DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: California

LOCALITY
California Coast
Pigeon Point to Pescadero Creek

U.S.C. & G.S.S. GUIDE
1932

CHIEF OF PARTY
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. & C. ENGINEER, CHIEF OF PARTY.
DESRIPTIVE 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.

LILITS: This sheet consists of a resurvey of the area adjacent
to the shoreline between Latitude 37° 11' and Latitude 37° 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 creks, usually dry. This section is very foul along the
shore. There are numerous small rocks, rocks arash, 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 cul-
tivation. At Latitude 37° 13.4' and Longitude 122° 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° 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 in 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.

<table>
<thead>
<tr>
<th>Traverse</th>
<th>Error in Meters</th>
<th>Distance in Feet</th>
<th>Length of Traverse Stat. Miles.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACat to ADaro</td>
<td>-2</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>ADaro to A Los</td>
<td>-4</td>
<td>0</td>
<td>1.9</td>
</tr>
<tr>
<td>A Los to, A Tank near Hotel</td>
<td>-1</td>
<td>0</td>
<td>0.6</td>
</tr>
<tr>
<td>A Tank near Hotel to A Pin</td>
<td>-4</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>A Pin to A Pigeon Point Lighthouse</td>
<td>-3</td>
<td>3</td>
<td>2.3</td>
</tr>
<tr>
<td>A Pigeon Point Lighthouse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Road (Road traverse)</td>
<td>-6</td>
<td>2</td>
<td>4.1</td>
</tr>
<tr>
<td>A Road to A Gregorio (Road traverse)</td>
<td>-12</td>
<td>5</td>
<td>11.2 (Total)</td>
</tr>
<tr>
<td></td>
<td>(-7)</td>
<td>(3)</td>
<td>(6.5)</td>
</tr>
</tbody>
</table>

*This traverse was run from A Gregorio on Sheet C to the bottom of that sheet and the last setup marked. A traverse was then run on this sheet from A 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 crash 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 recognised 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 crash 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 crash 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.
The positions of the rocks crash in Latitude 37°14.8, Longitude 122°25.5 and the sunken rocks in Latitude 37°15.1, Longitude 122°25.3 did not check very well with the cuts taken by the hydrographer. The rocks crash 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 15.3, Longitude 122 25.2 or to the breakers shown off the mouth of Pescadero Creek. These were located by good cuts by the topographer.

Respectfully submitted,

W. C. Appliquist
E. C. Appliquist,
Aid.

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: 
Date Field Work Was Completed: 
Number of Days of Field Work: 
Statute Miles of Shoreline: 
Statute Miles of Road: 
Area in Square Statute Miles: 
Number of Recoverable Hydrographic Stations Located: 

July 18, 1932 
August 3, 1932 
11 
9.8 
13.4 
7.0 
8
LIST OF TOPOGRAPHIC SIGNALS

to accompany
TOPOGRAPHIC SHEET FIELD LETTER D

<table>
<thead>
<tr>
<th>Hydrog.</th>
<th>Mars</th>
<th>Object and Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roa</td>
<td></td>
<td>9 ft. rock ½ mile north of Pigeon Point</td>
<td>Top</td>
</tr>
<tr>
<td>New</td>
<td></td>
<td>West Gable Unpainted Barn</td>
<td>Center</td>
</tr>
<tr>
<td>Gab</td>
<td></td>
<td>West Gable Grey Barn</td>
<td>Center</td>
</tr>
<tr>
<td>Thi</td>
<td></td>
<td>West Gable White Barn</td>
<td>Center</td>
</tr>
<tr>
<td>Grey</td>
<td></td>
<td>West Gable of Grey Barn</td>
<td>Center</td>
</tr>
<tr>
<td>Bar</td>
<td></td>
<td>West Gable White Barn</td>
<td>Center</td>
</tr>
<tr>
<td>Nar</td>
<td></td>
<td>North Gable Grey House</td>
<td>Center</td>
</tr>
<tr>
<td>Big</td>
<td></td>
<td>West Face small House on Sand Bunker</td>
<td>Center</td>
</tr>
</tbody>
</table>

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) Eel River Point to Reeds Beach, Pacific Coast, California

Chief of Party (Par. 57) Surveyed by H. K. Applegate. Inked by W. O. A.

Ship (Par. 58) 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.) Blended continuing on T 682, and was found good. Resurvey of shoreline and offshore 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, 45, 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.

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 DMs and DPs, 68.) and plotted checked.

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 69.) Existing landmarks covered by Descriptive Rep.

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is North America 1927 and the reference station is correctly noted. (Par. 34.) Seconds are shown in meter 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, 29, 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 T 653 and T 682 surveys of 1854.

Reviewed in office by R. J. Christiansen, Jan. 29, 1934

Examined and approved:

[Signatures]

Chief, Section of Field Records

Chief, Division of Charts

Chief, Section of Field Work

Chief, Division of Hyd. and Top.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 

State California

General locality California Coast

Locality Pigeon Point to Passadero Creek

Scale 1:10,000 Date of survey July 1932 

Vessel U.S.G.S. & 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. to ground

Approximate contour, interval 20 feet

Instructions dated April 4, 1932

Remarks

G P O