

4926

Diag. Ch. No. 1222-2

4926

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., Director

G. & G. NORVEY
L. & A.
NOV 14 1929
Acc. No.

State: Virginia

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. ⁴ 4926
~~Hydrographic~~ }

LOCALITY

Chesapeake Bay Entrance

South of Fisherman Island

1929

CHIEF OF PARTY

J. Senior

U. S. SURVEY
L. & A.
NOV 14 1929
ACC. NO.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. 4 - SOUTH OF
FISHERMAN ISLAND, CHESAPEAKE BAY ENTRANCE - SCALE, 1:20,000. H. 4926

1. Instructions:

This revisional survey was made in accordance with Instructions from the Director to the Commanding Officer of the Natoma, dated August 1, 1929. Reference should also be made to Chart letter No. 372,- 1929.

2. Survey Methods:

Triangulation stations furnished the control for this hydrographic survey. No other signals were necessary. The work was done in the field on a scale of 1:20,000. All soundings were taken from the NATOMA, using the standard bronze-center lead-line. Sounding lines were spaced about 200 meters apart, throughout the area outlined in the Director's Instructions, where changes had been reported. Sufficient additional lines, beyond instructed limits, were run to make proper junction with charted soundings, and to indicate areas where changes have occurred. In general, lines were run in a northwesterly and southeasterly direction, approximately parallel to the general trend of the current, and normal to lines of previous survey.

3. Discrepancies:

There are no discrepancies in depths, or positions, or locations of signals on this sheet. All work is of requisite accuracy.

4. Channels:

This latest survey indicates that that section of the North Channel in this vicinity, south of Fisherman Island, is now more contracted and lies farther south than charted. The positions of all navigational aids, at the time of the survey are noted on this sheet. Some of the buoys could be shifted to advantage to more properly define this ship channel.

Two mid-channel buoys, presumably marking southerly entrance to inside passage, were located and are noted on this sheet. However, from brief hydrographic reconnaissance made and from information gathered by Lieutenant (jg) Porter from fishermen, lightkeepers and Coast Guard men in the vicinity, it appears that there is no entrance to the inside passage from the south, other than 3 to 5 feet over the bar at high tide and smooth sea.

5. Dangers:

The danger buoy marking the position of a wreck south of Fisherman Island was located from the ship. No indication of wreck was seen in the brief hydrographic examination made in this vicinity. Unfavorable weather conditions did not permit the use of our launch for more detailed search, and further use of the ship in this area was not deemed safe.

6 Comparison with previous surveys:

This latest survey indicates that shoaling has occurred south of Fisherman Island. A complete topographic survey of the low-lying, sandy islands, south of Cape Charles, and the extension of the present hydrographic survey inshore, will be necessary to correct the chart for this locality. It is believed that proper junction has been made elsewhere.

7 General:

The following additional data accompany this report.

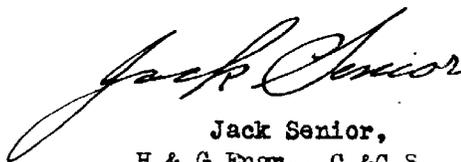
Hydrographic title sheet.

Statistical sheet.

Tidal note.

Landmarks for charts.

This sheet and records have been reviewed by the undersigned and are approved as forwarded.



Jack Senior,
H & G Engr., C & G S.,
Commanding.
M. V. Natoma.

STATISTICS FOR HYDROGRAPHIC SHEET NO. 4

SOUTH OF FISHERMAN ISLAND, ENTRANCE

CHESAPEAKE BAY.

<u>Date</u>	<u>Letter</u>	<u>Vol</u>	<u>Miles</u>	<u>Positions</u>	<u>Soundings</u>	<u>Vessel.</u>
1929 Sept 30	A	1	12.2	54	287	Natoma
Oct. 4	B	1	42.0	217	812	"
5	C	1&2	54.5	283	1074	"
7	D	2	24.0	110	410	"
8	E	2&3	39.0	189	736	"
11	F	3	<u>3.5</u>	<u>21</u>	<u>70</u>	"
		Totals	175.2	874	3389	

TIDAL NOTE FOR HYDROGRAPHIC SHEET NO. 4

A portable automatic tide gauge on the old quarantine wharf on Fisherman Island furnished the values for the hourly heights.

The datum for the 1929 tide staff was determined by direct levels to six tidal bench marks, whose values are based on a longer series than was possible during the period of the present survey.

The reading on staff (1929) for the plane of reference (M.L.W.) was 2.2 ft.

Section of Field Records.

em

November 20, 1929.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 4926

Locality: **Chesapeake Bay (Fisherman Island)**

Chief of Party: **Jack Senior, in 1929**

Plane of reference is **mean low water, reading**
2.2 ft. on tide staff at Fisherman Island.

~~XXXXXXXXXXXX~~

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 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.

Paul C. Whitney

Chief, Division of Tides and Currents.

Section of Field Records

Report on sheet no. 4926

Surveyed in 1929 - Instructions dated Aug. 1, 1929

Chief Party - Jack Senior

Supervised by - Jack Senior

Projected by - Ira S. Rubottom

Sounding plotted by - Ira S. Rubottom

Verified and inked by - J. H. Church

1. The records conform to the requirements of the general instructions

2. The plan and character of the development fulfil the requirements of the general instructions.

3. The sounding line crossing are adequate, but there is a discrepancy of 13 feet on the lines between positions 179 and 181 B and 64-66 B.

4. The usual depth curves can be completely drawn within the limits of the sheet.

5. The office draftsman did not have to do over any part of drafting done by the field party.

6. There are no contemporary adjacent sheets.

Dec. 17, 1927

Respectfully submitted
J. H. Church

January 10, 1930

Section of Field Records
Report on Hydrographic sheet No 4926
Chesapeake Bay Entrance - South of Fisherman I.
Surveyed in 1929.

Instructions dated August 1, 1929

Chief of Party - Jack Senior.

Surveyed by - Field Party.

Protracted and soundings plotted by - Era Rubottom
Verified and inked by - J. H. Church.

1. The handling of this survey was in accordance with all the requirements laid down in the Hydrographic manual, with respect to the records and plan and extent of the development.
2. The specific instructions were carefully followed. Attention is called to the charted black and red can buoy indicating the location of a wreck - four miles south east by east of Fisherman Island. The field party located this buoy, but found no indication of a wreck. Due to unfavorable weather conditions the area was not sufficiently developed to determine the existence or non existence of this danger. See H-6438 (1939)

3. a. This survey verifies the report that the shoal south of Fisherman Island has extended to the southward. Other changes developed and the work should therefore supplant work done previously in this area.

b. There are no recent surveys adjoining this sheet. An examination of previous work shows little change around the outside limits of this sheet except in the north west section, west of longitude $75^{\circ} 56'$.

c. An extension of the hydrographic development in shore in the area west of longitude $75^{\circ} 56'$ will be necessary to supply accurate up-to-date information for correcting the chart in this area.

(See paragraph 6 of the descriptive report.)
d. Attention is called to paragraph 4 under the heading "channels" in the descriptive report for this sheet and also to paragraph 5 under the heading " dangers"

4. Following are instances of disagreement in depths in connection with which no irregularities could be discovered in the records.

a. 29' sounding on clay between 236 and 237c.

The cross line 151E shows a depth of 24' in practically the same spot. This may be possibly due to erroneous reading of the lead line since the indication is that the bottom is even.

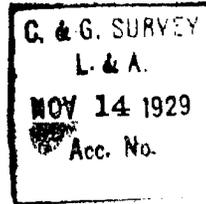
b. Line 65 B crossed lines 180 B and 185 E showing a discrepancy of 3 to 4 feet. Since the two cross lines support each other the line 64 B - 65 B is apparently in error. Since the sounding records give no indication of erroneous work and because of the small difference the work is accepted as plotted.

5. Reviewed by H. E. MacEwan January 10, 1930.
Sheet Inspected by - A. L. Shadoff.
Approved:

A. M. Sobieralski
Chief, Section of Field Records (Charts)

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO.

4926

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. 4

REGISTER NO. 4926

State Virginia

General locality Chesapeake Bay Entrance

Locality South of Fisherman Island

Scale 1:20,000 Date of survey Sept and Oct. 1929

Vessel Motor Vessel NATOMA

Chief of Party Jack Senior, H & G Engr.

Surveyed by " " " "

Protracted by Ira R. Rubottom, D.O.

Soundings penciled by " " "

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated August 1st 1929

Remarks:

Revisonal survey - chart letter 372, 1929.