

**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SUPERSEDED NUMBER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>
BOWIE						SEVEN	BOWIE7.BOWIE	SIX	12/10/2015	
<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"/>					

**DP ROUTE DESCRIPTION:**

DEPARTING SAN ANTONIO INTL:

TAKEOFF RWY 4, 13L, 13R, 22, 31L, 31R: CLIMB ON ASSIGNED HEADING FOR RADAR VECTORS TO SAT VORTAC. MAINTAIN 5000, THENCE...

DEPARTING STINSON MUNI:

TAKEOFF RWY 9, 14, 27, 32: CLIMB ON ASSIGNED HEADING AND ALTITUDE FOR RADAR VECTORS TO SAT VORTAC, THENCE...

...ON TRANSITION/ROUTE. 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>
CORPUS CHRISTI	BOWIE7.CRP	SAT VORTAC	YENNS	160.00 (SAT R-160)	35.24	3000		
		YENNS	THX VORTAC	157.02 (THX R-337)	34.88	3000		
		THX VORTAC	CRP VORTAC	125.72 & 125.05 (THX R-126 & CRP R-305)	51.90	3000		
LAREDO	BOWIE7. LRD	SAT VORTAC	MILET	190.00 (SAT R-190)	57.46	4000		
		MILET	LRD VORTAC	194.56 (LRD R-015)	81.80	14500		

**PROCEDURAL DATA NOTES:**

NOTE: RADAR REQUIRED.

**TAKEOFF MINIMUMS:**

SAN ANTONIO INTL:

TAKEOFF RWY 4, 13L, 13R, 22, 31L, 31R: STANDARD.

STINSON MUNI:

TAKEOFF RWY 14, 32: STANDARD.

TAKEOFF RWY 9: STANDARD WITH MINIMUM CLIMB OF 225 FT PER NM TO 1900.

TAKEOFF RWY 27: 300-1 3/4 OR STANDARD WITH MINIMUM CLIMB OF 221 FT PER NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT PER NM CLIMB GRADIENT, TAKEOFF MUST OCCUR NO LATER THAN 1700 FEET PRIOR TO DER.

**TAKEOFF OBSTACLES NOTES:**

SAN ANTONIO INTL:

NOTE: RWY 13R, ANTENNA ON RTR TOWER, 1034 FT FROM DER, 723 FT RIGHT OF CENTERLINE, 42 FT AGL/820 FT MSL.

BUILDING 3801 FT FROM DER, 1488 FT RIGHT OF CENTERLINE, 117 FT AGL/881 FT MSL.

NOTE: RWY 22, ANTENNA ON HANGAR AND FLAGPOLE 1198 FT FROM DER, 700 FT RIGHT OF CENTERLINE, 39 FT AGL/825 FT MSL.

QUALITY  
3  
CHECKED

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POLES BEGINNING 2209 FT FROM DER, 1041 FT RIGHT OF CENTERLINE, UP TO 23 FT AGL/869 FT MSL.  
SIGN 2713 FT FROM DER, 1034 FT RIGHT OF CENTERLINE, 71 FT AGL/857 FT MSL.

NOTE: RWY 31L, POLE 1931 FT FROM DER, 911 FT LEFT OF CENTERLINE, 42 FT AGL/867 FT MSL.  
POLES BEGINNING 2356 FT FROM DER, 913 FT LEFT OF CENTERLINE, UP TO 42 FT AGL/892 FT MSL.  
SIGN 2435 FT FROM DER, 1032 FT RIGHT OF CENTERLINE, 42 FT AGL/873 FT MSL.  
TOWER 2766 FT FROM DER, 834 FT LEFT OF CENTERLINE, 54 FT AGL/891 FT MSL.

NOTE: RWY 31R, ROD ON OL GS 1261 FT FROM DER, 591 FT LEFT OF CENTERLINE, 57 FT AGL/854 FT MSL.

**STINSON MUNI:**

NOTE: RWY 9, VEHICLE ON ROAD 285 FT FROM DER, 380 FT LEFT OF CENTERLINE, 15 FT AGL/584 FT MSL.  
TREES BEGINNING 1653 FT FROM DER, 435 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/629 FT MSL.

NOTE: RWY 14, VEHICLE ON ROAD 114 FT FROM DER, ON CENTERLINE EXTENDING 373 FT LEFT OF CENTERLINE, UP TO 15 FT AGL/564 FT MSL.  
TREES BEGINNING 72 FT FROM DER, 79 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/607 FT MSL.  
TREES BEGINNING 232 FT FROM DER, 54 FT LEFT OF CENTERLINE, UP TO 70 FT AGL/618 FT MSL.  
TRANSMISSION LINE TOWER 4205 FT FROM DER, 133 FT RIGHT OF CENTERLINE, 119 FT AGL/663 FT MSL.

NOTE: RWY 27, FENCE 41 FT FROM DER, 30 FT RIGHT OF CENTERLINE, 8 FT AGL/584 FT MSL.  
VEHICLE ON ROAD 108 FT FROM DER, 202 FT RIGHT OF CENTERLINE, 15 FT AGL/584 FT MSL.  
VEHICLE ON ROAD 123 FT FROM DER, 113 FT RIGHT OF CENTERLINE, 15 F T AGL/596 FT MSL.  
TREES AND POLES BEGINNING 229 FT FROM DER, 117 FT RIGHT OF CENTERLINE, UP TO 70 FT AGL/645 FT MSL.  
TREES AND POLES BEGINNING 599 FT FROM DER, 8 FT LEFT OF CENTERLINE, UP TO 70 FT AGL/634 FT MSL.  
BUILDING 1422 FT FROM DER, 432 FT RIGHT OF CENTERLINE, 40 FT AGL/527 FT MSL.  
BUILDING 2133 FT FROM DER, 36 FT LEFT OF CENTERLINE, 55 FT AGL/635 FT MSL.  
TANKS BEGINNING 1.3 NM FROM DER, 1338 FT RIGHT OF CENTERLINE, 179 FT AGL/799 FT MSL.

NOTE: RWY 32, FENCE 17 FT FROM DER, 80 FT LEFT OF CENTERLINE, 8 FT AGL/578 FT MSL.  
VEHICLE ON ROAD 54 FT FROM DER, 199 FT LEFT OF CENTERLINE, 15 FT AGL/586 FT MSL.  
TREES BEGINNING 1154 FT FROM DER, 125 FT RIGHT OF CENTERLINE, UP TO 70 F T AGL/639 FT MSL.  
TREES AND POLES BEGINNING 43 FT FROM DER, 41 FT LEFT OF CENTERLINE, UP TO 75 F T AGL/668 FT MSL.

**CONTROLLING OBSTACLES:**

**STINSON MUNI:**

RWY 9: 1546 FT MSL TOWER (48-004668) 291938.75N/0982117.63W  
RWY 27: 799 FT MSL TANK (48-005287) 292049.00N/0983017.00W

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**

CHART V163 ON CORPUS CHRISTI TRANSITION AND V17 ON LAREDO TRANSITION TO MILET.  
CHART COT R-307 AND R-040.  
SAN ANTONIO INTL - CHART TOP ALTITUDE: 5000



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**AIRPORTS SERVED:**

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
SAN ANTONIO INTL (KSAT)	SAN ANTONIO	TX
STINSON MUNI (KSSF)	SAN ANTONIO	TX

**COMMUNICATIONS:**

SAN ANTONIO INTL: ATIS, GND CON, ASOS, CLNC DEL, DEP CON, ATCT  
STINSON MUNI: ATIS, GND CON, ASOS, CLNC DEL, SAT DEP CON, ATCT

**FIXES AND/OR NAVAIDS:**

COT VORTAC



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**REMARKS:**  
ABBREVIATED AMENDMENT.  
STINSON MUNI - NO TOP ALTITUDE REQUESTED BY ATC.

**FLIGHT INSPECTED BY:**

**OFFICE SYMBOL:**      **DATE:**

**DEVELOPED BY:**      *Digitally signed by*  
JOHN THORNTON      **JOHN R THORNTON**  
Nov 01, 2016

**OFFICE SYMBOL:**      **DATE:**  
AJV-5422      09/06/2016

**APPROVED BY:**  
JULIE MORGAN

**OFFICE SYMBOL:**      **DATE:**  
AJV-5422

**REQUIRED EFFECTIVE DATE:**  
CONCURRENT WITH KSAT ILS OR LOC RWY 31L, AMDT 10C.

**COORDINATED WITH:**

<u>A4A</u>	<u>ALPA</u>	<u>AOPA</u>	<u>APA</u>	<u>HAI</u>	<u>NBAA</u>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**OTHER:**  
ZHU, SAT APP CON, SAT ATCT, AMGR, STATE AVIATION DIRECTOR

**CHANGES - REASONS:**  
1. CHANGED ALL REFERENCES TO RWY 12L, 12R, 30L, 30R TO: RWY 13L, 13R, 31L, 31R; RUNWAY DESIGNATORS CHANGED DUE TO MAGVAR CHANGE FROM 8E TO 4E.  
2. PROCEDURAL DATA NOTES STINSON MUNI TAKEOFF RWY 9: DELETED "OR 1000-2 1/2 FOR VCOA"; IAW 8260.46F PARA. 2-1-1, D. (5) - VCOA PROCEDURES ARE NOT ESTABLISHED IN CONJUNCTION WITH A SID.  
3. TAKEOFF OBSTACLE NOTES RWY 13R: CHANGED BLDG HEIGHT FROM 177 FT TO 117 FT; IT NOW READS: "BUILDING 3801 FT FROM DER, 1488 FT RIGHT OF CENTERLINE, 117 FT AGL/881 FT MSL"; OBSTACLE ID 48-003956 IS A LOW CLOSE-IN OBSTACLE THAT WAS PREVIOUSLY DOCUMENTED INCORRECTLY AS 177 FT VS ITS ACTUAL DATABASE VALUE OF 117 FT-NO CHANGE TO MINIMUMS.  
4. CONTROLLING OBSTACLES: DELETED "VCOA: 940 FT MSL TOWER (48-007986) 292304.00N/0982719.00W"; IAW 8260.46F PARA. 2-1-1, D. (5) - VCOA PROCEDURES ARE NOT ESTABLISHED IN CONJUNCTION WITH A SID.  
5. CONTROLLING OBSTACLES, STINSON MUNI, RWY 27: 799 FT MSL TANK (48-005287) LAT/LONG UPDATED FROM "292048.97N/0983016.50W" TO "292049.00N/0983017.00W"; OBSTACLE LAT/LONG WAS UPDATED IN DATABASE.  
6. AIRPORTS SERVED: ADDED "(KSAT)" TO SAN ANTONIO INTL AND ADDED "(KSSF)" TO STINSON MUNI; FOUR LETTER AIRPORT ID'S ADDED TO AID FASTER IDENTIFICATION.  
7. COMMUNICATIONS: CHANGED "ATIS; SAT, SSF; GND CON: SAT, SSF; WAOS/ASOS: SAT; SAT CLNC DEL; SAT DEP CON; SAT ATCT; SSF ATCT CLNC DEL; GND CON; SAT DEP CON; SAT ATCT; SSF ATCT" TO READ: SAN ANTONIO INTL: ATIS, GND CON, ASOS, CLNC DEL, DEP CON, ATCT STINSON MUNI: ATIS, GND CON, ASOS, CLNC DEL, SAT DEP CON, ATCT; REORGANIZED FREQUENCIES SO THEY ARE EASIER TO IDENTIFY.  
8. REMARKS: ADDED "ABBREVIATED AMENDMENT"; PER CENTRAL FPT, ABBREVIATED AMENDMENT FOR MAGVAR UPDATE FROM 8E TO 4E ONLY; PROCEDURE IS SCHEDULED FOR FUTURE AMENDMENT WITH EST. CHART DATE 10/12/2017.

QUALITY  
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CHECKED