

**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.
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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
CURLO	FOUR	CURLO4.CURLO	THREE	03/31/2016	10 NOV 2016

<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 checked="" type="checkbox"/>

DP ROUTE DESCRIPTION:

TAKEOFF RWY 13L: CLIMB HEADING 132.64 TO 1000, THENCE...

TAKEOFF RWY 13R: CLIMB HEADING 132.62 TO 1000, THENCE...

...DIRECT TO CROSS DRSET AT OR ABOVE 4000, THEN ON TRACK 132.66 TO CROSS HAYZZ AT OR ABOVE 6000, THEN ON TRACK 201.93 TO CURLO, THEN ON (TRANSITION). MAINTAIN 8000. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

TAKEOFF RWY 31L: CLIMB HEADING 312.63 TO 2700, THENCE...

TAKEOFF RWY 31R: CLIMB HEADING 312.65 TO 2700, THENCE...

...HEADING 013.00 OR AS ASSIGNED BY ATC, MAINTAIN 3000, EXPECT RADAR VECTORS TO CROSS HAYZZ AT OR ABOVE 6000, THEN ON TRACK 201.93 TO CURLO, THEN ON (TRANSITION). EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
ARDIA	CURLO4.ARDIA	CURLO	ARDIA	TRACK 202.90	21.94	11700	2000	
BILEE	CURLO4.BILEE	CURLO	DARTZ	TRACK 186.03	19.95	11300	2200	
			BRDEN	TRACK 158.64	25.18	16400	2000	
			TORNN	TRACK 158.73	23.08	FL180	2100	
			BILEE	TRACK 159.16	22.38	FL180	1900	
BRDEN	CURLO4.BRDEN	CURLO	DARTZ	TRACK 186.03	19.95	11300	2200	
			BRDEN	TRACK 158.64	25.18	16400	2000	
COLLEGE STATION	CURLO4.CLL	CURLO	ARDIA	TRACK 202.90	21.94	11700	2000	
			ELLVR	TRACK 168.57	34.92	FL180	2100	
			CLL VORTAC	TRACK 158.88	69.44	FL180	2100	
ELLVR	CURLO4.ELLVR	CURLO	ARDIA	TRACK 202.90	21.94	11700	2000	
			ELLVR	TRACK 168.57	34.92	FL180	2100	
HOARY	CURLO4.HOARY	CURLO	NELYN	TRACK 225.41	29.68	13300	2300	

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CURLO			FOUR	CURLO4.CURLO	THREE		03/31/2016	10 NOV 2016
			ACT VORTAC	TRACK 183.51	37.52	FL180	2100	
			PRIZE	TRACK 199.00	26.00	FL180	2800	
			HOARY	TRACK 198.90	44.00	FL180	3100	
JASPA	CURLO4.JASPA	CURLO	JASPA	TRACK 215.60	25.23	12400	2100	
NAVASOTA	CURLO4.TNV	CURLO	DARTZ	TRACK 186.03	19.95	11300	2200	
			BRDEN	TRACK 158.64	25.18	16400	2000	
			TORNN	TRACK 158.73	23.08	FL180	2100	
			BILEE	TRACK 159.16	22.38	FL180	1900	
			TNV VOR/DME	TRACK 159.23	55.04	FL180	1900	
NELYN	CURLO4.NELYN	CURLO	NELYN	TRACK 225.41	29.68	13300	2300	
SAN ANTONIO	CURLO4.SAT	CURLO	NELYN	TRACK 225.41	29.68	13300	2300	
			ACT VORTAC	TRACK 183.51	37.52	FL180	2100	
			PRIZE	TRACK 199.00	26.00	FL180	2800	
			HOARY	TRACK 198.90	44.00	FL180	3100	
			SAT VORTAC	TRACK 209.76	66.29	FL180	2900	
TORNN	CURLO4.TORNN	CURLO	DARTZ	TRACK 186.03	19.95	11300	2200	
			BRDEN	TRACK 158.64	25.18	16400	2000	
			TORNN	TRACK 158.73	23.08	FL180	2100	
WACO	CURLO4.ACT	CURLO	NELYN	TRACK 225.41	29.68	13300	2300	
			ACT VORTAC	TRACK 183.51	37.52	FL180	2100	
WINDU	CURLO4.WINDU	CURLO	JASPA	TRACK 215.60	25.23	12400	2100	

QUALITY
24
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CURLO	FOUR	CURLO4.CURLO	THREE	03/31/2016	10 NOV 2016
	WINDU	TRACK 178.53	45.19 FL180	2400	

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED.

NOTE: DME/DME/IRU OR GPS REQUIRED.

NOTE: RNAV 1.

NOTE: FOR USE BY TURBOJET AIRCRAFT ONLY.

NOTE: PROPS FILE AND EXPECT JOE POOL DEPARTURE.

NOTE: WACO TRANSITION FOR AIRCRAFT INBOUND TO WACO OR GRAY TERMINAL AREA AIRPORTS.

NOTE: SAN ANTONIO TRANSITION FOR AIRCRAFT OVERFLYING CENTEX AND SAN ANTONIO.

NOTE: WINDU TRANSITION FOR AIRCRAFT INBOUND TO AUSTIN OR SAN ANTONIO TERMINAL AREA AIRPORTS. AIRCRAFT SHOULD FILE AND/OR EXPECT BLEWE OR MARCS STAR AT WINDU.

NOTE: COLLEGE STATION TRANSITION FOR AIRCRAFT INBOUND TO WEST HOUSTON TERMINAL AREA AIRPORTS.

NOTE: ELLVR TRANSITION FOR AIRCRAFT INBOUND TO HOUSTON HOBBY, EFD, GLS, AND LBX.

NOTE: TORNN TRANSITION FOR AIRCRAFT LANDING LAFAYETTE, LAKE CHARLES, OR BEAUMONT/PORT ARTHUR AIRPORTS.

NOTE: BILEE TRANSITION FOR AIRCRAFT OVERFLYING THE BILEE INTERSECTION, THENCE VIA THE APPROPRIATE STAR TO GEORGE BUSH INTERCONTINENTAL OR EASTERN HOUSTON TERMINAL AIRPORTS.

NOTE: USE THE JOE POOL DEPARTURE DURING THE PERIOD 2100-0600 LOCAL TIME IN LIEU OF THE CURLO DEPARTURE.

TAKEOFF MINIMUMS:

RWY 13L, 13R, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1200. **RWY 31L, 31R,** STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1000.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 13L, TREES, POLES AND ELECTRICAL SYSTEMS BEGINNING 844 FT FROM DER, 515 FT LEFT OF CENTERLINE, UP TO 45 FT AGL/541 FT MSL. CRANE 5270 FT FROM DER, 568 FT LEFT OF CENTERLINE, 130 FT AGL/630 FT MSL.

NOTE: RWY 13R, POLES AND FENCES BEGINNING 693 FT FROM DER, 601 FT RIGHT OF CENTERLINE, UP TO 29 FT AGL/501 FT MSL. SIGN 779 FT FROM DER, 669 FT LEFT OF CENTERLINE, 30 FT AGL/503 FT MSL. TREES BEGINNING 1122 FT FROM DER, 670 FT LEFT AND RIGHT OF CENTERLINE, UP TO 40 FT AGL/514 FT MSL. SIGN 1424 FT FROM DER, 763 FT LEFT OF CENTERLINE, 45 FT AGL/516 FT MSL. ROD ON STAKE 2234 FT FROM DER, 979 FT LEFT OF CENTERLINE, 65 FT AGL/537 FT MSL.

NOTE: RWY 31L, TREES BEGINNING 327 FT FROM DER, 374 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/501 FT MSL.

NOTE: RWY 31R, POLE 38 FT FROM DER, 501 FT LEFT OF CENTERLINE, 27 FT AGL/487 FT MSL. TREES BEGINNING 366 FT FROM DER, 552 FT RIGHT OF CENTERLINE, UP TO 65 FT AGL/530 FT MSL. POLE 1531 FT FROM DER, 719 FT RIGHT OF CENTERLINE, UP TO 61 FT AGL/521 FT MSL.

CONTROLLING OBSTACLES:

RWY 13L: 1368 FT MSL ANTENNA 324648.00N/0964814.00W.

RWY 13R: 1368 FT MSL ANTENNA 324648.00N/0964814.00W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KDAL 3E EPOCH YR: 2020. DME/DME ASSESSMENT: SAT (RNP 2.0)

CHART: TOP ALTITUDE RWY 13L, 13R: 8000; RWY 31L, 31R: 3000.

CHART: MEA/MOCA FROM HAYZZ TO CURLO, 7300/1900.

PILOT NAVIGATION AREA:

7 NM ARC CENTERED ON HAYZZ (IF), CW

FROM: POINT A (BEARING 157 DEGREES TO HAYZZ)

TO: POINT B (BEARING 247 DEGREES TO HAYZZ)

MINIMUM ALTITUDE - 6000



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AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
DALLAS-LOVE FIELD	DALLAS	TX

COMMUNICATIONS:

ATIS, CLNC DEL, GND CON, LOVE TWR, REGIONAL DEP CON

FIXES AND/OR NAVAIDS:

REMARKS:

LETTER OF APPROVAL ON FILE FOR AIRPORTS/RUNWAYS OUTSIDE THE PNA. WACO VORTAC TO PRIZE CONTROLLING OBSTACLE, 2541' TOWER (48-005677), 6256.91' IN TO SECONDARY. ADJUSTED ALTITUDE 1784'.

CURLO FOUR AMENDMENT DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS.

CHANGES - REASONS:

1. CHANGED ALL REFERENCES OF TNV VORTAC TO TNV VOR/DME.- TACAN ANTENNA REPLACED WITH DME.
2. ADDED REMARK "CURLO FOUR AMENDMENT DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS"-MINOR AMENDMENT DOES NOT QUALIFY AS A PERIODIC REVIEW.



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CURLO		FOUR		CURLO4.CURLO		THREE		03/31/2016	10 NOV 2016
<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>
RW13L (AER)*	325123.36N/0965121.20W*	N							*DISPL THLD (400 FT)
1000 MSL				VA	135.64				CG 500 FT/NM TO 1200
DRSET	324536.47N/0964505.03W	Y	FB	DF			AT/ABOVE 4000		
HAYZZ	324243.89N/0964145.62W	Y	FB	TF	135.66	4.01	AT/ABOVE 6000		
RW13R (AER)*	325101.28N/0965144.41W*	N							*DISPL THLD (490 FT)
1000 MSL				VA	135.62				CG 500 FT/NM TO 1200
DRSET	324536.47N/0964505.03W	Y	FB	DF			AT/ABOVE 4000		
HAYZZ	324243.89N/0964145.62W	Y	FB	TF	135.66	4.01	AT/ABOVE 6000		
RW31L (AER)	325002.51N/0965036.30W	N							
2700 MSL				VA	315.63				CG 500 FT/NM TO 1000
				VM	016.00				
HAYZZ	324243.89N/0964145.62W	Y	FB	DF			AT/ABOVE 6000		
RWY 31R (AER)	323031.35N/0965020.95W	N							
2700 MSL				VA	315.65				CG 500 FT/NM TO 1000
				VM	016.00				
HAYZZ	324243.89N/0964145.62W	Y	FB	DF			AT/ABOVE 6000		
HAYZZ	324243.89N/0964145.62W	Y		IF					
CURLO	323653.18N/0964458.25W	Y	FB	TF	204.93	6.43			

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CURLO		FOUR		CURLO4.CURLO		THREE		03/31/2016	10 NOV 2016
<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>
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.ACT
NELYN	321705.86N/0971109.28W	Y	FB	TF	228.41	29.68			
ACT VORTAC	313944.39N/0971608.53W	Y	FB	TF	186.51	37.52			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.ARDIA
ARDIA	321706.26N/0965616.32W	Y	FB	TF	205.90	21.94			
CURLO	326353.18N/0964458.25W	Y		IF					CURLO4.BILEE
DARTZ	321708.72N/0964839.78W	Y	FB	TF	189.03	19.95			
BRDEN	315311.46N/0963920.96W	Y	FB	TF	161.64	25.18			
TORNN	313113.39N/0963052.96W	Y	FB	TF	161.73	23.08			
BILEE	310952.25N/0962253.62W	Y	FB	TF	162.16	22.38			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.BRDEN
DARTZ	321708.72N/0964839.78W	Y	FB	TF	189.03	19.95			
BRDEN	315311.46N/0963920.96W	Y	FB	TF	161.64	25.18			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.CLL
ARDIA	321706.26N/0965616.32W	Y	FB	TF	205.90	21.94			
ELLVR	314229.22N/0965016.05W	Y	FB	TF	171.57	34.92			
CLL VORTAC	303618.01N/0962514.45W	Y	FB	TF	161.88	69.44			

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<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>
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.ELLVR
ARDIA	321706.26N/0965616.32W	Y	FB	TF	205.90	21.94			
ELLVR	314229.22N/0965016.05W	Y	FB	TF	171.57	34.92			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.HOARY
NELYN	321705.86N/0971109.28W	Y	FB	TF	228.41	29.68			
ACT VORTAC	313944.39N/0971608.53W	Y	FB	TF	186.51	37.52			
PRIZE	311534.28N/0972730.23W	Y	FB	TF	202.00	26.00			
HORAY	303437.88N/0974631.01W	Y	FB	TF	201.90	44.00			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.JASPA
JASPA	321706.11N/0970332.37W	Y	FB	TF	218.60	25.23			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.NELYN
NELYN	321705.86N/0971109.28W	Y	FB	TF	228.41	29.68			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.SAT
NELYN	321705.86N/0971109.28W	Y	FB	TF	228.41	29.68			
ACT VORTAC	313944.39N/0971608.53W	Y	FB	TF	186.51	37.52			
PRIZE	311534.28N/0972730.23W	Y	FB	TF	202.00	26.00			
HOARY	303437.88N/0974631.01W	Y	FB	TF	201.90	44.00			
SAT VORTAC	293838.51N/0982740.73W	Y	FB	TF	212.76	66.29			

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<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>
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.TNV
DARTZ	321708.72N/0964839.78W	Y	FB	TF	189.03	19.95			
BRDEN	325311.46N/0963920.96W	Y	FB	TF	161.64	25.18			
TORNN	313113.39N/0963052.96W	Y	FB	TF	161.73	23.08			
BILEE	310952.25N/0962253.62W	Y	FB	TF	162.16	22.38			
TNV VOR/DME	301718.70N/0960329.66W	Y	FB	TF	162.23	55.04			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.TORNN
DARTZ	321708.72N/0964839.78W	Y	FB	TF	189.03	19.95			
BRDEN	325311.46N/0963920.96W	Y	FB	TF	161.64	25.18			
TORNN	313113.39N/0963052.96W	Y	FB	TF	161.73	23.08			
CURLO	323653.18N/0964458.25W	Y		IF					CURLO4.WINDU
JASPA	321706.11N/0970332.37W	Y	FB	TF	218.60	25.23			
WINDU	313149.93N/0970457.06W	Y	FB	TF	181.53	45.19			

