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U. S. COAST & GEODETIC SURVEY  
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DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. <u>g 4840</u>
State <u>CALIFORNIA</u>	
LOCALITY	
<u>Monterey Bay COAST</u>	
<u>Table Rock to El Jarro Point.</u>	
PROJECT NO. <u>101</u>	
<u>1932</u>	
CHIEF OF PARTY	
<u>FREE, L. PEACOCK</u>	

U. S. GOVERNMENT PRINTING OFFICE: 1934

4840

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

R. S. PATTON, DIRECTOR.

DESCRIPTIVE REPORT  
to accompany  
TOPOGRAPHIC SHEET FIELD LETTER "G"

CALIFORNIA COAST  
VICINITY OF DAVENPORT

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

PROJECT NO. 101

1932

FRED. L. PEACOCK, H. & G. ENGINEER, CHIEF OF PARTY.

DESCRIPTIVE REPORT  
to accompany  
TOPOGRAPHIC SHEET FIELD NO. G  
COAST OF CALIFORNIA  
U.S.C. & G.S.S. GUIDE  
1932

INSTRUCTIONS: Instructions for the topography on this sheet are dated April 4, 1932.

LIMITS This sheet consists of a resurvey of the area adjacent to the shoreline between Latitude  $36^{\circ} 57' 18''$  and El Jarro Point, Latitude  $37^{\circ} 01' 5''$ .

ORGANIZATION OF PARTY: The topographic party consisted of one officer and three men. The party based at the City of Santa Cruz and used a truck for transportation.

GENERAL DESCRIPTION OF COAST: The shoreline on this sheet consists of fairly steep bluffs, varying in height from 60 to 90 feet. Several creeks and washes make small breaks in the bluffs. Over the greater part of the sheet the high water line coincides with the foot of the bluff. Directly back of the bluffs is a fairly flat bench sloping back to the hills. This bench is practically all under cultivation.

Sand Hill Bluffs, Latitude  $36^{\circ} 58.6'$  are whitish in color and may be distinguished by their contrast to the other bluffs which are grayish in color.

The cement plant at Davenport consists of a group of buildings, tanks and silos. A cloud of white cement dust usually hangs over the plant. At night it can be identified by the cluster of lights.

LANDMARKS: A large silo, the most prominent object at the cement plant at Davenport is the only landmark on this sheet. It was located by triangulation in 1934. It is listed on Form No. 367, which will be submitted with a special report. GTL 1597

CHARACTER OF CONTROL: Control for this survey was furnished by second order triangulation executed in 1931 by Lieutenant C. D. Meaney. The stations are plotted on the North American (1927) Datum. The adjusted positions of the stations were used.

The triangulation station SILO was located in 1934 by a party from the GUIDE and was not used for control. It was plotted on this sheet in order to show the position of the pier under construction in January 1934.

SURVEY METHODS: Only standard survey methods were used. Setup positions were all determined by traverse and checked by three point fixes whenever possible. All features which were not rodded in were located by three or more cuts. Separate traverses were run

in locating the road and railroad. Sunken rocks were located by cuts to the breakers or boiling caused by them. They are not enclosed in dotted circles but each sunken rock symbol indicates the approximate position of a sunken rock. In estimating the heights of offlying rocks and the amount which rocks awash bared and also to secure a datum for contouring, a curve was drawn from the predicted tides and used to determine the stage of the tide.

CLOSING ERRORS OF TRAVERSES AND METHOD OF ADJUSTMENT; All traverses closed within the allowable limit of four meters per mile of traverse and the adjustments were made by distributing the errors proportionately over the traverses.

Traverse	Error in Meters		Length of traverse Stat. Miles
	Distance	Azimuth	
Jaro to Glass. . . . .	-5	0	3.0
Glass to Lag . . . . .	-3	2	2.3
Lag to Pars. . . . .	-5	1	2.4
Pars to Glass (Road) . . . . .	-4	2	4.8
Glass to Jaro (Road) . . . . .	-6	3	4.4

COMPARISON WITH OLD WORK: The contours, shoreline and rocks were carefully transferred from the bromides of the old sheets covering this area. The datum lines marked on the bromides were very inaccurate and it was necessary to erase all the detail from the sheet. The shoreline and the rocks were located and then checked with a tracing of the old work. The contours were then transferred by orienting the tracing by means of the rocks and points along the shoreline. The rocks and the shoreline checked very well. Considerable change was found necessary on the contours. Points on hills and shoulders farther back from the shoreline checked fairly well and these contours were not changed.

The bromides of the old work southeast of Table Rock were not available and this area was contoured by this party.

CHANGES IN COASTLINE: Due to the difficulty in determining the correct datum for transferring the detail from the old sheets, no good comparison could be made of the old and new shoreline. However, over the greater part of the sheet the surf acts directly on the foot of the bluff and it is slowly breaking down. The recession of the shoreline due to this breaking down of the bluffs appears to be small.

COMPARISON WITH AERIAL PHOTOGRAPHS: Aerial photographs for this area were available and were closely examined. A large number of features located on the topographic sheet are easily recognizable on the photographs and if the photographs are to be reduced there are a sufficient number of points recognizable on both. The photographs were also closely examined and compared with the topographic sheet in order to pick up any errors or omissions.

COMPARISON WITH HYDROGRAPHIC SHEET FIELD NO. 7 : This area is free of rocks excepting close inshore and all of the rocks located by the topographer were too close inshore for the hydrographer to attempt to verify.

MISCELLANEOUS: The pier shown in pencil at Davenport had not been started at the time of this survey. At the time the SILO was located, measurements were made to locate the line of the pier. The pier was plotted on this sheet from these measurements. A sketch was obtained from the Cement Company showing the location and proposed dimensions of the pier. This sketch was forwarded with the triangulation computations and report.

A list of recoverable topographic stations located accompanies this report. Form No. 524, Description of Hydrographic or Topographic Station, was filled out for each of these stations and are forwarded with the sheet. A large number of stations were located and marked in the vicinity of the cement plant at the request of the Cement Company, made through the Inspector, San Francisco Field Station.

Respectfully submitted,

*H. C. Applequist*  
H. C. Applequist,  
Aid,  
U.S.C. & G. Survey.

Respectfully forwarded,  
approved:

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

STATISTICS  
to accompany  
TOPOGRAPHIC SHEET FIELD LETTER 6

DATE FIELD WORK BEGAN:	September 20, 1932
DATE FIELD WORK WAS COMPLETED:	October 11, 1932
NUMBER OF DAYS OF FIELD WORK:	14
STATUTE MILES OF SHORELINE:	11.2
STATUTE MILES OF ROADS AND RAILROADS:	15.6
NUMBER OF RECOVERABLE TOPOGRAPHIC STATIONS LOCATED:	7

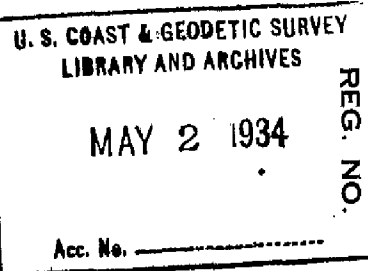
LIST OF TOPOGRAPHIC SIGNALS  
to accompany  
TOPOGRAPHIC SHEET FIELD LETTER G

Hydrog. Name:	Object and Description:	Remarks:
SOU	Small derrick opposite Davenport P.O.	Center
TANK	Black railroad water tank N. of Depot	Center
NAT	Large flat silvertank at cement plant	Center
MARG	Standard Hydrographic Station Disk	
Jery	Standard Hydrographic Station Disk	
LOIS	Standard Hydrographic Station Disk	
FAY	Standard Hydrographic Station Disk	

The above stations were all described on Form 524.  
These descriptions are forwarded with the topographic sheet

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET



4840

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. 4840

State CALIFORNIA

General locality Monterey Bay

Locality Table Rock to El Jarro Point,

Scale 1:10,000 Date of survey SEPTEMBER-OCTOBER, 1932

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

Chief of Party FRED. L. PEACOCK

Surveyed by H. C. APPLEQUIST

Inked by H. C. APPLEQUIST

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

~~contour~~ Approximate contour ~~from 1000~~ interval 20 feet

Instructions dated APRIL 4, 1932, 19

Remarks:

## Section of Field Records

### REVIEW OF TOPOGRAPHIC SURVEY T-4840 (1932)

Table Rock to El Jarro Point, Monterey Bay, California  
Surveyed September - October 1932  
Instructions dated April 4, 1932

Chief of Party - Fred L. Peacock.  
Surveyed by - H. C. Applequist.  
Inked by - H. C. Applequist.

1. Condition of Records.

The records are complete except that scaled  $1/2$  meter distances were not laid off along the edges of the sheet for distortion measurement as required by the Topographic Manual.

2. Compliance with Instructions for the Project.

The survey complies with instructions.

3. Junctions.

T-4839 (1932). The junction with the present survey is good.

4. Comparison with Prior Surveys.

T-444 (1853). There is about 1 mile of shoreline common to the surveys. The comparison was good except that the new survey did not show the small islet in latitude  $36^{\circ}57.7'$ , longitude  $122^{\circ}07.1'$ . There were indications that this islet had been located but was overlooked during the inking. The aerial photographs of this area showed a distinct island here, and it was inked in during this review. A rock awash has been carried forward in red because the air photograph indicates a breaker in this area.

T-445 (1853). The agreement in the shorelines of the two surveys is good. There are no rocks shown on the old survey which have not been verified. The new survey shows several sunken rocks and breakers which had not been located on the prior work.

5. Field Drafting.

Although the lettering is not good, the field inking of shoreline and other features is very satisfactory.

6. Additional Work Recommended.

The survey is complete and no additional work is necessary.

7. Superseding Old Surveys.

Within the area covered the new survey will supersede the following for charting purposes:

T-444 (1853) in part  
T-445 (1853) " "

8. Reviewed by - A. F. Jankowski, January 28, 1935.

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

*L. O. Pollock*  
Chief, Division of Charts.

*Fred. L. Peacock*  
Chief, Section of Field Work.

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