DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R.S. Patton, Director

State: California

DESCRIPTIVE REPORT
Topographic Hydrographic Sheet No. "C" 4793

LOCALITY
California Coast
Vicinity of San Gregorio

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 "C"

CALIFORNIA COAST

VICINITY OF SAN GREGORIO.

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. C  

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°17' and Latitude 37°24'.

GENERAL DESCRIPTION OF COAST: The coast line on this sheet consists of bluffs of varying heights and slopes. From Latitude 37°17' to Latitude 37°23.7 and from Latitude 37°22.5 to Latitude 37°22.8 there is a strip of beach below the bluffs. From Latitude 37°19.5 to Latitude 37°21.4 and from Latitude 37°22.5 to Latitude 37°22.8 the bluffs are more or less sloping and the contours are shown on the sheet. Over the remainder of the shoreline the bluffs rise nearly vertically and the High Water Line and the Low Water Line coincide with the foot of the bluffs.

From the north end of the sheet to Latitude 37°21.7 there is a tableland or bench sloping back to the hills. South of Latitude 37°21.7 the hills come directly to the edge of the bluffs. All of the area back of the shoreline which is not too steep is under cultivation. The remainder is used for pasture.

Several creeks cut their way through the hills and form wide breaks in the bluffs. These creeks are dry during the greater part of the year and the sand brought in by the surf creates a bar at their mouths which they cross in different places each year.

LANDMARKS: There are no objects on this sheet prominent enough to be shown as landmarks on the chart.

CHARACTER OF CONTROL: Control for this survey was furnished by second order triangulation executed in 1931 by Lieutenant C. D. Heaney 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 traverse. Three point fixes were used as checks only. All features which were not rodded in were located by three or more cuts. Separate traverse was run in surveying the road. Very few of the sunken rocks were visible and they were located by cuts to the breakers or boiling caused by them. Notes are placed on the sheet adjacent to these rocks indicating that the positions are approximate. However, the positions of these rocks are probably accurate to about 10 meters.

CLOSING ERRORS OF TRAVERSES AND METHOD OF ADJUSTMENT: All traverses closed well within the allowable error of four meters per mile and they were adjusted by distributing the error proportionately over the traverse.

<table>
<thead>
<tr>
<th>Traverse</th>
<th>Error in Meters</th>
<th>Length of Distance</th>
<th>Azimuth</th>
<th>Length of Traverse</th>
<th>Stat. Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>△Lex 2 to △Stack on House, one mile south of Lex. 0.0.0.0 -2</td>
<td>0</td>
<td>1.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△Stack on House, one mile south of Lex to △Island 0.0.0.0 -3</td>
<td>0</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△Island to △Gregorio 0.0.0.0.0 -4</td>
<td>2</td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△Gregorio to △San 0.0.0.0.0 -3</td>
<td>1</td>
<td>2.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△San to △Cat 0.0.0 -2</td>
<td>4</td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△Lex 2 to △Gregorio (Road traverses), 0.0.0.0.0.0 -7</td>
<td>4</td>
<td>6.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△Gregorio to △Road (Road traverses), 0.0.0.0.0.0 .3</td>
<td>5</td>
<td>11.2 (Total)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(- 5)</td>
<td>(2)</td>
<td></td>
<td>(6.7) (This Sheet)</td>
<td></td>
</tr>
</tbody>
</table>

This traverse was run from △Gregorio on this sheet to the bottom of the sheet and the last setup marked. A traverse was then run on Sheet D, north from △Road and closed on the setup from Sheet C transferred to Sheet D. 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 checked carefully and very little change was found necessary.

This change was all in the area along the shoreline between latitude 37°19'5 and 37°21'5. A railroad was built along the side of the bluff in this area, but the bluff receded and carried away the roadbed so the railroad was abandoned. The area affected by the grading for the railroad and by the cavein of the bluff was the only place in which it was necessary to recontour. The new work was carried back sufficiently to make a good connection with the old work.

The rocks on this sheet checked fairly well with the old work. Some of the smaller rocks were slightly out of position but the
greater part of the work checked well.

JUNCTIONS: Satisfactory junctions were made with Sheet Field Letter B on the north and Sheet Field Letter D on the south.

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

CHANGES IN COAST LINE: From the south end of the sheet to Latitude 37°22.6 there has been practically no change in the shoreline except in the area discussed in the section under COMPARISON WITH OLD WORK. Here practically the only change was in the slope of the bluff. The High Water Line was not affected.

From Latitude 37°22.6 to the north end of the sheet there appears to have been a small recession of the shoreline due to the breaking down of the bluff. No shoreline references were available and from a close comparison of the bluffs of the old sheet and this sheet it appeared probable that in no place had the recession amounted to more than fifteen meters.

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. 5: The sunken rocks and rocks much located on this sheet were all too close inshore for the hydrographer to make an attempt to locate or verify them.

INCOMPLETE WORK: The Maclay Radio Company has constructed a radio station at Latitude 37°25.1 and Longitude 122°26.5 since the work on this sheet was completed. However, it is not thought that this is important enough to warrant any additional work in this area.

The remainder of the work on this sheet is complete and requires no further examination.

Respectfully submitted,

[Signature]
U.S. Coast and Geodetic Survey

Respectfully forwarded, approved:

[Signature]
Fred. L. Peacock
Chief of Party, U.S. & G. Survey
Commanding Ship 'GUIDE'
STATISTICS
to accompany
TOPOGRAPHIC SHEET FIELD LETTER C

DATE FIELD WORK BEGAN: May 24, 1932
DATE FIELD WORK WAS COMPLETED: June 27, 1932
NUMBER OF DAYS OF FIELD WORK: 18
STATUTE MILES OF SHORELINE: 9.8
STATUTE MILES OF ROADS: 13.1
AREA IN SQUARE STATUTE MILES: 7.0
NUMBER OF RECOVERABLE HYDROGRAPHIC STATIONS LOCATED: 6

LIST OF TOPOGRAPHIC SIGNALS
to accompany
TOPOGRAPHIC SHEET FIELD LETTER C

<table>
<thead>
<tr>
<th>Hydrog.</th>
<th>Object and Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARN</td>
<td>West Gable of Whitewashed Barn</td>
<td>Center</td>
</tr>
<tr>
<td>IRON</td>
<td>Northwest Gable Sheetiron warehouse</td>
<td>Center</td>
</tr>
<tr>
<td>SLANT?</td>
<td>Standard Hydrographic Station Disc</td>
<td></td>
</tr>
<tr>
<td>JAP</td>
<td>Standard Hydrographic Station Disc</td>
<td></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.
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. C

REGISTER NO. 475

State California

General locality California Coast

Locality Vicinity of San Gregorio

Scale 1:10,000 Date of survey June 1932 192

Vessel U.S.C.G.S. GULD

Chief of Party Fred L. Pocock

Surveyed by H.C. Apploquist

Inked by H.C. Apploquist

Heights in feet above M.L. to ground 10 feet

Contour approximate every 10 feet

Instructions dated April 4, 1932 192

Remarks

_____________________________
REVIEW OF TOPOGRAPHIC SURVEY No. 4793

Title (Par. 56) Vicinity of San Gregorio, California

Chief of Party F. S. Bacon Surveyed by W. C. Appleyard Inked by A. C. Appleyard

Ship Guadalupe Instructions dated April 14, 1932 Surveyed in June 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.) Contours in pencil from T-682(854) and 1009(1854) considered satisfactory, changes are shown in red on T-4793

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.) Exception: Notations for rocks were given as "Bare 3' Low" instead of "Bare 3' Low Water". A.L.S.

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) Except a few bare rocks on T-1009 close inshore and one bare rock about 800 meters offshore inasmuch as no notation was made by the topographer regarding those rocks they have been carried forward to the new survey in red as rocks awash. A.L.S.

10. The span, draw, and clearance of bridges are shown. (Par. 16c.)

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. 54, 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 scaling checked.

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) No landmarks, see Des. 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.) Field computation.

19. Junctions with contemporary surveys are adequate. The sketch with T 4786 shows the H.W. line outside the bluff line. The front of the bluff line is in agreement on the two sheets. T-4706 should be given.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66a.)

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: The shoreline and features outside the high water line with the indicated additions from previous surveys should supersede all previous surveys for charting purposes. A.A. Shalow'ta.

Reviewed in office by P. C. Chisholm May 2, 1934
Exhausted by A. F. Edmiston

Examined and approved:

K. T. Adams  T. S. Brown
Chief, Section of Field Records  Chief, Section of Field Work

L. G. Pollock  J. E. Conley
Chief, Division of Charts  Chief, Division of Hyd. and Top.