


Flight Procedure Tracking Form		Action: AMENDMENT	Task Type: IAP	Date Open: 11/27/2018	Task #: 2018112731681801002	Request #: 20181127316818
Procedure: RNAV (RNP) Z RWY 27 AMDT 0A			Airport ID: KSAN	Airport: SAN DIEGO INTL		Reimbursable #: NO
City: SAN DIEGO	ST: CA	GPS #:	Estimated Chart Date: 04/25/2019		FICO #:	
Fac ID: N/A		Fac. Type:		Specialist: COLTON CROWDER		
Procedure Review						
	Rec'd	Rel'd	Full Name	Comments		
Lead:	12/14/2018	01/29/2019	MARK ADAMS	 <i>Digitally signed by</i> <i>Digitally signed by</i> BRIAN J BICKETT MARK D ADAMS Feb 27, 2019 Mar 12, 2019		
QA:	01/29/2019					
Liaison:						
Procedure Comments: ENROUTE-NON Remark Type: INFORMATION APPROVAL LETTER ON REQUEST: 20:1 PENETRATION VGSI MITIGATION. PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-33) MEMO, OCTOBER 3, 2018, SUBJECT: FLIGHT INSPECTION REVIEW NOT REQUIRED. CONTACT MARK ADAMS/LONNIE EVERHART, 405.954.9946/4576 2/21/19: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 12/28/18. 1. ADDED 2 ADDITIONAL 20:1 OBSTACLES TO PENETRATIONS SECTION.						

To:

From:

Subject: ACTION: Approval Request, San Diego INTL, San Diego, CA (KSAN); RNAV (RNP) Z RWY 27

Request approval to utilize the visual guidance slope indicator (VGSI) to mitigate unlit 20:1 visual straight-in surface penetrations, per FAAO 8260.3D, paragraph 3.3.2 c.(4)(b)1.

The following supporting information is provided for runway 27:

VG survey (08/20/2011)

VGSI (PAPI-4R) set at 3.50/66.2 ft, COMMISSIONED: 08/18/2015.

VGSI obstruction clearance surface (OCS) is clear.

The following unlit obstacles penetrate the RWY 27 straight-in 20:1 visual surface.

Obstacle penetrations listed below, supersede obstacles identified on 8260-9, dated 09/16/2016.

<u>MSL</u>	<u>Description</u>	<u>Accuracy</u>	<u>Coordinates</u>	<u>Amount of Penetration</u>
254	TREE (06-216737)	324347.79N/1170954.20W	1A	(12.05)
253	TRANSMISSION LINE (06-214380)	324347.21N/1170953.74W	1A	(8.34)
252	TRANSMISSION LINE (06-214378)	324346.29N/1170953.72W	1A	(5.95)
259	BUILDING (06-216738)	324345.94N/1170951.81W	1A	(4.62)
247	BUILDING (06-040225)	324347.81N/1170953.00W	1A	(0.13)

The obstacles listed above are privately owned property and utility company infrastructure not under the control of the sponsor. Therefore, the request is to use VGSI to mitigate the obstacles.

If approved, the following note will be charted in order to retain night operations:

“CHART NOTE: STRAIGHT-IN RWY 27 AT NIGHT, OPERATIONAL VGSI REQUIRED, REMAIN ON OR ABOVE VGSI GLIDEPATH UNTIL THRESHOLD.”

Attachments

INFORMATION ONLY

THIS IS A CURRENTLY APPROVED WAIVER

1. FLIGHT PROCEDURE IDENTIFICATION:

San Diego, California
San Diego Intl (SAN)
RNAV (RNP) Z RWY 27

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

The procedure has a GPA of 3.50 degrees and incorporates CAT D landing minimums. Order 8260.3C paragraph 2-6-2C and table 2-6-1, "GPAs must not exceed the values specified in table 2-6-1. Effective October 1, 2017, the maximum angles specified in table 2-6-2 will also apply to GPAs." From table 2-6-1: CAT D & E Maximum Angle 3.10.

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

The RNP procedure will provide the lowest possible minimums and will allow operators the ability to fly a stabilized, vertically guided procedure to RWY 27 at San Diego Intl. Terrain prevents a glide path angle less than 3.50 degrees. Additionally, terrain and airspace dictate a glide slope intercept altitude of 2000 feet MSL with a 3.50 degree GPA.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

1. Effective October 1, 2017, the maximum allowable GPA for CAT D aircraft will be 3.50 degrees; this request is to adopt early implementation of that authorization.
2. For CAT D aircraft, the GPA of 3.50 degrees is operationally equivalent to the current authorization for using a 3.50 degree VDA.
3. The HAT of 600 feet for RNP 0.11 meets the minimum HAT (270 feet) required for a 3.50 degree GPA per Order 8260.3C, table 3-2-2.
4. The 3.50 degree GPA approximates a 372 feet per NM final descent gradient. The intermediate descent gradient from CIJHI to REEBO of 314 feet per NM allows for a relatively stable transition to the glide path.
5. Procedure design is proven to satisfactorily meet flyability in aircraft simulator evaluations.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

High terrain and airspace limits options for the procedure design and does not permit a GPA that is less than 3.50 degrees.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

SCT, SAN ATCT, ZLA, METROPLEX INDUSTRY REPRESENTATIVES, AWP-AWO, WFPT.

7. SUBMITTED BY:

DATE	OFFICE IDENTIFICATION	TITLE	SIGNATURE
	AJV-5400	Manager, Instrument Flight Procedures Group	Steve Szukala

8. AFS ACTIONS:

☐ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

Digitally signed by
BEV L BORDY
Sep 26, 2016

COMMENTS:

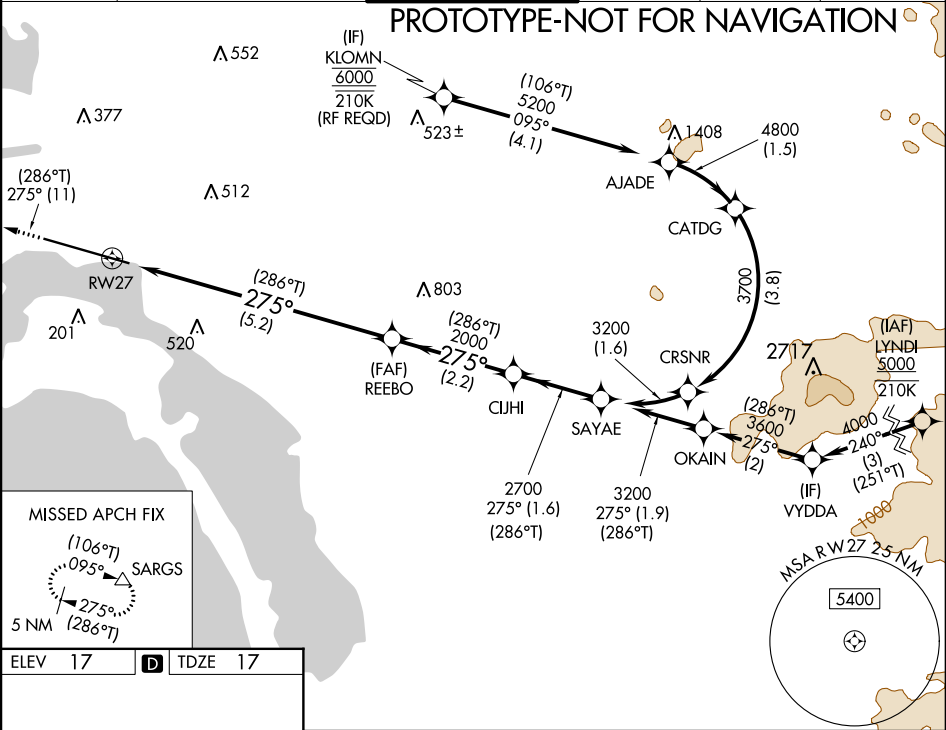
DATE	ROUTING SYMBOL	SIGNATURE
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APP CRS	Rwy Idg	7590
275°	TDZE	17
	Apt Elev	17

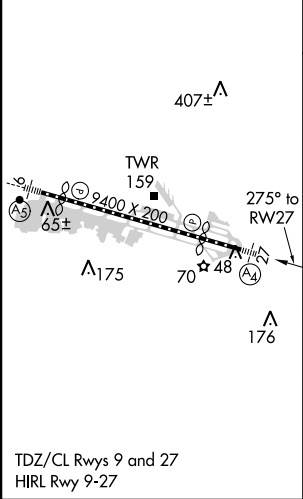
RNAV (RNP) Z RWY 27
SAN DIEGO INTL (SAN)

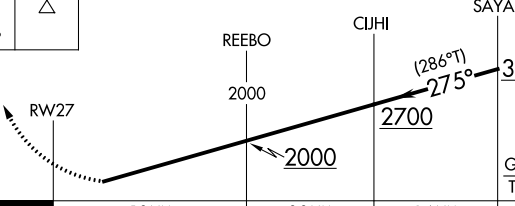
SNP AR APCH	For uncompensated Baro-VNAV systems, procedure NA below 6°C or above 46°C . Straight-in Rwy 27 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. For inop ALS, increase RNP 0.30 all Cats visibility to 2½ SM.			MALS	MISSED APPROACH: Climb to 2500 on track 275° to SARGs and hold.
▼				A4	

D-ATIS	SOCAL APP CON	LINDBERGH TOWER	GND CON	CLNC DEL	CPDLC
134.8	119.6 363.1(WEST) 124.35 279.625(EAST)	118.3 338.225	123.9	125.9	



ELEV 17	TDZE 17
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2500	SARGS	See planview for multiple IF locations.			
↑ tr 275°	△				
					
CATEGORY	A	B	C	D	
RNP 0.11 DA	617-1½ 600 (600-1½)				
RNP 0.30 DA	778-2 761 (800-2)				

AUTHORIZATION REQUIRED

INFORMATION ONLY

SAN DIEGO, CALIFORNIA

AI-373 (FAA)

17173

APP CRS
275°

Rwy ldg
TDZE
17

Apt Elev
17

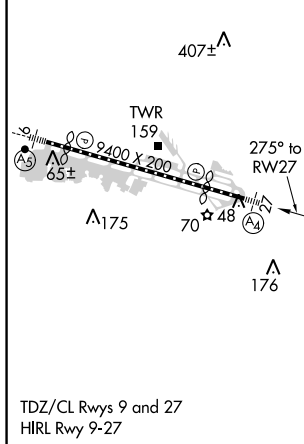
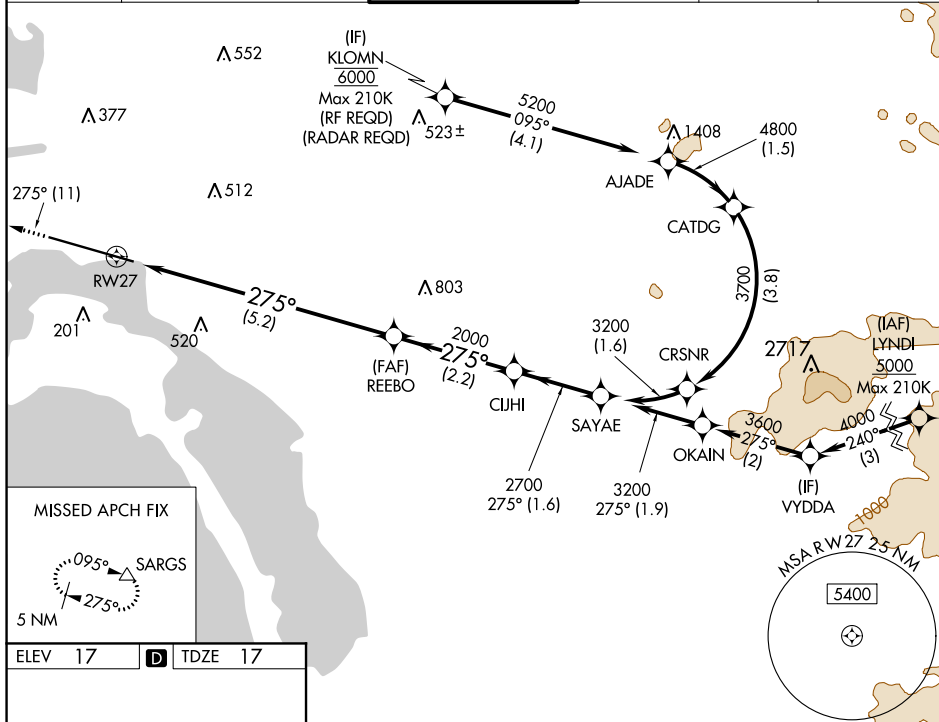
RNAV (RNP) Z RWY 27
SAN DIEGO INTL (SAN)

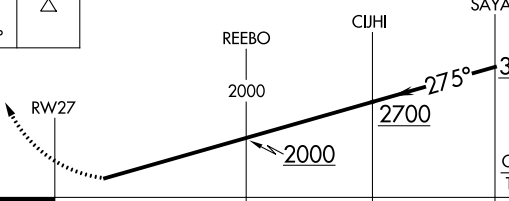
⚠ For uncompensated Baro-VNAV systems, procedure NA below 6°C (43°F) or above 46°C (115°F). GPS required.
For inop MALS, increase RNP 0.30 all Cats visibility to 2 ½ SM.

MALS

MISSED APPROACH: Climb to 2500 on track 275° to SARGs and hold.

D-ATIS 134.8	SOCAL APP CON 119.6 363.1 (WEST) 124.35 279.625 (EAST)	LINDBERGH TOWER 118.3 338.225	GND CON 123.9	CLNC DEL 125.9	CPDLC
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2500 ↑ tr 275°	SARGS △	See planview for multiple IF locations.			
					
CATEGORY	A	B	C	D	
RNP 0.11 DA	617-1½ 600 (600-1½)				
RNP 0.30 DA	778-2 761 (800-2)				
AUTHORIZATION REQUIRED					

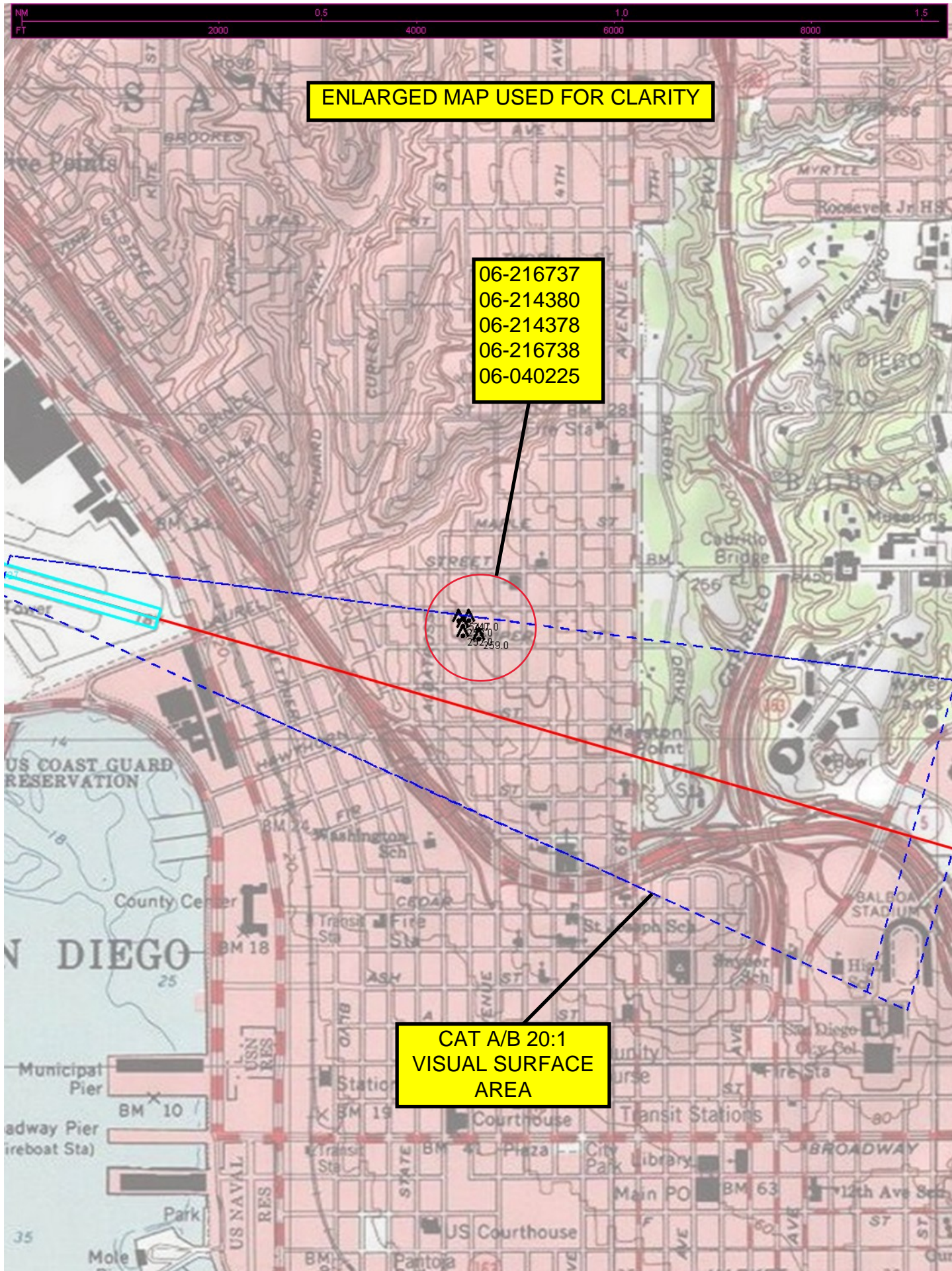
SAN DIEGO, CALIFORNIA
Orig 10NOV16

32°44'N-117°11'W

SAN DIEGO INTL (SAN)
RNAV (RNP) Z RWY 27

SW-3, 06 DEC 2018 to 03 JAN 2019

SW-3, 06 DEC 2018 to 03 JAN 2019





BACKGROUND MAP OMITTED FOR CLARITY

