

6119

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. 80-2  
Hydrographic }

LOCALITY

OFF SOUTHERN CALIFORNIA COAST

GULF OF SANTA CATALINA

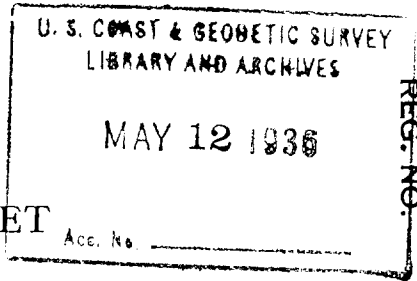
193 5

CHIEF OF PARTY

O. W. Swainson,

9  
11  
0

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY



HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 80-2 - 6119

REGISTER NO.

State California

General locality <sup>off</sup> Southern California Coast

Locality Gulf of Santa Catalina

Scale 1:80,000 Date of survey July 23-Sept. 15, 192<sup>35</sup>.

Vessel Ship PIONEER

Chief of Party O. W. Swainson

Surveyed by O. W. Swainson

Protracted by M. E. Wennermark

Soundings penciled by M. E. Wennermark

Soundings in fathoms feet-

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by J. A. Mc Cormick

Verified by J. A. Mc Cormick

Instructions dated June 23, 1934 and July 16, 1935, 192

Remarks:

## DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEET FIELD  
NO. 80-2

U.S.C. &amp; G.S.S. PIONEER

O. W. Swainson, Cmdg.

Project No. HT-187

Season 1935.

AUTHORITY

This survey was made in accordance with the Director's Instructions dated June 23, 1934, and Supplemental Instructions dated July 16, 1935.

LOCALITY

This sheet comprises an area in the Gulf of Santa Catalina off San Diego, California. It joins sheet Field No. 120-1 on the south, sheet Field No. 80-3 on the west, sheet Field No. 80-1 on the north and sheets Field Nos. 40-2, Register No. 4266 and Register No. 4258 on the east.

SURVEY METHODS

The fathometer was used to obtain the soundings. Sufficient vertical casts were taken throughout the sheet for bottom characteristics and for fathometer comparisons. The wire soundings were plotted above or below their respective fathometer soundings and designated by (v.c.). *see survey part 1*

Standard R. A. R. methods were used for control. A few of these positions were checked or strengthened by single angles or three point fixes.

Six hydrophone stations in all were used with at least three in operation at any one time. Stations "Crystal", "Loma", and "Pyramid" were the most reliable and the greatest weight was given them whenever used. Station "Lacosta-1" was later changed to "Lacosta-2", but neither was entirely satisfactory. A variable lag was noted and these stations merely served as a check on the actual position. Station "Romance" was of little value on this sheet as it was still in its experimental stage.

A launch was used as a floating station at "Romance". The hydrophone was suspended over the stern. It was located by bomb returns from two shore stations.

The velocity of sound used was 1482.5 meters per second. This was determined by velocity tests. The details of this work are submitted in a separate report. Time circles in units of five seconds are plotted on the sheet.

The following are the accepted final positions of the various hydrophones. All but station "Romance" were shore stations and were located by three point fixes, strengthened by from one to three check angles. "Romance" was located as noted above.

Crystal	Lat 33° 34'	111.2 m (1737.2 m.)
	Long 117 50	1048.0 (499.6)
Loma	32 42	1703.4 (144.8)
	117 16	1039.1 (523.4)
Pyramid	32 48	1444 (404 )
	118 20	1386 (175)
LaCosta-1	33 05	1044.7 (803.3)
	117 19	1280.0 (275.9)
LaCosta-2	33 05	1140.0 (708)
	117 20	644.0 (912.0)
Romance	32 05	22 (1826)
	118 14	1563 (11)

In laying the time circles down on the smooth sheet, two or three points along the arcs were computed for insured accuracy. Where the hydrophone stations fell off the sheet, the projection was temporarily extended and an extended beam compass was used to plot the circles.

#### DISCREPANCIES

There are no major discrepancies on this sheet. In general, the cross lines are in satisfactory agreement. In a few cases, however, where the cross lines were run along steep slopes there seem to be slight discrepancies, but making due allowance for this fact they are satisfactory.

At Latitude 32° 26.5', Longitude 117° 39.5', between positions 29 and 30 X, the 518 and the 464 fathom soundings appear to be 100 fathoms too shoal. This is of little significance, however, as there are lesser depths  $1\frac{1}{2}$  miles to the eastward. It is recommended therefore that they be retained. That they are probably good soundings is substantiated by the fact that there are "miss" soundings following. This is also true on the cross line 20-21 X which might suggest a shoaling. Also a 460 fathom sounding was rejected on the cross line because of a very weak echo.

*Sdg accepted. sum.*

In a few instances the fathometer soundings were obviously either read or recorded 100 fathoms in error. These soundings were either corrected or rejected as shown by accompanying notes in the record.

The soundings from position 28 to 31 M inclusive were rejected by the smooth plotter. The bomb position No. 29 was no good and the dead reckoning failed to check.

The soundings from position 48 to 82 M, and those from 11 N to the end of the day were rejected by the Chief of Party. Static and interference ruined bomb reception.

#### JUNCTION WITH OTHER SHEETS

Junctions with the other sheets of the current season are satisfactory.

#### DANGERS

There are no dangers within the limits of this sheet. Except for the inshore area off Point Loma the only shoal less than 100 fathoms lies at Latitude  $32^{\circ} 39'$ , Longitude  $117^{\circ} 58'$ . The least depth on this shoal is 43 fathoms.

#### TIDAL DATA

Los Angeles tide reducers were applied to soundings less than 100 fathoms. The tidal data was furnished by the Washington Office.

#### FATHOMETER CORRECTIONS

Fathometer corrections were computed in accordance with the method laid down in the Hydrographic Manual and are submitted in a separate report. A list of the corrections for the various hydrophone-oscillator combinations will be found in Vol. 1 of the sounding records.

#### COMPARISON WITH PREVIOUS SURVEYS

By making due allowance for the difference in the methods of survey, this sheet agrees very favorably with the previous work. On sheet Register No. 4366, the two most prominent shoals appear to have been very accurately located. However, the current sheet was developed in much greater detail and in most cases slightly lesser depths were obtained on the shoals.

Good agreement is also noted by comparison with sheet Register No 4265a, although the latter was very sketchily done.

#### MISCELLANEOUS INFORMATION

In compliance with the Instructions no further development was done on the shoal area in the southeast corner of the sheet.

As oil streaks on the surface had been observed in the area embraced by this sheet, the officers on watch were requested to keep a sharp lookout for evidence of such conditions, particularly in the areas formerly noted. There are several notations of oil streaks in the records, which were questioned at the time and later deleted as none of them could definitely be classed as seepage from the bottom. ✓

Respectfully submitted.

*M. E. Wennemark.*  
M. E. Wennemark,  
Jr. H. & G. Engr.,  
U.S.C. & G. Survey.

Approved and forwarded:

*R. R. Moore*  
R. R. Moore,  
H. & G. Engineer,  
USC & G. Survey.

✓

STATISTICS, SHEET 80-2

Date	Day Letter	Posn No.	No. of Bomb Positions	No. of Sound.		St. Mi. Sndg.In.	Area.
				Fath.	V.C .		
7/23	A	62	39	403		82.8	
24	B	88	58	380		80.5	
25	C	82	44	561		112.1	
26	D	37	21	226		43.4	
8/6	E	73	48	540	1	110;4	
7	F	72	46	594	2	117.8	
9	G	60	42	349	1	66.0	
12	H	29	17	213	1	37.1	
13	J	52	39	459		80.0	
14	K	58	31	452	2	73.6	
15	L	56	33	493	1	90.3	
21	M	91	51	535	1	106.0	
22	N	11	7	82		17.0	
23	P	67	37	367	2	73.0	
27	R	100	52	596	1	144.4	
28	S	78	49	589	1	112.0	
29	T	87	46	559	3	104.5	
30	U	52	31	417		76.5	
9/13	V	42	28	405		79.5	
14	W	10	6	64		14.0	
15	X	72	33	349	1	60.0	
Totals		1279	758	8633	17	1680.9	1940 SqStMi

## CHIEF OF PARTY'S REPORT OF INSPECTION OF SHEET FIELD NO. 80-2

The sheet and records for this work have been examined and are approved by me. No further work is recommended for the area within the limits of the sheet.



R. R. Moore,  
H. & G. E.,  
Chief of Party.



HYDROGRAPHIC SURVEY NO. H6119

Smooth Sheet Yes

Boat Sheet Yes - 1

Sounding Records Yes 6 & 3 Vols. \_\_\_\_\_

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes

Landmarks for Charts (Form 567) No

Statistics Yes

Approved by Chief of Party ~~No~~ Yes

Recoverable Station Cards (Form 524) No

Special Chart for Lighthouse Service  
(Circular Nov. 30, 1933) \_\_\_\_\_

Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H.6119**

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	...1279
Number of positions checked	..... <sup>12</sup>
Number of positions revised	..... <sup>0</sup>
Number of soundings recorded	...8633
Number of soundings revised	..... <sup>7</sup>
Number of signals erroneously plotted or transferred	..... <sup>0</sup>

Date: June 16, 1936

Verification by J. A. Mc Cormick

Time: 31 hr.

Review by Harold W. Murray

Time: 16 "

Ver. Cor. by "

2 "



GEOGRAPHIC NAMES  
 Survey No. **H6119**

On Chart No. **5701**  
 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

Name on Survey

A B C D E F G H K

Name on Survey	A	B	C	D	E	F	G	H	K
<u>Gulf of Santa Catalina</u> *							✓		
									1
									2
									3
									4
									5
									6
									7
									8
									9
									10
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									25
									26
									27

Names indicated by red checkmark  
 by *B. R. V.* on 6/15/36

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT  
~~PHOTOSTAT OF~~

} No. H **H6119**  
 } ~~No. F~~

{ received  
 { registered  
 { verified  
 { reviewed  
 { approved

MAY 12 1936  
 JUN 1 1936

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
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	
----	--

C. K. Green

LAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 6, 1936.

Division of Hydrography and Topography:

✓ Division of Charts: Att: Mr. E. P. Ellis

Tide Reducers are approved in  
9 volumes of sounding records for

HYDROGRAPHIC SHEET 6119

Locality Gulf of Santa Catalina, Southern California.

Chief of Party: C. W. Swainson in 1935

Plane of reference is mean lower low water reading

3.6 ft. on tide staff at Los Angeles Harbor (Berth 60)  
14.0 ft. below B.M. 8

Height of mean high water above plane of reference is 4.7 feet.

Condition of records satisfactory except as noted below:

*Paul Scherman*  
*Acting* Chief, Division of Tides and Currents.

Verifier's Report on H-6119.

Records:

Records are satisfactory.

Drafting:

Drafting is good.

Junctions:

This sheet is joined on the northeast by H-6117 (unverified), on the north by H-6118, on the north west by H-5758, on the west by H-6120 and on the south by H-6121 (unverified).

Junctions with verified sheets were satisfactory.

July 16, 1936.

Submitted,

J. A. Mc Cormick.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6119 (1935) FIELD NO. 80-2

Gulf of Santa Catalina, Southern California Coast, Cal.  
Surveyed in 1935, Scale 1:80,000.  
Instructions dated June 23, 1934 and July 16, 1935.(Pioneer)

Fathometer Soundings.

3 Point fixes on shore signals.  
RAR control.

Chief of Party - O. W. Swainson  
Surveyed by - O. W. Swainson  
Protracted by - M. E. Wennermark  
Soundings plotted by - M. E. Wennermark  
Verified and inked by - J. A. McCormick

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except that the number of bottom characteristics obtained on this survey, especially in the vicinity of important detached shoals was insufficient. This deficiency was remedied in the office by carrying forward bottom characteristics from H-4265a (1922-28), H-4266 (1922-23) and H-4366 (1924-28).

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

2. Compliance with Instructions for the Project.

The plan, character, and extent of the survey satisfy the instructions for the project except as noted in paragraph 1 of this review.

3. Shoreline and Signals.

This is an offshore survey and contains no shoreline nor topographic signals.

4. Sounding Line Crossings.

Agreement of sounding line crossings is satisfactory. The 464 fm. sounding which falls close to a 518 fm. sounding (lat. 32° 26.5', long. 117° 39.5') has been retained. (See D.R. page 2.)

5. Depth Curves.

The usual depth curves may be satisfactorily drawn.

6. Junctions with Surveys.

a. The junctions on the northeast with H-6117 (1935), on the north with H-6118 (1935), and on the south with H-6121 (1935) will be considered in the reviews of those surveys.



- b. The junctions on the northwest with H-5758 (1933-35) and on the west with H-6120 (1935) are satisfactory.
- c. There are no contemporary surveys on the east between lat. 32°30' and lat. 32°54.' This area; however, is covered by 1:40,000 scale surveys, H-4258 (1922-23) and H-4266 (1922-23). Depths on these old surveys are vertical cast and tube soundings, those falling within the limits of the present survey being vertical casts. In view of the general good agreement existing between the old and present work, the old surveys have been considered as contemporary and the usual junctions effected. Several depths on the old surveys were in disagreement with the present survey. These were not carried forward and should be omitted in future charting.

7. Comparison with Prior Surveys.

a. H-289 (1851).

This is a reconnaissance survey on a very small scale. It contains no information that needs consideration in this review.

b. H-1888 (1888-89) and H-1889 (1888-89).

These 1:20,000 scale sheets cover a small portion of the eastern limits of the present survey. Soundings are generally in good agreement with the present survey; however, in the vicinity of lat. 32°32', long. 117°24', line 24 to 28c on H-1888 (1888-89) with depths varying 87 to 109 fathoms, (none charted), falls in depths of 150 to 450 fms. on the present survey. This line is obviously misplaced and should be disregarded in future charting.

c. H-4265a (1922-23), H-4366 (1924-28) and H-4549a (1925-28).

These surveys are on scales of 1:120,000; 1:160,000, and 1:140,000 respectively and cover most of the present survey. Depths are generally in good agreement with the present survey; however, a number of differences are noted with the sonic soundings on H-4366 (1924), the more important being:

The	308	fath.	sounding	(charted)	at	lat.	32°51'	,	long.	117°57';
"	181	"	"	"	"	"	32°54'	,	"	117°53';
"	370	"	"	"	"	"	32°48'	,	"	118°09'.

Each of these soundings are shoaler by 10 to 30 fathoms than the surrounding depth on the present survey, but in each case the present survey clearly shows definite evidences of shoaling. An investigation of the records for H-4366 (1924) shows that the various types of control was alternately used through-

out the survey, (3 point fixes, RAR, single cuts, dead reckoning, and combinations thereof). The control for the above 3 soundings was considered to be reasonably rigid and the soundings have therefore been carried forward to the present survey and should be used for charting. The remainder of the work on the various surveys noted above should be superseded by the present survey, for charting purposes.

8. Comparison with Charts 5002 (New Print dated Sept. 10, 1935) and 5101 (New Print dated Mar. 28, 1936).

Several soundings shown on the above charts originate with sources other than those discussed in paragraph 7 of this review and are from miscellaneous sources. The authority for these soundings could not be readily ascertained but it is noted that most of them were charted on Chart 5000 (Edition of 1888). A few of these soundings are found to be in conflict with the present survey. The most important of which are the 266 fathom sounding at lat.  $32^{\circ}34'$ , long.  $117^{\circ}44'$  and the 428 fathom sounding at lat.  $32^{\circ}46'$ , long.  $117^{\circ}41'$ . They fall on the present survey in depths of 400 and 585 fathoms respectively. However, in view of their uncertain origin and the probable weak control it is considered that the soundings are out of position, and should therefore be disregarded in future charting.

9. Field Plotting.

Field protracting and plotting were exceptionally accurate and conform to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

This survey is complete and no additional field work is required at this time. However, when field work is resumed in this locality an adequate examination and definite disposition should be made of the following:

- a. The 464 fm. sounding discussed in the Descriptive Report (page 2, Discrepancies).
- b. The 308 fm. sounding discussed in paragraph 7-c of this review.

11. Note to Compiler.

Attention is called to the continued use of bottom characteristics from previous surveys discussed in paragraph 1 of this review.

12. Superseding Previous Surveys.

The present survey with the indicated additions from previous sur-


veys supersedes the following surveys for charting purposes:

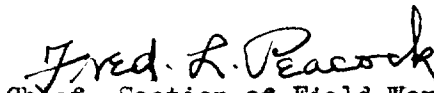
H- 289 (1851)	In part
H-1888 (1888-89)	"
H-1889 (1888-89)	"
H-4265a(1922-28)	In part, except bottom characteristics.
H-4366 (1924-28)	" " " "
H-4549a(1925-28)	In part.

Reviewed by - Harold W. Murray, July 29, 1936.  
and  
John G. Ladd

Inspected by - A. L. Shalowitz

Examined and approved:

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

  
Chief, Section of Field Work.

  
Chief, Division of Charts.

  
Chief, Division of H. & T.

	applied to	Chart 5101-	Feb 27, 1937 -	L.M.Z.
addtl work 1937	" "	" 5101	Mar 23 1938	SSM
	applied to	Chart 5117	June 7, 1937	G.H.S.
addtl work 1937	" "	" 5111	Sept 1938	J.L.

U. S. COAST & GEODETIC SURVEY  
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DEC 1 1937  
ASST. DIR.

6119 (Addl. Work  
1937)

(Addl. Work  
1937)  
6119

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. ~~120~~ 80-2  
*Hydrographic* }

LOCALITY

~~Offshore~~ Southern California Coast  
Gulf of Santa Catalina  
(Lat. 32° 50.8', Long. 117° 57';  
Lat. 32° 54.1', Long. 117° 53';)

1937

CHIEF OF PARTY

H. B. Campbell, H. & G. Engineer.

DESCRIPTIVE REPORT  
TO ACCOMPANY HYDROGRAPHIC SHEET  
NO. 120  
Season of 1937.

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

H. B. Campbell, Commanding.

AUTHORITY

The work on this sheet was done under Supplemental Instructions dated April 19, 1937.

LOCALITY

This work was to make an investigation of two soundings brought forward from Hydrographic Sheep # H-4366 and plotted on Sheet H-6119, as follows:

A 308 fathom sounding in latitude  $32^{\circ} 50.8'$ , longitude  $117^{\circ} 57'$ .

A 181 fathom sounding in latitude  $32^{\circ} 54.1'$ , longitude  $117^{\circ} 53'$ .

The shoalest soundings found are as follows:

A 316 fathom sounding in latitude  $32^{\circ} 49.8'$ , longitude  $117^{\circ} 57'.3$

A 195 fathom sounding in latitude  $32^{\circ} 54.6'$ , longitude  $117^{\circ} 53.5'.7$

METHOD OF SURVEY

The work was done using three point fixes on shore objects. The soundings were obtained by fathometer.

No smooth sheet was made as it was thought that the work would be plotted on Sheet H-6119 in the office.

No reduction was made for tide as the soundings were all over 100 fathoms.

STATISTICS

A Day	Str. PIONEER	20 miles	122 soundings	26 positions
B Day	Str. PIONEER	16 miles	99 soundings	19 positions
TOTALS:		36 miles	221 soundings	45 positions

Approved and forwarded:

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

*R. R. Moore*  
R. R. Moore,  
H. & G. Engineer,  
U.S.C. & G.S.S. PIONEER.



Field Records Section (Charts).

HYDROGRAPHIC SHEET NO. **H6119** (Addl. Wk. 1937)

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	..... <sup>45</sup>
Number of positions checked	.....
Number of positions revised	..... <del>20</del>
Number of soundings recorded	..... <sup>221</sup>
Number of soundings revised	.....
Number of signals erroneously plotted or transferred	..... <sup>1</sup>

Date: **Jan. 18, 1938**

*office Plotting*  
Verification by **G. H. Everett**  
*Completing junction & RAR adjustment by H. W. M.*  
Review by **Harold W. Murray**

Time: 18 hrs } 42  
24 " }  
Time: 4 1/4 "



HYDROGRAPHIC SURVEY NO. H-6119 (Addl. Work, 1937)

Smooth Sheet Original one

Boat Sheet Yes Two { 1 from field  
1 made in office

Sounding Records One Vols. \_\_\_\_\_

Descriptive Report Yes

Title Sheet Yes

List of Signals In Sounding Volume

Landmarks for Charts (Form 567) No

Statistics No

Approved by Chief of Party No

Recoverable Station Cards (Form 524) No

Special Chart for Lighthouse Service No  
(Circular Nov. 30, 1933)

Remarks HYDROGRAPHY

Total Days 2

Last Date Oct. 12, 1937

520.

### TIDE NOTE FOR HYDROGRAPHIC SHEET

December 22, 1937.

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis

Plane of reference

~~Tide Reducers were~~ approved in

1 volume~~s~~ of sounding records for

HYDROGRAPHIC SHEET 6119 Add. Wk. 1937

Locality Gulf of Santa Catalina, California coast.

Chief of Party: H. B. Campbell in 1937

Plane of reference is mean lower low water.

ft. on tide staff at

ft. below B.M.

All depths over 100 fathoms and no tide reducers were necessary.

Condition of records satisfactory except as noted below:



Acting Chief, Division of Tides and Currents.

# Report on H-6119 (Add'l. Work 1937)

The records conform to the requirements of the General Instructions. ✓

The field party submitted a boat sheet which showed a considerable amount of shrinkage. The positions on this B.S. will not check with the recorded angles because of this shrinkage. It was also noted that  $\Delta$  Guds was plotted one minute off in longitude. ✓

Because of the condition of the field B.S. a new projection was made and the positions replotted. Transfer of positions was made on H-6119 and the soundings inked on H-6119. The office ~~B.S.~~ <sup>projection</sup> and the plotting of  $\Delta$  stations have been checked. The plotting of the positions, their transfer and plotting of soundings have not been verified by anyone else ~~except~~ <sup>although</sup> as checked by the office plotter. ✓

Time checked very well. In the first area examined Lat.  $32^{\circ}50'$ , Long.  $117-57$ , the additional work agrees very good with itself and with H-6119 but disagrees with the ~~308 fm.~~ <sup>Retained</sup> sounding from H-4366. A 336 fm. falls on top of this 308 fm. (Pos. 20A) but ~~was~~ was inked just above it in order to show it. ✓ Soundings in this area which could not be inked because of lack of space are shown to one side in pencil.

In the area at Lat.  $32-54.4$  Long.  $117-52.5$  Pos 26A (a comparative sounding) was ~~not inked~~ <sup>because it was not accompanied by a 3-pt. fix position</sup>, but this position checks well the 198 fms of H-6119. Pos 26A is { 199 fm. vertical cast  
201 "

~~In the same locality soundings between 2-3 B disagree with 301-311 (H-6119)~~

Differences in soundings on B day with H-6119 are tabulated.

been -  
Curves have <sup>been</sup> revised.

Submitted 1/18/38

J. H. Everett.

Disagreements on B day with H-6119

Pos. (Add'l work)	Soundings (Fathoms)		Location		Depth linked on sheet
	(Add'l work)	H-6119	Lat.	Long.	
2B-3B	315	228	32-55	117-53	228
4-5B	217	202	-54.6	-52.8	202
8-9B	226	198	-54.3	-52.5	198
14-15B	243-285	238 N.P.	-53.6	-52.3	238
16-17B	268	218-230	-54.2	-51.8	218
17-18B	204	193-196	-54.5	-52.8	193-196

Note - There are no soundings which fall on the 181 fm (from H-4366). A sounding of 199 fm was L.D. obtained in this ~~near vicinity~~ <sup>near vicinity</sup> of 181 fm.

Above discrepancies eliminated by readjusting 1935 work. (See Rev. Ad. Wk. p. 30) HMM

H-6119 (Add'l Work 1937)

△ stations used by hydro party. For data see U.S.C&G.S. Report 1904  
Appendix 9 Part I.

Correction for N.A. Datum 1927      Lat. (-20.9 meters)  
Long. (-37.3 meters)

~~Correction for shrinkage of B.S.~~      ~~110 N.S.~~  
~~500 E.W.~~

✓ △ Santiago N.W. Peak (pg. 614)

Plotted N.A. 1927 datum ✓

Lat.		Long.
33°-43' - 346.9 m (N.A. Dat.)		117°-32' - 947.2 m (N.A. Dat.)
<u>-20.9</u>		<u>-37.3</u>
326.0 m (N.A. 1927)		909.9 m (N.A. 1927)

✓ △ High Mt. Catalina I 1876 (pg. 580)

✓ Plotting (N.A. 1927)

33°-22' - 960 m	118°-25' - 231.5 m
<u>-20.9</u>	<u>-37.3</u>
939.1 m	194.2 m

✓ △ Guds (1860) San Clemente I (pg. 578)

32°-49' - 1391.1 m	118°-21' - 1439.7 m
<u>-20.9</u>	<u>-37.3</u>
1370.2 m	1402.4 m

✓ △ U.S. Navy Tower 1936. San Clemente I.

✓ Plotting (N.A. 1927)

32°-53' - 71.4 m	118°-27' - 1560.5 m
<u>-20.9</u>	<u>34.93 m</u> 1595.43
50.5 m	<u>-37.3</u> <u>-37.3</u>
	26' - 57.6 m 1558.1

1250

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSTAT OF	}	No. H-6119 (Addl. Work 1937) <del>No. T</del>	}	received Dec. 7, 1937 registered Dec. 17, 1937 verified reviewed approved
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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
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	C. K. Green
----	-------------

✓

33°00'

118°00'

117°40'

33°00'

493

500

503

503

523

554

568

210

210

237

495

488

390

407

400

476

400

423

454

465

427

410

407

429

185

147

FOR INFORMATION OF COMPILER ONLY

Section of Chart 5101 (New Print dated Oct. 23, 1937) showing charted soundings from H-6118 (1935) and H-6119 (1935) that have been changed on the smooth sheet as a result of adjustment. See Rev. Par. 3c of Add'l Work (1937).

32°40'

118°00'

117°40'

32°40'

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6119 (1937) Ad.Wk. FIELD NO. 80-2

Gulf of Santa Catalina, Southern California Coast, California  
Surveyed in October 1937, Scale 1:80,000  
Instructions dated April 19, 1937 (PIONEER)

Fathometer Soundings.

3 Point fixes on shore signals.

Chief of Party - H. B. Campbell.  
Surveyed by - R. R. Moore.  
Protracted by - G. H. Everett.  
Soundings plotted by - G. H. Everett.  
Verified and inked by - G. H. Everett.

1. Purpose of Additional Work.

The purpose of this additional work was to investigate a 181 and 308 fathom sounding carried forward from H-4366 (1924-28) to H-6119 (1935), one of which, the 308 fathoms, was called for in the review of H-6119 (1935) par. 10b.

2. Office Work.

The field work was submitted on a boat sheet, scale 1:120,000. An inspection revealed that the sheet was considerably distorted and that triangulation station GUDS on San Clemente Island was plotted 1 minute west in longitude of its correct position thereby causing a 340 m. error in position plotting. The work was therefore replotted on a new sheet (now labeled as boat sheet) in the office and transferred to H-6119 (1935).

3. Results of Additional Work.

- a. Development of the 308 fathom (charted) carried forward from H-4366 (1924-28) in latitude  $32^{\circ} 51'$ , longitude  $117^{\circ} 57'$  does not reveal any shoaler depths here, a least depth of 336 fathoms being obtained along side of the 308 fathoms and a 316 fathoms about 1 mile S X W. The transferred 308 fathom sounding has been retained.
- b. Development of the 181 fathoms (charted) carried forward from H-4366 (1924-28) in lat.  $32^{\circ} 48'$ , long.  $117^{\circ} 53'$  does not reveal any shoaler depths, however, the 200 fathom curve enclosing the two detached shoal areas here is now completely defined. The transferred 181 fathoms has been retained.
- c. An analysis of cross line agreement showed discrepancies of 5 to 50 fathoms between the 3 point fix controlled additional work and several of the previous season's RAR lines. It was noted in the case of the RAR lines that the three bomb returns obtained in most cases did not intersect at a common point. By using the arc which was disregarded in the



original plotting in combination with one or the other of the other two arcs together with the dead reckoning data, a much better agreement in crossings was obtained. Lines 10 to 24A in lat.  $32^{\circ} 55'$ , long.  $117^{\circ} 50'$ ; 30 to 42A in lat.  $32^{\circ} 51'$ , long.  $118^{\circ} 03'$ , and 29 to 36L in lat.  $32^{\circ} 53'$ , long.  $117^{\circ} 52'$  on H-6119 (1935) and 1 to 6L in lat.  $32^{\circ} 53'$ , long.  $118^{\circ} 02'$ , on H-6118 (1935) were readjusted on this basis.

4. Note to Compiler.

The compiler's attention is called to a tracing attached to the Descriptive Report which shows the charted soundings affected by the adjustments discussed in par. 3c, this review.

5. Reviewed by - Harold W. Murray, Jan. 31, 1938.

Inspected by - A. L. Shalowitz.

Examined and approved:

*K. T. Adams*

K. T. Adams,  
Asst. Chief, Division of Charts.

*L. O. Gilbert*

Chief, Division of Charts.

*Fred. L. Pearson*

Chief, Section of Field Work.

*G. H. Hudd*

Chief, Division of H. & T.