

**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SUPERSEDED NUMBER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>
LINSE	ONE	LINSE1.LINSE	NONE		11 JUL 2024
<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	☐	☐	☒	☐	☒

DP ROUTE DESCRIPTION:**BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL:**

TAKEOFF RWY 10: CLIMB ON HEADING 105.20 TO 644, THEN DIRECT JWALL, THEN RIGHT TURN DIRECT UNSLD AT OR BELOW 9000, THEN ON TRACK 283.41 TO AADDY, THEN ON TRACK 292.30 TO CROSS TERPZ AT OR ABOVE 11000, THENCE ...

TAKEOFF RWY 15L: CLIMB ON HEADING 155.23 TO 644, THEN DIRECT HEDWG, THEN RIGHT TURN DIRECT NOPRO AT OR ABOVE 4000 AND AT OR BELOW 230 KIAS, THEN ON TRACK 288.68 TO CROSS UNSLD AT OR BELOW 9000, THEN ON TRACK 283.41 TO AADDY, THEN ON TRACK 292.30 TO CROSS TERPZ AT OR ABOVE 11000, THENCE ...

TAKEOFF RWY 15R: CLIMB ON HEADING 155.20 TO 644, THEN DIRECT WARYN, THEN RIGHT TURN DIRECT BOBYJ AT OR ABOVE 4000 AT OR BELOW 230 KIAS, THEN ON TRACK 290.41 TO CROSS FLACO AT OR BELOW 9000, THEN ON TRACK 281.08 TO AADDY, THEN ON TRACK 292.30 TO CROSS TERPZ AT OR ABOVE 11000, THENCE ...

TAKEOFF RWY 28: CLIMB ON HEADING 285.22 TO 644, THEN DIRECT JLENN, THEN ON TRACK 287.34 TO AADDY, THEN ON TRACK 292.30 TO CROSS TERPZ AT OR ABOVE 11000, THENCE ...

TAKEOFF RWY 33L: CLIMB ON HEADING 335.21 TO 644, THEN LEFT TURN DIRECT PCHEN AT OR BELOW 5000, THEN ON TRACK 276.29 TO AADDY, THEN ON TRACK 292.30 TO CROSS TERPZ AT OR ABOVE 11000, THENCE ...

TAKEOFF RWY 33R: CLIMB ON HEADING 335.24 TO 644, THEN LEFT TURN DIRECT PCHEN AT OR BELOW 5000, THEN ON TRACK 276.29 TO AADDY, THEN ON TRACK 292.30 TO CROSS TERPZ AT OR ABOVE 11000, THENCE ...

CARROLL COUNTY RGNL/JACK B POAGE FLD, MARTIN STATE, EASTON/NEWNAM FLD, FREDERICK MUNI, MONTGOMERY COUNTY AIRPARK: CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS TO CROSS TERPZ AT OR ABOVE 11000, THENCE...

...THEN ON TRACK 330.34 TO CROSS LINSE AT OR ABOVE 14000. THEN ON ASSIGNED TRANSITION. MAINTAIN 16000, EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL: ALL AIRCRAFT ATC CLIMB GRADIENT: IF UNABLE TO ACCEPT CLIMB RATE ADVISE ATC PRIOR TO TAXI. RWY 15R: 780 FT/NM UNTIL 644 FT MSL.

FREDERICK MUNI:

TAKEOFF RWY 5: CLIMB ON HEADING 048.49 TO 1100 BEFORE TURNING LEFT.

TAKEOFF RWY 12: CLIMB ON HEADING 123.95 TO 900 BEFORE PROCEEDING WESTBOUND.

TAKEOFF RWY 23: CLIMB ON HEADING 228.50 TO 1200 BEFORE TURNING RIGHT.

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>
JERES	LINSE1.JERES	LINSE	JERES	TRACK 347.55	17.90	4300	4200	
MCRA Y	LINSE1.MCRA Y	LINSE	BUFFR	TRACK 302.50	14.83	4300	4000	
		BUFFR	MCRA Y	TRACK 291.31	13.07	4300	4000	

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LINSE	ONE	LINSE1.LINSE	NONE		11 JUL 2024

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: JET AIRCRAFT ONLY.

TAKEOFF MINIMUMS:**BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL**

RWY 15R: STANDARD WITH MINIMUM CLIMB OF 780 FT/NM TO 644.

RWY 10, 15L, 28, 33R, 33L: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 644.

CARROLL COUNTY RGNL/JACK B POAGE FLD

RWY 34: STANDARD.

RWY 16: 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 225 FT/NM TO 1300.

EASTON/NEWNAM FLD

RWY 4, 15, 33: STANDARD.

RWY 22: 300-2 OR STANDARD WITH MINIMUM CLIMB OF 210 FT/NM TO 400.

FREDERICK MUNI

RWY 23: STANDARD.

RWY 5: 400 - 3 OR STANDARD WITH MINIMUM CLIMB OF 255 FT/NM TO 600.

RWY 12: 500 - 2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 410 FT/NM TO 800.

RWY 30: STANDARD WITH MINIMUM CLIMB OF 340 FT/NM TO 2400.

MARTIN STATE

RWY 15: STANDARD.

RWY 33: STANDARD WITH MINIMUM CLIMB OF 215 FT/NM TO 1300.

MONTGOMERY COUNTY AIRPARK

RWY 14, 32: STANDARD.

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:**CARROLL COUNTY RGNL/JACK B POAGE FLD**

RWY 16: 1144 FT MSL TOWER 393423.59N/0765815.00W.

EASTON/NEWNAM FLD

RWY 22: 294 FT MSL ANTENNA 384613.92N/0760455.09W (CLIMB GRADIENT) (CLIMB-TO ALTITUDE) (CEILING), 290 FT MSL TOWER 384616.00N/0760457.00W (VISIBILITY)

FREDERICK MUNI

RWY 5: 435 FT MSL ELEVATOR 392548.00N/0772123.00W (CLIMB GRADIENT), 528 FT MSL TREE 392557.10N/0772037.30W (CLIMB-TO ALTITUDE), 659 FT MSL TREE 392639.83N/0771925.31W (CEILING) (VISIBILITY).

RWY 12: 555 FT MSL TREE 392501.93N/0772054.90W (CLIMB GRADIENT), 785 FT MSL TREE 39242616.00N/0771933.58W (CLIMB-TO ALTITUDE) (CEILING), 636 FT MSL TREE 392432.58N/0771911.87W (VISIBILITY).

RWY 30: 1808 FT MSL AAO 392812.00N/0772939.00W.

OBSTACLES MANDATING ODP ROUTE DEVELOPMENT: RWY 5, 12: 1956 FT MSL AAO 392936.00N/0772954.00W, RWY 23: 1815 FT MSLAAO 392812.00N/0772942.00W.

MARTIN STATE
RWY 33: 175 FT MSL TREE 392043.41N/0762605.51W (CLIMB GRADIENT), 1289 FT MSL TOWER 392504.00N/0763320.00W (CLIMB-TO ALTITUDE).

MSA:
MSA FROM KBWI 2600
MSA FROM KDMW 3400
MSA FROM KMTN 2600
MSA FROM KFDK 3400
MSA FROM KESN 2100
MSA FROM KGAI 3300

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:
AIRPORT MV: BWI (P) 11W/2000, DMW 11W/2000, MTN 11W/2000, FDK 8W/1980, ESN 10W/1985, GAI 9W/1985
DME/DME ASSESSMENT: SAT (RNP 2.0)
CHART: MINIMUM CROSSING ALTITUDE AT TERPZ 11000
CHART: MINIMUM CROSSING ALTITUDE AT LINSE 14000
CHART SPEED ICON: MAXIMUM SPEED 230 KIAS AT BOBYJ.
ALL AIRPORTS - CHART: TOP ALTITUDE: 16000.

AIRPORTS SERVED:

AIRPORT ID	CITY	STATE
KBWI	BALTIMORE	MD
KDMW	WESTMINSTER	MD
KMTN	BALTIMORE	MD
KFDK	FREDERICK	MD
KESN	EASTON	MD
KGAI	GAITHERSBURG	MD

COMMUNICATIONS:
CHART ATIS: BWI, MTN, FDK, ESN
CHART CLNC DEL: BWI, DMW, MTN, FDK, ESN, GAI
CHART GND CON: BWI, MTN, FDK, ESN
CHART TOWER: BWI, MTN, FDK, ESN
CHART AWOS: GAI, DMW

FIXES AND/OR NAVAIDS:

REMARKS:
KBWI RWY 10, 15L, 28, 33R, 33L LNAV ENGAGEMENT OF 500 FT/NM CLIMB GRADIENT IS PER ATC REQUEST TO ACCOMODATE AIRSPACE CONSTRAINTS AND NOISE ABATEMENT REQUIREMENTS.
DO NOT CHART MOCA: FROM LINSE TO HERES, LINSE TO BUFFR, BUFFR TO MCRAY.
APPROVAL LETTERS (3) FOR CG, CALCULATIONS BELOW.
1. CG CALCULATIONS FOR RWY 15R CG: CG TERMINATION ALTITUDE 644 FT - 129.6 (DER) = 514, 514 FT DIVIDED BY .66 NM SEGMENT= 780 FT/NM CG.
2. CG CALCULATIONS FOR RWY 15L CG: CG TERMINATION ALTITUDE 644 FT - 114 (DER) = 530, 530 FT DIVIDED BY 1.06 NM SEGMENT = 500 FT/NM CG.
3. CG CALCULATIONS FOR RWY 28 CG: CG TERMINATION ALTITUDE 11000 FT - 139 (DER) = 10861 FT, 10861 DIVIDED BY 21.27 NM SEGMENT = 511 FT/NM CG.
WAIVERS (6):



1. ATC CG RWY 15R, WAIVER TO SEPARATE FROM OTHER EXISTING PROCEDURES.
2. RWY 15L WIND SPIRAL, VA-DF OEA CAN NOT CONSTRUCTED DUE TO INSUFFICIENT DISTANCE FROM DF FIX.
3. RWY 33L WIND SPIRAL, VA-DF OEA CAN NOT CONSTRUCT, DF FIX FALLS OUTSIDE OF WIND SPIRAL BOUNDARY.
4. RWY 33L WIND SPIRAL, VA-DF OEA CAN NOT BE CONSTRUCTED DUE TO INSUFFICIENT DISTANCE FROM DF FIX.
5. RWY 33R WIND SPIRAL, VA-DF OEA CAN NOT BE CONSTRUCTED, DF FIX FALLS OUTSIDE OF WIND SPIRAL BOUNDARY.
6. RWY 33R, VA-DF OEA CAN NOT BE CONSTRUCTED DUE TO INSUFFICIENT DISTANCE FROM DF FIX.

MEAS WERE DEVELOPED BY ATC DURING FULL WORKGROUP PROCEDURE DESIGN MEETINGS AND COORDINATED WITH ATC AND THE MARYLAND AVIATION AUTHORITY TO COMPLY WITH ENVIRONMENTAL FACTORS.

THE ENVIRONMENTAL REVIEW UNDER ORDER 1050.1 (LATEST EDITION) AND THE NOISE SCREENING HAVE BEEN ACOMPLISHED.

DO NOT CHART MOCA: FROM LINSE TO JERES, LINSE TO BUFFR, BUFFR TO MCRAY.

FLIGHT INSPECTED BY	SIGNATURE	OFFICE	DATE	
BOB S PRESSLER	<i>Digitally signed by</i> ALLAN WILL May 14, 2024	FPO	03/20/2024	
DEVELOPED BY	SIGNATURE	OFFICE	DATE	
TODD DAMRON	<i>Digitally signed by</i> TODD V DAMRON Feb 23, 2024	AJV-A423	02/20/2024	
APPROVED BY	SIGNATURE	OFFICE	DATE	TITLE
MIKE GARRITY	<i>Digitally signed by</i> ALLAN WILL May 14, 2024	AJV-A423		MANAGER
REQUIRED EFFECTIVE DATE				
ROUTINE				

COORDINATED WITH:

A4A ☒ ALPA ☒ AOPA ☒ APA ☒ HAI ☐ NBAA ☒ OTHER: ZDC, POTOMAC DEP CON, BWI ATCT, FDK ATCT, ESN ATCT, MTN ATCT, AMGR(S).

CHANGES - REASONS:

NEW RSID.



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

DP NAME					NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
LINSE					ONE	LINSE1.LINSE	NONE		11 JUL 2024
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
	BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL		KBWI						
RW10 (AER)*	391028.69N/0764115.66W*	N	-	-	-	-			*DISPL THLD (550 FT)
644 MSL	-		-	VA	094.20	-	AT/ABOVE 644		CG 500 FT PER NM TO 644 FT
JWALL	391014.37N/0763706.68W	Y	FO	DF	-	-			
UNSLD	391128.01N/0764743.89W	Y	FB	DF	-	8.35	AT/BELOW 9000		RIGHT TURN
AADDY	391148.48N/0765824.27W	Y	FB	TF	272.41	8.30			
TERPZ	391320.71N/0770820.29W	Y	FB	TF	281.30	7.87	AT/ABOVE 11000		
RW15L (AER)	391114.54N/0763948.74W	N	-	-	-	-			CG 500 FT PER NM TO 644 FT
644 MSL	-		-	VA	144.23	-	AT/ABOVE 644		
HEDWG	390929.74N/0763810.79W	Y	FO	DF	-	-			
NOPRO	391114.15N/0764531.57W	Y	FB	DF	-	5.97	AT/ABOVE 4000	AT/BELOW 230K	RIGHT TURN
UNSLD	391128.01N/0764743.89W	Y	FB	TF	277.68	1.73	AT/BELOW 9000		
AADDY	391148.48N/0765824.27W	Y	FB	TF	272.41	8.30			
TERPZ	391320.71N/0770820.29W	Y	FB	TF	281.30	07.87	AT/ABOVE 11000		
RW15R (AER)*	391104.89N/0764052.94W*	N	-	-	-	-			*DISPL THLD (301 FT)
644 MSL	-		-	VA	144.20	-	AT/ABOVE 644		CG 780 FT PER NM TO 644 FT
WARYN	390917.03N/0763913.04W	Y	FO	DF	-	-			
BOBYJ	391125.35N/0764535.81W	Y	FB	DF	-	5.40	AT/ABOVE 4000	AT/BELOW 230K	RIGHT TURN
FLACO	391148.27N/0764833.88W	Y	FB	TF	279.41	2.34	AT/BELOW 9000		QUALITY

QUALITY
20
CHECKED

<u>DP NAME</u>							<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
LINSE							ONE	LINSE1.LINSE	NONE		11 JUL 2024
AADDY	391148.48N/0765824.27W	Y	FB	TF	270.08	7.65					
TERPZ	391320.71N/0770820.29W	Y	FB	TF	281.30	7.87		AT/ABOVE 11000			
RW28 (AER)*	391021.98N/0763918.49W*	N	-	-	-	-				*DISPL THLD (700 FT)	
644 MSL	-		-	VA	274.20	-		AT/ABOVE 644		CG 500 FT PER NM TO 644 FT	
JLENN	391041.24N/0764518.19W	Y	FB	DF	-	-					
AADDY	391148.48N/0765824.27W	Y	FB	TF	276.34	10.25					
TERPZ	391320.71N/0770820.29W	Y	FB	TF	281.30	7.87		AT/ABOVE 11000			
RW33L (AER)*	390955.14N/0763948.33W*	N	-	-	-	-				*DISPL THLD (500 FT)	
644 MSL	-		-	VA	324.20	-		AT/ABOVE 644		CG 500 FT PER NM TO 644 FT	
PCHEN	391231.65N/0764718.62W	Y	FB	DF	-	-		AT/BELOW 5000		LEFT TURN	
AADDY	391148.48N/0765824.27W	Y	FB	TF	265.29	8.65					
TERPZ	391320.71N/0770820.29W	Y	FB	TF	281.30	7.87		AT/ABOVE 11000			
RW33R (AER)	391034.45N/0763911.63W	N	-	-	-	-					
644 MSL	-		-	VA	324.24	-		AT/ABOVE 644		CG 500 FT PER NM TO 644 FT	
PCHEN	391231.65N/0764718.62W	Y	-	DF	-	-		AT/BELOW 5000		LEFT TURN	
ADDYY	391148.48N/0765824.27W	Y	-	TF	265.29	8.65					
TERPZ	391320.71N/0770820.29W	Y	-	TF	281.30	7.87		AT/ABOVE 11000			
TERPZ	391320.71N/0770820.29W	Y	-	IF	-	-		AT/ABOVE 11000			
LINSE	392208.58N/0771804.80W	Y	FB	TF	319.34	11.60		AT/ABOVE 14000			



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LINSE							ONE	LINSE1.LINSE	NONE		11 JUL 2024
LINSE	392208.58N/0771804.80W	Y	-	IF	-	-		AT/ABOVE 14000		LINSE1.JERES	
JERES	393834.40N/0772718.20W	Y	FB	TF	336.55	17.90					
LINSE	392208.58N/0771804.80W	Y	-	IF	-	-		AT/ABOVE 14000		LINSE1.MCRAY	
BUFFR	392733.65N/0773553.93W	Y	FB	TF	291.50	14.83					
MCRAY	393217.69N/0775138.07W	Y	FB	TF	291.31	13.07					

