DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. H. Patton, Director

State: California

DESCRIPTIVE REPORT
Topographic Sheet No. A

LOCALITY
Southwest end of San Clemente I.,
Island, California

China

Vicinity of Brand Pt.

1936

CHIEF OF PARTY
H. R. Campbell
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: A

REGISTER NO. T65103

State: California

General locality: San Clemente Island, California

Locality: Southwest and vicinity of Punta Ph...

Scale: 1:10,000

Date of survey: May 1936

Vessel: FIONKER

Chief of Party: H. B. Campbell

Surveyed by: J. C. Sammons

Inked by: J. C. Sammons

Heights in feet above MLW to ground

Contour Approximate contour Form line interval 50 feet

Instructions dated: March 9, 1936

Remarks:

[Form 387a]
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "A"

U.S.C.& G.S.S. PIONEER Season 1936 H. B. Campbell, Commanding

LIMITS OF SHEET

The area covered by this sheet was previously surveyed by R. W. Knox in 1933 on a scale of 1:20,000. To the eastward of this area the work done by Mr. Knox was on a scale of 1:10,000. The present survey was done in accordance with the instructions of the Director dated March 9, 1936. The purpose is to extend the survey on a scale of 1:10,000, from the work of Mr. Knox on this scale to latitude 32° 48', so that this area may be included in a detail harbor chart of Pyramid Cove.

CONTROL

Triangulation stations Canyon, Choya, Seal, and China Point Light, were recovered and used in the control of this survey. Many of the topographic stations established by Mr. Knox were recovered and relocated on this sheet.

SURVEY METHODS

No new methods were used in this survey. Triangulation stations Seal, Choya, and Canyon were occupied and all signals visible from these stations were cut in. One traverse was run from triangulation station Seal to topographic station Sta where a three point fix was obtained. There was a very small error to adjust as there were numerous cuts and resections to control the traverse. The second traverse was run from topographic station Sta to triangulation station Canyon and needed no adjustment. A third traverse was run from triangulation station Canyon to topographic station Ley and this traverse was not closed although Ley had cuts from Canyon and Seal so there is but little chance for a discrepancy.

All elevations were determined by rod readings taken from traverse run along the side of the hill. These traverses were checked at frequent intervals by resections on signals along the shore.

All offlying rocks shown encircled by dashes were located by cuts. Rocks not encircled were sketched in.

GENERAL DESCRIPTION

The shore line for the most part consists of rocks and ledges of volcanic formation. There is a sand beach at topographic station Sta and boulder beaches at topographic station Sha and near topographic station You.

The land back of the shore line consists of loose rock and soil packed solid. It is barren of vegetation except for cactus and other arid plants. It is traversed by numerous deep canyons with almost vertical walls. The streams are dry except during rainy weather. There are some bushes and small trees in the canyons where they are protected from the wind.
LANDINGS

The prevailing northwest winds make landings on this section of the coast difficult. At topographic station She a good landing can be made at high tide on the boulder beach which is usually pedded by dead grass and sea weed. There are several large boulders just off the beach which makes a landing at low water difficult. A good landing can usually be made on the sand beach at topographic station Tic or on the rocky ledge at topographic station Who.

Respectfully submitted:

Jack C. Sammons
Lieut., C.& G. Survey

Approved and forwarded:

H.B. Campbell
H. & G. Engineer
Commanding Ship PIONEER.
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Names underlined in red approved by [Signature] on 2/24/37
Tracing showing adjusted contours for use on new 1:15,000 chart No. 5117. (See Rev., T-650a[1933], par. 4b.)
Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6510a (1936) FIELD NO. A

Vicinity of China Point, San Clemente Island, California
Surveyed May 1936 - Scale 1:10,000
Instructions dated March 9, 1936 (PIONEER)

Plane Table Survey

Chief of Party - H. B. Campbell.
Surveyed by - J. C. Sammons.
Inked by - J. C. Sammons.


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

a. The distance in longitude between the 116° 26' and 116° 27' meridians is excessive, a difference of 4-1/2 m. or 3 m. per 1000 being noted. The longitudinal distances of the meridians on either side from those mentioned agreeing closely with the Polyconic Tables, no change was made in the office.

b. No descriptions of Recoverable Topographic Stations were submitted, most of the stations being recovered or relocated stations established on T=6089 (1933). (See par. 4, this review).

The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

3. Junctions with Surveys.

a. A satisfactory junction in shoreline detail is made with the 1:20,000 sheet, T-6089 (1933) on the northward. Discrepancies in junctions of contours are discussed in paragraph 4b of this review.

b. The junctions with the 1:10,000 sheet, T-4857 (1933) on the south is not satisfactory.

The detail southwestward of signal MAL disagrees in geographic position, number and amount bearing with that shown on T-4857 (1933) and H-6159 (1936). An excellent 3 cut intersection obtained by the hydrographer places the outermost islet 20 m. northeastward where it confirms the position determined on T-4857 (1933). In view of this confirmation, the delineation
on T-4657 (1933) is accepted as the more correct and should be used for charting purposes.

The shoreline from signal MAL southward does not generally agree with that on T-4657 (1933), the only agreement noted being in the end of the points off signals MAL and LOY. In view of the hydrographic confirmation of the 1933 survey noted in the preceding paragraph, the shoreline shown on T-4657 (1933) should be used for charting purposes in the common area.

c. The junction of contours with those on T-1526 (1878) is discussed in paragraph 4b of this review.


a. Shoreline and associated details.

(1). T-1526 (1878).

Comparison with this 1:20,000 scale sheet which covers the entire area of the present survey was accomplished in the review of T-6089 (1933).

(2). T-6089 (1933).

This survey is on a scale of 1:20,000. The present survey is a resurvey of a portion of this sheet on a larger scale of 1:10,000. Discrepancies in various details are noted between this survey and the present survey. Beginning at the northwest end of the sheet, the two sunken rocks just west of signal LEY are shown on T-6089 as rocks awash. The cluster of three sunken rocks south of signal LEY are shown on T-6089 as a single islet and described as baring 2 feet at M.H.W. on H-6159 (1936). The rock awash (awash at 1/2 tide) 150 m. SSW of signal YON is noted on both H-5474 (1933) and H-6159 (1936) as baring 3 feet at M.H.W. and is therefore an islet. Three additional rocks that were not located in this vicinity on the present survey were carried forward from T-6089, H-6159 (1936) confirming the existence of the westernmost rock. Three rocks awash were also carried forward about 275 m. south of signal SHA, H-6159 confirming the existence of the southernmost rock which is noted as awash at M.H.W. Appropriate notations have been added to the various sheets to facilitate charting.

Discrepancies in geographic position of several topographic signals are also noted. Signal BO was located approximately 35 m. NNW of its position on
T-6089. Differences of 10 m. or less are noted in the positions of signals LEY, WIN, STA and MAL. The latter differences are attributed to the differences in scales of the two surveys. None of these signals are listed as described and marked on Form 524. The larger scale present survey determinations have been accepted as the control for the contemporary hydrographic sheet, H-6159 (1936).

b. Contours and associated inland details.

T-1526 (1878) and T-6089 (1933).

Marked disagreements in the locations of contours on these surveys with those on the present survey were revealed in the comparison. There were differences between the present survey and each of the previous surveys and between the two previous surveys themselves.

In the area eastward of longitude 118° 26' the confusion was particularly hopeless. When the contours from the various surveys were superimposed on each other, 100 foot contours actually crossed each other in some cases while in other cases coinciding contours differed by 100 feet in elevation. (See composite tracing attached to Descriptive Report). Attention is called to the lack of agreement in the determined elevations on the 1933 survey and the present survey in the area between the "arroyo" in longitude 118° 26' and the "arroyo" in longitude 118° 25.5'. Also note the 356 foot elevation from T-6089 (1933) coinciding with a 445 foot elevation on the present survey in latitude 32° 49.2', longitude 115° 25.3', and the 460 foot elevation from T-1526 (1876) falling close to a 569 foot elevation on the present survey in latitude 32° 49.5', longitude 118° 25.25'.

In order that the most probable contours could be applied to the new large scale chart of Pyramid Cove (under construction), a tracing was prepared (attached to Descriptive Report) showing the adjusted contours for the area from the western limit of the sheet to a line about 400 meters east of longitude 118° 26'. The adjusted contours were based upon a study of all three surveys and the elevations determined in the respective cases. Where there was little conflict the contours from the latest survey T-6510a (1936) were used. The position of the "arroyos" differed considerably in some cases on the three surveys, T-6510a but T-6510a (1936) being the latest and largest scale survey, it was accepted for their locations.
Eastward of the limiting line mentioned above, it was impossible to reconcile the discrepancies for the reasons mentioned in a preceding paragraph and no adjustment of the contours was attempted. Instead it was decided to retain the contours now shown on the Pyramid Cove insert on Chart 5111 (edition of July 1936) which are based on the old survey T-1526 (1878) and the 1933 surveys T-6069 and T-4857, to where the charted contours join T-6510b (1936). The contours on the latter sheet make a satisfactory junction with those on T-4857 (1933) and therefore no difficulty will be experienced in connecting them with the charted contours. (See Review T-6510b (1936)).

5. Field Drafting.

The field inking of the survey is satisfactory.

6. Additional Field Work Recommended.

In view of the numerous conflicts and discrepancies noted in the contours on the various surveys discussed in paragraph 4b of this review, it would be desirable to resurvey the interior details from the western limit of the present survey to a satisfactory junction with T-4857 (1933). At present, part of this area is covered only by the 1878 survey, T-1526 on a 1:20,000 scale and part of it covered by the 1933 survey, T-6069 on a 1:20,000 scale. Since the new chart of this area for the Navy Department is on a 1:15,000 scale, the surveys should all be on 1:10,000 scale. The survey of the interior detail should extend northward of latitude 32° 50' to a satisfactory junction with T-1526 (1878).

7. Superseding Prior Surveys.

The present survey, with the indicated additions from prior surveys supersedes the following for charting purposes:

T-6069 (1933) - in part (Shoreline and offshore detail only).

8. Note to Compiler.

The compiler's attention is called to par. 3b of this review, relative to the shoreline junction with T-4857 (1933) and to par. 4b relative to the contours and inland details to be used in the compilation of the new chart.


Inspected by - A. L. Shalowitz.

Examined and approved:

C. L. Green, C. T. Green, Fred. R. Peach
Chief, Field Records Section, Chief, Section of Field Work.
Chief, Division of Charts.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: California

DESCRIPTIVE REPORT
Topographic Sheet No. B

LOCALITY
North of Pyramid Point
San Clemente Island, California
Vicinity of Pyramid Pt.

183 6

CHIEF OF PARTY
H. B. C. Campbell
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: B

REGISTER NO. T6510

State: California

General locality: San Clemente Island, California

Vicinity: Head of Pyramid Point

Locality: Head

Scale: 1:10,000

Date of survey: June, July 1936

Vessel: PIONEER

Chief of Party: H. B. Campbell

Surveyed by: Roger C. Rowse

Inked by: Roger C. Rowse

Heights in feet above MLLW to ground to tops of trees

Contour Approximate contour Form line interval

Instructions dated: March 9, 1936

Remarks: 

U.S. Coast and Geodetic Survey Office, 1936
DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "B"


1936

AUTHORITY

This survey was made under the Director's instructions dated March 9, 1936, Project No. HT-187.

LOCALITY

The area covered by this sheet is a short stretch along the east shore of San Clemente Island, California, just north of Pyramid Point. The survey is for charting purposes on a scale of 1:10,000. The last previous survey of this area was done on a scale of 1:20,000 (T-6059) in August and September, 1933.

METHOD OF SURVEY

Standard survey methods were used throughout. A plane table traverse was run from Pyramid Point to topographic Station GAS. All the stations were recovered from the work of Lieutenant Knox in 1933, and their positions checked with his traverse.

ELEVATIONS

The elevations were obtained by traversing from Pyramid Point Lighthouse to Station GUIDE, 1882, with occasional side shots.

GENERAL DESCRIPTION

The coast line is rocky with steep cliffs and few offlying dangers. Evidence of emergence is clearly shown by the old shorelines, which appear at elevations of approximately 250 feet and 600 feet.

JUNCTIONS WITH PREVIOUS SURVEYS

The Survey joins sheet T-4857 on the south and west. No discrepancies were encountered in the junction.

STATISTICS

Length of shoreline 1.7 statute miles.
Area covered 0.3 square statute miles.

Respectfully submitted,

Roger C. Rowse
Roger C. Rowse,
Lieutenant, C. & G. S.,

Approved and forwarded:

H. B. Campbell, H. & G. Engr.,
Commanding U.S.C. & G.S.S. PIONEER.
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Names underlined in red approved by [Signature] on 3/24/27
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT
STATION X
No. T-6510ab

received Feb. 23, 1937
registered March 1, 1937
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO
82  C. K. Green
REVIEW OF TOPOGRAPHIC SURVEY No. G510B (1936) Field No. B

Title (Par. 56) Vicinity of Pyramid Head, San Clemente Island, Cal.

Chief of Party H. B. Campbell Surveyed by R. C. Rowe Inked by R. C. Rowe

Ship PIONEER Instructions dated Mar. 9, 1936 Surveyed in June-July 1936

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. The amount of vertical control that the Manual specifies for contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of contours-formlines- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) No maps submitted.

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

10. The span, draw and clearance of bridges are shown. (Par. 16c.)

11. Locations and elevations of summits are given. (Par. 19, 51.)

12. The tree line was shown on mountains. (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aro-topography relative to type of photographs, method of compilation, and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DIs and DPs, 68.) None submitted, accomplished in work of 1933 season.

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 133, e, 60.) Submitted but none apply to area covered by the present survey, but there is no evidence that the declinatioire.

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

18. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the descriptive reports (Par. 64, 66k.) of T-4857 (1933) and T-6089 (1933)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks:

Reviewed in office by

Examined and approved:

Chief, Section of Field Records

Chief, Division of Charts

Chief, Division of Field Work

Chief, Division of Hyd. and Top.
This envelope contains composite tracing showing contours of all surveys made in this area. (See Rev.1, par. 4b). NOT TO BE USED IN CHARTING.