5474
5475

Diag. Cht. No. 5101-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SC21 & SC22 Office No. H-5474 H-5475

LOCALITY

State California

General locality San Clemente Island

Locality North Part

Southern Part

1934

CHIEF OF PARTY

Robert W. Knox

LIBRARY & ARCHIVES

DATE July 9, 1934

8-1870-1 (1)

5475

5474

Rec'd July 9, 1934

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5475

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. SC 21

REGISTER NO. 5475

State California

General locality San Clemente Island

Locality (Northern Part)

Scale 1:20,000 Date of survey Sept. 21 - Nov. 23, 1933

Vessel Chartered Launch Romance

Chief of Party Robert W. Knox

Surveyed by Robert W. Knox

Protracted by C. L. Rasmusson

Soundings penciled by A. J. Vollmar

Soundings in fathoms XXXXX

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by E.R.Behn

Verified by E.R.Behn

Instructions dated September 13, 1933, 192

Remarks:

GPO

Rec'd July 9, 1934

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5474

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. SC 22

REGISTER NO. 5474

State California

General locality San Clemente Island

Locality (Southern Part)

Scale 1:20,000 Date of survey Sept. 21 - Nov. 23, 1933

Vessel Chartered Launch Romance

Chief of Party Robert W. Knox

Surveyed by Robert W. Knox

Protracted by A. J. Vollmar

Soundings penciled by A. J. Vollmar

Soundings in fathoms ~~XXXX~~

Plane of reference MLLW

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated September 13, 1933, 192

Remarks:

GPO

DESCRIPTIVE REPORT

TO ACCOMPANY HYDROGRAPHIC SHEETS NOS. H-5475 SC 21 & H-5474 SC 22

SOUTHERN CALIFORNIA — SAN CLEMENTE ISLAND

Instructions dated September 13, 1933 — Surveyed by R. W. Knox

* * *

AREA, LIMITS, ETC. The area covered by these sheets comprises the inshore waters surrounding San Clemente Island, with the exception of Northwest Harbor and Pyramid Cove, they having been surveyed on a scale of 1:10,000. The hydrography of these sheets joins the work of the STR. PIONEER, offshore, and the surveys of the above mentioned harbors in their respective places.

SURVEY METHODS. Standard survey methods were used. A 36 pound lead was used in wire soundings and a 12 pounder with the hand lead. The launch work was supplemented with skiff work in attempting to check reported rocks, and in the work in Seal Harbor.

DISCREPANCIES. A few discrepancies were noted in the plotting and reviewing of these sheets, the more important being:

Sheet 21 - H-5475

The sounding on position 23b (lat. 33° 02.6', long. 118° 35.7') is recorded as 19 fathoms, while the first sounding between 38b and 39b is 16 fathoms. The discrepancy was noted in the field and only the shoaler sounding was plotted on the boat sheet. It is recommended the 19 fathom sounding be rejected.

H5475 — 19 not plotted

Sheet 22 - H-5474

Position 137f was noted plotted on the smooth sheet as the location of the right object was not known. The soundings were plotted on time and course and gave satisfactory results.

H5474

Positions 46d to 48d were taken using a whitewash in the bight behind Θ HP, the two being confused at the time of observation. The line could not be plotted on either the boat or smooth sheets, and inasmuch as the area is fully developed with these soundings, it is recommended they be rejected.

rejected in sounding Volumes.

COMPARISION WITH PREVIOUS SURVEYS. There are two previous surveys in the vicinity of San Clemente Island, the survey of 1878-9 - sheets number 1429 and 1430 - and the survey of 1928 - sheet number 4783. Practically all the soundings from these surveys were transferred to the present boat sheet; the older work in red , and the later in green ink.

Sheet 21 - H-5475

The party could find no evidence of the sunken rock transferred from sheet 1429 in lat. 32° 54' 635m, long. 118° 32' 470m. A search was made for this rock in a pulling boat. Its deletion is recommended.

See review H5475 Pond.

Deletion recommended in review hydro.

It is believed the two sunken rocks located by the ~~topo~~graphic party in lat. 32° 54' 1470m, long. 118° 32' 810m are the same as shown on

The two sunken rocks have been shown on H5475 in a mean position. The new location is weak. (Estimated distance)

This Lat. & Long. is the location of the rocks as shown on H1429

sheet 1429 about 150m north of that position.

No attempt was made to verify the position of the sunken rock in lat. 32° 57' 450m, long. 118° 33' 780m, because of the heavy kelp, the fact that the bromide shows only 8 feet of water in the vicinity and and examination of the crossing of the old work with the new, lead the writer to believe the rock was closer to shore than charted. deduction logical, see letter H-5475 See par 6(2d) of Review.

The sunken rock in lat. 32° 57.0', long ~~133~~ 118° 30.6', was not observed by either the topographic or hydrographic party, but due to the fact that it is very close to the beach, and within the kelp line, it is recommended that the position be retained. delineation as shown on new topo should supersede in this case Rock symbol of no importance, directly on shoreline. Has been omitted since it was not seen by topographer or hydrographer. (See note on boatsheet)

In lat. 32° 57.7', long. 118° ~~32.3~~ 35.3', the Str. Pioneer obtained a 15 fathom flash on the fathometer, and the Commanding Officer requested the writer to investigate the area. The additional soundings failed to change the position of the depth curves. It is understood the Str Pioneer afterwards ran further lines over the area, but failed to check their shoal sounding. ✓

The present hydrography checked the previous work within close limits on the southeast side of the island - with some exceptions - where the depths increase rather gradually. Wide discrepancies, however, were noted off the opposite shore where the slopes are extremely steep. The weather was very favorable for hydrography when this side of the island was surveyed inthat there was no sea, little or no wind or troublesome currents to cause the wire to lead off the perpendicular during the time required for the deeper soundings. errors in plotting old survey is part of discrepancies

An exception to the above is the failure of the present work to check an old line of soundings running north by west of ΔAb soundings on old sheet incorrectly plotted

Sheet 22 - ← H5474

Of the group of rocks in lat. 32° 53.3', long. 118° 31.4', it is recommended the ones from sheet 1429 be deleted, as shown on the boat sheet New delineation of rocks accepted. JGL.

The two rocks from the old survey in lat. 32° 51.6', long. 118° 30.1' are obviously out of place, and it is recommended that they be deleted in favor of the positions determined by the recent survey. See review par 6,b,5

It is recommended the two rocks in lat. 32° 48'.4, long. 118°25.9' be deleted in favor of the pair to the southeast located by the topographic party. ✓ see review par 6,b,4

DANGERS AND SHOALS. There is a 9 fathom shoal in lat. 33° 02.6', longitude 118° 37.5', unmarked by kelp

A rock, awash at 1/2 tide and with a sunken rock immediately north and west of it, lies in lat. 33° 02' ~~470~~ 450m, long. 118° 36' 870m.

A reef, extending northwest of the northwesterly tip of the island terminates in a breaker about 40m off West. The area in this vicinity is covered by extremely heavy kelp, preventing a detailed examination of the bottom. H-5475

DANGERS AND SHOALS, continued, sheet 21

Breakers were observed off the point occupied by △ Dri to a distance of about 200m.

A 5 4½ fathom sounding was obtained in the developement of the area off Eel Point in lat. 32°55.2', long. 118° 33.2/3

Sheet 22 - H 5474

All rocks on this sheet are within the heavy kelp line, close to shore, and consequently do not constitute dangers to navigation.

The 40 and 31 fathom spots about 1½ and 2 miles south of China Point were not fully developed as they lie within the area surveyed by the Str, Pioneer.

ANCHORAGES. There are three anchorages in the area covered by these sheets; those at Wilson Cove, West Cove and Seal Harbor.

Wilson Cove is a fair anchorage for small craft in the prevailing west and west-southwesterly weather; it is of no value during heavy weather when the wind and seas are from the northwest, northeast or southeast. The bottom is alternately hard sand and rocky, and this, combined with the fact that a purely local wind of force 3 to 5 will often blow down a draw and directly offshore, makes the holding rather difficult. The anchorage is best approached by putting the group of houses in range with a distinct V-shaped cut on the skyline and running in to 7 to 5 fathoms.

West Cove is an anchorage used by the local fisherman during the northeast or "Santana" storms. It is also used during fair weather by the lobster fisherman while working in the vicinity. The cove contains considerable kelp and the bottom is rocky.

Seal Harbor is a very small indentation in the cliff line, and although the launch anchored there several times during the day for short periods it was not considered to afford sufficient protection or safety for a night anchorage. It is recommended the place be charted as Seal Cove or Seal Bight rather than Seal Harbor. The definition of harbor is understood to be " a port or haven where ships may find protection during storms", and with this in mind the name Seal Harbor is certainly misleading.

CURRENTS. No currents of abnormal strength were encountered during the surveying of the waters around San Clemente Island.

BOTTOM. Many different kinds of bottom were brought up with the tallow. At least two bottoms were recorded per page of soundings.

MISCELLANEOUS. Paragraph 9 of the Director's Instructions of April 14, 1932 permits spacing the sounding lines 1/4 mile apart between the 50 and 100 fathom curves, and 1/2 mile apart outside the latter curve. Because of the extensive use of these areas for maneuvers by the Fleet the majority of whose vessels are equipt with fathometers, the spacing was considerably reduced, especially in the vicinity of the points, so as to accurately locate the depth curves.

On the north and southwest sides of the island, the inshore sounding line was run as close to the beach as was considered safe. The kelp here is extremely thick and heavy, and as a rule extends to a distance of 2 or 3 sounding lines off the beach.

On the northeast side of the island there is little kelp, what there is growing close to the rock line.

GEOGRAPHIC NAMES: Local names of points, rocks, etc., are as follows:

West Rock or Castle Rock	small islet upon which West is located. Local fisherman and the sheep men of the island refer to this islet by both names.				
Goosehead Point		Latitude	33°01.4'	Longitude	118°33.8'
Eel Point		do	32 55.1	do	118 32.7
Mail Point			32 53.1	do	118 31.1

Otherwise names appearing on the charts are identical with the local names.

Respectfully submitted:

Robert W. Knox

Robert W. Knox,
H. & G. Eng'r,
Chief of Party.

Form 567

5474 5475

DIVISION OF CHARTS, FILE NO._____

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

~~Long Beach, California,~~

~~July 3, 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					METHOD OF DETERMINATION	CHARTS AFFECTED
	Latitude		Longitude		Datum		
	° '	D. M. meters	° '	D. P. Meters			
see T6087 Islet (=Castle Rk.)	33 02	120.7	118 36	1264.0	USStd	tri	5111 5102
* note: this islet is 72 feet high, its greatest length is about 100 m, but is shown on the existing chart as a ~~.~~ It is recommended the charts be hand corrected, and the elevation of this islet shown.							
Lighthouse	33 01	1530	118 35	1130	USStd	approximate location to be determined by triangulation in near future	5111 see letter 531-1934
Buildings, group of	in Wilson Cove						5111
Windmill	32 49	1203	118 27	~~1080~~ 480	USStd	topo	5111 5117

* Islet is shown on chart 5102 - the rock awash symbol is northwest of the islet. Show islet more plainly and add elevation. (see T15-26)

5/6 R.F.S 7/10/34

(copied from letter 446-1934)

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

APPROVAL OF CHIEF OF PARTY

Sheets number SC21 and SC22 have been inspected and approved by me. field work was done under my direct supervision, the office work under my upervision.

No additional work is considered necessary.

Robert W. Knox,
H. & G. Eng'r,
Chief of Party.

STATISTICS

HYDROGRAPHIC SHEET NO. SC 21. 5475

Date 1933	Vol.	Day	St. mi. sdgs.	Pos.	Sdgs.	Boat
Sept. 21	1	a	9.0	59	88	Romance
22	1	b	23.4	125	213	"
23	1	c	1.9	10	19	"
25	1	d	12.9	72	133	"
26	1	e	30.8	148	265	"
27	2	f	31.2	127	228	"
Oct. 4	2	g	12.5	82	152	"
5	2	h	26.5	137	226	"
6	2 & 3	j	20.9	121	243	"
7	3	k	17.8	103	303	"
9	3	l	4.9	27	52	"
11	3	m	7.6	41	80	"
12	3	n	17.8	94	170	"
18	3 & 4	p	27.9	106	134	"
20	4	q	26.6	119	193	"
21	4	r	13.3	64	147	"
Nov. 5	4	s	8.9	36	208	"
8	4	t	20.7	136	390	"
9	5	u	24.0	138	382	"
10	5	v	16.6	124	237	"
20	5	w	13.5	70	136	"
21	5 & 6	x	11.8	69	251	"
22	6	y	7.9	56	101	"
23	6	z	15.5	131	251	"
			403.9	2195	4602	

STATISTICS

HYDROGRAPHIC SHEET NO. SC 22 5474

Date	Vol.	Day	St. mi. sdg.	Pos.	Sdgs.	Boat
Oct. 7/33	1	a	9.8	46	97	Romanse
9	1	b	24.8	106	209	"
10	1	c	16.2	63	121	"
11	1	d	12.6	69	118	"
22	1 & 2	e	26.3	114	226	"
23	2	f	31.2	137	304	"
24	2	g	9.4	59	103	"
25	2	h	8.0	48	69	"
26	2	j	23.2	96	101	"
27	2	k	14.1	66	92	"
Nov. 4	3	l	25.3	131	218	"
5	3	m	17.9	83	240	"
6	3	n	26.5	136	476	"
7	3 & 4	p	16.1	94	241	"
15	4	q	17.2	111	186	"
			278.6	1359	2801	

Verification Report H. 5474.

1. Conformity to Hydrographic Manual.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

2. Depth Curves.

All standard curves from the one fathom to the 200 fathom curves appear on this sheet complete except for breaks closely inshore due to the incompleteness of the hydrography.

3. Field and Office Plotting.

The field plotting was neatly done. Comparison was made with the Boat Sheet and about 3% of the positions were checked by protracting. No appreciable errors were discovered. The value of several soundings was found to be in error, some due to carelessness, and some to confusion of feet with tenths of fathoms. These were corrected.

The shore line between China Point and Pyramid Head was added by the verifier, as was all the detail outside the highwater line over the entire sheet.

The rocks were checked and rock notes were reduced from the Boat Sheet by the Tide correction and added to the Smooth Sheet. as indicated in the sounding volumes.

Attention is invited to Part V below "Remarks" for discrepancies.

4. Junctions.

The junction with H. 5459 has been added to that sheet, and the agreement is good. H. 5475 has not as yet been verified. See "6"

5. Remarks.

a. The rocks on the west side of China Point between Latitudes 32°48'.3 - 32°48'.6 do not agree with the only topographic sheet which covers this area, T. 4857. It is apparent that this area was once included on T. 6089 and later removed, and this latter sheet is thought to have been the origin of the rocks as shown on H. 5474. These rocks have not as yet been changed or complemented from T. 4857.

the rocks from T4857 have been added to the sheet H.O.

b. A note appears in the records at the second sounding after 15m ((3 4/6 fathoms;) Lat. 32°52'.65, Long. 118°25'.15) "bending one foot to avoid rock". This note has been interpreted by the verifier to mean a change in course.

"Left" means Left.

* 6. A wreck appears on the Boat Sheet at Lat. 32°51'.9, Long. 118°24'.3. This was apparently plotted on the topographic sheet, T. 6089 and later removed. It is not mentioned in the records, but appeared on the smooth sheet as two rocks. These were changed to a submerged wreck by the verifier.

* wreck plotted inshore of original position (now deleted on T6089) in accordance with the note on Boat sheet. H.O.

4. Two rocks near 0 GAS and 0 ATE, respectively, were located by the Hydrography by one angle only. They do not appear on the Topographic Sheet. These were plotted by the verifier by use of the one angle and agreement with the Boat Sheet.

✓

5. Several small islets appear off the East side of San Clemente Island. These were already inked on the smooth sheet. They are not mentioned in the records, and appear in highly improbable locations. Locations are:

as these islets have no known origin and very unlikely they have been removed from the sheet by us.

Latitude	Longitude
32° 50'.05	118°21'.75
32° 52'	118°24'
32° 51'.4	118°23'.8
32° 50'.5	118°22'
32° 52'.8	118°25'.3

6. The crossings are in good agreement.

6 Additional Report.

Junction was made with H. 5475. Agreement was satisfactory except in the case of position 21q (Lat. 32°55'.8, Long. 118°29'.2). This position had not been satisfactory as originally observed, and one signal had been changed. By using the original signals and changing the left angle by an even twenty degrees, better agreement with time, course, and the adjacent sheet, H. 5475, was obtained, and 21q was so plotted.

change in ∠ is O.K. agreement good.

Mark S. Gurnee

Submitted by - M. S. Gurnee.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5474

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

Number of positions on sheet	1359.
Number of positions checked	40.
Number of positions revised	1.
Number of soundings recorded	2801.
Number of soundings revised	50 (Approx)
Number of signals erroneously plotted or transferred	———

Date: Oct. 6, 1934

Cartographer:

Verification of protracting / Verification & inking of rocks & shoals	by M. S. GURNEE	**Time:** 14 HRS.
Verification of inking by	M. S. GURNEE	**Time:** 24 HRS.
Review by	John G. Radd	**Time:** 29 hrs

Section of Field Records.

Verification Report on H 5475 ----------Surveyed in September 21, Nov. 23, 1933.

Chief of Party- Robert W. Knox
Protracted by- C.L. Rasmusson
Surveyed by- R. W. Knox
Soundings penciled by- A.J.Vollman
Verified and inked by- E.R. Behn.

The records conform to the general requirements of the Hydrographic Manual with the exception that no reference trangulation station or datum of this survey were indicated. The datum subsequently found to be North American and the reference station △North HEAD Lat.33°01'~~+1587.8m~~ +1531.7m, Long.118°35'~~+1134.3m~~ +1127.2m Adjusted were noted on the sheet.

Within the limits of the hydrography the depth curves could be completely drawn with the exception of the inshore curves due to the insufficiency of the inshore soundings. On the easterly side of the San Clemente Island the hydrography extended off shore to permit drawing of the 200 fathom curve while on the west side of the island the extent of the work only permitted the drawing of the 50 fathom curve.

The shore line in North West Harbor was added to this sheet from topo sheet T4857. All offshore detail as low water line, reefs, kelp and some rocks had to be transferred from topo sheets T4857, T 6087, T 6088. In reference to the kelp ✓ only the outer fringe is indicated. All notes concerning rocks were transferred from pencilled notes on the afore mentioned topo sheets, tide reducers furnished by the Tides and Currents Section. Attention is called to the attached note from T and C. dated October 9, 1934.

The sunken rock in Lat. 32°-57.0' Long. 118°-30.6', which is mentioned on page 2 of descriptive report of H 5474 and H 5475 in the second paragraph under ✓ "Comparison with Previous Surveys", has not been plotted on the smooth sheet. Attention is called to the note on the boat sheet concerning this rock.
Sunken rock symbol, adjacent to shoreline, has been omitted. Not seen by either topographer or hydrographer.

The two rocks Lat. 32° 54~~+1470~~1340m, Long. 118°32'~~+810~~750m just west of station ✓ mentioned page 1, in the third paragraph of the accompanying descriptive report have been inked in as indicated on the smooth sheet by the hydrographic field party. No mention of them is found on the topo sheet or in the sounding records. Shown as sunken rocks - Located at pos 12 & 14. - See review of H 5475 par 6(2b) R.S.

Attention is called to the note "no evidence of sunken rock transferred from bromide"in sounding volume 4 page 61. The position referred to is approximately ✓ in Lat. 32°-54.3' and Long. 118°-32.4'. See review of H-5475, par 6(2c) R.S.

The ~~two~~ soundings of 144 ~~and 148~~ fathoms, questioned in sounding volume 3 page 54 between positions 50 and 52n, Lat 33°-02.3' Long. 118°-~~33~~32.6'. The~~se~~ is ~~two~~ soundings ~~have~~ has been plotted and inked.

Depths between 10 and 11 fathoms were plotted to the nearest whole fathom instead of including the fraction. This was probably due to the field plotting ✓ being done before the change in general instructions.

File in descriptive report E

Form 167

11—683

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Washington, Oct. 9 *, 19*34.

Respectfully referred to Mr. Cole. *(T.& C.)*

We have a number of rocks on H. 5475, Northern Part of San Clemente I. Cal., which were located and described prior to executing the hydrography.

In order to relate them to the plane of reference please furnish me with tide reducers for the following dates and hours:

		Reducers feet
Sept. 13, 1933	- 8:30 AM	= 3.2
" " "	- 8:45 AM	= 3.1
" " "	- 9:00 AM	= 3.1
" " "	- 9:45 AM	= 3.0
" " "	-11:00 AM	= 2.9
Sept. 14, 1933	- 9:15 AM	= 3.1

Ellis

Reducers furnished.
10/11/34.
C.C.
Checked L.A.C.

Junction with H 5459 on the north is satisfactory as is also the junction on the south with H 5474 with the exception noted in the verifiers report on H 5474. No overlap was made with offshore hydrography as there has been no contemporary offshore work reviewed as yet.

Geographic names were obtained from chart 5102. Attention is called to fourth paragraph under "ANCHORAGES" on page 3 of the accompanying descriptive report in reference to the name "Seal Harbor". This name was inked in on the sheet as it is charted e.g. Seal Harbor.

The field plotting was legible and neat; however, there was considerable lack of uniformity in the size of the pencil soundings.

Submitted by- E.R.Behn

October 11, 1934.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5474 (1933).

Southern Part, San Clemente Island, California.
Instructions dated September 13, 1933 (R. W. Knox).
Surveyed Sept. 21 - Nov. 23, 1933.

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

Chief of Party - R. W. Knox.
Surveyed by - R. W. Knox.
Protracted and soundings penciled by - A. J. Vollmar.
Verified and inked by - M. S. Gurnee.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual with the following exceptions:

a. The topography outside the highwater line had not been completely transferred from the contemporary topographic sheet to the smooth sheet. This has been accomplished in the office.

2. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project.

3. Sounding Line Crossings.

No regular system of cross lines ~~were~~ was run. However adjacent parallel lines show good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn including portions of the 1, 2, 3, 5 and 10 fathom curves.

5. Junctions with Contemporary Surveys.

Satisfactory junctions are made with H. 5475 (1933) on the northwest and with H. 5459 (1933) on the southeast.

The junctions with the offshore surveys on the northeast and southwest will be considered in the reviews of those surveys. These sheets have not been received in the office to date.

6. Comparison with Prior Surveys.

a. H. 289 (1851).

This survey is a small scale reconnaissance of the west coast. Only a few soundings fall within the limits of the new survey and these are in agreement.

b. H. 1429 (1879) and H. 1430 (1879).

These two surveys make satisfactory agreement with the new work, although some differences were found to exist between the soundings and rocks of the old surveys and those shown on the new survey, H. 5474 (1933). They were disposed of in accordance with the principles laid down in the "Instructions for the Review of Hydrographic Surveys." The most important of those so disposed are as follows:

1. The charted rock awash at lat. 32°48'.1, long. 118°26'.0, originates as a sunken rock with H. 1429 (1879) and is shown there as just on the edge of a 3¾ fathom sounding. The sounding records for H. 1429 (1879) states that the 3¾ fathom sounding is "on Rock". Apparently the symbol originated with this note which refers to the sounding and not to an independent rock. The symbol should be disregarded in future charting.

2. The two charted 3 fathom soundings at lat. 32°48'.65, long. 118°25'.95 and the charted 4 fathom sounding at lat. 32°48'.8, long. 118°26'.5, are incorrectly plotted. An examination of the records for H. 1429 (1879) shows that there is no recorded time interval for the soundings (taken continuously) between positions, and they are plotted on the sheet with a uniform time interval. A correct interpretation of the records indicates a shortening of the interval between soundings as the depths decreased which would place the sounding in question further inshore where they would agree with the new work. The soundings should therefore be disregarded in future charting.

3. The two sunken rocks (charted) at lat. 32°49'.15, long. 118°20'.8 and lat. 32°49'.25, long. 118°20'.7 are not verified by the present survey and are not shown on either the old or new topographic sheets. They both originate with H. 1430 (1879). The former is plotted from a note at pos. 15h which is controlled by a very weak fix. The latter is plotted from a note at 14h which is controlled by a fix using one angle and a cut from the ship. In comparing the soundings at both these positions with those as shown on H. 5474 (1933) it is evident that both positions belong closer to shore than shown on H. 1430 (1879). In view of the weakness of the control it seems probable that the rocks in question are out of position and they have not been carried forward to the new survey. However, the area inshore of these rocks has been marked "Foul" on the new survey and as originating with H. 1430 (1879).

4. The charted bare rock shown on H. 1429 (1879) at lat. 32°48'.4, long. 118°25'.9 is not verified by the new hydrographic or topographic surveys. The only authority for the rock appears to be the note in the records for H. 1429 (1879) to the effect that, - "Two large rocks bearing E. to S. E. from this position". The correct plotting from this note would place the rock in the area of the group of rocks shown on the new survey at lat. 32°48'.35, long. 118°25'.8. The rock should be disregarded in future charting.

5. The rock awash shown on H. 1429 (1879) at lat. 32°51'.6, long. 118°30'.2 is not verified by the new survey. From the note in the old sounding records it appears that the rock awash on H. 1429 (1879) is probably the same as the bare rock on the old topographic survey which agrees closely with rock located by the present topographic party.

Notations regarding disposition of the numerous rocks and soundings on H. 1429 (1879) and H. 1430 (1879) have not been added to these sheets. Except for the rocks and other information that have been carried forward to the present survey the two surveys, H. 1429 (1879) and H. 1430 (1879) within the limits of the present survey should not be used in charting.

7. Comparison with Chart No. 5101 and 5126.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

8. Field Plotting.

The field plotting was satisfactory with the following exceptions:

a. The position numbers were placed too far from the positions.

b. The wrong values for at least 50 soundings were plotted on the smooth sheet due to confusion of feet with tenths of fathoms.

9. Discrepancy in Rocks.

* A discrepancy exists between the delineation of the rocks on T. 4857 west of China Point and the former delineation of the rocks on T. 6089 (later deleted by the field party). The deleted rocks were, however, not removed from the smooth sheet by the field party. Inasmuch as a number of the rocks originally shown on T. 6089 are at a considerable distance away from rocks shown on T. 4857, the matter has been referred to the field party for further information.

* Delineation as shown on T-4857 correct. All other rocks deleted from smooth sheet, see letter of Feb. 18, 1935 (R.W. Knox) Filed in this D.R. JGL.

10. Additional Field Work Recommended.

If work is resumed again in the locality, it would be desirable to investigate the following areas:

a. The 11 fathom shoaling at lat. 32°47'.90, long. 118°26'.05.

b. An extension of the work closer inshore in the numerous coves on the southwest side of the island that might afford protection for small boats in northeasterly weather. For example the cove about ¾ mile to the northwestward of China Point.

Developed on H-6159 (1936) H.W.M. 5/10/37

11. Note to Compiler.

Attention is called to the rock awash shown on T. 1526 (1879) at lat. 32°47'.7, long. 118°25'.8 which falls on the present survey in 20

fathoms of water. This rock is not shown on the old hydrographic survey and was not found on the present survey. The present topographic party likewise failed to find it. (See Descriptive Report, page 4, T. 4857). The rock apparently has never been charted and it is believed to be non-existent.

12. 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. 289 (1851) in part.
H. 1429 (1879) " "
H. 1430 (1879) " "

13. Reviewed by - John G. Ladd, October, 1934.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Colbert
Chief, Division of Charts.

F. B. Borden
Chief, Section of Field Work.

G. Rude
Chief, Division of H. & T.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5475

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

Number of positions on sheet	2195
Number of positions checked	23
Number of positions revised	----
Number of soundings recorded	4602
Number of soundings revised	11
Number of signals erroneously plotted or transferred	----

Date: October 11, 1934

Cartographer: Eric R. Behn

Verification of protracting)
Verification & inking of rocks & shoals) **by** E.R.Behn **Time:** 25 hrs.

Verification of inking by E.R.Behn **Time:** 43 hrs.

Review by John S Rood **Time:** 27 "

July 20, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5474

Locality San Clemente Island, Coast of Southern California

Chief of Party: R. W. Knox in 1933
Plane of reference is mean lower low water, reading
2.4 ft. on tide staff at San Clemente I.
10.9 ft. below B. M. 1

Height of mean higher high water above plane of reference is 5.1 ft.

Condition of records satisfactory except as noted below:

Paul Schureman

Acting Chief, Division of Tides and Currents

July 20, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 5475

Locality San Clemente Island, Coast of Southern California

Chief of Party: R. W. Knox in 1933
Plane of reference is mean lower low water, reading
2.4 ft. on tide staff at San Clemente I.
10.9 ft. below B. M. 1

Height of mean higher high water above plane of reference
is 5.1 ft.

Condition of records satisfactory except as noted below:

Paul Schureman

Acting Chief, Division of Tides and Currents

POST-OFFICE ADDRESS: Box 761, Santa Barbara, California.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

ANSWERED
FEB 27 1935
DIVISION OF CHARTS

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

February 18, 1935.

To: The Director,
Coast and Geodetic Survey,
Washington, D. C.

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

Subject: Rock symbols, sheet T-4857.

Reference: Director's letter of February 7th, 80-CFT

It is believed the discrepancy of rock symbols on the above sheet can be satisfactorily explained provided hydrographic sheet 5474 is the registered number of sheet SC22, and topographic sheet T-6089 is the registered number of sheet "M".

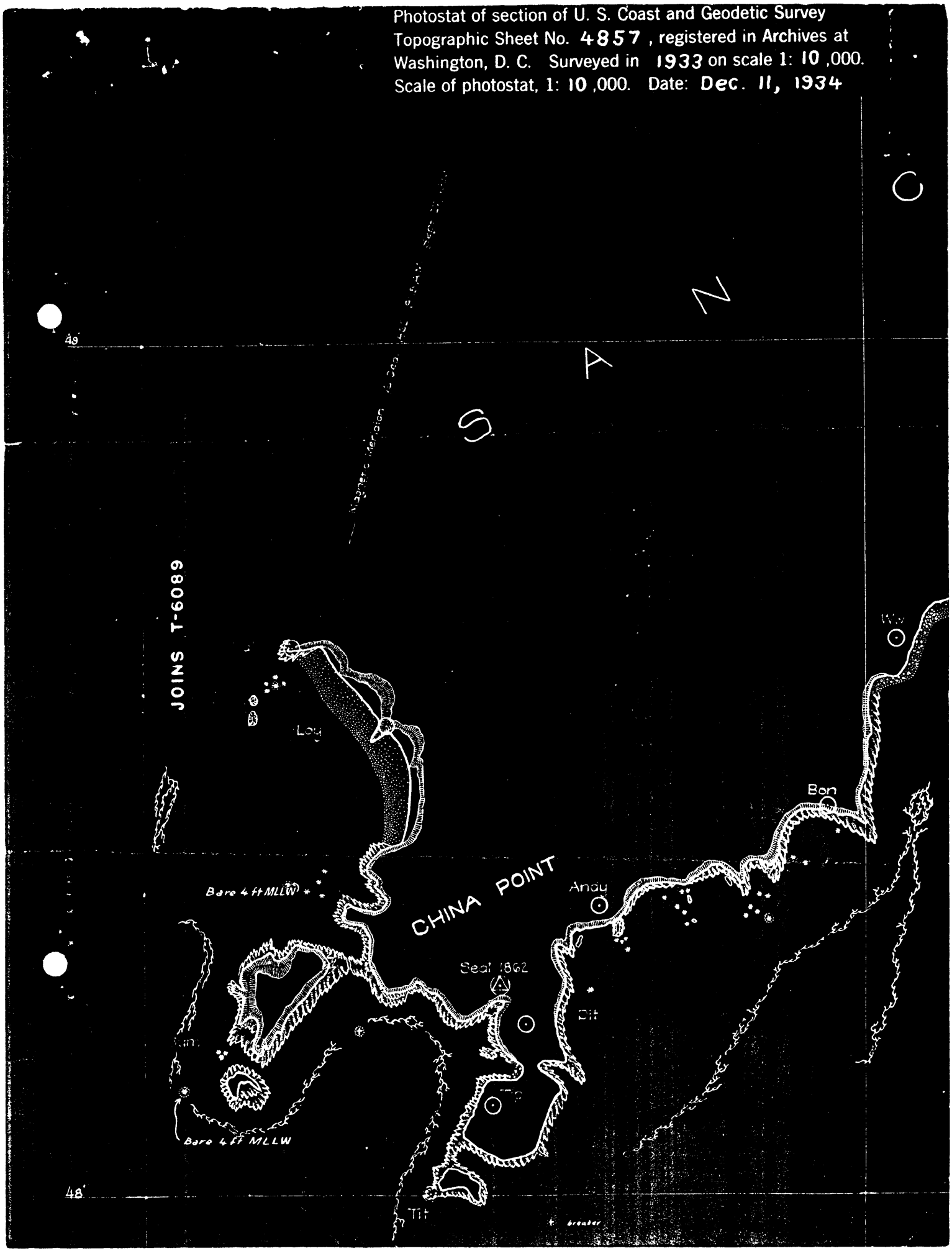
Topographic sheet 6089 (1:20,000) overlapped sheet 4857 (1:10,000) from signal Mal to the vicinity of the offlying island, and approximately the last mile of the former sheet was run in by E. M. Buckingham, Surveyor. Upon comparing the sheets in the office, it was decided to accept the detail on sheet 4857 because of the larger scale and the fact that the work was done by Lieut. Mathisson. In the meanwhile smooth sheet 5474 was constructed and plotted, in Long Beach, under the direction of the writer, while the topographic sheets were inked in San Diego under the supervision of Lieut. Mathisson. The sheets were submitted from the two places and no final check of breakers, etc., between the topographic and smooth sheets was made, as is the usual proceedure.

* It is respectfully recommended the rock symbols shown in red on the enclosed photostat be deleted.

Robert W. Knox

Robert W. Knox,
Chiefof Party.

* See Review of H-5474, par. 9. Rocks as recommended have been deleted from smooth sheet. JGH.


Photostat of section of U. S. Coast and Geodetic Survey
Topographic Sheet No. 4857, registered in Archives at
Washington, D. C. Surveyed in 1933 on scale 1: 10,000.
Scale of photostat, 1: 10,000. Date: Dec. 11, 1934
SAN
JOINS T-6089
Log
Bare 4 ft MLLW
CHINA POINT
Andy
Bon
Seal 1862
Dit
Bare 4 ft MLLW
48
Tit
+ greater

80-DRM

February 27, 1935.

To: Lieutenant Robert W. Knox,
U. S. Coast and Geodetic Survey,
Box 761,
Santa Barbara, California.

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

Subject: Rock symbols, sheet T-4857.

Your letter of February 18th, clarifying a discrepancy in field sheets of San Clemente Island, is acknowledged, with thanks.

Director.

CKG

80-OFT

February 7, 1935.

To: Lieutenant Robert W. Knox,
U. S. Coast and Geodetic Survey,
P. O. Box 761,
Santa Barbara,
California.

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

Subject: Rock symbols, sheet T-4857.

There is enclosed a photostat of a section of your topographic sheet No. 4857, on which is shown China Point, San Clemente Island.

The rock awash symbols, shown in red on the enclosed photostat, were originally shown on your topographic sheet 6089 and also hydrographic sheet 5474. These rocks were deleted from topographic sheet 6089 by the field party but were retained on the hydrographic sheet.

You will please advise the Office whether these rock symbols should be retained or deleted.

(Signed) J. H. HAWLEY,

Enclosure.

Acting Director.

Section of Field Records

REVIEW OF HYDROGRAPHIC SHEET NO. 5475 (1933).

Northern Part, San Clemente Island, Calif.
Instructions dated Sept. 13, 1933 (R. W. Knox)
Surveyed - Sept. 21 - Nov. 23, 1933.

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

Chief of Party - Robert W. Knox.
Surveyed by - Robert W. Knox.
Protracted by - C. L. Rasmusson.
Soundings penciled by - A. J. Vollmar.
Verified and inked by - E. R. Behn.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual with the following exceptions:

a. A reference triangulation station was not indicated on the smooth sheet. This had been added in the office.

b. The topographic features outside the high water line had not been completely transferred from the new topographic survey to the smooth sheet. This has been accomplished in the office.

2. Compliance With Instructions for the Project.

The survey satisfies the instructions for the project.

3. Sounding Line Crossings.

No regular system of cross lines was used, however the parallel adjacent sounding lines agree satisfactorily.

4. Depth Curves.

Within the limits of the survey the usual curves may be satisfactorily drawn including portions of the 1, 2, 3 and 5 fathom curves.

5. Junctions With Contemporary Surveys.

The junctions with H. 5474 (1933) on the south and southeast and with H. 5459 (1933) in Northwest Harbor are satisfactory.

The offshore surveys have not been received in the office to date.

6. Comparison With Prior Surveys.

a. H. 289 (1851).

This survey is a small scale track reconnaissance survey and

contains no soundings that are in conflict with the new survey H. 5475 (1933).

b. H. 4447 (1925).

This survey shows only a few soundings on the northern limits of the present survey. While in fair general agreement, the soundings from H. 4447 (1925) should be superseded within the area covered by those of the present survey, which are considered more accurate and better controlled.

c. H. 1429 (1879) and H. 1430 (1879).

These surveys are in fair agreement with the present survey except in some areas along the western side of San Clemente Island.

1. A number of soundings from H. 1429 (1879) which were in conflict with the new survey, were upon examination of the records, found to be either incorrectly plotted, controlled by very weak fixes or incorrectly spaced between positions. Most of the inshore lines on H. 1429 (1879), shown with red position numbers, are very weakly controlled by one cut from the ship to the sounding boat which in turn recorded an angle from a signal to the position of the ship. Several entire sounding lines were proven to be incorrect by the soundings of the present survey and the soundings from H. 1429 (1879) which are considered erroneous and disagree with those of the present survey are too numerous to enumerate.

The area in the vicinity of West Rock is shown on a subsketch (scale 1-5,000) on H. 1429 (1879). The control for these sounding lines is also very weak and the outer fringe of soundings do not agree with the recent work. Although this area is not fully developed, it is indicated as being foul, and it is believed the new delineation will be adequate even for large scale charting.

Of the soundings that were found to be incorrectly plotted only the charted ones are mentioned in the following list:

a. The charted $4\frac{3}{4}$ fathom sounding at lat. 33°00'.85, long. 118°36'.85, falls in depths of 12 fathoms on the present survey. The position controlling this sounding (pos. 5c red) is "on circle" and was incorrectly plotted.

b. The charted $4\frac{1}{4}$ fathom sounding at lat. 33°02'.1, long. 118°37'.3, falls in depths of 27 fathoms on the present survey. The entire line on which the $4\frac{1}{4}$ appears is out of position, due to the incorrect plotting of a cut from the sounding boat on a cut from the ship.

c. The charted 7 fathom sounding at lat. 32°57'.7, long. 118°34'.6, falls in depths of 18 fathoms on the present survey. This is due to the erroneous plotting of pos. 4b (red) which controls the entire line on H. 1429 (1879) on which the 7 is shown.

d. The charted 14 fathom sounding at lat. 33°02'.6, long. 118°37'.4, falls in depths of about 20 fathoms on the present survey. The 14 is incorrectly plotted; however, the shoaling which it indicates was developed on the present survey, and a least depth of 9¼ fathoms obtained. The 14 should be replaced on the chart by the recent soundings.

2. A number of rocks, some originating with T. 1526 (1879), were found to be in conflict with those as shown on H. 5475 (1933). They have been disposed of in accordance with the principles laid down in "Instruction for Review of Hydrographic Surveys". The most important of those so disposed are the following:

a. A charted row of sunken rock symbols between West Rock and the northwestern point of San Clemente Island is shown on H. 1429 (1879) but actually originates from T. 1526 (1878-9). A note on that sheet indicates that these are not located rocks but were intended to represent a line of heavy breakers. This entire area is noted as foul on the present survey which for large scale charting should supersede the sunken rock symbol.

b. The charted sunken rock from H. 1429 (1879) at lat. 32°54'.3, long. 118°32'.3, falls on a 3 5/6 fathom sounding on the new survey. This rock was searched for by the present hydrographic party and could not be found (see D. R., page 1). It should be removed from the chart.

c. The sunken rock from H. 1429 (1879) at lat. 32°57'.25, long. 118°33'.50 is not verified by the new survey. The note in the records for H. 1429 (1879) pos. 9b states that "large rocks just under water 50 feet from beach". It is apparent from this note that the rock is much closer inshore than shown on the old survey and evidently is a part of the outer edge of the reef which is shown on the present survey. The rock symbol should be discontinued on the chart.

Individual notations regarding disposition of the numerous rocks and soundings on H. 1429 (1879) and H. 1430 (1879) have not been added to these sheets. When the offshore surveys covering the balance of the old sheets are received, a general note will be added to the latter regarding their unsuitability for charting.

7. Comparison With Chart No. 5101.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review, except for the following:

a. Two rocks awash are charted in lat. 32°58'.80, long. 118°34'.7 and lat. 32°57'.50, long. 118°33'.8. These rocks originate with T. 1526 (1879) as well as two other rocks awash (not charted) in lat. 32°58'.98, long. 118°34'.94 and lat. 32°57'.8, long. 118°34'.15. The descriptive report for T. 6087 (1933), page 10, states that three of these rocks were not found and does not mention the fourth. There was no evidence that the areas had been examined at low water nor is there any indication that the rocks had been transferred to the topographic sheet. Apparently the hydrographic party did not search for these rocks. They were not spotted on the boatsheet and there were no notes in the records of the nearest sounding lines which were run during 5 feet of tide. All four of these rocks awash have been carried forward to H. 5475 (1933) and may be charted until definitely disproved.

8. Field Plotting.

The field plotting was satisfactory with the exception of the failure to completely transfer the topographic detail from the contemporary topographic surveys to the smooth sheet.

9. Additional Field Work Recommended.

No additional field work is recommended.

10. Superseding Old Surveys.

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

H. 289 (1851) in part.
H. 1429 (1879) " "
H. 1430 (1879) " "
H. 4447 (1925) " "

11. Reviewed by - John G. Ladd and R. L. Johnston, January 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Colbert
Chief, Division of Charts.

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

G. T. Rude
Chief, Division of H. & T.

H 5474 applied to drawing of Chart 5111 May 2, 1935 - J.F.W.
H 5475 " " " " " 13, " J.F.W.
" " " " 5101 May 1936 J.F.W.

Survey No. H - 5474
5475

Date. May 14, 1935 GEOGRAPHIC NAMES

Chart No. 5201-2

Diagram No. 5201-2

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	(Sheet H-5474)				
✓	San Clemente Island	"			
✓	Outer Santa Barbara ~~Channel~~ Passage				
✓	Pacific Ocean				
✓	~~Seal Harbor~~			Seal Cove	✓
✓	China Point				
✓	Pyramid Cove				
✓	Pyramid Head				
✓	Mosquito Cove	Mosquito Harbor			✓
	(Sheet H-5475)				
✓	Northwest Harbor				
✓	West Cove				
✓	Wilson Cove				
	~~Seal Harbor~~			✓ Seal Cove	✓
	Add Castle Rock	(See T 6087) KTH			

APPROVED NAMES UNDER AUTHORITY OF THE ACT OF JUNE 4, 1917
H.L. Flemer

✓ JTW

(M-136)

Applied to Chart Comp 5118 Sept 12, 1939. W. MacEwen
25 Jun 23, 1936
Orig.