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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 Hydrographic	Sheet No. <u>G</u> 4891
State <u>California</u>	
LOCALITY	
<u>California Coast</u>	
<u>Point Piedras Blancas to Ragged Point</u>	
1934	
CHIEF OF PARTY	
<u>F.H. Hardy</u>	

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
PRIMARY AND SECONDARY

REG. NO.

TOPOGRAPHIC TITLE SHEET

Acc. No. _____

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter _____ G. _____

REGISTER NO. 4891

State CaliforniaGeneral locality California CoastLocality Point Piedras Blancas to Ragged Point
~~Ragged Point to Point Piedras Blancas~~Scale 1 : 10,000 Date of survey Oct. 15 - 30, 1934Vessel U. S. C. & G. S. S. GuideChief of Party F. H. HardySurveyed by Chester J. BeymaInked by Chester J. BeymaHeights in feet above M.H.W. to ground ~~to tops of trees~~~~Contour~~ Approximate contour ~~Form line~~ interval 20 feetInstructions dated April 4, 1932; May 31, 1934., 19

Remarks: _____

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC FIELD SHEET NUMBER "G"

STR. GUIDE

F. H. HARDY COMMANDING

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

GENERAL DESCRIPTION

The country surveyed on this sheet is low with small bluffs and rolling treeless hills. Inland, the hills rise to high elevations. The coast highway, a hard surfaced road, parallels the coast.

The entire beach, except for the portion of sandy beaches as shown, is fringed with large boulders and outlying reefs. 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 large rock named La Cruz Rock Lat. 35° - $42.4'$ Long. 121° - $18.7'$ is 48 feet high, lies about $\frac{1}{2}$ mile south of Point Sierra Nevada and about 350 meters from the mouth of Arroyo La Cruz.

About $1\frac{1}{2}$ miles northwest from Piedras Blancas Lighthouse and nearly $\frac{3}{4}$ mile offshore Lat. 35° - $41.2'$ Long. 121° - $18.0'$ there is a rock awash which bares 1 foot at M.L.L.W. It is known as Harlech Castle Rock. The Coast Pilot, Fifth (1934) Edition specifies that this rock is covered by 1 foot of water. Check elevations were taken on this rock at low stages of the tide and found to bare 1 foot at M.L.L.W.

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 is as follows: Bald Top, Pine Slope, Cinnabar, Ragged Point, Sharp Rock Off Ragged Point, Sharp Double Rock $\frac{1}{2}$ mile South of Ragged Point, Large Rock $\frac{1}{2}$ mile south of Ragged Point, ~~Sharp Rock Off~~ La Cruz Rock, Silo 1 mile North of La Cruz, La Cruz, Evans Water Tank, Large Rock Inshore $\frac{1}{2}$ Mile of Hiway, Hiway, Large Rock Off Lighthouse, Blancas, Piedras Blancas Lighthouse and Large Rock South Off Lighthouse.

Distortion in this sheet was measured in the field daily, and

SURVEY METHODS (Cont.)

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 1 to 0 meters respectively per mile in Longitude.

Before field work was started, the shoreline, rocks, and contours were transferred to this sheet from photostats T-1395a and T-1395b. Every discrepancy in shoreline, off-lying rocks and contours between this survey and the old survey have been checked and this sheet represents existing conditions of the area.

In order to establish a plane table position on the northern end of this sheet, triangulation station Ragged Point Latitude $35^{\circ} - 45.5'$ was occupied and a traverse carried southward to triangulation station China Latitude $35^{\circ} - 43.6'$, joining topography on field sheet No. F. at topographic signal Point Latitude $35^{\circ} - 45.4'$. At Breaker Point the traverse was checked by a three point fix using triangulation stations Ragged Point, Sharp Rock Off Breaker Point, and China for control, and also resection cuts were taken on Bald Top and Yellow Hill. The traverse checked in azimuth and distance. From here the traverse was carried to triangulation station China Latitude $35^{\circ} - 43.6'$. The traverse error was negligible being 2 meters.

Occupying triangulation station China the traverse was carried southward to triangulation station Hiway. Abeam of La Cruz Rock Latitude $35^{\circ} - 42.5'$ a three point fix was taken to check the traverse using triangulation stations China, La Cruz, and Hiway for control and also resection cuts were taken on Yellow Hill, Cinnabar, and Silo. The traverse checked in azimuth and distance. From here the traverse was continued southward to triangulation station Hiway Latitude $35^{\circ} - 40.8'$. The traverse error was 3 meters over a distance of 2 miles. No adjustment was required.

Occupying triangulation station Blancas Latitude $35^{\circ} - 40.0'$ a traverse was carried northward to triangulation station Hiway. The traverse closed within 1 meter.

The junction on the southern end of this sheet around Point Piedras Blancas checked very satisfactorily with the survey shown on Sheet T-4850.

All off lying features such as bare rocks and rocks awash were located by three or more cuts. Mean high water line, bluff line, and road were located by stadia. Elevations to tops of hills and along the road and bluff line were taken at various intervals as shown on the sheet. All elevations checked very closely with the previous surveys.

COMPARISONS WITH PREVIOUS SURVEYS:

All comparisons are based on surveys shown on Sheets T-1395a and T-1395b.

COMPARISONS WITH PREVIOUS SURVEYS: (Cont.)

Changes in Shoreline:

In general the shoreline and bluff line of this survey checked the previous survey very satisfactorily.

Changes in Water Features:

Sheet T-1395b shows a bare rock in Latitude 35° - $45.0'$ Longitude 121° - $19.1'$. This rock does not exist.

Sheet T-1395a shows a large cluster of bare rocks northwest of Point Sierra Nevada Latitude 35° - $42.8'$. The existing rocks within this locality are shown on this sheet.

Sheet T-1395a in Latitude 35° - $43.0'$ shows the position of the wrecked ship Sierra Nevada. The remains of the ship have been washed away and do not exist.

From La Cruz Rock Latitude 35° - $42.5'$ north to the beach, Sheet T-1395a shows a large cluster of bare rocks. The rocks which exist in this locality are shown on this sheet.

REMARKS

Tracings used in transferring photostats T-1395a and T-1395b to this sheet are attached in order that the discrepancies may be noted.

Topographic station Gul Latitude 35° - $44.8'$ Longitude 121° - $19.1'$ is the only recoverable signal on this sheet. Form 524 describing it has been forwarded to the office.

STATISTICS

Statute miles of shoreline.....	10.0
Statute miles of road.....	7.5
Area in square statute miles.....	3.0

Respectfully submitted,

Chester J. Beyma
Chester J. Beyma, Aid
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 "G" has been inspected and is approved.

F. H. Hardy

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

Survey No. T 4891

Date. Mar. 14, 1935 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. 4891 (1934) FIELD LETTER "G"

Point Piedras Blancas to Ragged Point, California

Surveyed October 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 for distortion measurement. Distortion was frequently checked by the field party, however, by means of the projection lines (see D. R. page 1, par. 8).

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junctions with Contemporary Surveys.

Satisfactory junction was made with T-4850 (1934) on the south and with T-4890 (1934) on the north.

4. Comparison with Prior Surveys.

- a. T-1395b (1874), T-1829 (1887).

The high water line as shown on these surveys is in good agreement with the present survey. Contours checked well except in a few places which were corrected by the field party. In general there is good agreement in the offlying rocks and reefs. A few errors in the older work are discussed in the Descriptive Report and the present survey is considered correct as sent in from the field except that a sunken rock group in latitude $34^{\circ} 44.7'$, longitude $121^{\circ} 19.4'$ and a few rocks in the vicinity of latitude $35^{\circ} 43.7'$, longitude $121^{\circ} 19.2'$, are carried forward in red to the present survey.

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

A comparison of this survey with the present survey shows good agreement in shoreline, contours and in the offlying rocks. All rocks shown on the prior survey were verified.

5. Field Drafting.

The inking by the field party is good.

6. Additional Field Work Recommended.

No additional field work is required.

7. Superseding Old Surveys.

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

T-1395a (1872 - 73)

T-1395b (1874)

T-1829 (1887)

8. Reviewed by - A. F. Jankowski, August 22, 1934.

Examined and approved:

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

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

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

W. H. H. H.
Chief, Division of H. & T.

Applied to drawing of Chart 5302 - Feb 20, 1936 - J.F.W.