

**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SUPERSEDED NUMBER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>               |
|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| LWOOD                    | THREE                    | LWOOD3.LWOOD                        | TWO                      | 01/08/2015               | 8 NOV 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 type="checkbox"/> | <input checked="" type="checkbox"/> |

**DP ROUTE DESCRIPTION:**

TAKEOFF RWY 05L, 05R: CLIMB HEADING 054.14 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO FOCAL THEN ON DEPICTED ROUTE TO LWOOD, THENCE...

TAKEOFF RWY 23L: CLIMB HEADING 234.15 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO FOCAL THEN ON DEPICTED ROUTE TO LWOOD, THENCE...

TAKEOFF RWY 23R: CLIMB HEADING 234.16 OR AS ASSIGNED BY ATC, FOR RADAR VECTORS TO FOCAL THEN ON DEPICTED ROUTE TO LWOOD, THENCE...

...ON ASSIGNED TRANSITION, MAINTAIN 7000 OR ALTITUDE ASSIGNED BY ATC. EXPECT CLEARANCE TO FILED ALTITUDE WITHIN TEN MINUTES AFTER DEPARTURE.

**TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):**

| <u>TRANSITION NAME</u> | <u>TRANSITION<br/>COMPUTER CODE</u> | <u>FROM<br/>FIX/NAVAID</u> | <u>TO<br/>FIX/NAVAID</u> | <u>COURSE</u> | <u>DISTANCE</u> | <u>MEA</u> | <u>MOCA</u> | <u>CROSSING<br/>ALTITUDE/FIXES</u> |
|------------------------|-------------------------------------|----------------------------|--------------------------|---------------|-----------------|------------|-------------|------------------------------------|
| PULASKI                | LWOOD3.PSK                          | LWOOD                      | OPUSS                    | TRACK 333.39  | 29.79           | 13500      | 3300        |                                    |
|                        |                                     | OPUSS                      | PSK VORTAC               | TRACK 312.07  | 55.71           | 18000      | 5700        |                                    |
| ROANOKE                | LWOOD3.ROA                          | LWOOD                      | ROA VOR/DME              | TRACK 343.72  | 77.19           | 18000      | 5700        |                                    |

**PROCEDURAL DATA NOTES:**

NOTE: TRANSPONDER CODE WILL BE ASSIGNED VIA PDC OR RALEIGH CLEARANCE DELIVERY.

NOTE: IF UNABLE TO ACCEPT CLIMB RATE, ADVISE ATC ON INITIAL CONTACT.

NOTE: RNAV 1.

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: RADAR REQUIRED.

NOTE: FOR TURBOJET AIRCRAFT ONLY.

**TAKEOFF MINIMUMS:**

RWY 14, 32, NA – RUNWAY TOO SHORT FOR TURBOJETS.

RWY 05L, 05R, 23R, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 940.

RWY 23L, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1100.

**TAKEOFF OBSTACLES NOTES:**

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

**CONTROLLING OBSTACLES:**

RWY 23L, 23R, 2049 FT MSL TOWER (37-001064) 354251.00N/0784903.00W.

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

CHART: TOP ALTITUDE: 7000.

REFERENCE MAG VAR: KRDU 9W EPOCH YEAR: 2020.

DME/DME ASSESSMENT: SAT (RNP 2.0).

CHART: MEA/MOCA FROM FOCAL TO EPOCH, 6200/2200.

CHART: MEA/MOCA FROM EPOCH TO LWOOD, 7500/2000.

QUALITY  
3  
CHECKED

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| LWOOD          | THREE         | LWOOD3.LWOOD            | TWO                      | 01/08/2015   | 8 NOV 2018            |

PILOT NAVIGATION AREA:  
7NM ARC CENTERED ON FOCAL (IF), CW  
FROM: POINT A (BEARING 257.50 TO FOCAL)  
TO: POINT B (BEARING 347.50 TO FOCAL)  
MINIMUM ALTITUDE - 5000

**AIRPORTS SERVED:**

| <u>AIRPORT NAME</u>        | <u>CITY</u>    | <u>STATE</u> |
|----------------------------|----------------|--------------|
| RALEIGH-DURHAM INTL (KRDU) | RALEIGH/DURHAM | NC           |

**COMMUNICATIONS:**

ATIS, CLEARANCE DELIVERY, GROUND CONTROL, TOWER, DEPARTURE CONTROL: 132.35/256.9

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

ROANOKE AND PULASKI TRANSITIONS WITHIN MOUNTAINOUS TERRAIN.  
ABBREVIATED AMENDMENT.

**FLIGHT INSPECTED BY:**

FLIGHT INSPECTION REVIEW NOT REQUIRED,- PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, DEC 22, 2017.

**OFFICE SYMBOL:****DATE:**

*Digitally signed by*  
**BEV L BORDY**  
Aug 20, 2018

**DEVELOPED BY:**

LONNIE EVERHART (ARTHUR GUMTAU)

*Digitally signed by*

**BEV L BORDY**

Aug 20, 2018

**OFFICE SYMBOL:****DATE:**

AJV-5400

05/29/2018

**APPROVED BY:**

LONNIE EVERHART

*Digitally signed by*

**BEV L BORDY**

Aug 20, 2018

**OFFICE SYMBOL:****DATE:**

AJV-5400

**REQUIRED EFFECTIVE DATE:**

ROUTINE

**COORDINATED WITH:**

|                                     |                                     |                                     |                                     |                          |                                     |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| <b><u>A4A</u></b>                   | <b><u>ALPA</u></b>                  | <b><u>AOPA</u></b>                  | <b><u>APA</u></b>                   | <b><u>HAI</u></b>        | <b><u>NBAA</u></b>                  |
| <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, RDU ATCT, RDU APP CON, RDU AMGR

**CHANGES - REASONS:**

UPDATED MAGVAR FROM 7W 1985 TO 9W 2020

UPDATED DEPARTURE ROUTE DESCRIPTION FOR ALL RUNWAYS, REMOVED EXPECT FROM RADAR VECTORS - REQUIRED BY 8260.46F

CHANGED ROA VORTAC TO ROA VOR/DME - TACR PROGRAM UPDATE

REMOVED TAKEOFF OBSTACLE NOTES FROM 8260-15B - PER MEMO 259



**FEDERAL AVIATION ADMINISTRATION  
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DEPARTURE (DATA RECORD)**

| DP NAME     |                        |   |       |          |        |           | NUMBER   | DP COMPUTER CODE | SUPERSEDED NUMBER | DATED                | EFFECTIVE DATE |
|-------------|------------------------|---|-------|----------|--------|-----------|----------|------------------|-------------------|----------------------|----------------|
| LWOOD       |                        |   |       |          |        |           | THREE    | LWOOD3.LWOOD     | TWO               | 01/08/2015           | 8 NOV 2018     |
| FIX/NAVAID  | LAT/LONG               | C | FO/FB | LEG TYPE | TC     | DIST (NM) | ALTITUDE | SPEED            |                   | REMARKS              |                |
| RW05L (AER) | 355228.02N/0784807.07W | N | -     | -        | -      | -         |          |                  |                   | CG 500 FT/NM TO 940  |                |
|             |                        | - | -     | VM       | 045.14 | -         |          |                  |                   |                      |                |
| FOCAL       | 360205.45N/0791524.28W | Y | FB    | DF       | -      | -         |          |                  |                   |                      |                |
|             |                        |   |       |          |        |           |          |                  |                   |                      |                |
| RW05R (AER) | 355152.67N/0784750.42W | N | -     | -        | -      | -         |          |                  |                   | CG 500 FT/NM TO 940  |                |
|             |                        | - | -     | VM       | 045.14 | -         |          |                  |                   |                      |                |
| FOCAL       | 360205.45N/0791524.28W | Y | FB    | DF       | -      | -         |          |                  |                   |                      |                |
|             |                        |   |       |          |        |           |          |                  |                   |                      |                |
| RW23L (AER) | 355244.98N/0784645.82W | N | -     | -        | -      | -         |          |                  |                   | CG 500 FT/NM TO 1100 |                |
|             |                        | - | -     | VM       | 225.15 | -         |          |                  |                   |                      |                |
| FOCAL       | 360205.45N/0791524.28W | Y | FB    | DF       | -      | -         |          |                  |                   |                      |                |
|             |                        |   |       |          |        |           |          |                  |                   |                      |                |
| RW23R (AER) | 355337.76N/0784640.92W | N | -     | -        | -      | -         |          |                  |                   | CG 500 FT/NM TO 940  |                |
|             |                        | - | -     | VM       | 225.16 | -         |          |                  |                   |                      |                |
| FOCAL       | 360205.45N/0791524.28W | Y | FB    | DF       | -      | -         |          |                  |                   |                      |                |
|             |                        |   |       |          |        |           |          |                  |                   |                      |                |
| FOCAL       | 360205.45N/0791524.28W | Y | FB    | IF       | -      | -         |          |                  |                   |                      |                |
| EPOCH       | 360423.46N/0792155.68W | Y | FB    | TF       | 293.50 | 5.77      |          |                  |                   |                      |                |
| LWOOD       | 361050.35N/0792253.60W | Y | FB    | TF       | 353.08 | 6.49      |          |                  |                   |                      |                |
|             |                        |   |       |          |        |           |          |                  |                   |                      |                |
| LWOOD       | 361050.35N/0792253.60W | Y | -     | IF       | -      | -         |          |                  |                   | LWOOD3.PSK           |                |
| OPUSS       | 363503.70N/0794425.71W | Y | FB    | TF       | 324.39 | 29.79     |          |                  |                   |                      |                |

QUALITY

3

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|-------------------|------------------------|----------|--------------|-----------------|-----------|------------------|-----------------|-------------------------|--------------------------|--------------|-----------------------|
| LWOOD             |                        |          |              |                 |           |                  | THREE           | LWOOD3.LWOOD            | TWO                      | 01/08/2015   | 8 NOV 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>           |              |                       |
| PSK VORTAC        | 370515.74N/0804246.44W | Y        | FB           | TF              | 303.07    | 55.71            |                 |                         |                          |              |                       |
|                   |                        |          |              |                 |           |                  |                 |                         |                          |              |                       |
| LWOOD             | 361050.35N/0792253.60W | Y        | -            | IF              | -         | -                |                 |                         | LWOOD3.ROA               |              |                       |
| ROA VOR/DME       | 372036.47N/0800413.43W | Y        | FB           | TF              | 334.72    | 77.19            |                 |                         |                          |              |                       |

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