

4857

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 Sheet No. N. 4857
~~Hydrographic~~

State CALIFORNIA

LOCALITY

PYRAMID COVE AND

NORTHWEST HARBOR

SAN CLEMENTE ISLAND

1933

CHIEF OF PARTY

Robert W. Knox H. & C. Engr.

U. S. GOVERNMENT PRINTING OFFICE: 1934

4857

Applied to drawing of Chart 5111 - Apr. 25, 1935 - J.W.
Applied to Chart 5117 - April 2, 1936 - J. J. J. J.
Applied to Chart Comp 5118 Sept. 1939 J.W.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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REG. NO. 4857

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 No. N. 1933

REGISTER NO. 4857

State CALIFORNIA

General locality SAN CLEMENTE ISLAND ✓

Locality PYRAMID COVE AND NORTHWEST HARBOR ✓ *large*

Scale 1:10,000 Date of survey September, 1933

Vessel Launch and Shore Party, California

Chief of party Robert W. Knox

Surveyed by John C. Mathisson

Inked by D. L. Ackland

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

~~Contour~~ Approximate contour, ~~from line~~ interval 50 feet

Instructions dated September 13., 1933

Remarks: _____

L

DESCRIPTIVE REPORT
To Accompany
TOPOGRAPHIC SHEET FIELD LETTER "N", 1933
SAN CLEMENTE ISLAND
CALIFORNIA
September 1933
Robert W. Knox, Chief of Party
Scale 1:10,000

INSTRUCTIONS

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

INTRODUCTION

This sheet is divided to cover the area of
Northwest Harbor on one section and Pyramid Cove on the
other.

GENERAL DESCRIPTION OF AREA

For a general description of the area covered
by this sheet see the combined descriptive reports for
Sheets "K", "L", & "M" surveyed during August and
September, 1933.

CONTROL

The control used in the survey of Pyramid Cove

was executed in 1862 and by Charles Pierce in 1933. No additional triangulation was established in this area.

The control for the survey of Northwest Harbor was executed by the party before the survey by extending the original triangulation done in 1860-62.

SURVEYING METHODS

Standard methods were used in the execution of this survey. Rocks and other offlying dangers, as well as aids to navigation, were located by cuts from traverse positions.

The inshore limits of the kelp were sketched during the progress of the work and have been shown on the sheet.

Every opportunity was taken to correct the traverse by the use of three-point fixes.

The tide data had been transmitted before this sheet was inked. For this reason it was not available for the reduction of the water over rocks awash. These notes, therefore, have been left in pencil on the sheet. It is respectfully requested that they be reduced in the office.

The contours around Pyramid Head and

northwestward were obtained by taking the plane table equipment into the hills. The height of the table was determined by vertical angles to the high water line after the position was obtained by three-point fixes. Elevations were determined by shots from these three-point fixes and the contours interpolated.

CLOSING ERRORS OF TRAVERSES

PYRAMID COVE	TRAVERSE DISTANCE METERS	CLOSURE METERS
Δ SEAL 1862 to fix near ○ TAT	1625	3
Fix near ○ TAT to Beacon No. 1, 1933	660	0
Beacon No. 1, 1933 to Beacon No. 3, 1933	1285	0
Beacon No. 3, 1933 to Beacon No. 2, 1933	1903	0
Beacon No. 2, 1933 to Δ PYRAMID POINT, 1933	2275	0
NORTHWEST HARBOR		
Δ SAND, 1933 to Δ LOW, 1933	2390	0

Most of the above traverses were controlled by resection. Those that were in error were adjusted by proportion.

COMPARISON WITH PREVIOUS SURVEYS

The original survey of Pyramid Cove was made in 1878 and is shown on Sheet Registry No. 1526. This survey was on a scale of 1:20,000, and because of the difference in scale between it and the present survey an accurate comparison is impossible. Only the offlying rocks and dangers were compared, and this was rather difficult because the representation of these features on the old survey was indistinct.

A rock awash, shown 1060 meters southwest of station SEAL, 1862 on Sheet No. 1526, was not found.

This survey shows a rock, bare at high tide, at Latitude $32^{\circ} 47' + 1758$ meters and Longitude $118^{\circ} 25' + 920$ meters. Sheet No. 1526 shows this rock as a rock awash with a breaker a short distance southwest of the true position.

Two rocks to the east of this point are shown on Sheet No. 1526. These rocks were not seen, but a breaker was located in the vicinity, only much closer inshore.

Two rocks west of China Point are shown on Sheet 1526 as rocks bare at high tide. These rocks are in a slightly different position and are awash. They have been so shown on this sheet.

The rock reef inshore of Buoy N₂ was charted carefully. It does not conform to the same reef as charted on Sheet No. 1526, but the representation on this sheet is believed to be the true one.

Two rocks awash approximately 570 meters west of Pyramid Head are shown on Sheet No. 1526. These rocks were not visible at the time of this survey and have been omitted from this sheet.

There are three rocks awash shown on Chart 5126 which were not charted on this sheet. The approximate locations of these rocks, scaled from Chart 5126, follow:

	Latitude	Longitude
Near China Point	32 - 48 + 174m	118 - 26 + 0.0 m.
West of Pyramid Cove	32 - 48 + 960m	118 - 24 + 795m
West of Pyramid Head	32 - 48 + 1653m	118 - 21 + 769m

For more definite information regarding these rocks see Hydrographic Sheet Field No. S.C. 11, 1933.

Three sunken rocks not previously charted, or whose positions were erratic, were located on this sheet. Their approximate positions, scaled from the sheet, follow:

POSITION

Breaker in cove near China Point	Lat. 32 - 48 + 357 m. Long. 118 - 25 + 1094 m.
Breaker south of China Point	Lat. 32 - 47 + 1790 m. Long. 118 - 25 + 683 m.
Breaker west of Pyramid Head	Lat. 32 - 48 + 1701 m. Long. 118 - 21 + 934 m.

No material change was developed in the area of Northwest Harbor by a comparison with the former survey.

LANDMARKS

For a list of landmarks in the area of this sheet see descriptive report for Hydrographic Sheet Field No. S.C. 11, 1933.

PHOTOGRAPHS

Three photographs taken by a member of the topographic party are appended to this report.

INKING

This sheet was inked by a civilian draftsman under the direct supervision of the undersigned.

Forwarded approved:

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

John C. Mathisson
John C. Mathisson
Jr. H. & G. Engr.
U.S.C. & G. Survey

VERIFICATION REPORT

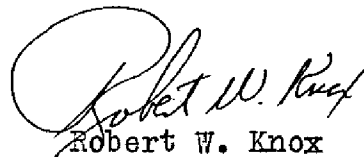
SHEET N, 1933

SAN CLEMENTE

CALIFORNIA

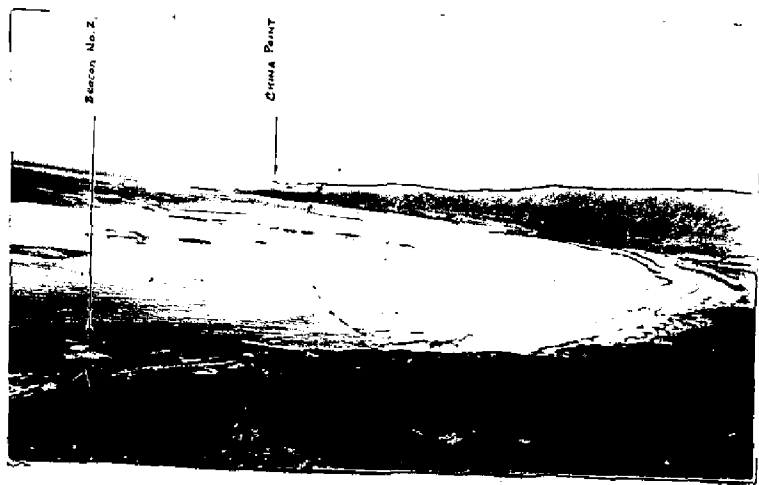
I have reviewed the sheet covered by this report and have supervised the field and office work on the sheet in so far as it was possible without interference with the progress of the field work.

This sheet is hereby approved

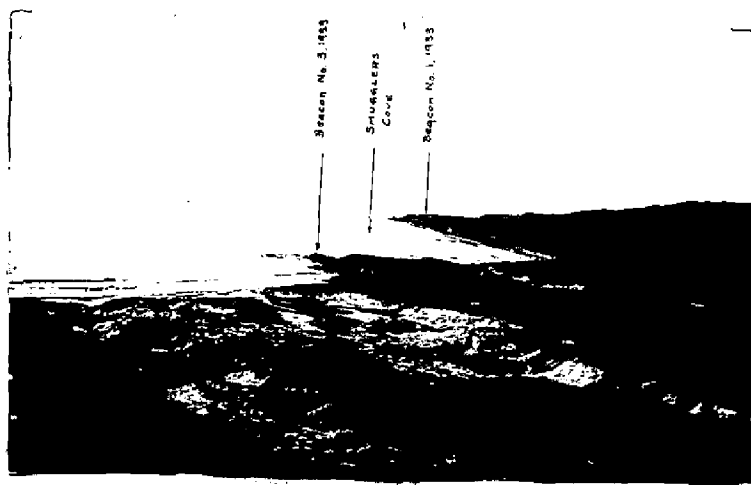

Robert W. Knox
H. & G. Engineer
Chief of Party

STATISTICS
SHEET N, 1933
SAN CLEMENTE
CALIFORNIA

Statute Miles of Shore Line	10.2
Square Statute Miles of Area	1.7



No. 1. View of Pyramid Cove



No. 2. View of Pyramid Cove showing Smugglers Cove



No. 3. View of China Point from the hills.

Date. May 14, 1935

Date May 14, 1935 **GEOGRAPHIC NAMES**

Survey No. T-4857

Chart No. 5101-2

Diagram No. 5101-2

Approved by the Division of Geographic Names, Department of Interior. ✕

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY T-4857 (1933)
Pyramid Cove and Northwest Harbor, San Clemente I., California
Surveyed: September 1933
Instructions dated: February 17, 1933 (R. W. Knox)
Plane Table Survey - Cloth Mounted

Chief of Party - R. W. Knox
Surveyed by - J. C. Mathisson
Inked by - D. L. Ackland

1. Condition of Records.

The records conform to the requirements of the Topographic Manual except for the following:

- a. Scaled one-half meter distances were not laid off for distortion checking.
- b. Rocks awash which were not referred to M.L.L.W. but were shown in pencil with the amount bare at time of observation, were reduced to M.L.L.W. by the Tide Division and appropriately inked on the sheet.

2. Compliance with Instructions for the Project.

The survey complies with the instructions.

3. Junctions with Contemporary Surveys.

A satisfactory junction of shoreline was made with T-6089 (1933). There is a gap of about 1.2 miles between the limits of contours northwest of Pyramid Head and the southeastern limit of contours on T-6089 (1933). The Northwest Harbor section of this survey joins T-6087 (1933) satisfactorily.

4. Comparison with Prior Surveys.

a. T-1526 (1878)

A comparison of this survey with the present survey shows good agreement at the limits of the new contours. Although the old survey shows a comparatively small number of elevations, its contours are in good agreement with the present survey.

Two sunken rocks in lat. $32^{\circ}49'20''$, long. $118^{\circ}20'75''$ shown outside of the rock awash were not shown on the present survey. They were brought forward to the present survey and are also brought forward on the contemporary hydrographic survey H-5474. These two sunken rocks fall within a kelp patch on the present survey.

Disproved. See
Rev. H. 6159
(1936), par.
7a (2).
H.W.M. 5/6/37

The breaker shown on the present survey in lat. $32^{\circ}48.9'$, long. $118^{\circ}21.6'$ was formerly shown as two rocks awash. The present hydrographic survey H-5459 (1933) shows this as a rock awash and it should be so charted.

There is considerable difference in the appearance of the rock reef inshore from Buoy N2. The present survey is considered correct in view of the special effort made to map this reef correctly.

The old survey shows a rock bare at H.W. in Lat. $32^{\circ}49.2$, Long. $118^{\circ}21.8$ which is mentioned in the Descriptive Report as not having been seen during the time of the present survey. The hydrographic party searched for this rock in 1934 when some additional work was done in the vicinity and saw no evidence of either a rock or a breaker although a heavy swell was running at the time. (See Review H-5459 Par. 6, b, 5). The rock is therefore considered non-existent.

The prior survey shows a rock awash in lat. $32^{\circ}47.7$, long. $118^{\circ}25.8$. This rock was not verified although an attempt was made to find it. (See Descriptive Report T-4857, Page 4). Since the rock was not shown on either the old or the new hydrographic survey (see Par. 10, H-5474) and apparently had never been charted, it is considered to be non-existent.

The Northwest Harbor section of the present survey is in good agreement with the old survey. There are a few minor differences in the number and character of the rocks shown in the vicinity of lat. $33^{\circ}02.1$, long. $118^{\circ}34.4$, but the present survey, being on a larger scale and showing greater care is considered correct as shown.

b. T-4192 (1926)

This is a survey of Pyramid Cove which was hurriedly made, chiefly to locate signals for hydrography and has been rejected for charting purposes. No attempt was made to compare this with the shoreline of the present survey.

5. Field Drafting.

The field inking of the survey is good.

6. Additional Field Work Recommended.

No additional field work is required. Attention is called, however, to the gap between the contour limits of this survey and T-6089 (1933).

7. Superseding Old Surveys.

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

T-1526 (1878) in part
T-4192 (1926) " "

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

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

Wm. L. Peacock
Chief, Section of Field Work.

L. O. Pollock
Chief, Division of Charts.

Wm. de
Chief, Division of H. & T.