

4890

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Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE	
U.S. COAST AND GEODETIC SURVEY	
R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. F 4890
State California	
LOCALITY	
California Coast	
Ragged Point to White Rock No. 2	
1934	
CHIEF OF PARTY	
F.H. Hardy	

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY  
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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. F

REGISTER NO. 4890

State.....California

General locality California Coast

General locality California coast  
Ragged Point to White Rock No 2  
 Locality ~~White Rock No. 2 to Ragged Point~~

Scale 1:10000 Date of survey Sept. 1 to 15 1934

Vessel..... U.S.C. &amp; 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, ~~Base line~~ interval 100 feet

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

Remarks: \_\_\_\_\_

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC FIELD SHEET NUMBER " F ".

Str. GUIDE

F.H.HARDY, COMMANDING

INSTRUCTIONS DATED APRIL 4, 1932; MAY 31, 1934.

GENERAL DESCRIPTION

The country surveyed on this sheet is mountainous and the coast is very bold and rugged. The shale and rocky bluffs rise abruptly from the beach to a height of 100 to 500 feet; and the land rises sharply to high elevations. The coast is intersected by deep valleys, deep gulches, and rocky canyons. From the beach, the steep bluffs obstruct all vision of any inland feature or object. The coast highway, a hard surfaced road, parallels the coast.

The entire beach, except for the portion of sandy beach just north of Ragged Point, is fringed with large 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 conspicuous white rock, named White Rock No. 1, is 39 feet high and lies 1/2 mile offshore and about 3/4 mile in a westerly direction from Salmon Creek. Just south of this rock there are two small rocks which bare 5 and 6 feet in height respectively. In a westerly direction, about 190 meters from White Rock No. 1, there is a rock which is awash at MLLW.

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. Cambria, California was used as a base by the field party.

Control for the topography consisted of triangulation stations on the 1932 scheme, which was executed by Lieutenant Charles Pierce, and plotted on the North American 1927 Adjusted Datum.

The triangulation scheme covering the area of this sheet includes a series of mountain stations: Helam 2, Soda 2, Salmon Top 2, Bald Top 2, which are not visible from the beach; the steep bluffs obscuring them. The triangulation stations along the beach were; White Rock No. 2, Evans, White Rock No. 1, County, Luis, Ragged Point, and Sharp Rock Off Ragged Point.

Distortion in this sheet was measured in the field daily, and adjustments for distortion <sup>were</sup> applied during the course of the traverses. The maximum and minimum distortion measured was 4 and 2 meters, respectively, per mile, in Latitude, and 1 and 0 meters, respectively, in Longitude.

In order to establish a plane table position on the beach on the northern end of the sheet, triangulation station Evans, Lat.  $35^{\circ}49.6'$ , was occupied, and a traverse carried to the beach; establishing a turning point at signal Go, Lat.  $35^{\circ}49.6'$ . A traverse was carried northward from here to abeam of White Rock No. 2, joining the traverse on field sheet E 1934 ( See Descriptive Report Field Sheet E 1934). The error was two meters-short in distance- and was determined by the resection cut on White Rock No. 2. This traverse was adjusted.

Reoccupying the setup at signal Go, Lat.  $35^{\circ}49.6'$ , a traverse was carried southward to signal My, Lat.  $35^{\circ}48.7'$ . For the first time along this traverse, three triangulation stations were visible, whereby a strong fix could be obtained. At signal My, the traverse was checked by a three point fix, using triangulation stations Evans, White Rock No. 1, and County for control. The traverse error from signals Go to My was within the allowable error, being 3 meters, and was adjusted.

Using the new position established by the three point fix, the traverse was carried southward to triangulation station County, Lat.  $35^{\circ}47.8'$ ,. This traverse was carried on the beach from signal My, Lat.  $35^{\circ}48.7'$ , to signal Ran, Lat.  $35^{\circ}48.4'$ , and then carried to the bluff line to triangulation station County. A closing error of 4 meters resulted within a traversed distance of 1 1/2 miles. The traverse was adjusted. Because of the precipitous bluffs from signal Ran southward to triangulation station County, the high water line was against the bluff, so it was impossible to work along the beach. All water features were located by three or more cuts. The mean high water line, and topographic signals were located by stadia. Every setup along the traverse was checked by a resection cut when a triangulation station was visible.

From triangulation stations County to White Rock No. 2, occupying triangulation station County, a traverse was carried northward along the bluff line, locating the bluff line and road by stadia, to a point abeam of White Rock No. 1, just above signal Nix, Lat.  $35^{\circ}48.7'$ . The traverse was checked by a three point fix using triangulation stations County, White Rock No. 1, and Evans for control. The error in the traverse was 2 meters in a distance of 1 1/2 miles. No adjustment was required.

Continuing from this established position, the traverse was carried along the road to triangulation station Evans. Over the traversed distance of 1 1/2 miles the traverse closed with an error of 3 meters, with no adjustment being required.

From triangulation station Evans, the traverse was carried northward along the road to abeam of White Rock No. 2, where it joined the traverse on field sheet E 1934 ( See Descriptive Report on Field Sheet E 1934 ). The error was 2 meters - short in distance - and was determined by the resection cut on White Rock No. 2. An adjustment was made.

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4890 (1934) FIELD LETTER "F"

Ragged Point to White Rock No. 2, California

Surveyed 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 in every respect.

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junction with Contemporary Surveys.

Satisfactory junctions were made with T-4879 (1934) on the north and with T-4891 (1934) on the south.

4. Comparison with Prior Surveys.

a. T-1829 (1887)

A comparison of this survey with the present survey shows differences to be as represented in the Descriptive Report. Although there is fair agreement in the shoreline in some sections, the old shoreline was found to be in error in several places. The fact that the top of the bluff line is in agreement throughout, indicates that the old survey was made along the bluff tops with considerable sketching of high water line and of the offlying rocks. The present survey is considered correct except that three sunken rocks in latitude  $35^{\circ} 46.8'$ , longitude  $121^{\circ} 20.0'$ , which lie outside of dangers shown on the new survey and which are not disproved by the new hydrography, are carried forward in red. These rocks were also carried forward on H-5642 (1934) in red. There is a sunken rock on the old survey in latitude  $35^{\circ} 47.7'$  longitude  $121^{\circ} 21.0'$ , which is not carried forward because the present hydrographic survey shows a sunken rock about 80 m. southwest of the old position.

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-1829 (1887) in part

8. Reviewed by - A. F. Jankowski, August 20, 1935.

Examined and approved:

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

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

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

*G. H. de*  
Chief, Division of H. & T.

*Applied to drawing of Chart 5302 - Feb. 19, 1936 - J.F.W.*

Triangulation station County was reoccupied and a traverse carried southward along the bluff to triangulation station Luis. Because of the precipitous bluff along this stretch of shoreline, it was impossible to work along the <sup>beach</sup> shoreline. The traverse error was 1 meter. All water features along this shoreline were located by three or more cuts. The mean high water line, topographic signals, bluff line, and road were located with rod readings.

Triangulation station Ragged Point was occupied and a traverse carried northward along the beach to abeam of triangulation station Large White Rock Off Luis, thence to the top of the bluff, closing the traverse on station Luis. A closing error of 3 meters resulted over a traversed distance of 1 1/2 miles. The traverse was adjusted.

An independent traverse was run southward from station Luis along the bluff, rodding in the bluff line and road; closing the traverse on station Ragged Point. The traverse error was 2 meters.

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

Before field work was started ~~on this sheet~~, the shoreline, rocks, and contours were transferred to this sheet from sheet T 1829. Every discrepancy in shoreline, offlying rocks, and contours, between this survey and the old survey have been checked, and this sheet represents existing conditions of the area.

#### COMPARISON WITH PREVIOUS SURVEYS

All comparisons are based on the survey on Sheet T 1829

#### Changes in Shoreline:

In general the shoreline of this survey checked the previous survey. The exceptions were in the following named places.

From abeam of White Rock No. 2 to about 1320 meters southward, to signal Ill, <sup>Lat 35° 41.3</sup> the shoreline of this survey extends inland about 125 meters.

From Salmon Creek southward for about 1020 meters to signal Sun, <sup>Lat 35° 48.2</sup> the shoreline of this survey extends offshore for about 100 meters.

From signal At, <sup>Lat 35° 47.7</sup> for about one mile south the shoreline of this survey extends offshore for about 90 meters.

The bluff line in most cases, when compared with the previous survey, checks very satisfactorily.

### Changes in Water Features:

Southeast for 1/3 of a mile from White Rock No. 2, and 60 meters from the beach, photostat T 1829 shows a large inshore bare rock 22 feet high. This rock is 130 meters in a southeasterly direction from the photostat position and is about 40 meters from the beach.

Signal Hat, Lat.  $35^{\circ}49.4'$ , is the correct position of the rock shown on sheet T 1829 40 meters south of this location.

Sheet T 1829 shows two rocks awash 248 meters and 460 meters due south from topographic signal Hat, Lat.  $35^{\circ}49.4'$ . This survey shows these rocks 70 and 88 meters inshore from the photostat positions.

Sheet T 1829 shows a cluster of three bare rocks and one sunken rock 237 meters southeast of signal My, Lat.  $35^{\circ}48.7'$ . There is only one rock baring, 7 feet at mean high water, 195 meters south of signal My.

Sheet T 1829 shows a rock awash 180 meters in a westerly direction, from White Rock No. 1. This survey shows that rock to be awash at MLLW 25 meters in a southwesterly direction <sup>from</sup> the above position.

The previous survey shows a bare rock 15 feet high, 43 meters northwest of signal Use, Lat.  $35^{\circ}47.9'$ . Signal Use is the correct position of this rock.

Sheet T 1829 shows a cluster of bare rocks 125 meters in a westerly direction from signal Use, Lat.  $35^{\circ}47.9'$ . There is only one large rock, as shown on this sheet.

Note: The above mentioned rocks located by this survey were located by three well defined cuts intersecting in one common point.

The large White Rock Off Luis, located by triangulation, is shown on sheet T 1829 as being 45 meters to the south of its proper location.

### REMARKS

Tracings used in transferring sheet T 1829 to this sheet are attached ~~to the sheet~~ in order that the discrepancies may be noted.

### STATISTICS

Statute miles of shoreline.....	8.0
Statute miles of road.....	8.8
Area in square statute miles.....	3.0

Approved and forwarded,

Respectfully submitted,

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

*Chester J. Beyma*  
 Chester J. Beyma, Aid  
 U.S.C. & G. Survey



APPROVAL NOTE OF CHIEF OF PARTY

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

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



