

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DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
BNGLE (RNAV)	FIVE	BNGLE5.BNGLE	FOUR	12/10/2015	21 MAR 2024
TYPE:	OBSTACLE	COPTER	SID	SPECIAL	RNAV
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**DP ROUTE DESCRIPTION:**  
**TAKEOFF RWY 9:** CLIMB ON HEADING 096.16 TO 1400, THEN DIRECT KINNG, THEN ON TRACK 020.37 TO LUBYI, THEN ON TRACK 006.54 TO BNGLE, THENCE ...  
**TAKEOFF RWY 18L:** CLIMB ON HEADING 186.21 TO INTERCEPT COURSE 171.63 TO LASNG, THEN ON TRACK 108.43 TO CODKO, THEN ON TRACK 042.97 TO JBETH, THEN ON TRACK 019.10 TO FOPAS, THEN ON TRACK 006.02 TO LUBYI, THEN ON TRACK 006.54 TO BNGLE, THENCE ...  
**TAKEOFF RWY 18C:** CLIMB ON HEADING 186.18 TO 1400, THEN DIRECT FLOEE, THEN ON TRACK 264.43 TO MIPIE, THEN ON TRACK 317.10 TO HERMM, THEN ON TRACK 007.38 TO AMMOT, THEN ON TRACK 051.47 TO BNGLE, THENCE ...  
**TAKEOFF RWY 18R:** CLIMB ON HEADING 186.17 TO INTERCEPT COURSE 205.00 TO FANSA, THEN ON TRACK 261.32 TO MIPIE, THEN ON TRACK 317.10 TO HERMM, THEN ON TRACK 007.38 TO AMMOT, THEN ON TRACK 051.47 TO BNGLE, THENCE ...  
**TAKEOFF RWY 27:** CLIMB ON HEADING 276.19 TO 1400, THEN DIRECT BONLE, THEN ON TRACK 359.57 TO MACOD, THEN ON TRACK 061.99 TO BNGLE, THENCE ...  
**TAKEOFF RWY 36L:** CLIMB ON HEADING 006.17 TO INTERCEPT COURSE 333.24 TO CIGMA, THEN ON TRACK 017.39 TO DJOHN, THEN ON TRACK 040.24 TO BNGLE, THENCE ...  
**TAKEOFF RWY 36C:** CLIMB ON HEADING 006.18 TO INTERCEPT COURSE 328.59 TO CIGMA, THEN ON TRACK 017.39 TO DJOHN, THEN ON TRACK 040.24 TO BNGLE, THENCE ...  
**TAKEOFF RWY 36R:** CLIMB DIRECT HAGSS, THEN ON TRACK 031.04 TO BNGLE, THENCE ...

...TURBOJETS: MAINTAIN 5000, ALL OTHER AIRCRAFT: MAINTAIN 4000. EXPECT CLEARANCE TO FILED ALTITUDE WITHIN TEN MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

TRANSITION NAME	TRANSITION COMPUTER CODE	FROM FIX/NAVAID	TO FIX/NAVAID	COURSE	DISTANCE	MEA	MOCA	CROSSING ALTITUDE/FIXES
RIKLE	BNGLE5.RIKLE	BNGLE	RIKLE	TRACK 044.29	21.43	11900	3100	
WWSHR	BNGLE5.WWSHR	BNGLE	RIKLE	TRACK 044.29	21.43	11900	3100	
		RIKLE	WWSHR	TRACK 051.55	131.05	FL180	3000	

PBN REQUIREMENT NOTES:

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES:

RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

PROCEDURAL DATA NOTES:

NOTE: INCREASE SPEED TO 250 KIAS UNTIL REACHING/LEAVING 10,000 FEET. IF UNABLE, ADVISE ATC.  
NOTE: IF UNABLE TO ACCEPT CLIMB RATES, ADVISE ATC ON INITIAL CONTACT.  
NOTE: TRANSPONDER CODE WILL BE ISSUED VIA PDC OR CINCINNATI CLNC DEL.

TAKEOFF MINIMUMS:

RWY 9, 18L, 18R, 27, 36L, 36C, 36R: STANDARD  
RWY 18C: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 1400

TAKEOFF OBSTACLES NOTES:

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

CONTROLLING OBSTACLES:



**MSA:**  
MSA FROM KCVG 3000

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**  
CHART TOP ALTITUDE: (JETS) 5000/(PROPS) 4000  
AIRPORT MV: CVG 6W/2020  
DME/DME ASSESSMENT: SAT (RNP 2.0).

**AIRPORTS SERVED:**

<u>AIRPORT ID</u>	<u>CITY</u>	<u>STATE</u>
KCVG	COVINGTON	KY

**COMMUNICATIONS:**  
CHART: ATIS, TOWER, GND CON, CLNC DEL

**FIXES AND/OR NAVAIDS:**

**REMARKS:**  
RWY 18C: CLIMB GRADIENT FOR DTA AT DF FIX.

**FLIGHT INSPECTED BY**  
JEFFREY FINDLEY

SIGNATURE

Digitally signed by  
**BEV L BORDY**  
Feb 05, 2024

OFFICE  
FICO

DATE  
2/2/24

**DEVELOPED BY**  
ERIC SUSKI (COLE NESTBITT)

SIGNATURE

Digitally signed by  
**BEV L BORDY**  
Feb 05, 2024

OFFICE  
AJV-A431

DATE  
9/18/20203

**APPROVED BY**  
ERIC SUSKI

SIGNATURE

Digitally signed by  
**BEV L BORDY**  
Feb 05, 2024

OFFICE  
AJV-A430

DATE

TITLE  
MANAGER

**REQUIRED EFFECTIVE DATE**  
ROUTINE

**COORDINATED WITH:**

**A4A** ☒ **ALPA** ☒ **AOPA** ☒ **APA** ☒ **HAI** ☐ **NBAA** ☒ **OTHER:** ZID, CVG APP CON, CVG ATCT, AMGR

**CHANGES - REASONS:**  
1. DP ROUTE DESCRIPTION: RWY 9 TRANSITION CREATED. - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.  
2. TRANSITION ROUTES (GRAPHIC DEPICTION ONLY): DJB TRANSITION DELETED. - REMOVAL OF GROUND-BASED NAVAIDS FROM PROCEDURE IAW FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.  
3. TRANSITION ROUTES (GRAPHIC DEPICTION ONLY): WWSHR TRANSITION CREATED. - REMOVAL OF GROUND-BASED NAVAIDS FROM PROCEDURE IAW FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.  
4. DP COMPUTER CODE: CHANGED FROM BNGLE4.BNGLE TO BNGLE5.BNGLE - IAW 8260.46J.  
5. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 18L FROM "TAKEOFF RWY 18L: CLIMB HEADING 184.21 TO INTERCEPT COURSE 168.37 TO CAMUM, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 18L: CLIMB ON HEADING 186.21 TO INTERCEPT COURSE 171.63 TO LASNG, THEN ON TRACK 108.43 TO CODKO, THEN ON TRACK 042.97 TO JBETH, THEN ON TRACK 019.10 TO FOPAS, THEN ON TRACK 006.02 TO LUBYI, THEN ON TRACK 006.54 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.



DP NAME	NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
BNGLE (RNAV)	FIVE	BNGLE5.BNGLE	FOUR	12/10/2015	21 MAR 2024
6. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 18C FROM "TAKEOFF RWY 18C: CLIMB HEADING 184.18 TO 1400, THEN DIRECT FLOEE, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 18C: CLIMB ON HEADING 186.21 TO INTERCEPT COURSE 171.63 TO LASNG, THEN ON TRACK 108.43 TO CODKO, THEN ON TRACK 042.97 TO JBETH, THEN ON TRACK 019.10 TO FOPAS, THEN ON TRACK 006.02 TO LUBYI, THEN ON TRACK 006.54 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
7. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 18R FROM "TAKEOFF RWY 18R: CLIMB HEADING 184.17 TO INTERCEPT COURSE 203.10 TO FANSA, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 18R: CLIMB ON HEADING 186.17 TO INTERCEPT COURSE 202.14 TO FANSA, THEN ON TRACK 261.32 TO MIPIE, THEN ON TRACK 317.10 TO HERMM, THEN ON TRACK 007.38 TO AMMOT, THEN ON TRACK 051.47 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
8. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 27 FROM "TAKEOFF RWY 27: CLIMB HEADING 274.19 TO 1400, THEN DIRECT BONLE, THEN RIGHT TURN DIRECT AMMOT, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 27: CLIMB ON HEADING 276.19 TO 1400, THEN DIRECT BONLE, THEN ON TRACK 359.57 TO MACOD, THEN ON TRACK 061.99 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
9. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 36R FROM "TAKEOFF RWY 36R: CLIMB HEADING 004.21 TO 1400, THEN DIRECT HAGSS, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 36R: CLIMB DIRECT HAGSS, THEN ON TRACK 031.04 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
10. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 36C FROM "TAKEOFF RWY 36C: CLIMB HEADING 004.18 TO INTERCEPT COURSE 325.30 TO CIGMA, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 36C: CLIMB ON HEADING 006.18 TO INTERCEPT COURSE 328.59 TO CIGMA, THEN ON TRACK 017.39 TO DJOHN, THEN ON TRACK 040.24 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
11. DP ROUTE DESCRIPTION: CHANGED TAKEOFF RWY 36L FROM "TAKEOFF RWY 36L: CLIMB HEADING 004.17 TO INTERCEPT COURSE 325.32 TO CIGMA, THEN ON DEPICTED ROUTE TO BNGLE, THENCE..." TO "TAKEOFF RWY 36L: CLIMB ON HEADING 006.17 TO INTERCEPT COURSE 333.24 TO CIGMA, THEN ON TRACK 017.39 TO DJOHN, THEN ON TRACK 040.24 TO BNGLE, THENCE ..." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
12. DP ROUTE DESCRIPTION THENCE INSTRUCTIONS CHANGED FROM "...TURBO JET AIRCRAFT MAINTAIN 6000, ALL OTHER AIRCRAFT MAINTAIN 4000. EXPECT CLEARANCE TO FILED ALTITUDE WITHIN 10 MINUTES AFTER DEPARTURE." TO "TURBOJETS: MAINTAIN 5000, ALL OTHER AIRCRAFT: MAINTAIN 4000. EXPECT CLEARANCE TO FILED ALTITUDE WITHIN TEN MINUTES AFTER DEPARTURE." - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
13. DRYER TRANSITION NAME CHANGED FROM "DRYER" TO "WWSHR", COMPUTER CODE CHANGED FROM "BNGLE4.DJB" TO "BNGLE5.WWSHR", AND RIKLE DJB VOR/DME SEGMENT CHANGED FROM RIJLE TO WWSHR - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
14. PBN REQUIREMENT NOTES: ADDED RNAV 1 - DME/DME/IRU OR GPS. - IAW 8260.46J.					
15. EQUIPMENT REQUIREMENT NOTES: ADDED "RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT." - IAW 8260.46J.					
16. PROCEDURAL DATA NOTES: REMOVED "DME/DME/IRU OR GPS REQUIRED", "RADAR REQUIRED." AND "RNAV1." - NOTES MOVED TO NEW SECTION OF THIS FORM IAW 8260.46J.					
17. TAKEOFF OBSTACLES NOTES: REMOVED AND REPLACED WITH "SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)." - IAW 8260.46J					
18. TAKEOFF MINIMUMS: CHANGED FROM "RWY 9, NA-ATC. RWY 18L, 18C, 18R, 27, 36R, 36C, 36L, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1400." TO "RWY 9, 18L, 18R, 27, 36L, 36C, 36R: STANDARD; 18C: STANDARD WITH MINIMUM CLIMB OF 500 FT/NM TO 1400" - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE, NEW EVALUATION.					
19. ADDITIONAL FLIGHT DATA: CHANGED NOTE FROM "REFERENCE MAG VAR: KCVG 4W EPOC YEAR: 95." TO "AIRPORT MV: CVG 6W/2020." - IAW MEMO 283.					
20. ADDITIONAL FLIGHT DATA: REMOVED "CHART NOTE: ACCELERATE TO 250 KIAS, IF UNABLE ADVISE ATC." - UPDATED NOTE ADDED TO PROCEDURAL NOTE SECTION.					
21. ADDITIONAL FLIGHT DATA: CHANGE NOTE FROM "CINCINNATI/NORTHERN KENTUCKY INTL: CHART: TOP ALTITUDE: (JETS) 6000 / (PROPS) 4000." TO "CHART TOP ALTITUDE: (JETS) 5000/(PROPS) 4000." - NOTE FORMATTING IAW 8260.46J AND CHANGE IN JETS ALTITUDE TO MAINTAIN SEPARATION FROM RNP-AR APPROACHES IAW GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
22. COMMUNICATIONS: CHANGED FROM "ATIS, TOWER, GND CON, CLNC DEL, DEP CON." TO "CHART: ATIS, TOWER, GND CON, CLNC DEL" - REMOVED DEP CON AND ADDED "CHART" IAW 8260.46J.					
23. FIXES AND/OR NAVAIDS: REMOVED "CODKO, JBETH, FOPAS, HERMM, MIPIE, DJOHN." - NO LONGER REQUIRED ALL FIXES ARE INCORPORATED IN DP ROUTE DESCRIPTION AND TRANSITION ROUTES IAW 8260.46J.					
24. FIXES AND/OR NAVAIDS: REMOVED "ANTEO, ZUGLU, JBENCH, HAGOL" - FPT/ATC REQUEST AND GRAPHIC DP WORKSHEET AND DISTRO PACKAGE.					
25. REMARKS: ADDED "RWY 18C: CLIMB GRADIENT FOR DTA AT DF FIX." - IAW 8260.46J.					

12/12/2023: THIS IS AN UPDATED COPY FOR THE FORM DEVELOPED ON 09/18/2023:

1. DP ROUTE DESCRIPTION: CHANGED FROM "TAKEOFF RWY 18R: CLIMB ON HEADING 186.17 TO INTERCEPT COURSE 202.14 TO FANSA," TO "TAKEOFF RWY 18R: CLIMB ON HEADING 186.17 TO INTERCEPT COURSE 205.00 TO FANSA,"

NFDD No. 027

02/08/2024

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FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
DEPARTURE (DATA RECORD)

DP NAME

BNGLE (RNAV)

NUMBER

FIVE

DP COMPUTER CODE

BNGLE5.BNGLE

SUPERSEDED NUMBER

FOUR

DATED

12/10/2015

ACTUAL EFFECTIVE DATE

21 MAR 2024

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
RW09 (AER)	390246.90N/0844142.35W	N	-	-	-	-			
1400 MSL	-	-	-	VA	090.16	-	AT/ABOVE 1400		
KINNG	390244.65N/0842906.14W	Y	FB	DF	-	-			
LUBYI	391557.75N/0842444.79W	Y	FB	TF	014.37	13.63			
BNGLE	393301.13N/0842432.27W	Y	FB	TF	000.54	17.04			
RW18L (AER)	390321.08N/0843848.00W	N	-	-	-	-			
-	390042.17N/0843848.74W	-	-	VI	180.21	2.65			
LASNG	385725.17N/0843744.05W	Y	FB	CF	165.63	3.39			
CODKO	385604.95N/0842959.38W	Y	FB	TF	102.43	6.19			
JBETH	385954.99N/0842617.41W	Y	FB	TF	036.97	4.80			
FOPAS	390504.20N/0842445.09W	Y	FB	TF	013.10	5.29			
LUBYI	391557.75N/0842444.79W	Y	FB	TF	000.02	10.88			
BNGLE	393301.13N/0842432.27W	Y	FB	TF	000.54	17.04			
RW18C (AER)	390353.07N/0844007.02W	N	-	-	-	-			
1400 MSL	-	-	-	VA	180.18	-	AT/ABOVE 1400		CG 500 FT/NM TO 1400
FLOEE	385724.12N/0844008.60W	Y	FB	DF	-	-			
MIPIE	385600.61N/0844848.81W	Y	FB	TF	258.43	6.91			
HERMM	385844.92N/0845250.25W	Y	FB	TF	311.10	4.16			
AMMOT	391149.88N/0845226.01W	Y	FB	TF	001.38	13.07			
BNGLE	393301.13N/0842432.27W	Y	FB	TF	045.47	30.27			

QUALITY  
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CHECKED

FAA Form 8260-15C (03/23) Supersedes Previous Edition

Electronic Version

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NFDD No. 027							02/08/2024	26	
<u>DP NAME</u>			<u>NUMBER</u>		<u>DP COMPUTER CODE</u>		<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>ACTUAL EFFECTIVE DATE</u>
BNGLE (RNAV)			FIVE		BNGLE5.BNGLE		FOUR	12/10/2015	21 MAR 2024
<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>
RW18R (AER)	390415.17N/0844101.46W	N	-	-	-	-			
-	390108.57N/0844102.17W	-	-	VI	180.17	3.11			
FANSA	385715.14N/0844245.21W	Y	FB	CF	199.00	4.11			
MIPIE	385600.61N/0844848.81W	Y	FB	TF	255.32	4.89			
HERMM	385844.92N/0845250.25W	Y	FB	TF	311.10	4.16			
AMMOT	391149.88N/0845226.01W	Y	FB	TF	001.38	13.07			
BNGLE	393301.13N/0842432.27W	Y	FB	TF	045.47	30.87			
RW27 (AER)	390246.54N/0843910.24W	N	-	-	-	-			
1400 MSL	-	-	-	VA	270.19	-	AT/ABOVE 1400		
BONLE	390245.57N/0845135.55W	Y	FO	DF	-	-			
MACOD	391748.47N/0845346.42W	Y	FB	TF	353.57	15.13			
BNGLE	393301.13N/0842432.27W	Y	FB	TF	055.99	27.28			
RW36L (AER)	390256.10N/0844101.76W	N	-	-	-	-			
-	390518.99N/0844101.21W	-	-	VI	000.17	2.38			
CIGMA	390842.01N/0844348.81W	Y	FB	CF	327.24	4.02			
DJOHN	391207.47N/0844255.60W	Y	FB	TF	011.39	3.49			
BNGLE	393301.13N/0842432.27W	Y	FB	TF	034.24	25.28			
RW36C (AER)	390204.36N/0844007.47W	N	-	-	-	-			
-	390455.70N/0844006.77W	-	-	VI	000.18	2.85			
CIGMA	390842.01N/0844348.81W	Y	FB	CF	322.59	4.74			



DP NAME		NUMBER					DP COMPUTER CODE		SUPERSEDED NUMBER		DATED		ACTUAL EFFECTIVE DATE	
BNGLE (RNAV)		FIVE					BNGLE5.BNGLE		FOUR		12/10/2015		21 MAR 2024	
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS					
DJOHN	391207.47N/0844255.60W	Y	FB	TF	011.39	3.49								
BNGLE	393301.13N/0842432.27W	Y	FB	TF	034.24	25.28								
RW36R (AER)	390142.24N/0843848.46W	N	-	-	-	-								
HAGSS	390924.37N/0843847.85W	Y	FO	DF	-	7.70								
BNGLE	393301.13N/0842432.27W	Y	FB	TF	025.04	26.06								
BNGLE	393301.13N/0842432.27W	Y	-	IF	-	-			BNGLE5.WWSHR					
RIKLE	394950.00N/0840718.00W	Y	FB	TF	038.29	21.43								
WWSHR	412034.09N/0820305.76W	Y	FB	TF	045.55	131.05								
BNGLE	393301.13N/0842432.27W	Y	-	IF	-	-			BNGLE5.RIKLE					
RIKLE	394950.00N/0840718.00W	Y	FB	TF	038.29	21.43								