DESCRIPTIVE REPORT

Topographic Sheet No. W & W

Hydrographic 1934-5

State  CALIFORNIA

LOCALITY
Santa Barbara Channel
SAN MIGUEL ISLAND

and
San Miguel Island
CUTLER HARBOR, SAN MIGUEL ISLAND

1934-5

CHIEF OF PARTY

Robert W. Knox,
H & G Eng'r.
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...Wm.1934-5

REGISTER NO. 62229

State........................................California.

General locality....................................Southern California, Santa Barbara Channel

Locality........................................San Miguel Island

Scale 1:20,000 Date of survey...Sept. 1934 to Jan. 1935

Vessel........................................Launch and shore party

Chief of Party................................Robert W. Knowl

Surveyed by....................................N. C. Skansen

Inked by........................................N. C. Skansen

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

Contour Approximate contour Form Line interval 100 feet

Instructions dated..................................September 9, 1933, 19

Remarks:.................................................
DESCRIPTIVE REPORT
To Accompany
TOPOGRAPHIC SHEETS FIELD LETTERS "W" & "Wa", 1934-5
SAN MIGUEL ISLAND.
Robert W. Knox, Chief of Party.
Scale 1:10,000 Sheet Wa
Scale 1:20,000 Sheet W

INSTRUCTIONS:
The instructions for this project were dated September 9, 1933.

INTRODUCTION:
This report covers the area of two topographic sheets surveyed in 1871.
The titles of each sheet are as follows:
Sheet "W" San Miguel Island.
Sheet "Wa" Cuylers Harbor, San Miguel Island.

GENERAL DESCRIPTION:
The island is leased by R. Brooks for grazing sheep.
Mr. and Mrs. Lester, who have two children, are hired as caretakers.
The ranch house is a long narrow, 10 room building, at the location of \( \triangle \) FLAGPOLE, with a windmill in a draw west of the house, as the source of water supply.

The island is said to be grazing 3,000 to 4,000 head of sheep, but they are in poor condition as there is good grass land only at the east end, and on and around Green Mountain,
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 Wa - 1934-5
REGISTER NO. 6232b

State: California
General locality: Southern California, San Miguel Island
Locality: Guadalupe Harbor, San Miguel Island
Scale: 1:10,000 Date of survey: Sept. 1934 to Jan. 1935
Vessel: Launch and shore party
Chief of Party: Robert W. Knox
Surveyed by: N. C. Skansen
Inked by: N. C. Skansen

Heights in feet above M.H.W. to ground to top of trees
Contour: Approximate contour line interval: 100 feet
Instructions dated: September 9, 1933

Remarks:
Where MOUNTAIN, and NEW SAN MIGUEL are located.
The rest of the island is bare ground and sand dunes, with just
a little grass here and there.

The sand is always shifting and blowing, because
of daily strong winds and the island as a whole is a very
desolate place. There is a movement in mind by the Forestry
Department, and also the State of California, to plant trees,
shrubs and grass to keep wind, sand and water erosion from
cutting and blowing the island into the sea.

There are several fresh water springs coming out
of the bluffs, and just above high water, in Simonton Cove.

A long dry lake 600 meters southeast of BOWL
could be used as an emergency landing field. An emergency
landing field is located three quarters of a mile east of
RANCH. This field was cleared by the inhabitants of the
island for a friend, who visits them from Santa Barbara.
The location of the windsock, and the limits of the field,
elevations at each corner are outlined on the sheet. During
or soon after rains the field is muddy and whether a plane
could land there is doubtful. The field is shown on both
sheets W & Wa.
The previous survey of this island was done in 1871 and is on Sheet Registry No. 1242.

A comparison of the high water line from the point at the east end of Guyler's Harbor to Cardwell Point, agree very closely. At Cardwell Point a sandspit has been built up, extending some 750 meters east of the previous eastern extremity of the point. This sandspit has covered some off-lying rocks shown on the old survey. The Group of rocks located 450 meters, east and north of \( \triangle \) Fish agree, but the old survey shows some additional rocks 300 meters off-shore from these, which could not be located. The several large groups of rocks due south of Cardwell Point shown by previous survey could not be found, but two rocks are now located in that locality. One rock awash, and one sunken.

The shore line between Cardwell Point and Crook point was from 70 to 100 meters north of the present survey in one or two places between Meridian 120° 20' and 120° 21'. The ledges extending off-shore in this minute of longitude in the old survey could not be located by the present one.

A sunken rock was newly located 400 meters south of \( \triangle \) Lamb. West of Meridian 120° 21' to and including Crook Point the high water lines agreed.

The cove, as shown on the old survey, west of Crook Point is now filled in with sand and the high water line cuts directly across.
West from this cove to Tylers Bight the high water lines agree
with the exception of a stretch 500 meters long at the deepest
part of Tylers Bight. The old survey shows this section 50 to
100 meters south of the present. The ledges out from shore one
half mile west of Crook Point, are extended somewhat too far on
the old survey. The off-lying rocks from Crook Point to Point
Bennett check fairly close as to position of latitude but are
now located from 30 to 50 meters east of the old survey. One
new rock awash was located in Tylers Bight.

The Point between Tylers Bight and Adams Cove checks
very close. The highwater line in Adams Cove has changed as
much as 120 meters, the sand having been built up from the
shore to the large rock located in Adams Cove. The island
lying southwest of Point Bennett is now connected by a narrow
neck of sand at high tide. The new location of this small
island is 60 meters southwest of the previous survey.

The foul areas west and north of Point Bennett have
been extended farther out and several new rocks awash have been
added. The highwater lines at Point Bennett compare very well.

From Point Bennett to the point one mile and a quarter
due east of Castle Rock, the present survey shows the high water
line following the cliff line on the 1871 map very closely, or
from 10 to 100 meters inshore from the 1871 high water line.

Castle Rock Island is 90 meters shorter and 40 meters
wider than by the previous survey, also the reef located by the
old survey off the west end of Castle Rock is now shown as a
smaller island above high tide. Several plane-table set-ups
were made on Castle Rock.
The high water lines and off-lying rocks from the prominent point at the southwest end of Simonton Cove to Harris Point and from Harris Point to west end of Cuylers Harbor compare very closely.

Due to the vagueness of the contours of the old Bromide Copy of 1871 map, no accurate comparison of the contours could be made, but a comparison of the elevation of triangulation stations, the present height is an average of fifteen feet lower than those recorded by the 1871 survey.

DESCRIPTION AND DETAIL OF SHEET Wa:

Prince Island checks the previous position within a few meters. A number of Plane-table set-ups were made on this island. The high water line of Cuylers Harbor checks the old survey of this area. No traverse was run as each Plane-table set-up was already located by triangulation or Plane-table three point fix.

SURVEY METHODS:

Before the field work was begun the rods were stood on a measured base line and longer rods were graduated, so as to make possible longer half interval sights.

Traverses were run between triangulation stations and three point fixes.

The tops of bluffs were determined by rod shots and intersections.
CLOSING ERRORS OF TRAVERSES:

<table>
<thead>
<tr>
<th>Traverse</th>
<th>Closure</th>
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<tr>
<td>CUMB to BOWL</td>
<td>4,900</td>
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<tr>
<td>BOWL to DUNE</td>
<td>3,220</td>
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<tr>
<td>Dune to ROCK</td>
<td>2,150</td>
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<td>CUMB to SEAL PT.</td>
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<td>SEAL PT. to 3 Point Fix below HARBOR 2</td>
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<td>3 Point Fix to PAT to BLACK PT.</td>
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<td>BLACK PT. to ROCK</td>
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<td>CAPE to FISH</td>
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<td>FISH to ROCK CAIRN #3.</td>
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<tr>
<td>LAMB to 3 Point Fix PAT</td>
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CONTROL:

There was ample control established just previous to the topography by R. J. Sipe. △ NEW SAN MIGUEL is in the first order system of this locality.

INKING:

These sheets were inked and lettered by the civilian topographer, N. C. Skansen.

Respectfully submitted

W. C. Skansen

Approve forwarded.

Robert W. Kerr
Chief of Party
STATISTICS REPORT.

Sheet W:

Statute miles of Shore line, 23.5
Square Statute Miles, 14.1

Sheet Wa:

Statute miles of shore line, 5.2
Square statute miles,
Area included in Sheet W.
VERIFICATION REPORT

SHEETS "W" & "Wa" 1934-5

SAN MIGUEL ISLAND

CALIFORNIA.

I have reviewed the sheets covered by this report and have supervised the field and office work on the sheets in so far as it was possible without interference with the progress of the field work.

These sheets are hereby approved.

[Signature]

Robert W. Knox,
H. & C. Engineer,
Chief of Party.
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<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>
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Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEYS NO'S. 6232a & b (1934-35)

San Miguel Island & Cuyler Harbor, Santa Barbara Channel, California.
Surveyed: September, 1934 - January, 1935 (Knox)
Instructions dated: September 9, 1933

Plane Table Survey       Aluminum Mounted

Chief of Party - R. W. Knox.
Surveyed by - N. C. Skansen.


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

a. No Description of Recoverable Topographic Stations, Form 524,
   was submitted.

b. The elevation of Clover Rock shown as 9 feet at MLW was changed
to 4 feet at HW.

2. Projection.

The projection was checked and was found to be correct.

3. Compliance with Instructions for the Project.

The survey complies with the instructions. A large number of well
distributed elevations were obtained.

4. Junction with Contemporary Surveys.

The junctions of T-6232a and T-6232b are satisfactory.

5. Comparison with Prior Surveys.

a. T-1242 (1871).

A comparison of this survey with T-6232a shows that discrepancies
are substantially as represented in the Descriptive Report,
which contains a very good treatment of changes. The greatest
change occurred at Cardwell Point, which has built out about 750
meters since 1871.

Many of the rocks and reefs are verified and it is not considered
necessary to enumerate the new rocks which were found. The follow-
ing disposition was made of disproved rocks and of rocks which
are being carried forward:
(1) Rock groups originating with T-1242 in lat. 34°00.95', long. 120°18.3' and in lat. 34°01.85', long. 120°18.2' are considered disproved. The Descriptive Report states they could not be found and the present hydrographic survey shows sounding lines in the areas.

(2) Several sunken rocks and one rock awash in the vicinity of Pt. Bennett, lat. 34°02', long. 120°27' are being carried forward to T-6232a in red. Although they appear to have been sketched, they are not disproved by the present survey. A number of sunken rocks in about lat. 34°03.5', long. 120°22.8' are carried forward in accordance with accepted practice of disposing of such details.

(3) A foul area shown by sunken rock symbols in lat. 34°03.8', long. 120°25.1' was not carried forward as it was quite thoroughly sounded and a minimum depth of 3-2/5 fathoms is shown on the present hydrographic survey.

A comparison of this survey with T-6232b shows fair agreement in both shoreline and rocks, with the following exceptions:

(1) A rock awash in lat. 34°03.20', long. 120°21.55' originating with T-1242 is not carried forward. It is believed to be an erroneous location of the rock which is now shown about 400 meters southeast of the old position (see Review of H-5662).

(2) Several sunken rocks are being carried forward from T-1242 off the northwest point of Prince L., lat. 34°03.55', long. 120°20.20' and off a rocky ledge in lat. 34°02.85', long. 120°20.60'.

(3) There is some emergence of the shoreline due to drifting sand. This change is apparent opposite Gull Rock where the high water line is now about 30 to 40 meters farther seaward.

b. T-2211 (1895).

This is a survey on scale of 1:20,000 of Cuyler Harbor and is a tracing of T-1242 (1871). It was made to show the encroachment of the shoreline due to drifting sand. A comparison of this survey with the present survey shows very little change.

6. Field Drafting.

The field inking of the survey is good.
7. **Additional Field Work Recommended.**

The surveys are complete in shoreline detail and in contouring, and no additional field work is required.

8. **Superseding Old Surveys.**

The present survey supersedes the following surveys for charting purposes:

- T-1242 (1871)
- T-2211 (1895)


Examined and approved:

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

Chief, Division of Charts.

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

Chief, Division of H. & T.

applied to charts 5/16 212 12/18/35 - A. F. Jankowski
1/26  May 1936  C. K. Green