

6261

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

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

State: California

DESCRIPTIVE REPORT

~~Territorial~~ } Sheet No. 21
Hydrographic }

LOCALITY

Off Southern California Coast;
~~Santa Barbara Basin, Channel Ids.~~
Osborn Bank.

19 37

CHIEF OF PARTY

H. B. Campbell

48

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. 21

REGISTER NO. H-6261 (1937)

State CALIFORNIA

General locality off SOUTHERN CALIFORNIA Coast; ~~CHANNEL ISLANDS.~~

Locality OSBORN BANK

Scale 1 - 20,000 Date of survey OCTOBER 1 - 5, 1937.

Vessel PIONEER

Chief of Party H.B. CAMPBELL

Surveyed by H.B. CAMPBELL

Protracted by G.A. NELSON

Soundings penciled by G.A. NELSON

Soundings in fathoms ~~FEET~~

Plane of reference M.L.L.W.

Subdivision of wire dragged areas by

Inked by S. C. McGlosson

Verified by S. C. McGlosson

Instructions dated JUNE 23, 1934 & APRIL 19, 1937., 19

Remarks:

DESCRIPTIVE REPORT
TO ACCOMPANY HYDROGRAPHIC SHEET
NO. 21 H 6261 (1937)
SEASON 1937
SOUTHERN CALIFORNIA

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

H.B. CAMPBELL, COMMANDING.

LOCALITY

This survey covers Osborn Bank, south of Santa Barbara Island, ✓
Southern California.

AUTHORITY

This survey was made under the Director's instructions dated ✓
June 23, 1934 and supplemental instructions dated April 19, 1937.

METHOD OF SURVEY

R.A.R. was used for control. A velocity of 1,482¹/₂ m/s was used. ✓
This velocity was determined in 1935 for this general area. See Special
Report of Velocity Tests, U.S.S. PIONEER, 1935.

The general development of the bank was by fathometer soundings.
The search for the least depth was by hand lead and drifting. The least ✓
depth found was 19 fathoms (reduced). This compares with the present
charted least depth of 24 fathoms, (Chart 5101).

TRANSFERS FROM SHEET NO. 83

The following positions were transferred from Sheet # 83 to this
sheet and the soundings plotted:-
H-6260

1 - 2 A	4 - 7 C	14 - 19 P	51 - 53 P	Some of these See note in red on H-6260.
47 - 52 A	2 - 5 K	24 - 26 P	98 - 99 R	
58 - 64 A	2 - 4 L			

LIST OF HYDROPHONE STATIONS

N.A. 1927 DATUM.

Santa Catalina Id. (CAT)	Latitude 33° 25' Longitude 118° 31'	+ 1153 meters. ✓ + 1291 meters. ✓	✓
Santa Barbara Id. (ARA)	Latitude 33° 27' Longitude 119° 02'	+ 757 meters. ✓ + 22 meters. ✓	✓

DISCREPANCIES

All crossings were in good agreement except at 46 - 47 B, (Lat. 33° - 22'^{23'}; Long. 119° - 02'^{3'}). A 76 fathom sounding between 46 - 47 B crossed a 94 fathom sounding between 62 - 63 A. The slope at this point is steep and the fathometer was probably difficult to read. The 76 fathom sounding was rejected. ✓

JUNCTIONS WITH OTHER SHEETS.

This sheet is a development of Osborn Bank which is covered by Field Sheet # 83. H(6260) (1937) ✓

It supercedes Registry No. H4447 A. ✓

COMPARISON WITH PREVIOUS SURVEYS.

This survey is more detailed than that on 4447 A. A lesser depth was found (19 fms. to 24 fms.). The surveys are, in general, in good agreement. ✓

DANGERS

There are no dangers to surface navigation. ✓



George A. Nelson
Jr. H. & G. Engineer,
U.S.C. & G. Survey.

TABLE OF STATISTICS
 Field Sheet No. 21 H 6261 (1937)
 1937.

Date	Day	Positions			Soundings			Statute miles
	Letter	Bomb	Other	Total	Fathometer	V.C.	Total	Sdg. lines
10/1	A	61	9	70	790	0	790	75.5
10/5	B	47	13	60	513	53	566	25.0
TOTALS	Z	108	22	130	1,303	53	1,356	100.5

CHIEF OF PARTY'S REPORT OF
INSPECTION OF RECORDS AND SHEETS.

This sheet and the records accompanying it for this survey have been examined and are approved by me.

The sheet was protracted and sounding pencilled by Lieut. (J.G.) G.A. Nelson. Lieut. Nelson also wrote the descriptive report.

No additional work on this area is recommended.

H.B. Campbell

H.B. Campbell
H. & G. Engineer,
Chief of Party,
Commanding PIONEER.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6261** (1931)

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

Number of positions on sheet	<i>.130..</i>
Number of positions checked	<i>...7...</i>
Number of positions revised	<i>...0...</i>
Number of soundings recorded	<i>.1356</i>
Number of soundings revised	<i>..11..</i>
Number of signals erroneously plotted or transferred	<i>...0...</i>

Date: *3 June, 1938*

Verification by *G.C. McGlasson*

Time: *2 days 2 hours*

Review by *J.A. McCormick, June 10, 1938.*

Time: *11 hrs.*

HYDROGRAPHIC SURVEY NO. H-6261 (1937)

Smooth Sheet Yes

Boat Sheet Yes

Records; Sounding One Vols., Wire Drag --- Vols., Bomb One Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals -----

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

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

Hydrography: Total Days 2 ; Last Date October 5, 1937

Remarks _____

Remarks

Decisions

	Remarks	Decisions
1		
2		<i>see H-6260</i>
3		
4		
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27		

GEOGRAPHIC NAMES

Survey No. **H6261**
(1931)

Name on Survey

	A, On Chart No. 5101	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	K
<u>Santa Barbara I.</u>	✓								1
<u>Osborn Bank</u>	✓								2
									3
									4
									5
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									27

Names underlined
by *JAE* on 4/13/38

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H -6261 (1937)
~~No. X~~

{ received Mar. 18, 1938
 registered Mar. 24, 1938
 verified
 reviewed
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
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LAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 26, 1938

Division of Hydrography and Topography:

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

Plane of reference

~~Tide Reducers~~ approved in
| volumes of sounding records for

HYDROGRAPHIC SHEET 6261 (1937)

Locality Osborne Bank, Southern California Coast.

Chief of Party: H. B. Campbell in 1937

Plane of reference is mean lower low water reading

3.7 ft. on tide staff at Los Angeles Harbor (Berth 60) *off limit of H-6261*
13.9 ft. below B.M. 8

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

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

3 June, 1938.

Report on H 6261
Verifying and Sinking

1. The records are neat and legible ✓ and conform to the requirements of ✓ the General Instructions.
2. The depth curves were not drawn on this sheet by direction of ✓ Captain Ellis.
3. The field plotting was very accurate and it was completed, to the extent prescribed in the Hydrographic Manual.
4. The officer drafterman did not have to do over any part of ✓ drafting done by the field party except as noted on the statistic sheet.
5. The junction with the contemporary adjacent sheet H 6260 (1937) is satisfactory.
To be considered
in review of H-6260 (1937).
6. The signals on this sheet consist only of triangulation stations and hydrophone stations.

7. This is an off shore sheet and no shoreline is shown. There are no buoys on the sheet and the lighthouse is located by triangulation consequently no discrepancy exist.
8. One error of ten fathoms was found in the reduction of soundings, and the log was not recorded between positions.
9. Lat. $33^{\circ} 22.2'$
Long. $119^{\circ} 02.3'$ Volume 1 - Page 47.

A 76 fathom sounding was rejected due to the fact that it is approximately 20 fathoms short. However it was taken on a steep slope and in all probability it is out of position. Therefore it was not plotted or recommended by G. H. Nelson.

Respectfully submitted

G. L. McBliss

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6261 (1937) FIELD NO. 21

Osborn Bank, Off Southern California Coast, California
Surveyed in October 1937, Scale 1:20,000
Instructions dated June 23, 1934 and April 19, 1937 (PIONEER)

Hand Lead and Fathometer Soundings.

RAR control.

Chief of Party - H. B. Campbell.
Surveyed by - H. B. Campbell.
Protracted by - G. A. Nelson.
Soundings plotted by - G. A. Nelson.
Verified and inked by - G. C. McGlasson.

1. Condition of Records.

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

The Descriptive Report is complete and satisfactorily covers all items of importance except that the method of plotting the time circles on the sheet for hydrophone station CAT which falls a considerable distance beyond the eastern limits of the sheet should have been given.

2. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project except that more bottom characteristics should have been obtained. The deficiency was remedied, however, by transferring characteristics from H-4447a (1925-26).

3. Shoreline and Signals.

This is an offshore survey and no shoreline is shown. Sounding lines were controlled entirely by bomb distances from shore hydrophones "Ara" and "Cat", the geographic positions of which are given in the descriptive report, page 2, and the shore fixes used in their location, in volume 1, page 2, of the sounding records.

4. Sounding Line Crossings.

Sounding line crossings are satisfactory.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

The present survey is entirely surrounded by the work on H-6260 (1937). The junction will be considered in the review of the latter.

7. Comparison with Prior Surveys.

a. H-2314 (1897), 1:40,000.

The above survey covers the major portion of the area developed on the present work. It is loosely controlled, no projection being shown on the sheet, and the sounding lines are widely spaced. The minimum depth obtained on the bank was 26 fathoms as compared with 19 fathoms on the present survey. No information from the 1897 work is shown on the latest charts. The present survey, because of its general superiority, should supersede H-2314 (1897) in future charting.

b. H-4447 (1924-28), 1:140,000; H-4447a (1925-26), 1:60,000.

The present survey falls entirely within the combined area of the above sheets. Information on the latest charts in the area under consideration originates entirely with these surveys. The minimum depth of 24 fathoms (charted) found on the old work falls in 21 fathoms and about 200 meters north of the least depth of 19 fathoms on the present survey (lat. $33^{\circ} 21.5'$, long. $119^{\circ} 02.4'$). The old and new surveys are in good agreement as to the limits of the bank. The present survey adequately covers the common area and should supersede the above surveys in future charting.

8. Comparison with Chart 5101 (New Print dated Oct. 23, 1937)
Chart 5202 (New Print dated Jan. 14, 1938).

a. Hydrography.

Within the area of the present survey the charts are based entirely on surveys discussed in the foregoing paragraphs.

b. Aids to Navigation.

The survey and the charts are in agreement as to the position of the lighthouse in lat. $33^{\circ} 28.1'$, long. $119^{\circ} 02.3'$. There are no floating aids in this area.

9. Field Plotting.

The field plotting was satisfactory.

10. Additional Field Work Recommended.

No additional field work is required.

11. Superseded Old Surveys.

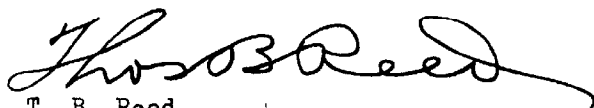
Within the area covered the present survey supersedes the following old surveys for charting purposes:

H-2314 (1897) in part
H-4447 (1924-28) in part
H-4447a (1925-26) in part

12. Reviewed by - J. A. McCormick, June 10, 1938.

Inspected by - E. P. Ellis.

Examined and approved:



T. B. Reed,
Chief, Section of Field Records.



K.T. Adams
Chief, Division of Charts.



Fred. L. Peacock
Chief, Section of Field Work.



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

Applied to drawing of chart 5101

Sept 1938 SPM

Applied to compilation of chart 5020

Nov ~~1938~~ 1938 SPM