

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation.
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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HAFNR	TWO	HAFNR2.HAFNR	ONE	25 JUN 15	20 AUG 2015

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWY 1: CLIMB HEADING 004.49 TO INTERCEPT COURSE 332.00 TO ADAXE, THEN ON DEPICTED ROUTE TO HAFNR, THENCE...

TAKEOFF RWY 15: CLIMB HEADING 151.64 TO 515, THEN RIGHT TURN DIRECT CAPVC, THEN ON DEPICTED ROUTE TO HAFNR, THENCE...

TAKEOFF RWY 19: CLIMB HEADING 184.50 TO 515, THEN DIRECT CAPVC, THEN ON DEPICTED ROUTE TO HAFNR, THENCE...

TAKEOFF RWY 33: CLIMB HEADING 331.65 TO 515, THEN RIGHT TURN DIRECT ADAXE, THEN ON DEPICTED ROUTE TO HAFNR, THENCE...

...ON ASSIGNED TRANSITION. MAINTAIN 5000. EXPECT CLEARANCE TO FILED ALTITUDE WITHIN TEN (10) MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
GREENSBORO	HAFNR2.GSO	HAFNR	JDUBB	TRACK 223.04	7.05	9600	2800	
			TYPNZ	TRACK 229.26	19.94	13500		
			SCORN	TRACK 229.09	45.24	FL180		
			RRSIN	TRACK 228.50	39.87	FL180		
			GSO VORTAC	TRACK 228.53	70.13	FL180		
SOUTH BOSTON	HAFNR2.SBV	HAFNR	JDUBB	TRACK 223.04	7.05	9600	2800	
			CASLY	TRACK 223.20	17.80	13100		
			MELTN	TRACK 223.07	61.44	FL180		
			SBV VORTAC	TRACK 222.66	37.92	FL180		

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: RNAV 1.

NOTE: RADAR REQUIRED.

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 P56, CLIMB HEADING 004, TURN LEFT AS SOON AS PRACTICAL TO INTERCEPT COURSE 332 TO ADAXE.

NOTE: PILOTS SHALL COMPLY WITH RONALD REAGAN WASHINGTON NATIONAL AIRPORT NOISE ABATEMENT AND PROHIBITED AREA (P-56) AVOIDANCE PROCEDURES AS DEFINED IN AIRPORT/FACILITY DIRECTORY SPECIAL NOTICES.

TAKEOFF MINIMUMS:

RWY 1, STANDARD WITH MINIMUM CLIMB OF 825 FT PER NM TO 600.

RWY 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.



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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 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 882 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 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: KDCA 9W EPOCH YEAR: 1985. DME/DME ASSESSMENT: SAT (RNP 2.0)

CHART: TOP ALTITUDE: 5000.

CHART SPEED ICONS: MAXIMUM SPEED 220 KIAS AT ADAXE; MAXIMUM SPEED 250 KIAS AT CUKLI.

CHART: P56A, P-56B.

AIRPORTS SERVED:

RONALD REAGAN WASHINGTON NATIONAL

WASHINGTON, DC

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, TOWER, DEP CON 118.95/257.2



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FIXES AND/OR NAVAIDS:

BEBLE, COVTO, FERGI, CUKLI, GAITE, DMKRT.



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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 004.49 TO 004.50. WILL RETAIN FLIGHT INSPECTED AND AFS APPROVED VALUE OF 004.49 FOR THIS AMENDMENT.
3. RADAR REQUIRED VICE RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT NOTE USED PER ATC REQUEST.

CHANGES:

1. AMENDED RWY 15 (245 FT DIFFERENCE) AND RWY 33 (245 FT DIFFERENCE) THRESHOLD COORDINATES ON FAA FORM 15C.
2. REMOVED SPEED RESTRICTION TEXT FROM RWY 1 AND RWY 33 DP ROUTE RESTRICTION.
3. AMENDED RWY 15 AND RWY 33 TAKEOFF OBSTACLE NOTES.
4. AMENDED RWY 19 TAKEOFF HEADING FROM 184.49 TO 184.50.

REASONS:

1. MATCH PENDING AIRNAV DATA FOR RUNWAY SAFETY AREA PROJECT.
2. NOT NEEDED. SPEED RESTRICTIONS ARE CODED AND SPEED ICON IS CHARTED.
3. OBSTACLES EVALUATED FROM UPDATED RUNWAY ENDS. MATCHES DATA ON FAA FORM 8260-15A, AMDT 8.
4. MATCH AMENDED AIRNAV RUNWAY BEARING VALUE.

6/26/2015: THIS IS A CORRECTED COPY OF THE FORM DEVELOPED ON 03/17/2015.

ADDED NOTE TO PROCEDURAL DATA NOTES: RWY 1 DEPARTURES REMAIN CLEAR OF P56, CLIMB HEADING 004, TURN LEFT AS SOON AS PRACTICAL TO INTERCEPT COURSE 332 TO ADAXE.



DEPARTURE (DATA RECORD)

DP Name		Number	DP Computer Code				Superseded Number	Dated	Effective Date
HAFNR		TWO	HAFNR2.HAFNR				ONE	25 JUN 15	20 AUG 2015
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
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: DCA VOR/DME
BEBLE	385455.81N/0770626.92W	Y	FB	TF	295.68	2.05			
COVTO	385649.58N/0770802.23W	Y	FB	TF	326.81	2.26			
FERGI	385912.16N/0771050.18W	Y	FB	TF	317.41	3.23			
CUKLI	385910.33N/0771634.81W	Y	FB	TF	269.64	4.48		AT/BELOW 250K	
HAFNR	382350.46N/0773358.95W	Y	FB	TF	201.20	37.83			
RW15 (AER)	385140.18N/0770235.87W	N	-	-	-	-			
515 MSL		-	-	VA	142.64	-			CG 500 FT/NM TO 515
CAPVC	384458.80N/0770204.96W	Y	FB	DF	-	-			RIGHT TURN
GAITE	384440.12N/0770744.97W	Y	FB	TF	266.02	4.44			
DMKRT	384234.33N/0771324.61W	Y	FB	TF	244.72	4.90			
HAFNR	382350.46N/0773358.95W	Y	FB	TF	220.88	24.71			
RW19 (AER)	385140.29N/0770219.41W	N	-	-	-	-			
515 MSL		-	-	VA	175.50	-			CG 500 FT/NM TO 515
CAPVC	384458.80N/0770204.96W	Y	FB	DF	-	-			
GAITE	384440.12N/0770744.97W	Y	FB	TF	266.02	4.44			
DMKRT	384234.33N/0771324.61W	Y	FB	TF	244.72	4.90			
HAFNR	382350.46N/0773358.95W	Y	FB	TF	220.88	24.71			
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			
FERGI	385912.16N/0771050.18W	Y	FB	TF	317.41	3.23			
CUKLI	385910.33N/0771634.81W	Y	FB	TF	269.64	4.48		AT/BELOW 250K	
HAFNR	382350.46N/0773358.95W	Y	FB	TF	201.20	37.83			



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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
HAFNR	382350.46N/0773358.95W	Y	-	IF	-	-			HAFNR2.GSO
JDUBB	381759.41N/0773859.76W	Y	FB	TF	214.04	7.05			
TYPNZ	380244.18N/0775518.72W	Y	FB	TF	220.26	19.94			
SCORN	372759.80N/0783154.33W	Y	FB	TF	220.09	45.24			
RRSIN	365707.34N/0790332.54W	Y	FB	TF	219.50	39.87			
GSO VORTAC	360244.49N/0795834.95W	Y	FB	TF	219.53	70.13			
HAFNR	382350.46N/0773358.95W	Y	-	IF	-	-			HAFNR2.SBV
JDUBB	381759.41N/0773859.76W	Y	FB	TF	214.04	7.05			
CASLY	380314.42N/0775139.73W	Y	FB	TF	214.20	17.80			
MELTN	371209.22N/0783444.33W	Y	FB	TF	214.07	61.44			
SBV VORTAC	364030.14N/0790052.20W	Y	FB	TF	213.66	37.92			