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U. S. COAST & GEODETIC SURVEY  
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## DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: California

## DESCRIPTIVE REPORT

Topographic  
~~Hydrographic~~

Sheet No. "D" 4796

## LOCALITY

California Coast

Pigeon Point to Pescadero Creek

U.S.C. &amp; G.S.S. GUIDE

1932

## CHIEF OF PARTY

Fred. L. Peacock, H. &amp; G. Eng.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. PATTON, DIRECTOR.

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET FIELD LETTER "D"

CALIFORNIA COAST

NORTH OF PIGEON POINT.

U. S. C. & G. S. S. GUIDE

PROJECT NO. 101

1932

FRED. L. PEACOCK, H. & G. ENGINEER, CHIEF OF PARTY.

DESCRIPTIVE REPORT  
to accompany  
TOPOGRAPHIC SHEET FIELD No. D  
Coast of California  
U.S.C. & G.S.S. GUIDE  
1932

INSTRUCTIONS: Instructions for the topography on this sheet are dated April 4, 1932.

LIMITS: This sheet consists of a resurvey of the area adjacent to the shoreline between Latitude  $37^{\circ} 11'$  and Latitude  $37^{\circ} 17'$ .

GENERAL DESCRIPTION OF COAST: From Pigeon Point to the mouth of Pescadero Creek the shoreline consists of low bluffs broken in places by small creeks, usually dry. This section is very foul along the shore. There are numerous small rocks, rocks awash, sunken rocks and rocky ledges and reefs. Back of the shoreline the country consists of hills of fairly gentle slopes. Practically all of it is under cultivation. At Latitude  $37^{\circ} 13.4$  and Longitude  $122^{\circ} 24.0$  there is a lake used for storing water for irrigation purposes. There is a dam at the west end over which the Coast Road passes.

Immediately north of Latitude  $37^{\circ} 16'$  there is a valley about 800 meters in width. This valley is very flat and marshy for about a mile back from the shoreline. Pescadero Creek meanders along this valley and for the greater part of the year loses itself in the marsh. It is only during the rainy part of the year that it empties directly into the ocean. In the northwest part of the valley there is a small lake or pond fed by Pescadero Creek.

Northward from this valley the shoreline consists of high bluffs with a strip of sand beach below. There are no offlying rocks in this section. The hills come directly to the edge of the bluffs. All of this area which is not too steep is under cultivation, the remainder being used for pasture.

LANDMARKS: The only landmarks on this sheet are Pigeon Point Lighthouse and the Pescadero Hotel, both of which are already shown on the charts. The tank which is triangulation station TANK NEAR HOTEL is on the north end of the Pescadero Hotel.

CHARACTER OF CONTROL: Control for this survey was furnished by second order triangulation executed in 1931 by Lieutenant C. D. Meany and by third order triangulation executed in 1932 by this party in order to

give more rigid control. The stations are plotted using the North American (1927) Datum, but the final adjusted positions were not available at the time of this survey.

**SURVEY METHODS:** Only standard survey methods were used. Setup positions were all determined by traverses. Three point fixes were used as checks only. All features which were not rodded in were located by three or more cuts. Separate traverses were run in surveying the road. Sunken rocks were located by cuts to the breakers or boiling caused by them. Notes are placed adjacent to these rocks indicating that the positions are approximate. However, the positions of these rocks are probably accurate to about 10 meters. It was practically impossible to locate all of the small rocks by cuts and some of them are sketched in. All of the rocks which have the heights shown were located by cuts as were the majority of the others.

Traverse	Error in Meters	Length of
	Distance <del>Asimuth</del>	Traverse
		Stat. Miles.
△ Cat to △ Dero . . . . .	-2      1	1.3
△ Dero to △ Los . . . . .	-4      0	1.9
△ Los to, △ Tank near Hotel . .	-1      0	0.6
△ Tank near Hotel to △ Pin . .	-4      2	1.8
△ Pin to △ Pigeon Point Light-		
house. . . . .	-3      3	2.3
△ Pigeon Point Lighthouse to		
△ Road (Road traverse). . . . .	-6      2	4.1
○ △ Road to △ Gregorio (Road		
traverse). . . . .	-12      5	11.2 (Total)
	(-7)      (3)	(6.5)(This Sheet)

○ This traverse was run from △ Gregorio on Sheet C to the bottom of that sheet and the last setup marked. A traverse was then run on this sheet from △ Road and closed on the above setup transferred to this sheet. The closing error was then adjusted between the two traverses.

**COMPARISON WITH OLD WORK:** The contours, shoreline and rocks were transferred from the bromides of the old sheets covering this area. The contours were carefully checked and no changes were found necessary. A new survey was made of the shoreline and the rocks. The shoreline checked fairly well over most of the sheet. However, in many places the High Water Line is on sloping rocky ledges and in several places the two surveys do not agree as to the position of this line. In some places the High Water Line on the old sheet is farther offshore and in other places it is farther inshore than on this sheet.

However, it is probable that this does not indicate a change in the shoreline but rather a difference of opinion as to where the High Water Line is.

The rocks stretch several hundred meters off shore and the larger rocks closer in checked very well with the old work. Close inshore there are so many small rocks that the rocks transferred from the old sheets were erased as they caused a great deal of confusion. An attempt was made to check them from a tracing but they had apparently been mostly sketched in on the old sheets and the individual rocks could not be identified. However, the outer limits of the groups of rocks checked fairly well.

**JUNCTIONS:** Satisfactory junctions were made with Sheet Field Letter C on the north and Sheet Field Letter E on the south.

**GEOGRAPHIC NAMES:** No new geographic names are used on this sheet.

CHANGES IN COAST LINE: No change in the shoreline could be determined by comparison with the old work. No shoreline references were available and the amount of change due to breaking down of the bluff was probably small.

COMPARISON WITH AERIAL PHOTOGRAPHS: Aerial photographs for this area were available and were very closely examined. A large number of the features located on the topographic sheet are easily recognized on the photographs and if these photographs are to be reduced there are a sufficient number of points easily recognizable on both. The photographs were also closely compared with the topographic sheet in order to pick up any errors or omissions.

COMPARISON WITH HYDROGRAPHIC SHEET FIELD NO. 4: Hydrographic Sheet Field No. 4 was mailed in to Washington Office before the inking of the topographic sheet was completed. However, all the rocks and the shoreline had been inked in and were transferred to the hydrographic sheet. The officer in charge of the smooth plotting of the hydrographic sheet examined the two sheets but neglected to mention it in his report. It should be noted that the breakers and rocks awash shown on this sheet were used on the smooth hydrographic sheet in preference to the locations obtained by the hydrographic party as the cuts taken by the hydrographic party were not taken simultaneously with the position. The hydrographer agrees that locations obtained by the topographer should be used except in those cases where a three point fix was taken over or close to a rock.

The position of the rocks smash half a mile north of Pigeon Point agreed very well with that obtained by the hydrographer and also with the positions shown on the bromides of the old topographic sheet.

1791-1800  
 1801-1810  
 1811-1820  
 1821-1830  
 1831-1840  
 1841-1850  
 1851-1860  
 1861-1870  
 1871-1880  
 1881-1890  
 1891-1900  
 1901-1910  
 1911-1920  
 1921-1930  
 1931-1940  
 1941-1950  
 1951-1960  
 1961-1970  
 1971-1980  
 1981-1990  
 1991-2000  
 2001-2010  
 2011-2020  
 2021-2030  
 2031-2040  
 2041-2050  
 2051-2060  
 2061-2070  
 2071-2080  
 2081-2090  
 2091-2100

The positions of the rocks atash in Latitude  $37^{\circ}14.8$ , Longitude  $122^{\circ}25.3$  and the sunken rocks in Latitude  $37^{\circ}15.1$ , Longitude  $122^{\circ}25.3$  did not check very well with the cuts taken by the hydrographer. The rocks atash checked very well with those on the bromides of the old topographic sheets. The sunken rocks were not shown on the bromides.

No cut was taken by the hydrographer to the sunken rock, Latitude  $37^{\circ}15.3$ , Longitude  $122^{\circ}25.2$  or to the breakers shown off the mouth of Pescadero Creek. These were located by good cuts by the topographer.

Respectfully submitted,

*H. C. Applequist*  
H. C. Applequist,  
Aid,  
U.S.C. & G. Survey.

Respectfully forwarded,  
approved:

*Fred. L. Peacock*  
Fred. L. Peacock,  
Chief of Party, C. & G. Survey,  
Commanding Ship GUIDE.

STATISTICS  
to accompany  
TOPOGRAPHIC SHEET FIELD LETTER D

Date Field Work Began:	July 18, 1932
Date Field Work Was Completed:	August 3, 1932
Number of Days of Field Work:	11
Statute Miles of Shoreline:	9.8
Statute Miles of Road:	13.4
Area in Square Statute Miles:	7.0
Number of Recoverable Hydrographic Stations Located:	8

LIST OF TOPOGRAPHIC SIGNALS  
to accompany  
TOPOGRAPHIC SHEET FIELD LETTER D

Hydrog. Name	Object and Description:	Remarks:
Roa	9 ft. rock $\frac{1}{2}$ mile north of Pigeon Point	Top
New	West Gable Unpainted Barn	Center
Gab	West Gable Grey Barn	Center
Whi	West Gable White Barn	Center
Grey	West Gable of Grey Barn	Center
Bar	West Gable White Barn	Center
Nor	North Gable Grey House	Center
Big	West Face small House on Sand Bunker	Center

These stations are all recoverable and Form 524, Description of Hydrographic or Topographic Station, was filled out for each of them.



## REVIEW OF TOPOGRAPHIC SURVEY No. 4796

Title (Par. 56) *Pigeon Point to Pescadero Creek, Pacific Coast, California*

Chief of Party *F. L. Percock* Surveyed by *H. C. Applegquist* Inked by *H. C. A.*

Ship *Guide* Instructions dated *April 4, 1932* Surveyed in *July 1932*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) *checked contouring on T 682 and was found good. Resurvey of shoreline and off shore details only accomplished.*
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None submitted*
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) *Details outside of high water line partly sketched. see Descriptive Report.* ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
10. ~~The span, draw and clearance of bridges are shown. (Par. 16a.)~~
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DPs, 68.) *and plotting checked* ✓
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *Existing landmarks covered by Desc. Rep.*
17. The magnetic meridian was shown and declination was checked. ✓ (Par. 17, 52.)
18. The geographic datum of the sheet is *North American 1927* and the reference station is correctly noted. (Par. 34.) *seconds are shown in meters only.*
19. Junctions with contemporary surveys are adequate. ✓
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓

23. The Chief of Party inspected and approved the sheet and the descriptive report. ~~after review by~~

24. Remarks: *Contents in pencil were transferred from T653 and T682 survey of 1854.*

Reviewed in office by *R. J. Christman, Jan. 29, 1934*

Examined and approved:

*L. O. Dolbuit*  
Chief, Section of Field Records

*L. O. Dolbuit*  
Chief, Division of Charts

*J. B. Borden*  
Chief, Section of Field Work

*G. W. Hulse*  
Chief, Division of Hyd. and Top.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. "D"

REGISTER NO. 4756

State California

General locality California Coast

Locality Pigeon Point to Pescadero Creek

Scale 1:10,000 Date of survey July 1932, ~~1932~~

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party Fred L. Peacock

Surveyed by H. C. Applequist

Inked by H. C. Applequist

Heights in feet above M. H. W. to ground ~~to tops of trees~~

~~Contour~~ Approximate contour, ~~contour~~ interval 20 feet

Instructions dated April 4, 1932, ~~1932~~

Remarks: