

11647

orig

Diag. Cht. No. 5101-2.

Form 804

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (PHOTOGRAMMETRIC)

Field No. Ph-5908 Office No. T-11647

LOCALITY

State CALIFORNIA

General locality LONG BEACH

Locality LONG BEACH (MIDDLE HARBOR)

1959-1960

CHIEF OF PARTY

FRED NATELLA

LIBRARY & ARCHIVES

DATE Sept. 1963

USCOM-DC 5087

11647

DESCRIPTIVE REPORT - DATA RECORD

T - 11647

Project No. (II): PH-5908 Quadrangle Name (IV):

Field Office (II): SANTA ANA, CALIFORNIA Chief of Party: FRED NATELLA
Photogrammetric Office (III): PORTLAND, OREGON UNIT CHIEF: C. H. BISHOP
Officer-in-Charge: FRED NATELLA

Instructions dated (II) (III): 6 JANUARY 1960 Copy filed in Division of
AMENDMENT I: 13 APRIL 1960 Photogrammetry (IV)

Method of Compilation (III): KELSH 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): FEB 18 1963 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:
Elevations shown as (25) refer to mean high water X
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): MID EAST, 1948

Lat.: 33° 43' 14.655" Long.: 118° 12' 47.164" Adjusted X
Unadjusted

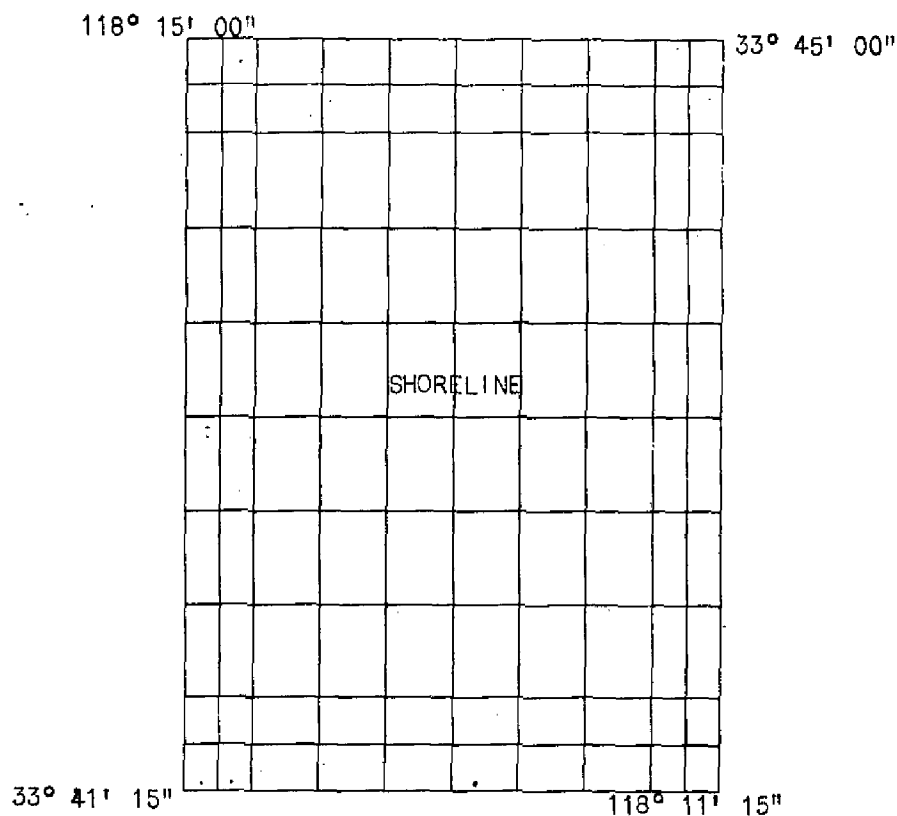
Plane Coordinates (IV): State: CALIFORNIA Zone: VI

Y= 571,064.10 X= 1,403,081.54

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): C. H. BISHOP, R. B. MELBY & L. L. RIGGERS Date: SEPT - OCT.
1960

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): OCTOBER 1960 BY FIELD INSPECTION.
AND PLANETABLE. COMPILATION BY KELSH INSTRUMENT.

Projection and Grids ruled by (IV): R.A.C. Date: 9-29-60

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

Control plotted by (III): C. H. BISHOP Date: 1-10-62

Control checked by (III): L. L. GRAVES Date: 3-9-62

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

Planimetry D. N. WILLIAMS Date: 5-22-62

Stereoscopic Instrument compilation (III):
Contours Date:

Manuscript delineated by (III): C. H. BISHOP, SCRIBING Date: 7-30-62
C. C. HARRIS, STICK-UP 11-26-62

Photogrammetric Office Review by (III): J. L. HARRIS, ROUGH DRAFT Date: 6-4-62
J. L. HARRIS, ADVANCE 11-30-62

Elevations on Manuscript checked by (II) (III): Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS SINGLE LENS "S"

Number	Date	Time	Scale	Stage of Tide
59 S 8152 THRU 8154	10-3-59	10:45	1:30,000	0.6' ABOVE M.H.W..
59 S 7969 AND 7970	10-2-59	14:30	1:10,000	0.4' ABOVE M.L.L.W..
59 S 7977 THRU 7980	"	"	"	"

COLOR TRANSPARENCIES

Tide (III)

Reference Station: LOS ANGELES (OUTER HARBOR)
Subordinate Station: LONG BEACH OUTER HARBOR, PIER A
Subordinate Station:
COMPUTED FROM PREDICTED TIDE TABLES.

DIURNAL		
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): 1
Shoreline (More than 200 meters to opposite shore) (III): 4
Shoreline (Less than 200 meters to opposite shore) (III): 0
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 20 Recovered: 13 Identified: 3
Number of BMs searched for (II): Recovered: Identified:
Number of Recoverable Photo Stations established (III): 4 *
Number of Temporary Photo Hydro Stations established (III): NONE

Remarks:

* TWO LANDMARKS LOCATED BY KELSH INSTRUMENT
AND TWO BY TRAVERSE..

FIELD INSPECTION REPORT

MAP MANUSCRIPT T-11647

PROJECT PH-5908

REFER TO THE FIELD INSPECTION REPORT FOR T-11641, T-11642
AND T-11647 SUBMITTED TO THE WASHINGTON OFFICE 1-27-61.

Filed with Desc. Report T-11641

PHOTOGRAMMETRIC PLOT REPORT

MAP MANUSCRIPT T-11647

PROJECT PH-5908

REFER TO THE PHOTOGRAMMETRIC PLOT REPORT FOR THE ENTIRE
PROJECT BY R. E. FUESCHEL, OCTOBER 1960.

Filed with Desc. Report T-11640

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T-11647

PROJECT NO. PH-5908

SCALE OF MAP 1:10,000

SCALE FACTOR NONE

STATION	ZONE VII SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-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)	
ANGLE POINT, LONG BEACH BREAKWATER 1949	P-17	N.A. 1927	4,011,701.87	1701.87	(3298.13)		518.7	(1005.3)	
EAST BREAKWATER L.H. (WEST END) 1942	VI P-106	"	4,225,557.89 567,621.41 1,393,697.60	557.89	(4442.11)		170.0	(1354.0)	
EHLE, 1949	VII P-16	"	4,019,000.20 4,214,479.74	2621.41	(2378.59)		799.0	(725.0)	
IRON PIPE O, 1949	" P-20	"	4,018,531.20 4,217,849.81	3697.60	(1302.40)		1127.0	(397.0)	
LONG BEACH BIGHOUSE, 1949	" P-16	"	4,020,173.56 4,222,796.75	4000.20	(999.80)		4219.3	(304.7)	
MID EAST, 1948	VI P-81	"	571,064.10 1,403,081.54	4479.74	(520.26)		1365.4	(158.6)	
MID WEST, 1948	" P-81	"	568,962.80 1,397,364.87	3531.20	(1468.80)		1076.3	(447.7)	
MIDDLE BREAKWATER EAST RANGE, NORTH POLE, 1948	P-81	"	571,069.80 1,403,068.37	2849.81	(2150.19)		868.6	(655.4)	
MIDDLE BREAKWATER EAST RANGE, SOUTH POLE, 1948	P-81	"	568,962.80 1,397,364.87	173.56	(4826.44)		52.9	(1471.1)	
MIDDLE BREAKWATER WEST RANGE, NORTH POLE, 1948	P-81	"	571,050.36 1,403,075.69	2796.75	(2203.23)		852.4	(671.6)	
MIDDLE BREAKWATER WEST RANGE, SOUTH POLE, 1948	P-81	"	568,973.49 1,397,360.75	1064.10	(3935.90)		324.3	(1199.7)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	3081.54	(1918.46)		939.3	(584.7)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	3962.80	(1037.20)		1207.9	(316.1)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	2364.87	(2635.13)		720.8	(803.2)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	1069.80	(3930.20)		326.1	(1197.9)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	3068.67	(1931.63)		935.2	(588.8)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	1050.36	(3949.64)		320.1	(1203.9)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	3075.69	(1924.31)		937.5	(586.5)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	3973.49	(1026.51)		1211.1	(312.9)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	2360.75	(2639.25)		719.6	(804.4)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	3953.94	(1046.06)		1205.3	(318.8)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	2367.91	(2632.09)		721.7	(802.3)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	1034.88	(3965.12)		315.4	(1208.6)	
NORTH POLE, 1948	P-81	"	568,953.94 1,397,360.75	2725.67	(2274.33)		830.8	(693.2)	
NAVY JETTY AIR BASE, LIGHT, 1942	P-106	"	581,034.88 1,392,725.67						

1 FT. = 3048006 METER

COMPUTED BY: C.H.B.

DATE 10-30-61

CHECKED BY: J.E.D.

DATE 11-7-61

COM-DC-57843

MAP T-11647

PROJECT NO. PH-5908

SCALE OF MAP 1:10,000

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER.

C.H. 11

DATE 10-30-61

CHECKED BY: J.E.D.

DATE.

11-7-61

COMM-DC-57843

COMPILATION REPORT

MAP MANUSCRIPT T-11647

PROJECT PH-5908

31. DELINEATION:

PIER F AND PIER G WERE DELINEATED AS LOCATED BY PLANETABLE SURVEYS BY THE FIELD UNIT. THE KELSH INSTRUMENT WAS USED TO COMPILE THE REMAINING DETAIL.

32. CONTROL:

SUPPLEMENTARY CONTROL BASED UPON IDENTIFIED PREVIOUSLY ESTABLISHED HORIZONTAL CONTROL STATIONS WAS ADEQUATE.

33. SUPPLEMENTAL DATA:

MAP OF PORT OF LONG BEACH, CALIFORNIA, SCALE 1 INCH = 1100',
COMPILED BY CITY OF LONG BEACH, HARBOR DEPARTMENT.

MAP OF LOS ANGELES HARBOR, SCALE 1 INCH = 1600',
COMPILED BY BOARD OF HARBOR COMMISSIONERS, CITY OF
LOS ANGELES, SEPTEMBER 1959.

MAP OF LOS ANGELES COUNTY No. 30, SCALE 1 INCH = 600',
COMPILED BY THE COUNTY ENGINEER, JANUARY 1954

34. CONTOURS AND DRAINAGE:

CONTOURS ARE NOT APPLICABLE.

THERE IS NO DRAINAGE ON THIS MANUSCRIPT.

35. SHORELINE AND ALONGSHORE DETAILS:

THE LIMITS OF THE PIERS THAT COMPRISE THE MEAN HIGH-WATER LINE WERE ADEQUATELY FIELD INSPECTED. NO LOW-WATER LINE WAS DELINEATED.

36. OFFSHORE DETAILS:

MIDDLE BREAKWATER WAS NOT COVERED BY THE PHOTOGRAPHY. IT WAS DELINEATED BY PLOTTING THE CONTROL STATIONS LOCATED AT THE ENDS AND ALONG THE BREAKWATER.

37. LANDMARKS AND AIDS:

FOUR LANDMARKS WERE LOCATED; TWO BY TRAVERSE AND TWO BY KELSH INSTRUMENT.

EIGHT FIXED AIDS TO NAVIGATION WERE LOCATED; TWO BY THEODOLITE, TWO BY KELSH INSTRUMENT AND FOUR WERE TRIANGULATION POSITIONS.

FORMS 567 ARE SUBMITTED.

38. CONTROL FOR FUTURE SURVEYS:

NONE.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11641 TO THE NORTH AND WITH T-11646 TO THE WEST. THERE ARE NO CONTEMPORARY SURVEYS TO THE EAST AND SOUTH.

40. HORIZONTAL AND VERTICAL ACCURACY:46. COMPARISON WITH EXISTING MAPS:

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

47. COMPARISON WITH NAUTICAL CHARTS:

COMPARISON WAS MADE WITH THE FOLLOWING NAUTICAL CHARTS:

NAUTICAL CHART 5147, SCALE 1:12,000 AT LAT. $33^{\circ} 44'$,
6TH ED. OCT. 1943, REVISED AUG. 1962.

NAUTICAL CHART 5148, SCALE 1:18,000 AT LAT. $33^{\circ} 43'$,
3RD ED. MAY 1957, REVISED FEB. 1962.

NAUTICAL CHART 5142, SCALE 1:80,000 AT LAT. 33° 31',
1ST ED. MAR. 1957, REVISED NOV. 1959.

NAUTICAL CHART 5101, SCALE 1:234,270, AT LAT. 33° 20',
5TH ED. JAN. 1947, REVISED MAY 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 TO THE HYDROGRAPHER:

NONE.

PHOTOGRAMMETRIC OFFICE REVIEW

T-48363 11647

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) X		7. PHOTO HYDRO STATIONS None
8. BENCH MARKS None	9. PLOTTING OF SEXTANT FIXES X	10. PHOTOGRAMMETRIC PLOT REPORT X	11. DETAIL POINTS None
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE X	13. LOW-WATER LINE None	14. ROCKS, SHOALS, ETC. None	15. BRIDGES None
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 None		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 Edward Deal	
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			

COMPILATION RECORD

COMPLETION DATE

REMARKS

<i>Alongshore area for hydro</i>	<i>Nov. 26, 1962</i>	
<i>Interior details added Compilation complete</i>	<i>Nov. 26, 1962</i>	

NONFLOATING AIDS OR CANNOT BE USED FOR CHARTS

The positions given have been checked after listing by

J. L. HAMM: 6

FRED NAVELLA *Chief of Party.*

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

TABULATE SECONDS AND METERS

TO BE CHARTED

STRIKE OUT TWO

NON-DRAWING AND SOON LANDMARKS FOR CHARTS

PORTLAND, OREGON 1 JUNE

Index

1962

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~the~~ the charts indicated.

The positions given have been checked after listing by

J. L. HAMM: 8

FRED NAYLOR

Chief of Party

STATE CALIFORNIA			POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE*		LONGITUDE*		DATUM							
			° ' "	D. P. METERS	° ' "	D. P. METERS								
MARKER "E 1"	WHITE SQUARE DAYMARK ON TRIPOD FACING NORTHEAST HT=15' (24')		33 42	55.75	118 13	45.47	N.A.	10-26-60	X			5147		
MARKER "E 2"	WHITE SQUARE DAYMARK ON TRIPOD, FACING NORTHEAST HT=15' (24')		33 43	1717.5	118 12	1170.9	1927	"	X			5148		
PILOT STATION				15.01		46.24	"		X			DO		
				462.3		1190.5			X					
LOOKOUT TOWER	ENCLOSED WOODEN TOWER ON PILOT STATION HT=47' (54')		33 49	58.53	118 12	52.03	"	10-11-60	X			DO		
				1741.6		1339.1			X					
RADAR TOWER	SKELTON STEEL TOWER HT=144' (152')		33 44	58.67	118 12	50.94	"	"	X			DO		
				1748.1		1311.1			X					

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

**U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY**

TO BE DELETED

STRIKE OUT TWO

NUMERICAL LANDMARKS FOR CHARTS

PORTLAND, OREGON

1 JUN 1962

I recommend that the following objects which ~~have~~(have not) been inspected from seaward to determine their value as landmarks be ~~reconsidered~~(deleted from) the charts indicated.

The positions given have been checked after listing by

FRED MAYELLA *Chief of Party.*

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

USCOMM-DC 16234-P61

48. Geographic Names List;

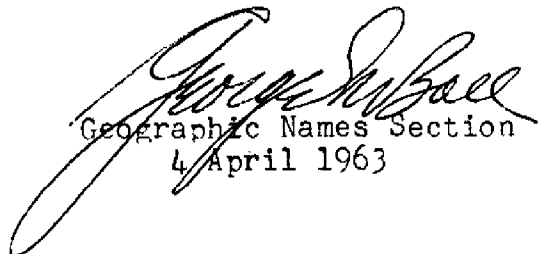
Long Beach

Middle Harbor

Naval Base Mole

San Pedro Bay

West Basin


Geographic Names Section
4 April 1963

Review Report
Shoreline Maps
T-11641 thru T-11643, T-11647 and T-11648
June 1963

61. General Statement

These are five (5) shoreline maps of project PH-5908, Long Beach to Laguna Beach, California. These maps were prepared primarily for location of all non-floating aids and landmarks for use in the revision of our Nautical Charts.

62. Comparison with Registered Topographic Surveys

T-5032	1:10,000	1933
T-5033A	1:10,000	1934
T-5034A	1:10,000	1934

The shoreline in some areas has built out as much as 200 meters. In the vicinity of Lat. $33^{\circ}45'$, Long. $118^{\circ}13.5'$ (San Pedro Bay Area) the water front has been almost completely rebuilt. These maps are to supersede the above surveys for common area for Nautical Charting.

63. Comparison with Maps of Other Agencies

Seal Beach, Calif.	1:24,000	U.S.G.S.	1949
Los Alamitos, Calif.	1:24,000	U.S.G.S.	1949
Long Beach, Calif.	1:24,000	USNO.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

5142	1:80,000	Nov. 1960 revised Dec. 1962
5147	1:12,000	Feb. 1963
5148	1:18,000	Feb. 1963

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

56. 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:

Charles H. Hensler
Chief, Photogrammetric Br.

James G. Taylor
Chief, Nautical Charts Division

J. E. Waugh 8/21/63
Chief, Photogrammetry Div.

Harold B. Conely
Chief, Operations Division

