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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: MARYLAND

DESCRIPTIVE REPORT

~~Topographic~~  
Hydrographic

Sheet No. 2 5328

LOCALITY

CHESAPEAKE BAY

Eastern Bay (Central Part)

& S. COY. MARSHES, CHESAPEAKE BAY

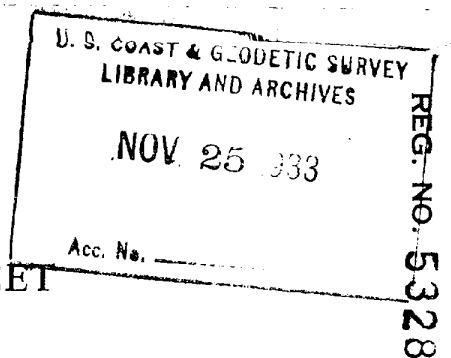
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CHIEF OF PARTY

E. R. MC CARTHY.

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. 2

REGISTER NO. **5328**

State Maryland

General locality Chesapeake Bay

Locality Eastern Bay (Central Part)

Scale 1:10000 Date of survey Oct. 27 to Nov. 11, 1933

Vessel Shore Party

Chief of Party E. R. McCarthy

Surveyed by E. R. McCarthy and R. A. Philleo

Protracted by A. E. Durie and R. A. Philleo

Soundings penciled by A. E. Durie

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by Edbert W. Smith

Verified by \_\_\_\_\_

Instructions dated August 12, 1933

Remarks: \_\_\_\_\_

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. "2"

Authority:

Instructions from the Director dated August 12, 1933.  
Original instructions for J.A. Bond dated May 10, 1933.

Limits:

Eastern Bay--from Kent Point to Shipping Point; Sagey  
Marsh Point to Harbor Cove.

Methods:

Positions were located by the usual sextant fixes on objects located by triangulation or topography. Soundings were taken with a lead line graduated in fathoms and feet for depths over two fathoms, and with a sounding pole graduated in feet and half feet for depths below two fathoms (see photo attached).

Equipment:

A hired launch, the "Nanuk", was used for all hydrography except the inshore work which was done by means of an outboard motor on a specially fitted skiff (see photo).

Discrepancies:

The soundings crossed very well; the largest difference being one-half ( $\frac{1}{2}$ ) foot.

Danger s:

There are no dangers to navigation within the limits of this sheet.

Channels:

The only channel used by a large boat is that into Claiborne which is used by the Claiborne-Annapolis Ferry which draws from ten to twelve feet. The channel is well marked on the starboard side of the entrance by spar <sup>buoys</sup> and on the portside by a lighted beacon. The depth in this channel is ample for the draft using it. A least depth of thirteen (13') feet may be carried to the ferry slip.

Comparison with previous surveys:

This sheet was compared with sheet No. 2464 and the following differences noted:

Latitude: 38-51.7.37

Longitude: 76-19.8<sup>9</sup>

A least depth of six (6') feet in general depths of eight (8') feet is shown here. This was investigated (positions 96--100d) and was found to be non-existent. This is an oyster reef and was probably dredged away.

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**U. S. COAST AND GEODETIC SURVEY**

Comparison with previous surveys: (continued)

Latitude 38-51.5<sup>4</sup> Longitude 76-19.1<sup>2</sup>

A least depth of twenty-nine and one-half ( $29\frac{1}{2}$ ') feet is shown here. As it is on the edge of the sheet, it was not investigated. Least depth obtained was thirty (30') feet on positions 55a & 92a.

Latitude 38-48.5 Longitude 76-20.4

A shoal with a least depth of eighteen (18.0') feet is shown here. This was investigated and a least depth of eighteen and one-half ( $18\frac{1}{2}$ ') feet obtained on positions 58k and 29d.

Latitude 38-49.3 Longitude 76-19.2<sup>3</sup>

A shoal with a least depth of seventeen and one-half ( $17\frac{1}{2}$ ') feet is shown here. This was investigated and a least depth of seventeen and one-half ( $17\frac{1}{2}$ ') feet found on positions 52-4f.

Latitude 38-49.2 Longitude 76-19.0 <sup>three quarters</sup> ~~one half~~  $\frac{3}{4}$

A shoal with a least depth of eleven and ~~one half~~ ( $11\frac{3}{4}$ ') feet is shown here. This was not investigated as a line was run directly over it and no indication appeared.

Latitude 38-50.2 Longitude 76-18.2<sup>38</sup>

A shoal with a least depth of twelve (12') feet is shown here. This was investigated and was found non-existent, on positions 36-42k. Least depth in this area is thirteen (13') feet.

Latitude 38-50.2 Longitude 76-18.1<sup>13</sup>

A shoal with a least depth of six (6') feet is shown here. This was investigated and found to be non-existent. Least depth obtained was thirteen (13') feet on position 14g. *Only one sounding line*

Latitude 38-50.2 Longitude 76-17.7

Two shoals, one with a least depth of twelve (12') feet and one with a least depth of ten and three-quarters ( $10\frac{3}{4}$ ') feet are shown here. The twelve foot sounding falls within the two fathom curve and the least depth over the second shoal is 13' on position 18k.

Latitude 38-50.2 Longitude 76-17.1<sup>2</sup>

A shoal with a least depth of six (6') feet is shown here. This was investigated and found to be within the 6' curve.

Junction with sheet #5237 is satisfactory.

Landmark<sup>s</sup>:

A list of landmarks is submitted with the topographic sheet for this area and also submitted with the Coast Pilot report.

Names:

Names are shown on the topographic sheet for this area.

Miscellaneous:

Statistics and tidal notes are attached.

Respectfully submitted,

*ER Mc Cortly*

Hydrographer.

Forwarded approved:

*ER Mc Cortly*

Chief of Party.

Day	Date	Boat	Miles (Statute)	Soundings	Positions	Total Miles for day.
a	10-27-33	Nanuk	21.3	446	111	26.1
b	10-30-33	"	30.9	903	201	35.9
c	10-31-33	"	22.5	789	179	35.0
d	11- 1-33	"	33.0	969	190	42.3
e	11- 2-33	"	27.5	809	170	39.7
f	11- 3-33	"	16.5	522	118	22.2
g	11- 4-33	"	8.5	259	48	10.3
h	11- 7-33	"	23.9	875	166	26.9
j	11- 9-33	"	1.0	44	11	2.0
k	11-11-33	"	6.7	289	65	21.6
Totals			191.8	5905	1859	262.0

## STATISTICS---HYDROGRAPHIC SHEET NO. 2

Day	Date	Boat	Miles (statute)	Soundings	Positions	Total Miles for day.
a	10-31-33	Skiff	10.0	430	92	18.9
b	11- 1-33	"	11.2	469	97	14.5
c	11- 2-33	"	9.8	464	103	12.8
Totals			31.0	1363	292	46.2





SOUNDING WITH THE  
LEAD LINE



BLOODY BAR LIGHTHOUSE





HYDROGRAPHIC SKIFF



SOUNDING WITH THE POLE



HEAVING THE LEAD



TIDAL NOTE TO ACCOMPANY DESCRIPTIVE REPORT FOR HYDROGRAPHIC SHEET # 2

An automatic gauge was established at Ferry Cove for the entire season and no correction made to observed tides. (see letter attached).

Position of gauge : Latitude 38-45.9  
Longitude. 76-19.8

Mean low water on staff is two and two-tenths (2.2') feet.

The gauge clock stopped a number of times and necessary tides were interpolated by comparisons with the Gibson Island gauge of the " Mikawe " party. Computations are attached.

*Ed Mc Cartley*

Chief of Party.

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**EXPRESS ADDRESS:**

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

COPY

Refer to No. 30-MDS.

To: Lieut. (j.g.) E.R. McCarthy,  
U.S. Coast & Geodetic Survey,  
Tilghman, Md.

From: The Director,  
U.S. Coast & Geodetic Survey,

Sub ject: Tide, Data, Eastern Bay.

Receipt is acknowledged of your letter of October 28, 1933 with simultaneous tide observations at Claiborne and Ferry Cove. As there is apparently little difference in the time and range of tide at the two places, it will be satisfactory to use the Ferry Cove tides without time or height correction for the reduction of soundings in Eastern Bay.

Signed J.H. Hawley

Acting Director.

200

December 5, 1933

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in  
6 volumes of sounding records for

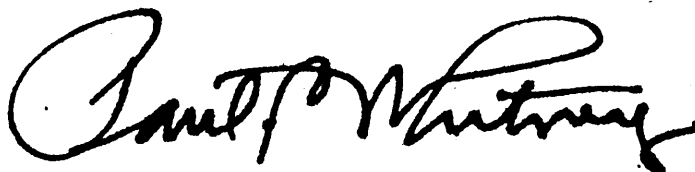
HYDROGRAPHIC SHEET 5328

Locality Eastern Bay, Chesapeake Bay, Md.

Chief of Party: E. R. McCarthy in 1933  
Plane of reference is mean low water, reading  
2.2 ft. on tide staff at Ferry Cove  
4.3 ft. below B. M. 1

Height of mean high water above plane of reference is 1.0 ft.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents

SECTION OF FIELD RECORDS

Report on --- H-5328

Surveyed in Oct. 27, to Nov. 11, 1933.

Chief of Party-- Lt. E.R. McCarthy

Surveyed by E.R. McCarthy &  
R.A. Philleo.

Protracted by A.E. Durie &  
R.A. Philleo.

Soundings plotted by A.E. Durie.

Verified and inked by E.W. Smith &  
L.S. Straw.

Topography inked by Field Party.

1. The records conform very accurately to the requirements of the General Instructions.
2. All of the usual depth curves can be completely drawn.
3. The field plotting was completed to the extent perscribed in the General Instructions.
4. The office draftsman has to make additions to the designations of two recovered and relocated Triangulations stations to show both the original date of establishment, and the last modern survey re-location. The two stations thus corrected were: Rich Neck Water Tank-1909 and Haddaway-1909.
5. All junctions with adjacent sheets are satisfactory.
6. In checking ~~the~~ the plotting of positions, the verifier found the field work to be very accurate. The spacing of soundings was also of a high degree of accuracy. Only in a few cases were improper depths penciled in, these cases being the frequent case of reversing soundings between subsequent positions.  
All crosses and split runs checked to 1-foot or less in all but one case. In this case the soundings on the first run of the area in Positions 36-39 (f) in Latitude 38- 50.2 and Longitude 76 - 18.4 and the split run of positions 36-38 (k) ran close together but showed a difference of two (2') feet. Knowing that some of the "Tide Reducers" were taken from interpolated tides due to the fact of the guage clock stopping, these positions were sent back to the Tide Division. It was found that the reducers for that portion of (f) day were from interpolated values and that by transferring the increase of reducer from Position 42 (f) to position 36(f) that the two lines checked to within one foot.
7. The quality of the field work is excellent, very close attention given to recording of time interval and speed changes as well as considering these factors in the plotting. Time interval changes checked with extreme accuracy.
8. The controlling depth of the dredged channel at Claiborne dock is 12 ft.

Respectfully submitted

*Elbert W. Smith*  
Elbert W. Smith.

*Leo S. Straw*  
Leo S. Straw.

Date: January 16, 1934.

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5328.

Central part of Eastern Bay, Chesapeake Bay, Maryland.

Surveyed in 1933.

Lead line and pole soundings.

Original instructions dated May 10, 1933. (J. A. Bond).

Supplemental instructions dated Aug. 12, 1933.

Chief of party - E. R. McCarthy.

Surveyed by - E. R. McCarthy, R. A. Philleo.

Protracted by - A. E. Durie, R. A. Philleo.

Soundings plotted by - A. E. Durie.

Verified and inked by - L. S. Straw, E. W. Smith.

- Millman*
1. The records conform to the requirements of the Hydrographic Manual.
  2. The original specific instructions of May 10, 1933 are presumed to govern this work as there are no other instructions in the office files. The plan, character and extent of the survey satisfy these instructions with the exception of that portion of par. 11 which reads, "A sufficient number of cross lines shall be run to afford a check on the soundings and to define the exact limits of the channels."
  3. The only cross lines, in the entrance channel to Claiborne, cross very well and the agreement of adjacent lines is good throughout.
  4. The information is sufficient for completely drawing the usual depth curves.
  5. At present there is no contemporary work north of this survey.

The junction with H. 5237 in the vicinity of Kent Point is satisfactory.

The junction on the south with H. 5327 will be reported in the review of that sheet when it is completed.

6. Comparison with previous surveys.

The survey of 1899, H. 2464, is the only previous survey covering this area. This was a closely developed survey with lines crossing in two and for a portion of the area, three ways, but was on a scale of 1/20,000. The agreement between the two surveys is excellent. The plotted curves fall closely together.

The shoals and isolated shoal soundings located on H. 2464 are listed in detail on pages 1 and 2 of this descriptive report. A specific report of inspection and its result was made by the Chief of Party in each case.

The recent work, H. 5328, will supersede the older survey but in view of the close agreement, the soundings from H. 2464 may be used, if they should be needed, to fill in blank areas in charting. Care



H. 5328 - 2.

must be taken in this case that shoal soundings of the earlier survey be not used if reported as non-existent.

7. The survey as a whole is considered very good. It can only be criticized for its lack of cross lines.

8. No additional work required.

9. Reviewed by - R. L. Johnston.

*L. O. Colbert*

L. O. Colbert,  
Chief, Section of Field Records.

*J. S. Brown*

Chief, Section of Field Work.

Examined and approved:

*W. H. Lawrence*  
Chief, Division of Charts.

*G. F. Rude*  
Chief, Division of H. & T.

*Applied to new chart 550  
Oct 3, 1934*

Applied Reconstruction  
of Chart 550 Jan 13 1947 *LL*.