18774 LORAN-C OVERPRINTED

NOTE C
TRAFFIC SEPARATION SCHEME
One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions at the approaches to major harbors and along heavily traveled coastal waters, but are not intended in any way to supersede or to alter the applicable rules of the road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones use extreme caution.

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO 11 FATHOMS)

1st Ed., 1979

TIDAL INFORMATION

Place Name (Lat/Long)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Tide Level	Mean Low Water	Extreme Low Water
	feet	feet	feet	feet	feet
La Jolla (Scripps Institution Wharf) (32°52'N/117°15'W)	5.2	4.5	2.7	0.0	−2.5
San Clemente (33°25'N/118°37'W)	5.3	4.6	2.7	0.0	−2.5
Avalon, Santa Catalina Island (33°3'5"N/118°19'W)	5.3	4.6	2.7	0.0	−2.5
Camp Pendleton: Boat Basin (Oceanside Harbor) (33°13'N/117°24'W)	5.3	4.5	2.7	0.0	−2.5

(676)

Nautical Chart Catalog No. 2, Panel A

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY ..... 100kHz.
PULSE REPETITION INTERVAL
9940 ..... 99,400 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designations)
M ..... Master
W ..... Secondary
X ..... Secondary
Y ..... Secondary
Z ..... Secondary
EXAMPLE: 9940-X

RATES ON THIS CHART
9940-X 9940-Y

The Loran-C lines of position overprinted on this chart have been prepared for use with ground wave signals and are presently compensated only for theoretical propagation delays which have not yet been verified by observed data. Mariners are cautioned not to rely entirely on the lattices in inshore waters. Small-scale corrections are not provided.

LORAN LINEAR INTERPOLATOR

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

UNITED STATES – WEST COAST
CALIFORNIA

GULF OF SANTA CATALINA

Mercator Projection
Scale 1:100,000 at Lat. 33°09'
North American 1927 Datum

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER

For Symbols and Abbreviations see Chart No. 1
COLREGS: International Regulations for Preventing Collisions at Sea, 1972. Demarcation lines are shown thus: .....

AUTHORITIES
Hydrography and topography by the National Ocean Survey (formerly the Coast and Geodetic Survey) with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard and Defense Mapping Agency

DELMAR BOAT BASIN (Camp Pendleton)
Scale 1:15,000
Yards
PLANE COORDINATE GRID
The California plane coordinate grid system (zone II) is indicated by dashed ticks at 4,000 foot intervals.
OCEANSIDE HARBOR
(Sign dighted)
RESTRICTED AREA (33°12'N/117°23'W to 33°12'N/117°22'W to 33°11'N/117°22'W to 33°11'N/117°23'W)
COLREGS DEMARCATION LINE (33°12'N/117°23'W to 33°11'N/117°23'W)

STORM WARNINGS
The National Weather Service displays storm warnings at the following approximate locations.
Avalon, Santa Catalina Island (33°35.7'–118°19.4')
Oceanside Harbor (33°12.5'–117°23.7')

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
See Defense Mapping Agency Hydrographic/Topographic Center List of Lights and Fog Signals for information not included in the U.S. Coast Guard Light List.

NOTE B
CAUTION
The positions of buoys located in Oceanside Harbor and Camp Pendleton Boat Basin are approximate and are subject to being shifted due to inboard changes of channel conditions. Navigate by sight and local knowledge before navigating these channels.

CABLE AND PIPELINE AREAS
The cable and pipeline areas falling within the areas of the larger scale charts are shown thereon, and are not repeated on this chart.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 7 for important supplemental information.

NOAA VHF-FM WEATHER BROADCASTS
The National Weather Service stations listed below provide continuous weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Los Angeles, Ca.	KWO-37	162.55 MHz
San Diego, Ca.	KSC-82	162.40 MHz

CAUTION
Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light List and Defense Mapping Agency Hydrographic/Topographic Center Publication 117 (A & B).
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ◎(Approximate location)

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other privately maintained buoys are not all listed in the U.S. Coast Guard Light List.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7, or weekly Notice to Mariners which include new or revised regulations. Information concerning the regulations may be obtained at the Office of the District Engineer, Corps of Engineers in Los Angeles, Calif.
Anchorage regulations may be obtained at the Office of the Commander, 11th Coast Guard District, San Pedro, California.
Refer to section numbers shown with area designation.

HEIGHTS
Elevations of rocks, landmarks and lights are in feet and refer to Mean High Water. Contour and summit elevation values are in feet and refer to Mean Sea Level.

SAN CLEMENTE ISLAND
SANTA CATALINA ISLAND
SAN PEDRO CHANNEL
SOUTHBOUND COASTWISE TRAFFIC LANE
NORTHBOUND COASTWISE TRAFFIC LANE
SEPARATION ZONE
OUTER SANTA BARBARA PASSAGE
SANTA CATALINA
GULF OF SANTA CATALINA
Larsen Knott
Emery Knott
Catalina Basin
Santa Catalina Basin
Avalon Bay
Isthmus Cove
Two Harbors
Catalina Airport
White Cove
Seven Bays
Pebbly Beach Road
Airport Road
Middle Ridge
Mount Orizaba
Mount Black Jack
Mount Ada
Mount Banning
Mount Lloyd
Mount Canon
Mount Hollywood
Mount Wilson
Mount Baldy
Mount San Antonio
Mount San Gorgonio
Mount San Jacinto
Mount Santiago
Mount Saddleback
Mount Modjeska
Mount Laguna
Mount Cuyamaca
Mount Palomar
Mount Woodson
Mount Soledad
Mount Helix
Point Fermin
Point Vicente
Palos Verdes Peninsula
Point Loma
Point La Jolla
Point Dume
Point Mugu
Point Hueneme
Point Conception
Point Arguello
Point Sal
Point Arena
Point Reyes
Point Bonita
Point Pinos
Point Sur
Point Piedras Blancas
Point Buchon
Point Arguello
Point Conception
Point Dume
Point Mugu
Point Hueneme