

**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.

<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
ALAMO	TWO	ALAMO2.ALAMO	ONE	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"/>	<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>
GOBBY	ALAMO2.GOBBY	SAT VORTAC	GOBBY	002.10 (SAT R-002)	26.68	3500		
GOOCH SPRINGS	ALAMO2.AGJ	SAT VORTAC	GOBBY	002.10 (SAT R-002)	26.68	3500		
		GOBBY	AGJ VORTAC	002.10 & 005.26 (SAT R-002 & AGJ R-185)	67.06	3500		
HENLY	ALAMO2.HENLY	SAT VORTAC	HENLY	359.25 (SAT R-359)	28.00	3100		
JUMBO	ALAMO2.JUMBO	SAT VORTAC	JUMBO	359.25 (SAT R-359)	114.20	18000		

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.



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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 GOOCH SPRINGS TRANSITION; J23-131 ON JUMBO TRANSITION.
CHART: STV R-105; CWK R-244; BWD R-110; JEN R-197; CVE R-213; AGJ R-350.
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:

BWD VORTAC; CWK VORTAC; CVE VORTAC; JEN VORTAC; STV VORTAC

QUALITY
3
CHECKED

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

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. 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 IT'S ACTUAL DATABASE VALUE OF 117 FT-NO CHANGE TO MINIMUMS.
3. TRANSITION ROUTES: REMOVED ALL INSTANCES OF "INT" AND "DME"; "INT" AND "DME" ARE NOT REQUIRED TO BE ON FORM/THEY ARE DETERMINED FROM THE 8260-2.
4. 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.
5. TRANSITION ROUTES, GOOCH SPRINGS TRANSITION: CHANGED FROM GOBBY TO AGJ VORTACE COURSE FROM "002.10 (AGJ R-185)" TO "002.10 & 005.26 (SAT R-002 & AGJ R-185)"; TRANSITION STILL MIRRORS V163 BUT NOW ALLOWS AIRCRAFT TO NAVIGATE ON THE PROCEDURE AS THEY WOULD ON THE AIRWAY - NO CHANGE TO GROUND TRACK.
6. 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.
7. CONTROLLING OBSTACLES: DELETED "RWY 32: 1379 MSL TOWER (48-0015577) 292509.00N/0982901.00W"; OBSTACLE NOT REQUIRED TO BE LISTED BECAUSE IT IS NOT A CONTROLLING OBSTACLE.
8. 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.
9. AIRPORTS SERVED: ADDED "(KSAT)" TO SAN ANTONIO INTL AND ADDED "(KSSF)" TO STINSON MUNI; FOUR LETTER AIRPORT ID'S ADDED TO AID FASTER IDENTIFICATION.
10. COMMUNICATIONS: CHANGED "ATIS; 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.
11. 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
3
CHECKED