

# 11641

only

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-11641

### LOCALITY

State CALIFORNIA

General locality LOS ANGELES

Locality LONG BEACH (TERMINAL ISLAND)

1959-1960

### CHIEF OF PARTY

FRED NATELLA

### LIBRARY & ARCHIVES

DATE Sept. 1963

USCOMM-DC 5087

# 11641

DESCRIPTIVE REPORT - DATA RECORD

T - 11641

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: R. B. MELBY

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):

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): MID, 1949

Lat.:

Long.:

Adjusted  
Unadjusted

Plane Coordinates (IV):

State: CALIFORNIA Zone: VII

Y= 4,123,672.06

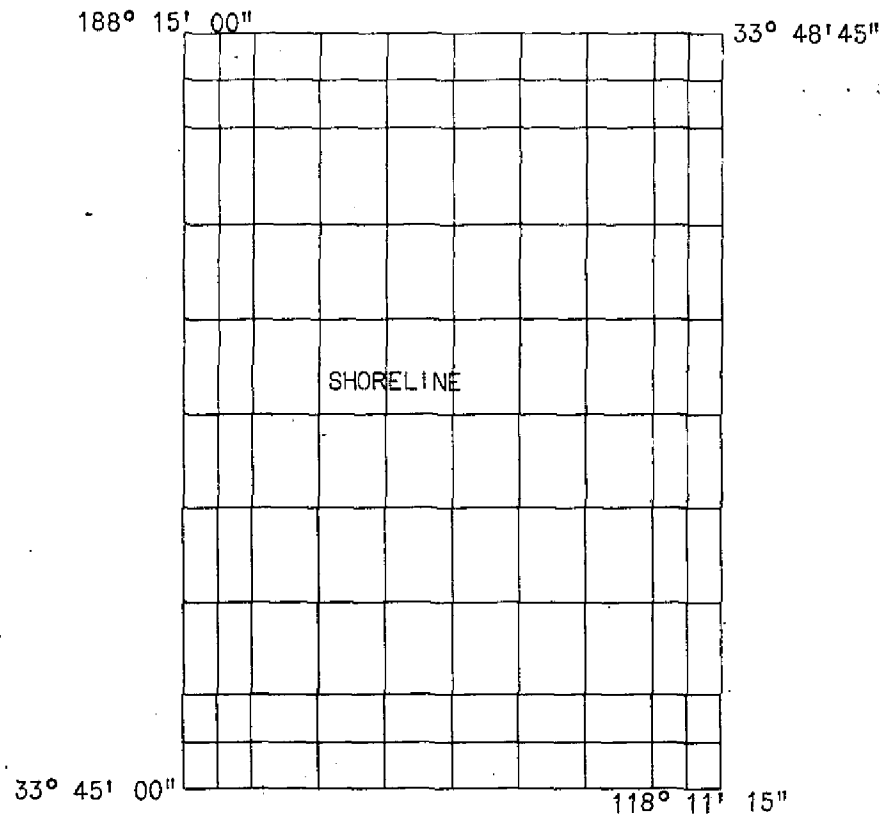
X= 4,226,388.52

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.

FORM 181a  
(4-23-54)

## DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): C. H. BISHOP Date: OCT. 1960

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

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

Projection and Grids ruled by (IV): R.A.C. Date: 9-27-60

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

Control plotted by (III): C. H. BISHOP Date: 11-8-61

Control checked by (III): D. N. WILLIAMS Date: 3-2-62

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

Stereoscopic Instrument compilation (III):  
Planimetry D. N. WILLIAMS Date: 4-24-62  
Contours Date:

Manuscript delineated by (III): L. L. GRAVES & C. H. BISHOP, SCRIBING Date: 8-17-62  
C. C. HARRIS, STICK-UP 12-6-62

Photogrammetric Office Review by (III): J. L. HARRIS, ROUGH DRAFT Date: 5-31-62  
J. L. HARRIS, ADVANCE 12-10-62

Elevations on Manuscript  
checked by (II) (III): 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 8191				
THRU 8193	10-3-59	11:18	1:30,000	0.5' ABOVE M.H.W.
59 S 8152	"	10:45	"	" " "
THRU 8155	"	11:04	"	" " "
59 S 8178	"			
AND 8179	"			
59 S 7975				
THRU 7980	10-2-59	14:30	1:10,000	AT M.L.L.W.
59 S 7966	"	14:30	"	"
THRU 7970	"	14:30	"	"
59 S 7989	"	14:30	"	"
THRU 7994	"	14:30	"	"

(COLOR TRANSPARENCIES) Tide (III)

Reference Station: LOS ANGELES (OUTER HARBOR)  
Subordinate Station: LONG BEACH (INNER HARBOR)  
Subordinate Station:

COMPUTED FROM PREDICTED TIDE TABLES.

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 10  
Shoreline (More than 200 meters to opposite shore) (III): 12  
Shoreline (Less than 200 meters to opposite shore) (III):  
Control Leveling - Miles (II):  
Number of Triangulation Stations searched for (II): 117 Recovered: 45 Identified: 11  
Number of BMs searched for (II): 23 Recovered: 17 Identified: 5  
Number of Recoverable Photo Stations established (III): 21  
Number of Temporary Photo Hydro Stations established (III):

Remarks:

Ratio of Ranges	Mean Range	DIURNAL Spring Range
	3.8	5.4
	3.7	5.3

Date:

Date:

Date:

Date:

**Camera (kind or source) (III):**

PHOTOGRAPHS (III)

Number

Date \_\_\_\_\_

Time

### Scale

Stage of Tide

**Tide (III)**

Reference Station:

**Subordinate Station:**

**Subordinate Station:**

**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):**

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

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

Control Leveling - Miles (II):

* Number of Triangulation Stations searched for (II):	150	Recovered:	19	Identified:	14
** Number of BMs searched for (II):	23	Recovered:	17	Identified:	5
*** Number of Recoverable Photo Stations established (III):	26				
Number of Temporary Photo Hydro Stations established (III):					

Remarks:	Searched for:	Recov.	Ident.
----------	---------------	--------	--------

(11641	117	45	11
* (11642	13	6	0
(11647	20	13	3

**\*\* All bench marks in 11641**

```

      (11641      21
*** (11642      1
      (11647      4

```

Ratio of Ranges	Mean Range	Spring Range

## FIELD INSPECTION REPORT

Sheets 11641, 11642, 11647

Project Ph-5908

Vicinity of Long Beach, California

October 1960

2. Areal Field Inspection:

Field inspection was done in accordance with Instructions - Project PH-5908, Shoreline Mapping, Long Beach to Laguna Beach, dated 6 January 1960 and Amendment I dated 13 April 1960.

The area around Long Beach Harbor is a highly developed industrial area. The major portion of Terminal Island is occupied by the Long Beach Naval Shipyard and the U. S. Naval Base. The shipyard has extensive ship repair facilities as well as three large drydocks. Considerable change and relocation of buildings, railways, roads and other cultural features is under way in the area to allow land filling to help offset the general land subsidence in this area.

The land subsidence is both vertical and horizontal in nature, the center of the area being near the northeast corner of Terminal Island. The land on the inshore side of the dikes in this area is below sea level at the present time.

Life guard stations along the beach eastward from Rainbow Pier were not indicated for mapping, as they are movable structures.

Field data has been inked on the following color transparencies:

59 S 7968      59 S 7977      59 S 7980

Field data has been inked on the following field photographs:

59 S 8152 thru 8154; 8172; 8178; 8179; 8188 thru 8190;  
and 8192.3. Horizontal control:

- (a) No supplemental control was established.
- (b) No datum adjustments were made by the field party.
- (c) Only control established by the Coast & Geodetic Survey was searched for.

(d) Stations required by project instructions for control of compilation were recovered and positively identified.

(e) The following stations were previously reported as lost and no further search was made:

Long Beach, Wilson High School, tower 1933  
(The previous recovery note for this station was confirmed)

NEW RIVER 1872	LOS CERRITOS 1853
STATION II 1872	Los Cerritos, tank 1920
STATION III 1872	
Long Beach, Catholic Church Steeple, 1920	

The station mark at Station LONG BEACH 1920 has been destroyed by a landslide. Both reference marks for this station were recovered in good condition.

#### 4. Vertical Control:

Only the recovery of tidal bench marks was required by project instructions. All tidal bench marks within the sheet limits were searched for and one mark in each group recovered was identified on the field photographs. Fifteen tidal bench marks were recovered and six were not recovered.

Two bench marks not required by project instructions were recovered in connection with the determination of heights of landmarks. They were not identified.

Form 685A, Recovery Note, Bench Mark is submitted for all bench marks searched for.

#### 5. Contours and Drainage:

Contours not applicable.

There are no streams in the area except the Los Angeles River (Los Angeles Flood Control Channel). When the tide is out, the bottom of this channel is bare.

#### 6. Woodland Cover:

There is no woodland cover except shade trees in yards, along streets and in city parks. These are obvious and have not been classified on the photographs

#### 7. Shoreline and Alongshore Features:

(a) The mean high water line has been indicated on the field photographs.



Most of the shoreline in Long Beach Harbor has been stabilized by bulkheads, piers and rip-rap.

The mean high water line eastward from Navy Landing was located by measurements from identifiable points on the photographs. It should be mapped by joining the points so located and not by trying to follow any line on the photographs near these points that might appear to be the mean high water line. Since the date of photography, the beach has been built up by pumping sand from a dredging operation onto the beach. This section of shoreline is unstable and the delineation on the field photographs is correct as of the date of field inspection.

(b) The low water line was not located.

(c) The character of the foreshore has been indicated on the photographs.

(d) There are no bluffs or cliffs adjacent to the shoreline. A bluff extending eastward from the Villa Riviera Hotel to the vicinity of Belmont Pier has been indicated on Photograph 59 S 8190. It is from 110 to 130 meters inshore from the mean high water line.

(e) Long Beach Harbor is highly developed with numerous piers and wharves which have been indicated on Photograph 59 S 8153. There are numerous small craft moorages in Cerritos Channel. Two of these just east of the Heim Lift Bridge, one on the north side and one on the south side of the channel, were located by Planetable. These are floating piers secured to piling. Finger piers have been symbolized, rather than mapped to scale.

Eastward from Long Beach Harbor is Rainbow Pier, a recreation pier located south of the Long Beach Municipal Auditorium. Farther east along the beach is Belmont Pier, which is also a recreation pier.

(f) The shore ends of submarine cables have been indicated on the field photographs.

(g) Two structures designated as Pier F and Pier G were located by planetable on Photograph 59 S 8152. These were under construction at the time of photography and are made of earth fill between boulder rip-rap.

There is a small craft launching ramp between the Los Angeles River channel and Navy Landing. Navy Landing is approximately 0.4 mile west of Rainbow Pier and is where navy personnel are put ashore for liberty. It is enclosed by concrete piers on the south-west and east sides. The entrance is on the south side. At Navy Landing a new waiting room and lounge, which is a landmark building along the water front, is nearing completion. This was located on Photograph 59 S 8152 by reference measurements to the shoreline.

## 8. Offshore Features:

Middle Breakwater, a boulder jetty which projects from 8 to 10 feet above mean high water, extends in a general east-west direction across Sheet 11647. The elevation of this structure was determined by hand level.

A navy degaussing range approximately 0.3 mile southwest of Naval Mole Light 5 has been indicated on Photograph 59 S 8153.

Two piling at the navy degaussing range were located by sextant fixes which are recorded on the back of photograph 59 S 8153.

Two offshore obstructions in the form of irregular concrete blocks were indicated on Color Transparency 59 W 7968. They are near Long Beach Channel Daybeacon 13.

## 9. Landmarks and Aids:

(a) All charted landmarks were investigated. Those still in existence were identified on the photographs and listed on Form 567 as Landmarks to Be Charted. Chartist landmark features that have been removed have been listed on form 567 as Landmarks To Be Deleted.

No new landmarks were selected.

(b) Large buildings of landmark value and public buildings within the area of interior field inspection were indicated on the field photographs.

(c) There are no aeronautical aids within the area covered by this report.

(d) The following fixed aids to navigation were located as triangulation in 1953:

Long Beach Breakwater East End Light (L.L. No. 118)  
 (Long Beach Breakwater East End Light, 1953)  
 Long Beach Channel Entrance East Light (L.L. No. 120)  
 (Long Beach Channel Entrance East Light, 1953)  
 Long Beach Light (L.L. No. 121)  
 (Long Beach Light 1953)

These lights were visited and it was ascertained that there have been no changes in location since they were located by triangulation. They are off the limits of photography and are not within the project limits, but are mentioned in Amendment I to the project instructions. They are listed on Form 567 as Nonfloating Aids To Be Charted. No Form 152 is submitted for these objects.

All other fixed aids to navigation have been identified on the photographs and listed on Form 567 as Nonfloating Aids To Be Charted.

(e) At the request of the U. S. Navy, two small buoys marking a degaussing range for smaller ships, located on the west side of the naval base mole, were located by sextant fixes which are recorded on the back of Photograph 59 S 8153. These buoys are charted as piling on C&GS Chart 5148.

10. Boundaries, Monuments and Lines:

Boundaries and monuments not applicable.

The limit lines of Bixby park and Bluff Park in Long Beach have been delineated on Photograph 59 S 8190.

11. Other Control:

No other control was established.

12. Other Interior Features:

Roads and buildings were classified on field photographs.

Bridge and overhead cables and pipeline crossings and overhead cables over navigable waters that already appear on the charts were not re-determined.

The general area of the extensive oil fields have been indicated on the field photographs. There are no offshore wells or drilling derricks in the area.


13. Geographic Names:

Geographic names will be the subject of a special report.

14. Special Reports and Supplemental Data:

(a) Map of Port of Long Beach, dated January 1, 1960.

Approved:

  
Fred Natella  
CAPT, C&GS  
Portland District Officer

Respectfully submitted:

  
Charles H. Bishop, Cartographer

Robert B. Melby,  
Surveying Technician

PHOTOGRAMMETRIC PLOT REPORT

MAP MANUSCRIPT T-11641

PROJECT PH-5908

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

*See Desc Report T11640*

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

MAP T-11841 PROJECT NO. PH-5908 SCALE OF MAP 1:10,000 SCALE FACTOR NONE

STATION	ZONE VI SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\phi$ -COORDINATE LONGITUDE OR $\lambda$ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
LONG BEACH, BREAKERS HOTEL, TOWER, 1932	VI	N.A.	587,572.04	2572.04	(2427.96)		784.6	( 740.0)		
	P-16	1927	1,410,537.63	537.63	(4462.37)		163.9	(1360.1)		
LONG BEACH FEDERAL BUILDING FLAGPOLE, 1933	"	"	589,138.87	4138.87	( 861.13)		1261.5	( 262.5)		
	P-15	"	1,411,014.95	1014.95	(3985.05)		309.4	(1214.6)		
WATSON JUNCTION, ASSOCIATED OIL CO. STACK, 1933	"	"	602,529.63	2529.63	(2470.37)		771.0	( 753.0)		
	P-14	"	1,398,129.53	3129.53	(1870.47)		953.9	( 570.1)		
WILMINGTON, TEXACO OIL CO., STACK, 1933	"	"	595,965.69	965.59	(4034.41)		294.3	(1229.7)		
	P-14	"	1,396,757.42	1757.42	(3242.58)		535.7	( 988.3)		
ADMINISTRATION TOWER, 1949	VII	"	4,022,691.73	2691.73	(2308.27)		820.4	( 703.6)		
	P-16	"	4,215,227.72	227.72	(4772.28)		69.4	(1454.6)		
BASE D-1 (ED CO. LTD) 1949	"	"	4,026,827.57	1827.57	(3172.43)		557.0	( 967.0)		
	P-18	"	4,219,073.26	4073.26	( 926.74)		1241.5	( 282.5)		
BASE D AUX (ED CO. LTD) 1949	"	"	4,027,226.48	2226.48	(2773.52)		678.6	( 845.4)		
	M "	"	4,219,988.67	(4988.67	( 11.33)		1520.5	( 3.5)		
B.M. S I (USN) 1949	"	"	4,022,536.13	2536.13	(2463.87)		773.0	( 751.0)		
	P-20	"	4,216,005.52	1005.52	(3994.48)		306.5	(1217.5)		
B.M. 9-2 (USN) 1949	"	"	4,023,979.83	3979.83	(1020.17)		1213.1	( 310.9)		
	P-19	"	4,217,987.04	2987.04	(2012.96)		910.4	( 613.6)		
B.M. 102, 1949	"	"	4,024,343.98	4343.98	( 656.02)		1324.0	( 200.0)		
	"	"	4,218,843.67	(3843.67	(1156.33)		1171.6	( 352.4)		
B.M. C-9 (USN) 1949	"	"	4,023,783.66	3783.66	(1216.34)		1153.3	( 370.7)		
	"	"	4,217,224.38	2224.38	(2775.62)		678.0	( 846.0)		
B.M. C 371, 1949	"	"	4,033,141.77	3141.77	(1858.23)		957.6	( 566.4)		
	P-18	"	4,219,555.95	4555.95	( 444.05)		1388.7	( 135.3)		

1 FT. = 3048006 METER  
COMPUTED BY: J.L.H.  
C.H.B.DATE 3-10-60  
10-26-61CHECKED BY: D.N.W.  
J.E.D.DATE 3-10-60  
11-3-61

COMM-DC-57843

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

MAP T-11641

PROJECT NO. PH-5908

SCALE OF MAP 1:10,000

SCALE FACTOR

None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\mu$ -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)	
B.M. R 615, 1949	VII P-19	N.A. 1927	4,023,700.14	3700.14	(1299.86)		1127.8	(396.2)	
			4,215,609.09	609.09	(4390.91)		185.7	(1338.3)	
B.M. TIDAL 9, 1948	" P-18	"	4,025,066.32	66.32	(4933.68)		20.2	(1503.8)	
			4,225,373.21	373.21	(4626.78)		113.8	(1410.2)	
B.M. T 11, 1949	" P-20	"	4,022,031.52	2031.52	(2968.48)		619.2	(904.8)	
			4,214,102.92	4102.92	(897.08)		1250.6	(273.4)	
B.M. T 13, 1949	" "	"	4,021,969.92	1969.92	(3030.08)		600.4	(923.6)	
			4,214,383.32	4383.32	(616.68)		1336.0	(188.0)	
B.M. W 18, 1949	" P-19	"	4,025,175.58	175.58	(4824.42)		53.5	(1470.5)	
			4,219,119.13	4119.13	(880.87)		1255.5	(268.5)	
BRIDGE, 1949	" P-18	"	4,027,625.08	2625.08	(2374.92)		800.1	(723.9)	
			4,215,286.69	286.69	(4713.31)		187.4	(1436.6)	
DRY, 1949	" P-19	"	4,024,526.72	4526.72	(473.28)		1379.7	(144.3)	
			4,219,101.79	4101.79	(898.21)		1250.2	(273.8)	
EDISON, 1933	VI P-13	"	586,819.06	1819.06	(3180.94)		554.4	(969.6)	
			1,399,816.28	4816.28	(183.72)		1468.0	(56.0)	
FORD, 1949	OFFICE COMP.	"	4,029,947.97	4947.97	(52.03)		1508.1	(15.9)	
R.M. 3			4,215,109.21	109.21	(4890.79)		33.3	(1490.7)	
HAST, 1949	VII P-18	"	4,035,904.72	904.72	(4095.28)		275.8	(1248.2)	10
			4,221,811.93	1811.73	(3188.27)		552.2	(971.8)	
HEAD, 1949	" P-16	"	4,035,906.37	906.37	(4093.63)		276.3	(1247.7)	
			4,219,789.44	4789.44	(210.56)		1459.8	(64.2)	
LONG BEACH CLOCK TOWER, 1920	VI P-11	"	588,216.64	3216.64	(1783.36)		980.4	(543.6)	
			1,409,934.66	4934.66	(65.34)		1504.1	(19.9)	

1 FT. = 3048006 METER

COMPUTED BY: C.H.B.

DATE 10-26-61

CHECKED BY: J.E.D.

DATE 11-3-61

COMM-DC-57843

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

MAP T-11641

PROJECT NO. PH-5908

SCALE OF MAP 1:19,000

SCALE FACTOR NONE

STATION	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)	
LONG BEACH, PROCTOR & GAMBLE CO., WATER TANK, 1933 LONG BEACH, STEEL TANK, RED BAND, 1920	VI P-15	N.A.. 1927	590,398.51	398.51	(4601.49)		121.5	(1402.5)	
	"	"	1,403,333.65	333.65	(1666.35)		1016.1	(507.9)	
	"	"	588,299.73	3299.73	(1700.27)		1005.8	(518.2)	
	P-11	"	1,403,365.39	3365.39	(1634.61)		1025.8	(498.2)	
MACHINE, 1949	VII P-17	"	4,023,764.24	3764.24	(1235.76)		1147.3	(376.7)	
	"	"	4,218,997.46	3997.46	(1002.54)		1218.4	(305.6)	
MAST ON SIGNAL TOWER, 1942	VI P-106	"	583,093.88	3093.88	(1906.12)		943.0	(581.0)	
	"	"	1,395,303.77	303.77	(4696.23)		92.6	(1431.4)	
MID., 1949	VII P-18	"	4,023,672.06	3672.06	(1327.94)		1119.2	(404.8)	
	"	"	4,226,388.52	1388.52	(3611.48)		423.2	(1100.8)	
NAVY BASE TANK, 1942	VI P-106	"	584,477.64	4477.64	(522.36)		1364.8	(159.2)	
	"	"	1,396,770.87	1770.87	(3229.13)		539.8	(984.2)	
PL 174 (U.P.R.R.) 1949	VII P-18	"	4,031,830.77	1830.77	(3169.23)		558.0	(966.0)	
	"	"	4,219,585.51	4585.51	(414.49)		1397.7	(126.3)	
VIC 2, 1949	OFFICE COMP.	"	4,023,031.42	3031.42	(1968.58)		924.0	(600.0)	
	"	"	4,225,639.92	639.92	(4360.08)		195.0	(1329.0)	
STACK, 1942	VI P-106	"	583,422.54	3422.54	(1577.46)		1043.2	(480.8)	
	"	"	1,395,595.42	595.42	(4404.58)		181.5	(1342.5)	
STOP, 1949	VII P-19	"	4,023,308.62	3308.62	(1691.38)		1008.5	(515.5)	
	"	"	4,215,649.90	649.90	(4350.10)		198.1	(1325.9)	
TRIPOD 1, 1949	" P-19	"	4,022,729.78	2729.78	(2270.22)		832.0	(692.0)	
	"	"	4,215,852.74	852.74	(4147.26)		259.9	(1264.1)	
WELL, 1949	" P-19	"	4,025,637.28	637.28	(4362.72)		194.2	(1329.8)	
	"	"	4,218,707.54	3707.54	(1292.46)		1130.1	(393.9)	

1 FT. = 3048006 METER

COMPUTED BY: C.H.B.

DATE 10-26-61

CHECKED BY: J.E.D.

DATE 11-3-61

COMM-DC-57843

SCALE FACTOR

1 FT. = 3048006 METER	DATE	10-26-81	CHECKED BY	J.E.D.	DATE	11-3-81
COMPUTED BY	C.H.B.					



## COMPILATION REPORT

MAP MANUSCRIPT T-11641

PROJECT PH-5908

31. DELINEATION:

THE PLANIMETRY WAS COMPILED BY USE OF THE KELSH INSTRUMENT. IN SOME INSTANCES, BUILDINGS ON PIERS WERE CONDENSED IN SIZE TO PERMIT DETAILING OF RAILROAD TRACKS LOCATED BETWEEN THE BUILDINGS AND THE EDGE OF THE PIERS.

32. CONTROL:

IDENTIFIED HORIZONTAL CONTROL STATIONS, SUPPLEMENTED BY THE PASS POINTS ESTABLISHED BY THE STEREOPLANIGRAPH BRIDGE PROVIDED ADEQUATE CONTROL.

33. SUPPLEMENTAL DATA:

MAPS OF LOS ANGELES COUNTY Nos. 28 AND 30, SCALE 1 INCH = 600 FEET, COMPILED BY THE COUNTY ENGINEER, NOV. 1954, AND MAY 1958.

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

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

34. CONTOURS AND DRAINAGE:

CONTOURS ARE NOT APPLICABLE.

DRAINAGE WAS COMPILED AS FIELD INSPECTED AND WAS IN AGREEMENT WITH OFFICE INSPECTION OF THE PHOTOGRAPHY AND WITH THE U.S.G.S. QUADRANGLE.

35. SHORELINE AND ALONGSHORE DETAILS:

THE MEAN HIGH-WATER LINE WAS LOCATED AND THE NUMEROUS PIERS AND CULTURAL FEATURES IDENTIFIED BY THE FIELD PARTY AND INDICATED ON THE FIELD PHOTOGRAPHY. THESE DATA WERE ADEQUATE FOR COMPILATION BY THE KELSH OPERATOR.

NO LOW-WATER LINE WAS IDENTIFIED AND NONE WAS DELINEATED.

36. OFFSHORE DETAILS:

NONE.

37. LANDMARKS AND AIDS:

SIXTEEN LANDMARKS ARE INCLUDED IN THE AREA OF THIS MAP MANUSCRIPT. SEVEN ARE TRIANGULATION INTERSECTION STATIONS. THE REMAINING NINE LANDMARKS WERE LOCATED BY THE KELSH INSTRUMENT OPERATOR DURING COMPILATION.

ELEVEN AIDS WERE IDENTIFIED BY THE FIELD UNIT AND LOCATED BY KELSH INSTRUMENT. THE 1962 LIGHT LIST INDICATES THREE ADDITIONAL AIDS INCLUDED IN THE LIMITS OF THIS MAP WHICH DO NOT APPEAR ON THE PHOTOGRAPHS AND WERE NOT IN POSITION AT THE TIME OF FIELD INSPECTIONS.

FORMS 567 ARE SUBMITTED.

38. CONTROL FOR FUTURE SURVEYS:

NONE.

39. JUNCTIONS:

SATISFACTORY JUNCTIONS WERE MADE WITH T-11642 TO THE EAST, WITH T-11647 TO THE SOUTH AND WITH T-11640 TO WEST. THERE IS NO CONTEMPORARY SURVEY TO THE NORTH.

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

NAUTICAL CHART 5142, SCALE 1:80,000 AT LAT.  $33^{\circ} 31'$   
1ST ED. MARCH 1957, REVISED NOV. 1959.

NAUTICAL CHART 5147, SCALE 1:12,000 AT LAT.  $33^{\circ} 44'$   
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.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

NONE.

ITEMS TO BE CARRIED FORWARD:

NONE.

APPROVED:

RESPECTFULLY SUBMITTED:

*Fred Natella*  
FRED NATELLA, CAPT, C&GS  
PORTLAND DISTRICT OFFICER

*James L. Harris*  
JAMES L. HARRIS  
CARTOGRAPHER

49. NOTES FOR THE HYDROGRAPHER:

NONE.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-1000 11641

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 X	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 X	14. ROCKS, SHOALS, ETC. None	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 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 J. 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>12/6/62</i>	
<i>Interior details added - Compilation complete</i>	<i>12/6/62</i>	

NONFLOATING AIDS ~~CHARTED~~ FOR CHARTS

TO BE CHARTED

STRIKE OUT TWO

PORTLAND, OREGON

21 MAY 1962

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

The positions given have been checked after listing by

J. L. HARRIS

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						
			° ' "	"	° ' "	"							
LIGHT	PIER A LIGHT	LL 11.5	33	45	118	12	N.A. 1927	KELSH INST.	10-21-60	X	X	X	5101 5142 5148
LIGHT	NAVY LANDING ENTRANCE SLIGHT	LL 118.7	33	45	118	11	"	"	"	X	X		5147 5148
LIGHT	NAVY LANDING WEST SLIGHT	LL 118.8	33	45	118	11	"	"	"	X	X		DO
LIGHT	NAVAL BASE RANGE FRONT LIGHT	LL 122	33	45	118	13	"	"	10-18-60	X	X	X	5142 5147 5148
LIGHT	NAVAL BASE RANGE REAR LIGHT	LL 123	33	45	118	14	"	"	"	X	X		DO
LIGHT	LONG BEACH CHANNEL LIGHT 10	LL 129	33	45	118	12	"	"	10-19-60	X	X		5147 5148
HORN	LONG BEACH, PIER E Fog Signal	LL 130	33	45	118	13	"	"	10-28-60	X	X		DO
DAYBEACON	LONG BEACH CHANNEL DAYBEACON 13		33	45	118	13	"	"	10-24-60	X	X		DO
LIGHT	LONG BEACH CHANNEL LIGHT 14	LL 134	33	45	118	13	"	"	10-19-60	X	X		5148
LIGHT	LONG BEACH TURNING BASIN LIGHT 15	LL 135	33	48	118	13	"	"	"	X	X		5147 5148
LIGHT	PIER B LIGHT	LL 155	33	45	118	12	"	"	10-21-60	X	X		DO
LIGHT	SOUTHWIND MARINA WEST LIGHT	LL 151.2	}							X	X		DO
LIGHT	SOUTHWIND MARINA EAST LIGHT	LL 151.3								X	X		DO

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 6-36, Fig. 79. Positions of charted landmarks and non-floating 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

## NONFLOATING AIDS OR CANNED WATERS FOR CHARTS

TO BE CHARTED  
FOR RECORDING  
FOR RECORDING

STRIKE OUT TWO

PORTLAND, OREGON 21 MAY 1962

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

The positions given have been checked after listing by J. L. Harris

FRED NATELLA	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.



U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEYPg. 1 of 32  
1641

## NOTIFICATION OF CHARTS

TO BE CHARTED  
TO BE CHANGED  
TO BE DELETED

STRIKE OUT TWO

PORTLAND, OREGON

23 MAY 1962

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

The positions given have been checked after listing by J. L. HARRIS

FRED NATELLA Chief of Party.

CALIFORNIA				POSITION						METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE *		LONGITUDE *										DATUM
				°	'	D.M. METERS	°	'	D.P. METERS							
CALIFORNIA	MAST	MAST ON SIGNAL TOWER, 1942 (GYEEL) Hy=134' (139')		33	45	12.189	118	14	21.943	N.A.	X			5147		
	STACK	STACK, 1942 (BLACK) Hy=98' (103')		33	45	375.5	118	14	584.7	1927	X			5148		
	TANK	NAVY BASE TANK, 1942 (GRAY) Hy=121' (126')		33	45	15.493	118	14	18.584	"	X			5147		
	(ELEV) TANK	WILMINGTON, FORD MOTOR CO. TANK, 1933 Hy=152' (145')		33	45	477.4	118	14	477.6	"	X			5147		
	(ELEV) TANK	LONG BEACH, PIERCE AND GUNDEL CO., WATER TANK, Hy=152' (155')		33	46	26.153	118	14	04.883	"	X			5148		
	(ELEV) TANK	LONG BEACH, STEEL TANK		33	46	805.8	118	14	125.7	"	X			5147		
	(ELEV) TOWER	RED BAND, 1920 Hy=116' (110')		33	46	08.535	118	12	17.143	"	X			5147		
	(ELEV) TOWER	LONG BEACH, BREAKERS HOTEL TOWER 1932 Hy=220' (254') (THIS IS NOW WILTON HOTEL)		33	45	25.948	118	12	48.490	"	X			5147		
	S.W. STACK	CONCRETE STACK, SOUTHWEST ONE OF FOUR Hy=247' (237')		33	45	799.5	118	12	1247.7	"	X			5148		
	TOWER	BRIDGE LIFT TOWER, NORTH ONE OF TWO Hy=215' (215')		33	45	05.194	118	12	47.645	"	X			DO		
	TOWER	BRIDGE LIFT TOWER, SOUTH ONE OF TWO Hy=217' (217')		33	45	160.0	118	12	1228.1	"	X			5147		
	GAS TANK	SHALLER OF TWO NATURAL GAS TANKS Hy=113' (114')		33	46	59.324	118	11	22.544	"	X			5148		
	GAS TANK	LARGER OF TWO NATURAL GAS TANKS Hy=173' (175')		33	46	1827.8	118	13	580.1	"	X			DO		
	NOTE:	BASES OF THESE OBJECTS ARE BELOW M.H.W.														

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-P81

# UNIQUE DESIGN CONCEPTS LANDMARKS FOR CHARTS

**PORTLAND, OREGON**

23 May 1962

The positions given have been checked after listing by J. L. Harris

**FARO NATALLA** *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.

USCOMM-DC 10234-P01

**ALL INFORMATION CONTAINED  
HEREIN IS UNCLASSIFIED  
EXCEPT WHERE SHOWN  
OTHERWISE  
DATE 05-10-2011 BY 60322 UCBAW**

STRIKE OUT TWO

## MORE ON THE XNDS FOR LANDMARKS FOR CHARTS

**PORTLAND, OREGON**

33 May 1962

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

The positions given have been checked after listing by

**J. L. Harrison**

**FRED BAYLELLA** 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

Cerritos Channel

Channel No. 2

Channel No. 3

Consolidated Slip

Dominguez Channel

East Basin

Inner Harbor

Long Beach

Los Angeles River

Middle Harbor

Palm Beach Park

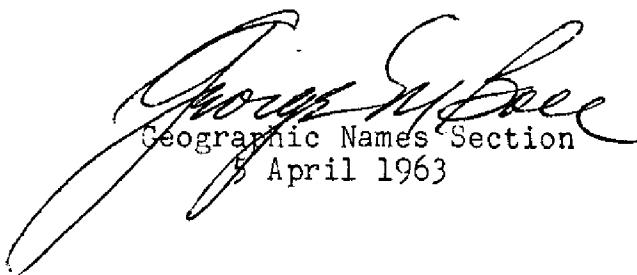
Rainbow Pier

San Pedro Bay

Terminal Island

Turning Basin

West Basin

  
Geographic Names Section  
5 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	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

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.

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:

*Charles Lerner*  
Chief, Photogrammetric Br.

*Leann G. Taylor*  
Chief, Nautical Charts Division

*J. E. Hughes 8/20/63*  
Chief, Photogrammetry Div.

*Harold S. Connelley*  
Chief, Operations Division

