

4901

4901

Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. J 4901
State California	
LOCALITY	
California Coast	
Point Esteros to Santa Rosa Creek	
1934	
CHIEF OF PARTY	
F.H. Hardy	

Applied to drawing of Chart 5302 - Feby. 29, 1936 - J.F.W.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAR 14 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 for-
warded to the Office.

Field No. J

REGISTER NO. 4901

State CALIFORNIA

General locality CALIFORNIA COAST

Locality Pt. Esteros to Santa Rosa Creek
Point ESTEROS

Scale 1:10,000 Date of survey OCTOBER, 1934

Vessel U.S.C. & G.S.S. GUIDE

Chief of party F. H. HARDY - SUB-PARTY JOHN C. BLISS

Surveyed by JOHN C. BLISS

Inked by JOHN C. BLISS

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

Contour, Approximate contour, Form line interval 50 feet

Instructions dated May 31, 1934, 19

Remarks: CONTINUATION OF PROJECT H.T. 184

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET FIELD No. "J"

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 rugged, rocky coastline. The bluffs along the shoreline are generally low and rocky. A coastal ridge rises abruptly from the shoreline cutting off all view of the back country. There are a few wagon roads leading to separated spots along the coast but the coastline is generally inaccessible to vehicles.

The entire shoreline is fringed with boulders with no sand beaches. The inshore area is covered with numerous detached rocks, causing the sea to break generally over the entire inshore area, even in calm weather.

SURVEY METHODS

The topography on this sheet was executed from shore. The party consisted of J.C. Bliss, Surveyor, and three assistants. U.S.C.&G.S. truck #212 was used in the work and the party was based at Cambria, California.

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 Datum.

The triangulation scheme covering the area of this sheet includes a series of mountain stations, namely, Scott, Dawson, Gence and Sullivan. These stations are visible from certain parts of the beach but were not of much value in the survey of the coast. The triangulation

station along the beach were, Creek, Large Rock Northwest of Thompson, and Thompson.

Distortion in this sheet was measured in the field daily and adjustments for distortion were applied during the course of the traverses. The maximum and minimum distortion measured was, 4 and 2 meters, respectively, per mile in latitude and 3 and 1 meters, respectively, in longitude.

Field work was commenced by occupying triangulation station "Creek" and orienting on triangulation station "Dawson". From "Creek" a traverse was executed southward to triangulation station "Large Rock Northwest of Thompson". A check was obtained by getting the planetable on a line between triangulation stations "Dawson" and "Large Rock Northwest of Thompson" and resecting to a barn gable previously located by cuts from triangulation stations "Dawson" and "Creek". This is the hydrographic station "Gab". "Gab" was also verified by cuts and a rod shot during the course of the traverse. The traverse was found to be in error about four meters and was adjusted.

From this traverse position abeam of "Large Rock Northwest of Thompson", a traverse was executed southward to triangulation station "Thompson", a distance of approximately one and one half miles. Here a closing error of five meters was obtained. This traverse was adjusted.

From "Thompson" a traverse was executed southward to hydrographic station "Extra" where a closing error of two meters was obtained. This traverse was about two miles long so no adjustment was considered necessary. Hydrographic station "Extra" was located by planetable cuts from triangulation stations "Gence" and "Dawson" and checked by planetable cuts from triangulation stations by Ensign Beyma on the next sheet south so its position is considered correct.

Hydrographic station "Extra" is the southerly limit of this sheet.

COMPARISON WITH PREVIOUS SURVEYS

All comparisons are with sheet # T-1753 executed by Stehman Forney in 1886. Much distortion in the bromide of T-1753 made comparisons difficult.

Comparison of shorelines.

From triangulation station "Creek" to triangulation station "Large Rock Northwest of Thompson" shoreline of this survey is five to ten meters inland of that on T-1753.

From triangulation station "Large Rock Northwest of Thompson" to hydrographic station "Nun" shoreline of this survey extends five to twenty five meters inland of shoreline shown on T-1753.

From hydrographic station "Nun" south to limits of this survey there is a generally fair agreement in shorelines except in minor details.

Comparison of water features

A fair agreement was obtained with the offlying rock detail of T-1753. The bromide of T-1753 was badly blotched and it was difficult to determine which of the spots in the vicinity of the shoreline were rocks and which were not. A great deal of additional detail is shown on this sheet that is not shown on T-1753. Most of this detail was obtained at or near minus tides.

The sunken rock symbols on T-1753 about 180 meters west of hydrographic station "Sine" were changed to rocks awash on this survey because these rocks are awash at M.L.L.W.

The fairly large rock about 70 meters offshore from hydrographic station "Extra" this survey is shown as a smaller rock on T-1753.

TOPOGRAPHY

There has been no change in the topography of the inland area since the old survey. Therefore a closer watch was kept on the form lines, drainage lines, etc; rather than the elevations. A few elevations checked in the vicinity of the shoreline agreed closely with T-1753.

The topography of the old survey was traced off a bromide of T-1753 and transferred to this sheet. The penciled topography shown on this sheet is that transfer.

MAGNETIC MERIDIAN:

Three magnetic meridian observations were taken on this sheet, namely at triangulation stations "Creek," "Dawson" and "Sullivan". The observations at "Creek" and "Sullivan" checked perfectly with a protracted declination of 16 degrees and 49 minutes. However the observation at "Sullivan" showed a protracted declination of 17 degrees and 17 minutes. No reason can be advanced for this difference because all observations were taken under practically identical conditions with the same declinoire.

REMARKS

Tracings used in transferring the bromide of T-1753 to this sheet are attached so that discrepancies may be noted.

Before field work was commenced on this sheet the transfer of T-1753 was made. All discrepancies noted with the old survey on this sheet were checked in the field and this sheet represents existing conditions in the area.

STATISTICS

Statute miles of shoreline.....7.4

Area in square statute miles.....3.0

N.B.

There are no recoverable hydrographic stations or new landmarks on this sheet.

5
Respectfully submitted

John C. Bliss
John C. Bliss, Surveyor
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.

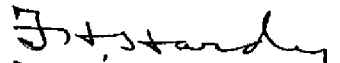
GEOGRAPHIC POSITIONS OF CONTROL STATIONS

TOPOGRAPHIC SHEET "J"

STATION	DATE	LATITUDE			LONGITUDE		
		°	'	"	°	'	"
CREEK	1885-1932	35	33	51.076	121	06	26.162
				15741.7			658.8
DAVISON	1932	35	31	45.782	121	04	09.393
				1411.0			236.6
SCOTT	1885-1932	35	34	35.709	121	04	23.419
				1100.5			589.7
GENCE	1884-1932	35	30	27.735	121	02	36.397
				854.8			917.2
SULLIVAN	1932	35	29	34.934	121	02	01.037
				1076.6			26.1
THOMPSON	1932	35	30	39.164	121	03	35.217
				1207.0			887.5
LARGE ROCK N. W. OF TRIANGULATION STATION THOMPSON		35	31	58.560	121	05	14.557
				1804.8			366.7

APPROVAL NOTE OF CHIEF OF PARTY

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



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

Date. March 20, 1935

Survey No. T-4901

Chart No. 5302

California

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. 27, 1935

Harlow Bacon

(M-136)

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 IMs and DPs, 68.) *None submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *None submitted*
17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) *Three meridians shown and discussed in Descriptive Report. No note made of having checked declination*
18. The geographic datum of the sheet is *N.A. 1927 (Adjusted)* and the reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. ✓
Joins T 4900 (1934) on the North and T 4912 (1934) on the South
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 ^{Fair} good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
Rocks, both submerged and awash are very carelessly drawn. Very few elevations of dry rocks shown
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:

Reviewed in office by *Chas. P. Bush Jr. May 25, 1936.*

Examined and approved:

E. J. Green
Chief, Section of Field Records

R. O. Lobert
Chief, Division of Charts

Frederick L. Peacock
Chief, Section of Field Work

G. H. de
Chief, Division of Hyd. and Top.

REVIEW OF TOPOGRAPHIC SURVEY No. 4901

Title (Par. 56) *Pt. Estero to Santa Rosa Creek, California*Chief of Party *F.H. Hardy* Surveyed by *J.C. Bliss* Inked by *J.C. Bliss*Ship *Guide* Instructions dated *May 31, 1934* Surveyed in *October 1934*

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.)
No revision necessary
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)
No contours necessary
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, 43, 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.)
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) ✓
See reverse side
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.)
Former elevations considered adequate
12. The tree line was shown on mountains. (Par. 16g.)
Tree line not shown as no new contours were drawn.

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.

Paragraph 9

T1753 (1886)

The discrepancies between the present survey and T1753 are well discussed in the Descriptive Report of T4901. The details on T4901 are much more clearly defined.

Chart 5302

Only inshore rocks are shown on this chart which are well shown in detail on T4901.