

**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SUPERSEDED NUMBER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>
LAVAA	SEVEN	LAVAA7.LAVAA	SIX	01/18/2015	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 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 LAVAA, THENCE ...

TAKEOFF RWY 10R: CLIMB ON HEADING 103.01 TO INTERCEPT COURSE 077.86 TO RIVRR, THEN ON DEPICTED ROUTE TO LAVAA, THENCE ...

TAKEOFF RWY 28L: CLIMB DIRECT PEGTY, THEN ON TRACK 284.07 TO KELYY, THEN ON DEPICTED ROUTE TO LAVAA, THENCE ...

TAKEOFF RWY 28R: CLIMB ON HEADING 283.04 TO INTERCEPT COURSE 269.12 TO PEGTY, THEN ON DEPICTED ROUTE TO LAVAA, THENCE ...

...ON TRANSITION, MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ATLITUDE 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>
PENDELTON	LAVAA.7.PDT	LAVAA	PDT VORTAC	TRACK 074.31	122.64	10000	6300	
SUNED	LAVAA.7.SUNED	LAVAA	SUNED	TRACK 050.77	85.81	10000	8100	

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS REQUIRED

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

PROCEDURAL DATA NOTES:

NOTE: JET AIRCRAFT ONLY.

TAKEOFF MINIMUMS:

RWYS 10L/R: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 540.

RWY 28L: STANDARD WITH MINIMUM CLIMB OF 350 FT/NM TO 540, THEN MINIMUM CLIMB OF 205 FT/NM TO 6100.

RWY 28R: STANDARD WITH MINIMUM CLIMB OF 300 FT/NM TO 540, THEN MINIMUM CLIMB OF 205 FT/NM TO 6100.

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:

RWY 28L/R: 4573 FT MSL AAO 454451.00N/1221421.00W.

MSA:

MSA FROM KPDJ, 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 ARUPT.
CHART: AT OR ABOVE 5000 AT ARUPT.

AIRPORTS SERVED:		
AIRPORT ID	CITY	STATE
KPDX	PORTLAND	OR

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

FIXES AND/OR NAVAIDS:
ARUPT, COSUG, OKKOR

REMARKS:
MEA ON SUNED TRANSITION SET AT 10,000 FOR ATC COMM AND DME/DME/IRU SOLUTION.
MEA ON PDT TRANSITION FAILED DME ANALYSIS BELOW 10,000.
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

<u>FLIGHT INSPECTED BY</u>	<u>SIGNATURE</u>	<u>OFFICE</u>	<u>DATE</u>	
	WENDI S GIMA <i>Digitally signed by</i> ROBERT G HAMILTON Sep 03, 2024	FPO	08/30/2024	
<u>DEVELOPED BY</u>	<u>SIGNATURE</u>	<u>OFFICE</u>	<u>DATE</u>	
JOSHUA DUGAN	<i>Digitally signed by</i> ROBERT G HAMILTON Sep 03, 2024	AJV-A431	05/06/2024	
<u>APPROVED BY</u>	<u>SIGNATURE</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
ERIC SUSKI	<i>Digitally signed by</i> ROBERT G HAMILTON Sep 03, 2024	AJV-A431	10/31/2024	MANAGER
<u>REQUIRED EFFECTIVE DATE</u>				
ROUTINE				

COORDINATED WITH:

A4A☒

ALPA☒

AOPA☒

APA☒

HAI☐

NBAA☒

OTHER: ZSE, ATCT, ST AERO, AMGR

CHANGES - REASONS:
DP ROUTE DESCRIPTION TAKEOFF RWY 10L CHANGED FROM “CLIMB HEADING 103.03 TO 540, THEN DIRECT TO RIVRR, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” TO “CLIMB ON HEADING 103.03 TO INTERCEPT COURSE 082.15 TO RIVRR, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” - ATC/FPT REQUEST.
DP ROUTE DESCRIPTION TAKEOFF RWY 10R CHANGED FROM “CLIMB HEADING 103.01 TO 540, THEN DIRECT TO RIVRR, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” TO “CLIMB ON HEADING 103.01 TO INTERCEPT COURSE 077.86 TO RIVRR, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” - ATC/FPT REQUEST.
DP ROUTE DESCRIPTION TAKEOFF RWY 28L CHANGED FROM “CLIMB HEADING 283.03 TO 540, THEN DIRECT TO PEGTY, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” TO “CLIMB DIRECT PEGTY, THEN ON TRACK 284.07 TO KELYY, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” - ATC/FPT REQUEST.
DP ROUTE DESCRIPTION TAKEOFF RWY 28R CHANGED FROM “CLIMB HEADING 283.04 TO 540, INTERCEPT COURSE 268.00 TO PEGTY, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” TO “CLIMB ON HEADING 283.04 TO INTERCEPT COURSE 269.12 TO PEGTY, THEN ON DEPICTED ROUTE TO LAVAA, THENCE” - ATC/FPT REQUEST.
DP ROUTE DESCRIPTION THENCE INSTRUCTIONS: CHANGED THE WORD "VIA" TO "ON" - VIA NO LONGER USED IAW 8260.46J, APP E, SECTION 1, PARA 2C
TRANSITION ROUTES CHANGED MEA FROM FL190 TO 10000 - UPDATED EVALUATION



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LAVAA	SEVEN	LAVAA7.LAVAA	SIX	01/18/2015	31OCT2024

TRANSITION ROUTES REMOVED YAKIMA TRANSITION ADDED SUNED TRANSITION - ATC REQUESTED REROUTE TO AVOID RESTRICTED AREA

PROCEDURAL DATA NOTES REMOVED NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 10L/R, UBG DME MUST BE OPERATIONAL FOR THE YAKIMA TRANSITION.- REMOVED YAKIMA TRANSITION - IAW 8260.46J 2-1.G

PROCEDURAL DATA NOTES REMOVED NOTE: GPS REQUIRED FOR AIRCRAFT DEPARTING RWYS 10L/R, FOR THE PENDELTON TRANSITION. - IAW 8260.46J 2-1.G

PROCEDURAL DATA NOTES REMOVED NOTE: FOR NON-GPS EQUIPPED AIRCRAFT DEPARTING RWYS 28L/R, UBG AND BTG DME MUST BE OPERATIONAL FOR ALL TRANSITIONS. - IAW 8260.46J 2-1.G

PROCEDURAL DATA NOTES CHANGED NOTE: TURBOJET AIRCRAFT ONLY TO JET AIRCRAFT ONLY - ATC REQUEST.

TAKEOFF MINIMUMS REMOVED "THEN MINIMUM CLIMB OF 350 FT PER NM TO FL190". - NO LONGER NEEDED

TAKEOFF MINIMUMS: REMOVED "RWY 3, 21: NA AIR TRAFFIC" - NO DP ROUTE DESCRIPTION FOR RWYS 3, 21, NOT REQUIRED ON 15B.

TAKEOFF MINIMUMS RWYS 10L/R CHANGED FROM: "STANDARD WITH A MINIMUM CLIMB OF 500' PER NM TO 540, THEN MINIMUM CLIMB OF 350' PER NM TO FL 190" TO "STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 540." - NEW OBSTACLE EVALUATION RESULTS, AND LNAV ENGAGEMENT CG REQUIRED FOR VI LEG LENGTH.

TAKEOFF MINIMUMS RWYS 28R CHANGED FROM: "STANDARD WITH A MINIMUM CLIMB OF 500' PER NM TO 540, THEN MINIMUM CLIMB OF 350' PER NM TO FL 190" TO "STANDARD WITH MINIMUM CLIMB OF 350 FT/NM TO 540, THEN MINIMUM CLIMB OF 205 FT/NM TO 6100." - NEW OBSTACLE EVALUATION RESULTS, LNAV ENGAGEMENT CG REQUIRED FOR ATT/FIX ERROR AT FIX PEGTY.

TAKEOFF MINIMUMS RWYS 28L CHANGED FROM: "STANDARD WITH A MINIMUM CLIMB OF 500' PER NM TO 540, THEN MINIMUM CLIMB OF 350' PER NM TO FL 190" TO "STANDARD WITH MINIMUM CLIMB OF 300 FT/NM TO 540, THEN MINIMUM CLIMB OF 205 FT/NM TO 6100." - NEW OBSTACLE EVALUATION RESULTS, LNAV ENGAGEMENT CG REQUIRED FOR ATT/FIX ERROR AT FIX PEGTY.

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.

MSA: ADDED MSA FROM KPDX 5800 - NEW OBSTACLE EVALUATION RESULTS, IAW 8260.46J, APP E, SECTION 1, PARA 2A.

ADDITIONAL FLIGHT DATA: ADDED "CHART: AT OR ABOVE 5000 AT ARUPT AND CHART SPEED ICON: MANDATORY SPEED 250 KIAS AT ARUPT" - ATC/FPT REQUEST

COMMUNICATIONS: CHANGED FROM "PDX ATIS, PDX CLNC DEL, PDX GND CON, PORTLAND TOWER, PORTLAND DEP CON" TO "CHART D-ATIS, CLNC DEL, CPDLC, GND CON" - IAW 8260.46J, APP E, SECTION 1, PARA 2O.

REMARKS: ADDED "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." - TO EXPLAIN REASONING FOR CG REQUIREMENT.

REMARKS: ADDED MSA CONTROLLING OBSTACLE: 4728 MSL AAO 455300.00N/1220324.00W.

FIX AND/OR NAVAIDS ADDED COSUG, ARUPT AND OKKOR.



[illegible]

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LAVAA		SEVEN		LAVAA7.LAVAA		SIX		01/18/2015	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>
RWY28R (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, THEN CG 205 FT/NM TO 6100
PEGTY	453701.71N/1224017.66W	Y	FB	CF	285.12	1.58			
KELYY	454027.55N/1224845.50W	Y	FB	TF	300.07	06.86			
ARUPT	454530.00N/1224444.50W	Y	FB	TF	029.15	05.77	AT/ABOVE 5000	AT 250K	
LAVAA	454448.00N/1215120.00W	Y	FB	TF	090.75	37.40			
LAVAA	454448.00N/1215120.00W	Y	-	IF	-	-			LAVAA.7.PDT
PDT VORTAC	454154.31N/1185619.36W	Y	FB	TF	090.31	122.64			
LAVAA	454448.00N/1215120.00W	Y	-	IF	-	-			LAVAA7.SUNED
SUNED	461741.55N/1195736.15W	Y	FB	TF	066.77	85.81			

