

**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SUPERSEDED NUMBER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>
SETHY	FIVE	SETHY5.SETHY	FOUR	11/10/2016	09/10/2020
<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 31: CLIMB HEADING 305.18 TO 2640, THEN LEFT TURN DIRECT SETHY, CROSS SETHY AT OR ABOVE 4000, THENCE...

...ON TABER TRANSITION. MAINTAIN 6000. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE

...ON AASTN TRANSITION. AT AASTN FLY HEADING 244.63 OR ASSIGNED BY ATC. MAINTAIN 6000. RADAR VECTORS WILL BE PROVIDED TO FILED ROUTE. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL WITHIN TEN (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>
AASTN	SETHY5.AASTN	SETHY	AASTN	TRACK 244.63	8.88	5200	4000	
TABER	SETHY5.TABER	SETHY MRUNN FUENT	MRUNN FUENT TABER	TRACK 159.84 TRACK 083.42 TRACK 128.82	6.75 13.70 9.26	5000 5300 6000	4000	

PROCEDURAL DATA NOTES:

NOTE: GPS REQUIRED.

NOTE: RNAV-1

NOTE: RADAR REQUIRED.

NOTE: WHEN IN RADAR CONTACT, VECTORS WILL BE PROVIDED TO FILED / ASSIGNED ROUTE.

TAKEOFF MINIMUMS:

TAKEOFF MINIMUMS: RWY 13, NA - ATC.

TAKEOFF MINIMUMS: RWY 31, STANDARD WITH MINIMUM CLIMB OF 300 FT PER NM TO 2640 THEN MINIMUM CLIMB OF 230 FT PER NM TO 4000.

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:**LOST COMMUNICATIONS PROCEDURES:****ADDITIONAL FLIGHT DATA:**

REFERENCE MAG VAR: KBCB 8W EPOCH YR: 2020

CHART: TOP ALTITUDE: 6000

DME/DME ASSESSMENT: NOT CONDUCTED.



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SETHY	FIVE	SETHY5.SETHY	FOUR	11/10/2016	09/10/2020

CHART: MINIMUM CROSSING ALTITUDE AT SETHY - AT OR ABOVE 4000.
CHART SPEED ICON MAXIMUM SPEED 220 KIAS AT SETHY

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
VIRGINIA TECH/MONTGOMERY EXECUTIVE	BLACKSBURG	VA

COMMUNICATIONS:

AWOS, CTAF, DEP CON, CLNC DEL

FIXES AND/OR NAVAIDS:**REMARKS:**

PRECIPITOUS TERRAIN ADJUSTMENT: MRUNN TO FUENT - 61'. FUENT TO TABER - 149'.
ENROUTE ROC REDUCTION OF 1500 ABOVE TERRAIN USED FOR SETHY TO MRUNN SEGMENT AND SETHY TO AASTN.
220 SPEED RESTRICTION APPLIED TO TABER AND AASTN TRANSITIONS TO SHORTEN SEGMENT LENGTH AND REDUCE TURN RADIUS DUE TO TERRAIN.
SECOND CLIMB GRADIENT OF 230 FT PER NM TO 4000 AND 4000 MCA FOR OBSTACLE CLEARANCE IN THE SETHY TO AASTN SEGMENT AND ENSURES AIRCRAFT WILL REACH 5200 MVA AT AASTN.

FLIGHT INSPECTED BY:

PENDING

Digitally signed by
JOHN BORDY
Jun 01, 2020

OFFICE SYMBOL:**DATE:****DEVELOPED BY:**

ROBERT HAMILTON (AUSTIN GOTCHER)

Digitally signed by
JOHN BORDY
Jun 01, 2020

OFFICE SYMBOL:**DATE:**

AJV-5422

09/14/2018

APPROVED BY:

JULIE MORGAN

Digitally signed by
JOHN BORDY
Jun 01, 2020

OFFICE SYMBOL:**DATE:**

AJV-5420

REQUIRED EFFECTIVE DATE:

09/10/2020

COORDINATED WITH:

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

OTHER:

ZTL, AMGR, ROA DEP CON.

CHANGES - REASONS:

1. RWY NUMBERS CHANGE FROM RWY 12 AND 30 TO 13 AND 31. - MAGVAR CHANGING FROM 6W 1985 TO 8W 2020.
2. CHANGED DP ROUTE DESCRIPTION FROM "CLIMB HEADING 303.19 TO 2640, THEN LEFT TURN DIRECT SETHY, THENCE." TO "CLIMB HEADING 305.18 TO 2640, THEN LEFT TURN DIRECT SETHY, CROSS SETHY AT OR ABOVE 4000, THENCE." - MAGVAR UPDATE, NEW APPLICATION OF CRITERIA, AND ENSURES AIRCRAFT ACHIEVES MINIMUM CROSSING HEIGHT.

QUALITY
35
CHECKED

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FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
SETHY	FIVE	SETHY5.SETHY	FOUR	11/10/2016	09/10/2020
<p>3. CHANGED RADAR NOTE FROM "WHEN IN RADAR CONTACT EXPECT VECTORS TO FILED/ ASSIGNED ROUTE" TO "WHEN IN RADAR CONTACT, VECTORS WILL BE PROVIDED TO FILED / ASSIGNED ROUTE." - THE WORD "EXPECT" CANNOT BE USED IN REFERENCE TO RADAR VECTORS IAW 8260.46F, 1-1-6.</p> <p>4. REMOVED PULASKI PSK VORTAC. - PSK TO BE DECOMMISSIONED.</p> <p>5. REMOVED ROANOKE ROA VOR/DME AND WOODRUM ODR FROM FIXES AND/OR NAVAIDS - FPT REQUEST.</p> <p>6. REPLACED PSK TRANSITION AND PSK VORTAC WITH FIX AASTN. - PSK TO BE DECOMMISSIONED.</p> <p>7. MOVED SETHY AND MRUNN - REQUIRED TO MEET SEGMENT LEG LENGTH CRITERIA CHANGES IN THE 8260.58A.</p> <p>8. SETHY TO MRUNN TRACK/DISTANCE CHANGED FROM 150.02/7.60 TO 159.84/6.75. - 8260.58A CHANGES APPLIED RESULTING IN LEG LENGTHS THAT WERE TOO SHORT; FIXES MOVED TO MEET REQUIRED LEG LENGTHS AND COORDINATED WITH ATC.</p> <p>9. RENAMED BEMAR FIX AS FUENT - ALLOW BEMAR FIX TO BE MOVED ON THE BEMAR SID AND MAINTAIN THE NAME AS BEMAR.</p> <p>10. MRUNN TO FUENT (BEMAR FIX ON PREVIOUS AMDT) TRACK/DISTANCE CHANGED FROM 080.56/10.74 TO 083.42/13.70. - 8260.58A CHANGES APPLIED RESULTING IN LEG LENGTHS THAT WERE TOO SHORT; FIXES MOVED TO MEET REQUIRED LEG LENGTHS AND COORDINATED WITH ATC.</p> <p>11. FUENT (OLD BEMAR LOCATION) TO TABER TRACK CHANGED FROM 126.82 TO 128.82. - MAGVAR UPDATE.</p> <p>12. UPDATED DEPARTURE ROUTE DESCRIPTION. CHANGED FROM "VIA TRANSITION. MAINTAIN 6000, EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE. TO "...ON TABER TRANSITION. MAINTAIN 6000. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE" AND "...ON AASTN TRANSITION. AT AASTN FLY HEADING 244.63 OR ASSIGNED BY ATC. MAINTAIN 6000. RADAR VECTORS WILL BE PROVIDED TO FILED ROUTE. EXPECT CLEARANCE TO FILED ALTITUDE/FLIGHT LEVEL WITHIN TEN (10) MINUTES AFTER DEPARTURE. - AASTN TRANSITION REQUIRES RADAR VECTORS AND TABER TRANSITION DOES NOT.</p> <p>13. REMOVED PROCEDURAL DATA NOTE "AIRCRAFT ON TABER TRANSITION, DO NOT EXCEED 220K UNTIL PASSING SETHY." AND REPLACED WITH "CHART SPEED ICON MAXIMUM SPEED 220 KIAS AT SETHY" IN ADDITIONAL FLIGHT DATA. - 220 KIAS SPEED RESTRICTION APPLIED TO BOTH TRANSITIONS FOR TERRAIN & SEGMENT LENGTH REQUIREMENTS & 8260-46F, 2-1-1 E(3)(B).</p> <p>14. ADDED 4000 MINIMUM ALTITUDE AT SETHY - 8260.46F, 2-1-1 D(3)(B).</p> <p>15. ADDED SECOND CLIMB GRADIENT AFTER LNAV ENGAGEMENT ALTITUDE CLIMB GRADIENT - ENSURE OBSTACLE CLEARANCE IN THE ENROUTE TRANSITION (8260-46F, 2-1-1 E(2).</p> <p>16. REMOVED FROM REMARKS STATEMENT "USED 21 DEGREE BANK ANGLE AT SETHY AND MRUNN TO CALCULATE MINIMUMS LEG LENGTH BETWEEN SETHY AND MRUNN - 8260.58A ALLOWS BANK ANGLE UP TO 25 DEGREES (8260.58A, 1-2-1 C(3)(B)1.</p> <p>17. ADDED 5200 MEA FOR SETHY TO AASTN SEGMENT. - BASED ON OBSTACLE/TERRAIN EVALUATION.</p> <p>18. ADDED 5000 MEA FOR SETHY TO MRUNN SEGMENT. - BASED ON OBSTACLE/TERRAIN EVALUATION.</p> <p>19. MEA FOR MRUNN TO FUENT SEGMENT CHANGED FROM 5600 TO 5300. - BASED ON OBSTACLE/TERRAIN EVALUATION.</p> <p>20. MEA FOR FUENT (BEMAR FIX ON PREVIOUS AMDT) TO TABER SEGMENT CHANGED FROM 5600 TO 6000. - BASED ON OBSTACLE/TERRAIN EVALUATION.</p> <p>21. ADDED TO REMARKS: PRECIPITOUS TERRAIN ADJUSTMENT: MRUNN TO FUENT - 61'. FUENT TO TABER - 149'.</p> <p>22. ADDED TO REMARKS: ENROUTE ROC REDUCTION OF 1500 ABOVE TERRAIN USED FOR SETHY TO MRUNN SEGMENT AND SETHY TO AASTN SEGMENT.</p> <p>23. ADDED TO REMARKS: 220 SPEED RESTRICTION APPLIED TO TABER AND AASTN TRANSITIONS DUE TO SHORTEN SEGMENT LENGTH AND REDUCE TURN RADIUS DUE TO TERRAIN.</p> <p>24. ADDED TO REMARKS: SECOND CLIMB GRADIENT OF 230 FT PER NM TO 4000 AND 4000 MCA FOR OBSTACLE CLEARANCE IN THE SETHY TO AASTN SEGMENT AND ENSURES AIRCRAFT WILL REACH 5200 MVA AT AASTN.</p> <p>25. ADDED MOCA'S TO TRANSITION ROUTES: SETHY - AASTN: 4000, SETHY - MRUNN: 4000 - MOCA'S NOT WITHIN 500 FT OF MEA PER 8260.46F, APPDX E, SECTION 1, #4 H.</p>					

06/01/2020: THIS IS A UPDATED COPY OF THE FORM APPROVED ON 10/12/2018.

1. CHANGED EFFECTIVE DATES FROM 06/20/19 TO 09/10/2020.
2. ON 8260-15C, CHANGED EFFECTIVE DATE FROM 06/20/19 TO 09/10/2020.
3. ON 8260-15C, AASTN TRANSITION, REMOVED LEG TYPE 'VM' AND TRUE COURSE '236.63'

QUALITY
35
CHECKED

**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>EFFECTIVE DATE</u>
SETHY		FIVE		SETHY5.SETHY		FOUR		11/10/2016	09/10/2020
<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>
RWY31 (AER)	371221.37N/0802413.28W	N	-	-	-	-			
2640 MSL	-	-	-	VA	297.18	-			CG 300 FT PER NM TO 2640, THEN CG 230 FT PER NM TO 4000
SETHY	371012.10N/0803325.43W	Y	FB	DF	-	-	AT/ABOVE 4000	AT/BELOW 220K	
SETHY	371012.10N/0803325.43W	Y	-	IF	-	-	AT/ABOVE 4000	AT/BELOW 220K	SETHY5.AASTN
AASTN	370518.46N/0804241.29W	Y	FO	TF	236.63	8.88			
SETHY	371012.10N/0803325.43W	Y	-	IF	-	-	AT/ABOVE 4000	AT/BELOW 220K	SETHY5.TABER
MRUNN	370414.49N/0802926.60W	Y	FB	TF	151.84	6.75			
FUENT	370740.54N/0801251.81W	Y	FB	TF	75.42	13.70			
TABER	370255.04N/0800255.66W	Y	FB	TF	120.82	9.26			