, CLNC DEL, CPDLC, GND CON" - IAW 8260.46J, APP E, SECTION 1, PARA 2O.</p> <p>22. REMARKS: ADDED "MEA WHAMY TO IMB VOR/DME REDUCED FROM FL230 TO 10000 AND WHAMY TO KOATA FROM FL230 TO 15000 FOR DME/DME EVAL" - DME/DME EVALUATION RESULTS.</p> <p>23. REMARKS: ADDED "RWY 10L/R LNAV ENGAGEMENT CLIMB GRADIENT REQUIRED TO ENSURE LNAV ENGAGEMENT TO MEET MINIMUM REQUIRED CLIMB-TO INTERCEPT LEG LENGTH" AND "RWY 28L/R LNAV ENGAGEMENT CLIMB GRADIENT REQUIRED TO ENSURE LNAV ENGAGEMENT ALTITUDE REACHED PRIOR TO ATT/FIX ERROR AT FIX PEGTY" - TO EXPLAIN REASONING FOR LNAV ENGAGEMENT CG REQUIREMENT.</p> <p>24. REMARKS: ADDED "MSA CONTROLLING OBSTACLE: 4728 MSL AAO 455300.00N/1220324.00W" - FOR FUTURE SPECIALISTS REFERENCE.</p> <p>25. FIX AND/OR NAVAIDS: ADDED "COSUG, HADIS, KELLY, RUTGE, TOSEH" - IAW 8260.46J APPENDIX E, SECTION 1, PARA 2(P).</p>					



**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
DEPARTURE (DATA RECORD)**

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
WHAMY	FIVE	WHAMY5.WHAMY	FOUR	11/13/2014	31OCT2024

<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>
RW10L (AER)*	453541.28N/1223544.19W*	N	-	-	-	-			*DISPL THLD (1290 FT)
	453430.72N/1223243.21W	-	-	VI	119.03	2.42			CG 500 FT/NM TO 540, THEN CG 205 FT/NM TO 6200
RIVRR	453404.55N/1222822.20W	Y	FB	CF	098.15	3.09			
COSUG	453227.71N/1221930.64W	Y	FB	TF	104.48	6.43			
HADIS	452921.94N/1221636.60W	Y	FB	TF	146.61	3.71			
WHAMY	451515.00N/1215842.00W	Y	FB	TF	138.09	18.94	AT/ABOVE 10000		
RW10R (AER)	453542.53N/1223717.30W	N	-	-	-	-			
	453419.73N/1223344.78W	-	-	VI	119.01	2.84			CG 500 FT/NM TO 540, THEN CG 205 FT/NM TO 6200
RIVRR	453404.55N/1222822.20W	Y	FB	CF	093.86	3.79			
COSUG	453227.71N/1221930.64W	Y	FB	TF	104.48	6.43			
HADIS	452921.94N/1221636.60W	Y	FB	TF	146.61	3.71			
WHAMY	451515.00N/1215842.00W	Y	FB	TF	138.09	18.94	AT/ABOVE 10000		
RW28L (AER)	453449.85N/1223502.05W	N	-	-	-	-			
PEGTY	453701.71N/1224017.66W	Y	FB	DF	-	4.30			CG 350 FT/NM TO 540
KELYY	454027.55N/1224845.50W	Y	FB	TF	300.07	6.86			
RUTGE	453851.30N/1225615.33W	Y	FB	TF	253.08	5.50	AT/ABOVE 5000	AT 250K	
TOSEH	453229.75N/1225335.44W	Y	FB	TF	163.59	6.63			
WHAMY	451515.00N/1215842.00W	Y	FB	TF	113.71	42.35	AT/ABOVE 10000		

QUALITY
8
CHECKED

NFDD NO. 174							09/09/2024		82		
<u>DP NAME</u>							<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
WHAMY							FIVE	WHAMY5.WHAMY	FOUR	11/13/2014	31OCT2024
<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>		
RW28R (AER)*	453502.94N/1223405.84W*	N	-	-	-	-			*DISPL THLD (535 FT)		
	453636.94N/1223807.15W	-	-	VI	299.04	3.23			CG 300 FT/NM TO 540		
PEGTY	453701.71N/1224017.66W	Y	FB	CF	285.12	1.58					
KELYY	454027.55N/1224845.50W	Y	FB	TF	300.07	6.86					
RUTGE	453851.30N/1225615.33W	Y	FB	TF	253.08	5.50	AT/ABOVE 5000	AT 250K			
TOSEH	453229.75N/1225335.44W	Y	FB	TF	163.59	6.63					
WHAMY	451515.00N/1215842.00W	Y	FB	TF	113.71	42.35	AT/ABOVE 10000				
WHAMY	451515.00N/1215842.00W	Y	-	IF	-	-			WHAMY5.IMB		
IMB VOR/DME	443854.21N/1194241.87W	Y	FB	TF	109.82	103.19					
WHAMY	451515.00N/1215842.00W	Y	-	IF	-	-			WHAMY5.KOATA		
KOATA	432611.72N/1185806.21W	Y	FB	TF	129.02	169.35					

