

**SAN DIEGO TOWER  
STANDARD OPERATING PROCEDURES**

This Order prescribes air traffic control procedures and phraseology for use by all controllers staffing San Diego (Lindbergh) Tower (SAN\_DEL/GND/TWR). Controllers are required to be familiar with the provisions of this Order that pertain to their operational responsibilities and to exercise their best judgment if they encounter situations not covered by it.

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**List of Changes**

Version	Date	Explanation of Changes
4.00	2JAN21	Additions to departure procedures. Added appendix for North Island LOC approaches. Initial release in PDF form.
4.20	27AUG22	Added initial altitude assignments. Some modifications to SID assignments, especially concerning TEC routes. Added initial headings for IFR aircraft with no SID.
4.21	1OCT22	Fixed typos. Updated missed approach procedures for runway 9.
4.22	28MAR23	Adjusted VFR departures to align with real operations.
4.23	28JUL23	Adjusted VFR helicopter departures to assign direction of flight instead of heading to avoid MVA violations
4.24	5NOV23	Added declared distance remaining for 9/27

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## CHAPTER 1. GENERAL

### 1-1. FACILITY IDENTIFICATION

Controllers will use “Lindbergh” for radiotelephony/facility identification.

Examples:

“Lindbergh Ground...”

“Lindbergh Clearance Delivery...”

“Lindbergh Tower...”

### 1-2. RADIO FREQUENCY ASSIGNMENTS

The following frequencies are assigned for use at the Tower unless otherwise noted.

POSITION	CALLSIGN	PRIMARY VHF FREQUENCY	IDENTIFIER
Tower	SAN_TWR	118.30	5S
Ground	SAN_GND	123.90	5SG
Clearance Delivery	SAN_DEL	125.90	5SC
ATIS	KSAN_ATIS	134.80	N/A

### 1-3. RUNWAY USE PROGRAM

#### West Traffic:

Use runway 27 for arrivals and departures.

Preferred operation.

#### East Traffic:

Use runway 09 for arrivals and departures

Use when the tailwind component on a West Traffic configuration exceeds 10 knots.

#### Opposite Direction Operations:

Use runway 09 for arrivals and runway 27 for departures.

Use when weather conditions prohibit instrument approaches to runway 27.

## CHAPTER 2. CLEARANCE DELIVERY

### 2-1. GENERAL

- a. Use primary frequency 125.90.
- b. TEC routes must be issued to all aircraft arriving at airports covered by the TEC route system.

### 2-2. ROUTING

- a. Aircraft that have not filed for an approved Standard Instrument Departure (SID) shall be issued the most appropriate SID for their route of flight (see below).
- b. Aircraft unable to accept a SID or those who refuse an approved SID will be issued the following departure headings:
  - i. West Traffic: Heading 310 (PQ), Heading 290 (JM)
  - ii. East Traffic: Runway heading.
- c. The controller handling clearance delivery must amend all flight strips to reflect the route as cleared.
- d. All flight strips must have the correct voice tag (/v /r /t), and have the appropriate scratch code.
- e. West Traffic
  - i. J and M routed via MZB293R SLI148R SLI may be issued the PEBLE SID or CWARD SID
  - ii. North, west, and northwest bound departures should be issued the PADRZ or PEBLE SID
  - iii. East, northeast, and southbound departures should be issued the ZZOOO or BRDR SID
  - iv. J/M type TEC departures shall be assigned heading 290 for vectors to the first route segment or the CWARD SID if applicable.
  - v. P/Q type TEC departures shall be assigned heading 310 for vectors to the first route segment.
- f. East Traffic
  - i. North and northwest bound departures should be issued the ECHHO or FALCC SID
  - ii. Oceanic departures should be issued the MMOTO SID
  - iii. East, northeast, and southbound departures should be issued the SAYOW or BRDR SID
  - iv. TEC departures to OCN or ROBNN shall be issued the RWY9 ODP to MZB, then on course.
- g. Opposite Direction Operations
  - i. Refer to East Traffic, except:
    - 1. J/M type TEC departures shall be issued heading 290 for vectors to the first route segment.
    - 2. P/Q type TEC departures shall be issued heading 310 for vectors to the first route segment.

### 2-3. INITIAL ALTITUDES

- a. Assign all aircraft on CWARD SID "*climb via SID except maintain (cruise)*"
- b. Assign all aircraft on ECHHO, PADRZ, SAYOW, ZZOOO SIDs "*climb via SID*"
- c. Assign all aircraft on the BRDR SID "*maintain 8000*"
- d. Assign all aircraft on the FALCC, MMOTO SIDs "*climb via SID except maintain 8000*"
- e. Assign J type aircraft on the PEBLE SID "*climb via SID except maintain 15000*"
- f. Assign M type aircraft on the PEBLE SID "*climb via SID except maintain 14000*"
- g. Assign all aircraft not on SID "*maintain 5000*"

## 2-4. VFR DEPARTURES

- a. Issue the following departures as appropriate for P and Q class aircraft:

Traffic	Direction of Flight	Departure Procedure
West	North/Northwest	Heading 310, Maintain VFR at 3000
West	East	Heading 115, Maintain VFR at 5500
East	North/Northwest	Direct MZB, Maintain VFR at 2000
East	Otherwise	Runway Heading, Maintain VFR at requested altitude

- b. Issue the appropriate clearance for the direction of flight for J and M class aircraft:

Traffic	Direction of Flight	Departure Procedure
West	North/Northwest	Heading 290, Maintain VFR at 8000 or requested altitude, whichever is lower
West	East	Heading 290, Maintain VFR at 8000 or requested altitude, whichever is lower
East	Any	Runway Heading, Maintain VFR at requested altitude
East	Over MZB	Runway heading, then on course to MZB at 2500.

**Helicopters:** Issue direction of flight and altitude as requested.

## **CHAPTER 3. GROUND CONTROL**

### **3-1. GENERAL**

- a. Primary frequency:
  - i. 123.90
- b. Airspace
  - i. Ground control owns all ground movement areas of SAN.

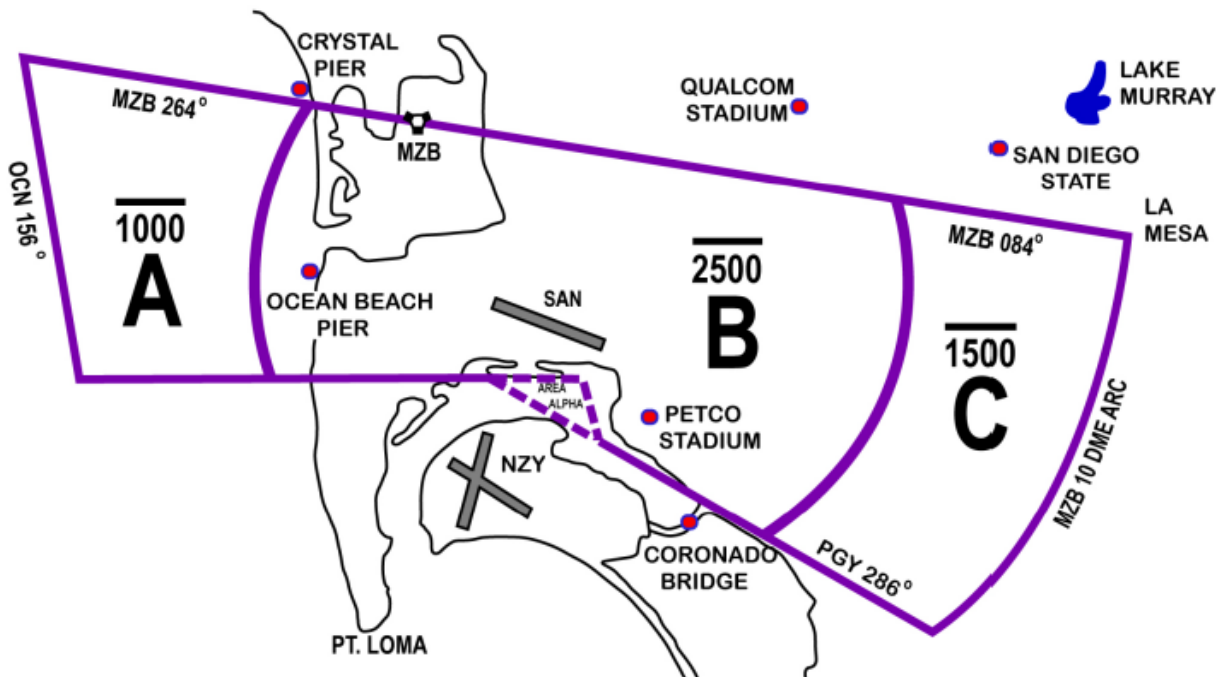
### **3-3. SPECIAL INSTRUCTIONS**

- a. Aircraft must be issued an IFR clearance or VFR Bravo clearance prior to taxi.
- b. Before issuing taxi instructions, aircraft must squawk normal to comply with the ASDE-X Surveillance System.
- c. When issuing taxi instructions, all aircraft must be given the altimeter setting.
- d. Aircraft requesting closed traffic should be coordinated with Local Control prior to taxi instructions being issued.
- e. When the duties of Local Control are being fulfilled by another controller (i.e. SCT\_APP or LAX\_CTR) a departure notification must be sent to the controller in the following format as an aircraft is reaching its departure runway: (callsign) (runway) (scratchpad).

## CHAPTER 4. LOCAL CONTROL

### 4-1. GENERAL

- a. Primary Frequency:
  - i. 118.30
- b. Airspace
  - i. Lindbergh Tower is delegated the following airspace:



### 4-2. RADAR SERVICE (S3 and above)

- a. San Diego local controllers may provide radar service in order to simulate real-world operations. This allowance is optional and is neither tested nor required for certification. Local controllers choosing to provide radar service may do so as described in this section.
- b. San Diego local controllers providing radar service must familiarize themselves, at minimum, with radar identification methods, acquiring a track and dropping a tracked target.
- c. Provide Class B services as directed in FAA JO 7110.65.
- d. Provide all radar identified aircraft/helicopters appropriate radar services. Advise the aircraft when:
  - 1. Radar contact is established or when radar contact is lost.
  - 2. Radar services are terminated.
  - 3. Leaving the San Diego Class B airspace.
- e. All aircraft/helicopters operating in SAN Tower Class B airspace must be radar identified prior to entering Class B airspace.
- f. VFR aircraft shall be instructed to join approved VFR transitions or routes but shall not be vectored.
- g. The LC controller must radar identify Taxiway Delta or Offshore/Shoreline aircraft and ensure radar separation from arrival aircraft. Prior to exiting SAN Tower Class B airspace, terminate radar service; drop the radar track; advise the aircraft they are leaving the San Diego Class B

airspace; and provide a frequency change outside North Island's Class D surface area if applicable.

#### **4-2. MISSED APPROACHES AND GO-AROUNDS**

- a. Aircraft on a published instrument approach for either runway: issue the published missed approach.
- b. Aircraft on a visual approach:
  - i. Runway 27: Heading 275, maintain 2500
  - ii. Runway 09: Runway heading, maintain 2500, or pattern entry instructions

#### **4-3. OPPOSITE DIRECTION OPERATIONS**

- a. Same runway opposite direction procedures are applicable when both of the opposing aircraft are IFR.
- b. Tower must issue traffic advisories to departing aircraft and TRACON must issue traffic advisories to arriving aircraft. Examples:
  - i. *OPPOSITE DIRECTION TRAFFIC (distance) MILE FINAL, (type aircraft).*
  - ii. *OPPOSITE DIRECTION TRAFFIC ONE ZERO MILES WEST, (type aircraft).*
  - iii. *OPPOSITE DIRECTION TRAFFIC DEPARTING RUNWAY TWO SEVEN, (type aircraft)*
- c. Use caution for potential missed approaches/go-arounds.

#### **4-4. VFR TRANSITIONS**

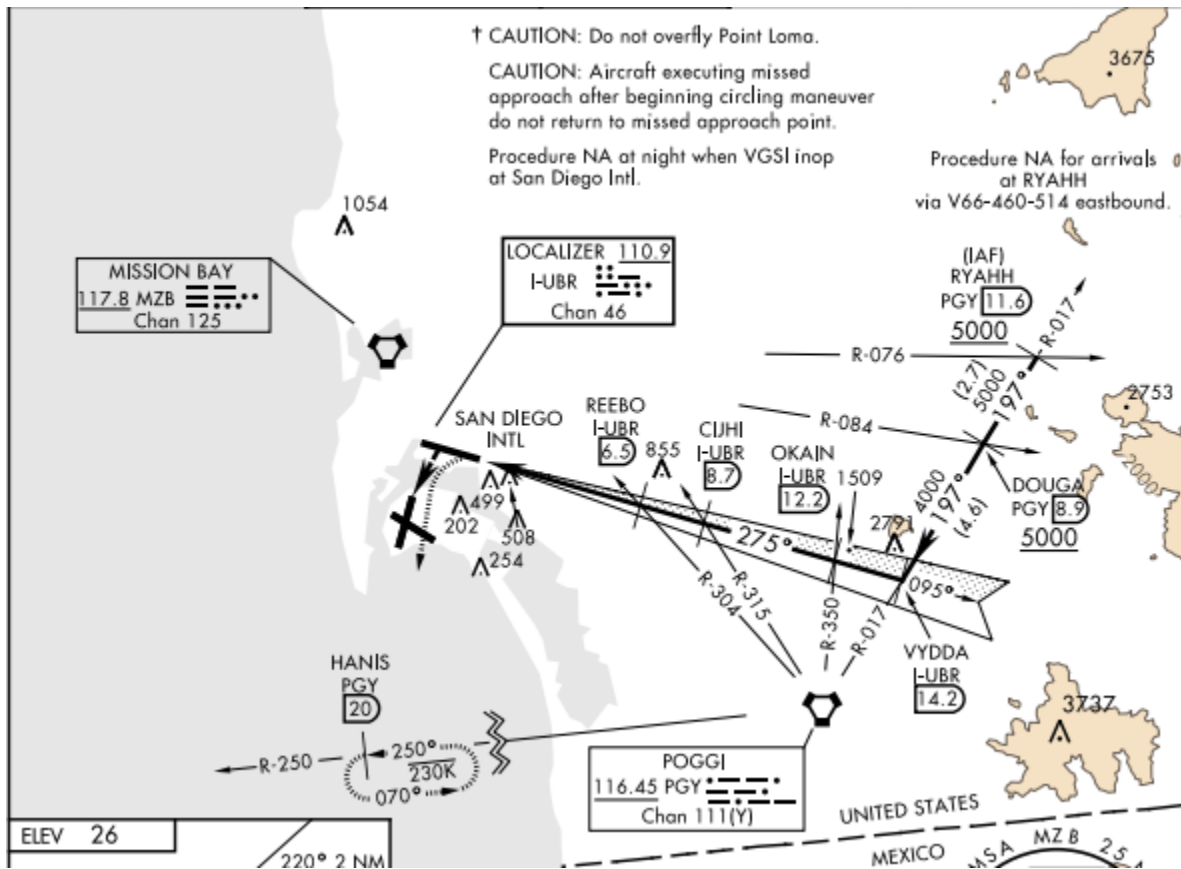
- a. Taxiway Delta Transition
  - i. Aircraft requesting the Taxiway Delta Transition shall be cleared through San Diego Bravo airspace and instructed to overfly taxiway Delta at 1500'.
- b. Offshore/Shoreline Transition
  - i. Aircraft requesting the Offshore Transition shall be cleared through San Diego Bravo airspace and instructed to follow the shoreline at or below 500'.
  - ii. Once clear of the surface area, southbound aircraft should be instructed to contact North Island Tower or top-down controlling entity.
- c. Use caution for potential missed approaches/go-arounds.

#### **4-5. CLOSED TRAFFIC**

1. Runway 27 is the preferred runway. Standard pattern for VFR aircraft landing runway 27 is right traffic.
2. Traffic pattern altitude information for runway 27 shall, when requested, be transmitted as:
  - a. Category I and II aircraft- 1200' MSL
  - b. Category III aircraft- At or above 2000' MSL



## Appendix A - North Island LOC Approaches



North Island NAS utilizes the San Diego 27/09 localizer for two instrument approaches: LOC/DME-A and LOC/DME-B. San Diego local controllers should instruct aircraft conducting these approaches to “continue approach” and provide necessary separation from traffic at SAN. As soon as practical, transfer communications to North Island Tower or top-down controlling entity.

**Appendix B - Runway Declared Distance Remaining**

<b>Runway</b>	<b>Intersection</b>	<b>Distance Remaining</b>
27	C2	8,790'
	D	7,304'
	C3	7,110'
	C4	6,350'
	C5	5,129'
	C6	4,202'
9	B9	8,545'
	B8	7,430'
	B7	6,325'
	B6	5,201'