

4850

July 18, 1934

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. K

4850

LOCALITY

San Simeon to Pt. Piedras Blancas

Pacific Coast

1934

CHIEF OF PARTY

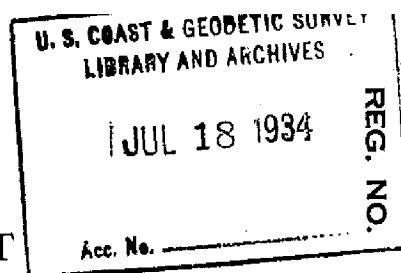
Fred L. Pescock.

U. S. GOVERNMENT PRINTING OFFICE: 1929

4850

applied to drawing of Chart 5302 - Feb 24, 1936 - J.F.W.

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. K

REGISTER NO. 4850

State California

General locality Pacific Coast

Locality San Simon to Point Piedras Blancas

Scale 1:10,000 Date of survey Jan. 8 to Feb. 14, 1934

Vessel GUIDE

Chief of Party Fred. L. Peacock

Surveyed by E. H. Sheridan

Inked by E. H. Sheridan

Heights in feet above M H W to ground ~~xxxxxxxxxxxx~~

~~xxxxxx~~ Approximate contour, ~~xxxxxx~~ interval 20 feet

Instructions dated April 4, 1932 and March 27, 1933

Remarks: _____

DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET FIELD NO. K
Coast of California
U.S.C. & G.S.S. GUIDE
1934

AUTHORITY: This sheet was executed in accordance with the Director's instructions dated April 4, 1932 and March 27, 1933.

LIMITS: This sheet consists of a complete re-survey of the topography of the shore line from Triangulation Station Padre, Latitude $35^{\circ} 38.1$, Longitude $121^{\circ} 09.8$ to Piedras Blancas Lighthouse, Latitude $35^{\circ} 39.9$, Longitude $121^{\circ} 17.0$.

ORGANIZATION OF PARTY: The topographic party consisted of one officer and three men. While the work was executed the party lived at Cambria, California. United States Coast and Geodetic Survey Truck No. 212 was used for transportation.

GENERAL DESCRIPTION OF COAST: From Triangulation Station Padre, Latitude $35^{\circ} 38.1$, Longitude $121^{\circ} 09.8$ to San Simeon the shore line consists of steep bluffs about 30 to 40 feet high with a strip of sand beach below. This section is very foul along the shore. There are numerous small rocks, rocks awash, sunken rocks and rocky ledges. Immediately southeast of San Simeon the sand beach widens, the bluffs diminish in height to less than 20 feet and the foul area disappears. Immediately west of San Simeon the bluffs rise gradually to over eighty feet and then break sharply to the south with no beach below. The steep cliff extends entirely around San Simeon Point and continue along the open coast to the northwest. Immediately south of San Simeon Point there are a number of sunken rocks and rocks awash. To the northwest the steep bluffs gradually diminish in height and sunken reefs which bare at M L L W extend offshore in many places.

From Latitude $35^{\circ} 38.7$, Longitude $121^{\circ} 12.6$ to Latitude $35^{\circ} 39.2$, Longitude $121^{\circ} 13.3$ a wide sandy beach extends along the coast with a rocky ledge and foul area at Longitude $121^{\circ} 13.2$. From this point to the northeast end of the sheet at Piedras Blancas Lighthouse the entire coast is very foul. The shore line consists of low bluffs from 15 to 35 feet high with rocky ledges, reefs and narrow sandy and gravel beaches below. Scattered boulders and rocks are very numerous on the beaches and the sunken reefs and rocky ledges which bare at M L L W extend as far as 150 and 200 meters offshore at places. Numerous sunken rocks and rocks awash make this area very foul well off the coast. To the northwest Point Piedras Blancas is a low point more rocky than the remainder of the sheet and projects about one-half mile beyond the general trend of the coast. A foul area due to

many sunken rocks and reefs extends about 200 meters to the south of this point. Sand dunes well covered with small brush and vegetation in many places extend northeastward from this point.

Along the entire sheet low, rolling hills extend from 1/4 to 1/2 mile inshore and here rather abruptly rise to heights of 400 to 500 feet. Directly north of San Simeon the low rolling hills extend much further ¹²³⁷⁴⁷² without an appreciable rise.

The new coast highway extends the full length of the sheet, following the general trend of the coast most of the way. From Triangulation Station Adobe, Latitude $35^{\circ} 39.2$, Longitude $121^{\circ} 13.5$ to immediately southeast of San Simeon the highway passes inshore.

LANDMARKS: The only landmarks on this sheet are Piedras Blancas Lighthouse and Piedras Blancas Rocks, both of which are shown on the charts.

CHARACTER OF CONTROL: The control for this survey was furnished by second order triangulation executed in 1932 by Lieutenant Chas. Pierce. The stations were plotted on the North American (1927) Datum. At the time this topography was executed only the field computations of Mr. Pierce were available. In the scheme of triangulation from Station Soberanes Point to Station Rocky Butte it appears that a discrepancy was found when the connection was made at Rocky Butte of such magnitude that it would show on the scales used by the field parties. Until the final values were available the Division of Hydrography and Topography furnished this party with the following adjustment method.

Adjusted	(Soberanes Pt.	36 - 26 - 54.451	121 - 55 - 40.140
Positions	(Rocky Butte	35 - 39 - 55.019	121 - 03 - 30.792
N.A. (1927)		46 - 59.432	52 - 09.348
		Lat.	Long.
Rocky Butte	(Pierce (field comp.) =	35 - 39 - 55.654	121 - 03 - 31.017
	(Fixed N.A. 1927 Datum -	55.019	30.792
	Discrepancy =	0.635	0.225

Correction to be applied to each field position (x) of Charles Pierce between Station Soberanes Point and Station Rocky Butte.

$$\text{Corr. Lat.} = \frac{-(36-26-54.451) - (\text{Lat. } x)}{0.635} ; \text{Corr. Long.} = \frac{(121-55-40.140) - (\text{Long. } x)}{0.225}$$

During April 1933 these stations were adjusted and plotted on this sheet. A preliminary traverse was run from Station Padre to Station Simeon; from Station Simeon to Station Adobe; from Station Adobe to Station Reef and from Station Reef to Station Blancas by another officer in order to locate hydrographic signals for Launch Hydrographic Sheet, Field No. 11. This work was done rather hurriedly so that launch hydrography could be begun on Sheet No. 11.

When topography was begun on January 11, 1934 the previous adjustment of stations was found to be in error and therefore the hydrographic signals on Boat Sheet, Field No. 11 based on this adjustment are also in error.

The stations were properly adjusted in accordance with instructions, the method checked and the topography executed on this control.

When the final values were received the topography had been completed ~~but~~^{and} the inking of the sheet had ~~not~~^{not yet} been begun. It was discovered that the position ~~of the~~^{of the} stations used for traverse namely Padre, Simeon, Adobe, Reef and Blancas varied on an average of 4 or 5 meters from the final positions. The discrepancy in supplementary stations was much larger; in one instance it was as much as 17 meters in the position of Hearst's Air Beacon.

The final positions were plotted and the topography adjusted to this control. It is believed that a faithful representation of shoreline and offlying features was obtained. The topographic features depending on the supplementary stations for control were adjusted as carefully as possible and considered fairly accurate.

SURVEY METHODS AND RESULTS: Only standard survey methods were used. Setup positions were all determined by traverse. 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. In sections of the sheet there are such a great number of small rocks that it was practically impossible to locate all of them by cuts and some of them were sketched in. All of the rocks which have the heights shown were located by at least three cuts.

The following traverses were run: Reef to Blancas; closure negligible and not adjusted. Reef to Adobe, closure 7 meters. This error was adjusted. Simeon to Adobe; closure 7 meters. This error was adjusted. Simeon to Padre; closure 6 meters. The error was adjusted. Hearst's Air Beacon to Adobe (Road); closure 6 meters. The error was adjusted.

All traverses closed within the allowable limit of four meters per mile and they were adjusted by distributing the error proportionately over the traverse.

COMPARISON WITH OLD WORK: The contours, shoreline and rocks were transferred from the bromides of the old sheets covering this area.

Some difficulty was incurred in transferring these features because of the lack of an accurate datum on the bromides. This was especially true on the photostats of Topographic Sheet No. 1395A. There were not enough parallels and meridians visible on

this sheet to construct accurate projection. However, by using well defined objects such as offlying rocks it is believed that all necessary features were transferred accurately from the bromides. The contours were carefully checked and few changes were found necessary. The changes were due to slight shifting of the sand dunes east of Piedras Blancas Lighthouse and the construction of the new Coast Highway.

A new survey was made of the shoreline and the rocks. The shoreline showed very little change and it was difficult to determine whether any change was due to transferring or due to change in shoreline.

The larger rocks on the sheet checked very well with the old work. In some places there are large groups of rocks and the individual rocks could not be identified. However, the off-shore limits of the foul areas and usually the individual rocks farthest out agree very well.

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

INCOMPLETE WORK: The work on this sheet is complete and requires no further examination.

Respectfully submitted,

E. H. Sheridan
E. H. Sheridan,
Aid,
U.S.C. & G. Survey.

Respectfully submitted,
approved:

F. H. Hardy
F. H. Hardy,
Chief of Party, C. & G. S.,
Commanding Ship GUIDE.

STATISTICS
to accompany
TOPOGRAPHIC SHEET FIELD NO. K
Coast of California
U.S.C. & G.S.S. GUIDE
1934

DATE FIELD WORK BEGAN:	January 8, 1934
DATE FIELD WORK WAS COMPLETED:	February 14, 1934
NUMBER OF DAYS OF FIELD WORK:	20
STATUTE MILES OF SHORELINE:	10.0
STATUTE MILES OF ROADS:	8.0
AREA IN SQUARE STATUTE MILES:	9.0
NUMBER OF HYDROGRAPHIC SIGNALS LOCATED:	45

LIST OF PLANETABLE POSITIONS

Hydrographic Name	Object and Description
Lim	Standard Hydrographic Station disk
Dog	Standard Hydrographic Station disk

These stations are recoverable and Form 524 was filled out for each of them.

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4850 (1934)

San Simson to Pt. Piedras Blancas, California
Surveyed: January, February, 1934
Instructions dated: April 4, 1932 - March 27, 1933 (GUIDE)

Plane Table Survey

Cloth Mounted

Chief of Party - F. L. Peacock.
Surveyed by - E. H. Sheridan.

1. Condition of Records.

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

- a. Scaled one-half meter distances were not laid off for distortion measurement.
- b. Vertical lettering was used for notes regarding objects which cover at high tide, whereas the Topographic Manual requires slanting lettering for such features.

2. Compliance with Instructions for the Project.

The survey complies with instructions in every respect.

3. Junction with Contemporary Surveys.

Satisfactory junction was made with T-4891 (1934) on the west and with T-4900 (1934) on the east.

4. Comparison with Prior Surveys.

a. T-1278 (1871).

This survey is in good agreement with the present survey, both in shoreline detail and in the location of offlying rocks and islets. All rocks have been verified on the present survey, with the exception of a rock awash in lat. $35^{\circ}38.1'$, long. $121^{\circ}11.4'$, which is carried forward in red. This rock was located by the Hydrographic Party and is shown on H-5476 (1933).

b. T-1395a (1872 & 73).

This survey is in agreement with the present survey except in minor details. Some of the rocks are now shown in slightly different locations and the delineation of reefs is somewhat different but the new locations are considered correct particularly in view of the fact that it appears that the old topography was traced on the new sheet during the survey.

c. T-1784 (1887).

Notes under comparison of T-1278 (par. 4a) fully cover the comparison of this survey with the present survey:

5. Field Drafting.

The field inking of the survey is satisfactory.

6. Additional Field Work Recommended.

The survey is complete and no additional work is required.

7. Superseding Old Surveys.

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

T-1278 (1871)	in part.
T-1395a (1872-73)	" "
T-1784 (1887)	" "

8. Reviewed by - A. F. Jankowski, February, 1935.

Examined and approved:

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

L. O. Zolbert
Chief, Division of Charts.

Paul A. Smith
Acting
Chief, Section of Field Work.

R. R. Lusk
Act. Chief, Division of H. & T.

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
Steamer GUIDE, 510 Custom House,
San Francisco, Calif.,
April 18, 1935.

To: The Director, U. S. Coast and Geodetic Survey,
Washington, D. C.

From: The Commanding Officer, U.S.C. & G.S.S. GUIDE.

Subject: Tracing of Hydrographic Sheet, H-5476.

Reference: Director's letter dated April 13, 1935, 80-SD.

The two off-lying rocks on the enclosed tracing are small, not over ten meters in diameter. Neither rock is a pinnacle rock, but rather flatish in character.

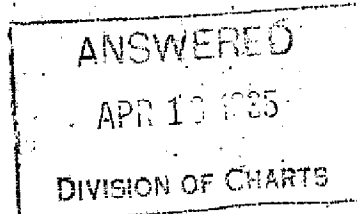
The elevation of the Rock East of San Simeon Dock is three feet as shown on photostat of T-4850. The elevation of Rock North Entrance San Simeon Bay is blurred on our photostat, but it is felt its elevation is shown on T-4850. } for corrections to those elevations see page 3 of D.R. of H-5959-WP. JGL.

F. H. Hardy
F. H. Hardy,
Captain, C. & G. Survey,
Commanding Ship GUIDE.

*Information has been given
to T-4850 and H-5476*

J. K.

80-SD



April 13, 1935.

To: The Commanding Officer, Ship GUIDE,
U. S. Coast and Geodetic Survey,
510 Customhouse,
San Francisco, California.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Tracing of Hydrographic Sheet, H-5476.

There is inclosed a tracing from sheet H-5476 (Field No. 11), San Simeon Bay, on which are shown two offshore triangulation stations. While the names of these stations indicate that they are located on off-lying rocks, there is no information regarding their extent or elevation.

Please furnish, if possible, information concerning the character of these rocks.

(Signed) R. S. PATTON

Inclosure.

Director.