

4561

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Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: California
11-5615
DESCRIPTIVE REPORT.
Report No. Sheet No. 4561
LOCALITY:
Southern Coast
Southwest of San Clemente
Island ~ Offshore
1926
CHIEF OF PARTY:
T.J. Maher

(11)

November 4, 1926.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4561

Locality: COAST OF SOUTHERN CALIFORNIA

Chief of Party: T. J. Maher in 1926.

Plane of reference is  
ft. on tide staff at

Reducers less than 1% of depth and therefore not used.

For reduction of soundings, condition of records satisfactory  
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted
3. Time meridian not given at beginning of day's work.
4. Time (whether A. M. or P. M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.



Chief, Division of Tides and Currents.

OCT 7 8 55 AM '26

U. S. COAST AND GEODETIC SURVEY

Col. E. Lester Jones, Director

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DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. \_\_\_\_\_

AREA WEST OF TANNER BANK, CALIFORNIA

Surveyed March 26-27, 1926.

Str. GUIDE  
1926

Thos. J. Maher  
Chief of Party, Commanding.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. \_\_\_\_\_

SURVEYED MARCH 26th AND 27th, 1926.

Authority:

Director's orders dated November 21, 1924, and instructions of January 12, 1924.

Limits:

The work comprises two lines, one of which extends from latitude  $32^{\circ} 25'$ , longitude  $119^{\circ} 25'$ , in a southwesterly direction to latitude  $31^{\circ} 52'$ , longitude  $119^{\circ} 52'$ ; thence northwesterly to latitude  $32^{\circ} 34'$ , longitude  $120^{\circ} 14'$ . The second extends from latitude  $32^{\circ} 27'$ , longitude  $120^{\circ} 04'$ , to latitude  $31^{\circ} 56'$ , longitude  $119^{\circ} 52'$ ; and then a development of the area from latitude  $32^{\circ} 00'$  to  $32^{\circ} 14'$ , and from longitude  $119^{\circ} 40'$  to  $119^{\circ} 55'$ .

Purpose:

The object in running these two additional days was to investigate the reported 50 to 90 fathom bank between latitudes  $32^{\circ} 01'$  and  $32^{\circ} 10'$ , and between longitudes  $119^{\circ} 42'$  and  $119^{\circ} 48'$ , and shown on chart No. 5002. No indication of such a bank was found.

Control:

Little control was available for this area. A few distances were received from shore stations but only two on each day ( all from San Nicholas) were usable. The others are obviously incorrect. (See notes in record on p. 26.) The starting point of A day was taken as the run

from hydrographic signal "Black" (buoy on Tanner Bank.) For the rest, sun and star sights and adjustment to secure agreement of soundings must suffice.

Detailed Explanation of Adjustment:

"A" Day. - As stated above, the start of "A" day was located by the run from hydrographic signal "Black". A single bomb distance from San Nicholas was obtained on position 11-A. Two sun sights were taken between positions 22-A and 23-A. A meridian altitude was taken on position 26-A. Sun sights were again taken between positions 42-A and 43-A, and positions 49-A and 50-A; and an altitude on the moon between positions 66-A and 67-A. Five star sights were taken at position 70-A, including a latitude on Polaris; and five star sights again on position 76-A, these also including Polaris.

The first adjustment accepted the bomb distance at position 72-A and the approximate mean of the star sights at position 77-A. Further examination, however, indicated that a much better agreement of crossings, also of the various sights along the line would be secured by accepting the bomb distance on position 76-A and the approximate mean of the star sights on position 70-A. The latter adjustment is further justified by the fact that the average time of the star sights at 77-A is nearly two hours later than the time of stopping, and the westerly breeze blowing at the time could have caused considerable drift to eastward which would reconcile the two sets of star sights.


Accordingly the line was adjusted by using hydrographic station "Black" as the starting point and the, at first, accepted position of position 77-A as the finish, and evenly distributing the error, except that position 11-A was made to fall on the distance arc from San Nicholas,

which required that its proportionate correction be decreased about 0.15 mi. Following that adjustment the line was swung in azimuth from position 32-A to use the accepted position of position 70-A and the distance arc on position 76-A as shown in the record on p. 26.

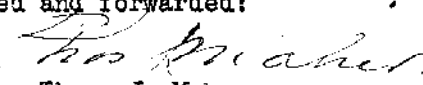
"B" Day. - On "B" day two bomb distances from San Nicholas were secured near the beginning of the line and sun sights on positions 13, 16, 21, 24 (three including meridian altitude), 35, 40, 45 and 52. By swinging the portion of the line from position 4-B to position 24-B about  $3^{\circ}$  in azimuth and plotting the balance by dead reckoning, taking into account the deviation of the wheelhouse compass by ship swing of Feb. 5, 1926, all of the above information is reconciled, none of the sun sights except at position 13-B and one of the three (marked doubtful by observer) at position 24-B being over one mile out. The arcs at positions 4-B and 6-B are accepted as correct.

The crossings between "A" and "B" days with the above adjustment are only fair, but with the "Hydrographic Sheet of the Area West of San Clemente Island, 1925" the crossings are as good as may be expected.

Respectfully submitted,

  
G. C. Jones,  
H. & G. Engineer.

Approved and forwarded:

  
Thos. J. Maher,  
Commanding Officer.

STATISTICS

SUPPLEMENTAL HYDROGRAPHIC SHEET FOR AREA WEST OF TANNER BANK.

Date. 1926	Letter	Vol. No.	Pos. No.	Soundings		Stat. Miles	Vessel.
				Sonic	Wire		
Mar. 26	"A"	1	77	183	1	128.7	"GUIDE"
Mar. 27	"B"	1	84	216	2	119.2	"
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TOTALS:	-	1	161	399	3	247.9	-
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*Portion of signals and R.A.R*  
*stations obtained from Tanner Bank sheet.*  
*Records - 1 Vol. Soundings*  
*1 " Rights.*  
*J. J. Baker*

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY

AND REPORT NO.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

December 21, 1926.

REPORT ON VERIFICATION OF HYDROGRAPHIC

SHEET No. 4561

As this sheet was practically all dead reckoning  
the positions were accepted as plotted.

The sounding records is complete.

The drafting conforms to the general instructions.



H. R. Edmonston.



IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

January 18, 1927.

AND REFER TO NO. 11-DRM

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4561

Southwest of San Clemente Island - Offshore

Surveyed in 1926.

Instructions dated January 12, 1924

Chief of Party, T. J. Maher.

Surveyed by T. J. M., E. H. Bernstein, I. Rittenberg.

Protracted and soundings plotted by G. C. Jones.

Verified and inked by H. R. Edmonston.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development satisfy the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are good.
5. The usual field plotting was completed to the extent prescribed in the General Instructions. The field adjustment of the lines was accepted by the office cartographer without verification. The customary check, however, was given to the soundings.
6. The junction with H. 4549<sup>a</sup> will be taken up in the review for that sheet. A good portion of the work on this sheet is covered by the work on H. 4549<sup>a</sup>.
7. No additional work is necessary for the purpose of disproving the 50 fathom bank reported between latitudes 32° 02' and 32° 09' and in longitude 119° 45'. This report was made by the Dutch Cruiser ZEELAND in 1917 (See letter 312, 1917). A careful study was made

of the work on this sheet and the work on H. 4549<sup>a</sup> together with the soundings taken in this vicinity by the HULL and COREY in 1922. None of the surveys disclosed any such bank in this locality and it is recommended that it be removed from the charts.

See sect. of  
H.O. chart 1006  
attached to  
Letter 205-1929  
for confirmation  
of this.  
A.L.S. (4-1-29)

8. Character and scope of field operations - excellent.  
Field drafting - excellent.
9. Reviewed by A. L. Shalowitz, January, 1927.

Approved:

*A. L. Shalowitz*

Chief, Section of Field Records (Charts)

*L. O. Pollock*

Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY



REG. NO. 4561

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. ....

REGISTER NO. 4561

State California

General locality Southern California Coast

Locality Southwest West of San Clemente Island ~ Offshore

Scale 1:140,000 Date of survey March 26-27, 1926

Vessel Str. "GUIDE"

Chief of Party Lieut. Commander T. J. Maher

Surveyed by T. J. Maher, E. H. Bernstein, I. Rittenberg  
Plotted

~~Processed~~ by G. C. Jones

Soundings penciled by G. C. Jones

Soundings in fathoms ~~feet~~

Plane of reference Not reduced.

Subdivision of wire dragged areas by .....

Inked by .....

Verified by .....

Instructions dated Jan. 12, 1924, and orders of Nov. 21, 1924.

Remarks: One (1) volume Soundings

One (1) volume Astronomic Sights. (Registered as Vol. 2-Sdgs)