

6510ab

U. S. COAST & GEODETIC SURVEY
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6510ab

Form 504
Ed. June, 1928

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

State: California

DESCRIPTIVE REPORT

Topographic } Sheet No. A
~~Hydrographic~~

LOCALITY

~~Southwest end of San Clemente I.~~

~~Island, California~~

China
Vicinity of ~~Point~~ Pt.

193 6

CHIEF OF PARTY

H. B. Campbell

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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 AREGISTER NO. T65102State CaliforniaGeneral locality San Clemente Island, CaliforniaLocality China, Southwest End Vicinity of Pyramid Pt.Scale 1:10,000 Date of survey May, 19 36Vessel PIONEERChief of Party H. B. CampbellSurveyed by J. C. SammonsInked by J. C. SammonsHeights in feet above MLW to ground ~~to tops of trees~~Contour Approximate contour Form line interval 50 feetInstructions dated March 9, 19 36

Remarks:

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 $32^{\circ}48'52''$, 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 Stu 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 Stu 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 Yon.

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 Sha a good landing can be made at high tide on the boulder beach which is usually padded 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
Jack C. Sammons,
Lieut., C. & G. Survey

Approved and forwarded:

H. B. Campbell
H. B. Campbell,
H. & G. Engineer,
Commanding Ship PIONEER.

Remarks

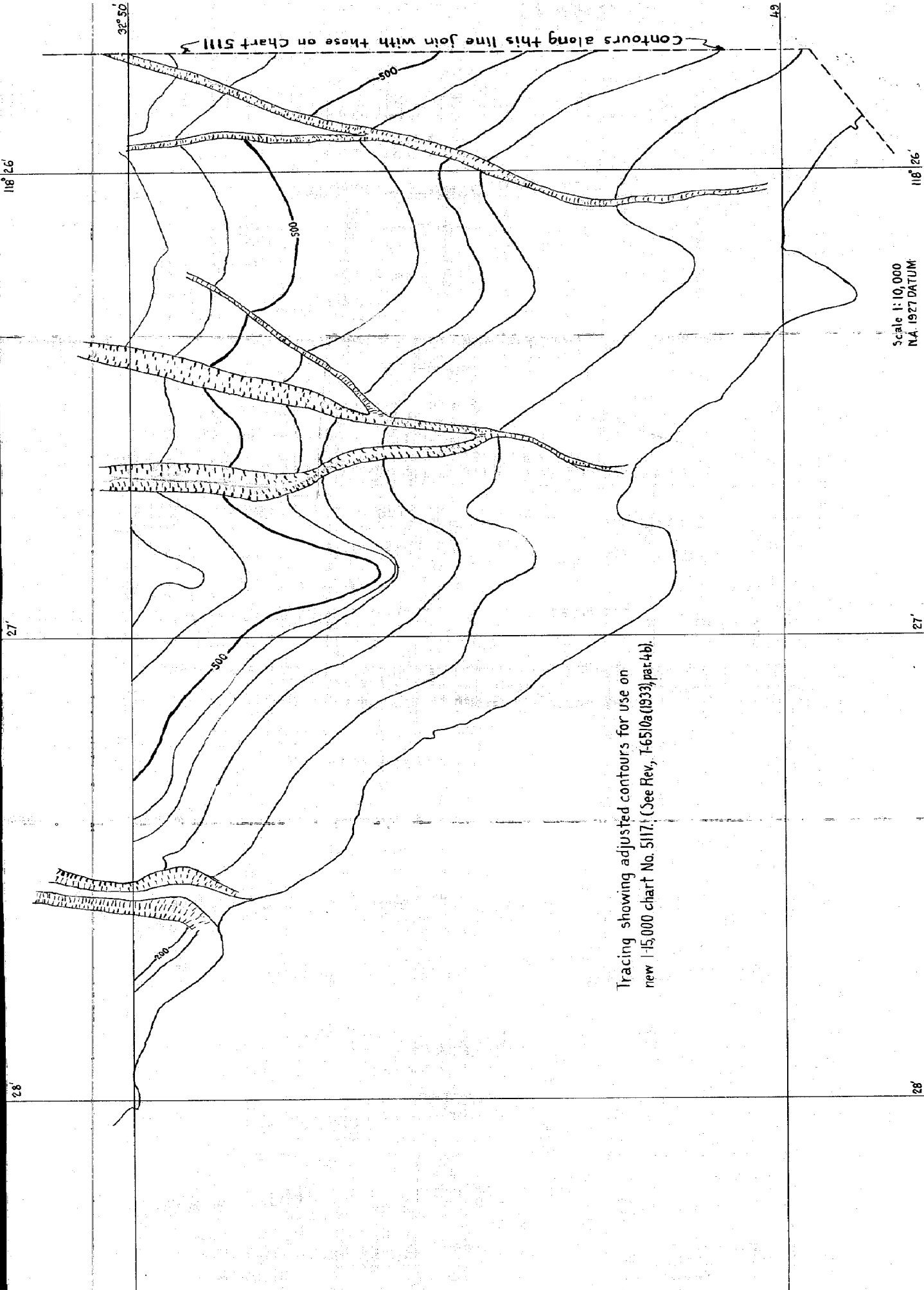
Decisions

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GEOGRAPHIC NAMES

Survey No. T-6510a

Name on Survey	On Chart No. 5101		On previous survey No. T-1526		On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A	B	C	D							
<u>San Clemente I.</u>	✓ app'd	✓									1
<u>Pacific Ocean</u>											2
<u>California</u>											3
<u>China Point</u>	✓ app'd	✓									4
<u>Cove Pt</u>		✓									5
<u>stump Pt</u>		✓									6
<u>Goat Pt</u>		✓									7
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<div style="border: 1px solid black; padding: 5px; display: inline-block;"> Names underlined in red approved by <u>WFE</u> on <u>3/26/37</u> </div>											26
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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

Aluminum Mounted

Chief of Party - H. B. Campbell.

Surveyed by - J. C. Sammons.

Inked by - J. C. Sammons.

1. Condition of Records.

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

- a. The distance in longitude between the $118^{\circ} 26'$ and $118^{\circ} 27'$ meridians is excessive, a difference of $4\frac{1}{2}$ 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.

rock
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-4857 (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-4857 (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-4857 (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.

4. Comparison with Prior Surveys.

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 bearing 2 feet at M.H.W. on H-6159 (1936). The rock awash (awash at 1/2 tide) 130 m. SSW of signal YON is noted on both H-5474 (1933) and H-6159 (1936) as bearing 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 $118^{\circ} 26'$ 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 $118^{\circ} 26'$ and the "arroyo" in longitude $118^{\circ} 25.5'$. Also note the 358 foot elevation from T-6089 (1933) coinciding with a 445 foot elevation on the present survey in latitude $32^{\circ} 49.2'$, longitude $118^{\circ} 25.3'$, and the 460 foot elevation from T-1526 (1878) falling close to a 559 foot elevation on the present survey in latitude $32^{\circ} 49.5'$, longitude $118^{\circ} 25.25'$.

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 $118^{\circ} 26'$. 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, ~~but~~ 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-6089 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-6089 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-6089 (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.

9. Reviewed by - H. W. Murray, May 8, 1937.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Field Records Section
L. O. Pollard
Chief, Division of Charts.

Fred. R. Pease
Chief, Section of Field Work.
Shalowitz
Chief, Division of H. & T.

6510b

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton *Director*

State: California

DESCRIPTIVE REPORT

Topographic } Sheet No. B
~~*Hydrographic*~~

LOCALITY

~~North of Pyramid Point,~~

San Clemente Island, ~~California~~

Head
Vicinity of Pyramid ~~PE~~

193 6

CHIEF OF PARTY

H. B. Campbell

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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.

T6510b

State CaliforniaGeneral locality San Clemente Island, ~~California~~Locality Vicinity ~~North~~ of Pyramid ~~Point~~ HeadScale 1:10,000 Date of survey June, July, 19 36Vessel PIONEERChief of Party H. B. CampbellSurveyed by Roger C. RowseInked by Roger C. RowseHeights in feet above MLLW to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated March 9, 19 36

Remarks: _____

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "B"

1 9 3 6

U.S.C. & G.S.S. PIONEER

H. B. Campbell, Cmdg.

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-6089) in August and September, 1933.

METHOD OF SURVEY

Standard survey methods were used throughout. A plane table traverse was run from Δ 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 GUDS, 1862, 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
Area covered

1.7 statute miles.
0.3 square statute miles.

Respectfully submitted,

Roger C. Rowse

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

Approved and forwarded:

H. B. Campbell

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

Remarks

Decisions

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GEOGRAPHIC NAMES

Survey No. T-6510b

Name on Survey	On Chart No. 5101	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
	A	B	C	D	E	F	G	H	K	
<u>San Clemente I.</u>	✓ app'd									1
<u>Pyramid Cove</u>	✓ app'd									2
<u>Pyramid Head</u>	✓ app'd									3
<u>California</u>										4
										5
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Names underlined in red approved
by WHE on 3/26/37

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } ~~No. 11~~
~~PHOTO STAT OF~~ } 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.

ROUTE		Initial	Attention called to
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RETURN TO

82	C. K. Green
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REVIEW OF TOPOGRAPHIC SURVEY No. 65106(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. Rowse* Inked by *R.C. Rowse*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. ^{ok →} 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 aero-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 IMs 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. 16d, e, 60.) Submitted but none apply to area covered by the present survey. ✓
17. The magnetic meridian was shown, and declination was checked. (Par. 17, 52.) but there is no evidence that the declinatoire ✓
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

Harold W. Murray April 12, 1937
Inspector, A. T. S. Department

Examined and approved:

C. K. Green
Chief, Section of Field RecordsL. O. Solbert
Chief, Division of ChartsFred. L. Peacock
Chief, Section of Field WorkG. H. Hude
Chief, Division of Hyd. and Top.



This envelop contains composite
tracing showing contours of all
surveys made in this area. (See
Rev., par. 4b). NOT TO BE USED IN CHARTING

