5396
5397

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
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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~~ **********
Hydrographic

Sheet No.s 12 & 13

5397 5396

LOCALITY

Southern California

Los Angeles County

Portuguese Bend to Hermosa Beach

19 33

CHIEF OF PARTY

Robert W. Knox, H & G Eng'r

U. S. GOVERNMENT PRINTING OFFICE: 1930

5396
5397

Form 537
Ed. Sept., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
FEB 28 1934
Acc. No.

REG. NO. 5396

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. 13

REGISTER NO. 5396

State California

General locality Santa Monica Bay, California

Locality Redondo Beach to Playa del Rey

Scale 1:10,000 Date of survey May 1 to Jun 19, 1933

Vessel ~~chartered launch Romarco~~

Chief of Party Robert W. Knox

Surveyed by do

Protracted by A. J. Vollmar

Soundings penciled by do

Soundings in fathoms ~~feet~~

Plane of reference mean lower low water

Subdivision of wire dragged areas by

Inked by R.B.Krum

Verified by R.B.Krum

Instructions dated Feb 17, 1933, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1929

Applied to Cht. 5144, Feb. 1935
K.R.

DESCRIPTIVE REPORT 5397 – 5396

TO ACCOMPANY HYDROGRAPHIC SHEETS NOS. 12 & 13

Scale 1:10,000

SOUTHERN CALIFORNIA PORTUGUESE BEND TO HERMOSA BEACH

Instructions dated Fe. 17, 1933 Surveyed by R. W. Knox

AREA, LIMITE, ETC. The area covered by sheets 12 and 13 comprises the inshore waters from immediately north of Portuguese Bend northward to the southern limits of Hermosa Beach. Junction at varying depths, offshore, was made with the work of the current season of the Steamer Pioneer.

With the exception of oil shipments to and from the Standard Oil Company's pier at El Segundo, there is no water bourne commerce along this section of the Coast. There are several so-called Pleasure Piers along the beach from one or two of which water taxis maintain schedules with fishing barges anchoraged inthe Bay.

Paragraph 10 of the Director's instructions of Feb. 17, 1933 stated that it was desired to finish the project by June 30th, if possible. It was therefore attempted to so plan the execution of the surveys from San Pedro Breakwater to Point Mugu, a distance of some sixty miles, so as to complete them by the end of the fiscal year, and still satisfy the requirements of the Hydrographic Manual, the specific instructions, and such additional requirements as the nature of the bottom demanded. The work was completed shortly before June thirtieth, and an examination of the smooth sheets leads the Chief of Party to beleive that all essential requitements were met.

SURVEY METHODS: Standard survey methods were used; a ten and twelve pound lead being used under and over approximately ten fathoms, respectively. A great deal of trouble was experienced in obtaining true lead line corrections, due to the poor quality of the tiller rope used. Successive days corrections were plotted on cross section paper and the results studies in an effort to better arrive at true corrections.

DISCREPANCIES: In latitude 33° 49!1, longitude 118° 24!3 it was noted that a 10 and 11 fathom sounding appear contradictory. The actual difference is 3 feet, and it is thought the sounding between positions 1 and 2 on g day might not actually been on a line between the positions. only 1 ft. H5397

DANGERS AN SHOALS: The shore line of the southern portion of sheet 12 is rocky and broken, the water line being fringed with many rocks and breakers, and with heavy kelp out to a depth of about 10 fathoms. The topography of the shore line and interior changes sharply in about latitude 33° 48', breaking from precipitous rocky bluffs decending directly to the water line to a sand beach. The dangers are well inshore, and with the exception of the small islet about 340 m SSE of the Point Vicente Lighthouse, are in heavy kelp:

a. A rock, breaking in a light swell, is located in latitude 33° 46' 40m, longitude 118° 25' 908 m.

b. A reef makes off the point in latitude 33° 47!8, longitude 118° 24!4 a distance of about 210 m in a ~~ESE~~ WSW direction

SUBMARINE VALLEY: A submarine valley lies in the northern portion of sheet 12. Portions of the slope are exceedingly steep. A few rocky bottom specimens were recorded in the valley, but the majority were sand, gray or black. The valley can be distinctly traced by the soundings almost to the low water line, but shore-side there is nothing in the way of topographic features to indicate its presence.

ANCHORAGES: There is but one anchorage in the area covered by these sheets, that at Malaga Cove, and it is safe and comfortable only in the fairest of weather. The launch Romance was able to make use of it but few times during the course of the field work in the locality.

CURRENTS: Except for moderately strong currents sometimes encountered over the submarine valley mentioned above, and the above normal currents naturally expected during the strength of the tide inthe vicinity of the prominent points, no abnormal currents were noted during the survey.

A twenty-four hour series of currents were observed in the vicinity of the ship moorings off El Segundo. A current pole was used.

COMPARISION WITH PREVIOUS SURVEYS: No bromides of previous inshore work were furnished the party.

BOTTOM: Bottom specimens were invariably fine sand, mostly gray, but with some black. Some rocky bottoms were noted close ashore on the southern portion of sheet 12.

GEOGRAPHIC NAMES: Local names are identical with those appearing on the charts. Attention is respectfully called to the difference in spelling of the name Vicente appearing on the charts (as given) and in the Coast Pilot and all triangulation records - spelt Vincente. The newspapers of the vicinity spell the name as it appears on the charts.

PLOTTING; Because of a shortage of steel three-arm protractors, most of the plotting was done with celluloid protractors. It is thought the work suffered little therefrom, as most of the fixes are strong, and the draftsmen used the one available steel protractor between them for the plotting of the weaker fixes.

Rocky bottom specimens were erroneously recorded in the volumes as rk or Rk instead of rky. In all cases actually involving a rock awash of a sunken rock, the proper notation will be found in the remarks column.

Respectfully submitted:

Robert W. Knox

Robert W. Knox,
Chief of Party.

STATISTICS

HYDROGRAPHIC SHEETS NOS. 12 & 13

* * *

No. 12

Date	Vol	Day	St.mi.sdg.	Pos.	Sdgs	Boat
Apr 18	1	a	9.3	80	147	Romance
19	1	b	20.3	163	252	do
20	1	c	19.0	153	320	do
21	2	d	21.6	174	378	do
24	2	e	21.6	175	514	do
25	2 & 3	f	26.5	189	534	do
26	3	g	27.9	194	465	do
27	3 & 4	h	19.1	149	460	do
28	4	j	14.6	141	241	do
May 1	4	k	5.7	57	98	do
Jun 12	4	l	3.1	27	47	do
19	4	m	- -	7	9	skiff
27	4	n	7.8	69	183	Romance
totals			196.5	1578	3648	

No. 13

May 1	1	a	16.0	102	294	Romance
5	1	b	20.7	113	363	do
8	1	c	5.5	26	88	do
12	1	d	7.6	46	89	do
15	1	e	6.6	46	172	do
17	2	f	21.3	121	486	do
Jun 19	2	g	12.4	93	192	do
totals			90.1	547	1684	

APPROVAL OF CHIEF OF PARTY

Field sheets numbers 12 and 13 and accompanying records have been inspected and approved by me. The field work was done under my immediate supervision; the office work under my occasional supervision.

No additional work is considered necessary.

Robert W. Knox

Robert W. Knox,
Chief of Party.

Duplicate

Form 567

DIVISION OF CHARTS, FILE NO. _____

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Long Beach, California

February 23, 1934, 19

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Robert W. Knox, Chief of Party.

DESCRIPTION	POSITION						Datum	METHOD OF DETERMINATION	CHARTS AFFECTED
	Latitude			Longitude					
	°	'	D. M. meters	°	'	D. P. Meters			
Elevator loft	33	51	1527.7	118	24	109.0	NA1927	tri	5144
Black tank(Del Rey)	33	57	432.1	118	26	969.9	do	tri	5144
West stack	33	51	225.0	118	23	1095.9	do	trl	5144
Tallest stack	33	54	1211.6	118	24	907.1	do	tri	5144
Water tank	33	51	590.0	118	23	16.2	do	tri	5144
Spire	33	47	1315.4	118	23	1469.9	do	trl	5144 & 5143
Lone oil derrick	33	53	1686	118	24	726	do	topo	5144

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

GOVERNMENT PRINTING OFFICE

LCC

March 17, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 5396

Locality Redondo Beach and Port Ballona, Coast of Southern California

Chief of Party: Robt. W. Knox in 1933
Plane of reference is mean lower low water, reading
2.8 ft. on tide staff at El Segundo
6.4 ft. below B. M. R-20

2.0 ft. on tide staff at Santa Monica
25.2 ft. below B.M. "PRIMARY"

3.6 ft. on tide staff at Los Angeles Outer Harbor
14.0 ft. below B.M. 8

Height of mean higher high water above plane of reference is 5.4 feet

Condition of records satisfactory except as noted below:

Harmann

Acting Chief, Division of Tides and Currents

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5396

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

Number of positions on sheet	547
Number of positions checked	61
Number of positions revised	10
Number of soundings recorded	1684
Number of soundings revised	81
Number of signals erroneously plotted or transferred	none

Date: June 18 1934

Cartographer: R. B. Krum

Verification of positioning by J. G. Ladd Time: hours

Verification and inking by R. B. Krum Time: 85 hours

Review by Time:

Records:

The sounding records are neat and legible. They conform to the General Requirements with the following exceptions:-

1. Changes in time intervals between positions were not always noted with a distinctive mark.
2. ~~The bottom characteristics were not usually entered with their correct abbreviation. (See Descriptive Report)~~
3. Signal GUN was often entered in the records as SEC.
4. There were many errors in either reading or recording angular values for the fixes. The field draftsman adjusted most of these during the protracting, however, in some cases the adjustment seemed to be little more than guess work without sufficient proof for making the change. These will be mentioned under Office Protracting.
5. There were many cases where the field party recorded the wrong name for one of the signals between which the angle was taken. Many of these were adjusted by the field draftsman during protracting, but sometimes an incorrect adjustment was attempted by altering the value of the angle rather than finding the true cause of error.
6. The bell buoy (pos. 42g) and the five mooring buoys (pos. 82-86g) were not entered in the index of the record.
7. On the line of f day which passes around three wharves, no distance is given from the boat to the end of the wharves.

Field Protracting:

The field protracting was very accurately done except for cases where the information in the records was obviously in error. Mr. J. G. Ladd made the visual inspection of this sheet.

Field Plotting and Drafting:

The day numbers and letters were very well drawn and but for the following exceptions the field drafting was good:-

1. In plotting soundings the field draftsman took into consideration neither the changes in time interval between positions nor cases where the position and the sounding did not coincide.
2. the soundings were somewhat large.
3. Some of the sounding lines were engraved into the paper.
4. In some cases turns in the boat's course between positions were not taken into consideration in plotting soundings.
5. Geographic names were not penciled in by the field draftsman.
6. There was no triangulation datum given on the hydrographic sheet.

7. Bottom characteristics were not always penciled on the hydrographic sheet with their correct abbreviation.

Office Protracting:

Positions 38, 68, 69, 70, and 71 a ; positions 6 and 25b ; and positions 12c, 32d, and 69f were reprotracted. An explanation for reprotracting is given in the sounding records wherever it is deemed necessary.

Office Drafting:

Some eighty soundings were replotted by the verifier. These changes are marked in the sounding records. Replotting was considered advisable to satisfy the requirements in the records such as :-

1. Bends in line between positions. Noteworthy of these is the sounding between positions 21 and22g. In all cases of changes the boat sheet plotting was carefully inspected.
2. Positions which were taken too late to coincide with the soundings.
3. Changes in time interval between positions.
4. And of course the necessary replotting caused by a reprotracted position.

Comparison with Other Data:

The hydrographic sheet checked well with the boat sheet and with the contemporary topographic sheets 4827a and b and 4828. Upon comparison with the current standard chart 5202 it was noted that the name Playa del Rey is not on the chart. However the verifier understands that proper authority was given to ink the name Playa del Rey on H-5363 adjoining this sheet. (See Verification Report of H-5363) Also the five mooring buoys heretofore mentioned are not shown on the current Aid Proof.

Crossings:

There are no crossings on this sheet.

Curves:

The usual depth curves can be drawn except for the one fathom and parts of the two fathom curves. The ten fathom curve on the adjoining sheet H-5235 was completely redrawn after the ten fathom soundings had been revised to $\frac{1}{4}$ and $\frac{1}{2}$ values so that the ten fathom curve on both sheets would coincide.

Junctions:

H-5235 fills in the gap on this sheet and joins both sections of hydrography. This sheet is joined on the north by H-5363 and on the south by H- 5397. All overlap was made by tracing transfer and the soundings are in good agreement.

Respectfully submitted ,

R. B. Krum, Verifier.

June 18, 1934

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5396 (1933)

Redondo Beach and Port Ballona, Santa Monica Bay, Calif.
Instructions dated Feb. 17, 1933 (R. W. Knox) and Oct. 21, 1932 (C. K. Green)
Surveyed in May-June 1933

Machine and Hand Lead Soundings - 3 Point Fix on Shore Signals.

Chief of Party - Robert W. Knox.
Surveyed by - R. W. Knox.
Protracted and soundings penciled by - A. J. Vollmar.
Verified and inked by - J. G. Ladd; R. B. Krum.

1. Condition of Records.

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

a. The aids to navigation located by sextant cuts were not indexed in the front of the sounding volumes (par. 60a).

b. When sounding lines were run close to wharves the distance from line to wharf should have been given (par. 75b).

c. There were a number of errors in recording the signals used, some of which were corrected by the field draftsman in plotting the smooth sheet.

d. There was no note on the smooth sheet as to the geographical datum used although a reference station was correctly noted.

e. The Director's instructions regarding the location of natural or artificial objects for use of Lighthouse Bureau have not been complied with. Not necessary, no floating aids in this area. GPR

2. Compliance with Instructions for the Project.

The survey satisfies the requirements of the instructions under which the work was done.

3. Sounding Line Crossings.

There are no cross lines on this survey and none were called for in the instructions. The parallel lines show a very good agreement.

4. Depth Curves.

The depth curves are satisfactory.

5. Junctions with Contemporary Surveys.

a. There is a two mile gap in the middle of this survey which is covered by H. 5235 (1933). A very satisfactory junction is effected by the new survey on both ends of H. 5235 (1933).

b. The junctions with H. 5397 (1933) on the south and with H. 5363 on the north are satisfactory.

c. The offshore contemporary survey has not been received to date.

6. Comparison with Prior Surveys.

There are two prior surveys in this area, H. 1340b and H. 1341a, both surveyed in 1876. The former survey covers the inshore soundings and the latter the offshore. There is a very good agreement between these two surveys and the present one. There are no dangers or shoal spots of any kind in this area. The new survey within its limits should supersede both prior surveys.

7. Comparison with Chart No. 5144.

The comparison with Chart No. 5144 is satisfactory. However, the five mooring buoys south of El Segundo are not shown on the current sheet.

8. Field Plotting.

The field plotting was satisfactory with the following exceptions:

a. The frequent change in time interval between positions was not always considered.

b. Changes in course between positions were not always taken into consideration in plotting on the smooth sheet.

c. No geographic names were shown on the sheet.

9. Additional Field Work Recommended.

No additional field work is necessary.

10. Superseding Old Surveys.

Within the area covered the present survey supersedes the following surveys for charting purposes:

H. 1340b (1876) in part.
H. 1341a (1876) in part.

11. Note to Compiler.

Because of the general good agreement between the new and the old surveys, the soundings on H. 1340b (1876) that fall inshore of the inshore limits of the new survey can be used to supplement the new survey whenever necessary for large scale charting.

12. Reviewed by - John G. Ladd, June 1934.

Inspected by - A. L. Shalowitz.

K. T. Adams

K. T. Adams,
Chief, Section of Field Records.

Examined and approved:

L. O. Colbert

Chief, Division of Charts.

T. S. Borden

Chief, Section of Field Work.

G. Rude

Chief, Division of H. & T.

Form 537
Ed. Sept., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
FEB 28 1934
Acc. No.
REG. NO. 5397

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. 12

REGISTER NO. 5397

State California

General locality Santa Monica Bay.

Locality Point Vincente to Redondo Beach.

Scale 1:10,000 Date of survey Apr 18 to Jun 27, 1933

Vessel chartered launch Romance

Chief of Party Robert W. Knox

Surveyed by do

Protracted by A. J. Vollmar

Soundings penciled by do

Soundings in fathoms ~~feet~~

Plane of reference mean lower low water

Subdivision of wire dragged areas by

Inked by Alexis M. Uzefovich

Verified by A.M.U.

Instructions dated February 17, 1933, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1929

Applied to Cht. 5144, Feb., 1935
K. R.

KTA
&
EAR

80-LE

July 12, 1934.

To: Lieutenant Robert W. Knox,
U. S. Coast and Geodetic Survey,
P. O. Box 463,
Long Beach, California.

From: The Director,
U. S. Coast and Geodetic Survey.

Subject: Hydrographic Survey H 5397.

Hydrographic survey H 5397 in the vicinity of Santa Monica Bay, California, has just been reviewed in this office.

There are being forwarded to you two photostats of sections of this smooth sheet, on which are indicated in red crayon small inked rocks, for the existence of which no support is found on either the topographic survey, the original sounding records, or the boat sheet. One of these apparently small rocks is found just eastward of Long Point. The other two are indicated on the second photostat, one in latitude 33° 48½', and the other just north of latitude 33° 49'.

You will please examine these photostats and advise this office as to whether these rocks actually exist or whether they should be removed from the smooth sheet. If they exist, please advise this office as to why their existence is not verified in some of the other records.

If necessary to make a field examination in order to disprove or prove the existence of these three rocks, you are instructed to make such examination at such time in the near future as is convenient to you.

(Signed) J. H. HAWLEY

Director.

Acting

POST-OFFICE ADDRESS: Box 463 Long Beach, California.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

KTA

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

1934 AUG 6 PM 12:57

August 2, 1934.

To: The Director,
Coast and Geodetic Survey.

From: Lieut. Robert W. Knox,
Coast and Geodetic Survey.

Subject: Hydrographic Survey H 5397.

Reference: Director's letter of July 12th, 80-LE.

A field examination was made of the shore line in the vicinity of 1) Long Point and 2) Malaga Cove to determine whether or not small rocks, as noted in the above reference, actually existed.

Hydrographic signals in the vicinity of all three questioned rocks were recovered and occupied with a sextant where angles were taken to the smooth sheet positions of the rocks. No evidence of any of the rocks could be found, and it is recommended they be removed from the smooth sheet. Their smooth sheet locations are:

1) 60 m 137° true from 0 Ly
2) 80 m 300° true from 0 Ng
3) 130 m 235° true from 0 Blue

It is difficult to understand how these rocks appeared upon the smooth sheet without support from any of the original records, as the civilian draftsmen have been duly impressed with the importance and seriousness of such a matter, and the shore line transfer was supposedly checked.

A copy of the reference has been sent to the draftsmen at San Diego for their information.

Robert W. Knox

Robert W. Knox,
Chiefof Party.

The bare rocks noted above have been removed from the smooth sheet. In addition to the rocks a sunken rock near shore as noted in par. 1.a of the review of H5397 (1933) was also removed. This rock was inadvertly overlooked when the letter of July 12, 1934 (attached herewith) was written to the chief of party.

A.L.S. (aug. 20, 1934)

LAC

82

March 17, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5397

Locality Point Vincente to Redondo Beach, Coast of Southern California

Chief of Party: Robt. W. Knox in 1933
Plane of reference is mean lower low water, reading
3.6 ft. on tide staff at Los Angeles Outer Harbor
14.0 ft. below B. M. g

Heigh of mean higher high water above plane of reference is 5.4 feet

Condition of records satisfactory except as noted below:

H A Marmer
Acting Chief, Division of Tides and Currents

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5397.

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

Number of positions on sheet	1578
Number of positions checked	7
Number of positions revised	—
Number of soundings recorded	3648
Number of soundings revised	53
Number of signals erroneously plotted or transferred	—

Date: May 28, 1934

Cartographer: Alexis M. Uzefovich

May 29, 1934

Section of Field Records
Report on H-5397

Chief of party R.W. Knox — Surveyed in Apr.-June 1933
Protracted by A.J. Wollmar — Surveyed by R.W. Knox
Verified and inked by A.M. Uzefovich — Soundings plotted by A.J. Wollmar

1. The records conform to the requirements of the General Instructions, except Vol. I, page 38, positions 112b-113b, where the ~~spacing of~~ time was not indicated ~~properly~~.
2. The field plotting was completed to the extent prescribed in the General Instructions.
3. The hydrography is incomplete, and the usual depth curves of one, two, three, five, and even ten fathoms can not be drawn for their full extention.
4. The office cartographer inked MLLW line, and improved slightly, according to Topo. sheets 4825 and 4826, the shore line, done by the field party.
5. The junction with adjacent sheet H-5396 was not made, as this sheet is not inked yet. The junction with adjacent sheet H-4559 was also not made. This sheet has scale 1:120,000.
6. Remarks: Vol.2, p.47, position 106e (205m. S.W. of ⊙ Bum, Lat. 33°46') mentioned: "Bending 1 ft. left to avoid rock", there is no rock on Smooth sheet, Boat sheet, and Topo. 4826.
There is on Smooth sheet a symbol + for sunken rock (125m. N. of ⊙ Sum, Lat. 33°48.2), which does not show on Boat Sheet and Topo. 4826.
There are also on Smooth sheet three small islands (60m. S.E. of ⊙ LY - Lat. 33°44'.2, 80m. N.W. of ⊙ Ng - Lat. 33°48.4, and 120m. S.W. of ⊙ Blue - Lat. 33°49'.1), which do not appear on Boat sheet, or on Topo. 4825 and 4826.
The buoy at Lat. 33°46'.6 and Long 118°25'.9 does not show on Topo. 4826.
Vol. 3, p. 14 - mentioned: "strong currents along submarine valley" (near Lat. 33°50')
7. The quality of the work is fair.

Respectfully submitted
Alexis M. Uzefovich

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5397 (1933).

Point Vincente to Redondo Beach and Santa Monica Bay, Calif.
Instructions dated Feb. 17, 1933 (R.W. Knox) and Oct. 21, 1932
Surveyed in 1933. (G. K. Green).

Machine and Lead Line Soundings. - 3 Point Fixes on Shore Signals.

Chief of Party - Robert W. Knox.
Surveyed by - R. W. Knox.
Protracted and soundings penciled by - A. J. Vollmar.
Verified and inked by - J. G. Ladd; A. M. Uzefovich.

1. Condition of Records.

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

* a. The origin of the three islets on the smooth sheet in lat. 33°44'.25, long. 118°23'.65 and lat. 33°45'.5, long. 118°23'.55 and lat. 33°49'.1, long. 118°23'.4 and the sunken rock at lat. 33°48'.2, long. 118°23'.75 could not be ascertained. They are not shown on the current topographic sheet, the boat sheet, nor any prior topographic sheet nor hydrographic sheet, nor could any reference to them be found in the sounding records. (See par. 9 and 11 of this review.).

* Islets and sunken rock removed from sheet on authority of letter from chief of Party dated Aug. 2 1934. (Attached to Descriptive report)

2. Compliance with Instructions for the Project.

The survey satisfies the requirements of the instructions for the Project.

3. Sounding Line Crossings.

No general system of cross lines was called for in the instructions. The cross lines run in the submarine valley on the north end of the sheet, (Specifically called for) shows a good agreement of the crossings.

4. Depth Curves.

The depth curves are satisfactory. The ten fathom curve is the only inshore curve that is complete, the 1, 2, 3 and 5 fathom curves are broken due to the inability to survey near shore on account of heavy kelp and rocks.

5. Junction with Contemporary Surveys.

The junction with H. 5396 (1933) on the north is considered in the review of that sheet. No other adjoining sheets as yet have been received. The offshore junction with H. 4559 (1928) is satisfactory.

6. Comparison with Prior Surveys.

The rocks and soundings from prior hydrographic and topographic surveys that were found to be in conflict with the present hydrographic survey have been disposed of in accordance with the principles laid down in "Instructions for Review of Hydrographic Surveys". The more important of those so disposed are included in the following discussion of these prior surveys in this area. They are H. 1417 (1878), H. 1340b (1876) which includes work transferred from H. 1341a and H. 4784 (1928).

a. H. 1417 (1878).

This survey is in general good agreement with the present survey and within its limits should be superseded by the new survey (H. 5397 (1933) for charting purposes.

b. H. 1340b (1876).

There is a good agreement between this survey and the new one with the following exceptions:

1. A 16 and 23 fathom sounding (originating with H. 1341a, the 23 only having been transferred to H. 1340b) in the upper end of the submarine valley fall in depths of 30 to 34 fathoms respectively on the new survey. The deeper soundings of the new survey are well corraborated by other soundings and should be accepted as correct.

2. A sounding line that crosses the head of the submarine valley is consistently deeper by 4 to 6 fathoms than the soundings of the new survey. An examination, however, shows that the control for this line (on H. 1340b) is weak. This area on the new survey is fairly well developed and should be accepted. In view of the increased development, more accurately controlled, and larger scale of the new survey, it should supersede H. 1340b for charting purposes.

c. H. 4784 (1928).

This survey is a fathometer survey of the submarine valley off Redondo Beach and shows a good agreement with the new survey with the exception of one charted 44 fathom sounding in lat. 33°49'.82 long. 118°24'.76 which falls on a 89 fathom sounding on the new survey. The depths of the new survey are well substantiated. ~~As there is a steep slope within 800 meters to the north of the 44 fathom sounding, it is possible that it is an echo from the side of the slope.~~ Because of the larger scale of the new survey and the fact that it is a vertical cast survey, it should supersede H. 4784 within its limits for charting purposes.

7. Comparison with Charts Nos. 5143 and 5144.

Except for matters discussed above there are no other rocks, shoals,

or matters of importance that need consideration in this review. However, attention is called to the fact that a buoy shown on the new survey off Rock Point is not shown on the chart. As an examination fails to show any official authority for this buoy it is assumed to be a privately maintained one.

8. Field Plotting.

The field plotting is very satisfactory with the following exceptions:

a. The note "bending left to avoid rock" at position 106e Vol. 2 should have been accounted for in the plotting. A sunken rock has been added to the sheet in the office at this position.

9. Additional Field Work Recommended.

* No additional field work is recommended. The field party should however be requested to advise the office of the origin of the sunken rock at lat. 33°48'.2, long. 118°23'.75 and the three small islets in lat. 33°44'.25, long. 118°23'.65, lat. 33°48'.5, long. 118°23'.55, and lat. 33°49'.1, long. 118°23'.4 which are shown on the new survey but for which no authority has been found.

* (See note at par. 1a of this review).

10. Superseding Old Surveys.

Within the area covered the present survey with the indicated additions from previous surveys supersedes the following surveys for charting purposes:

H. 1417 (1878) in part.
H. 1341a (~~1878~~) " " (1876)
H. 1340b (1876) " "
H. 4784 (1928) " "

11. ~~Note to Compiler.~~

The charting of the sunken rock and the three islets mentioned above in par. 9 should be withheld until information from the field party is received regarding their origin.

12. Reviewed by - J. G. Ladd. June, 1934

Inspected by - A. L. Shalowitz.

K. T. Adams
K. T. Adams,
Chief, Section of Field Records.

Examined and approved:

L. O. Colbert
Chief, Division of Charts.

J. S. Borden
Chief, Section of Field Work.

G. F. Tinder
Chief, Division of H. & T.

Applied to chart 5143 Dec. 27, 1934 AHC

25 Jan 27 1936

Applies to Chart 5101 - May 1936 R.M.J.

App'd to chart 5144 INSet 5-7-66 HR