

# 5501

Diag. Cht. No. 77-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 2 Office No. H-5501

### LOCALITY

State Maryland

General locality Chesapeake Bay

Locality Thomas Point Lighthouse to

Chesapeake Beach

194 33

CHIEF OF PARTY

John A. Bond, Chief of Party

LIBRARY & ARCHIVES

DATE August 27, 1934

B-1870-1 (1)

# 5501

DESCRIPTIVE REPORT

To Accompany Hydrographic sheet No. 2

Chesapeake Bay

Thomas Point Shoal Lighthouse to Chesapeake Beach, Maryland

AUTHORITY

This work was executed in accordance with the Director's Instructions dated May 10, 1933 (Project HT-146) to the Commanding Officer, Launch MIKAWA. ✓

LIMITS

Sheet 2 covers the center portion of Chesapeake Bay from Lat.  $38^{\circ} 42.3$  to  $38^{\circ} 53.5$ . On the east it joins the work of E. R. McCarthy executed during 1933, and on the west it joins sheets 3 and 4 both of which were executed by the Launch MIKAWA in 1933. ✓

SURVEY METHODS

Standard Coast Survey methods of hand lead soundings and sextant fixes were used throughout. The lead line was No. 8 Samson mahogany tiller rope, graduated in fathoms and feet. The leads used varied in weight from 8 to 14 pounds. The boat mostly used was a 32 foot hydrographic launch. A 22 foot skiff with outboard motor was used to run a few splits. ✓

DISCREPANCIES

No discrepancies are known to exist. Errors in the sounding records principally in recording and reading of angles have been adjusted during the smooth plotting and noted in red in the sounding records. ✓

DANGERS

No dangers are known to exist.

COMPARISON WITH PREVIOUS SURVEYS

The depth curves check well with previous surveys as taken from the chart. ✓

(see Review)

MISCELLANEOUS

Days a to k inclusive were surveyed by Lieutenant (j.g.)  
F. R. Gossett. The remainder of the sheet was surveyed by  
D. E. Sturmer. ✓

Respectfully submitted,

*D. E. Sturmer*

D. E. Sturmer  
Deck Officer, C. & G. Survey

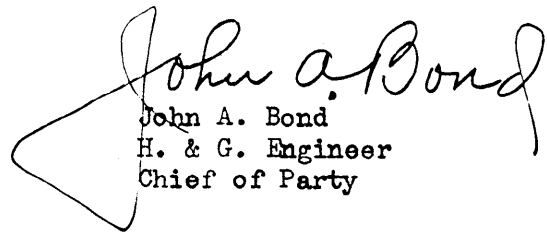
Approved and forwarded:

*John A. Bond*  
John A. Bond  
H. & G. Engineer  
Chief of Party

STATISTICS FOR FIELD SHEET NO. 2

<u>Date</u>	<u>Day Letter</u>	<u>Volume</u>	<u>Positions</u>	<u>Soundings</u>	<u>Sta. Miles</u>
July 25	a	I	116	555	21.0
27	b	I	141	549	30.9
Aug. 3	c	I	107	420	25.5
7	d	II	120	461	25.7
9	e	II	111	416	25.2
14	f	II	107	416	25.3
15	g	II & III	145	549	35.4
16	h	III	118	439	28.5
30	j	III	91	334	22.9
31	k	III	80	272	19.4
Sept. 1	l	III & IV	38	109	7.4
5	m	IV	44	149	9.0
7	n	IV	85	199	16.7
8	p	IV	104	398	21.1
9	q	IV	33	121	7.0
18	r	IV & V	54	233	13.2
19	s	V	101	275	19.4
20	t	V	125	468	23.0
21	u	V	83	313	16.0
22	v	VI	83	313	14.5
25	w	VI	80	204	16.4
Oct. 2	x	VI	57	138	11.1
3	y	VI	70	224	16.0
4	z	VI	55	129	7.0
10	a'	VII	79	288	18.3
Nov. 7	b'	VII	40	192	7.2
20	c'	VII	52	265	11.2
25	d'	VII	55	255	14.4
28	e'	VII	62	179	8.5
<b>Totals</b>			<b>2436</b>	<b>8863</b>	<b>517.2</b>

Smooth Sheet No. 2 and accompanying records have been  
examined by the Chief of Party and are approved.

  
John A. Bond  
H. & G. Engineer  
Chief of Party

*Mr. Ellis*

*Lac*

August 30, 1934

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in  
7 volumes of sounding records for

HYDROGRAPHIC SHEET 5501

Locality Thomas Pt. Lighthouse to Chesapeake Beach, Chesapeake Bay, Md.

Chief of Party: John A. Bond in 1933.

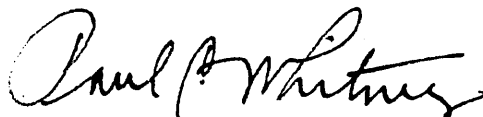
Plane of reference is mean low water reading

2.4 ft. on tide staff at Thomas Pt. Shoal L. H.

3.9 ft. below B. M. 1

Height of mean high water above plane of reference  
is 0.9 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. 5501

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. .....2.....

REGISTER NO. 5501

State ..... Maryland .....

General locality ..... Chesapeake Bay .....

Locality .. Thomas Point ~~Shoal~~ Lighthouse <sup>TO</sup> Chesapeake Beach .....

Scale... 1:20,000 ..... Date of survey July-Nov. ...., 19 33

Vessel ..... Launch MIKAWA .....

Chief of Party ..... John A. Bond .....

Surveyed by ..... F.R. Gossett & D.E. Sturmer .....

Protracted by ..... J.W. Seager .....

Soundings penciled by ..... A. van Reuth .....

Soundings in ~~fathoms~~ feet

Plane of reference ..... Mean Low Water .....

Subdivision of wire dragged areas by .....

Inked by ..... A. M. Uzefovich .....

Verified by ..... A. M. Uzefovich .....

Instructions dated ..... May 10, 1933 ....., 19

Remarks: .....

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. ...5501

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

Number of positions on sheet	..2436
Number of positions checked	....20
Number of positions revised	.....
Number of soundings recorded	..8863 /
Number of soundings revised	.....2
Number of signals erroneously plotted or transferred	.....

Date: ..October 22, 1934.....

Cartographer: ..A. M. Uzefovich.....

**Verification of projecting**  
**Verification & inking of rocks and shoals** } by A. M. Uzefovich

Time: 13 hours

Verification, <sup>2nd</sup> of inking by A. M. Uzefovich

Time: 14 1/2 hours

Review by R. J. Christman  
+ R. L. Johnston

Time: 23 1/2 hrs  
21 1/2 hrs



Oct. 22, 1934

Section of Field Records  
*Verification* Report on H-5501 (1933)

Chief of Party John A. Bond

Protracted by J. W. Seager

Surveyed in July-Nov. 1933

Soundings plotted by A. van Reuth

Surveyed by F. R. Gossett & D. E. Sturmer

Verified & inked by A. M. Uzefovich

1. The records conform to the requirements of the General Instructions. ✓
2. The field plotting was completed to the extent prescribed in the General Instructions. ✓
3. The hydrography is complete, and the usual depth curves can be drawn. ✓
4. The junctions with adjacent sheets: H-5197 (1932), H-5237 (1932), H-5327 (1933), H-5374 (1933), and H-5432 (1933) were verified, and all are satisfactory. ✓  
As H-5327, H-5374, and H-5432 have scales 1:10,000, the overlaps were made on them from H-5501, which has scale 1:20,000.  
If soundings had been plotted to the nearest half foot on these sheets - junctions would have agreed more accurately. ✓
5. Remarks: The tracing of soundings lines from the smooth sheet was made, and there was found a good agreement between the Boat and smooth sheets, except for a slight difference in location of some positions, and only one big departure in the location of position 107C (Lat.  $38^{\circ}48'.7$ , Long.  $76^{\circ}26'.8$ ).  
Therefore the plotting of a few number of positions was verified, including position 107C. All of them proved to be plotted on the smooth sheet, by the field party, satisfactorily. ✓  
Also all positions for buoys were checked, and no errors were found. ✓  
Black Can Buoy N<sup>o</sup>1 (Vol. 7. page 54, Lat.  $38^{\circ}52'.2$ , Long.  $76^{\circ}28'.9$ ) is shown on Black and White chart N<sup>o</sup> 77, as REF. ✓  
Black Can Buoy N<sup>o</sup>27 (Vol. 7. page 54, Lat.  $38^{\circ}49'.7$ , Long.  $76^{\circ}27'.9$ ) is shown on the chart N<sup>o</sup> 77 about 15" further north. ✓

Vol. 7, page 56 has two buoys: "Red Lighted Buoy" N° 20A (Lat. 38°45'.1, Long. 76°26'.2), and "Red Spar" N° 20A (Lat. 38°45'.2, Long. 76°26'.2). On the chart N° 77 there is only one buoy shown as FLW BELL (see also Vol. 3 page 48 - Buoy N° 20A, Light and Bell) Vol. 7, page 55 mentioned - "Not a permanent buoy" (Lat. 38°49'.3, Long. 76°28'.4), which does not appear on the Smooth sheet of H-5501, or chart N° 77.

The buoy S "1" (Lat. 38°45', Long. 76°30'.7) was transferred on H-5501 from H-5374 in pencil. (has been in Bell)

Vol. I, page 25, Vol. I, page 34, and Vol. 5, page 47 mentioned: "Fish trap" (Lat. 38°52'.2, Long. 76°27'.3; Lat. 38°52'.2, Long. 76°27'.2; and Lat. 38°47'.2, Long. 76°29'.8), but these traps are not shown on the Boat, or Smooth sheets.

Vol. 2, page 40 mentioned: "Piling" (Lat. 38°52', and Long. 76°25'.7), which does not appear on the Boat, or Smooth sheets.

Respectfully submitted

Alexis M. Utefovich

This was probably a dredger's temporary mark. RPL

GEOGRAPHIC NAMES

Survey No. H 5501

Date. Oct. 22, 1934

Chart No. 77

*Names underlined in red approved Oct. 24, 1934*

Diagram No. 77

*J.B.*

\*, 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
	✓	<u>Kent Pt.</u>			Lat. 38° 50' Long. 76° 22'
	✓	<u>Poplar I.</u>			Lat. 38° 46' Long. 76° 22'
	✓	<u>Thomas Pt.</u>			Lat. 38° 55' Long. 76° 28'
	✓	<u>Saunders Pt.</u>			Lat. 38° 53' Long. 76° 29'
	✓	<u>Curtis Pt.</u>			Lat. 38° 51' Long. 76° 30'
	✓	<u>Horseshoe Pt.</u>			Lat. 38° 50' Long. 76° 29'
	✓	<u>Holland Pt.</u>			Lat. 38° 44' Long. 76° 31'
	✓	<u>Chesapeake Beach</u>			Lat. 38° 41' Long. 76° 32'
	✓	<u>CHESAPEAKE BAY</u>			
	✓	<u>Herring Bay</u>			
	✓	<u>West River</u>			
	✓	<u>Kent Island</u>			

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5501 (1933)

Thomas Pt. Lighthouse to Chesapeake Beach, Chesapeake Bay, Md.  
Instructions dated May 10, 1933 (MIKAWA)  
Surveyed - July - Nov. 1933.

Hand Lead Soundings - 3 Point Fixes on Shore Objects.

Chief of Party - John A. Bond.  
Surveyed by - F. R. Gossett; D. E. Sturmer.  
Protracted by - J. W. Seager.  
Soundings penciled by - A. van Reuth.  
Verified and inked by - A. M. Uzefovich.

1. Condition of Records.

The records conform to the requirements of the Hydrographic Manual.

2. Compliance with Instructions for the Project.

The plan and extent of development conform to the instructions for the project except as follows:

a. No cross lines were run (par. 11). (See remarks under par. 3, this review).

b. Development is not adequate in the vicinity of buoy C 27, Lat.  $38^{\circ}49'.7$ , Long.  $76^{\circ}27'.9$ . Development should have been closer in the vicinity of Lat.  $38^{\circ}51'$ , Long.  $76^{\circ}27'$ , where shoaler depths are charted from prior surveys. The shoal soundings of the new survey along Long.  $76^{\circ}27'$ , from Lat.  $38^{\circ}5'$  to  $38^{\circ}51'.5$ , were not developed.

c. In the few places where the spacing of the lines is in excess of the 200 meters prescribed in the instructions (par. 13), the bottom is regular.

3. Sounding Line Crossings.

No cross lines were run but depths on adjacent lines are consistent.

4. Depth Curves.

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

5. Junctions with Contemporary Surveys.

a. Junction on the east with H. 5237 (1932) and H. 5327 (1933) is satisfactory.

b. Junction on the west with H. 5197 (1932), H. 5374 (1933) and H. 5432 (1933) is satisfactory.

c. Adequate junction was effected with H. 2402 (1898) on the north. Soundings in the overlapping area west of long.  $76^{\circ}24\frac{1}{2}'$  are in good

8-49.7

2

agreement, however, eastward of this longitude the 1898 work appears from 2 to 8 feet deeper.

6. Comparison with Prior Surveys.

a. H. 188 (1846).

The 1933 survey agrees very closely with this survey over the greater part of the area common to them. Depths differ somewhat in the deepest part (depths over 100 feet) where soundings on the 1933 survey shows a deeper pocket off Kent Point. The general configuration of the 3 fathom curve has changed little except in lat.  $38^{\circ}50'$ , long.  $76^{\circ}28'$ , where the 1933 survey failed to adequately define the point of the shoal (see par. 6e, below.

A 17 foot shoal is shown on H. 188 (1846) in lat.  $38^{\circ}45'.3$ , long.  $76^{\circ}31'.4$ . Neither of the later surveys, H. 2629 (1903) and H. 5501 (1933) show this shoaling. While the development on neither the 1903 survey nor the present survey is ~~not~~ close, yet there is one line on each survey that crosses the shoal without any indication of it. The bottom here is very regular. This shoal should not be used for charting.

b. H. 2427 (1899), H. 2652 (1903).

These surveys show lines of soundings across the bay, 3 miles and 1 mile apart, respectively. The agreement in depth is good.

c. H. 2631 (1902).

This survey covers a small area west of Poplar Island. It is in fair agreement with the new work except that the 18 foot curve extends further north and south on the 1933 survey. A charted 16 foot spot in lat.  $38^{\circ}46'.8$ , long.  $76^{\circ}24'.3$ , originates with H. 2631 (1902). It is a single sounding recorded as 3 fathoms in a row, of 3 fathom and 4 foot soundings (pos. 53c to pos. 54c) leaving a doubt as to whether this sounding should not have been the same as the others. The 16 falls in depths from 19 to 20 feet on H. 5501 (1933) and H. 5327 (1933). Because of its questionable accuracy the 16 foot sanded spot should be replaced on the chart by the new depths.

d. H. 2629 (1903).

This survey covers the western edge of the present survey from lat.  $38^{\circ}49'$  south to lat.  $38^{\circ}44'$ . It is in general good agreement with the new work.

A 17 foot shoaling in lat.  $38^{\circ}47'.4$ , long.  $76^{\circ}29'.9$ , originates with H. 2629 (1903) and was intensively developed and strongly located. The surrounding depths are in good agreement with the work. Since it was missed by the new sounding lines, the 17 foot sounding has been added to H. 5501 (1933) and is the only sounding brought forward from H. 2629 (1903).

e. H. 2667 (1903).

This survey covers the area on the western limits of the present survey, north of lat.  $38^{\circ}49'$ . The greater part of it is in fair agreement with the new work but in some places differences are noted. In the area in the vicinity of lat.  $38^{\circ}51'.5$ , long.  $76^{\circ}27'.0$  the soundings indicate that changes may have occurred. The soundings from the present survey are from 2 to 6 feet deeper but are not spaced closely enough to disprove the shoaler soundings from H. 2667 (1903). Because of the general disagreement in this area and because the area will probably be investigated in the near future, none of the critical soundings from H. 2667 (1903) have been carried forward, however soundings under 30 feet should be retained on the chart until further disproved.

A 23 foot and 28 foot sounding are shown on H. 2667 (1903) in lat.  $38^{\circ}50'.5$ , long.  $76^{\circ}27'.3$ . The records show that the 1903 field party made a later examination of these spots (see pos. 67a) and could find nothing under 28 feet at the 23 foot sounding and 33 feet on the 28 foot sounding. For some reason these soundings were not changed on H. 2667 (1903). The two soundings (not shown on Chart No. 1225) should not be used for charting.

In the general vicinity of lat.  $38^{\circ}50'$ , long.  $78^{\circ}28'$  a few soundings from H. 2667 (1903) have been added to H. 5501 (1933) because they define the limits of the 18 foot curve which was not well fixed by the new sounding lines.

7. Comparison with Chart No. 1225.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review. The limits of fish trap areas are shown on the chart but were not defined by the 1933 survey.

Lighted buoy "20A" (lat.  $38^{\circ}45'.2$ , long.  $76^{\circ}26'.2$ ) is charted about 250 meters eastward of the location given on H. 5501 (1933) and the N20 buoy about 250 meters northeast of the position on H. 5501 (1933).

Buoy C 25 (lat.  $38^{\circ}43'.6$ , long.  $76^{\circ}30'$ ) is charted about 250 meters south, and buoy C 27 (lat.  $38^{\circ}49'.7$ , long.  $76^{\circ}28'$ ) about 500 meters south of the positions located on H. 5501 (1933). However, in all these cases the buoys as actually found on the ground are located correctly with respect to the features they are supposed to mark.

8. Field Plotting.

Field protracting and penciling of soundings were satisfactory.

9. Additional Field Work Recommended.

a. Immediately Necessary.

1. The point of the shoal in the vicinity of buoy C 27 (lat. 38°49'.7, long. 76°28') is inadequately defined; both the 1846 survey (H. 188) and the 1903 survey (H. 2667) show a shoal ridge between the deeper sounding lines of the present survey.

*Also 15+13 at north end of chart from 2345 HRC*

2. The area where the new soundings disagree with those on H. 2667 (1903) in the general vicinity of lat. 38°51'.5, long. 76°27'.0 should be more closely developed as well as the several indications in the same general vicinity.

3. The 17 foot shoaling described in par. 6a, above, should also be examined.

10. Superseding Old Surveys.

Within the area covered, the present survey with indicated additions from previous surveys, and with the exceptions noted in par. 6, e of this review, supersedes the following surveys for charting purposes:

- H. 188 (1846) in part.
- H. 2427 (1899) " "
- H. 2652 (1903) " "
- H. 2631 (1902) " "
- H. 2629 (1903) " "
- H. 2667 (1903) " "

11. Reviewed by - R. J. Christman and R. L. Johnston - Oct. 1934.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

*L. O. Tolbut*  
Chief, Division of Charts.

*T. B. Borden*  
Chief, Section of Field Work.

*G. H. Hude*  
Chief, Division of H. & T.

*Applied to new chart 550 + chart 1225  
Nov. 14, 1934 HRC.*

