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. Distances are in nautical miles. Visibilities are in statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| **BULRN** | **TWO** | **BULRN2.BULRN** | **ONE** | **25 JUN 15** | 15 Oct 0215 |

**TYPE:** RNAV SID

## DP ROUTE DESCRIPTION:

**TAKEOFF RWY 1C/1L:** CLIMB HEADING 010.65 TO 820, THEN LEFT TURN HEADING 270.00 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL, THENCE…
**TAKEOFF RWY 1R:** CLIMB HEADING 010.67 TO 820, THEN LEFT TURN HEADING 270.00 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL, THENCE…
**TAKEOFF RWY 19C/19R:** CLIMB HEADING 190.65 TO 820, THEN ON HEADING 190.65 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL, THENCE…
**TAKEOFF RWY 19L:** CLIMB HEADING 190.67 TO 820, THEN ON HEADING 190.67 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL, THENCE…
**TAKEOFF RWY 30:** CLIMB HEADING 300.65 TO 820, THEN LEFT TURN HEADING 270.00 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL, THENCE…

...ON TRACK 210.49 TO BULRN, THEN ON (TRANSITION) MAINTAIN 3000 OR AS ASSIGNED BY ATC. 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 |
|---|---|---|---|---|---|---|---|---|
| FLASK | BULRN2.FLASK | BULRN | BUTRZ | TRACK 236.67 | 8.62 | 6700 | 2600 | |
| | | | CLTCH | TRACK 237.91 | 7.05 | 8100 | 2800 | |
| | | | KERRK | TRACK 244.90 | 28.20 | 13700 | 3300 | |
| | | | TEEMS | TRACK 242.94 | 48.01 | FL180 | | |
| | | | FLASK | TRACK 243.34 | 67.00 | FL180 | | |
| GREENSBORO | BULRN2.GSO | BULRN | HAFNR | TRACK 171.86 | 14.38 | 7800 | 1800 | |
| | | | JDUBB | TRACK 224.04 | 7.05 | 9200 | 1800 | |
| | | | TYPNZ | TRACK 230.26 | 19.94 | 13100 | 1800 | |
| | | | SCORN | TRACK 230.09 | 45.24 | FL180 | | |
| | | | RRSIN | TRACK 229.50 | 39.87 | FL180 | | |
| | | | GSO VORTAC | TRACK 229.53 | 70.13 | FL180 | | |
| LYNCHBURG | BULRN2.LYH | BULRN | POOCH | TRACK 193.73 | 10.23 | 7000 | 1700 | |
| | | | SCRAM | TRACK 239.11 | 7.68 | 8500 | 1800 | |
| | | | DANOO | TRACK 240.48 | 27.88 | 14000 | 4000 | |
| | | | WALCE | TRACK 241.00 | 33.42 | FL180 | | |
| | | | GLANC | TRACK 226.67 | 20.99 | FL180 | | |
| | | | LYH VORTAC | TRACK 227.07 | 13.98 | FL180 | | |

QUALITY 6 CHECKED

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| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| **BULRN** | **TWO** | **BULRN2.BULRN** | **ONE** | **25 JUN 15** | 15 Oct 0215 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MAULS | BULRN2.MAULS | BULRN | BUTRZ | TRACK 236.67 | 8.62 | 6700 | 2600 |
| | | | CLTCH | TRACK 237.91 | 7.05 | 8100 | 2800 |
| | | | KERRK | TRACK 244.90 | 28.20 | 13700 | 3300 |
| | | | MAULS | TRACK 258.54 | 47.83 | FL180 | |
| SOUTH BOSTON | BULRN2.SBV | BULRN | HAFNR | TRACK 171.86 | 14.38 | 7800 | 1800 |
| | | | JDUBB | TRACK 224.04 | 7.05 | 9200 | 1800 |
| | | | CASLY | TRACK 224.20 | 17.80 | 12700 | 1800 |
| | | | MELTN | TRACK 224.07 | 61.44 | FL180 | |
| | | | SBV VORTAC | TRACK 223.66 | 37.92 | FL180 | |

**PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:**

**NOTE:** RNAV 1.
**NOTE:** DME/DME/IRU OR GPS REQUIRED.
**NOTE:** RADAR REQUIRED.
**NOTE:** TURBOJETS ONLY.

**TAKEOFF MINIMUMS:**
**RWY 1C, 1L, 1R, 19C, 19L, 19R, 30,** STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 820.

**TAKEOFF OBSTACLES NOTES:**

**NOTE: RWY 1C,** TREES 2815 FT FROM DER, 1031 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/345 FT MSL. SIGN 64 FT FROM DER, 303 FT RIGHT OF CENTERLINE, 13 FT AGL/272 FT MSL.
**NOTE: RWY 1L,** TOWER 1917 FT FROM DER, 680 FT LEFT OF CENTERLINE, 51 FT AGL/330 FT MSL.
**NOTE: RWY 19C,** SIGN 100 FT FROM DER, 472 FT LEFT OF CENTERLINE, 4 FT AGL/289 FT MSL. VEHICLES ON ROAD 24 FT FROM DER, 274 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/293 FT MSL.
**NOTE: RWY 30,** TREES 2264 FT FROM DER, 1033 FT RIGHT OF CENTERLINE, UP TO 72 FT AGL/383 FT MSL.

**CONTROLLING OBSTACLES:**

**LOST COMMUNICATIONS PROCEDURES:**

QUALITY 6 CHECKED

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# GRAPHIC DEPARTURE PROCEDURE (DP)

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| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| **BULRN** | **TWO** | **BULRN2.BULRN** | **ONE** | **25 JUN 15** | 15 Oct 0215 |

## ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KIAD 10W EPOCH YEAR: 2000. DME/DME ASSESSMENT: SAT (RNP 2.0)

**CHART TOP ALTITUDE:** 3000.

**CHART:** MEA/MOCA FROM CIIVL TO BULRN, 5000/2600.

**PILOT NAVIGATION AREA:**
7 NM ARC CENTERED ON CIIVL (IF), CW
FROM: POINT A (BEARING 165 DEGREES TO CIIVL)
TO: POINT B (BEARING 255 DEGREES TO CIIVL)
MINIMUM ALTITUDE: 4000

## AIRPORTS SERVED:

| | |
|---|---|
| WASHINGTON DULLES INTL | WASHINGTON, DC |

## COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, TOWER, DEP CON 126.55/350.2

## FIXES AND/OR NAVAIDS:

QUALITY 6 CHECKED

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# GRAPHIC DEPARTURE PROCEDURE (DP)

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| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| **BULRN** | **TWO** | **BULRN2.BULRN** | **ONE** | **25 JUN 15** | 15 Oct 0215 |

**REMARKS:**

*Digitally signed by*

07/30/2015

05/14/2015

**REQUIRED EFFECTIVE DATE:**

ROUTINE

ATA, ALPA, APA, AOPA, NBAA, ZDC, POTOMAC APP CON, IAD ATCT, ARPT MGR

**CHANGES:**

1. ADDED PNA 7 NM CENTERED ON CIIVL WITH MINIMUM ALTITUDE 4000.
2. MODIFIED DP ROUTE DESCRIPTION TAKEOFF RWY 1C/1L/1R/30: CHANGED “FROM LEFT TURN DIRECT TRUPS, THEN ON TRACK 181.06 TO BURLN” TO “LEFT TURN HEADING 270.00 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL.”
3. MODIFIED DP ROUTE DESCRIPTION TAKEOFF RWY 19C/19R/19L: CHANGED “DIRECT CIIVL, THEN ON TRACK 232.94 TO BURLN” TO “ON HEADING 190.65 OR AS ASSIGNED BY ATC, EXPECT RADAR VECTORS TO CIIVL.”
4. REMOVED NOTE AIRCRAFT MAY BE RADAR VECTORED TO CIIVL, TRUPS, BULRN, BUTRZ, CLTCH, POOCH, SCRAM, OR JDUBB.
5. ADDED TO ADDITIONAL FLIGHT DATA: CHART MEA/MOCA FROM CIIVL TO BULRN, 5000/2600.
6. CHANGED PORTION OF THENCE NOTE FROM “ON ASSIGNED TRANSITION. MAINTAIN 3000” TO “ON TRACK 210.49 TO BULRN, THEN ON (TRANSITION) MAINTAIN 3000 OR AS ASSIGNED BY ATC.”

**REASONS:**

1, 2, 3. ATC REQUEST TO VECTOR AIRCRAFT TO RNAV ROUTES.
4. AIRCRAFT WILL BE VECTORED TO CIIVL.
5. IAW 8260.46E, APPENDIX E, 9(B).
6. PROVIDE AIRCRAFT TRACK FROM CIIVL TO BULRN.

QUALITY 6 CHECKED

# DEPARTURE (DATA RECORD)

| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| BULRN | TWO | BULRN2.BULRN | ONE | 25 JUN 15 | 15 OCT 2015 |

| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **RW01C (AER)** | 385620.64N/0772735.20W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 000.65 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 260.00 | - | | | LEFT TURN |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |
| **RW01L (AER)** | 385641.88N/0772829.32W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 000.65 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 260.00 | - | | | LEFT TURN |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |
| **RW01R (AER)** | 385525.53N/0772611.22W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 000.67 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 260.00 | - | | | LEFT TURN |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |
| **RW19C (AER)** | 385814.31N/0772733.55W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 180.65 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 180.65 | | | | |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |
| **RW19L (AER)** | 385719.19N/0772609.53W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 180.67 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 180.67 | - | | | |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |

QUALITY 6 CHECKED

# DEPARTURE (DATA RECORD)

| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| BULRN | TWO | BULRN2.BULRN | ONE | 25 JUN 15 | 15 OCT 2015 |

| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| **RW19R (AER)** | 385814.78N/0772827.98W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 180.65 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 180.65 | - | | | |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |
| **RW30 (AER)** | 385601.00N/0772721.23W | N | - | - | - | - | | | |
| 820 MSL | - | - | - | VA | 290.65 | - | | | CG 500 FT/NM TO 820 |
| - | - | - | - | VM | 260.00 | | | | LEFT TURN |
| CIIVL | 384300.63N/0773703.93W | Y | FB | DF | - | - | | | |
| BULRN | 383731.39N/0773940.75W | Y | FB | TF | 200.49 | 5.85 | | | |
| BULRN | 383731.39N/0773940.75W | Y | - | IF | - | - | | | BULRN2.FLASK |
| BUTRZ | 383135.70N/0774740.45W | Y | FB | TF | 226.67 | 8.62 | | | |
| CLTCH | 382651.62N/0775420.14W | Y | FB | TF | 227.91 | 7.05 | | | |
| KERRK | 381033.77N/0782335.86W | Y | FB | TF | 234.90 | 28.20 | | | |
| TEEMS | 374125.90N/0791151.85W | Y | FB | TF | 232.94 | 48.01 | | | |
| FLASK | 370103.92N/0801858.62W | Y | FB | TF | 233.34 | 67.00 | | | |
| BULRN | 383731.39N/0773940.75W | Y | - | IF | - | - | | | BULRN2.GSO |
| HAFNR | 382350.46N/0773358.95W | Y | FB | TF | 161.86 | 14.38 | | | |
| 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 | | | |
| BULRN | 383731.39N/0773940.75W | Y | - | IF | - | - | | | BULRN2.LYH |
| POOCH | 382718.56N/0774031.56W | Y | FB | TF | 183.73 | 10.23 | | | |
| SCRAM | 382216.20N/0774754.77W | Y | FB | TF | 229.11 | 7.68 | | | |
| DANOO | 380427.24N/0781508.96W | Y | FB | TF | 230.48 | 27.88 | | | |

QUALITY 6 CHECKED

# DEPARTURE (DATA RECORD)

| DP Name | Number | DP Computer Code | Superseded Number | Dated | Effective Date |
|---|---|---|---|---|---|
| BULRN | TWO | BULRN2.BULRN | ONE | 25 JUN 15 | 15 OCT 2015 |

| FIX/NAVAID | LAT/LONG | C | FO/FB | LEG TYPE | TC | DIST (NM) | ALTITUDE | SPEED | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| WALCE | 374319.43N/0784753.20W | Y | FB | TF | 231.00 | 33.42 | | | |
| GLANC | 372627.01N/0790337.65W | Y | FB | TF | 216.67 | 20.99 | | | |
| LYH VORTAC | 371516.48N/0791410.97W | Y | FB | TF | 217.07 | 13.98 | | | |
| BULRN | 383731.39N/0773940.75W | Y | - | IF | - | - | | | BULRN2.MAULS |
| BUTRZ | 383135.70N/0774740.45W | Y | FB | TF | 226.67 | 8.62 | | | |
| CLTCH | 382651.62N/0775420.14W | Y | FB | TF | 227.91 | 7.05 | | | |
| KERRK | 381033.77N/0782335.86W | Y | FB | TF | 234.90 | 28.20 | | | |
| MAULS | 375249.36N/0791949.19W | Y | FB | TF | 248.54 | 47.83 | | | |
| BULRN | 383731.39N/0773940.75W | Y | - | IF | - | - | | | BULRN2.SBV |
| HAFNR | 382350.46N/0773358.95W | Y | FB | TF | 161.86 | 14.38 | | | |
| 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 | | | |

QUALITY 6 CHECKED