

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.

| DP NAME | NUMBER                   | DP COMPUTER CODE         | SUPERSEDED NUMBER                   | DATED                    | ACTUAL EFFECTIVE DATE    |
|---------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| KNIGHTS | THREE                    | KN13.KNI                 | TWO                                 | 01/03/19                 | 21 Mar 2024              |
| TYPE:   | OBSTACLE                 | COPTER                   | SID                                 | SPECIAL                  | RNAV                     |
|         | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**DP ROUTE DESCRIPTION:**  
**CHARLOTTE/DOUGLAS INTL (KCLT):**  
**RWY 18C:** CLIMB ON HEADING 182.96 TO 1200 BEFORE TURNING LEFT, THENCE...  
**RWY 18L:** CLIMB ON HEADING 182.97 OR AS ASSIGNED BY ATC, THENCE...  
**RWY 18R:** CLIMB ON HEADING 182.96 OR AS ASSIGNED BY ATC, THENCE...  
**RWY 36C:** CLIMB ON HEADING 002.96 TO 1400 BEFORE TURNING LEFT, THENCE...  
**RWY 36L:** CLIMB ON HEADING 002.96 TO 1800 BEFORE TURNING LEFT, THENCE...  
**RWY 36R:** CLIMB ON HEADING 002.97 OR AS ASSIGNED BY ATC, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 4000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE

**CONCORD-PADGETT RGNL (KJQF):**  
**RWY 2:** CLIMB ON HEADING 016.46 TO 2200, THENCE...  
**RWY 20:** CLIMBING LEFT TURN HEADING 150 TO 2400, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE .

**GASTONIA MUNI (KAKH):**  
**RWY 3:** CLIMB ON HEADING 049.34 TO 2700, THENCE...  
**RWY 21:** CLIMB ON HEADING 214.33 TO 1600 BEFORE PROCEEDING NORTH, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

**CHARLOTTE-MONROE EXECUTIVE (KEQY):**  
**RWY 5:** CLIMB ON HEADING 052.98, THENCE...  
**RWY 23:** CLIMB ON HEADING 232.99, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

**ROCK HILL/YORK CO/BRYANT FIELD (KUZA):**  
**RWY 2:** CLIMB ON HEADING 016.23, THENCE...  
**RWY 20:** CLIMB ON HEADING 196.23, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

**LINCOLN-TON-LINCOLN COUNTY RGNL(KIPJ):**  
**RWY 5:** CLIMB ON HEADING 063.15 TO 2000 BEFORE PROCEEDING ON COURSE. THENCE...  
**RWY 23:** CLIMB ON HEADING 243.16 TO 2800 BEFORE TURNING LEFT, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

**LANCASTER COUNTY-MC WHIRTER FIELD (KLKR):**  
**RWY 6:** CLIMB ON HEADING 065.51, THENCE...  
**RWY 24:** CLIMB ON HEADING 245.52. THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

**STANLY COUNTY (KVUJ):**  
**RWY 4R:** CLIMB ON HEADING 043.18, THENCE...  
**RWY22L:** CLIMB ON HEADING 223.19, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.



**MID-CAROLINA RGNL (KRUQ):**  
**RWY 2:** CLIMB ON HEADING 021.99, THENCE...  
**RWY 20:** CLIMB ON HEADING 201.99 TO 1700 BEFORE TURNING WEST, THENCE...  
... EXPECT RADAR VECTORS TO INTERCEPT FILED/ASSIGNED TRANSITION OR ENROUTE FIX/NAVAID. MAINTAIN 3000, EXPECT FILED ALTITUDE/FLIGHT LEVEL 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

| TRANSITION NAME | TRANSITION<br>COMPUTER CODE | FROM<br>FIX/NAVAID | TO<br>FIX/NAVAID | COURSE             | DISTANCE | MEA   | MOCA | CROSSING<br>ALTITUDE/FIXES |
|-----------------|-----------------------------|--------------------|------------------|--------------------|----------|-------|------|----------------------------|
| PEKNN           | KNI3.PEKNN                  | CLT VOR/DME        | GIPPR            | 93.32 (CLT R-093)  | 47.52    | 4000  | 3100 |                            |
|                 |                             | GIPPR              | PEKNN            | 92.10 (SDZ R-272)  | 5.55     | 4000  | 1900 |                            |
| LILLS           | KNI3.LILLS                  | CLT VOR/DME        | LILLS            | 111.58 (CLT R-112) | 52.58    | 9000  | 2700 |                            |
| HAMLN           | KNI3.HAMLN                  | CLT VOR/DME        | WALUT            | 175.19 (CLT R-175) | 31.83    | 5000  | 2200 |                            |
|                 |                             | WALUT              | HAMLN            | 175.19 (CLT R-175) | 18.70    | 5000  | 2000 |                            |
| ANDYS           | KNI3.ANDYS                  | CLT VOR/DME        | ANDYS            | 196.00 (CLT R-196) | 50.00    | 8000  | 2300 |                            |
| DEBIE           | KNI3.DEBIE                  | CLT VOR/DME        | DEBIE            | 255.00 (CLT R-255) | 45.00    | 11000 | 2700 |                            |
| NEANO           | KNI3.NEANO                  | CLT VOR/DME        | BOBZY            | 274.71 (CLT R-275) | 33.56    | 8000  | 2900 |                            |
|                 |                             | BOBZY              | NEANO            | 249.85 (ODF R-070) | 18.89    | 8000  | 3600 |                            |
| FLYYN           | KNI3.FLYYN                  | CLT VOR/DME        | FLYYN            | 360.00 (CLT R-360) | 55.00    | 5000  | 4700 |                            |
| CEGAL           | KNI3.CEGAL                  | CLT VOR/DME        | FLYYN            | 360.00 (CLT R-360) | 55.00    | 5000  | 4700 |                            |
|                 |                             | FLYYN              | CEGAL            | 360.00 (CLT R-360) | 40.00    | 9000  | 6800 |                            |

**PROCEDURAL DATA NOTES:**  
**NOTE:** FOR PROPELLER AIRCRAFT ONLY.  
**NOTE:** TURBOPROPS: OPERATE IN A MANNER THAT WILL RESULT IN BEST FORWARD SPEED AND CLIMB RATE.  
**NOTE (CHARLOTTE/DOUGLAS INTL ONLY):** TRANSPONDER CODE WILL BE ISSUED VIA PDC OR CHARLOTTE CLEARANCE DELIVERY.  
**NOTE (CONCORD-PADGETT RGNL ONLY):** TRANSPONDER CODE WILL BE ISSUED VIA CONCORD ATCT OR CHARLOTTE CLEARANCE DELIVERY.  
**NOTE (GASTONIA MUNI, CHARLOTTE-MONROE EXECUTIVE, ROCK HILL/YORK CO/BRYANT FIELD, LINCOLNTON-LINCOLN COUNTY RGNL, LANCASTER COUNTY-MC WHIRTER FIELD, STANLY COUNTY, MID-CAROLINA RGNL ONLY):** TRANSPONDER CODE WILL BE ISSUED VIA CHARLOTTE CLEARANCE DELIVERY.

PBN REQUIREMENTS NOTES:

**EQUIPMENT REQUIREMENT NOTES:**  
RADAR AND DME REQUIRED.

**TAKEOFF MINIMUMS:**  
**CHARLOTTE /DOUGLAS INTL (KCLT):**  
**RWY 18C, 18L, 18R, 36C, 36L, 36R:** STANDARD.



| <u>DP NAME</u> | <u>NUMBER</u> | <u>DP COMPUTER CODE</u> | <u>SUPERSEDED NUMBER</u> | <u>DATED</u> | <u>ACTUAL EFFECTIVE DATE</u> |
|----------------|---------------|-------------------------|--------------------------|--------------|------------------------------|
| KNIGHTS        | THREE         | KNI3.KNI                | TWO                      | 01/03/19     | <b>21 Mar 2024</b>           |

**CONCORD-PADGETT RGNL (KJQF):****RWY 2:** STANDARD.**RWY 20:** STANDARD WITH MINIMUM CLIMB OF 320 FT PER NM TO 2400.**GASTONIA MUNI (KAKH):****RWY 3, 21:** STANDARD.**CHARLOTTE-MONROE EXECUTIVE (KEQY):****RWY 5, 23:** STANDARD.**LINCOLN-TON-LINCOLN COUNTY RGNL (KIPJ):****RWY 5, 23:** STANDARD.**LANCASTER COUNTY-MC WHIRTER FIELD (KLKW):****RWY 6, 24:** STANDARD.**STANLY COUNTY (KVUJ):****RWY 4L, 22R:** NA - ENVIRONMENTAL.**RWY 22L:** STANDARD**RWY 4R:** 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 315 FT PER NM TO 1000.**MID-CAROLINA RGNL (KRUQ):****RWY 2:** STANDARD.**RWY 20:** 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 205 FT PER NM TO 1300, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1200 FT PRIOR TO DER.**ROCK HILL/YORK CO/BRYANT FIELD (KUZA):****RWY 2, 20:** STANDARD.**TAKEOFF OBSTACLES NOTES:**

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

**CONTROLLING OBSTACLES:****CONCORD-PADGETT RGNL (KJQF):****RWY 20:** 1950 FT MSL TOWER 351715.00N/0804144.00W.**STANLY COUNTY (KVUJ):****RWY 4R:** 732 FT MSL TREE (37-111225) 352557.53N/0800829.12W (CLIMB GRADIENT), 803 FT MSL TREE (37-112801) 352620.07N/0800816.77W (CLIMB TO ALTITUDE), 820 FT MSL TREE (37-116182) 352627.52N/0800810.70W (CEILING), 790 FT MSL (37-114938) 352637.40N/0800804.59N (VISIBILITY).**MID-CAROLINA RGNL (KRUQ):****RWY 20:** 1121 FT MSL TOWER 353613.00N/0803234.12W.**MSA:**

KCLT: MSA FROM KCLT 3800.

KJQF: MSA FROM KJQF 3800.

KAKH: MSA FROM KAKH 3800.

KEQY: MSA FROM KEQY 3100.

KIPJ: MSA FROM BZM VOR/DME 3800.

KLKR: MSA FROM KLKR 2300.

KVUJ: MSA FROM KVUJ 3100.

KRUQ: MSA FROM KRUQ 3400.

KUZA: MSA FROM KUZA 3800.



LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

AIRPORT MV: KCLT (P) 7W/2000, KJQF 6W/1995, KAKH 6W/2000, KEQY 6W/1990, KIPJ 6W/1995, KLKR 7W/2000, KVUJ 6W/1985, KRUQ 6W/1985, KUZA 5W/1990.

CHART: V54-409, CLT VOR/DME R-093 GIPPR TO PEKNN.

CHART: ODF DME AT NEANO.

CHARLOTTE/DOUGLAS INTL - CHART: TOP ALTITUDE 4000

CHART: SOUTHEAST AND NORTHWEST DEPARTURE SECTORS WITH DASHED LINE EXTENDED THROUGH CLT VOR/DME FROM 055 DEGREES TO 235 DEGREES.

CONCORD-PADGETT RGNL - CHART: TOP ALTITUDE 3000.

GASTONIA MUNI - CHART: TOP ALTITUDE 3000.

CHARLOTTE-MONROE EXECUTIVE - CHART: TOP ALTITUDE 3000.

LINCOLNTON-LINCOLN COUNTY RGNL - CHART: TOP ALTITUDE 3000.

LANCASTER COUNTY-MC WHIRTER FIELD - CHART: TOP ALTITUDE 3000.

STANLY COUNTY - CHART: TOP ALTITUDE 3000.

MID-CAROLINA RGNL - CHART: TOP ALTITUDE 3000.

ROCK HILL/YORK CO/BRYANT FIELD - CHART: TOP ALTITUDE 3000.

AIRPORTS SERVED:

| AIRPORT ID | CITY       | STATE |
|------------|------------|-------|
| KCLT       | CHARLOTTE  | NC    |
| KJQF       | CONCORD    | NC    |
| KAKH       | GASTONIA   | NC    |
| KEQY       | MONROE     | NC    |
| KIPJ       | LINCOLNTON | NC    |
| KLKR       | LANCASTER  | SC    |
| KVUJ       | ALBEMARLE  | NC    |
| KRUQ       | SALISBURY  | NC    |
| KUZA       | ROCK HILL  | SC    |

COMMUNICATIONS:

CHARLOTTE/DOUGLAS INTL: CHART: ATIS, CLNC DEL, GND CON, TOWER.

CONCORD-PADGETT RGNL: CHART: ATIS, CLNC DEL, GND CON, TOWER, UNICOM.

GASTONIA MUNI: CHART: ASOS, CLNC DEL, UNICOM.

CHARLOTTE-MONROE EXECUTIVE: CHART: ASOS, CLNC DEL, UNICOM.

ROCK HILL/YORK CO/BRYANT FIELD: CHART: ASOS, CLNC DEL, UNICOM

LINCOLNTON-LINCOLN COUNTY RGNL: CHART: AWOS, CLNC DEL (GCO), UNICOM.

LANCASTER COUNTY-MC WHIRTER FIELD: CHART: AWOS, GCO, UNICOM.

MID-CAROLINA RGNL: CHART: AWOS, CLNC DEL, UNICOM.

STANLY COUNTY: CHART: ATIS, CLNC DEL, GND CON, TOWER.



24

24

02/05/2024

DP NAME

KNIGHTS

NUMBER

THREE

DP COMPUTER CODE

KNI3.KNI

SUPERSEDED NUMBER

TWO

DATED

01/03/19

ACTUAL EFFECTIVE DATE

21 Mar 2024

FIXES AND/OR NAVAIDS:

ODF VOR/DME, SUG VORTAC, SDZ VORTAC, FLO VORTAC.

REMARKS:

ABBREVIATED AMENDMENT

FLIGHT INSPECTED BY

JEFFREY ECKMAN

Digitally signed by

CASEY D HILL

Jan 18, 2024

OFFICE

FPO

DATE

09/15/2023

DEVELOPED BY

ANA VEGA

Digitally signed by

ANA Y VEGA

May 05, 2023

OFFICE

AJV-A412

DATE

01/06/2023

APPROVED BY

JULIE MORGAN

Digitally signed by

MARK D ADAMS

May 12, 2023

OFFICE

AJV-A410

DATE

TITLE

MANAGER

REQUIRED EFFECTIVE DATE

ROUTINE

COORDINATED WITH:

A4A

ALPA

AOPA

APA

HAI

NBAA

OTHER: ATA, ZTL, CLT APP CON, CLT ATCT, JQF ATCT, VUJ ATCT, AMGR(S).

CHANGES - REASONS:

1. 1. REMOVED ALL REFERENCES TO KCLT RWY 5/23 - INCORPORATE NOTAM CLT 05/427.

2. DP DESCRIPTION: CHARLOTTE/DOUGLAS INTL (KCLT): RWY 18C UPDATED FROM "CLIMB ON HEADING 182.96, THENCE" TO "CLIMB ON HEADING 182.96 TO 1200 BEFORE TURNING LEFT" - CLEARS NOTAM FDC 3/0602. RWY 36C UPDATED CLIMB ON HEADING FROM "002.98" TO 002.96" - RWY TRUE BEARING AND MATCH OTHER SIDS.

3. DP DESCRIPTION: CONCORD-PADGETT RGNL (KJQF): RWY 20 UPDATED CLIMB ON HEADING FROM "150: TO "150.00" -LIST TO HUNDREDTH OF A DEGREE.

4. DP DESCRIPTION: LINCOLNTON-LINCOLN COUNTY RGNL (KIPJ): RWY 23 UPDATED CLIMB ON HEADING FROM "233.15" TO "243.16" - TO MATCH ODP.

5. TAKEOFF MINIMUMS: STANLY COUNTY (KVUJ) AMENDED RWY 4R FROM "300 1 ½ OR STANDARD WITH MINIMUM CLIMB OF 276 FT PER NM TO 1000" TO "300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 315 FT PER NM TO 1000" - INCORPORATE FDC 3/0577.

6. TAKEOFF MINIMUMS: STANLY COUNTY (KVUJ) RWY 4L, 22R UPDATED TO READ "NA - ENVIRONMENTAL" - PER AIRNAV USED AS ASSAULT STRIP BY MILITARY, IT IS NOT USED FOR IFR OPERATIONS.

7. CONTROLLING OBSTACLES: STANLY COUNTY (KVUJ) RWY 4R UPDATED FROM "837 FT MSL TREE 352627.34N/0800808.17W" TO "732 FT MSL TREE (37-111225) 352557.53N/0800829.12W (CLIMB GRADIENT) AND ADDED "803 FT MSL TREE (37-112801) 352620.07N/0800816.77W (CLIMB TO ALTITUDE), 820 FT MSL TREE (37-116182) 352627.52N/0800810.70W (CEILING), 790 FT MSL (37-114938) 352637.40N/0800804.59N (VISIBILITY)" - NEW PENETRATING OBSTACLES.

8. CONTROLLING OBSTACLES: REMOVED ALL "ROUTE DEVELOPMENT" OBSTACLES - ROUTES ARE NOT BASED ON OBSTACLES.

9. PROCEDURAL DATA NOTES: MOVED "RADAR AND DME REQUIRED" NOTE TO EQUIPMENT REQUIREMENT NOTES - 8260.46J SECTION 2.

10. COMMUNICATIONS: REMOVED DEPARTURE CONTROL (DEP CON) - CHARTING DEPARTURE CONTROL FREQUENCY OCCURS AUTOMATICALLY PER IAW 8260.46J APPENDIX E.

11. AIRPORTS SERVED: UPDATED TO "AIRPORT ID" ONLY - IAW 8260.46J.

12. CHANGED DP ROUTE DESCRIPTION FOR ALL RUNWAYS FROM "CLIMB HEADING" TO "CLIMB ON HEADING" - IAW 8260.46J APPENDIX E.

13. ADDED "APT. ID" FOLLOWING THE AIRPORT NAME ON DP ROUTE DESCRIPTION, TAKEOFF MINIMUMS AND CONTROLLING OBSTACLES - IAW 8260.46J

14. ADDED TO MSA "KCLT: MSA FROM KCLT 3800. KJQF: MSA FROM KJQF 3800. KAKH: MSA FROM KAKH 3800. KEQY: MSA FROM KEQY 3100. KIPJ: MSA FROM BZM VOR/DME 3800. KLKR: MSA FROM KLKR 2300. KVUJ: MSA FROM KVUJ 3100. KRUQ: MSA FROM KRUQ 3400. KUZA: MSA FROM KUZA 3800" - IAW 8260.3E, PARA 2-3-2.B, SINCE THE ONLY VOR (CLT) THAT IS WITHIN 25NM OF THE AIRPORT IS SLATED FOR DECOMM IN 2026, USED THE AIRPORT (ARP) FOR THE MSA.

15. ADDITIONAL FLIGHT DATA: ADDED " AIRPORT MV: KCLT (P) 7W/2000, KJQF 6W/1995, KAKH 6W/2000, KEQY 6W/1990, KIPJ 6W/1995, KLKR 7W/2000, KVUJ 6W/1985, KRUQ 6W/1985, KUZA 5W/1990" - CRITERIA CLARIFICATION MEMO (7/15/2022) TO MEMO 283 (6/2/2022).

16. COMMUNICATIONS: ADDED "CHART:" TO THE FREQUENCIES FOR EACH AIRPORT - IAW 8260.46J APP. E, SEC 1.

17. TRANSITION ROUTES: ADDED MOCA VALUES TO FLYNN AND CEGAL - NOT INCLUDED IN THE CURRENT PROCEDURE.

18. COMMUNICATIONS: STANLY COUNTY (KVUJ) REMOVED "UNICOM" - PER NFDD 42 REMOVED FROM ARP.

19. FIXES AND/OR NAVAIDS: UPDATED ODF FROM "VORTAC" TO "VOR/DME" - NAME CHANGED.

