

4879

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. **E 4879**

State California

LOCALITY

California Coast

White Rock No. 2 to Plaskett Rock

1934

CHIEF OF PARTY

F.H. Hardy

U. S. GOVERNMENT PRINTING OFFICE: 1934

4879

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

FEB 9 1935

REG. NO.

Acc. 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. E

REGISTER NO. **4879**

State California

General locality California Coast

Locality White Rock No. 2 to Plaskett Rock
Plaskett Rock to White Rock No. 2

Scale 1:10000 Date of survey Aug. to Sept., 1934

Vessel U.S.C. & G.S.S. Guide

Chief of Party F.H. Hardy

Surveyed by Chester J. Beyma

Inked by Chester J. Beyma

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

Contour, Approximate contour, Form line interval 100 feet

Instructions dated April 4, 1932; May 31, 1934, 19

Remarks: _____

1

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC FIELD SHEET NUMBER "E"

STR. GUIDE

F.H.HARDY COMMANDING

INSTRUCTIONS DATED APRIL 4, 1932 : MAY 31, 1934

GENERAL DESCRIPTION

The country surveyed on this sheet is mountainous, with a high ridge running in a northwest and southeast direction. The coast is intersected by deep intervening valleys, deep gulches and rocky canyons. From seaward, a rocky and shale precipitous bluff rises abruptly from 50 feet to as high as 500 feet along the coast. From the beach, the steep bluffs obstruct all vision of any inland features or objects. The coast highway, a hard surfaced new road, parallels the coast and lies a short distance from the bluff.

The entire beach is fringed with boulders. Foul ground and extensive fields of heavy kelp lie adjacent to the shoreline. The inshore area is covered with numerous detached rocks, causing the sea to be generally breaking over the entire inshore area even in the calmest of weather.

A white rock, named White Rock No. 2, in Lat. 35 49.8'; Long. 121 23.5' is 64 feet high and lies 253 meters offshore about one mile southward from the mouth of Villa Creek. Inshore about 70 meters in a southeasterly direction from White Rock No. 2 there are two rocks awash.

About $1\frac{1}{4}$ miles south of Cape San Martin and about 700 meters offshore, Lat. 35 52.3'; Long. 121 27.3', there is a rock awash which bares 5 feet at MLLW. It is known as Whaleboat Rock. About $\frac{1}{4}$ mile north of Whaleboat Rock, Lat. 35 52.6'; Long. 121 27.2', and 450 meters offshore there is a rock which bares 5 feet, known as Bird Rock.

At Cape San Martin there are three large rocks and one small inconspicuous rock. The outer one of the three large rocks is 44 feet high, and $\frac{1}{2}$ mile offshore. The middle one of the three large rocks is 33 feet high and lies about 500 meters offshore. The inner of the three large rocks, being the highest of all three is 170 feet high and lies 170 meters offshore. The small inconspicuous rock, which bares 7 feet at high water lies 325 meters offshore.

SURVEY METHODS

The topography on this sheet was executed from shore. The party consisted of one officer and three men, using U.S.C. & G.S. truck No. 213. The party used Cambria, California as a base.

Control for the topography on this sheet consisted of triangulation stations on the 1932 scheme, executed by Lieutenant Charles Pierce, plotted on the North American ¹⁹²² Adjusted Datum.

The triangulation scheme covering the area includes a series of mountain stations; Round, Winnie, San Martin Top, and Helam 2, which are invisible from the beach on account of the steep bluffs. The triangulation stations visible along the beach are; Plaskett Rock, Outer Rock Cape San Martin, Middle Rock Cape San Martin, Inner Rock Cape San Martin, Spruce, and White Rock No. 2.

Distortion in this sheet was measured in the field daily and adjustments for distortion applied during the course of the traverses. The Maximum and minimum distortion measured were 4 and 2 meters per mile respectively in latitude, and 1 and 0 meters per mile respectively in longitude.

In order to establish a plane table position on the northern end of the sheet a three point fix was taken on the bluff line above topographic signal Pad, Lat. 35 54.3', using triangulation stations Winnie, Plaskett Rock and Outer for control. This resulted in a strong fix to establish a starting point for a traverse. A traverse was carried northward from here along the bluff line to topographic signal Kid, Lat. 35 55.3', joining topography on field sheet D, the closing error being negligible, amounting to 2 meters. All water features were located by three or more cuts. The mean high water line, topographic signals, bluff line, and road were located by stadia. Every setup was checked by a resection cut whenever a triangulation station was visible. Because of the precipitous bluffs from Plaskett Rock south to signal Sin, Lat. 35 54.0', the high water line was against the bluff, which made it impossible to work along the beach.

The area southward from topographic signal Pad to triangulation signal Spruce was located by traverse. This traverse was run in two sections, namely; from topographic signal Pad south to topographic signal Cape, and from triangulation station Spruce northward to topographic signal Cape. Signal Cape is the position of the light on Cape San Martin.

The starting point of the above traverse was reoccupied and a traverse carried southward to topographic signal Cape at Cape San Martin. This traverse was partly executed on the beach from signal Sin, Lat. 35 54.0', to signal We, Lat. 35 53.4', then carried to the bluff line to signal Cape, Lat. 35 53.3'. Before descending to the

beach at signal Sin, an independent traverse was run along the bluff rodding in the road and bluff line to signal Cape, checking the previous location of signal Cape.

Triangulation Spruce was next occupied and a traverse carried along the beach to signal Fox, Lat, 35 52.3'. Because of the precipitous bluff northward to Cape San Martin it was impossible to carry the traverse along the beach, so the line of traverse was carried to the bluff line to signal Cape. A closing error of 7 meters resulted within a traversed distance of 3.5 miles. The error was within the allowable limits and was adjusted. Reoccupying the turning point at signal Fox, traverse was carried along the bluff south to triangulation station Spruce, rodding in the road and bluff line. The traverse closed by 2 meters over a distance of $1\frac{1}{2}$ miles.

Triangulation station Spruce was again occupied and a traverse carried southward along a rocky beach to triangulation station White Rock No. 2 terminating with a resection cut on White Rock No. 2. The traverse error was 6 meters short in distance. This turning point was tied in from a traverse northward to White Rock No. 2 on topographic field sheet No. F. The error in joining was 8 meters short in distance, checking the azimuth of the previous turning point. Since the two traverses checked in azimuth they were adjusted independently. The traverse from triangulation station Spruce to abeam of White Rock No. 2 was adjusted for 6 meters, while the traverse from triangulation station Evans to abeam of White Rock No. 2 on field sheet No. F, 1934 was adjusted for 2 meters.

The bluff line and road were rodded in from an independent traverse along the bluff from triangulation station Spruce to White Rock No. 2. The traverse was also ended on a turning point, checking its position by a resection cut on White Rock No. 2, and found to be 4 meters short in distance. Similarly this turning point was tied in from a traverse along the bluff northward to White Rock No. 2 on topographic field sheet No. F. The error in joining was 6 meters short in distance, checking the azimuth of the previous turning point. Since these two traverses checked in azimuth they were adjusted independently. The traverse from triangulation stations Spruce to abeam of White Rock No. 2 was adjusted for 4 meters, while the traverse from triangulation stations Evans to abeam of White Rock No. 2 on field sheet No. F, 1934 was adjusted for 2 meters.

All offlying features, such as bare rocks and rocks awash were located by three or more cuts. Elevations on mountain peaks and along the road and bluff were taken at various intervals as shown on the sheet. The elevations checked closely except the contours along the highway which were revised to conform with existing changes.

Before field work was started, the shoreline, rocks and contours were transferred to this sheet from sheets T 1901 and T 1896. Every

4

discrepancy in shoreline, offlying rocks, and contours, between the old survey and this survey have been checked and this sheet represents existing conditions of the area covered by this sheet.

COMPARISONS WITH PREVIOUS SURVEYS

All comparisons are based upon surveys from Sheets T 1901 and T 1896.

Changes in shoreline:

In general the shoreline of this survey checked with the previous survey. The following exceptions are noted.

Abeam of White Rock No. 2 to about 400 meters north of Redwood Gulch the shoreline of this survey extends inland about 150 meters.

From Villa Creek southward for 700 meters the shoreline of this survey extends offshore about 100 meters.

From Alder Creek northward to signal Ill, Lat. 35 52.0', a distance of 1 1/8 miles, the shoreline of this survey extends offshore to about 180 meters. Before undertaking field work on this sheet, it was thought triangulation station Spruce 1932 (which is within this area) had moved or an error made in its location. Triangulation station Spruce 1932 was relocated by occupying Soda 2 1932, Ragged Point 1873-R 1932, and Spruce 1932, observing two sets of 6D and 6R. The position of Spruce, when computed, was found to be the same as in 1932.

At topographic signal Go, Lat. 35 52.2', northward for 300 meters, the shoreline extends inland for 80 meters.

Northward from signal Sin, Lat. 35 54.0', to signal Ox, Lat. 35 54.6', a distance of $\frac{1}{2}$ mile, the shoreline of this survey extends offshore about 60 meters.

Changes in Water Features:

The location of the inshore rocks shown on sheet T 1901, from Redwood Gulch south to White Rock No. 2, are in error. The existing rocks in this locality are shown on this sheet.

Sheet T 1901 shows a cluster of bare rocks about 115 meters northwest of topographic signal Dub, Lat. 35 50.6'. The outermost rock in this cluster does not exist.

The rock which bares 32 feet, south of Alder Creek, is 40 meters north from the location shown on Sheet T 1901. The photostat also shows two bare rocks adjacent to, and inshore from the 32 foot rock, which were erroneously located. They are closer inshore than shown on previous Survey.

5

The bare rock southwest of topographic signal, Lat. 35 52.0', is 35 meters northeast of the location shown by previous surveys.

Sheet T 1896 shows a bare rock 195 meters northwest of signal Fox, Lat. 35 52.3'. This rock is not a bare rock, but is a rock awash. It is not shown on this sheet, but was located by the hydrographic party on field sheet No. 5, 1934.

Sheet T 1896 shows three bare rocks 440 meters northwest of signal Fox, Lat. 35 52.3'. These rocks do not exist.

Two inshore rocks at signal We, Lat. 35 53.4', are 55 meters north of the location shown on sheet T 1896.

Sheet T 1896, in Lat. 35 53' 1420 meters, Long. 121 27' 1373 meters, about 1/3 mile north from Cape San Martin, shows a bare rock. This rock does not bare at all stages of the tide and therefore should be shown as such. This rock lies 30 meters north of the location shown on the photostat.

4

The bare rock in Lat. 35 53' 495 meters, Long. 121 27' 1452 meters, lies 28 meters north of the location shown on sheet T 1896.

The two bare rocks shown on sheet T 1896, about 145 meters south-east of signal Nun, Lat. 35 54.7', do not exist.

REMARKS

Tracings used in transferring sheets T 1896 and T 1901 onto this sheet are attached to the sheet in order that the discrepancies, in comparison with previous surveys, may be noted.

STATISTICS

Statute miles of shoreline.....	9.8
Statute miles of road.....	9.0
Area in square statute miles.....	4.0

Respectfully submitted,

Chester J. Beyma
Chester J. Beyma, Ad
U.S.C. & G. Survey

Approved and forwarded,

F.H. Hardy
F.H. Hardy, H. & G. E.
Chief of Party, C. & G. Survey
Commanding Ship Guide.

APPROVAL NOTE OF CHIEF OF PARTY

The completed topographic sheet, field letter
" E ", has been inspected, and is approved.

F.H.Hardy
F.H.Hardy, H. & G.E.
Chief of Party, C. & G. Survey
Commanding Ship Guide

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Oakland, California

February 2, 1935....., 19

SUPERINTENDENT, U. S. COAST AND GEODETIC SURVEY:

● The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted: *Island*

F.H.Hardy

Commanding Steamer Guide *Chief of Party.*

[illegible]

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

To: H.M. Strong
From: C.F.M.

Survey No. T 4879

Date. Feb. 16, 1935 GEOGRAPHIC NAMES
CALIFORNIA

Chart No. 5302

Diagram No. 5302-2

Approved by the Division of Geographic Names, Department of Interior. ✕

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q. *Names underlined in red approved Mar 26, 1935*

Harlow Bacon

[illegible]

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4879 (1934) FIELD LETTER "E"

White Rock No. 2 to Plaskett Rock, California

Surveyed August to September 1934

Instructions dated April 4, 1932, May 31, 1934 (GUIDE)

Plane Table Survey.

Cloth Mounted.

Chief of Party - F. H. Hardy.

Surveyed and Inked by - C. J. Beyma.

1. Condition of Records.

The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance.

The records conform to the requirements of the Topographic Manual with the following exceptions:

- a. Scaled one-half meter distances were not laid off along the edges of the sheet for distortion measurement. (See D. R. page 2 par. 4).

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junction with Contemporary Surveys.

Satisfactory junctions were made with T-4878 (1934) on the north and with T-4890 (1934) on the south.

4. Comparison with Prior Surveys.

- a. T-1896 (1888).

This survey is in fair agreement with the present survey except for occasional stretches (see D. R. page 4) where it appears that the high water line was sketched from bluff tops at the time of the old survey. The old contours were transferred to the present survey and differences found are corrected in red. The agreement in offlying rocks is poor. There is a good discussion of differences in the Descriptive Report and the present survey is considered correct, except that a rock awash in latitude $35^{\circ} 53.23'$, longitude $121^{\circ} 27.79'$ and a rock awash in latitude $35^{\circ} 52.34'$, longitude $121^{\circ} 26.82'$, are carried forward to the present survey. Sunken rocks extending off Cape San Martin are not carried forward because they were disposed of on H-5651 (1934) by carrying forward sunken rocks from H-2076 (1890-91).

b. T-1901 (1888).

This survey agrees with the present survey in some sections but in others the old survey was found to be in error as much as 180 meters. These differences which are fully discussed in the Descriptive Report, are inconsistent. In some cases the old shoreline was shown too far out and in others the high water line was shown too far inshore. The rocks on the old survey seemed to have been located more or less approximately. For that reason no rocks are carried forward. Although ordinarily a sunken rock in latitude $35^{\circ} 51.4'$, longitude $121^{\circ} 25.0'$, and a rock awash in latitude $35^{\circ} 50.07'$ longitude $121^{\circ} 23.93'$, would have been carried forward, the location of new rocks in the immediate vicinities on the hydrographic survey, H-5642 (1934) is considered sufficient evidence that the old rocks were not overlooked but were erroneously located.

5. Field Drafting.

The inking by the field party is satisfactory.

6. Additional Field Work Recommended.

No additional field work is required.

7. Superseding Old Surveys.

Insofar as the topography actually included on the present survey is concerned, it supersedes the following surveys for charting purposes:

T-1896 (1888) in part
T-1901 (1888) " "

8. Reviewed by - A. F. Jankowski, August 16, 1935.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

K. T. Adams
Acting Chief, Division of Charts.

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

G. H. Hilde
Chief, Division of H. & T.

applied to drawing of Chart 5302 - Feb. 18, 1936 - J.F.W.