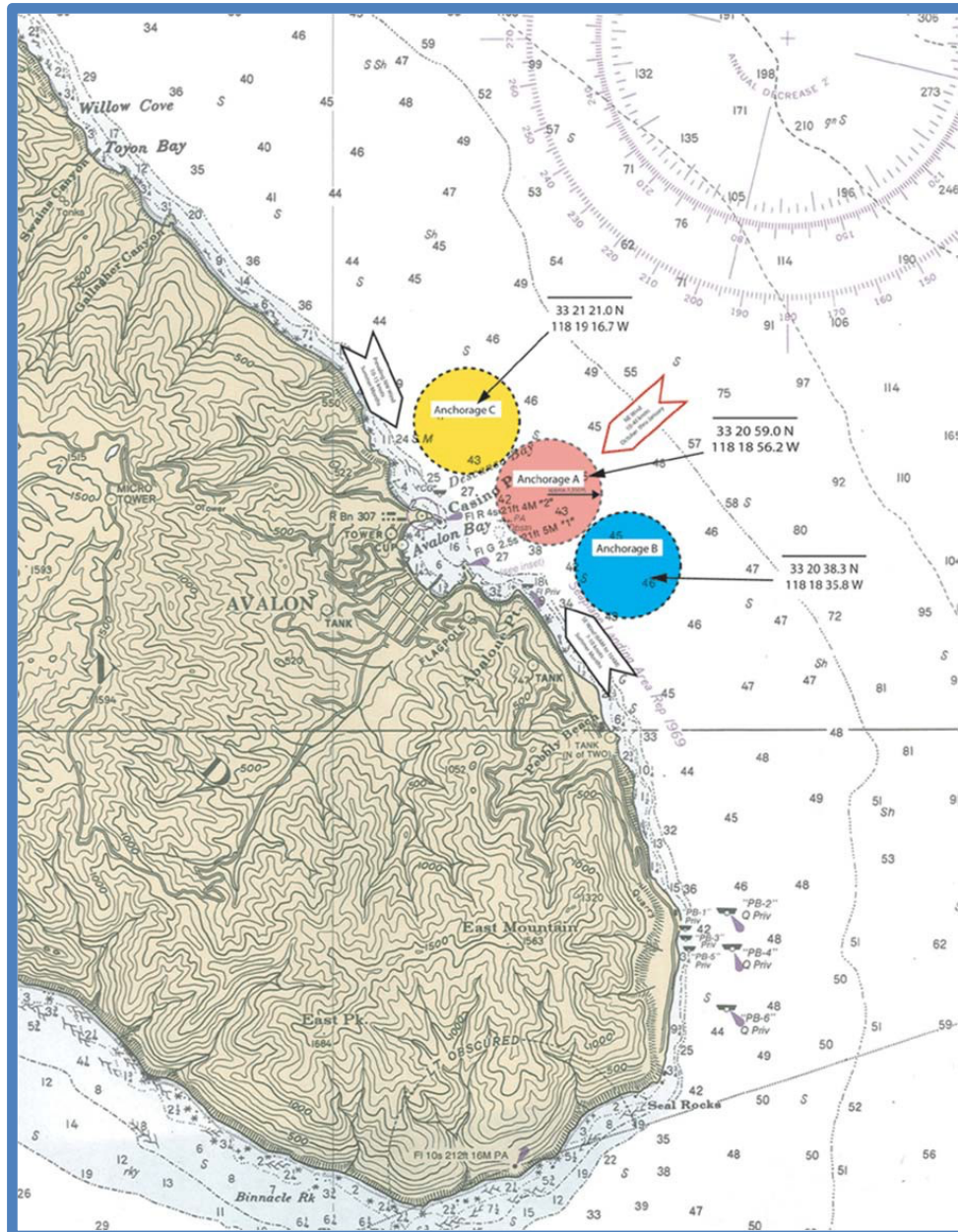


**LA/LB Harbor Safety Committee  
Santa Catalina Island**



**Avalon Harbor and Avalon Bay Federal Anchorages**

The US Coast Guard established the Avalon Bay Federal Anchorages in 2005 (33 CFR 110.216). The Avalon Bay anchorage is reserved for large passenger vessels of over 1600 gross tons unless otherwise authorized by the Captain of the Port Los Angeles-Long Beach. These three anchorages provide better control and security over the increasing number of cruise ships visiting the island. The number and size of large passenger vessels visiting Santa Catalina Island has increased and continued growth is expected. The coordination and cooperation needed to process multiple large vessels and large groups of passengers at one port has created a need for a policy ensuring safe operations.



**Southeast Santa Catalina Island showing Avalon Bay Federal Anchorages**

### **Coordination**

The Harbor Safety Committee, (HSC) is the coordinating entity for this appendix. The Avalon Harbor Master is the coordinating entity for cruise lines and other vessels desiring to visit Santa Catalina Island and discharge passengers in Avalon Harbor. Local entities provide support to the visiting vessels and must plan long in advance to meet the needs of visiting vessels. The Avalon Harbor Master works with ship's agents and cruise lines in advance of their arrivals to arrange the safe transportation of passengers ashore.

### **Discussion**

Historically, the number and size of large cruise ships visiting Santa Catalina Island has been somewhat manageable. Previously only one cruise ship visited at a time, with less than 3,000 passengers. Today, the island receives cruise ships with up to 5,000 passengers onboard. This number does not include the crew, who may also go ashore, and the increasing tourism from the mainland.

The Avalon Harbor area immediately adjacent to the anchorages can be extremely busy with private recreational vessels, cross channel fast ferries, visiting cruise ships and water taxis moving thousands of visitors and passengers to the island daily. The cruise ships unload and load thousands of people in the morning and again in the afternoon. Close coordination is necessary to ensure a safe visit for all.

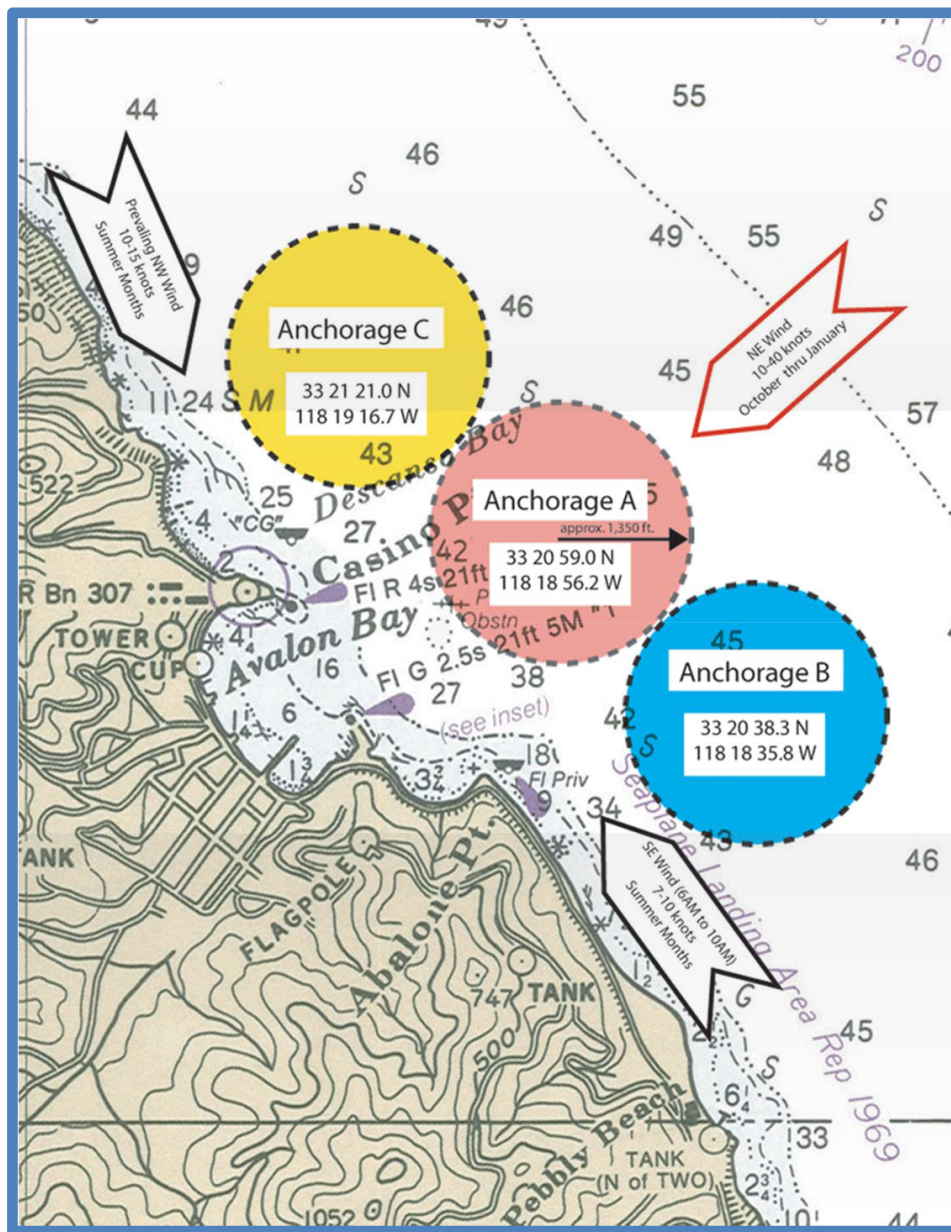
The passage of the Maritime Security Regulations has increased the visibility of cruise ship visitations to coastal areas along with other vessels. The federal anchorages have been established to assist in this regard. The presence of small craft in the vicinity of the cruise ships, the presence of aircraft flying nearby and the potential for other security issues drives the need to accurately coordinate the arrival and departure of visiting vessels.

### **Anchorage Assignment**

The Avalon Harbor Master assigns vessels to the three Avalon Bay Anchorages "A", "B" and "C" according to locally developed protocols. The Avalon Harbor Master assigns large passenger vessels to the Avalon Federal Anchorages as well as assigning all mooring locations for recreational vessels. Large commercial vessels must always use the designated federal anchorages as opposed to random anchoring offshore. The Avalon Harbor Master maintains communication with vessels occupying the Avalon Bay Anchorages.

The COTP Los Angeles-Long Beach has the authority to order vessels to move from the Avalon Bay Anchorages.

Avalon Bay Federal Anchorages & Wind Patterns



	Anchorage A	Anchorage B	Anchorage C
<b>Avalon Bay Federal Anchorages</b>	33° 20' 59.0" N 118° 18' 56.2" W	33° 20' 38.3" N 118° 18' 35.8" W	33° 21' 21.0" N 118° 19' 16.7" W
<b>Depth</b>	30-40 fathoms	40-45 fathoms	35-40 fathoms
NOAA Chart 18757			

### **Pre-Arrival Planning**

**Multiple Ships Visiting Santa Catalina Island Anchorages:** The following procedures are designed to ensure the safe movement of personnel and passengers to and from multiple cruise ships and other vessels anchored offshore of Avalon Harbor. The port presently receives multiple cruise ships and each has different needs due to the port layout and vessel traffic patterns. Coordination must be maintained between the cruise ships, water taxis, tenders, cross-channel ferries and recreational vessels.

The Avalon Harbor Security Plan holder should meet with the vessels' safety and security officer, prior to the commencement of passenger ferrying operations to discuss all pertinent information including terminal and vessel security, tendering operations, passenger safety and communications. A Declaration of Security (DOS) should be maintained for all operations.

### **Safe Operating Practices For Cruise Ship Tendering Operations**

The purpose of this section is to ensure cruise ships, large visiting vessels and commercial waterway users know the standard operating procedures and are able to coordinate with arriving vessels. This section is also intended to familiarize the masters and vessel operators with the local weather patterns in Avalon Harbor and the near offshore area of Santa Catalina Island.

The procedures in this document must be reviewed and a briefing should take place before arrival to Avalon Bay anchorages by visiting ships and by harbor support operations personnel. Specifically, briefings should discuss the following:

1. The restricted nature of Avalon Harbor. Tendering vessels should not congregate inside the harbor. Rather they should wait outside the breakwater until there is dock space. Having too many vessels navigating inside the harbor creates a situation where vessels cannot maneuver safely.
2. Using only a small number of tendering vessels. The Avalon Harbor Master recommends that no more than four (4) tenders be used per cruise ship to alleviate harbor congestion. If there is a need for more tenders, the cruise ship shall seek approval from the Avalon Harbor Master. Experience has shown that if more tenders are used there may be insufficient dock space.
3. Radio communications procedures should be reviewed. All tender vessels should be able to communicate in English on marine VHF. VHF Channel 13 should be used for coordinating with other tenders and Channel 16 should be used for calling and emergencies – The Harbor Master's office monitors VHF Channel 16. All radios operating in the vicinity of Avalon Harbor should be in the low power mode.
4. Safe handling of the cruise ship tenders shall be reviewed. All ship tenders shall proceed through Avalon Harbor at a speed slow enough that it does not create a wake.

**Santa Catalina Island: General Description**

The island is 18 miles S of Point Fermin, is 21 miles long in a SE direction and has a greatest width of 8 miles. The island is privately owned.

The island is almost divided by a deep N cut about 6 miles from the West end. The cut forms coves less than 0.5 mile apart at their heads, and because the isthmus separating these coves is low, the island appears as two from a few miles off. Rugged and mountainous, the island has steep, precipitous shores intersected occasionally by deep gulches and valleys, and is covered with a thick growth and some scrub oak. The highest peak, Mount Orizaba, rises 2,097 feet and lies near the middle of the East part of the island.

Much of the North shore is free from kelp, but the South side in general has a narrow fringe of kelp close to the beach. The island rises abruptly from deep-water, the 30-fathom curve being close inshore. Most of the dangers in the approaches to the island are inside the kelp.

Lights are shown from a pole with a red and white diamond-shaped day mark on the S end, Long Point (East side), and West End (NW point) of the island. Ribbon Rock, on the West side of Santa Catalina Island, 2.9 miles SE of West End, shows as a dark vertical rock wall with a gigantic ribbon of quartz veining that is visible for many miles.

Farnsworth Bank, 9.2 miles SSE of West End and 1.6 miles offshore, has a least known depth of 9 fathoms over it. Shelter from Santa Ana winds can be had by anchoring in the bight near the Palisades on the South side of the island, 2 to 3 miles NW of the Southern extremity.

**Avalon Bay**

Avalon Bay is on the North shore of Santa Catalina Island, 2.5 miles from its SE extremity, is entered between Casino Point breakwater on the North and the breakwater extending from Cabrillo Peninsula on the South. The breakwaters are marked by lights on their seaward ends.

The small bay has depths of 2 to 13 fathoms; a depth of 20 fathoms is immediately outside the points of the bay. The Avalon Harbor Master reports that shelter is good during SW, NW, and SE weather if the wind does not exceed 20 knots. The breakwater provides limited protection in the NW and SE ends of the harbor during NE Santa Ana winds that occasionally blow during the fall and winter.



**Avalon Harbor**

A large white circular building, brilliantly illuminated for about half the night during summer, is on Casino Point.

Avalon is an incorporated city and part of Los Angeles County. Avalon is an extensive resort and the principal settlement of the island. Daily cross channel ferries and helicopter service is maintained year-round to San Pedro, Long Beach, Newport Beach, and Dana Point. A road along the beach extends some distance on each side of the cove and at night the lights along this road are conspicuous from San Pedro Channel. The bay is extremely popular as a yacht haven and vacation resort during the summer.

**Vessel Communications**

The Avalon Harbor Master has designated the channel and frequency in which the Avalon Harbor Department will communicate with the water taxi operators and/or commercial traffic and the cruise ships. Water taxi or tender call signs should be agreed upon prior to commencing operations.

Water Taxi Services	Avalon Harbor Master	Bridge to Bridge	Cruise Ship Tenders	VTS LA-LB	Emergency (Baywatch Avalon)
VHF 9	VHF 12 & 16	VHF 13	VHF 12 & 13	VHF 14	VHF 16

All radios operating in the vicinity of Avalon Harbor should be on low power mode. This prevents the undesired distance of travel and stepping on other maritime communications.

**PORT COMMUNICATIONS Reference**

<b>Organization</b>	<b>Contact (s)</b>	<b>Radio Channel</b>	<b>Phone #</b>
Avalon Harbor Master	Avalon Harbor Master	VHF 12 & 16	1 (310) 510-0535
VTS LA-LB	24hr Watch	VHF 14	1 (310) 832-6411
USCG Sector LA-LB	24hr Watch	VHF 16 and 22a	1 (310) 521-3801
Avalon Sheriff Department	Dispatcher		1 (310) 510-0174
CBP	Dispatcher		1 (800) 232-5378
FBI	Duty Officer		1 (562) 432-6951
Catalina Classic Cruises (Cruise Ship Tenders)	Mr. Chuck Dobbins Mr. Joe Caliva	VHF 12, 13 and 16	1 (415) 265-5858 1 (310) 560-8353
Catalina Express	Mr. Erik Bombard		1 (562) 485 3200
Tour Companies (glass bottom, etc..)			1 (877) 778 8322
Catalina Flyer	Mr. Sterling Miles		1 (949) 673 5245

**Avalon Piers**

**Cabrillo Mole:** The Avalon Cabrillo Mole pier is used primarily by the cross-channel ferries. These vessels operate on scheduled runs from the mainland to Avalon Harbor. Additionally, these piers are used when shipboard tenders are used and must be carefully coordinated.





**Cabrillo Mole Ferry piers with Ship Tenders**

The cross-channel ferries have water jet propulsion systems that produce significant currents during mooring and unmooring. There are three, 100-foot floating docks, with reported depths of 30 feet alongside, on the East side of the Cabrillo Mole (Cabrillo Peninsula). These docks are shared with all commercial waterway users and are controlled by the Avalon Harbor Master.

**Avalon Pleasure Pier:** In the center of the Harbor is the Avalon Pleasure Pier with various loading floats, concessions, and equipment rental firms. In the summer months, May 15 thru October 15, an extension is added onto the pier providing substantially more space for water taxi and harbor tour boats (see below).

**Harbor Moorings:** Yachts and other small craft moor to buoys in the bay; there are no alongside berths. The mooring buoys in the bay are privately owned and are assigned by the Avalon Harbor Master.



**Summer - Avalon Pier with end float (May 15 thru Oct 15)**

During the winter periods, October 16-May 14 the floating pier on the end of the harbor dock is removed and shorter piers are used that lay alongside the main Avalon Pleasure Pier (See below).



**Winter - Avalon Pier operations and view of Mole area (Oct 16 thru May 14)  
Harbor Traffic**

During the visit by cruise ships and other large vessels, smaller traffic supporting the ships along with cross channel ferries and visiting recreational vessels create a heavy traffic area in the harbor. The water taxis and ship tenders must ensure traffic can flow. There is more room outside the harbor than inside the breakwater and tenders should not crowd the harbor while others are debarking passengers. Tenders should slow their pace or remain outside the harbor until a berthing area is clear.

**Vessel and Terminal Security**

A vessel security officer (or representative) and a terminal security officer representative shall always be present at pier side during the full duration of a cruise ship visit where passengers are being handled. These two officers are required to meet to ensure that their security plan objectives are met and to ensure that security measures are not being breached. For example, the tender boarding area is a designated "RESTRICTED AREA" with access limited to authorized personnel using temporary barriers.

**Shipboard Crewing Requirements**

All cruise ships must be manned, while underway and at anchor, according to their SOLAS Safe Manning Document. This is to ensure that sufficient crew is always available to respond to unforeseen emergencies, such as a fire, dragging anchor or a security incident, while passengers are aboard.

**Avalon Harbor Master**

The Avalon Harbor Master, located on the pleasure pier, offers 24-hour service year-round and can be reached on Marine VHF-FM channels 12 and 16 or via phone (310) 510-0535.

**Water Taxi's**

Can be reached on VHF-FM channel 9.(Call harbor master if unable to reach via VHF)

**Emergency Services**

Emergency medical services are available at Avalon. Baywatch Avalon paramedics should be contacted through the Avalon Sheriffs Dispatch Center by calling 310 510-0174 or 911, contacting the Coast Guard or the Avalon Harbor Master on VHF-FM channel 16, 24 hours a day.

**Weather**

General weather conditions:

Prevailing year-round	NW winds @ 10-15 knots
Summer months	SE winds @ 7-10 knots, 6-10 AM Fog bank, east of island
October-January	NE winds @ 10-40 knots Santa Ana warming trend conditions 1-2 times/year, exceeds 50 knots

General Sea Conditions:

Wind waves	1-2 feet average
Swell	1-3 feet average

Weather information for Avalon is broadcast by NOAA weather radio channel 1.

**Wind:** The prevailing winds are W and NW and blow nearly every day, especially in the afternoon. Strong SE winds occur in the winter, and at times the sea is too rough for several days to permit the passage of small vessels. In the summer the winds in the channel are wholly different from those outside the islands and off the coast to the NW.

Under the North shore, which is protected by the bold range of the Santa Ynez Mountains, the West winds do not reach far East of Point Conception with much strength but are felt towards the islands, a strong NW wind and heavy swell coming in from the open ocean. The climate in the Santa Barbara Channel, because of this blocking of the winds, is much milder than to the North along the coast. However, during NW weather boats crossing the channel from the mainland

usually encounter heavier seas as the islands are approached.

The belt of rough seas, locally known as Windy Lane, lies along the North shores of the islands and is about 6 miles (11 km) wide. This sea condition is the opposite to that experienced in the crossing from Los Angeles-Long Beach to Santa Catalina Island. These W winds usually begin about 1000 and grow progressively stronger until sundown.

During heavy NW weather strong squally winds draw down the canyons between Point Conception and Capitan and pass directly offshore, causing a severe choppy sea. Heavy NW gales are often encountered off Point Conception on coming through Santa Barbara Channel, and great changes of climatic and meteorological conditions are experienced; the transition is often remarkably sudden and well defined.

In the fall and winter, stiff northeasters are occasionally experienced at and near the E end of the channel. They come up without warning, usually at night in clear dry weather, and when the barometer is either high or rising rapidly. At such times small boats should be prepared to seek shelter at a moment's notice. During the summer heavy fogs are a common occurrence in the Santa Barbara Channel and envelop the main shore, channel, and islands. Sometimes the mainland and channel are clear while the islands alone are hidden. At other times all are clear during the day but wrapped in dense wet fog nights and mornings. This condition, the fog lying offshore during the day and enveloping the land at night, is characteristic of the whole southern California coast. The fogs occur mostly during calm weather and light winds and are generally dissipated by the strong NW winds.

Current: Currents in Santa Barbara Channel are variable and dependent largely upon the wind. It appears that a weak non-tidal flow sets East in the spring and summer, and West in autumn and winter.

It has been observed that a strong inshore set prevails on a rising tide in the deep waters of Hueneme Canyon. In general, there are conflicting currents, at times quite strong, around the slopes of the submarine valleys both here and off Point Mugu.

The tidal current sets along the N shore of Santa Barbara Channel with velocities of 0.5 to 1 knot. In heavy NW weather, the current and heavy swells make into the South side of the West entrance to the channel and along the North shore of San Miguel Island.

The currents in the vicinity of the Channel Islands frequently follow the direction of the wind, with eddies under the lee of the islands and projecting points. Tidal currents of about 1 knot set through the passages between the islands.

**Comments or Questions**

Persons with comments or questions regarding the procedures for the Avalon Bay Federal Anchorages should contact:

US Coast Guard: 310-521-3860 Waterways Management

**COLREGS Demarcation Lines:** The 72 COLREGS apply to the harbors on Santa Catalina Island. NOAA Chart 18757 applies to the operations in this procedure.

**Glossary**

COLREGS	Collision Regulations
DOS	Declaration of Security
HSC	Harbor Safety Committee LA/LB Los Angeles/Long Beach
FBI	Federal Bureau of Investigations
NOAA	National Oceanic and Atmospheric Administration
SOLAS	Safety of Live at Sea (International Ship Safety Regulations)
VHF-FM	Very High Frequency-Frequency Modulated
VTSLA-LB	Vessel Traffic Service Los Angeles – Long Beach