

# 11654

Diag. Cht. No. 5101-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Shoreline (PHOTOGRAMMETRIC)

Field No. Ph-5908 Office No. T-11654

### LOCALITY

State California

General locality Orange County

Locality NEWPORT BAY

1959-1961

### CHIEF OF PARTY

Fred Natella, CAPT, C&GS  
Portland District Officer

### LIBRARY & ARCHIVES

DATE AUG 1-1963

USCOMM-DC 5087

# 11654

DESCRIPTIVE REPORT - DATA RECORD

T - 11654

Project No. (II): Ph-5908

Quadrangle Name (IV):

Field Office (II): Santa Ana, California

Chief of Party:

Fred Natella

Unit Chief:

Charles H. Bishop

Photogrammetric Office (III): Portland, Oregon

Officer-in-Charge:

Fred Natella

Instructions dated (II) (III): II III 6 January 1960  
Amend. I 13 April 1960

Copy filed in Division of  
Photogrammetry (IV)

Method of Compilation (III): KESLM INSTRUMENT

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6000

PANTOGRAPH SCALE:

1:10,000

Scale Factor (III): NONE.

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean sea level except as follows: X  
Elevations shown as (25) refer to mean high water  
Elevations shown as (5) refer to sounding datum  
i.e., mean low water or mean lower low water

Reference Station (III): PROMONTORY, 1875

Lat.: 33° 36' 48.746"

Long.: 117° 53' 49.630"

Adjusted X  
Unadjusted

Plane Coordinates (IV):

State: CALIFORNIA

Zone: VI

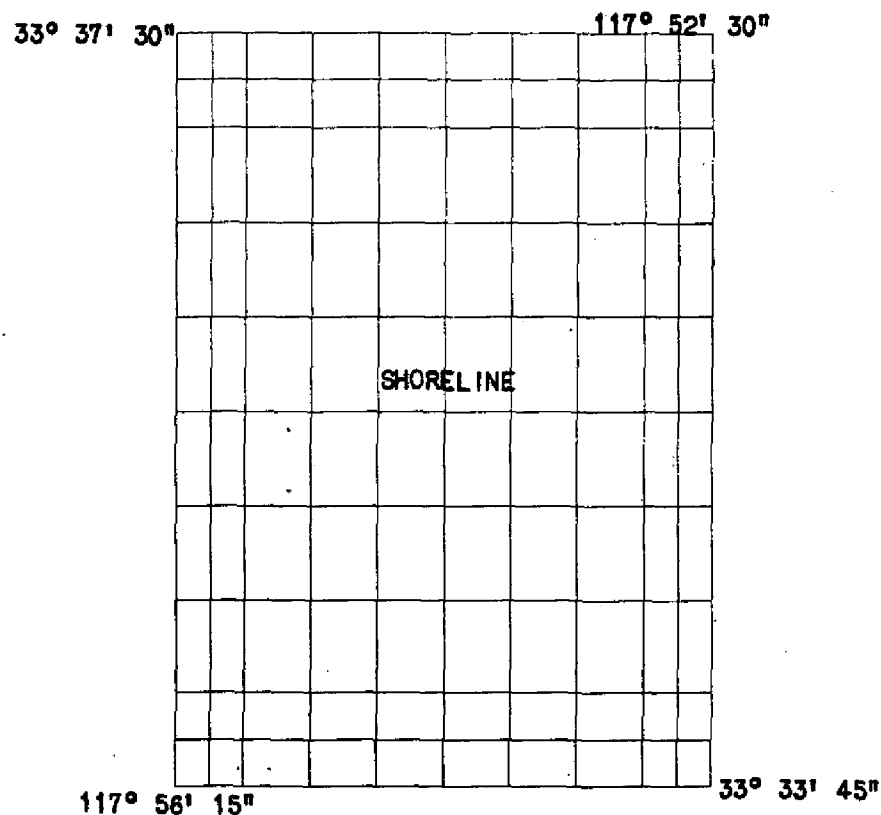
Y= 530,399.06

X= 1,498,536.86

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,  
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DESCRIPTIVE REPORT - DATA RECORD



Areas contoured by various personnel  
(Show name within area)  
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): **Charles H. Bishop, Robert B. Melby**  
**Lyle L. Riggers, Gilbert F. Marick**  
Date: **Dec. 1960**  
**Jan. 1961**  
**Feb. 1961**

Planetable contouring by (II):  
Date:

Completion Surveys by (II):  
Date:

Mean High Water Location (III) (State date and method of location): **BY FIELD INSPECTION DECEMBER, 1960 AND JANUARY 1961 AND COMPILED BY KELSH INSTRUMENT.**

Projection and Grids ruled by (IV): **R.A.C.**  
Date: **10-4-60**

Projection and Grids checked by (IV): **J.D.C.**  
Date: **10-12-60**

Control plotted by (III): **C. H. BISHOP**  
Date: **10-18-61**

Control checked by (III): **L. L. GRAVES**  
Date: **10-31-61**

Radial Plot or Stereoscopic  
Control extension by (III): **R. E. FUESCHEL**  
Date: **OCT. 1960**

Planimetry **D. N. WILLIAMS**  
Date: **1-16-62**  
Stereoscopic Instrument compilation (III):  
Contours  
Date:

Manuscript delineated by (III): **L. L. GRAVES, SCRIBING**  
**C. C. HARRIS, STICK-UP**  
Date: **6-19-62**  
**8-17-62**

Photogrammetric Office Review by (III): **J. L. HARRIS, ROUGH DRAFT**  
**J. L. HARRIS, ADVANCE**  
Date: **2-5-62**  
**11-16-62**

Elevations on Manuscript  
checked by (II) (III): **NONE**  
Date:

DESCRIPTIVE REPORT - DATA RECORD

5.

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

Camera (kind or source) (III):

C&GS SINGLE LENS "S"

Number	Date	Time	Scale	Stage of Tide
59 S 8221 THRU 8223	10-3-59	11:34	1:30,000	4.5' ABOVE M.L.L.W.
59 S 8259 AND 8260	"	12:04	"	4.0' " "

Tide (III)

Reference Station:

LOS ANGELES, CALIFORNIA

Subordinate Station:

BALBOA (OCEAN PIER), CALIFORNIA

Subordinate Station:

COMPUTED FROM PREDICTED TIDE TABLES.

Ratio of Ranges	Mean Range	Spring Range
	3.8	5.4
	3.7	5.3

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (II): 3

Shoreline (More than 200 meters to opposite shore) (III): 15

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 39

Recovered: 8

Identified: 5

Number of BMs searched for (II): 13

Recovered: 13

Identified: 4

Number of Recoverable Photo Stations established (III): ~~XXX~~ 21

Number of Temporary Photo Hydro Stations established (III): NONE

Remarks:

## FIELD INSPECTION REPORT

Map Manuscript T-11654

Project Ph-5908

Refer to Field Inspection Report for T-11651, T-11652, T-11653 and T-11654, Project Ph-5908, by Charles H. Bishop and Robert B. Melby, February 1961, INCLUDED WITH THE DESCRIPTIVE REPORT FOR T-11651.

*Filed with Desc. Report T-11651*

## PHOTOGRAMMETRIC PLOT REPORT

MAP MANUSCRIPT T-11654

PROJECT PH-5908

REFER TO THE PHOTOGRAMMETRIC PLOT REPORT FOR THE ENTIRE  
PROJECT PH-5908 BY ROBERT E. FUESCHEL, OCTOBER, 1960.

*Filed with Desc. Report T-11640*

U.S. DEPARTMENT OF COMMERCE  
DESCRIPTIVE REPORTCOAST AND GEODETIC SURVEY  
ROLL RECORD

MAP T-11654

PROJECT NO. PM-5908

SCALE OF MAP 1:10,000

SCALE FACTOR None

STATION	ZONE VI SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\lambda$ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
GOLF, 1928	OFFICE	N.A.	531,688.05	1688.05	(3311.95)		514.5	(1009.5)	
R.M. 1, 1948	COMP.	1927	1,494,661.70	4661.70	(338.30)		1420.9	(103.1)	
SUB STA. A	"	"	531,688.36	1688.36	(3311.64)		514.6	(1009.4)	
			1,494,635.96	4635.96	(364.04)		1413.0	(111.0)	
SUB STA. B	"	"	531,689.65	1689.65	(3310.35)		515.0	(1009.0)	
			1,494,619.59	4619.59	(380.41)		1408.1	(115.9)	
NEWPORT HARBOR, HIGH SCHOOL TOWER, 1955	P-13	"	533,844.85	3844.85	(1155.15)		1171.9	(352.1)	
			1,493,919.19	3919.19	(1080.81)		1194.6	(329.4)	
BRUSH, 1875	OFFICE	"	524,684.23	4684.23	(315.77)		1427.8	(96.2)	
			1,504,892.90	4892.90	(107.10)		1491.4	(32.6)	
R.M. 1, 1932	COMP.	"	521,597.28	1597.28	(3402.72)		486.9	(1037.1)	
			1,504,671.38	4671.38	(328.62)		1423.8	(100.2)	
NEWPORT BAY, EAST JETTY LIGHT, 1937	"	"	521,126.55	1126.55	(3873.45)		343.4	(1180.6)	
			1,504,008.84	4008.84	(991.16)		1221.9	(302.1)	
NEWPORT BEACH, BALBOA DISTRICT, HOTEL TOWER, 1933	P-13	"	526,088.42	1088.42	(3911.58)		331.8	(1192.2)	
			1,497,855.11	2855.11	(2144.89)		870.2	(653.8)	
NEWPORT BEACH, BALBOA PAVILION, FLAGPOLE, 1933	"	"	526,464.34	1464.34	(3535.66)		446.3	(1077.7)	
			1,498,227.53	3227.53	(1772.47)		983.8	(540.2)	
NEWPORT BEACH, LIDO ISLE	"	"	529,519.47	4519.47	(480.53)		1377.5	(146.5)	
			1,492,362.85	2362.85	(2637/15)		720.2	(803.8)	
GOLD DOME, 1933	"	"	530,268.74	268.74	(4731.26)		81.9	(1442.1)	
			1,498,550.29	3550.29	(1449.71)		1082.1	(441.9)	
ORIGIN (USE) 1960	OFFICE COMP.	"							
PROMONTORY, 1875	P-20	"	530,399.06	399.06	(4600.94)		121.6	(1402.4)	
			1,498,536.86	3536.86	(1463.14)		1078.0	(446.0)	

1 FT. = 3048006 METER

COMPUTED BY

J.L.H.  
C.H.B.

DATE

3-9-60  
10-9-61

CHECKED BY

D.N.W.  
J.E.D.

DATE

3-9-60  
10-12-61

COM-DC-57843



## COMPILATION REPORT

MAP MANUSCRIPT T-11654

PROJECT PH-5908

31. DELINEATION:

COMPILATION WAS BY KELSH INSTRUMENT.

32. CONTROL:

SUPPLEMENTARY CONTROL AS ESTABLISHED BY THE STEREOPLANOGRAPH WAS ADEQUATE.

33. SUPPLEMENTAL DATA:SHEET NO. 37E, MAP OF ORANGE COUNTY  
SCALE 1 INCH = 800 FT.34. CONTOURS AND DRAINAGE:

CONTOURS ARE NOT APPLICABLE.

NO DRAINAGE WAS INDICATED BY THE FIELD INSPECTION IN THE AREA OF THIS MAP MANUSCRIPT. THIS IS CONFIRMED BY COMPARISON WITH THE U.S.G.S. QUADRANGLE AND OTHER AVAILABLE MAPS OF THE AREA.

35. SHORELINE AND ALONGSHORE DETAILS:

FIELD INSPECTION OF THE HIGH-WATER LINE WAS ADEQUATE. THE LOW-WATER LINE WAS NOT SHOWN AS NO LOW-WATER PHOTOGRAPHY WAS AVAILABLE.

36. OFFSHORE DETAILS:

NONE.

37. LANDMARKS AND AIDS:

NINE LANDMARKS ARE LOCATED IN THE AREA OF THIS MAP. FOUR ARE INTERSECTION STATIONS, ONE WAS LOCATED BY THEODOLITE AND THE REMAINING FOUR WERE LOCATED BY THE KELSH STEREOSCOPIC INSTRUMENT.

TWELVE AIDS WERE IDENTIFIED AND ARE SHOWN ON THIS MANUSCRIPT.

TWO AIDS ARE TRIANGULATION STATIONS AND TEN AIDS WERE LOCATED BY THE KELSH INSTRUMENT.

FORMS 567 ARE SUBMITTED.

38. CONTROL FOR FUTURE SURVEYS:

NONE.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11653 ON THE WEST, WITH T-11652 ON THE NORTH, AND WITH T-11655 ON THE EAST. TO THE SOUTH IS THE GULF OF SANTA CATALINA.

40. HORIZONTAL AND VERTICAL ACCURACY:

41. OVERHEAD CABLE CLEARANCES:

TWO OVERHEAD CABLES OVER GRAND CANAL, BALBOA ISLAND, ARE SHOWN. THE VERTICAL CLEARANCE OF THE OVERHEAD CABLE NEAR THE SOUTH END OF GRAND CANAL IS 21 FEET AT M.H.W. THE VERTICAL CLEARANCE OF THE OVERHEAD CABLE NEAR THE NORTH END OF GRAND CANAL IS 24 FEET AT M.H.W.

46. COMPARISON WITH EXISTING MAPS:

COMPARISON WAS MADE WITH THE U.S.G.S.  $7\frac{1}{2}$  BY 10 MINUTE NEWPORT BEACH, CALIFORNIA QUADRANGLE, SCALE 1:24,000, EDITION 1949.

47. COMPARISON WITH NAUTICAL CHARTS:

COMPARISON WAS MADE WITH THE FOLLOWING NAUTICAL CHARTS:

NAUTICAL CHART 5101, SCALE 1:234,270 AT LAT.  $33^{\circ} 20'$   
5TH ED. JAN. 6, 1947, REVISED MAY 18, 1959.

NAUTICAL CHART 5142, SCALE 1:80,000 AT LAT.  $33^{\circ} 31'$   
1ST ED. MARCH 5, 1951, REVISED NOV. 9, 1959.

NAUTICAL CHART 5108, SCALE 1:10,000 AT LAT. 33° 37'  
8TH ED. AUG. 22, 1940, REVISED JUNE 15, 1959

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

NONE.

ITEMS TO BE CARRIED FORWARD:

NONE.

APPROVED:

  
FRED NATELLA, CAPT, C&GS  
PORTLAND DISTRICT OFFICER

RESPECTFULLY SUBMITTED:

  
JAMES L. HARRIS  
CARTOGRAPHER

49. NOTES FOR THE HYDROGRAPHER:

NONE.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-10005 11654

1. PROJECTION AND GRIDS X	2. TITLE X	3. MANUSCRIPT NUMBERS X	4. MANUSCRIPT SIZE X
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY X	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) None		7. PHOTO HYDRO STATIONS None
8. BENCH MARKS X	9. PLOTTING OF SEXTANT FIXES None	10. PHOTOGRAMMETRIC PLOT REPORT X	11. DETAIL POINTS None
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE X	13. LOW-WATER LINE X	14. ROCKS, SHOALS, ETC. X	15. BRIDGES X
16. AIDS TO NAVIGATION X	17. LANDMARKS X	18. OTHER ALONGSHORE PHYSICAL FEATURES X	19. OTHER ALONGSHORE CULTURAL FEATURES X
PHYSICAL FEATURES			
20. WATER FEATURES X	21. NATURAL GROUND COVER X		22. PLANETABLE CONTOURS None
23. STEREOSCOPIC INSTRUMENT CONTOURS None	24. CONTOURS IN GENERAL None	25. SPOT ELEVATIONS None	26. OTHER PHYSICAL FEATURES X
CULTURAL FEATURES			
27. ROADS X	28. BUILDINGS X	29. RAILROADS X	30. OTHER CULTURAL FEATURES X
BOUNDARIES			
31. BOUNDARY LINES X		32. PUBLIC LAND LINES None	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES X	34. JUNCTIONS X		35. LEGIBILITY OF THE MANUSCRIPT X
36. DISCREPANCY OVERLAY None	37. DESCRIPTIVE REPORT X	38. FIELD INSPECTION PHOTOGRAPHS X	39. FORMS X
40. REVIEWER James L. Harris		SUPERVISOR, REVIEW SECTION OR UNIT	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER		SUPERVISOR	
43. REMARKS			

48. Geographic Names List

Balboa  
Balboa Beach  
Balboa Island  
Balboa Pier  
Bay Island  
Bay Shores

Cliff Haven  
Collins Island  
Corona del Mar

East Jetty  
Entrance Channel

Grand Canal  
Gulf of Santa Catalina

Harbor Island

Lido Isle  
Lido Peninsula  
Linda Isle

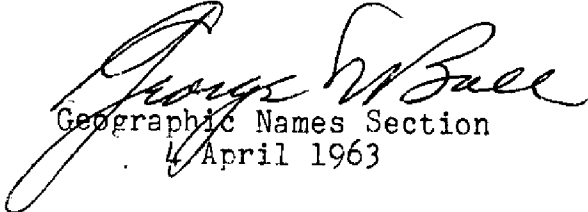
Main Channel

Newport Bay  
Newport Beach  
Newport Beach (city)  
Newport Channel  
Newport Heights  
Newport Island  
Newport Pier

The Rivo Alto  
The Arches  
The Rhine  
The Rialto  
Turning Basin

West Jetty

Upper Newport Bay

  
Geographic Names Section  
4 April 1963

Review Report  
Shoreline Maps  
T-11649 thru T-11654

June 1963'

61. General Statement

These are six (6) shoreline maps of project PH-5908, Long Beach to Laguna Beach, California. These maps were prepared primarily for the location of all non-floating aids and landmarks for use in the revision of our Nautical Charts.

62. Comparison with Registered Topographic Surveys

T-5030A	1:10,000	1934
T-5031	1:10,000	1933
T-5032	1:10,000	1933

There are numerous cultural and shoreline differences due to time interval. These maps are to supersede the above surveys for common area for nautical charting.

63. Comparison with Maps of Other Agencies

Newport Beach, Calif.	1:24,000	U.S.G.S.	1949
Seal Beach, Calif.	1:24,000	U.S.G.S.	1949

There are cultural and shoreline changes due to the difference in survey dates.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

5108	1:10,000	Aug. 1940	revised to Mar. 1961
5142	1:80,000	Nov. 1960	revised to Dec. 1962

There are no differences of importance between the above charts and the subject manuscripts.

66. Adequacy of Results and Future Surveys

These surveys were prepared according to project instructions and are within the required accuracy for Nautical Charting.

Reviewed by:

L. C. Lande  
L. C. Lande

Approved by:

[Signature]  
Chief, Cartographic Br.

[Signature]  
Chief, Nautical Charts Division

[Signature]  
Chief, Photogrammetry Div.

[Signature]  
Chief, Operations Division

