

4919

Diag. Cht. No. 77-2

4919

Form 504

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

....., Director

S. & G. SURVEY L. & A. SEP 27 1929
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State: Maryland Acc. No

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DESCRIPTIVE REPORT

*Topographic* } Sheet No. <sup>3</sup> 4919  
*Hydrographic* }

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LOCALITY

Eastern Shore of Chesapeake Bay  
Tar Bay

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1929

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CHIEF OF PARTY

J. Senior

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET 3

TAR BAY and FISHING CR.

MARYLAND

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INSTRUCTIONS:

The survey was made in accordance with Instructions from the Director dated July 3, 1929. (Project No. 42.).

SURVEY METHODS:

With the exception of a small area off Charity Point, at the entrance to Fishing Creek, the survey was made with the NATOMA's motor-launch and the soundings taken with a hand lead. All positions were visual fixes.

The control consisted of triangulation stations of third order accuracy, except for a few topographic signals required in Fishing Creek. Seven of the triangulation stations were lighted beacons.

At Charity Point, where the water was too shallow for the motor launch, some soundings were taken by one officer and one seaman in a light skiff, using a graduated stick. One man rowed the skiff on range and held the skiff in a fixed position when soundings or position angles were taken, by ramming an oar into the muddy bottom. The time of stopping and going ahead was recorded. The object of the soundings taken by means of the skiff was to outline the shoals on both sides of the narrow entrance to Fishing Creek. This work is all contained in Vol.5.

No spacing of sounding lines was specified in the Instructions, and the lines in different parts of the area were variously spaced according to the judgement of the Chief of Party, and the hydrographer.

The channel across Tar Bay is very narrow and the lines were run very close together, parallel with the channel, and with an average spacing of about 7 meters. These channel lines are shown on the sub-plan on a scale of 1 to 5,000.

The area between the two red spar buoys near the western edge of the sheet and red Beacon "C" (signal Red) was covered with a system of lines spaced 200 meters apart, running approximately east by north, and west by south.

In Honga River, at the eastern end of the area, sounding lines were spaced 100 meters apart and run approximately north-west to south-east to cover the area between Fishing Creek and the deep channel marked by Beacon No. 7.

A few other random lines were run to outline the limits of the mud flats north of Barren Island.

#### DISCREPANCIES:

A discrepancy can be seen at the end of the line ending about 270 meters north of red spar buoy 16 "D", where a 32 ft. sounding falls between a 17 ft. and a 23 ft. sounding. The bottom here falls off rapidly towards the west and it is believed that position "41 f" should be slightly farther west than the point where it is plotted.

*The discrepancy has been eliminated by plotting 17 ft by left L and time. E.H.*

The soundings between positions "16 b" and "17 b" fall south of a line of shoaler soundings and it is believed that position "17 b" is slightly in error and should plot slightly north of position "64 a". This discrepancy occurs south of Beacon B, (signal Black). It is recommended that the shoaler soundings between positions "64 a" and "65 a" be retained. This line has been plotted by changing the right angle (Conceded on by U.M.S.)

No other discrepancies greater than 1 foot occurred. In the Tar Bay Channel, soundings of various depths are found in close proximity but that is to be expected, in view of the narrowness of the channel and the steeply sloping sides.

*E.H.*

#### DANGERS:

The only serious danger to navigation found during the course of the survey is the wreck in Honga River, south of black Beacon 7. The position of the wreck is Lat.  $38^{\circ} 20'$  ( $+247$  m). Long.  $76^{\circ} 11'$  ( $+1346$  m). The wreck is part of an old hull, of which  $1\frac{1}{2}$  ft. is visible at half tide. It lies in 6 ft. of water.

#### CHANNELS:

A long mudflat extends northward from the northern shore of Barren Island to the small marshy island on which station Marsh is located. A narrow channel, about 25 meters wide, crosses this mud flat and is marked by three red and two black lighted beacons, as well as by brush stakes.

The Channel is narrowest at a point 125 meters west of black Beacon No. 3, where it is about 15 meters in width. The sides have a steep slope and it is possible to get a sounding of two feet on one side of the motor launch and a sounding of 6 feet on the other. At low, or even half tide, the edges of the channel are plainly visible.

The channel connects with Fishing Creek, which leads into Honga River to the eastward. Boats should steer from the drawbridge slightly south of Beacon 5, then turn and head for Beacon 7, passing to the east of Beacon 7, to avoid the wreck. The bottom in Honga River between Beacons 5 and 7 is quite flat and has a depth of 5 to 6 feet. East and south of Beacon 7 a 25 foot channel is encountered. The controlling depth of this deep channel, however, was not determined, as it was desired merely to connect with it.

The depth at the entrance of the Channel across Tar Bay is  $5\frac{1}{2}$  ft. The shallowest part of the channel is 250 meters west of Beacon 3, where 3 feet were obtained. However, it is quite possible that deeper water than this exists, as  $5\frac{1}{2}$  feet and 6 feet were obtained on each side of the 3 foot soundings, and the 3 foot sounding is known to have been taken north of the center of the channel. The controlling depth at mean low water may be taken as  $3\frac{1}{2}$  ft. The bottom is soft mud. Most of the boats using the channel are small fishing craft drawing about  $3\frac{1}{2}$  feet. A fisherman living at Fishing Creek stated that a boat drawing 5 feet could enter at high tide and a cabin cruiser drawing 5 feet was seen at the dock in Fishing Creek. This boat had come through the Tar Bay Channel.

ANCHORAGES:

The bottom of the Tar Bay region surveyed affords good holding ground and small boats can anchor almost any place where there is enough water to keep them afloat. Many fishing boats were seen to anchor in Fishing Creek and south of Fishing Creek near the western shore of Hooper Island. Honga River also affords good anchorage and protection from wind, since it is completely land-locked.

The survey ship "NATOMA" usually anchored half a mile south east of spar buoy 16 E, approximately in Lat.  $38^{\circ} 21.2'$  and Long.  $76^{\circ} 18'$ . This locality affords good holding ground but no protection from westerly winds.

Respectfully submitted:

*Examined & Approved.*  
*Joseph J. Senior, U.S. C. & G.S.*  
*Chief of Party*

*J. C. Bose*  
J.C. Bose,  
Jr. H & G Engr, C & G.S.,

S T A T I S T I C S   F O R   H Y D R O G R A P H I C  
 S H E E T   ( F I E L D )   N o .   3 ,   T A R B A Y   a n d  
 F I S H I N G   C R E E K  
 M A R Y L A N D

Date:	Letter	Day:	Boat:	Statute : miles soundings:	Positions:	Soundings:
1929						
Aug. 20	a		Mc <sup>157</sup> Launch	16.0	147	776
21	b		"	20.5	190	831
22	c		"	18.0	189	924
23	d		"	16.5	145	755
26	e		"	8.7	64	324
26	v		Skiff	1.0	25	140
27	f		M.L.	<u>21.5</u>	<u>159</u>	<u>824</u>
			Total:	102.2	919	4574

LIST OF SIGNALS USED ON  
HYDROGRAPHIC SHEET (FIELD)  
No. 3, TAR BAY and  
FISHING CREEK  
MARYLAND

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Triangulation Stations (Third Order)

Marsh 1929 (Mar)

No 1929 (intersection station)

Reference Mark for South, 1900, Maryland Shell Fish  
Commission Monument, (Com),

Beacon C, 1929 (Red)

Beacon B, 1929 (Black)

Beacon No. 2, 1929 (Two)

" " 3, " (Three)

" " 4, " (Four)

" " 5 " (Five)

" " 7 " (Bea)

East "

New "

Char "

Fish "

Keenes 1910 (Keen)

Gunners " (Gun)

Kerwin " (Ker)

Topographic Signals:

Der

Drew

Bar

Flag

Sap

Ban

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

*Copy*

LANDMARKS FOR CHARTS

Fishing Creek, Md.

August 26th, 19 29

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.

Jack Senior, H & H Engr Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	Latitude		Longitude		Datum			
	°	' D. M. meters	°	' D. P. Meters				
Beacon, lighted, red "C"	38	21	149.0	76	15	1441.8	Triang.	1224
" " bk. "B"	38	21	126.8	76	15	993.0	"	
" " red "2"	38	20	1705.5	76	15	728.5	"	
" " bk. "3"	38	20	1468.8	76	14	1074.0	"	
" " red "4"	38	20	1096.0	76	14	639.6	"	
" " bk. "5"	38	20	178.6	76	13	288.5	"	
" " bk. "7"	38	20	373.0	76	11	1294.6	"	
* These two beacons are not numbered.								
Letter designations for survey purposes only.								

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, flagstuffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Norfolk, Va.,

September 24th, 19 29

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.

~~Jack Senior, H & G Engr.,~~ Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	Latitude		Longitude		Datum			
	° ' "	D. M. meters	° ' "	D. P. Meters				
# Wreck in Fishing Creek (Near edge of channel)	38	20	+247	76	11	+1346	Hyd.	1224
#Old hull projecting about 2 ft. above surface at L.W., in 6 ft. of water.								

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, flagstuffs and like objects are not sufficiently permanent to chart.



Copy for Field Records Section files

Division of Hydrography and Topography:

Sept 30, 1939

Division of Charts:

Tide Reducers are approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4919

Locality: Tar Bay, Chesapeake Bay, Md.

Chief of Party: Jack Senior, in 1939

Plane of reference is mean low water, reading

2.0 ft. on tide staff at Point Lookout, Md.

~~ft. below B. M.~~

Allowance made for time

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.

Chief, Division of Tides and Currents.

## Report on H4919

Chief of Party - Jack Senior  
Surveyed by - J.C. Bose  
Profiled and soundings plotted by - Mrs R. Rubotta  
Verified and inked by - John E. Ladd

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfills the requirements of the General Instructions.
3. The sounding line crossings are adequate.
4. The usual depth curves could be drawn.
5. The field plotting was complete to the extent prescribed - the General Instructions.
6. There are no recent surveys adjoining this sheet.
7. No part of the field work had to be done over by the office draftsman.

8. The character and scope of the survey are excellent and the field plotting was very well done. The accuracy and neatness of the work was splendid.
9. The soundings from position 16 b to 18 b (controlled by position 17 b) were not plotted as per recommendation of Chief of Party in descriptive report. The reason being that position 17 b does not plot correctly. Also there is ample development of the channel without these soundings.

John S. Ladd  
jr. Civ. Eng.

Nov. 13, 1929

Section of Field Records  
Report on Hyd. Sheet No. 4919  
Far Bay, Chesapeake Bay, Maryland  
Surveyed in 1929.

Instructions dated July 3, 1929 (Natoma)

Chief of Party - Jack Senior

Surveyed by - J. C. Bose

Protracted and plotted by - I. R. Rubottom

Verified and inked by - J. G. Ladd

1. The records conform to the requirements.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of the survey satisfy the specific instructions.

4. The sounding line crossings are satisfactory. The two discrepancies noted in the descriptive report were satisfactorily adjusted, and other differences noted were only one foot.
5. The information is sufficient for drawing the usual depth curves, except the L. W. curve.
6. There are no contemporary sheets. The old surveys are very open and while they agree fairly well, it is believed that this sheet should supersede the previous work.
7. The usual amount of field plotting was carefully and accurately done.
8. Character and scope of surveying - very good. While the instructions are not specific as to the spacing of sounding lines, about the proper amount of development seems to have been done.
9. Additional work is not necessary.

10. Reviewed by P. L. Johnston  
Approved  
A. M. Sobieralski

Dec. 16, 1929.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4919

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. 3

REGISTER NO. 4919

State Maryland Dorchester Co.

General locality Eastern shore of Chesapeake Bay

Locality Tar Bay

Scale 1-10,000 Date of survey August 20-27th, 1929

Vessel NATOMA

Chief of Party Jack Senior, H & G Engr.,

Surveyed by J.C. Bose, Jr. H & G Engr.,

Protracted by Ira R. Rubottom, Deck Officer

Soundings penciled by Ira R. Rubottom.

Soundings in fathoms feet

Plane of reference Mean Low water

Subdivision of wire dragged areas by

Inked by John G. Ladd

Verified by John G. Ladd

Instructions dated July 3, 1929

Remarks: Sub-plan of Tar Bay channel plotted on scale 1-5,000

# NAUTICAL CHARTS BRANCH

SURVEY NO. 4919, H

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
			Before After Verification and Review
<u>12/26/45</u>	<u>3331</u>	<u>H. MacLure</u>	<del>Before</del> After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

Applied to Cht. Compilation 553 9-2-42 KQ.