FEDERAL AVIATION ADMINISTRATION

FLIGHT STANDARDS SERVICE

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

TITLE 14 CFR PART 97.33

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.

AIRPORT	AIRPORT ID	PROCEDURE NAME	ORIGINAL/AMENDMENT	CITY	STATE
SAN DIEGO INTL	KSAN	RNAV (GPS) RWY 9	1B	SAN DIEGO	CA

AIRPORT ELEVATION	TDZE	SUPERSEDED	ORIGINAL/AMENDMENT	DATED	MAG VAR	EPOCH YEAR
17	17	RNAV (GPS) RWY 9	1A	06/22/2017	11E	2020

FACILITY	COORDINATES OF FACILITIES	ACTUAL EFFECTIVE DATE	REQUIRED EFFECTIVE DATE	CANCEL/SUSPEND
RNAV		15 AUGUST 2019	ROUTINE	

TERMINAL ROUTES

FROM	FIX TYPE	TO	FIX TYPE	LEG TYPE	FO/FB	RNP	COURSE	DISTANCE	ALTITUDE
SARGS	IF	GATTO		TF	FB	1.00	094.82	4.05	2000
GATTO	FAF	RW09	MAP	TF	FO	0.30	094.93	5.86	
RW09	MAP	2000 MSL		CA			094.93		2000
2000 MSL		CAPUS		DF	FO	1.00			3000

MISSED APPROACH

MAP:
LPV: DA
LNAV/VNAV: DA
LNAV: RW09

MISSED APPROACH INSTRUCTIONS:
CLIMB TO 2000 THEN CLIMBING RIGHT TURN TO 3000 DIRECT CAPUS AND HOLD.

ALTERNATE MISSED APPROACH INSTRUCTIONS:

PROFILE:

1. PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)

2. PROFILE STARTS AT SARGS

3. FAC: 094.93 **FAF:** GATTO **DIST FAF TO MAP:** 5.86 **DIST FAF TO THLD:** 5.86

4. MIN ALT: SARGS 2100, GATTO 2000

5. DIST TO THLD FROM OM: **MM:** **IM:** **150 HAT:** **245 HAT:** 0.58 **GS ANT:**

6. MIN GP INCPT: 2000 **GP ALT AT FAF :** GATTO 2000 **OM:** **MM:** **IM:**

7. GP ANGLE: 3.10 **34:1:** IS NOT CLEAR **20:1:** IS CLEAR **TCH:** 55.1

8. MSA FROM: RW09 5400

QUALITY 7 CHECKED

PBN REQUIREMENTS NOTE:

RNP APCH

NOTES:

CHART NOTE: CIRCLING NA N OF RWY 9-27.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 6°C OR ABOVE 47°C.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT SARGS ON V165 WEST BOUND.
CHART NOTE: WHEN CIRCLING TO RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.
CHART NOTE: RWY 9 HELICOPTER VISIBILITY REDUCTION BELOW RVR 4000 NOT AUTHORIZED.
CHART PROFILE NOTE: VGSI AND RNAV GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE} TCH {FEET}).
CHART NOTE: INOPERATIVE TABLE DOES NOT APPLY TO LPV ALL CATS.
CHART NOTE: FOR INOPERATIVE ALS, INCREASE LNAV CATS A/B VISIBILITY TO RVR 5500.

ADDITIONAL FLIGHT DATA:

CHART CIRCLING ICON.
CHART VDP AT 1.55 NM TO RW09*
*LNAV ONLY
WAAS CHANNEL #49237
REFERENCE PATH ID: W09A
HOLD S, RT, 004.85 INBOUND
LTP HAE: -30.2 M

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

ALTERNATE: NA ☐ STANDARD - CAT B 900-2, CAT C 900-2 1/4, CAT D 1000-3

CATEGORY:	A			B			C			D			E		
FINAL TYPE	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA	DA/MDA	VIS	HAT/HAA
LPV DA	262	4000	245	262	4000	245	262	4000	245	262	4000	245			
LNAV/VNAV DA	621	1 1/2	604	621	1 1/2	604	621	1 1/2	604	621	1 1/2	604			
LNAV MDA	600	4000	583	600	4000	583	600	1 1/4	583	600	1 1/4	583			
CIRCLING	800	1	783	820	1	803	820	2 1/4	803	940	3	923			

QUALITY 7 CHECKED

CHANGES - REASONS

1. REMOVED NOTE "DME/DME RNP-0.3 NA" - NEW CRITERIA.
2. ADDED NOTE "WHEN CIRCLING TO RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD. - 20:1 PENETRATIONS IN RWY 27 VISUAL AREA.
3. REMOVED FAHRENHEIT TEMPERATURES FROM BARO-VNAV NOTE - NEW CRITERIA.
4. CHANGED COPTER NOTE FROM "..NA" TO "..NOT AUTHORIZED." - CRITERIA CHANGE.
5. ADDED PBN REQUIREMENTS NOTE: "RNP APCH" - NEW CRITERIA.
6. INCREASED LNAV/VNAV DA/HAT FROM 620/603 TO 621/604 - MINOR DIFFERENCE BETWEEN IPDS AND TARGETS SLOPE CALCULATION.
7. ADDED TO PROFILE LINE 7: 20:1: IS CLEAR - NO 20:1 PENETRATIONS EXIST.

PDF EDITS:
1. ADDED TO ALTERNATE MINIMUMS LINE: "CAT B 900-2"

2/21/19: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/31/18.
1. ADDED 2 ADDITIONAL 20:1 OBSTACLES TO PENETRATIONS SECTION.

4/30/19: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/31/18.
1. MAGNETIC VARIATION EPOCH YEAR CHANGED TO 2020.

COORDINATED WITH:

A4A [X]   **ALPA** [X]   **AOPA** [X]   **APA** [X]   **HAI** [ ]   **NBAA** [X]   **OTHER:** ZLA, SOCAL TRACON, SAN ATCT, ST AERO, AMGR

FLIGHT CHECKED BY
PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT:
FLIGHT INSPECTION REVIEW NOT REQUIRED

OFFICE

Digitally signed by
MARK D ADAMS

May 06, 2019

DATE

DEVELOPED BY
COLTON CROWDER

Digitally signed by
COLTON CROWDER

Apr 30, 2019

OFFICE
AJV-A412

DATE
12/31/2018

APPROVED BY
LONNIE EVERHART

Digitally signed by
MARK D ADAMS

May 06, 2019

OFFICE
A41

DATE

TITLE
MANAGER

QUALITY 7 CHECKED

FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KSAN
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	324410.9155N
LTP/FTP LONGITUDE	1171204.4300W
LTP/FTP ELLIPSOIDAL HEIGHT	-00302
FPAP LATITUDE	324346.3115N
FPAP LONGITUDE	1171022.8945W
THRESHOLD CROSSING HEIGHT (TCH)	00055.1
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.10
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	0192
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0
CRC REMAINDER	57EA7BB5

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00049
FPAP ORTHOMETRIC HEIGHT	+00049

QUALITY
7
CHECKED