

**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SUPERSEDED NUMBER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>
BOOCK	THREE	BOOCK3.BOOCK	TWO	03/31/2016	29 MAR 2018

<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 1: CLIMB HEADING 006.49 TO INTERCEPT COURSE 334.00 TO ADAXE, THEN ON DEPICTED ROUTE TO BOOCK, THENCE...
TAKEOFF RWY 4: CLIMB HEADING 036.56 TO 515, THEN RIGHT TURN ON HEADING 072.00 OR AS ASSIGNED BY ATC, EXPECT VECTORS TO MCNAB, THEN ON TRACK 155.88 TO BOOCK, THENCE...
TAKEOFF RWY 15: CLIMB HEADING 153.64 TO INTERCEPT COURSE 209.04 TO LEAVY, THEN ON DEPICTED ROUTE TO BOOCK, THENCE...
TAKEOFF RWY 19: CLIMB HEADING 186.50 TO 515, THEN DIRECT FIMBI, THEN ON DEPICTED ROUTE TO BOOCK, THENCE...
TAKEOFF RWY 33: CLIMB HEADING 333.65 TO 515, THEN RIGHT TURN DIRECT ADAXE, THEN ON DEPICTED ROUTE TO BOOCK, THENCE...

...ON COLIN TRANSITION. MAINTAIN 5000. EXPECT CLEARANCE TO FILED ALTITUDE 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>
COLIN	BOOCK3.COLIN	BOOCK	COLIN	TRACK 183.74	18.71	10100	1500	

PROCEDURAL DATA NOTES:

NOTE: RNAV 1.
NOTE: RADAR REQUIRED.
NOTE: TURBOJETS ONLY.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: DEPARTING RWY 1 REQUIRES EXPEDITIOUS INTERCEPT OF OUTBOUND COURSE TO ENSURE AVOIDANCE OF P-56 BOUNDARY.
NOTE: RWY 1 DEPARTURES REMAIN CLEAR OF P-56, CLIMB HEADING 006.49, TURN LEFT AS SOON AS PRACTICAL TO INTERCEPT COURSE 334.00 TO ADAXE.
NOTE: PILOTS SHALL COMPLY WITH RONALD REAGAN WASHINGTON NATIONAL AIRPORT NOISE ABATEMENT AND PROHIBITED AREA (P-56) AVOIDANCE PROCEDURES AS DEFINED IN THE CHART SUPPLEMENT SPECIAL NOTICES.

TAKEOFF MINIMUMS:

RWY 1, STANDARD WITH MINIMUM CLIMB OF 825 FT PER NM TO 600.
RWY 4, 15, 19, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 515.
RWY 33, STANDARD WITH MINIMUM CLIMB OF 540 FT PER NM TO 640.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 1, BUILDINGS BEGINNING 118 FT FROM DER, 332 FT RIGHT OF CENTERLINE, UP TO 10 FT AGL/22 FT MSL. FENCE 261 FT FROM DER, 514 FT LEFT OF CENTERLINE, 9 FT AGL/19 FT MSL. LIGHT POLE AND TREES BEGINNING 995 FT FROM DER, 210 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/49 FT MSL. TREES BEGINNING 1008 FT FROM DER, 499 FT LEFT OF CENTERLINE, UP TO 71 FT AGL/72 FT MSL. TREES 1365 FT FROM DER, 333 FT RIGHT OF CENTERLINE, UP TO 50 FT AGL/51 FT MSL. TREES BEGINNING 1744 FT FROM DER, 152 FT LEFT OF CENTERLINE, UP TO 70 FT AGL/71 FT MSL. MONUMENT 1.7 NM FROM DER, 1787 FT RIGHT OF CENTERLINE, 556 FT AGL/595 FT MSL.
NOTE: RWY 4, TERRAIN AND MICROWAVE SENSORS BEGINNING 3 FT FROM DER, 260 FT RIGHT OF CENTERLINE, UP TO 7 FT AGL/18 FT MSL. SIGN AND TOWER BEGINNING 857 FT FROM DER, 677 FT LEFT OF CENTERLINE, UP TO 72 FT AGL/84 FT MSL. SPIRE 1.6 NM FROM DER, 208 FT RIGHT OF CENTERLINE, 236 FT AGL/265 FT MSL.
NOTE: RWY 15, ELECTRICAL SYSTEMS BEGINNING 178 FT FROM DER, 288 FT RIGHT OF CENTERLINE, UP TO 10 FT AGL/19 FT MSL. TREES 1.4 NM FROM DER, 13 FT RIGHT OF CENTERLINE, UP TO 94 FT AGL/245 FT MSL. TREES 1.5 NM FROM DER, 520 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/235 FT MSL.
NOTE: RWY 19, TREES 3434 FT FROM DER, 1135 FT RIGHT OF CENTERLINE, UP TO 96 FT AGL/105 FT MSL. BUILDING 1.1 NM FROM DER, 1891 FT RIGHT OF CENTERLINE, 171 FT AGL/189 FT MSL.
NOTE: RWY 33, SIGN 18 FT FROM DER, 191 FT LEFT OF CENTERLINE, 3 FT AGL/15 FT MSL. FENCE AND POLE BEGINNING 27 FT FROM DER, 332 FT RIGHT OF CENTERLINE, UP TO 18 FT AGL/28 FT MSL. VEHICLES ON ROAD AND TREES BEGINNING 365 FT FROM DER, 344 FT LEFT OF CENTERLINE, UP TO 51 FT AGL/70 FT MSL. TREES BEGINNING 533 FT FROM DER, 101 FT LEFT OF CENTERLINE, UP TO 37 FT AGL/39 FT MSL. POLES AND TREES BEGINNING 641 FT FROM DER, 165 FT RIGHT OF CENTERLINE, UP TO 56 FT AGL/60 FT MSL. CRANES AND TREES BEGINNING 682 FT FROM DER, 289 FT LEFT OF CENTERLINE, UP TO 82 FT AGL/95 FT MSL. TREES BEGINNING 1603 FT FROM DER, 78 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/83 FT MSL. POLES AND BUILDINGS

CHECKED
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BOOCK	THREE	BOOCK3.BOOCK	TWO	03/31/2016	29 MAR 2018

BEGINNING 1777 FT FROM DER, 868 FT LEFT OF CENTERLINE, UP TO 124 FT AGL/145 FT MSL. POLES BEGINNING 2917 FT FROM DER, 511 FT RIGHT OF CENTERLINE, UP TO 78 FT AGL/105 FT MSL.
BUILDINGS AND ANTENNAS BEGINNING 4379 FT FROM DER, 246 FT LEFT OF CENTERLINE, UP TO 115 FT AGL/151 FT MSL.

CONTROLLING OBSTACLES:

RWY 1: 595 FT MSL MONUMENT 385322.00N/0770207.00W (CLIMB-TO ALTITUDE).
RWY 33: 1049 FT MSL TOWER 385624.20N/0770452.42W (CLIMB-TO ALTITUDE).

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KDC A 11W EPOCH YEAR: 2020. DME/DME ASSESSMENT: SAT (RNP 2.0)

CHART: TOP ALTITUDE: 5000.

CHART SPEED ICONS: MAXIMUM SPEED 220 KIAS AT ADAXE; MAXIMUM SPEED 230 KIAS AT FIMBI; MAXIMUM SPEED 250 KIAS AT DOGUE.

CHART: P56A, P-56B.

PILOT NAVIGATION AREA:

7 NM ARC CENTERED ON MCNAB (IF), CW
FROM: POINT A (BEARING 111 TO MCNAB)
TO: POINT B (BEARING 201 TO MCNAB)
MINIMUM ALTITUDE - 4300

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
RONALD REAGAN WASHINGTON NATIONAL	WASHINGTON	DC

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, TOWER, DEP CON 125.65/348.725

FIXES AND/OR NAVAIDS:

BEBLE, COVTO, ALEEX, DOGUE, GUCER



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BOOCK	THREE	BOOCK3.BOOCK	TWO	03/31/2016	29 MAR 2018

REMARKS:

1. WAIVER AND APPROVAL LETTER ON FILE FOR LEG LENGTHS LESS THAN MINIMUM REQUIRED BY CRITERIA AND FOR CLIMB GRADIENTS EXCEEDING 500 FT PER NM.
2. RWY 1 MAGNETIC HEADING IN AIRNAV WAS UPDATED FROM 006.49 TO 006.50. WILL RETAIN FLIGHT INSPECTED AND AFS APPROVED VALUE OF 006.49 FOR THIS AMENDMENT.

FLIGHT INSPECTED BY:

FLIGHT INSPECTION REVIEW NOT REQUIRED
PROCESSED IAW FLIGHT INSPECTION TEAM (AJW-333)
MEMO, MAY 30, 2017

Digitally signed by
DONALD H LANIER
Dec 26, 2017

OFFICE SYMBOL: DATE:

AJW-333

DEVELOPED BY:

BEV BORDY (CHRISTINE BAYSE)

Digitally signed by
DONALD H LANIER
Dec 26, 2017

OFFICE SYMBOL: DATE:

AJV-5433 09/13/2017

APPROVED BY:

PATRICK MULQUEEN

Digitally signed by
DONALD H LANIER
Dec 26, 2017

OFFICE SYMBOL: DATE:

AJV-5430

REQUIRED EFFECTIVE DATE:

ROUTINE

COORDINATED WITH:

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

OTHER:

ZDC, POTOMAC APP CON, DCA ATCT, ARPT MGR

CHANGES - REASONS:

1. UPDATED DP ROUTE DESCRIPTION ALL HEADINGS AND COURSES BY ADDING 2 DEGREES.- MAG VAR UPDATED FROM 9W TO 11W.
2. UPDATED TRANSTION ROUTE TRACK COURSE BY ADDING 2 DEGREES.- MAG VAR UPDATED FROM 9W TO 11W.
3. UPDATED PROCEDURE NOTES FROM " **NOTE:** RWY 1 DEPARTURES REMAIN CLEAR OF P-56, CLIMB HEADING 004.49, TURN LEFT AS SOON AS PRACTICAL TO INTERCEPT COURSE 332.00 TO ADAXE" TO "**NOTE:** RWY 1 DEPARTURES REMAIN CLEAR OF P-56, CLIMB HEADING 006.49, TURN LEFT AS SOON AS PRACTICAL TO INTERCEPT COURSE 334.00 TO ADAXE".- MAG VAR UPDATED FROM 9W TO 11W.
4. UPDATED ADDITIONAL FLIGHT DATA REFERENCE MAG VAR NOTE FROM KDCA 9W EPCOH YEAR: 1985 TO KDCA 11W EPOCH YEAR 2020.- MAG VAR ROTATION.
5. UPDATED ADDITIONAL FLIGHT DATA PILOT NAVIGATION AREA BEARINGS FROM POINT A 109 TO 111 AND POINT B 199 TO 201.- MAG VAR UPDATED FROM 9W TO 11W.
6. UPDATED REMARK FROM "RWY 1 MAGNETIC HEADING IN AIRNAV WAS UPDATED FROM 004.49 TO 004.50. WILL RETAIN FLIGHT INSPECTED AND AFS APPROVED VALUE OF 004.49 FOR THIS AMENDMENT" TO "RWY 1 MAGNETIC HEADING IN AIRNAV WAS UPDATED FROM 006.49 TO 006.50. WILL RETAIN FLIGHT INSPECTED AND AFS APPROVED VALUE OF 006.49 FOR THIS AMENDMENT".- MAG VAR UPDATED FROM 9W TO 11W.
7. UPDATED THE RECOMMENDED NAVAID FROM DCA VOR/DME TO BAL VORTAC. - DUE TO THE MAG VAR CHANGE.



**FEDERAL AVIATION ADMINISTRATION
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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>			
BOOCK		THREE	BOOCK3.BOOCK	TWO	03/31/2016	29 MAR 2018			
<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>
RW01 (AER)	385029.65N/0770212.29W	N	-	-	-	-			
	385216.70N/0770223.06W	-	-	VI	355.49	1.79			CG 825 FT/NM TO 600
ADAXE	385402.61N/0770405.22W	Y	FB	CF	323.00	2.21		AT/BELOW 220K	RECOMMENDED NAVAID: BAL VORTAC
BEBLE	385455.81N/0770626.92W	Y	FB	TF	295.68	2.05			
COVTO	385649.58N/0770802.23W	Y	FB	TF	326.81	2.26			
ALEEX	385902.29N/0770930.51W	Y	FB	TF	332.56	2.49			
DOGUE	390230.96N/0770556.51W	Y	FB	TF	038.64	4.45		AT/BELOW 250K	
GUCER	390146.95N/0765653.83W	Y	FB	TF	095.89	7.09			
BOOCK	382434.35N/0764250.50W	Y	FB	TF	163.44	38.77			
RW04 (AER)*	385029.84N/0770228.15W*	N	-	-	-	-			*DISPL THLD (200 FT)
515 MSL		-	-	VA	025.56	-			CG 500 FT/NM TO 515
		-	-	VM	061.00	-			
MCNAB	383306.13N/0765027.69W	Y	FB	DF	-	-			
BOOCK	382434.35N/0764250.50W	Y	FB	TF	144.88	10.41			
RW15 (AER)	385140.18N/0770235.87W	N	-	-	-	-			
	385007.25N/0770105.16W	-	-	VI	142.64	1.95			CG 500 FT/NM TO 515
LEAVY	384819.33N/0770150.09W	Y	FB	CF	198.04	1.89			RECOMMENDED NAVAID: BAL VORTAC
FIMBI	384508.90N/0770105.77W	Y	FB	TF	169.67	3.22		AT/BELOW 230K	
MCNAB	383306.13N/0765027.69W	Y	FB	TF	145.25	14.64			
BOOCK	382434.35N/0764250.50W	Y	FB	TF	144.88	10.64			

QUALITY
4
CHECKED

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<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>
RW19 (AER)	385140.29N/0770219.41W	N	-	-	-	-			
515 MSL		-	-	VA	175.50				CG 500 FT/NM TO 515
FIMBI	384508.90N/0770105.77W	Y	FB	DF	-	-		AT/BELOW 230K	
MCNAB	383306.13N/0765027.69W	Y	FB	TF	145.25	14.64			
BOOCK	382434.35N/0764250.50W	Y	FB	TF	144.88	10.41			
RW33 (AER)	385059.29N/0770155.95W	N	-	-	-	-			
515 MSL		-	-	VA	322.65	-			CG 540 FT/NM TO 640
ADAXE	385402.61N/0770405.22W	Y	FB	DF	-	-		AT/BELOW 220K	RIGHT TURN
BEBLE	385455.81N/0770626.92W	Y	FB	TF	295.68	2.05			
COVTO	385649.58N/0770802.23W	Y	FB	TF	326.81	2.26			
ALEEX	385902.29N/0770930.51W	Y	FB	TF	332.56	2.49			
DOGUE	390230.96N/0770556.51W	Y	FB	TF	038.64	4.45		AT/BELOW 250K	
GUCER	390146.95N/0765653.83W	Y	FB	TF	095.89	7.09			
BOOCK	382434.35N/0764250.50W	Y	FB	TF	163.44	38.77			
BOOCK	382434.35N/0764250.50W	Y	-	IF	-	-			BOOCK3.COLIN
COLIN	380559.23N/0763950.85W	Y	FB	TF	172.74	18.71			

