DESCRIPTIVE REPORT
4869
Topographic Sheet No. 0.1934

State California
LOCALITY
Santa Catalina Island
Western Part

1934
CHIEF OF PARTY
Robert W. Knox H. & G. E.
appeals to Chart 5101 - May 1976 - E.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 Q 1934

REGISTER NO. 4869

State: California

General locality: Santa Catalina Island

Locality: Western Park

Scale: 1:20,000 Date of survey Dec 1933 - May 1934

Vessel: Launch and shore party, California

Chief of Party: Robert W. Knox

Surveyed by: P. M. Scott

Inked by: P. M. S.

Heights in feet above M. H. W. Approximate contour interval 50' feet

Instructions dated September 13, 1933

Remarks: 

U. S. COAST AND GEODETIC SURVEY
LIBRARY AND ARCHIVES

NOV 15 1934

REG. NO. 4869
DISRIPTIVE 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.

DESCRIPTION:
From the extreme west end of the island easterly
to C 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 A Pablo to A End we have a shore line broken by small coves
and bights having boulder beaches with the exception of a cove
located between C Em and C M3M. 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 A Red Peak 2 and A End which is barren.

LANDMARKS:
Approaching the coast from the north there is a small
island lying approximately 280 meters off shore west of A Pablo.
A 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 visible 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:

<table>
<thead>
<tr>
<th>Traverse</th>
<th>Traverse dist. (meters)</th>
<th>Closure (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>△ Pablo to △ Isle</td>
<td>4955</td>
<td>5</td>
</tr>
<tr>
<td>△ Isle to △ Black Point</td>
<td>926</td>
<td>0</td>
</tr>
<tr>
<td>△ Black Point to △ End</td>
<td>2370</td>
<td>12</td>
</tr>
<tr>
<td>△ Horn to O Ten</td>
<td>2410</td>
<td>2</td>
</tr>
<tr>
<td>△ Horn to point between O Mira and O Gra</td>
<td>1830</td>
<td>0</td>
</tr>
<tr>
<td>△ Gull to point between O Tit and O Mira</td>
<td>1130</td>
<td>0</td>
</tr>
<tr>
<td>△ Gull to fix between O Ish and O Gig</td>
<td>3820</td>
<td>5</td>
</tr>
</tbody>
</table>

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.

UNUSUAL SURVEY METHODS:

Section of shore line between \( \odot A \) and a point between \( \odot N \)ira 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 \( \odot \) Hor 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. 3023.
PLANE TABLE POSITIONS:

<table>
<thead>
<tr>
<th>Object</th>
<th>Latitude</th>
<th>DM</th>
<th>Longitude</th>
<th>DP</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light house</td>
<td>33°28'</td>
<td>1/50</td>
<td>116°36'</td>
<td>485</td>
<td>approximately</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>160' high</td>
</tr>
</tbody>
</table>

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. A Isle was found to be on a peninsula by the present survey, previous charted 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 A 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,


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.

Robert W. Knox,
H. & G. B., Chief of Party.
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>Santa Catalina Island ✓</td>
<td>Same</td>
<td></td>
<td></td>
<td>use H 5555 in location</td>
</tr>
<tr>
<td>✓</td>
<td>Whale Rk.</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Ribbon Rock</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Iron Bound Cove ✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Eagle Rk.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>West End</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Sunken Rks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Stony Pt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Parson Landing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Arrow Pt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Emerald Cove</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Wilson's Harbor in the vicinity too small to identify.

Outer Santa Barbara Passage

San Pedro Channel
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.


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).


T-1639 (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.


Examined and approved:

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

L. O. Roberts
Chief, Div. of Charts.

T. F. Bonine
Chief, Section of Field Work.

D. T. Rice
Chief, Div. of H. & T.
Copy for Information of the Director, Coast and Geodetic Survey. August 3, 1921.

The specifications of a new lighthouse at Point Arena, California,

To the Director, Coast and Geodetic Survey,
San Francisco, California,

Robert W. Stone,
Assistant Surveyor,

Subject: Details of the construction and elevation of newly established lighthouse.

The following information has been received from the Federal Works Department, regarding the construction and elevation of the new lighthouse at Point Arena, California. The specifications are as follows:

<table>
<thead>
<tr>
<th>Light</th>
<th>Longitude</th>
<th>Latitude</th>
<th>Elevation Above MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>124 32' 21''</td>
<td>39 10' 43''</td>
<td>39 10' 43''</td>
</tr>
<tr>
<td>Arena</td>
<td>124 32' 21''</td>
<td>39 10' 43''</td>
<td>39 10' 43''</td>
</tr>
<tr>
<td></td>
<td>124 32' 21''</td>
<td>39 10' 43''</td>
<td>39 10' 43''</td>
</tr>
</tbody>
</table>