# 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

DP NA	<u>ME</u>					NUMBER	DP COMPUTER CODE	SUPERSEDED NUMBER	DATED	ACTUAL EFFECTIVE DATE
TJANO	(RNAV)					TWO	TJANO2.TJANO	ONE	01/25/2024	
TYPE:	OBSTACLE	COPTER	SID	SPECIAL	RNAV					
SAN AN TAKEO TAKEO TAKEO TAKEO	FF RWY 13L: CL FF RWY 13R: CL FF RWY 22: CLIN FF RWY 31L: CL	AT): IB ON HEADING IMB ON HEADI IMB ON HEADIN MB ON HEADIN IMB ON HEADIN	ING 127.63 O ING 127.60 C IG 216.79 OR ING 307.61 O	R AS ASSIGNED OR AS ASSIGNED R AS ASSIGNED OR AS ASSIGNED	D BY ATC, FO D BY ATC, FO BY ATC, FO D BY ATC, FO	OR VECTORS OR VECTORS R VECTORS OR VECTORS	O LVACA, THENCE S TO LVACA, THENCE S TO LVACA, THENCE TO LVACA, THENCE S TO LVACA, THENCE S TO LVACA, THENCE			
ON TF	RACK 205.38 TO	TJANO, THEN	ON TRANSI	TION. MAINTAIN	5000. EXPE	CT FILED AL	TITUDE 10 MINUTES AFTER D	DEPARTURE		
TAKEO		MB ÓN HEADIN			,		TO LVACA, THENCE TO LVACA, THENCE			
TAKEO		MB ON HEADIN			,		TO LVACA, THENCE TO LVACA, THENCE			
TAKEO							TO LVACA, THENCE TO LVACA, THENCE			
TAKEO TAKEO TAKEO	FF RWY 17: CLIN FF RWY 31: CLIN	MB ON HEADIN MB ON HEADIN MB ON HEADIN	NG 172.71 OR NG 307.74 OR	R AS ASSIGNED R AS ASSIGNED	BY ATC, FO BY ATC, FO	R VECTORS R VECTORS	TO LVACA, THENCE TO LVACA, THENCE TO LVACA, THENCE TO LVACA, THENCE			
TAKEO		MB <sup>°</sup> ON HEADIN			,		TO LVACA, THENCE TO LVACA, THENCE			
TAKEO TAKEO TAKEO	FF RWY 15R: CL FF RWY 33L: CL	IMB ON HEADI IMB ON HEAD IMB ON HEADI	ING 145.03 C ING 325.03 O	R AS ASSIGNEI R AS ASSIGNEI	D BY ATC, FO D BY ATC, FO	OR VECTORS	S TO LVACA, THENCE S TO LVACA, THENCE S TO LVACA, THENCE S TO LVACA, THENCE			
TAKEO							TO LVACA, THENCE TO LVACA, THENCE			ONALITY

TAKEOFF RWY 28: CLIMB ON HEADING 279.53 OR AS ASSIGNED BY ATC, FOR VECTORS TO LVACA, THENCE... TAKEOFF RWY 32: CLIMB ON HEADING 322.36 OR AS ASSIGNED BY ATC, FOR VECTORS TO LVACA, THENCE...

<u>DP NAME</u>
TJANO (RNAV)

NUMBER
DP COMPUTER CODE
SUPERSEDED NUMBER
DATED
ONE
01/25/2024

ACTUAL EFFECTIVE DATE
ONE
01/25/2024

...ON TRACK 205.38 TO TJANO, THEN ON TRANSITION. MAINTAIN ATC ASSIGNED ALTITUDE. EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE

# TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

TRANSITION NAME	TRANSITION COMPUTER CODE	FROM FIX/NAVAID	<u>TO</u> <u>FIX/NAVAID</u>	COURSE	DISTANCE	<u>MEA</u>	MOCA	CROSSING ALTITUDE/FIXES
KAHAN	TJANO2.KAHAN	TJANO	TEEPY	TRACK 205.88	37.00	10000	2500	
		TEEPY	KAHAN	TRACK 187.04	30.85	10000	1900	
ZANNI	TJANO2.ZANNI	TJANO	TEEPY	TRACK 205.88	37.00	10000	2500	
		TEEPY	ZANNI	TRACK 196.21	30.00	10000	2300	

# **PBN REQUIREMENT NOTES:**

RNAV 1 - DME/DME IRU OR GPS.

# **EQUIPMENT REQUIREMENT NOTES:**

RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT.

RADAR REQUIRED.

# **PROCEDURAL DATA NOTES:**

# **TAKEOFF MINIMUMS:**

SAN ANTONIO INTL (SAT):

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

# **BOERNE STAGE FLD (5C1):**

RWY 17: STANDARD WITH MINIMUM CLIMB OF 210 FT/NM TO 2200.

RWY 35: STANDARD WITH MINIMUM CLIMB OF 250 FT/NM TO 3800.

# CASTROVILLE MUNI (CVB):

RWY 16. 34: STANDARD

#### KELLY FLD (SKF):

RWY 16, 34: STANDARD

# NEW BRAUNFELS NTL (BAZ):

RWY 13, 17, 31, 35: STANDARD

#### PLEASANTON MUNI (PEZ):

RWY 16, 34: STANDARD

# RANDOLPH AFB (RND):

RWY 15L, 15R, 33L, 33R: STANDARD

#### STINSON MUNI (SSF):

RWY 10: STANDARD WITH MINIMUM CLIMB OF 230 FT/NM TO 1900

RWY 14: STANDARD WITH MINIMUM CLIMB OF 220 FT/NM TO 1900

RWY 28: 300-1 5/8 OR STANDARD WITH MINIMUM CLIMB OF 230 FT/NM TO 900, OR ALTERNATIVELY, WITH STANDARD TAKEOFF MINIMUMS AND A NORMAL 200 FT/NM CLIMB GRADIENT, TAKEOFF

MUST OCCUR NO LATER THAN 1800 FEET PRIOR TO DER.

RWY 32: STANDARD WITH MINIMUM CLIMB OF 230 FT/NM TO 1700

16

DP NAME NUMBER **DP COMPUTER CODE SUPERSEDED NUMBER DATED ACTUAL EFFECTIVE DATE** TJANO (RNAV) TWO TJANO2.TJANO ONE 01/25/2024

# **TAKEOFF OBSTACLES NOTES:**

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

# **CONTROLLING OBSTACLES:**

**BOERNE STAGE FIELD (5C1):** 

RWY 17: 1942 AAO 294015.00N/0984345.00W (CLIMB GRADIENT, CLIMB-TO ALTITUDE)

RWY 35: 3048 MSL TOWER (48-005697) 295027.00N/0984933.00W (CLIMB GRADIENT, CLIMB-TO ALTITUDE).

#### STINSON MUNI (SSF):

RWY 10, 14: 1546 MSL TOWER (48-004668) 291938.75N/0982117.63W (CLIMB GRADIENT, CLIMB GRADIENT TERMINATION ALTITUDE).

RWY 28: 802 MSL TANK (48-169742) 292048.87N/0983016.57W (CEILING), C(LIMB GRADIENT), (CLIMB GRADIENT TERMINATION ALTITUDE), (VISIBILITY).

RWY 32: 1379 MSL TOWER (48-001577) 292509.00N/0982901.00W (CLIMB GRADIENT, CLIMB-TO ALTITUDE).

#### MSA:

SAT: MSA FROM SAT, 4100 5C1: MSA FROM 5C1, 4100 CVB: MSA FROM CVB. 4100 SKF: MSA FROM SKF, 4100 BAZ: MSA FROM BAZ, 3100 PEZ: MSA FROM PEZ, 3100 RND: MSA FROM RND, 3200

#### LOST COMMUNICATIONS PROCEDURES:

### ADDITIONAL FLIGHT DATA:

SSF: MSA FROM SSF, 4100

CHART: TOP ALTITUDE: SAT: 5000; 5C1, CVB, SKF, BAZ, PEZ, RND, SSF: ASSIGNED BY ATC.

AIRPORT MV: SAT (P) 4E/2020, 5C1 5E/2010, CVB 4E/2020, SKF 4E/2020, BAZ 8E/1975, PEZ 6E/2000, RND 5E/2010, SSF E3/2025

CHART: MINIMUM CROSSING ALTITUDE AT LVACA-5000.

DME/DME ASSESSMENT: SAT (RNP 2.0).

#### AIRPORTS SERVED.

 AIRPURIS SERVED:		
AIRPORT ID	<u>CITY</u>	STATE
SAT	SAN ANTONIO	TX
5C1	SAN ANTONIO	TX
CVB	CASTROVILLE	TX
SKF	SAN ANTONIO	TX
BAZ	NEW BRAUNFELS	TX
PEZ	PLEASANTON	TX
RND	UNIVERSAL CITY	TX
SSF	SAN ANTONIO	TX

# **COMMUNICATIONS:**

SAN ANTONIO INTL (SAT): CHART: ATIS, GND CON, CLNC DEL, ATCT

BOERNE STAGE FIELD (5C1): CHART: ATIS, CLNC DEL

QUALITY

DP NAME NUMBER **DP COMPUTER CODE SUPERSEDED NUMBER DATED ACTUAL EFFECTIVE DATE** TJANO (RNAV) TWO TJANO2.TJANO ONE 01/25/2024

CASTROVILLE MUNI (CVB): CHART: ATIS. CLNC DEL

KELLY FLD (SKF): CHART: ATIS. GND CON. ATCT

NEW BRAUNFELS NTL (BAZ): CHART: ATIS, ATCT, GND CON, CLNC DEL

PLEASANTON MUNI (PEZ): CHART: CLNC DEL

RANDOLPH AFB (RND): CHART: ATIS, ATCT, GND CON, CLNC DEL STINSON MUNI (SSF): CHART: ATIS, GND CON, CLNC DEL, ATCT

**FIXES AND/OR NAVAIDS:** 

**REMARKS:** 

ENVIRONMENTAL REVIEW UNDER ORDER 1050.1 (LATEST EDITION) AND THE NOISE SCREENING HAVE BEEN ACCOMPLISHED.

VEGETATION HEIGHT: 75FT - BASED ON SAT AND FPT.

MEA - 10000 BASED ON DME/DME COVERAGE FROM ESV'S AND ATC REQUEST.

**FLIGHT INSPECTED BY SIGNATURE OFFICE** DATE Digitally signed by

PROCESSED IAW TECHNICAL SUPPORT GROUP (AJF-17) MEMO 1/2021 GUIDANCE FOR PROCEDURAL CHANGES REQUIRING FLIGHT INSPECTION/VALIDATION

Mar 20, 2025

**DEVELOPED BY SIGNATURE OFFICE** DATE Digitally signed by RICHARD CAMPBELL AJV - A423 01/24/2025

RICHARD E CAMPBELL

Feb 13, 2025

**SIGNATURE APPROVED BY OFFICE** DATE TITLE Digitally signed by AJV - A423

**ALLAN WILL ALLAN WILL** 

REQUIRED EFFECTIVE DATE Mar 20, 2025

**ROUTINE** 

COORDINATED WITH:

 $A4A \times$ ALPA 🔀 AOPA X  $APA \times$ HAI NBAA 🔀 OTHER: ZHU, SAT APP CON, SAT ATCT, AMGR, STATE AVIATION DIRECTOR

#### **CHANGES - REASONS:**

- 1. DP DEPARTURE ROUTE DESCRIPTION: ADDED EXPECT FILED ALTITUDE 10 MINUTES AFTER DEPARTURE IAW 8260.46J. FIGURE E-1.
- 2. SSF RUNWAY CHANGED FROM 9/27 TO 10/28 SSF MAG VAR UPDATED TO 3.0E
- 3. SSF RUNWAY HEADINGS CHANGED RWY 10: FROM 094.53 TO 099.53, RWY 14: FROM 137.36 TO 142.36, RWY 28: FROM 274.53 TO 279.53, RWY 32: FROM 317.36 TO 322.36 MAG VAR UPDATE.
- 4. PBN REQUIREMENTS: CHANGED FROM RNAV 1 GPS TO RNAV 1 DME/DME/IRU OR GPS DME SCREENS AND APPROVED ESVS PROVIDE DME/DEME/IRU SOLUTIONS.
- 5. EQUIPMENT REQUIREMENT NOTES: CHANGED FROM RADAR REQURIED TO RADAR REQUIRED FOR NON-GPS EQUIPPED AIRCRAFT AND RADAR REQUIRED DME SCREENS AND APPROVED ESVS PROVIDE DME/DEME/IRU SOLUTIONS.
- 6. ADDITIONAL FLIGHT DATA: MAG VAR CHANGED FOR SSF FROM 8E/1980 TO 03E/2025.
- 7. ADDITIONAL FLIGHT DATA: CHANGED DME ASSESSMENT FROM UNSAT TO SAT (RNP 1.0).
- 8. ALL LOCATION IDENTIFIERS REMOVED K'S FROM BEGINNING OF IDENTIFIER.
- 9. COMMUNICATIONS: ADDED BOERNE STAGE FIELD (5C1) AND CASTROVILLE MUNI (CVB).
- 10. REMARKS: ADDED VEGETATION HEIGHT.

06/18/25: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 03/20/25. CHANGED RWY 228 TO RWY 28 IN STINTON MUNI (SSF) DP ROUTE DESCRIPTION.

MANAGER

# **FEDERAL AVIATION ADMINISTRATION FLIGHT STANDARDS SERVICE DEPARTURE (DATA RECORD)**

DP NAME TJANO (RNAV)						NUMBER TWO	DP COMPUTER CODE TJANO2.TJANO	SUPERSEDED NUMBER ONE	<b>DATED</b> 01/25/2024	ACTUAL EFFECTIVE DATE
FIX/NAVAID	<u>LAT/LONG</u>		C FO/FB LEG			DIST (NM)	ALTITUDE	SPEED	REMARKS	
LVACA	290629.34N/0984059.65W	Υ	-	IF	-	-	AT/ABOVE 5000			
TJANO	284900.57N/0985209.93W	Υ	FB	TF	209.38	20.00				
TJANO	284900.57N/0985209.93W	Υ	-	IF	-	-			TJANO2.KAHAI	N
TEEPY	281649.01N/0991302.73W	Υ	FB	TF	209.88	37.00				
KAHAN	274627.24N/0991942.15W	Υ	FB	TF	191.04	30.85				
TJANO	284900.57N/0985209.93W	Υ	-	IF	-	-			TJANO2.ZANN	I
TEEPY	281649.01N/0991302.73W	Υ	FB	TF	209.88	37.00				
ZANNI	274834.76N/0992443.95W	Υ	FB	TF	200.21	30.00				