

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: SID	Estimated Chart Date: 01/22/2026	APWS Task ID: 946F029BE1C04E8597500C3E483B6D96	APWS Project ID: 08A7D460FDD84B51A621400F5FB0329E
Procedure: MMOTO THREE DEPARTURE (RNAV)		Enroute: YES	Specialist: Townsend, Matthew		Agreement Number:
Airport ID: KSAN			Airport City: SAN DIEGO		State: CA
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			

**Procedure Comments:**

UTILIZED ACTIVE AIRNAV DATA FOR AIRPORT AND RUNWAY 9 and 27.

UPDATED RWY 9 TAKEOFF MINIMUMS FROM "400-1 WITH MINIMUM CLIMB OF 610 FT PER NM TO 1900 OR STANDARD WITH MINIMUM CLIMB OF 687 FT PER NM TO 1900" TO "400-1 WITH MINIMUM CLIMB OF 610 FT/NM TO 1900 OR STANDARD WITH MINIMUM CLIMB OF 823 FT/NM TO 1900".

CLEAR NOTAM FDC 5/4295.

WAIVER ON REQUEST FOR ICA LENGTH EXTENDING PAST 10 NM.

APPROVAL LETTER ON REQUEST FOR CLIMB GRADIENT IN EXCESS OF 500FT/NM.

CONTACT ROBERT HAMILTON, AJV-A433, 405-954-4608.





# Federal Aviation Administration

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## Memorandum

To: Bruce DeCleene, Manager, Flight Technologies and Procedures  
Division THRU: Doug Rodzon, Acting Manager Flight Procedure  
Implementation and Oversight Branch

From: Lonnie Everhart, Manager, Instrument Flight Procedures (IFP)  
Coordination Team, AJV-5400

Subject: Approval Request: SAN DIEGO, CA  
SAN, MMOTO DEPARTURE (RNAV)

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Climb gradient exceed 500 feet per NM, 8260.46K, PARA 2-1-5(b).

The computed climb gradient for Runway 9 is 823 feet per NM to 1900.  
The obstacle driving this climb gradient is a 281 MSL Tree located 2578 feet from runway 9 DER.  
Alternatively, aircraft may depart with a 400 foot ceiling and when visibility is at least 1SM at 610  
feet per NM to an altitude 1900 feet above airport elevation. Request approval to publish the  
following takeoff minimums and a minimum climb gradient for RWY 9: 400 and 1 with minimum  
climb of 610 feet per NM to 1900 or Standard with minimum climb of 823 feet per NM to 1900.

Climb gradient required to avoid 281 FT MSL Tree located 2578 feet from runway 9 DER. For  
aircraft unable to meet or exceed the climb gradient, a aircraft may depart with a 400 foot ceiling  
and when visibility is at least 1 mile at 610 feet per NM to an altitude 1900 feet above airport  
elevation.

Tree is unable to be relocated or removed.

**1. FLIGHT PROCEDURE IDENTIFICATION:**

San Diego, CA  
SAN  
MMOTO Departure (RNAV)

**2. WAIVER REQUIRED AND APPLICABLE STANDARD:**

FAAO 8260.3G para 13-1-3b(1).  
The ICA length is normally 2 NM, measured from the ICAB to the ICAE along runway centerline extended. It may be less than 2 NM in length for early turns by publishing a climb gradient. The ICA may be extended beyond 2 NM to maximum length of 10 NM. A specified altitude (typically 400' above DER) or the interception of PCG route must identify the ICAE.

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

When San Diego Intl (KSAN) is on Runway 9, it's due to low clouds and fog. Consequently air traffic at other airports in the San Diego area is not always aligned with the traffic flow at KSAN. The area east of SAN has quite a bit of traffic, such as arrivals landing at Montgomery airfield (KMYF) on runway 28. San Diego Intl departures from Runway 9 cannot turn below 4000 MSL without creating a potential hazard with the Montgomery arrivals. Runway 9 departure aircraft must also reach 4000 before turning to remain within the confines of the San Diego Class B airspace. The calculated ICA length with a CG of 610 and CGTA of 1900 is 13.58 NM. The calculated ICA length with a CG of 823 and CGTA of 1900 is 12.79 NM.

**4. EQUIVALENT LEVEL OF SAFETY PROVIDED:**

The MMOTO DEPARTURE is RADAR required and aircraft are closely monitored by ATC to ensure they remain on the extended departure course until reaching 4000' due to adjacent Class B airspace.

**5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:**

The only usable NAVAID for PCG is north of the airport and causes a southbound turn greater than 30°. This is not feasible due to ATC's need for aircraft to fly northbound. Adding new NAVAIDs is not cost effective. The CG could be maintained to a higher altitude, but the CG is in excess of 500'/NM and terminating this CG at the earliest point is a safer option..

**6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):**

ATA, ALPA, AOPA, NBAA, ZLA, SAN TRACON, ATCT, AMGR

**7. SUBMITTED BY:**

DATE	OFFICE IDENTIFICATION	TITLE
	AJV-433	Manager

**SIGNATURE**

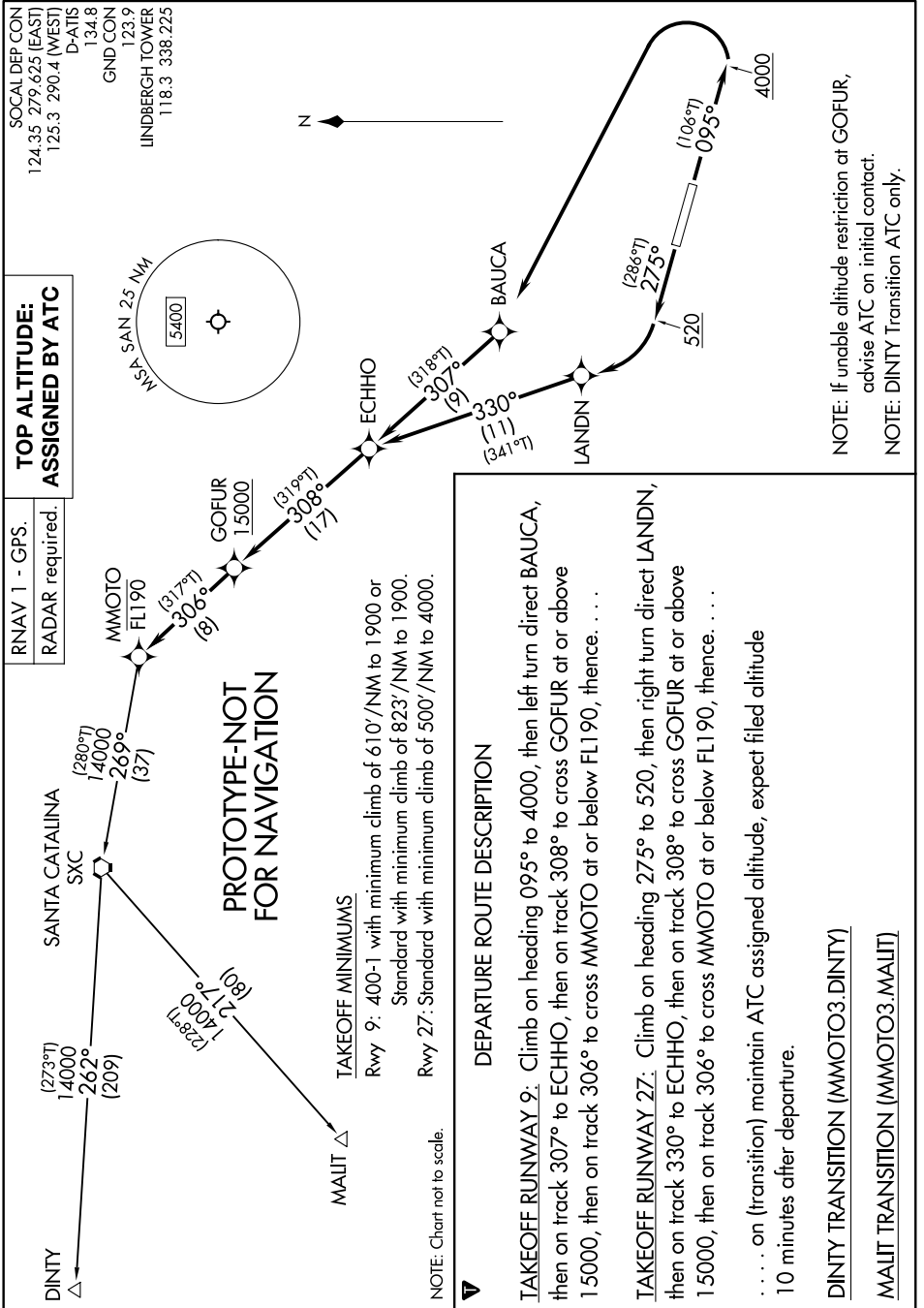
*Digitally signed by*  
**ROBERT G HAMILTON**  
Sep 11, 2025

**8. AFS ACTIONS:**

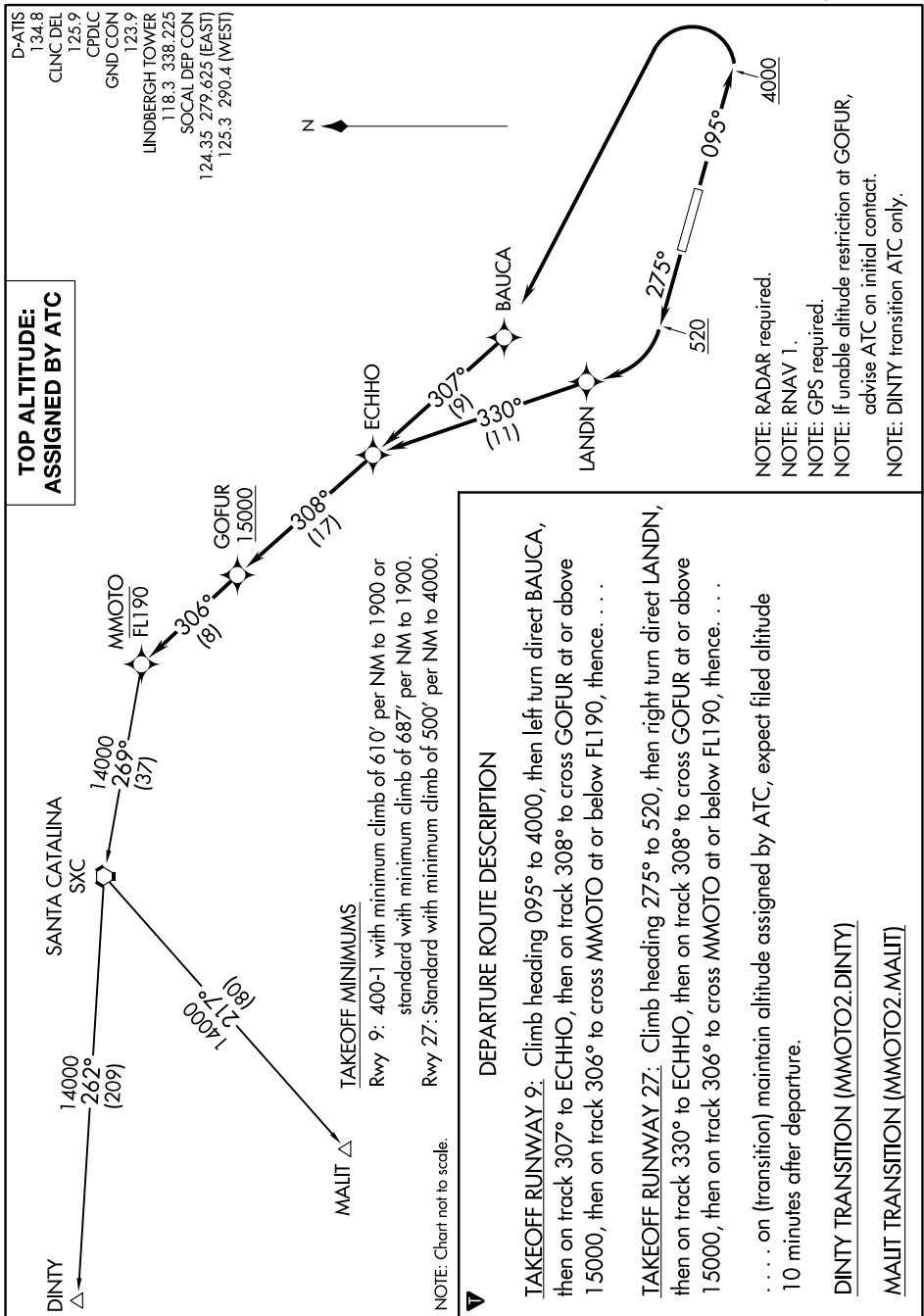
APPROVED  DISAPPROVED  NOT REQUIRED

**COMMENTS:**

DATE	ROUTING SYMBOL	SIGNATURE



SW-3, 15 MAY 2025 to 12 JUN 2025



**TOP ALTITUDE:  
ASSIGNED BY ATC**

D-ATIS 134.8  
 CLNC DEL 125.9  
 CPDLC  
 GND CON 123.9  
 LINDBERGH TOWER 118.3 338.225  
 SOCIAL DEP CON 124.35 279.625 (EAST)  
 125.3 290.4 (WEST)

TAKEOFF MINIMUMS

Rwy 9: 400-1 with minimum climb of 610' per NM to 1900 or standard with minimum climb of 687' per NM to 1900.  
 Rwy 27: Standard with minimum climb of 500' per NM to 4000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 095° to 4000, then left turn direct BAUCA, then on track 307° to ECHHO, then on track 308° to cross GOFUR at or above 15000, then on track 306° to cross MMOTO at or below FL190, thence. . . .

TAKEOFF RUNWAY 27: Climb heading 275° to 520, then right turn direct LANDN, then on track 330° to ECHHO, then on track 308° to cross GOFUR at or above 15000, then on track 306° to cross MMOTO at or below FL190, thence. . . .

. . . on (transition) maintain altitude assigned by ATC, expect filed altitude 10 minutes after departure.

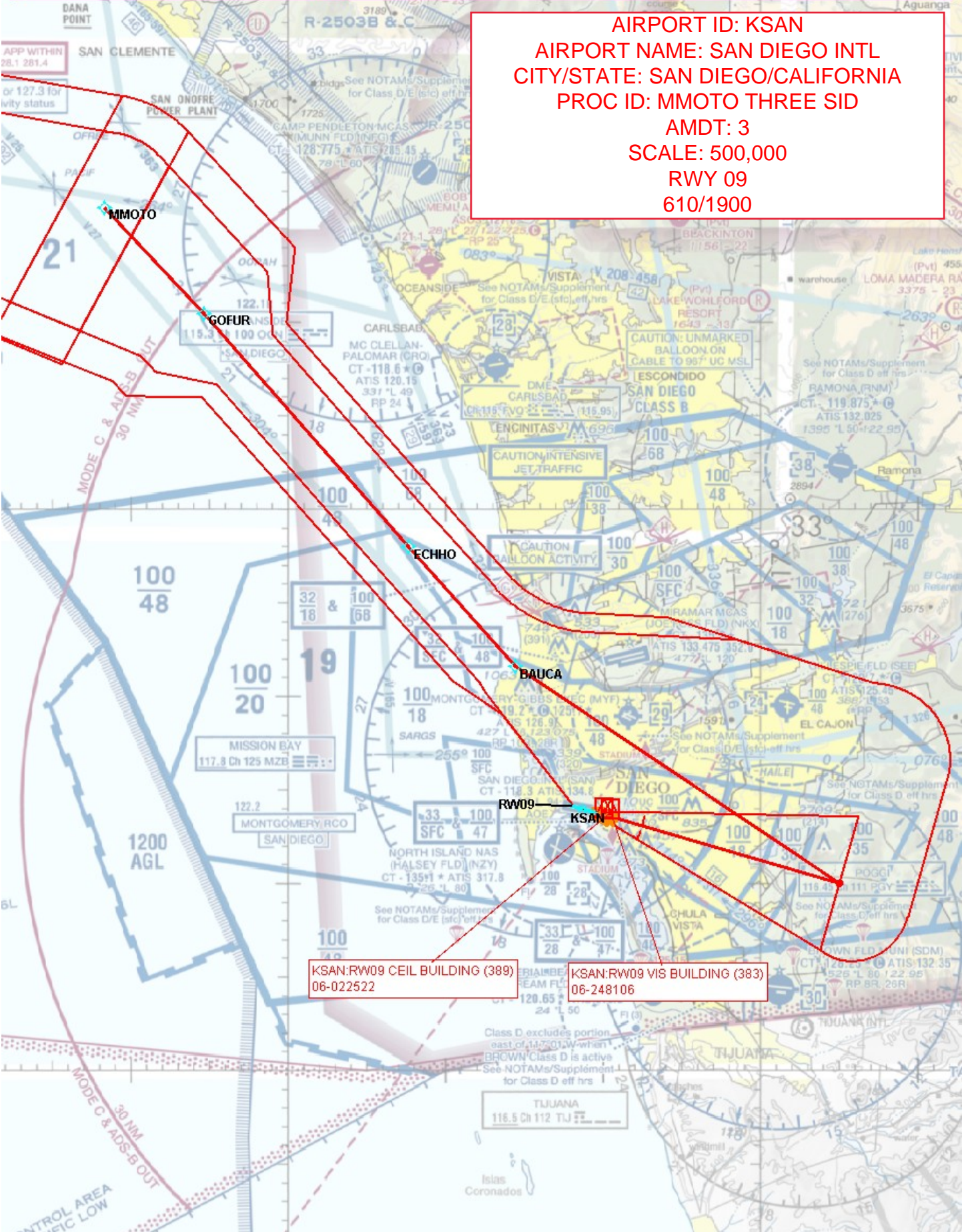
DINTY TRANSITION (MMOTO2.DINTY)

MALIT TRANSITION (MMOTO2.MALIT)

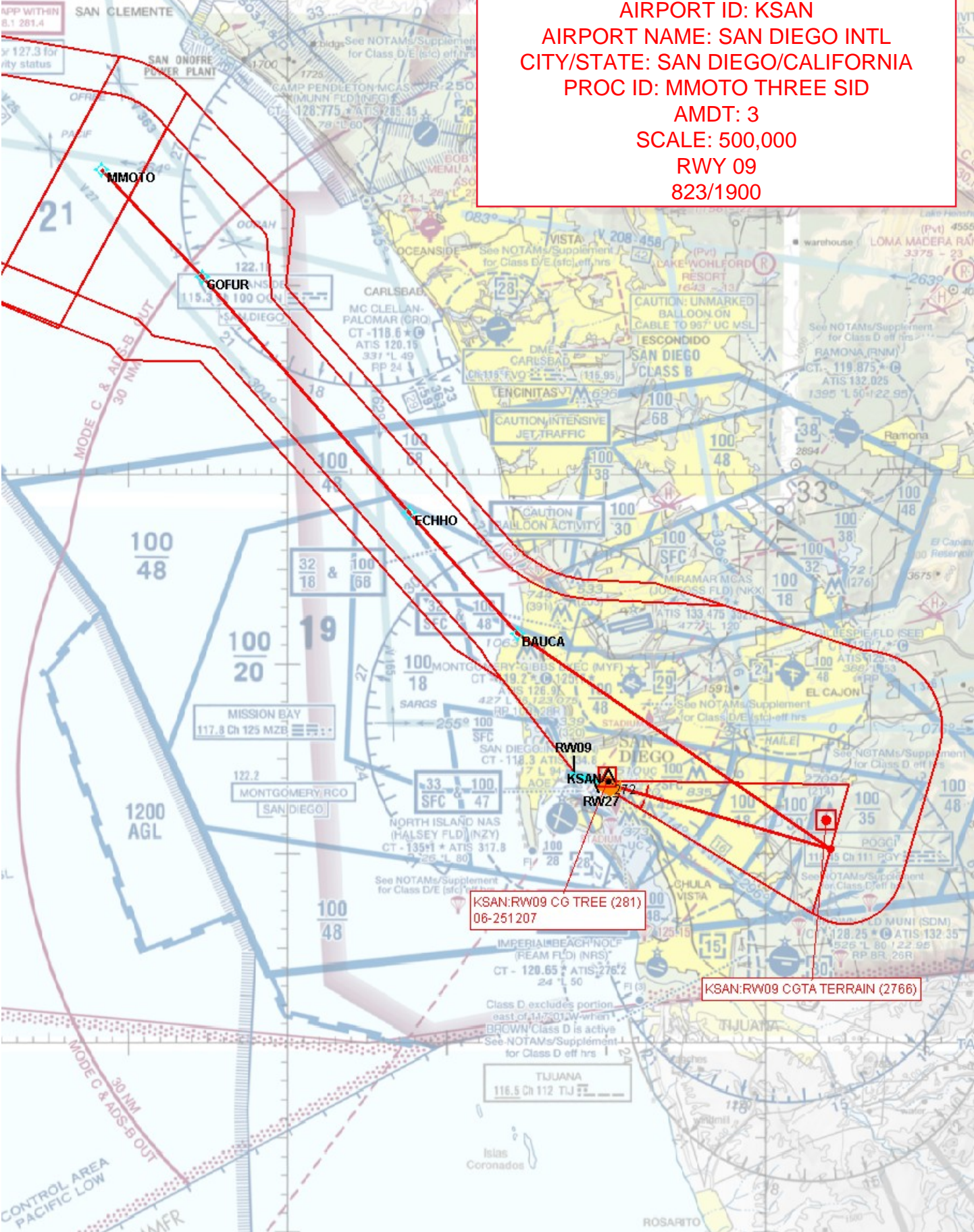
NOTE: RADAR required.  
 NOTE: RNAV 1.  
 NOTE: GPS required.  
 NOTE: If unable altitude restriction at GOFUR, advise ATC on initial contact.  
 NOTE: DINTY transition ATC only.

SW-3, 15 MAY 2025 to 12 JUN 2025

**AIRPORT ID: KSAN**  
**AIRPORT NAME: SAN DIEGO INTL**  
**CITY/STATE: SAN DIEGO/CALIFORNIA**  
**PROC ID: MMOTO THREE SID**  
**AMDT: 3**  
**SCALE: 500,000**  
**RWY 09**  
**610/1900**



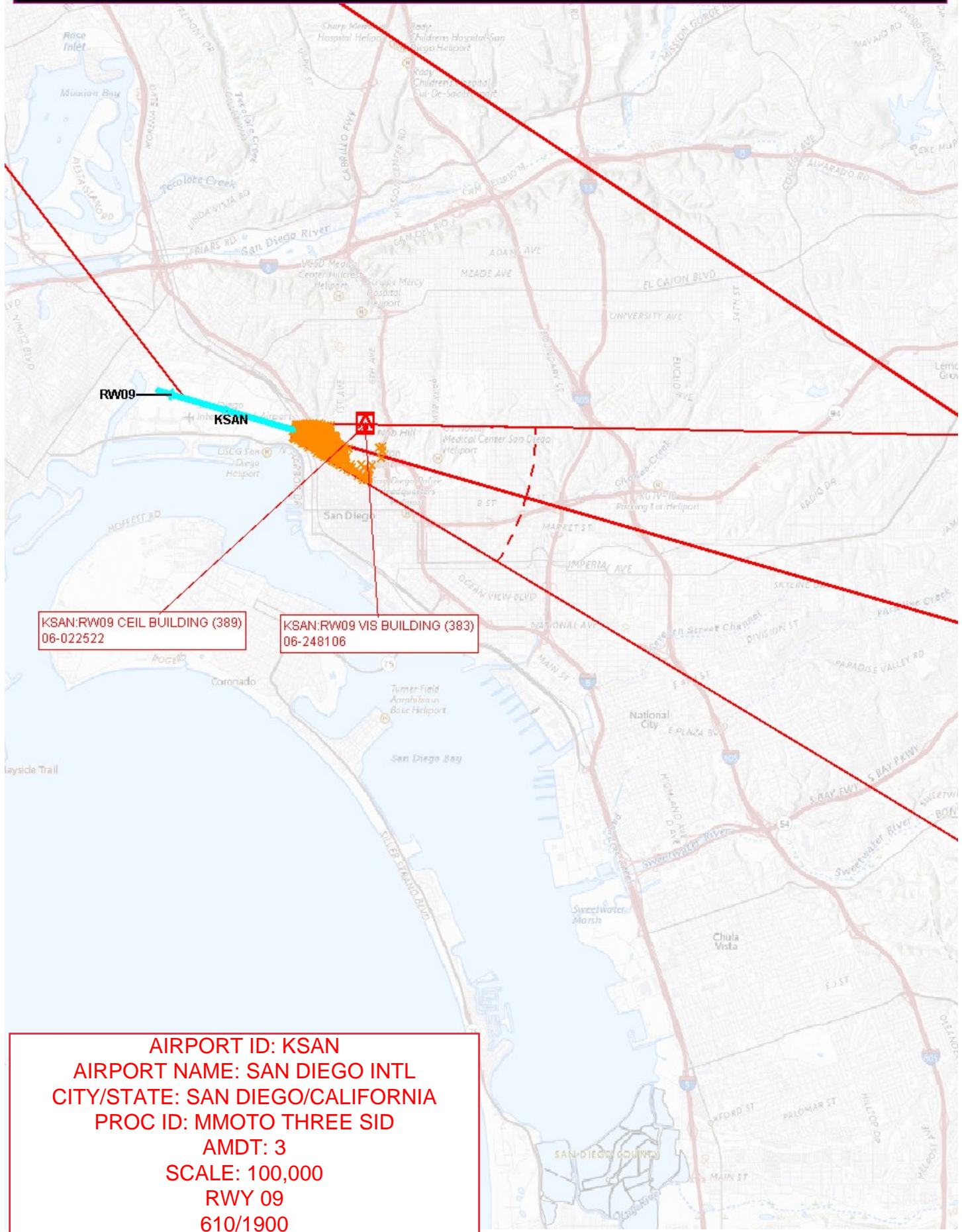
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AIRPORT NAME: SAN DIEGO INTL  
CITY/STATE: SAN DIEGO/CALIFORNIA  
PROC ID: MMOTO THREE SID  
AMDT: 3  
SCALE: 500,000  
RWY 09  
823/1900



KSAN:RW09 CG TREE (281)  
06-251 207

KSAN:RW09 CGTA TERRAIN (2766)

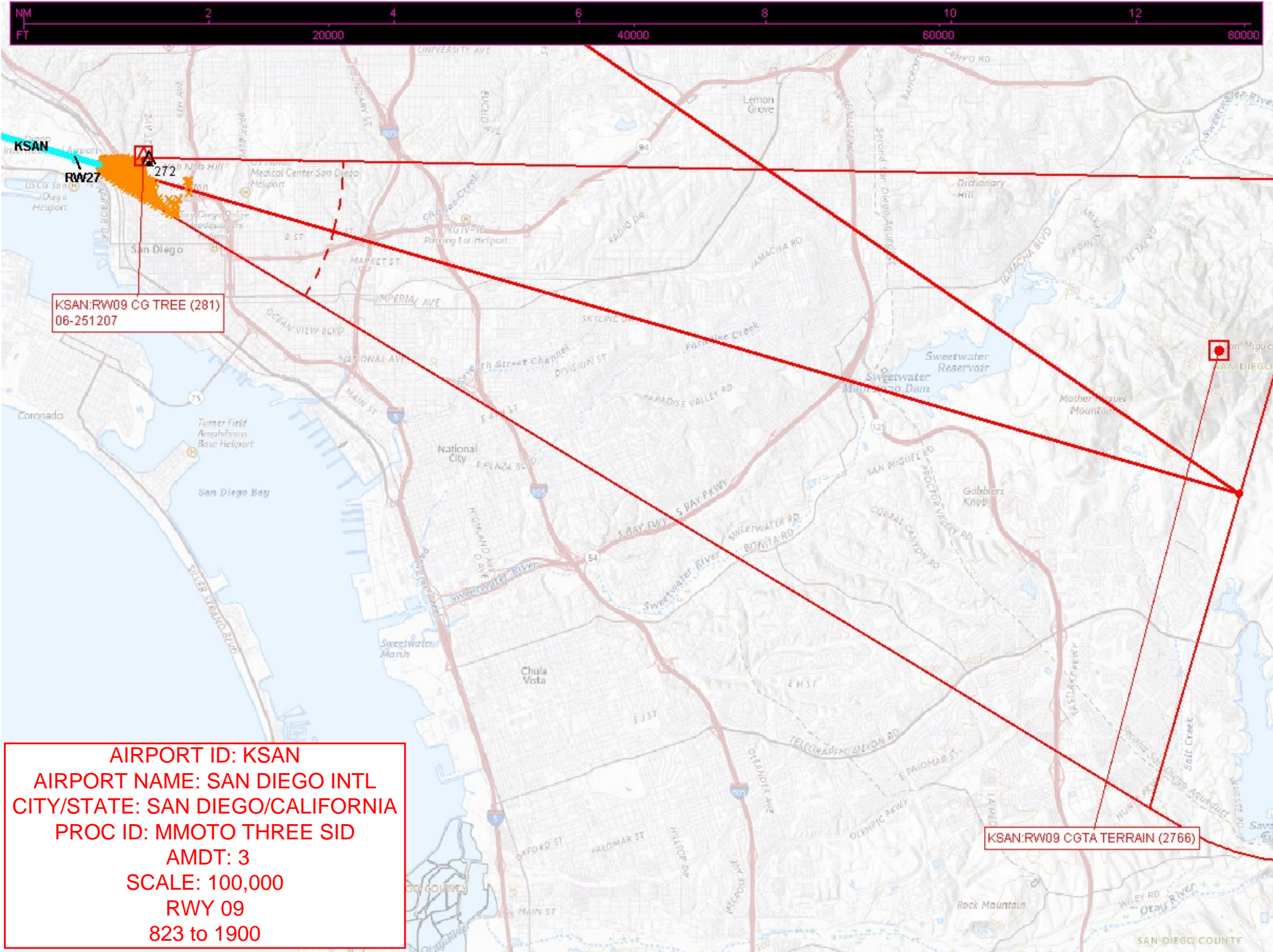
NM 2 4 6 8  
FT 20000 40000



KSAN:RW09 CEIL BUILDING (389)  
06-022522

KSAN:RW09 VIS BUILDING (383)  
06-248106

AIRPORT ID: KSAN  
AIRPORT NAME: SAN DIEGO INTL  
CITY/STATE: SAN DIEGO/CALIFORNIA  
PROC ID: MMOTO THREE SID  
AMDT: 3  
SCALE: 100,000  
RWY 09  
610/1900

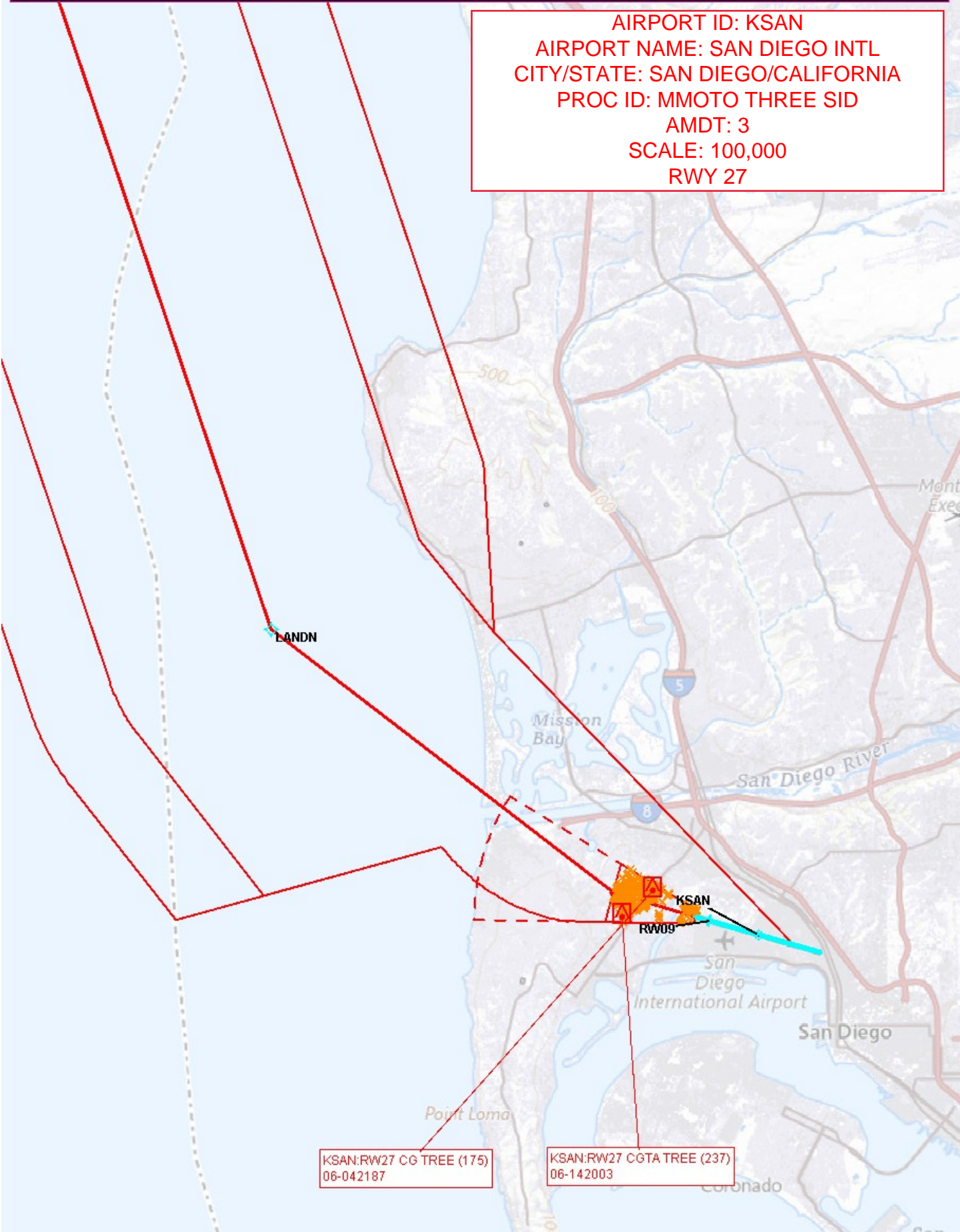




**AIRPORT ID: KSAN**  
**AIRPORT NAME: SAN DIEGO INTL**  
**CITY/STATE: SAN DIEGO/CALIFORNIA**  
**PROC ID: MMOTO THREE SID**  
**AMDT: 3**  
**SCALE: 500,000**  
**RWY 27**



AIRPORT ID: KSAN  
AIRPORT NAME: SAN DIEGO INTL  
CITY/STATE: SAN DIEGO/CALIFORNIA  
PROC ID: MMOTO THREE SID  
AMDT: 3  
SCALE: 100,000  
RWY 27



LANDN

500

100

5

8

KSAN

RW09

San Diego International Airport

San Diego

Point Loma

Coronado

KSAN:RW27 CG TREE (175)  
06-042187

KSAN:RW27 CGTA TREE (237)  
06-142003