Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 04/18/2012	Task #: 2009050622060301006	Request #: 20090506220603
Procedure: RNAV (RNP) Z RWY 4 AMDT 0A		Airport ID: KSAT	Airport: SAN ANTONIO INTL		Reimbursable #:
City: SAN ANTONIO	ST: TX	GPS #:		Estimated Chart Date: 11/15/2012	FICO #:
Fac ID: SAT	Fac. Type: Proc-P	Specialist: BETTY RICHARDS			P1

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	04/18/2012	07/12/2012	JILL OLSON	
QA:	07/12/2012	07/13/2012	STEVEN SZUKALA	
Liaison:	07/13/2012		K. Spurlin	P1; WAIVER CANCEL; REQUEST TABLE TOP

Procedure Comments: Non- ENROUTE **Remark Type:** INFORMATION PKG 3 of 5

SAN ANTONIO, TX; SAN ANTONIO INTL (KSAT); RNAV (RNP) Z RWY 4, ORIG-A; ENROUTE-YES; FC BY 9/18/12; PUB 11/15/12

ATTACHED FORMS: 8260-3, 8260-9, 8260-10, 8260-2(S): CFBJP, ORIG; CFBJQ, ORIG; CFBJR, ORIG; HARDD, REV 7; 8260-1 (CANCEL)

CONTACT: JILL OLSON/STEVE BARNETT, AJV-353 LEADS, 405-954-0414/9307.

PLEASE TABLE TOP FLIGHT CHECK.

NEW

RNAV (RNP) Z RWY 4

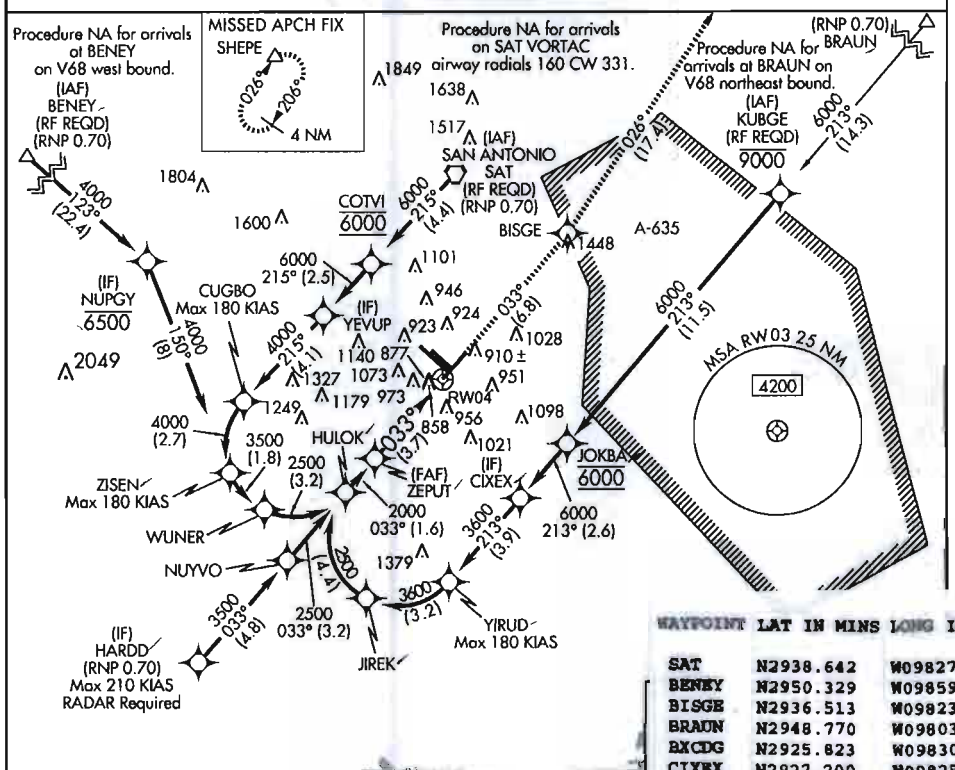
SAN ANTONIO, TEXAS

SAN ANTONIO INTL (SAT)

When VGSI is inoperative, procedure NA at night. GPS required. For inoperative MALS, increase RNP 0.15 all Cats visibility to RVR 6000 and RNP 0.30 all Cats visibility to 1¾. For uncompensated Baro-VNAV systems, procedure NA below -4°C (24°F) or above ~~46°C (116°F)~~ 54°C (130°F).

MISSED APPROACH: Climb to 3500 on track 033° to BISGE then left turn on track 026° to SHEPE and hold.

PROTOTYPE: NOT FOR NAVIGATION

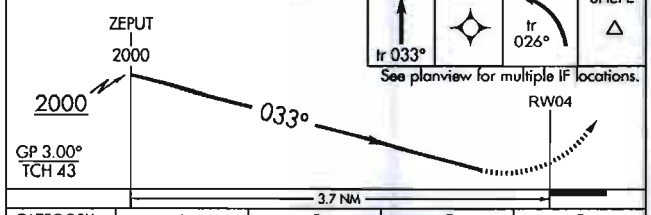


WAYPOINT	LAT IN MINS	LONG IN MINS
SAT	N2938.642	W09827.679
BENEY	N2950.329	W09859.434
BISGE	N2936.513	W09823.141
BRAUN	N2948.770	W09803.794
BXCDG	N2925.823	W09830.039
CIXEX	N2927.200	W09825.067
COTVI	N2935.439	W09831.087
CUGBO	N2930.610	W09836.246
HARDD	N2921.368	W09838.061
HULOK	N2927.400	W09832.130
IVIXE	N2928.983	W09834.230
JIREK	N2923.667	W09831.284
JOKBA	N2929.140	W09823.161
KUBGE	N2937.883	W09814.529
NUPGY	N2935.521	W09840.156
NUYVO	N2925.006	W09834.486
SHEPE	N2951.037	W09812.094
UVWUQ	N2928.965	W09834.238
WUNER	N2926.789	W09835.410
YEVUP	N2933.619	W09833.024
YIRUD	N2924.255	W09827.939
ZEPUT	N2928.603	W09830.946
ZISEN	N2928.082	W09836.796
RW03	N2931.394	W09828.194

VGSI and RNAV glidepath not coincident.

3500	BISGE		SHEPE
tr 033°		tr 026°	

See planview for multiple IF locations.



CATEGORY	A	B	C	D
RNP 0.15 DA	1171/50	385 (400-1)		
RNP 0.30 DA	1284-1½	498 (500-1½)		

AUTHORIZATION REQUIRED

SAN ANTONIO, TEXAS

~~AMDT 4~~ FIG ORIG-A

SAN ANTONIO INTL (SAT)

RNAV (RNP) Z RWY 4

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD, INSTRUMENT APPROACH PROCEDURE, TITLE 14 CFR PART 97.33

Bearings, headings, courses, 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 in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
SAT VORTAC (IAF)	COTVI (TF) (FB) (RNP 1.00)	214.93 / 4.36	6000
COTVI	YEVUP (TF) (FB) (RNP 1.00)	214.94 / 2.48	6000
YEVUP (IF)	CUGBO (TF) (FB) (RNP 1.00)	215.13 / 4.11	4000
CUGBO	ZISEN (RF) (FB) (RNP 1.00)	(2.40 NM RADIUS CCW CFBJP)/2.71	4000
ZISEN	WUNER (RF) (FB) (RNP 0.90)	(2.40 NM RADIUS CCW CFBJP)/1.81	3500
(SEE FORM 8260-10)			

MISSED APPROACH

MAP : DA

CLIMB TO 3500 ON TRACK 032.77 TO BISGE THEN LEFT TURN ON TRACK 025.53 TO SHEPE AND HOLD.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT ZEPUT
3. FAC: 032.76 FAF: ____ DIST FAF TO MAP: ____ THLD: ____
4. MIN. ALT: ZEPUT 2000
5. DIST TO THLD FROM OM: 3.68 MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2000 GS ALT AT: ZEPUT 2000 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 43.2# 34:1 IS NOT CLEAR
8. MSA FROM: RW04 4200

ADDITIONAL FLIGHT DATA:
HOLD SW, RT, 025.53 INBOUND.
CHART FAS OBST: 877 POLE 293110N/0982845W
CHART FAS OBST: 973 BLDG 293110N/0982923W
CHART 858 POLE 293105N/0982845W
CHART A-635.
DISTANCE TO THLD FROM 385 HATH: 1.07 NM.
CHART MANDATORY 6000 AT COTVI.
CHART MANDATORY 6000 AT JOKBA.
#TCH 829.2 MSL (DO NOT CHART)
ROUTE TYPE: A, H
ROUTE TYPE QUALIFIER 1: F
ROUTE TYPE QUALIFIER 2: S
CHART MAXIMUM 9000 AT KUBGE
CHART MAXIMUM 6500 AT NUPGY

MAG VAR: 8E EPOCH YEAR: 1980

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT | ALTERNATE: N A | STANDARD

CATEGORY =====>	A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
AUTHORIZATION REQUIRED															
RNP 0.15 DA	1171	5000	385	1171	5000	385	1171	5000	385	1171	5000	385			
RNP0.30 DA	1284	1 1/2	498	1284	1 1/2	498	1284	1 1/2	498	1284	1 1/2	498			

NOTES:
CHART NOTE: WHEN VGSI IS INOPERATIVE, PROCEDURE NA AT NIGHT.
CHART NOTE: GPS REQUIRED.
CHART PLANVIEW NOTE AT HARDD : MAX 210 KIAS.

(SEE FORM 8260-10)

QUALITY CHECKED 4

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: SAN ANTONIO INTL	RNAV	RNAV (RNP) Z RWY 4, ORIG-A	AMDT: ORIG
				DATED 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		ROUTINE

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
X		X	X	X	X	X ZHU, SAT APP CON

FLIGHT CHECKED BY		
NAME: PAUL KOSCHEKA	FIFO AVN	DATE: 9/12/12

DEVELOPED BY		
NAME: BETTY RICHARDS	FIFO AJV-353	DATE: 05/31/2012

APPROVED BY		
NAME: LARRY STROUT MANAGER	FIFO AJW-353	DATE:

CHANGES:

1. RUNWAY NUMBER CHANGED FROM 3 TO 4.
2. CNF FIX UVWUQ CHANGED TO CFBJP.
3. CNF FIX IVIXE CHANGED TO CFBJQ.
4. CNF FIX BXCDG CHANGED TO CFBJR.
5. CHANGED UNCOMPENSATED BARO-VNAV NOTE CRITICAL HIGH TEMPERATURE FROM 46C (116F) TO 54C (130F).

REASONS:

1. RUNWAY RENUMBERED.
2., 3., 4. IAW FAA MEMO DATED 12/30/2011.
5. APPLICATION OF MEMO DATED 06/01/12 USING AFS-400 TEMPERATURE CALCULATIONS FOR HIGH TEMPS.

10/5/12: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/27/12.
1. CHANGED AMENDMENT NUMBER FROM ORIG TO ORIG-A ON PAGES 4-7.

10/9/12: THIS IS A CORRECTED COPY OF THE FORM APPROVED ON 09/27/12.
ADDED "Z" TO SUP PROCEDURE NAME ON PAGE 3.

QUALITY CHECKED

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
WUNER	HULOK (RF) (FB) (RNP 0.90)	(2.42 NM RADIUS CCW CFBJQ)/3.15	2500
HULOK	ZEPUT (TF) (FB) (RNP 0.70)	032.75 / 1.58	2000
BENEY (IAF)	NUPGY (TF) (FB) (RNP 1.00)	123.27 / 22.36	4000
NUPGY (IF)	ZISEN (TF) (FB) (RNP 1.00)	150.43 / 7.98	4000
HARDD (IF)	NUYVO (TF) (FB) (RNP 0.70)	032.70 / 4.79	3500
NUYVO	HULOK (TF) (FB) (RNP 0.70)	032.73 / 3.15	2500
BRAUN	KUBGE (TF) (FB) (RNP 2.00)	212.76 / 14.33	6000
KUBGE (IAF)	JOKBA (TF) (FB) (RNP 1.00)	212.83 / 11.52	6000
JOKBA	CIXEX (TF) (FB) (RNP 1.00)	212.70 / 2.55	6000
CIXEX (IF)	YIRUD (TF) (FB) (RNP 1.00)	212.50 / 3.86	3600
YIRUD	JIREK (RF) (FB) (RNP 1.00)	(2.41 NM RADIUS CW CFBJR)/3.21	3600
JIREK	HULOK (RF) (FB) (RNP 1.00)	(2.41 NM RADIUS CW CFBJR)/4.37	2500
ZEPUT *(FAF)*	RW04 (MAP) (TF) (FO)	032.76 / 3.68	
RW04 (MAP)	BISGE (TF) (FB) (RNP 1.00)	032.77 / 6.75	
BISGE (TF)	SHEPE (TF) (FO) *(RNP 1.00)*	025.53 / 17.39	3500

NOTES, (CONT.):
CHART PLANVIEW NOTE AT YIRUD : MAX 180 KIAS.
CHART PLANVIEW NOTE AT CUGBO : MAX 180 KIAS.
CHART PLANVIEW NOTE AT ZISEN : MAX 180 KIAS.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BENEY ON V68 WEST BOUND.

QUALITY 1 CHECKED

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: SAN ANTONIO INTL	RNAV	RNAV (RNP) Z RWY 4, ORIG-A	AMDT: ORIG
				DATED: 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) - STANDARD,
INSTRUMENT APPROACH PROCEDURE, - TITLE 14 CFR PART 97.33

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CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT BRAUN ON V68 NORTHEAST BOUND.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON SAT VORTAC AIRWAY RADIALS 160 CW 331.
CHART PLANVIEW NOTE ADJACENT TO SAT VORTAC IAF: RF REQUIRED.
CHART PLANVIEW NOTE ADJACENT TO BENEY IAF: RF REQUIRED.
CHART PLANVIEW NOTE ADJACENT TO KUBGE IAF: RF REQUIRED.
CHART PLANVIEW NOTE AT SAT VORTAC: (RNP 0.70).
CHART PLANVIEW NOTE AT BENEY: (RNP 0.70).
CHART PLANVIEW NOTE AT HARDD: (RNP 0.70).
CHART PLANVIEW NOTE AT BRAUN: (RNP 0.70).
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT.
CHART PLANVIEW NOTE AT HARDD: RADAR REQUIRED.
CHART NOTE: FOR INOPERATIVE MALS, INCREASE RNP 0.15 ALL CATS VISIBILITY TO RVR 6000 AND RNP 0.30 ALL CATS VISIBILITY TO 1 3/4.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, PROCEDURE NA BELOW -4C(24F) OR ABOVE 54C (130F).
CHART PROFILE NOTE: SEE PLANVIEW FOR MULTIPLE IF LOCATIONS.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: SAN ANTONIO INTL	RNAV	RNAV (RNP) Z RWY 4, ORIG-A	AMDT: ORIG
				DATED. 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC PACKET - 424-18 - RNAV (RNP)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        SAT   K4011680VTHA N29383851W098274073    N29383851W098274073E0080011602     NARSAN ANTONIO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   BENEY K40    R   L N29501976W098592602                      E0051     NAR           BENEY
        SUSAEAENRT   BISGE K40    W     N29363080W098230845                      E0048     NAR           BISGE
        SUSAEAENRT   BRAUN K40    C   L N29484618W098034763                      E0046     NAR           BRAUN
        SUSAEAENRT   CFBJP K40    W     N29285792W098341430                      E0049     NAR           CNF(CFBJP)
        SUSAEAENRT   CFBJQ K40    W     N29285897W098341377                      E0049     NAR           CNF(CFBJQ)
        SUSAEAENRT   CFBJR K40    W     N29254937W098300233                      E0048     NAR           CNF(CFBJR)
        SUSAEAENRT   CIXEX K40    W     N29271201W098250401                      E0048     NAR           CIXEX
        SUSAEAENRT   COTVI K40    W     N29352633W098310523                      E0049     NAR           COTVI
        SUSAEAENRT   CUGBO K40    W     N29303657W098361477                      E0049     NAR           CUGBO
        SUSAEAENRT   HARDD K40    C     N29212205W098380363                      E0049     NAR           HARDD
        SUSAEAENRT   HULOK K40    W     N29272401W098320778                      E0049     NAR           HULOK
        SUSAEAENRT   JIREK K40    W     N29234001W098311703                      E0049     NAR           JIREK
        SUSAEAENRT   JOKBA K40    W     N29290837W098230967                      E0048     NAR           JOKBA
        SUSAEAENRT   KUBGE K40    W     N29375298W098143176                      E0047     NAR           KUBGE
        SUSAEAENRT   NUPGY K40    W     N29353125W098400934                      E0049     NAR           NUPGY
        SUSAEAENRT   NUYVO K40    W     N29250035W098342913                      E0049     NAR           NUYVO
        SUSAEAENRT   SHEPE K40    C   L N29510219W098120565                      E0047     NAR           SHEPE
        SUSAEAENRT   WUNER K40    W     N29264734W098352462                      E0049     NAR           WUNER
        SUSAEAENRT   YEVUP K40    W     N29333714W098330143                      E0049     NAR           YEVUP
        SUSAEAENRT   YIRUD K40    W     N29241529W098275636                      E0048     NAR           YIRUD
        SUSAEAENRT   ZEPUT K40    W     N29283616W098305673                      E0049     NAR           ZEPUT
        SUSAEAENRT   ZISEN K40    W     N29280494W098364776                      E0049     NAR           ZISEN

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSATK4ASAT     0     085YHN29320130W098281120E008000809         1800018000C    MNAR    SAN ANTONIO INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSATK4FH04-Z ABENEY 010BENEYK4EA0E  A    IF                                          18000                A FS
        SUSAP KSATK4FH04-Z ABENEY 020NUPGYK4EA0E  B 010TF                                   B 0650004000                A FS
        SUSAP KSATK4FH04-Z ABENEY 030ZISENK4EA0E    010TF                                   + 04000          180        A-FS
        SUSAP KSATK4FH04-Z ABENEY 040WUNERK4EA0E   L091RF       0024001504    10720018    + 03500                CFBJP K4EAA FS
        SUSAP KSATK4FH04-Z ABENEY 050HULOKK4EA0E   L091RF       0024201072    03280032    + 02500                CFBJQ K4EAA FS
```

QUALITY CHECKED 7

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: **SAN ANTONIO INTL**	**RNAV**	**RNAV (RNP) Z RWY 4, ORIG-A**	AMDT: **ORIG**
				DATED: **05/05/2011**

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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SUSAP KSATK4FH04-Z ABENEY 060ZEPUTK4EA0EE   071TF                                  + 02000                          A FS
SUSAP KSATK4FH04-Z ABRAUN 010BRAUNK4EA0E       IF                                                18000               A FS
SUSAP KSATK4FH04-Z ABRAUN 020KUBGEK4EA0E  A 020TF                                  B 0900006000                       A FS
SUSAP KSATK4FH04-Z ABRAUN 030JOKBAK4EA0E    010TF                                    06000                            A FS
SUSAP KSATK4FH04-Z ABRAUN 040CIXEXK4EA0E  B 010TF                                  + 06000                            A FS
SUSAP KSATK4FH04-Z ABRAUN 050YIRUDK4EA0E    010TF                                  + 03600          180               A-FS
SUSAP KSATK4FH04-Z ABRAUN 060JIREKK4EA0E   R010RF       0024102125    28880032    + 03600                 CFBJR K4EAA FS
SUSAP KSATK4FH04-Z ABRAUN 070HULOKK4EA0E   R010RF       0024102888    03280044    + 02500                 CFBJR K4EAA FS
SUSAP KSATK4FH04-Z ABRAUN 080ZEPUTK4EA0EE   071TF                                  + 02000                          A FS
SUSAP KSATK4FH04-Z AHARDD 010HARDDK4EA0E  B    IF                                                18000210            A-FS
SUSAP KSATK4FH04-Z AHARDD 020NUYVOK4EA0E    071TF                                  + 03500                            A FS
SUSAP KSATK4FH04-Z AHARDD 030HULOKK4EA0E    071TF                                  + 02500                            A FS
SUSAP KSATK4FH04-Z AHARDD 040ZEPUTK4EA0EE   071TF                                  + 02000                            A FS
SUSAP KSATK4FH04-Z ASAT   010SAT  K4D 0V  A    IF                                                18000               A FS
SUSAP KSATK4FH04-Z ASAT   020COTVIK4EA0E    010TF                                    06000                            A FS
SUSAP KSATK4FH04-Z ASAT   030YEVUPK4EA0E  B 010TF                                  + 06000                            A FS
SUSAP KSATK4FH04-Z ASAT   040CUGBOK4EA0E    010TF                                  + 04000          180               A-FS
SUSAP KSATK4FH04-Z ASAT   050ZISENK4EA0E   L010RF       0024002151    15040027    + 04000          180    CFBJP K4EAA-FS
SUSAP KSATK4FH04-Z ASAT   060WUNERK4EA0E   L091RF       0024001504    10720018    + 03500                 CFBJP K4EAA FS
SUSAP KSATK4FH04-Z ASAT   070HULOKK4EA0E   L091RF       0024201072    03280032    + 02500                 CFBJQ K4EAA FS
SUSAP KSATK4FH04-Z ASAT   080ZEPUTK4EA0EE   071TF                                  + 02000                            A FS
SUSAP KSATK4FH04-Z H      020ZEPUTK4EA1E  F    IF                                  + 02000     18000       RW04  K4PGA FS
SUSAP KSATK4FH04-Z H      020ZEPUTK4EA2W                                                A031A152                        FS
SUSAP KSATK4FH04-Z H      030RW04 K4PG0GY M 031TF                                    00829             -300            A FS
SUSAP KSATK4FH04-Z H      040BISGEK4EA0E M  010TF                                                                      A FS
SUSAP KSATK4FH04-Z H      050SHEPEK4EA0EY   010TF                                  + 03500                            A FS
SUSAP KSATK4FH04-Z H      060SHEPEK4EA0EE  R   HM                     02550040    + 03500                            A FS
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSATK4GRW04    0085050328 N29312364W098281166-0400    +0214200786000056150IISAT1
```

```
                1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KSATK4SRW04 K4PG                0   18018004225                                                                        M
```

QUALITY CHECKED 7

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: SAN ANTONIO INTL	RNAV	RNAV (RNP) Z RWY 4, ORIG-A	AMDT: ORIG
				DATED: 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (RNP) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

Bearings, headings, courses, 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 in feet RVR.

ARINC SUMMARY - 424-18 - RNAV (RNP)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BENEY	BENEY	010	IAF	IF		FB					
	BENEY	NUPGY	020		TF		FB	1.0			BT 0650004000	
	BENEY	ZISEN	030		TF		FB	1.0			AA 04000	AB 180
	BENEY	WUNER	040		RF	L	FB	0.9		001.8	AA 03500	
	BENEY	HULOK	050		RF	L	FB	0.9		003.2	AA 02500	
	BENEY	ZEPUT	060		TF		FB	0.7			AA 02000	
	BRAUN	BRAUN	010		IF		FB					
	BRAUN	KUBGE	020	IAF	TF		FB	2.0			BT 0900006000	
	BRAUN	JOKBA	030		TF		FB	1.0			AT 06000	
	BRAUN	CIXEX	040		TF		FB	1.0			AA 06000	
	BRAUN	YIRUD	050		TF		FB	1.0			AA 03600	AB 180
	BRAUN	JIREK	060		RF	R	FB	1.0		003.2	AA 03600	
	BRAUN	HULOK	070		RF	R	FB	1.0		004.4	AA 02500	
	BRAUN	ZEPUT	080		TF		FB	0.7			AA 02000	
	HARDD	HARDD	010		IF		FB					AB 210
	HARDD	NUYVO	020		TF		FB	0.7			AA 03500	
	HARDD	HULOK	030		TF		FB	0.7			AA 02500	
	HARDD	ZEPUT	040		TF		FB	0.7			AA 02000	
	SAT	SAT	010	IAF	IF		FB					
	SAT	COTVI	020		TF		FB	1.0			AT 06000	
	SAT	YEVUP	030		TF		FB	1.0			AA 06000	
	SAT	CUGBO	040		TF		FB	1.0			AA 04000	AB 180
	SAT	ZISEN	050		RF	L	FB	1.0		002.7	AA 04000	AB 180
	SAT	WUNER	060		RF	L	FB	0.9		001.8	AA 03500	
	SAT	HULOK	070		RF	L	FB	0.9		003.2	AA 02500	
	SAT	ZEPUT	080		TF		FB	0.7			AA 02000	
		ZEPUT	020	FAF	IF		FB				AA 02000	
		RW04	030	MAP	TF		FO	0.3			AT 00829	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	BISGE	040		TF		FB	1.0				
	SHEPE	050		TF		FO	1.0			AA 03500	
	SHEPE	060		HM	R	FO		025.5(033.5T)	004.0	AA 03500	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	SAT	N293838.51	W0982740.73	N2938.642	W09827.679
	BENEY	N295019.76	W0985926.02	N2950.329	W09859.434
	BISGE	N293630.80	W0982308.45	N2936.513	W09823.141
	BRAUN	N294846.18	W0980347.63	N2948.770	W09803.794
	CFBJP	N292857.92	W0983414.30	N2928.965	W09834.238

QUALITY CHECKED

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: SAN ANTONIO INTL	RNAV	RNAV (RNP) Z RWY 4, ORIG-A	AMDT: ORIG
				DATED: 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

Bearings, headings, courses, 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 in feet RVR.

CFBJQ	N292858.97	W0983413.77	N2928.983	W09834.230
CFBJR	N292549.37	W0983002.33	N2925.823	W09830.039
CIXEX	N292712.01	W0982504.01	N2927.200	W09825.067
COTVI	N293526.33	W0983105.23	N2935.439	W09831.087
CUGBO	N293036.57	W0983614.77	N2930.610	W09836.246
HARDD	N292122.05	W0983803.63	N2921.368	W09838.061
HULOK	N292724.01	W0983207.78	N2927.400	W09832.130
JIREK	N292340.01	W0983117.03	N2923.667	W09831.284
JOKBA	N292908.37	W0982309.67	N2929.140	W09823.161
KUBGE	N293752.98	W0981431.76	N2937.883	W09814.529
NUPGY	N293531.25	W0984009.34	N2935.521	W09840.156
NUYVO	N292500.35	W0983429.13	N2925.006	W09834.486
SHEPE	N295102.19	W0981205.65	N2951.037	W09812.094
WUNER	N292647.34	W0983524.62	N2926.789	W09835.410
YEVUP	N293337.14	W0983301.43	N2933.619	W09833.024
YIRUD	N292415.29	W0982756.36	N2924.255	W09827.939
ZEPUT	N292836.16	W0983056.73	N2928.603	W09830.946
ZISEN	N292804.94	W0983647.76	N2928.082	W09836.796
RW04	N293123.64	W0982811.66	N2931.394	W09828.194

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW04	00786	56

QUALITY CHECKED 1

CITY AND STATE	ELEVATION: 809 THRE: 786	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP: RNAV (RNP) Z RWY 3
SAN ANTONIO, TX	AIRPORT NAME: SAN ANTONIO INTL	RNAV	RNAV (RNP) Z RWY 4, ORIG-A	AMDT: ORIG
				DATED: 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INITIAL	**SAT VORTAC**	**COTVI**	**1. AAO**	**293918.00N/0982848.00W**	**1470 (4E)**	**1000**	**AC98 AT3432**	**6000**
(RNP 1.00)			**2. TERRAIN**	**293918.00N/0982848.00W**	**1270 (1300)**		**AS1500**	**2800**
INITIAL: STEPDOWN	**COTVI**	**YEVUP**	**3. AAO**	**293642.00N/0983248.00W**	**1365 (4E)**	**1000**	**AC98 AT3537**	**6000**
(RNP 1.00)			**4. TERRAIN**	**293642.00N/0983248.00W**	**1165 (1200)**		**AS1500**	**2700**
INTERMEDIATE:	**YEVUP**	**CUGBO**	**5. TOWER (48-002269)**	**293110.94N/0983416.22W**	**1327 (5D)**	**500**	**AC50 AT2123**	**4000**
(RNP 1.00)			**6. TERRAIN**	**293324.00N/0983512.00W**	**1060 (1100)**		**AS1500**	**2600**
INTERMEDIATE: *STEPDOWN*	**CUGBO**	**ZISEN**	**7. TOWER (48-000865)**	**293133.00N/0983707.00W**	**1321 (5D)**	**500**	**AC50 AT2129**	**4000**
(RNP 1.00)			**8. TERRAIN**	**293009.00N/0983557.00W**	**942 (900)**		**AS1500**	**2400**
INTERMEDIATE: *STEPDOWN*	**ZISEN**	**WUNER**	**9. TOWER (48-012047)**	**292844.00N/0983512.00W**	**1239 (5D)**	**500**	**AC50 AT1711**	**3500**
(RNP 0.90)			**10. TERRAIN**	**292803.00N/0983633.00W**	**886 (900)**		**AS1500**	**2400**
INTERMEDIATE: *STEPDOWN*	**WUNER**	**HULOK**	**11. BLDG (48-004224)**	**292631.00N/0983023.00W**	**1140 (5D)**	**500**	**AC50 AT810**	**2500**
(RNP 0.90)			**12. TERRAIN**	**292824.00N/0983433.00W**	**831 (800)**		**AS1500**	**2300**
INTERMEDIATE: *STEPDOWN*	**HULOK**	**ZEPUT**	**13. TOWER (48-007370)**	**292802.00N/0982925.00W**	**960 (4D)**	**500**	**AC50 AT490**	**2000**
(RNP 0.70)			**14. TERRAIN**	**292918.00N/0983223.00W**	**814 (800)**		**AS1000**	**1800**

2. PROCEDURE TURN		**NA**
3. MISSED APPROACH	MAP:	
	ELEV:	

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **RW03**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	**TWR (48-005142)**	**275/ 22.7**	**3049 (5E)**	**4200**					

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SAN ANTONIO, TX	**ELEVATION: 809** AIRPORT NAME: **SAN ANTONIO INTL**	**RNAV**	**RNAV (RNP) Z RWY 4, ORIG-A**	**ASW**

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE		3. ALTIMETER SETTING
SAT APP CON SAT TOWER ZHU ARTCC	N W S F A A A / C	OTHER: ASOS	SOURCE: KSAT DISTANCE: HOURS REMOTE OPERATION:
SATISFACTORY ON:			
X VHF X UHF HF	LOCATION: KSAT		ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3
5. APPROACH & RUNWAY LIGHTING	X	ALSF-2 12R
		(S) SALS
	X	MALS 04 MALSR 30L
	X	HIRL 22, 30L, 12R, 04
	X	MIRL 30R, 12L
	X	REIL 30R, 12L, 22
	X	TDZ 12R
	X	C/L 22, 30L, 12R, 04
	X	OTHER (SPECIFY) PAPI-4L 30R, 12L, 22, 30L, 12R, 04
6. RUNWAY MARKINGS	BASIC	BSC-G 30R
	ALL WEATHER	PIR-G 22, 30L, 12R, 04
	INSTRUMENT	NPI-G 12L
7. RUNWAY VISUAL RANGE	APPROACH	30L, 12R, 04
	MIDFIELD	30L, 12R
	ROLL OUT	30L, 12R
8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 786.0
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 43.2
9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD FT. FROM THRESHOLD
	X	ON CENTERLINE FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: BETTY RICHARDS	DATE: 05/31/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

MAX SPEED ZISEN TO WUNER - 180 KIAS.

MAX SPEED CUGBO TO ZISEN - 180 KIAS.

MAX SPEED YIRUD TO JIREK - 180 KIAS.

MAX SPEED WUNER TO HULOK - 180 KIAS.

MAX SPEED JIREK TO HULOK - 180 KIAS.

PARA 251, 20:1 PENETRATION.

PARA 251, 34:1 PENETRATION.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

OBST 48-023083 WAS SURVEYED ON 07/26/2010 WITH A 1/A ACCURACY CODE APPLIED.

ORDER 8260.3, VOLUME 1, "VISUAL PORTION OF FINAL" PENETRATIONS:
20:1 825 POLE (48-023882) (250/50)
293113.31N/0982834.34W (1.91)
34:1 849 POLE (48-023905) (250/50)
293103.02N/0982844.03W (24.95)
854 POLE (48-023903) (250/50) 293104.09N/0982844.61W (30.69)
858 POLE (48-023901) (250/50) 293104.98N/0982845.11W (33.85)
858 POLE (48-023887) (250/50) 293105.82N/0982844.94W (33.74)

FAAO 8260.52, PARAGRAPH 3.6 PENETRATIONS: SEE LAT/LONGS AND A/C CODES ABOVE.

PENETRATION	RNP 0.15	RNP 0.30
858 POLE (48-023901)	6.17	6.19
854 POLE (48-023903)	5.72	5.72
849 POLE (48-023905)	1.13	1.14

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED (SAAAR) FAAO 8260.52 CRITERIA APPLIED.

BARO-VNAV NA BELOW -4C (24F) OR ABOVE 54C (130F).
ACT: -4.11
DELTA ISA LOW: -17.4.
DESCENT RATE: STANDARD TEMP 964, HIGH TEMP 1126
TEMPERATURE HIGH LIMITS AND DESCENT VALUES DERIVED FROM AFS-400 CALCULATOR
DELTA ISA LOW AND CRITICAL LOW TEMPERATURE DERIVED FROM IAPA BUILD.

VEB ROC RNP 0.30 HIGHER VALUE APPLIED/USED.

VEB DATA: SEE ATTACHED SPREADSHEETS.

BACK-UP ALTIMETER NOT PUBLISHED. REDUNDANT REPORTING ON AIRPORT.

VGSI DATA: 3.00/63.6

100 FT VEGETATION CARRIED OVER FROM EXISTING PROCEDURES.

SEGMENT	ALT	KIAS	KTAS	HAA	VKTW*	TR	BA
CUGBO-ZISEN	4861	180	197.50	4051.9	40	2.40	18.93
ZISEN-WUNER	4000	180	194.40	3190.9	40	2.40	18.47
WUNER-HULOK	3500	180	192.60	2690.9	40	2.42	18.07
YIRUD-JIREK	4909	180	197.67	4099.9	40	2.41	18.88

CONT.

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INITIAL	**BENEY**	**NUPGY**	**15. AAO**	**295042.00N/0985745.00W**	**2221 (4E)**	**1000**	**AC98 AT681**	**4000**
(RNP 1.00)			**16. TERRAIN**	**295042.00N/0985745.00W**	**2021 (2000)**		**AS1500**	**3500**
INTERMEDIATE	**NUPGY**	**ZISEN**	**17. AAO**	**293718.00N/0983918.00W**	**1624 (4E)**	**500**	**AC98 AT1778**	**4000**
(RNP 1.00)			**18. TERRAIN**	**293621.00N/0983848.00W**	**1310 (1300)**		**AS1500**	**2800**
INTERMEDIATE:	**HARDD**	**NUYVO**	**19. AAO**	**292336.00N/0983757.00W**	**975 (4E)**	**500**	**AC98 AT1927**	**3500**
(RNP 0.70)			**20. TERRAIN**	**292318.00N/0983742.00W**	**785 (800)**		**AS1500**	**2300**
INTERMEDIATE: *STEPDOWN*	**NUYVO**	**HULOK**	**21. TOWER (48-014331)**	**292536.70N/0983414.93W**	**908 (1A)**	**500**	**AT1089 AC3**	**2500**
(RNP 0.70)			**22. TERRAIN**	**292751.00N/0983348.00W**	**778 (800)**		**AS1500**	**2300**
FEEDER	**BRAUN**	**KUBGE**	**23. TOWER (48-001049)**	**294936.40N/0980700.00W**	**1728 (2C)**	**1000**	**AC20 AT3252**	**6000**
(RNP 2.00)			**24. TERRAIN**	**294651.00N/0981145.00W**	**1190 (1200)**		**AS1500**	**2700**
INITIAL	**KUBGE**	**JOKBA**	**25. AAO**	**293254.00N/0982115.00W**	**1227 (4E)**	**1000**	**AC98 AT3675**	**6000**
(RNP 1.00)			**26. TERRAIN**	**293254.00N/0982115.00W**	**1027 (1000)**		**AS1500**	**2500**
INITIAL: STEPDOWN	**JOKBA**	**CIXEX**	**27. TOWER (48-014296)**	**292953.49N/0982500.18W**	**1098 (2C)**	**1000**	**AC20 AT3882**	**6000**
(RNP 1.00)			**28. TERRAIN**	**292842.00N/0982639.00W**	**824 (800)**		**AS1500**	**2300**
INTERMEDIATE:	**CIXEX**	**YIRUD**	**29. TOWER (48-001577)**	**292509.00N/0982901.00W**	**1379 (3D)**	**500**	**AC50 DG1671**	**3600**
(RNP 1.00)			**30. TERRAIN**	**292818.00N/0982700.00W**	**814 (800)**		**AS1500**	**2300**

3. MISSED APPROACH	
MAP:	
ELEV:	

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SAN ANTONIO, TX	**ELEVATION: 809** AIRPORT NAME: **SAN ANTONIO INTL**	**RNAV**	**RNAV (RNP) Z RWY 4, ORIG-A**	**ASW**

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
SATISFACTORY ON:		N W S	OTHER:	SOURCE:
		F A A		DISTANCE:
		A / C		HOURS REMOTE OPERATION:
V H F / U H F / H F	LOCATION:			ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3
5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

CONTINUED.
JIREK-HULOK 3600 180 194.00 2790.9 40 2.41 18.34

*MITRE WINDS USED FOR HISTORICAL WINDS

0.70 RNP VALUE USED FOR MINIMUM SEGMENT LENGTH HULOK--ZEPUT.

0.90 RNP VALUE USED FOR MINIMUM SEGMENT LENGTH ZISEN--WUNER.

0.70 RNP VALUE AND 210 KT SPEED RESTRICTION USED IN HARDD INTERMEDIATE SEGMENT TO ALLOW FOR RADAR VECTORS TO THE IF (MINIMUM SEGMENT LENGTH AND DTA)

GREATER THAN 250 FT/NM DESCENT GRADIENT/TURN COMPUTATION USED TO DEVELOP PROCEDURE TO ALLOW FOR REQUIRED AT/ABOVE ALTITUDES AT ATC REQUEST.

SEE ATTACHED AIRSPACE LETTER.

AVERAGE COLD TEMPERATURE BASED ON 5-YEAR HISTORY (2005-2009)

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INTERMEDIATE: *STEPDOWN*	**YIRUD**	**JIREK**	**29. TOWER (48-001577)**	**292509.00N/0982901.00W**	**1379 (3D)**	**500**	**AC50 AT1671**	**3600**
(RNP 1.00)			**31. TERRAIN**	**292342.00N/0982709.00W**	**716 (700)**		**AS1500**	**2200**
INTERMEDIATE: *STEPDOWN*	**JIREK**	**HULOK**	**11. BLDG (48-004224)**	**292631.00N/0983023.00W**	**1140 (5D)**	**500**	**AC50 DG810**	**2500**
(RNP 1.00)			**32. TERRAIN**	**292842.00N/0983354.00W**	**867 (900)**		**AS1500**	**2400**
FINAL: RNP 0.15	**ZEPUT**	**RW04**	**33. POLE (48-023890)**	**293110.47N/0982844.64W**	**877 (4D)**	**20.51:1**	**AC50 MA46**	**1171/385**
FINAL: RNP *0.30*	**ZEPUT**	**RW04**	**34. BLDG (48-004927)**	**293110.00N/0982923.00W**	**973 (5D)**	**20.48:1**	**AC50**	**1284/498**
MISSED APPROACH	*DA*	*RW04*	*35. BLDG (KSAT0060)*	*293110.39N/0982859.08W*	*957 (1B)*	*ASC*	*AC10*	
(RNP 0.15-1.00)		*(40:1)*						
MISSED APPROACH	*DA*	*RW04*				*ASC*		
(RNP 0.30-1.00)		*(40:1)*						
MISSED APPROACH	*RW04*	*BISGE*				*ASC*		
(RNP 0.15-1.00)		*(40:1)*						
MISSED APPROACH	*RW04*	*BISGE*				*ASC*		
(RNP 0.30-1.00)		*(40:1)*						
MISSED APPROACH	*BISGE*	*SHEPE*				*ASC*		
(RNP 1.00)		*(40:1)*						
3. MISSED APPROACH — MAP:	*DA*	*SHEPE*				*ASC*		*3500*
	(RNP 0.30-1.00)	*(40:1)*	*36. TOWER (48-001037)*	*294604.74N/0981436.06W*	*1633 (2C)*	*1000*	*AC50*	*2700*
ELEV:	*923/977*		*37. TERRAIN*	*294827.00N/0981627.00W*	*1395 (1400)*		*AS1500*	*2900*

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL
CATEGORY A	1.3 NM	350	
CATEGORY B	1.5 NM	450	
CATEGORY C	1.7 NM	450	
CATEGORY D	2.3 NM	550	
CATEGORY E	4.5 NM	550	

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

CITY AND STATE	ELEVATION: 809 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
SAN ANTONIO, TX	**SAN ANTONIO INTL**	**RNAV**	**RNAV (RNP) Z RWY 4, ORIG-A**	**ASW**

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
SATISFACTORY ON:		N W S	OTHER:	SOURCE:
		F A A		DISTANCE:
		A / C		HOURS REMOTE OPERATION:
V H F / U H F / H F	LOCATION:			ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3

5. APPROACH & RUNWAY LIGHTING		**ALS**
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)

6. RUNWAY MARKINGS	BASIC
	ALL WEATHER
	INSTRUMENT
7. RUNWAY VISUAL RANGE	APPROACH
	MIDFIELD
	ROLL OUT

8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING		RUNWAY THRESHOLD	FT. FROM THRESHOLD
		ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

RADIO FIX AND HOLDING DATA RECORD

NAME: CFBJP **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292857.92N/0983414.30W **TYPE:** CNF

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
NAME CHANGED FROM UVWUQ TO CFBJP

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 4			KSAT	SAN ANTONIO	TX (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
NAME CHANGED
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/30/2012 **OFFICE:** AJV-353 **NAME:** BETTY RICHARDS

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: SAT APP CON
OTHER:

QUALITY CHECKED 1

RADIO FIX AND HOLDING DATA RECORD

NAME: CFBJQ **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292858.97N/0983413.77W **TYPE:** CNF

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
NAME CHANGED FROM IVIXE TO CFBJQ

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 4			KSAT	SAN ANTONIO	TX (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
NAME CHANGED
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 05/30/2012 **OFFICE:** AJV-353 **NAME:** BETTY RICHARDS

APPROVED BY: **DATE:** **OFFICE:** AJV-352 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: SAT APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: CFBJR **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292549.37N/0983002.33W **TYPE:** CNF

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
NAME CHANGED FROM BXCDG TO CFBJR

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (RNP) Z RWY 4			KSAT	SAN ANTONIO	TX (US)

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
NAME CHANGED
UPDATED FIX USE

DEVELOPED BY: **DATE:** 05/30/2012 **OFFICE:** AJV-353 **NAME:** BETTY RICHARDS

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZHU
ATC FACILITY: SAT APP CON
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: HARDD **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 292122.05N/0983803.63W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	SAN ANTONIO	I-SAT	LOC/DME		216.78	220.78	14.77	14.77		3500	5200
2	STINSON	SSF	VOR	L	291.35	300.35		11.60		3500	5200

HOLDING: **HOLDING TYPE OF ACTION:** ESTABLISH

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SW		WP	212.70	032.70	R		4	3500	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (48-007753)	291439.85N/0984428.08W	1211	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 4	1, 2		KSAT	SAN ANTONIO	TX (US)
IAP	RNAV (GPS) Y RWY 4		1	KSAT	SAN ANTONIO	TX (US)
IAP	RNAV (RNP) Z RWY 4			KSAT	SAN ANTONIO	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 7 **DATE OF REVISION:** 11/15/2012

REASON FOR REVISION:
UPDATED FAC 1 MAG BRG FROM 212.78 TO 216.78.
ADDED DME AS FIX TYPE
UPDATED FIX USE.
ADDED DME DISTANCE FOR FAC 1.
ADDED HOLDING PATTERN.

DEVELOPED BY: **DATE:** 04/24/2012 **OFFICE:** AJV-353 **NAME:** BETTY RICHARDS

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZHU
ATC FACILITY: SAT APP CON
OTHER: