

**FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
GRAPHIC DEPARTURE PROCEDURES (DP)**

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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SUPERSEDED NUMBER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>
TRUAX	SIX	NGP6.NGP	FIVE	12/10/2015	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 type="checkbox"/>

This is a corrected copy of a procedure in NFDD 184.
See "Changes - Reasons", page 4.

DP ROUTE DESCRIPTION:

DEPARTING GEORGE BUSH INTERCONTINENTAL/HOUSTON: CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS TO YAWNS INT, MAINTAIN 16000. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE, THENCE...

DEPARTING WILLIAM P HOBBY: CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS TO YAWNS INT, MAINTAIN 16000. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE, THENCE...

DEPARTING ELLINGTON: CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS TO YAWNS INT, MAINTAIN 4000. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE, THENCE...

ALL OTHER AIRPORTS: WHEN ENTERING CONTROLLED AIRSPACE, CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS TO YAWNS INT, MAINTAIN 4000. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE.

...ON VUH R-228 AND NGP R-047 TO NGP VORTAC.

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>
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PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED.

NOTE: FOR AIRCRAFT FILED FL180 AND ABOVE TO RIO GRANDE VALLEY AREA OR FOR AIRCRAFT FILED FL180 AND ABOVE OVERFLYING NGP VORTAC TO INTERNATIONAL DESTINATIONS.

TAKEOFF MINIMUMS:

GEORGE BUSH INTERCONTINENTAL/HOUSTON: RWY 8R, 8L, 9, 27, 15L, 15R, 26L, 26R, 33L, 33R, STANDARD.

WILLIAM P HOBBY: RWY 13L, 13R, 31L, 31R, 35, STANDARD. RWY 4, 300-1 OR STANDARD WITH MINIMUM CLIMB OF 270 FT PER NM TO 300. RWY 17, 300-1 RWY 22, STANDARD WITH MINIMUM CLIMB OF 290 FT PER NM TO 1500.

ELLINGTON: RWY 4, 17R, 17L, 35R, 35L, STANDARD. RWY 22, 200-1 1/4 OR STANDARD WITH MINIMUM CLIMB OF 214 PER NM TO 300 OR ALTERNATIVELY WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1400 FT PRIOR TO DER.

SUGAR LAND RGNL: RWY 17, 35, STANDARD.

SCHOLES INTL AT GALVESTON: RWY 14, 18, 32, 36, STANDARD.

TEXAS GULF COAST RGNL: RWY 17, 35, STANDARD.

TAKEOFF OBSTACLES NOTES:

GEORGE BUSH INTERCONTINENTAL HOUSTON:

NOTE: RWY 8L, TREE 2866 FT FROM DER, 921 FT LEFT OF CENTERLINE, 107 FT AGL/201 FT MSL. MULTIPLE TREES BEGINNING 2750 FT FROM DER, 106 FT RIGHT OF CENTERLINE, UP TO 80 FT AGL/174 FT MSL.

NOTE: RWY 15L, MULTIPLE TREES BEGINNING 2638 FT FROM DER, 758 FT RIGHT OF CENTERLINE, UP TO 76 FT AGL/160 FT MSL.

NOTE: RWY 15R, TOWER 1431 FT FROM DER, 591 FT LEFT OF CENTERLINE, 48 FT AGL/133 FT MSL. ANTENNA ON GLIDESLOPE 1 469 FT FROM DER, 621 FT LEFT OF CENTERLINE, 49 FT AGL/133 FT MSL.

NOTE: RWY 26R, POLE 950 FT FROM DER, 660 FT RIGHT OF CENTERLINE, 40 FT AGL/129 FT MSL.

NOTE: RWY 33R, TREE 2868 FT FROM DER, 1027 FT RIGHT OF CENTERLINE, 73 FT AGL/172 FT MSL.

WILLIAM P HOBBY:

NOTE: RWY 4, POLE 4403 FT FROM DER, 1069 FT RIGHT OF CENTERLINE, 121 FT AGL/166 FT MSL. LIGHT ON BUILDING 1562 FT FROM DER, 859 FT RIGHT OF CENTERLINE, 59 FT AGL/103 FT MSL.

BUILDING 3990 FT FROM DER, 1223 FT RIGHT OF CENTERLINE, 139 FT AGL/174 FT MSL. LIGHT ON FLGPL 4618 FT FROM DER, 768 FT RIGHT OF CENTERLINE, 117 FT AGL/161 FT MSL.

QUALITY
23
CHECKED

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NOTE: RWY 13L, ANTENNA ON HANGER 1548 FT FROM DER, 424 FT LEFT OF CENTERLINE, 45 FT AGL/85 FT MSL.

NOTE: RWY 13R, VEHICLE AND ROAD 514 FT FROM DER, 543 FT RIGHT OF CENTERLINE, 17 FT AGL/55 FT MSL. TREE 1217 FT FROM DER, 756 FT RIGHT OF CENTERLINE, 43 FT AGL/89 FT MSL.

FENCE 85 FT FROM DER, 492 FT LEFT OF CENTERLINE, 4 FT AGL/45 FT MSL. VEHICLE AND ROAD 176 FT FROM DER, 497 FT LEFT OF CENTERLINE, 17 FT AGL/55 FT MSL. POLE 1011 FT FROM DER, 696 FT LEFT OF CENTERLINE, 33 FT AGL/73 FT MSL. TREE 1256 FT FROM DER, 783 FT LEFT OF CENTERLINE, 38 FT AGL/78 FT MSL.

NOTE: RWY 17, MULTIPLE POLES BEGINNING 606 FT FROM DER, 393 FT RIGHT OF CENTERLINE, UP TO 79 FT AGL/124 FT MSL. CRANE 1795 FT FROM DER, 689 FT RIGHT OF CENTERLINE, 100 FT AGL/150 FT MSL. ANT ON BUILDING 620 FT FROM DER, 312 FT LEFT OF CENTERLINE, 27 FT AGL/72 FT MSL. MULTIPLE TREES BEGINNING 721 FT FROM DER, 260 FT LEFT OF CENTERLINE, UP TO 71 FT AGL/116 FT MSL. RADAR REFLECTOR 1214 FT FROM DER, 258 FT LEFT OF CENTERLINE, 32 FT AGL/77 FT MSL.

NOTE: RWY 22, POLE 727 FT FROM DER, 626 FT RIGHT OF CENTERLINE, 28 FT AGL/77 FT MSL. TREE 1310 FT FROM DER, 679 FT RIGHT OF CENTERLINE, 27 FT AGL/76 FT MSL. ANTENNA ON LT POLE 1805 FT FROM DER, 968 FT RIGHT OF CENTERLINE, 60 FT AGL/109 FT MSL.

NOTE: RWY 31L, ANTENNA ON BUILDING 547 FT FROM DER, 274 FT RIGHT OF CENTERLINE, 23 FT AGL/69 FT MSL. MULTIPLE POLES BEGINNING 341 FT FROM DER, 501 FT LEFT OF CENTERLINE, UP TO 39 FT AGL/84 FT MSL. MULTIPLE TREES BEGINNING 1392 FT FROM DER, 466 FT LEFT OF CENTERLINE, UP TO 78 FT AGL/118 FT MSL.

NOTE: RWY 31R, POLE 1096 FT FROM DER, 785 FT RIGHT OF CENTERLINE, 29 FT AGL/75 FT MSL. ANTENNA ON BUILDING 500 FT FROM DER, 525 FT LEFT OF CENTERLINE, 33 FT AGL/69 FT MSL.

NOTE: RWY 35, ANTENNA ON LT POLE 738 FT FROM DER, 519 FT RIGHT OF CENTERLINE, 40 FT AGL/86 FT MSL. LT POLE 1119 FT FROM DER, 353 FT RIGHT OF CENTERLINE, 31 FT AGL/77 FT MSL.

ANTENNA ON BUILDING 66 FT FROM DER, 471 FT LEFT OF CENTERLINE, 33 FT AGL/69 FT MSL.

ELLINGTON:

NOTE: RWY 4, TREE 1526 FT FROM DER, 737 FT RIGHT OF CENTERLINE, 39 FT AGL/69 FT MSL.

NOTE: RWY 17R, POLE 1488 FT FROM DER, 817 FT RIGHT OF CENTERLINE, 40 FT AGL/74 FT MSL.

NOTE: RWY 22, OL ON GS AND EQUIPMENT 321 FT FROM DER, 544 FT LEFT OF CENTERLINE, 39 FT AGL/68 FT MSL. SIGN 213 FT FROM DER, 472 FT RIGHT OF CENTERLINE, 6 FT AGL/32 FT MSL.

ANTENNA ON BUILDING 1998 FT FROM DER, 598 FT RIGHT OF CENTERLINE, 54 FT AGL/83 FT MSL. OBSTRUCTION LIGHT ON COMM EQUIPMENT AND ANTENNA 1626 FT FROM DER, 837 FT RIGHT OF CENTERLINE, 88 FT AGL/114 FT MSL. OL ON WATER TOWER AND TANK 6114 FT FROM DER, 1635 FT RIGHT OF CENTERLINE, 159 FT AGL/192 FT MSL.

NOTE: RWY 35R, TREE 1597 FT FROM DER, 32 FT LEFT OF CENTERLINE, 50 FT AGL/80 FT MSL. TANK 2639 FT FROM DER, 1157 FT RIGHT OF CENTERLINE, 77 FT AGL/109 FT MSL.

NOTE: RWY 35L, TREES BEGINNING 1119 FT FROM DER, 679 FT RIGHT OF CENTERLINE, UP TO 37 FT AGL/77 FT MSL. CRANE 2353 FT FROM DER, 1024 FT LEFT OF CENTERLINE, 58 FT AGL/97 FT MSL.

SUGAR LAND RGNL:

NOTE: RWY 17, MULTIPLE POLES BEGINNING 436 FT FROM DER, 172 FT RIGHT OF CENTERLINE, UP TO 44 FT AGL/124 FT MSL. BUILDING 1036 FT FROM DER, 743 FT RIGHT OF CENTERLINE, 26 FT AGL/102 FT MSL. RAILROAD 110 FT FROM DER, 10 FT LEFT OF CENTERLINE, 23 FT AGL/104 FT MSL. MULTIPLE POLES BEGINNING 135 FT FROM DER, 270 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/111 FT MSL.

NOTE: RWY 35, VEHICLE AND ROAD 65 FT FROM DER, 2 FT RIGHT OF CENTERLINE, 15 FT AGL/96 FT MSL. MULTIPLE TREES BEGINNING 37 FT FROM DER, 275 FT RIGHT OF CENTERLINE, UP TO 81 FT AGL/164 FT MSL. DME ANTENNA 380 FT FROM DER, 253 FT RIGHT OF CENTERLINE, 24 FT AGL/100 FT MSL. MULTIPLE TREES BEGINNING 83 FT FROM DER, 65 FT LEFT OF CENTERLINE, UP TO 81 FT AGL/155 FT MSL.

SCHOLES I NTL AT GALVESTON:

NOTE: RWY 14, BUILDING 2614 FT FROM DER, 376 FT RIGHT OF CENTERLINE, 76 FT AGL/81 FT MSL.

NOTE: RWY 18, BUILDINGS BEGINNING 2560 FT FROM DER. 284 FT LEFT OF CENTERLINE, UP TO 121 FT AGL/178 FT MSL. T-L TOWER 636 FT FROM DER, 551 FT RIGHT OF CENTERLINE, 55 FT AGL/60 FT MSL. TREES AND POLES BEGINNING 50 FT FROM DER, 75 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/65 FT MSL.

NOTE: RWY 32, CRANE 4434 FT FROM DER, 1081 FT LEFT OF CENTERLINE, 131 FT AGL/131 FT MSL.

NOTE: RWY 36, BUSH 419 FT FROM DER, 577 FT LEFT OF CENTERLINE, 12 FT AGL/17 FT MSL. TREE 526 FT FROM DER, 371 FT LEFT OF CENTERLINE, 14 FT AGL/19 FT MSL. TREES BEGINNING 713 FT FROM DER, 383 FT RIGHT OF CENTERLINE, UP TO 27 FT AGL/32 FT MSL.

TEXAS GULF COAST RGNL:

NOTE: RWY 35, TREE 1510 FT FROM DER, 721 FT LEFT OF CENTERLINE, 48 FT AGL/68 FT MSL.

CONTROLLING OBSTACLES:

WILLIAM P HOBBY: RWY 4: 174 FT MSL BUILDING 293935.00N/0951526.00W, RWY 17: 150 FT MSL CRANE 293751.23N/0951710.97W, 2049 FT MSL TOWER 293430.00N/0952938.00W. RWY 22, 31L, 31R:

2049 FT MSL TOWER 293430.00N/0952938.00W.

ELLINGTON: RWY 22: 192 FT MSL WATER TOWER, 293521.00N/0951048.09W.

SUGAR LAND RGNL: RWY 17: 2049 FT MSL TOWER 293415.70N/0953038.30W, RWY 35: 2049 FT MSL TOWER 293435.00N/0953037.00W.



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LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

GEORGE BUSH INTERCONTINENTAL/HOUSTON – CHART: TOP ALTITUDE: 16000
WILLIAM P HOBBY – CHART: TOP ALTITUDE: 16000
ELLINGTON – CHART: TOP ALTITUDE: 4000
SUGAR LAND RGNL – CHART: TOP ALTITUDE: 4000
SCHOLLES INTL AT GALVESTON – CHART: TOP ALTITUDE: 4000
TEXAS GULF COAST RGNL – CHART: TOP ALTITUDE: 4000

AIRPORTS SERVED:

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
GEORGE BUSH INTERCONTINENTAL/HOUSTON	HOUSTON	TX
WILLIAM P HOBBY	HOUSTON	TX
ELLINGTON	HOUSTON	TX
SUGAR LAND RGNL	HOUSTON	TX
SCHOLLES INTL AT GALVESTON	GALVESTON	TX
TEXAS GULF COAST RGNL	ANGLETON/LAKE JACKSON	TX

COMMUNICATIONS:

ATIS: IAH, HOU, EFD.
AWOS/ASOS: IAH, HOU, EFD, SGR, GLS, LBX.
CLNC DEL: IAH, HOU, SGR, GLS, LBX.
GND CON: IAH, HOU, EFD, SGR, GLS.
TWR: IAH, HOU, EFD, SGR, GLS.
CTAF: SGR, GLS, LBX.
DEP CON: IAH, HOU, EFD, SGR, GLS, LBX.

FIXES AND/OR NAVAIDS:

REMARKS:

ABBREVIATED AMENDMENT



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CHANGES - REASONS:

1. CHANGED ALL REFERENCES OF HOU RWY 12L/R-30L/R TO RWY 13L/R-31 L/R.- UPDATED RUNWAY NUMBERS AFTER MAGVAR.

09/28/16: THIS IS A CORRECTED COPY OF THE FORMS APPROVED ON 09/13/16.

1. CHANGED ALL REFERENCES OF ELLINGTON FIELD (ELD) TO ELLINGTON (ELD) (CB).

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23
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