

4869

U. S. COAST & GEODETIC SURVEY  
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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

4869

Sheet No. 9 1934

~~Hydrographic~~

State California

## LOCALITY

Santa Catalina Island

Western Part

1934

## CHIEF OF PARTY

Robert W. Knox

H. & G. E.

U. S. GOVERNMENT PRINTING OFFICE: 1934

4869

applied to Chart 5101- May 1936 - R.M.Z.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEYU. S. COAST & GEODETIC SURVEY  
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REG. NO. 4869

## 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 Letter Q 1934REGISTER NO. **4869**State CaliforniaGeneral locality Santa Catalina IslandLocality Western Part of Island *Small*Scale 1 : 20,000 Date of survey Dec. 1933 - May, 1934Vessel Launch and shore party, CaliforniaChief of Party Robert W. KnoxSurveyed by P. M. ScottInked by P. M. S.Heights in feet above M. H. W. ~~XXXXXXXXXXXXXXXXXXXX~~~~XXXXXX~~ Approximate contour ~~XXXXXX~~ interval 50' feetInstructions dated September 13, 1933, 19

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

# DISCRIPTIVE REPORT

to accompany

Sheet Q 1934

West end of Santa Catalina Island

California

Robert W. Knox

Chief of Party

Scale 1 : 20,000

## INSTRUCTIONS:

The instructions for this project were dated  
september 13, 1933.

## DISCRIPTION:

From the extreme west end of the island easterly  
to  $\odot$  Ten, on the south side, the coast is very rugged, with sheer  
cliffs backed by high broken ridges, forming steep cactus covered  
slopes and deep canyons. Coast is covered with large boulders.  
From  $\Delta$  Pablo to  $\Delta$  End we have a shore line broken by small coves  
and bights having boulder beaches with the exception of a cove  
located between  $\odot$  Em and  $\odot$  MGM this is a deep cove with a gravel  
beach. The coast line is of rocky bluffs. The interior is of high  
broken ridges covered with brush except for that portion of  
country about  $\Delta$  Red Peak 2 and  $\Delta$  End which is barren.

## LANDMARKS:

Approching the coast from the north there is a small  
island lying approximately 280 meters off shore, west of  $\Delta$  Pablo.  
 $\Delta$  Red Peak 2 is on a high conical peak, located on a prominent point.

△ End is very prominent, located at the west end of the island on a high pointed hill. The unattended light house at the extreme west end of the island is visable when approaching the coast from west , north or south. △ Sharp is a very prominent landmark, it is a high pinnacle rock located approximately 320 meters from the south shore of the island.

CONTROL:

The control of this sheet is from the original triangulation scheme of 1875, most of these stations were recovered by the party. △ Red Peak 2, West Point 2 and Slide 2 were reestablished △ Sharp, End, Centre, Isle, Gull, and Horn were established by the party to aid in the running of traverse of the shore line.

CLOSING ERROR OF TRAVERSE:

	Traverse dist. (meters)	Closure (meters)
△ Pablo to △ Isle	4955	5
△ Isle to △ Black Point	920	0
△ Black Point to △ End	2370	12
△ Horn to ○ Ten	2410	2
△ Horn to point between ○ Nira and ○ Gra	1830	0
△ Gull to point between ○ Tit and ○ Nira	1130	0
△ Gull to fix between ○ Ish and ○ Gig	3820	5

Above traverses that were in error, adjusted by proportion.

SURVEY METHODS:

Plane table traverses were run between triangulation stations and fixes. In all cases there were stations visible for orientation. Roads were run from plane table traverse between fixes. The inshore limits of kelp was sketched in the field. The outlying rocks were located by cuts and rod readings from plane table set ups.

UNUSAL SURVEY METHODS:

Section of shore line between  $\odot \Delta$  and a point between  $\odot$  Nira and  $\odot$  Gra, was run in with sextants cuts from the launch as topography of shore line rendered it impossible to run usual plane table traverse.  $\odot$  Ten was transferred by DM's and DP's to this sheet, from Field Sheet No. Q 1934 having a scale of 1; 10,000 and the traverse of this sheet (Sheet Field No. Q 1934) tied into transferred point ( $\odot$  Ten). Traverse between  $\Delta$  Horn and a point between  $\odot$  In and  $\odot$  Wh was re-run due to first survey having a closing error of thirty meters.

NAMES:

The cove between  $\odot$  Em and  $\odot$  MGM is locally known as Emerald Bay and Johnsons Cove, the former being given the preference. Emerald Bay is shown in pencil on the sheet.

For information on additional geographic names, see Descriptive report on Hydrographic sheet No SC23. H 5555

PLANE TABLE POSITIONS:

: Object	: Latitude	: DM	: Longitude	: DP	: Remarks
: Light house	: 33°28'	: <del>470</del> <sup>1360</sup>	: 118°36'	: 485	: unattended
					: approximately
					: 100' high

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COMPARISON WITH PREVIOUS SURVEYS:

The general trend of the present survey of the coast line compares favorably with survey of 1876, Sheet Reg. No. 1603. The points check very well. the bight in the vicinity of O Gar is indicated by the present survey as being 50 meters further seaward than the survey of 1876 shows. Δ Isle was found to be on a peninsula by the present survey, previous chartered location shows this as an island, erosion at this location has possibly caused this and has also filled in the bights at this location. Between O Der and O Clu present survey shows bights to be 50 meters further inland than prior survey shows it to be. This sheet shows Δ Horn extending 50 meters further seaward than shown on Reg. Sheet No. 1603. O Kui. is on a point that is 60 meters further seaward than previous records indicate, also the bight in this vicinity is 60 meters further inland than is indicated by prior survey.

STATISTICS:

Statute miles of shore line	12.21
Statute miles of roads	0.90

INKING:

This sheet was inked in the office by P. M. Scott  
civilian observer under the supervision of John C. Mathission,  
Jr. H. & G. Engr. C. & G. Survey.

P. M. Scott  
Observer.

Respectfully forwarded;

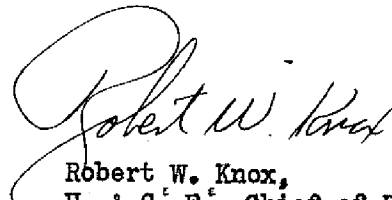


Robert W. Knox  
H. & G. E. Chief of Party.

VERIFICATION REPORT

I have reviewed the sheet covered by this report and have supervised the field and office work on said sheet insofar as it was possible without interference with the progress of the field work.

This sheet is hereby approved.

A handwritten signature in cursive script, reading "Robert W. Knox".

Robert W. Knox,  
H. & G. E., Chief of Party.



Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4869 (1934)

Santa Catalina Island, Western Part, California

Surveyed: December 1933 to May 1934

Instructions dated: September 13, 1933(Knox)

Plane Table Survey - Cloth Mounted

Chief of Party - R. W. Knox.

Surveyed by - P. M. Scott.

1. Condition of Records.

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

- a. Triangulation stations are shown with a triangle enclosed in a circle. The accepted method is to indicate them by triangles alone.
- b. Scaled one-half meter distances were not laid off along the edge of the sheet for distortion checking.
- c. Notes in pencil regarding the baring of rocks were reduced to M.L.L.W. by the tide Division and the rocks are now described with reference to M.L.L.W.

2. Compliance with Instructions for the Project.

The survey complies with the instructions for the project.

3. Junction with Contemporary Surveys.

Satisfactory junction was made with T-4870a (1934).

4. Comparison with Prior Surveys.

T-1603 (1877).

This survey and the present survey are in good agreement in general character of shoreline and in the offlying rocks. The old survey was found to be in error in a few instances. These errors were checked and found to be as described in the Descriptive Report.(D.R. page 4)

5. Field Drafting.

The field inking of the survey is satisfactory.

6. Additional Field Work Recommended.

The survey is complete and no additional field work is required.

7. Superseding Old Surveys.

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

T-1603 (1877) in part.

8. Reviewed by - A. F. Jankowski, December 1934.

Examined and approved:

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

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

*L. O. Zolbert*  
Chief, Div. of Charts.

*G. H. Huse*  
Chief, Div. of H. & T.

Copy for information of the Director, Coast and Geodetic Survey, August 3, 1934.

To: The Director, Coast and Geodetic Survey,  
San Francisco, California.

From: The Director, Coast and Geodetic Survey,  
San Francisco, California.

Re: Mr. Robert W. Knox,  
Coast and Geodetic Survey.

Subject: Position and elevation of newly established lighthouses.

In accordance with instructions from the Director, Coast and Geodetic Survey, the newly established lighthouses on the Channel Islands were located by this party. Their positions and elevations are as follows:

No.	Name	Latitude	Longitude	Elevation above M.S.L.
20.6	Point L	33° 50' 11.4" (114)	118° 21' 10.51" (272)	225
20.61	Point L	33° 50' 15.01" (114)	118° 21' 30.67" (270)	225
✓ 20.6	Point L	33° 50' 17.7" (114)	118° 21' 43.82" (270)	225

West End