

4884

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

_____, Director

State California

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

} Sheet No. R 1934

4884

LOCALITY

Santa Catalina Island

(Eastern Part) of Island

1934

CHIEF OF PARTY

Robert W. Knox.

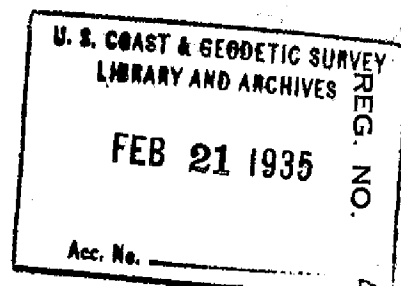
H. & G. E.

4884

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

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 Letter R 1934

REGISTER NO. **4884**

State California
General locality Santa Catalina Island *(Large)*
Locality ~~East end of island~~ Eastern Part
Scale 1 : 20,000 Date of survey Feb. and April, 19 34
Vessel Launch and shore party, California
Chief of Party Robert W. Knox
Surveyed by John C. Mathisson and P. M. Scott
Inked by D. L. Ackland and P. M. Scott
Heights in feet above M. H. W. to tops of trees
~~Contour. Approximate contour. Form line interval.~~
Instructions dated September, 13, 1933, 19
Remarks: _____

DISCRIPTIVE REPORT

to accompany

Sheet R 1934

East end of Santa Catalina Island

California

Feb. and Apr. 1934

Robert W. Knox

Chief of Party

Scale 1 : 20,000

INSTRUCTIONS:

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

GENERAL DESCRIPTION:

The section of coast line from Δ Slip to Δ Black Ridge is bold and irregular and made up of rocky bluffs, broken by small coves and bights. The beaches are covered with boulders and numerous large rocks lying close in shore. From Δ Black Ridge to \odot Bold the coast is bold and more regular and is made up of high rocky bluffs and palisades. All beaches are of gravel and boulders. From \odot Fir to Δ S. E. Rock Aux. there are high prominent palisades attaining an elevation of over 1600' at Δ Silver. The back country is made up of broken ridges, and spurs with steep slopes and deep canyons, in most instances covered with scattered grass and desert vegetation. Off shore from the beaches are found numerous rocks awash, and a few sunken rocks lying within the inshore limits of kelp.

From Δ Quarry to Δ Lone Point Light the coast line is very rugged made up of high rocky bluffs broken by deep coves and bights. The beaches in the coves and bights are gravel and boulders while in other portions there are rocks. Inland there are high broken ridges covered with cactus and brush with deep canyons. There is a valley extending

\odot Be to \odot Wek as far back as Δ Pot known as Pot Valley. This section of the interior is rolling hills and covered with brush. From Δ Lone Point Light to Δ Bible Peak the coast line is very irregular made up of rocky bluffs broken by deep coves and bights with steep cactus covered slopes and deep heavy brushed canyons, most of the beaches in this area are of boulders and gravel but the one in White cove is of sand. In this area is found the silver floatation mill Of the Catalina Island Co.

The silver is brought down from the mine at the base of Δ Catalina Peak by an overhead tram. From Δ Bible Peak to \odot Lil the coast is of rocky bluffs and the beaches are composed of gravel and rocks. Back of \odot Pier is Whitter State School. There are a number of large brick buildings at this location which are prominent off shore. The back country is of broken ridges and sharp spurs, forming deep canyons covered with brush and cactus.

LANDMARKS:

Approaching the coast from the south Δ Silver the highest point of the palisades over 1660' high is very prominent. S.E. Rock made up of a cluster of pinnacle rocks approximately 40' high lies off shore 240 meters. A light house on the S.E. end of the island just above \odot Per was located by stadia and found to have an elevation of 212'.

Approaching the coast from the north Δ Lone Point Light is a very prominent landmark. The Navy tower at Δ Catalina Peak is visible for a great distance, the tower 50' in height was erected by the U.S. Navy. The silver floatation mill White Cove is a good landmark when approaching the coast from the east, located on this sheet by stadia from plane table set up.

CONTROL:

The control of this sheet is from the original triangulation scheme of 1875 and 1876, also triangulation stations established in 1913 and 1917 were utilized. Most of these stations were recovered by the party. Cliff 2 and Whitley Peak 2 were re-established by the party. S. E. Rock Aux., South, Four, Slip, Quarry, Cape, Lone Point Light, and Bible Peak were established by the party under Robert W. Knox, Chief of Party, to facilitate in the running of the plane table traverse.

CLOSING ERROR OF TRAVERSE:

	Traverse dist. (meters)	Closure (meters)
Δ Slip to fix on off lying rock between \odot Pil and \odot Bur	3970	Within limits
Fix on off lying rock between \odot Pil & \odot Bur To Fix " " " below \odot Yel	5280	within limits
Fix on off lying rock off of \odot Yel to " " " " " " \odot Dodo	2580	within limits
Fix on off lying rock off of \odot Dodo to Δ South	4020	within limits
Fix from using Δ Cactus, Ord 2 and East Mt. to Δ S.E. Rock Aux.		30

	Traverse dist. (meters)	Closure (meters)
△ S. E. Rock aux., to △ South	1725	within limits
△ Bible Peak to △ Lone Point Light	1738	00
△ Lone Point Light to ○ Lil	4827	within limits
△ Quarry to fix at ○ Der	2510	5
Fix at ○ Der to △ Lone Point Light	7397	20

All the above traverses that were in error were adjusted by proportion.

SURVEY METHODS:

Plane table traverses were run between triangulation stations and between fixes. A blind traverse was run from fix originating from △ Ord 2, △ Cactus and △ East Mountain, to S. E. Rock. In practically all other instances stations were visible for orientation. Roads were run from plane table traverses from fix to fix, at no time were there stations visible for orientation. Errors in closing traverses were adjusted by proportion at once in the field. Elevations were carried and checked on elevations established on triangulation stations. Elevations on triangulation stations were established by carrying Mean High Water elevation into the interior by vertical angles and triangulation station distances. The outlying rocks were located by rod readings and out from plane table set ups. From ○ Der to △ Lone Point Light traverse was re-run owing to orientation being lost. John C. Mathisson, Jr., E. & G. Engr., C. & G. Survey, ran all of the traverses on this sheet with the exceptions of those portions between △ Slip and Black Ridge, and between △ Quarry and Lone Point Light which were run by P. M. Scott civilian observer. Roads were run by P. M. S. on a Field sheet and transferred to this sheet, elevations and locations of roads being carefully checked against original sheet.

LIST OF PLANE TABLE POSITIONS:

: Object	: Latitude	: D M's	: Longitude	: D P's	: Remarks
: Light house	: 33°18'	: 235	: 118°19'	: 26	: South east end of Per. 212 feet high.
: Flotation mill	: 33°23'	: 1242	: 118°22'	: 374	: Galvanized iron bldg. on sloping side of hill appears as high bldg.

COMPARISON WITH PREVIOUS SURVEYS:

The general trend of the coast line of the present survey compares very favorably with that of the 1876 survey. Some of the bights and points of the previous survey are not in the same location as that of the present survey. For example the bight in the vicinity of \odot Nai was found to be 80 meters deeper than shown by the prior survey. At \odot Bat old survey shows an indenture in the coast of 100 meters while this sheet shows a regular coast line. Between \odot We and \odot Ten the present survey shows shows coast line 40 meters further seaward than previous survey. From \odot Pun to \odot Rid present survey shows coast to have receded a maximum distance of 80 meters inland further than the chartered location. From \odot Rid to \odot Tur high water line is 50 meters further seaward than shown by prior surveys. Opposite \odot Chez the previous survey shows a decided point while present survey shows the coast to be regular. At \triangle Lone Point Light present survey indicates shore line as being irregular and the shore line to have receded 50 meters to the west and 20 meters to the east than was shown on previous chart. In the vicinity of \odot Dirt there is at present a bight extending into the interior. maximum depth of 80 meters further than shown by previous survey. At \odot Bess present survey found high water line to be 50 meters further seaward than shown by previous surveys. The point at \odot Jal is 50 meters further ^{east} west than shown formerly.

At O Box and O Der high water line is 40 meters further seaward than formerly shown. Between O Q and O Puz shore line is also 20 meters further seaward than indicated by previous surveys.

STATISTICS:

Statute miles of shore line	24.3
Statute miles of roads	31.6
Statute square miles of surveyed territory	6.0

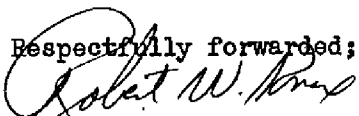
INKING:

This sheet was inked in office by D. L. Ackland civilian draftsman and P. M. Scott civilian observer under the supervision of John C. Mathisson, Jr. H. & G. Engr., C. & G. Survey.

D. L. Ackland.
Civilian draftsman.

P. M. Scott
Civilian observer.

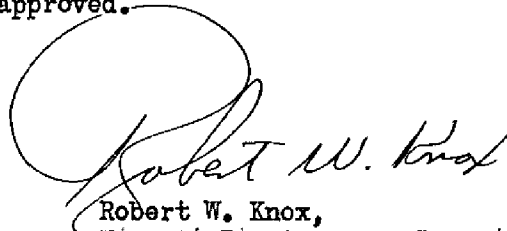
Respectfully forwarded;


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 work in the field.

This sheet is hereby approved.



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

California

Survey No. T 4884

GEOGRAPHIC NAMES

Date. April 6 1935Chart No. 5102Diagram No. 5102 - 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

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	<u>Goat Harbor</u>	✓			
✓	LONG <u>Lone Point</u>	✓ <i>USGB decision</i>			
✓	<u>White Landing</u>	X			
✓	<u>White Cove</u>	✓			
✓	Southeast Rock	✓ <i>Church Rk a USGB decision</i> <i>3/11/37 by STE</i>			
✓	<u>Gulf of Santa Catalina</u>				
✓	<u>Outer Santa Barbara Passage</u>				
	The following names were transferred from H - 5658				
✓	<u>Moonstone Beach</u>	X			
✓	<u>Silver Canyon</u>	✓			
✓	<u>Salta Verde Point</u>	✓			
✓	CHINA <u>Chinese Point</u>	✓ <i>(See C.L. 31, 1936 Map)</i>			
	<u>Torqua Springs</u>	<i>Not shown on sheet</i> <i>(See C.L. 31, 1936 Map) & H-5658 (Dir.)</i>			
✓	<u>Palisades</u>	✓			
	<u>Jewfish Point</u>				
✓	<u>Swains Canyon</u>	✓			
✓	<u>Gallagher Beach</u>	X			
	<u>Pebbly Beach</u>				
✓	<u>Gallagher Canyon</u>	✓			
✓	<u>Button Shell Beach</u>				
	<u>Binnacle Rk</u>	<i>C.L. 31, 1936 STE</i>	<i>H-5658</i>		

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4884 (1934) - FIELD LETTER R

Eastern Part, Santa Catalina Island, California

Surveyed February and April, 1934

Instructions dated September 13, 1933

Plane Table Survey

Cloth Mounted

Chief of Party - R. W. Knox.

Surveyed by - J. C. Mathisson and P. M. Scott.

Inked by - D. L. Ackland and P. M. Scott.

1. Condition of Records.

The Descriptive Report is clear and comprehensive and satisfactorily covers everything of importance, except that it fails to state anything regarding a formerly located bare rock in lat. 33°18.3', long. 118°18.6', which was not verified on the present survey (see Par. 4a), otherwise the records conform to the requirements of the Topographic Manual with the following exceptions:

- a. In some instances elevations of rocks bare at high water were given above M. L. L. W. These were changed to show elevation above High Water.
- b. Scaled $\frac{1}{2}$ meter distances were not laid off for distortion measurement.

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junction with Contemporary Surveys.

Satisfactory junctions were made with T-4870a (1933-34) and with T-4871 (1934).

4. Comparison with Prior Surveys.

a. T-1606 (1878).

A comparison of the high water line on this survey with the present location shows a fair agreement in general features. The entire shoreline was compared and discrepancies were found to be as stated in the Descriptive Report. Many discrepancies exist in the offlying rocks but they are mostly of an unimportant character. The present survey is considered correct where the locations do not check. Only one rock awash near the beach in lat.

33°18.95', long. 118°21.80' is carried forward from the old survey. Other rocks which are not verified but are not carried forward on the present survey due to the apparent thoroughness of the present survey, both in topographic rock locations and in the close inshore hydrography, are as follows:

- (1) Sunken rock in white covey; lat. 33°23.6', long. 118°22.1', is now indicated by a sounding of 1-5/6 fathoms.
- (2) Sunken rocks off the points in lat. 33°23.3', long. 118°21.9' are not carried forward because of fair hydrographic development off both points.
- (3) A bare rock shown on the former survey in lat. 33°20.13', long. 118°28.40' is considered to be an erroneous location of the bare rock now shown about 200 meters northwest from the old location.
- (4) A rock awash in lat. 33°19.0', long. 118°25.1' is considered an erroneous location of a rock awash now shown about 140 m. west of the old location. In this immediate vicinity the new survey shows several rocks which were not located on the prior survey.
- (5) A rock shown on the old survey in lat. 33°18.3', long. 118°18.6' is not carried forward because of evidence that it does not exist (see Review H-5658 (1934)).
- (6) A rock shown on the old survey in lat. 33°18.05', long. 118°18.90' is evidently an erroneous location of a rock awash now shown about 100 m. inshore of the old location. The present hydrographic survey shows no indication of the rock in the old location.

5. Field Drafting.

The field inking of the survey is good.

6. Additional Field Work Recommended.

The shoreline and offlying rocks and islands are fully surveyed and no additional field 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-1606 (1878) in part.

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

Examined and approved:

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

L. O. Lobnitz
Chief, Division of Charts.

B. Bordin
Chief, Section of Field Work.

G. H. Hude
Chief, Division of H. & T.