5567

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic

Sheet No. 5567
Field No. 42

State California

LOCALITY

Point Piedras Blancas to Lopez Point

Pacific Coast

1934

CHIEF OF PARTY

F. L. Peacock and F. H. Hardy

U. S. GOVERNMENT PRINTING OFFICE: 1934

5567

Form 537

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. 42

REGISTER NO. 5567

State California

General locality Pacific Coast

Locality Point Piedras Blancas to Lopez Point

Scale 1:40,000 Date of survey May 20, Sept. 14, 19 34

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party Fred. L. Peacock and F. H. Hardy

Surveyed by Fred. L. Peacock and R. F. A. Studds

Protracted by T. A. Ruston and G. E. Logan

Soundings penciled by R. H. McCarthy Jr. and G. E. Logan

Soundings in fathoms ~~feet~~

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by

Inked by J.W Parsons

Verified by J.W. Parsons

Instructions dated March 23, 19 33

Remarks: Sextant Fix Hydrography throughout.

Fathometer Soundings

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET FIELD No. 42
Projects 140 and 184
1933 and 1934.

INSTRUCTIONS: Instructions for the hydrography on this sheet are dated March 23, 1933, The work was performed in accordance with the season's instructions dated March 23, 1933. Mar 27 1933 Aug 4 1934

CHARACTER OF WORK: The hydrography on this sheet was controlled by visual fixes. All soundings were obtained by the Fathometer except for 56 wire soundings obtained for Fathometer comparisons. The depth range is from 15 fathoms to 442 fathoms. The major portion of the work is outside the 100 fathom curve.

Sounding line spacing is approximately 300 to 400 meters inside the 200 fathom curve, 600 meters inside the 300 fathom curve and one-half of a mile inside the 400 fathom curve. Cross lines are spaced roughly four miles apart.

The position interval is in general three minutes, with supplemental positions at radical changes of speed and course.

The scale of this sheet is 1:40,000.

LIMITS: The hydrography on this sheet covers an area of approximately 215 square miles (statute) extending from Latitude 35° 58', (Lopez Point), to Latitude 35° 38',(Point Piedras Blancas).

The 100 fathom curve lies from 2 to 6 miles offshore, and has been completely developed as has the 50 fathom curve.

The sheet is joined on the north by Field Sheet No. 41, on the west by R. A. R. Field Sheet No. 81, on the south by Field Sheet No. 43 and on the east the inshore junction is composed of Launch Sheet Field Nos. 4, 5, 6 and 7, completed in 1934 under Project No. 184.

CONTROL: Control for the hydrography on this sheet consisted of hydrographic signals over triangulation stations on the 1932 scheme, plotted on the North American 1927 adjusted datum.

DATES OF SURVEY: Work on this sheet began on May 20, 1933, and was concluded on September 14, 1934.

TIDAL REDUCERS: Tidal reducers for the work on this sheet were obtained from the Monterey Standard tide gage and the San Simeon and Port San Luis portable automatic tide gages.

For further information on the subject of tidal reductions the reader is referred to the season's tidal report, which covers all of the tidal work of the party of the Ship GUIDE for the 1933 season. Tidal data for the additional hydrography on this sheet, done in 1934, was referenced to the portable automatic tide gage at Monterey.

APPARATUS CORRECTIONS: The apparatus corrections for the soundings on this sheet, consisting of the constant Fathometer correction, the velocity correction for the temperatures, salinity and depths, the dial speed tests and comparative vertical casts, were applied in accordance with the instructions in the Hydrographic Manual. Dial speed was constant in 1933 and also in 1934. The index correction in 1933 varied from 0 to 1 fathom, subject to the vessel being unusually deep or light in the water and according to the hydrophone or oscillator used. In 1934 it was found to be 0.2 fathom for the time worked.

For futher information the reader is referred to the Season's Report on Temperature and Salinity Determinations for 1933. A report on the same subject will be forthcoming for the 1934 season which will give in detail the corrections for the 1934 season.

SLOPE CORRECTIONS: There were no slope corredtions applied to any of the soundings on this sheet.

BOTTOM CHARACTERISTICS: 21 bottom characteristics, distributed over the area of this sheet, were obtained. They were for the most part, green mud and gray sand, with indications of rocky bottom.

DANGERS: There appear to be no dangers to navigation within the limits of the hydrography on this sheet.

DISCREPANCIES: The cross lines run on this sheet show no great deviation.from the regular sounding lines. The agreement was good in all cases.

Photostats H1611 b, H2076 and H2077 were compared with the work on this sheet. There were no real discrepancies apparent in the comparison.

ADDITIONAL WORK: Additional inshore development by the ship was done in 1934. The majority of this work consisted of crosslines and filling in the bight between Lopez Point and Cape San Martin.

The shoal area in Latitude 35° 41' and Longitude 121° 20' was completely developed and wire dragged by the hydrographic party this season. This work will appear on Launch Sheet No.7, Project HT 184.

ADDITIONAL NOTE: In taking vertical casts the following procedure was observed; the starboard sounding machine was used, and position angles were taken on the bridge forward of the pilot house as close to the sounding machine as practicable. In addition, angles were taken on the bridge forward of the pilot house for all hydrography on this sheet.

In comparing the junction with R.A.R. Sheet No. 81 and inshore work of the 1934 season it should be noted that these sheets mentioned have not as yet been completed. A more adequate report on junctions will accompany those sheets.

Respectfully submitted,

G. E. Logan

G. E. Logan,
Observer,
Coast and Geodetic Survey.

Forwarded, approved:

F. H. Hardy

F. H. Hardy, H & G Engineer,
Chief of Party.
Coast and Geodetic Survey.

STATISTICS
to accompany
HYDROGRAPHIC SHEET FIELD NO. 42
Project No. 140

1933 date	Day	No. of Soundings RL	RL x 6	V.C.	No. of Positions RL	RL x 6	V.C.	Stat. Miles Sdg.Lines.	Bottom Charact-eristics	Water Samples
5-20	A	74	107		20	24		27.1		
5-21	B	130	163	13	44	53	13	55.6	3	
5-22	C	312	61	13	82	21	13	56.2	3	2
5-23	D	182	118	6	69	32	2	55.3	1	1
5-25	E	246	115	1	66	31	1	58.9	2	1
5-26	F	326	133		88	31		78.6		
6-6	G	98	370	2	29	117	2	86.6	2	2
6-7	H	391	35	17	12	95	17	54.3	2	2
6-8	J	149	210		34	77		62.3		
6-11	K	95	148		16	33		28.3		
10-13	L		154	1		55	1	30.8		
10-19	M	59	56		20	18		23.0		
10-31	N		154	1		55	1	30.75		
11-2	P	92	125	3	32	46	3	39.6	2	2
12-6	Q	300	33	3	74	10	3	43.2	2	
TOTALS		2454	1982	60	586	698	56	730.6	17	10

Area 215 square statute miles.

ADDITIONAL STATISTICS
-1934-

8-24	R	392		6	72		2	40.6	1	
9-6	S	123		6	23		2	9.1	1	
9-7	T	133			24			14.6		
9-8	U	305		6	56		2	28.5	1	
9-11	V	34	13	6	7	1	2	3.3	1	
9-12	W	154			26			11.0		
9-14	X	47	3		7			3.0		
TOTALS		1188	16	24	215	1	8	110.1	4	
Totals,1933		2454	1982	60	586	698	56	730.6	17	
TOTALS FOR ENTIRE SHEET		3642	1998	84	801	699	64	840.7	21	

Additional area 1934 = 10.0 square statute miles.
Total area 215+10 = 225.0 square statute miles.

Additional Note

to accompany

Hydrographic Sheet Field No. 42

The positions marked with the small colored squares on this sheet are the ones on which velocity tests were taken for the 1933 season's R.A.R. Sheets. Additional data on these positions can be secured by using the report on velocities forwarded with R.A.R. Sheet No. 181.

The Triangulation Station LOPEZ ROCK 1932 is included with this report. During the 1933 season this signal was not used and thus the smooth sheet was made up and the 1933 work protracted and plotted. During the 1934 season additional work was done and this signal used. It was found to plot off the smooth sheet.

STATEMENT
to accompany
HYDROGRAPHIC SHEET FIELD No. 42
California Coast
1933-1934

The smooth plotting on this sheet was done by Mr. T. A. Renton, Computer, and Mr. G. E. Logan, Observer. The penciling of the soundings was done by Mr. R. H. McCarthy, Draftsman, and by Mr. G. E. Logan. Mr. Logan has drawn the depth curves.

The completed smooth sheet has been inspected and is approved.

Ten percent of the protracted positions on this sheet have been checked by Lieutenant (j.g.) Lawrence W. Swanson.

F. H. Hardy,
Chief of Party, C. & G. S.,
Commanding Ship GUIDE.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5567

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

Number of positions on sheet	1564
Number of positions checked	201
Number of positions revised	7
Number of soundings recorded	5724
Number of soundings revised	190
Number of signals erroneously plotted or transferred	0

Date: 4/22/35

Verification by John W. Parsons Time: 13 5/7 days

Review by V. D. Behn Time: 12½ hrs

To: Mr. Bacon
From C.F.M.

Date. Jan.8, 1935

GEOGRAPHIC NAMES
CALIFORNIA

Survey No. H 5567

Chart No. 5302

Diagram No. 5302

___ Names approved Jan. 29, 1935. Helen M. Strong
Harlow Bacon

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

¢, Not Approved by the Division of Geographic Names, Department of Interior.

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

Status	Name on Survey	* Name on Chart	New Names in local use	Names assigned by Field	Location
	--------	Point Piedras Blancas			
	--------	Lopez Point			
	----	Cape San Martin			
	-----	Ragged Point			
	-----	Point Sierra Nevada			
	*All these names are found on the original topo survey sheets of this coast. HMS				

(M 100)

LIST OF SIGNALS
to accompany

HYDROGRAPHIC SHEET FIELD NO. 42

TRIANGULATION

Hydrographic Name	Location
BLAN	Piedras Blancas Lighthouse 1932
CAS	Hearst Castle South Tower 1932
CHIM	Rockland Chimney 1932
CHINA	China 1932
CONE	Mansfield Cone 1932
COW	County 1932
CRUZ	La Cruz 1932
DEL	White Rock Number 2 1932
DOBE	Adobe 1932
EVA	Evans 1932
INNER	Inner Rock Cape San Martin 1932
ISA	White Rock Number 1 1932
KETT	Plaskett Rock 1932
KIRK	Kirk 1932
LOPE	Lopez Point 1932
LUIS	Luis 1932
MID	Middle Rock 1932
OUT	Outer Rock 1932
PEAK	Cone Peak 1932
POD	Rockland Tripod 1932
RAG	Ragged Point 1932
REEF	Reef 1932
RUCE	Spruce 1932
TANK	Evans Water Tank 1932
WILD	Wild 1932
LA CRUZ ROCK	La Cruz Rock 1932
LOPEZ ROCK	Lopez Rock 1932

TOPOGRAPHIC SIGNALS

JOY	Joy, 1934, Topographic Sheet F

parsons 1002

LQC

March 27, 1935.

E

Division of Hydrography and Topography:

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

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5567

Locality Point Piedras Blancas to Lopez Point, California Coast

Chief of Party: F. L. Peacock in 1933-34
Plane of reference is mean lower low water, reading
1.3 ft. on tide staff at San Simeon
20.0 ft. below B.M. 1

2.7 ft. on tide staff of 1933 at Monterey)
2.5 ft. on tide staff of 1934 at Monterey)
12.5 ft. below B.M. 3

3.2 ft. on tide staff at Port San Luis
14.7 ft. below B.M. 6

Height of mean higher high water above plane of reference is 5.2 feet at San Simeon and Port San Luis; 5.3 feet at Monterey.

Condition of records satisfactory except as noted below:

H. A. Marmer

Acting Chief, Division of Tides and Currents.

Report on Hydro. sheet H-5567 Surveyed in California
Chief of Party - Fred L. Peacock / F. H. Hardy
Surveyed by - Fred L. Peacock / R. F. A. Studds
Protracted by - T. A. Renton / G. E. Logan
Soundings Plotted by - R. H. McCarthy Jr. / G. E. Logan
Verified and inked by - John W. Parsons.

The records are complete and conform to the requirements of the general instructions. ✓

The depth curves can be completely drawn except for a small break in the 50 fathom curve at the N.W. end of the sheet and just a portion of the 20 fathom curve could be drawn. ✓

All positions recorded have been, in general, plotted satisfactorily with few corrections as noted in the records. However, in many cases, while penciling the soundings five tenths of a fathom was called the next highest fathom. ✓

The junction made with sheet H-5477 is very satisfactory. Sheet 5611 has not been inked, so a transfer could not be made ✓

Remarks

The rock shown on the boat sheet at Lat. 33°-51.9 Long 121°-26.45 with the notation "rock reported" was evidently not located as no notes appeared in the records concerning it. No other rocks were shown on this sheet as they will be shown on the inshore sheets. ✓

The sounding on position 26 J was in question so was not inked. Sounding just outside of pos. 109 G shows a difference of 15 fathoms shoaler. ✓

Omission

Landmarks for charts
Special chart for the U.S. Lighthouse service ✓

Respectfully submitted
John W. Parsons

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5567 (1934)

Point Piedras Blancas to Lopez Point, Pacific Coast, California
Surveyed in May - September, 1934
Instructions dated April 4, 1932, and March 27, 1933 (GUIDE)

Fathometer Soundings. 3 Point Fixes on Shore Signals.

Chief of Party - F. L. Peacock and F. H. Hardy.
Surveyed by - F. L. Peacock and R. F. A. Studds.
Protracted by - T. A. Renton and G. E. Logan.
Soundings penciled by - R. H. McCarthy and G. E. Logan.
Verified and Inked by - John W. Parsons.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

a. No copy of Landmarks for Charts on Form 567 accompanied this particular sheet.

b. There is a note "Rock Indicated" on the boat sheet in lat. 35° 53.7', long. 121°29.5' adjacent to line 50-51H on the inshore edge of this survey. There is no other reference to this rock in the records, and no rock was located on the inshore survey, H-5651 (1934). This matter has been referred to the field party.

No rock here see letter filed with Descriptive Report

The Descriptive Report is clear and adequately covers all matters of importance, except that no reference was made to the notation "Rock Indicated" on the boat sheet (par. 1(b) this review).

2. Compliance with Instructions for the Project.

This survey complies with the instructions for the project.

3. Sounding Line Crossings.

The agreement in sounding line crossings is good.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn.

5. Junctions with Contemporary Surveys.

The junctions with inshore surveys H-5642 (1934) and H-5671a (1934) and with surveys H-5477 (1933) and H-5566 (1933), on the north and south, respectively, are satisfactory.

The junctions with inshore surveys H-5651 (1934) and H-5641 (1934) and with offshore survey H-5611 (1933) will be considered in their respective reviews. These surveys have not as yet been completely verified.

6. Comparison with Prior Surveys.

a. H-290 (1851).

This is a reconnaissance survey, on scale 1:375,000, having only a single line of soundings which are spaced approximately 2.5 miles apart. These soundings are in good agreement with the present survey.

b. H-1611b (1884) H-2076 (1890-91)
H-1612 (1884) H-2077 (1890-91).

These surveys are in good agreement with the new survey.

c. H-3048 (1910).

This survey consists of one line of soundings on Chart 5400 (small scale), which are spaced approximately 4 miles apart, and only 2 of which fall on the present survey. These soundings are in fair agreement with the latter.

7. Comparison with Chart No. ~~5032~~ 5302.

Within the area of the present survey this chart is based primarily on the surveys discussed in the foregoing paragraph, and, except as noted below, contains no additional information that needs consideration in this review.

A number of soundings appear on the chart that originate with sources other than our own surveys. These soundings are in good agreement with the present survey and hence their authority was not traced. The present survey should within its limits supersede all information charted within this area at the present time.

8. Field Plotting.

The field plotting and protracting is satisfactory and conforms to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

The present survey fully covers the area surveyed and no additional work is required.

10. Superseding Old Surveys.

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

H- 290	(1851)	in part.
H-1611b	(1884)	" "
H-1612	(1884)	" "
H-2076	(1890-91)	" "
H-2077	(1890-91)	" "
H-3048	(1910)	" "

11. Reviewed by - V. D. Behn, May, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

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

Chief, Section of Field Work.

Chief, Division of H. & T.

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

80 KTA
82 - ekg
1935 JUN-21-AM 11:40

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY
Steamer GUIDE, 510 Custom House,
San Francisco, California,
June 15, 1935.

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

From: The Commanding Officer, U.S.C. & G.S.S. GUIDE.

Subject: Photostat of section of Boat Sheet H 5567.

Reference: Your letter dated June 10, 1935, (80- NM).

The note referred to in reference was made during the 1933 season so the spot could be examined. In carrying a line of Fathometer soundings several strays were noticed which might indicate the existance of a rock.

During last season several lines were run over this area in going to and from anchorage and considerable time was spent sounding over it during misty weather while waiting to pick up the launch party.

As no indications were obtained of a rock it was concluded that the strays observed during the 1933 season were caused by some ship noise. The note should have been referred to in the descriptive report, or, having served its purpose, been erased from the boat sheet.

Note removed from boat sheet

F. H. Hardy

F. H. Hardy,
H. & G. Engineer, C. & G. S.,
Commanding Ship GUIDE.

CKG
KTA

80-NM

June 10, 1935.

To: The Commanding Officer,
U. S. C. & G. S. Ship "Guide",
510 Customhouse,
San Francisco, California.

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

Subject: Photostat of a Section of Boat Sheet H-5567.

Inclosed is a photostat of a section of your boat sheet H-5567 (Field No. 42). Encircled in yellow is a note, "Rock indicated". This note does not appear on the smooth sheet, nor is it mentioned in the descriptive report. The soundings of this sheet and the adjacent inshore sheet show no indication of a rock at this spot.

Please advise the office as to the significance of this note.

(Signed) J. H. HAWLEY
Acting Director.

Inclosure.

25 Jan 13, 1936
Ellis.

applied to drawing of Chart 5302 - Feby. 28, 1936, - J.F.W.