

**UNITED STATES AIR FORCE  
FLIGHT STANDARDS SERVICE  
VOR OR TACAN STANDARD INSTRUMENT APPROACH PROCEDURE**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or feet RVR.

<b>AIRPORT ID</b> SJT	<b>PROCEDURE NAME</b> HI - VOR Z OR TACAN RWY 21	<b>ORIGINAL/AMENDMENT</b> 3	<b>CITY</b> SAN ANGELO	<b>STATE</b> TX
<b>AIRPORT ELEVATION</b> 1919	<b>TDZE</b> 1906	<b>SUPERSEDED</b> HI - VOR Z OR TACAN RWY 21	<b>DATED</b> 12/02/2021	<b>EPOCH YEAR</b> 1965
<b>FACILITY</b> SJT	<b>COORDINATES OF FACILITIES</b>	<b>ACTUAL EFFECTIVE DATE</b>	<b>REQUIRED EFFECTIVE DATE</b> ROUTINE	<b>MAG VAR</b> 10E
				<b>CANCEL/SUSPEND</b>

**TERMINAL ROUTES**

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
SJT VORTAC	IAF	EWUYI/SJT 15.00 DME					090.00	15.00	4100
EWUYI/15.00 DME CCW	IAF	JERJI/SJT 15.00 DME					15.00 DME ARC (SJT VORTAC LR-068)		4100
JERJI/SJT 15.00 DME	IF	SJT VORTAC					240.00	15.00	2600

**MISSED APPROACH**

**MAP:**

PAPIY/SJT 1.83 DME

**MISSED APPROACH INSTRUCTIONS:**

CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4400 ON HEADING 360 AND SJT VORTAC R-284 TO TANKR/SJT 11.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4400.

**ALTERNATE MISSED APPROACH INSTRUCTIONS:**

**PROFILE:**

- PT**                      **SIDE OF COURSE**                      **OUTBOUND**                      **FT WITHIN**                      **MILES OF**                      (IAF)
- PROFILE STARTS AT SJT VORTAC
- FAC:** 235.00                      **FAF:** SJT VORTAC                      **DIST FAF TO MAP:**                      **DIST FAF TO THLD:** 1.83
- MIN ALT:** SJT VORTAC 12000, EWUYI/SJT 15.00 DME 4100, JERJI/SJT 15.00 DME 4100, SJT VORTAC 2600
- MSA FROM:** SJT VORTAC 4300, ESA W/IN 100 NM 4700



**EQUIPMENT REQUIREMENTS NOTES:**

DME REQUIRED.

**NOTES:**

CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).  
CHART NOTE: CIRCLING NA FOR CAT D W OF RWY 18-36.

**ADDITIONAL FLIGHT DATA:**

SJT VORTAC TO RW21: 3.34/59  
HOLD W, RT, 103.60 INBOUND.  
CHART FAS OBST: 2045 TOWER (48-175403) 312139N/1002750W.  
CHART VDP AT 0.72 DME.  
DISTANCE VDP TO THLD 1.11 NM.  
CHART SJT R-090 AT EWUYI.  
FAC CROSSES RWY C/L EXTENDED 478 FT FROM THLD.

**MINIMUMS:**

**TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT**

**ALTERNATE:** NA  STANDARD

<b><u>CATEGORY:</u></b>	<b><u>A</u></b>			<b><u>B</u></b>			<b><u>C</u></b>			<b><u>D</u></b>			<b><u>E</u></b>		
	<b><u>FINAL TYPE</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>	<b><u>HAT/HAA</u></b>	<b><u>DA/MDA</u></b>	<b><u>VIS</u></b>
S-21		NA			NA		2300	1 1/8	394	2300	1 1/8	394	2300	1 1/8	394
CIRCLING		NA			NA		2500	1 1/2	581	2580	2	661		NA	

**CHANGES - REASONS**

1. CHANGED MISSED APPROACH INSTRUCTIONS FROM "CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4400 ON HEADING 360 AND SJT VORTAC R-284 TO TANKR INT/SJT 11.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4400" TO "CLIMB TO 3000 THEN CLIMBING RIGHT TURN TO 4400 ON HEADING 360 AND SJT VORTAC R-284 TO TANKR/SJT 11.00 DME AND HOLD, CONTINUE CLIMB-IN-HOLD TO 4400" - REMOVED TANKR "INT", WOOLE (SJ) NDB DECOMMISSIONED.
2. REMOVED "CHART CIRCLING ICON" - IAW MEMO DATED 05/15/2025.
3. REMOVED "CHART ASR" - NOT NEEDED.



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SJT

PROCEDURE NAME  
HI - VOR Z OR TACAN RWY 21

ORIGINAL/AMENDMENT  
3

CITY  
SAN ANGELO

STATE  
TX

COORDINATED WITH:

A4A  ALPA  AOPA  APA  HAI  NBAA

OTHER: ZFW, MAF ATCT, SJT APP CON, AMGR

FLIGHT CHECKED BY

OFFICE

DATE

DEVELOPED BY

ARTHUR ULVESTAD

OFFICE

AJV-A422

DATE

11/14/2025

RECOMMENDED BY

RAKE MCGRAW

OFFICE

AJV-A422

DATE

TITLE

MANAGER

APPROVED BY

OFFICE

DATE

TITLE







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HI - VOR Z OR TACAN RWY 21

**AMDT NO.**  
3

**CITY**  
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**STATE**  
TX

**AIRPORT ELEVATION**  
1919

**FACILITY**  
SJT

**MISSED APPROACH**

**FROM**  
PAPIY/SJT 1.83 DME

**TO**  
TANKR/SJT 11.00 DME

RNP

DISTANCE

PAT

MAP

HAT

HMAS  
2050

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>CG</u>	<u>CGTA</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
							ASC				4400
TOWER (48-007985)	312516.58N/1003237.34W	2692	500	50	5D	1000					3700
TERRAIN	312924.00N/1003721.00W	2283 (2300)								AS1500	3800

**COMPUTATIONS**

ALT    KIAS    KTAS    HAA    VKTW    TR    BA    DTA    COURSE CHANGE    DVEB    VEB OCS    RF CENTER FIX/DISTANCE

**SEGMENT REMARKS:**

**CIRCLING**     ALL CATS     CAT A     CAT B     CAT C     CAT D     CAT E     NOT AUTHORIZED

<u>OBSTRUCTION</u>	<u>COORDINATES</u>	<u>RADIUS</u>	<u>HAA</u>	<u>ELEV MSL</u>	<u>HORZ</u>	<u>VERT</u>	<u>AC</u>	<u>ROC</u>	<u>OCS</u>	<u>ADJUSTMENTS</u>	<u>MIN ALT</u>
CATEGORY C											
TOWER (48-001287)	312441.66N/1002830.77W	2.95	581	2183	50	20	2C	300			2500
CATEGORY D											
TOWER (48-023478)	311901.88N/1002610.55W	3.86	661	2268	20	10	1B	300			2580

**CIRCLING REMARKS:**



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**AIRPORT ELEVATION**  
1919

**FACILITY**  
SJT

**ESA**

**CENTER** **RADIUS**  
SJT VORTAC 100

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (48-004448)	322345.23N/1015721.31W	309	98.1	3640	500	50	5D	1000			4700

**ESA REMARKS:**

**MSA**

**CENTER** **RADIUS**  
SJT VORTAC 25

SECTOR	OBSTRUCTION	COORDINATES	BEARING	DISTANCE	ELEV MSL	HORZ	VERT	AC	ROC	OCS	ADJUSTMENTS	MIN ALT
360-360	TOWER (48-004098)	312202.00N/1000249.00W	081	20.9	3283	500	50	5D	1000			4300

**MSA REMARKS:**

**NOTES/EXPLANATIONS FROM PROCEDURE SEGMENTS:**

VEGETATION HEIGHT 55 FT PER FPT.

**PART B: SUPPLEMENTAL DATA**

**COMMUNICATIONS WITH**

MAF TOWER, SJT FSS

<b>WX SERVICE</b> ASOS	<b>LOCATION</b> SJT	<b>HRS OPERATION</b> 24	<b>ALTIMETER SOURCE</b> SJT	<b>DISTANCE</b>	<b>WMSCR</b> Y	<b>ADJUSTMENTS</b> 0
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<b>BACK-UP WX SERVICE</b>	<b>LOCATION</b>	<b>HRS OPERATION</b>	<b>ALTIMETER SOURCE</b>	<b>DISTANCE</b>	<b>WMSCR</b>	<b>ADJUSTMENTS</b>
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**WX REMARKS:**

BACKUP ALTIMETER SOURCE NOT ESTABLISHED DUE TO AVAILABILITY OF NWS AT THE AIRPORT.

<b>PRIMARY NAVAID</b> SJT VORTAC	<b>MONITOR POINT</b> ZFW	<b>HRS OPERATION</b> 24	<b>CAT</b> 1
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APPROACH AND RUNWAY LIGHTING SYSTEM	RUNWAY MARKINGS	RUNWAY VISUAL RANGE
RW09 - MIRL (PCL)	BSC-G	
RW27 - MIRL (PCL)	BSC-G	
RW18 - MIRL (PCL), REIL (PCL), PAPI-4L (PCL)	NPI-G	
RW36 - MIRL (PCL), PAPI-4L (PCL)	NPI-G	
RW03 - MALSR (PCL), HIRL (PCL)	PIR-G	APPROACH
RW21 - HIRL (PCL), VASI-4L	PIR-G	ROLL OUT



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**FACILITY**  
SJT

GLIDESLOPE ANGLE

ELEV RWY THRESHOLD

TCH

ELEV GS ANTENNA

DISTANCE FROM RWY

VGSI ANGLE  
3.00

TCH  
52.0

**FINAL APPROACH COURSE AIMING**

RUNWAY THRESHOLD

478 FT FROM THRESHOLD

DISPLACED THRESHOLD DISTANCE

ON CENTERLINE

FT FROM CENTERLINE

**CRITICAL TEMPERATURES**

CRITICAL LOW

CRITICAL HIGH

ACT

APT ISA

**CRITICAL TEMPERATURE REMARKS:**

**"VISUAL PORTION OF FINAL" PENETRATIONS**

**HELICOPTER 'VISUAL PORTION OF FINAL' PENETRATIONS**

and/or

**5280-FT "PROCEED VFR" SEGMENT LEVEL SURFACE AREA PENETRATIONS**

**PENETRATIONS REMARKS:**

**PART C: GENERAL REMARKS:**

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

ORDER 8260.3, CHAPTER 2, NEW CIRCLING CRITERIA APPLIED.



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**PART D: AIRSPACE**

**DOCKET #**

**ALL DISTANCES TO 1/100NM; ELEVATION TO NEAREST 100 FEET; COORDINATES TO 1/100 SECOND; DEG TO 1/100 DEGREE**

<b>DISTANCE FROM</b>	MAP	<b>TO 1000FT POINT</b>	14.43
<b>WIDTH OF</b>	INTERMEDIATE	<b>SEGMENT AT 1000FT POINT</b>	7.20
<b>TRUE COURSE OF</b>	INTERMEDIATE	<b>SEGMENT CONTAINING 1000FT POINT</b>	250.00
<b>HIGH TERRAIN IN</b>	INTERMEDIATE	<b>SEGMENT CONTAINING 1000FT POINT</b>	1900
<b>DISTANCE FROM</b>	MAP	<b>TO 1500FT POINT</b>	15.43
<b>WIDTH OF</b>	INTERMEDIATE	<b>SEGMENT AT 1500FT POINT</b>	7.62
<b>TRUE COURSE OF</b>	INTERMEDIATE	<b>SEGMENT CONTAINING 1500FT POINT</b>	250.00
<b>HIGH TERRAIN IN</b>	INTERMEDIATE	<b>SEGMENT CONTAINING 1500FT POINT</b>	1900

<b>THRESHOLD COORDINATES (IF STR-IN)</b>	312141.81N/1002912.68W
<b>ARP COORDINATES</b>	312127.89N/1002946.70W
<b>RUNWAY APCH END AND DIST FURTHEST FROM ARP</b>	RUNWAY 36 DISTANCE 0.69 NM
<b>FAF COORDINATES</b>	312229.84N/1002717.53W
<b>FIX NAME COORDINATES</b>	

**REMARKS**

**PART E: PREPARED BY**

<u>NAME</u>	<u>OFFICE</u>	<u>DATE</u>	<u>TITLE</u>
ARTHUR ULVESTAD	AJV-A422	11/14/2025	AERONAUTICAL INFORMATION SPECIALIST

