

6599

6599

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. H-6599
Hydrographic }

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

NOV 4 1941

Acc. No.

State Maryland

LOCALITY

Chesapeake Bay

Chester River ~~Hall Pt.~~

~~1937~~ 1940

CHIEF OF PARTY

F. L. Gallen

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H6599

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. 1003

REGISTER NO. H-6599

State Maryland

General locality Chesapeake Bay

Locality ~~Head Point~~, Chester River

Scale 1:10,000 Date of survey July, XIX 1940

Vessel Launches MITCHELL & OGDEN

Chief of Party F. L. Gallen

Surveyed by Charles A. Schanck

Protracted by J.T. Burke

Soundings penciled by J.T. Burke and L.L. Lawrence

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by C. E. Dennis 1/27/42

Verified by " " "

Instructions dated April 17, 1940

Remarks: Plotted and soundings penciled at the Norfolk Processing Office under the supervision of H. Arnold Karo.

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet H-6599

INSTRUCTIONS

The instructions for the work covered by this report are dated April 17, 1940. The project is designated number HT-250. ✓

SURVEY METHODS

The hydrography on this sheet was controlled by signals located by triangulation, air photo compilation, sextant cuts and sextometer distances. Most sextant cuts were taken from triangulation stations and referred to other triangulation stations. Sextometer distances were used only in narrow unimportant streams. Practically all positions were determined by regular sextant fixes. A few were located by estimated distances and directions from signals, and still fewer, near the heads of creeks, were spotted by estimating their relation to the adjacent shoreline. Most of the soundings were hand lead, taken from a 25 foot skiff propelled by outboard motors. Deep water soundings along the river channel were obtained with an automatic depth recorder installed on the Launch OGDEN. ✓

DISCREPANCIES

No known discrepancies exist on this sheet. ✓

DANGERS

Numerous oyster bars and mounds are found along the edges of the deep water channel of the river, in places rising abruptly from over 10 fathoms to less than two fathoms. The outstanding oyster shoals along the channel are as follows: In Lat. 39 01.6, Long. 76 11.7, a least depth of 10 feet; in Lat. 39 01.8, Long. 76 11.5, a least depth of 12 feet; in Lat. 39 02.9, Long. 76 11.9, a least depth of 10 feet; in Lat. 39 03.8, Long. 76 11.8, a least depth of 11 feet; in Lat. 39 04.1, Long. 76 11.8, a least depth of 8 feet; in Lat. 39 04.3, Long. 76 10.8, a least depth of 11 feet. ✓

Extensive grassy flats are found along the southshore of Eastern Neck Island and along the channel into Queenstown Creek. ✓

CHANNELS

The controlling depth of the main channel of the river within the limits of this sheet is 25 feet. This was the maximum depth found near the northern limits of the sheet in the area where the river is wide and its bottom comparatively flat. The river channel is over seven fathoms in depth throughout the greater part of the area covered by this sheet. ✓

The channel into Queenstown Creek is about 50 meters wide, with very shoal grassy flats on either side. This channel has a least depth of 10 feet. ✓

A least depth of 8 feet was found in the channel leading into the mouths of Grove and Reed Creeks. The channel at the mouth of Grove Creek is only about 20 meters wide. These creeks are used by pleasure boats only. The channel into them is marked with stakes and barrel buoys during the summer months by local boat owners.

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There are no channels into the other creeks surveyed on this sheet.

COMPARISON WITH CHARTS AND PREVIOUS SURVEYS

In general this survey compares very closely with the old hydrographic sheets of this area and chart 548. The detached 4 foot shoal in the central part of Reed Creek is no longer in existence and should be removed from the charts. There has been considerable erosion along the eastern shore bluffs of the river with the result that the shoal water area extends farther offshore than in the old surveys. The 5 foot shoal point charted in Lat. 38 59.1, Long. 76 11.8, has been worn away. The deep water channel in the vicinity of Lat. 39 01.7, Long. 76 11.6 is not as wide as is indicated on the chart. Carpenter Island, off the mouth of Tilghman Creek has eroded away to about 1/4 its charted size. Nothing remains of Cockey Island, charted off the south end of Eastern Neck Island or of Bogle Island, charted off the mouth of Durdin Creek. The only evidence of Fryingpan Island charted in Eastern Neck Narrows is a small shell mound that bares about 6 inches at low water.

Notes
H. 2/11/34
L. 2/11/34

A satisfactory connection was made with the Kent Island Narrows survey of 1932 along the southwest limits of this sheet.
H-5295 (1932)

25

GEOGRAPHIC NAMES

In as much as a detailed investigation of the geographic names in this area was made by the air photo compilation party, no repetition of this work was undertaken by the hydrographic party.

RECOVERABLE H. & T. STATIONS

Descriptions of recoverable H. & T. Stations, not described by the air photo compilation party, have been submitted on cards, form No. 524.

Approved by,

F. L. Gallen
F. L. Gallen
H. & G. Engr.
Chief of Party

Submitted by,

Charles A. Schanck
Charles A. Schanck
Jr. H. & G. Engr.

SMOOTH SHEET H-6599 (FIELD NO. 1003)

Prepared in Washington office 12-13-40.

Projection on ruling machine.

Shore line and signals transferred in projector from
T-5703, T-5701, T-5706 and T-5705 by F. H. M.

Shore line and signals checked in projector by R. E. E.

Triangulation stations have not been plotted.

Please make this a part of the descriptive report.

B. G. Jones.

STATISTICS

Date	Day	Statute Miles	Soundings	Positions
July 3	a	19.7	591	106
5	b	31.1	931	162
8	c	21.1	752	155
9	d	20.0	607	122
10	e	21.5	735	154
11	f	29.8	1008	175
12	g	21.8	657	119
15	h	23.3	758	149
16	j	17.7	674	162
17	k	14.4	543	113
18	l	14.3	734	126
19	m	21.2	785	150
22	n	22.2	787	155
23	p	22.2	867	152
24	q	34.0	848	168
25	r	20.6	798	159
26	s	7.4	293	67
Total hand lead		362.3	12368	2394
29	t	38.9	1346	174
30	u	39.0	1383	185
31	v	15.5	637	95
Total depth recorder		93.4	3366 3365	454 338
Totals for sheet		455.7	15734 14781	2848 2782

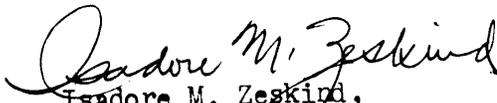
A D D E N D U M

FATHOGRAM CORRECTIONS:

In the process of checking the fathograms it was noted that they were off ^{scale} in some instances. A percentage graph on a celluloid template was made which was used in checking the fathograms. Where differences were noted between the template and the fathogram, the amount of differences in percentage was recorded in blue in the sounding records. These corrections were then applied to the soundings as originally recorded; 0 ft. to 0.25 ft. was recorded as 0 ft. correction; 0.25 ft. to 0.75 ft. was recorded as 1/2 ft. correction; 0.75 ft. to 1.25 ft. was recorded as 1 ft. correction, etc.

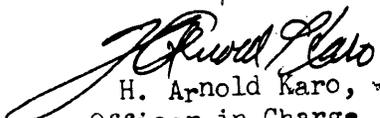
Although the fathogram appeared to be in error between positions 44 to 79 u (red) inclusive, no corrections were applied as the surrounding hydrography (hand lead and fathometer) indicated that the uncorrected soundings agreed more closely with the adjacent hydrography than the corrected soundings would. No reason can be ascribed to this apparent discrepancy by this office.

Respectfully submitted,


Isadore M. Zeskind,
Asst. Cartographic Engr.

October 24, 1941.

Approved and forwarded by


H. Arnold Karo,
Officer in Charge,
Norfolk Processing Office.

LAC
MRE

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 14, 1941

Division of Hydrography and Topography:

✓ Division of Charts: ATTENTION: Mr. H. R. Edmonston

Plane of reference approved in
11 volumes of sounding records for

HYDROGRAPHIC SHEET 6599

Locality Chester River, Chesapeake Bay

Chief of Party: F. L. Gallen in 1940

Plane of reference is mean low water reading

2.4 ft. on tide staff at Cliff Point

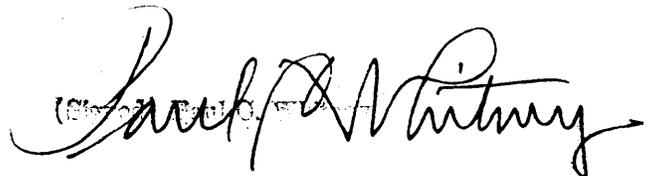
5.0 ft. below B. M. 1

2.0 ft. on tide staff at Queenstown

6.2 ft. below BM 1

Height of mean high water above plane of reference is 1.5 feet at Cliffs
Point; 1.3 feet at Queenstown.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

more names
checked
by chart
548 g.a.m.

Survey No.

H6599

Name on Survey

A. On Chart No.
B. On previous survey No.
C. On U. S. quadrangle Maps
D. From local information
E. On local Maps
F. P. O. Guide or Map
G. Rand McNally Atlas
H. U. S. Light List
K.

Name on Survey	A.	B.	C.	D.	E.	F.	G.	H.	K.
<u>Chesapeake Bay</u>									1
<u>Chester River</u>									2
<u>Queenstown Cr.</u>									3
<u>Winchester cr.</u>									4
<u>Tilghman cr.</u>									5
<u>Reed cr.</u>									6
<u>Grove cr.</u>									7
<u>Church cr.</u>									8
<u>Eastern Neck I.</u>									9
<u>Durbin Cr.</u>									10
<u>Shipyard Cr.</u>									11
<u>Hail cr.</u>									12
									13
									14
									15
									16
<u>Queenstown</u>									17
<u>Cliffs Pt.</u>									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

Names underlined in red approved
by L. Heck on 2/9/42

Remarks

Decisions

	Remarks	Decisions
1		U.S.G.B.
2		390 762
3		389 761
4		389 762
5		390 761
6		"
7		.
8		390 762
9		"
10		"
11		"
12		"
13		
14		
15		
16		
17	Location of tide staff on this sheet	389 761
18	" " " : North of "	391 761 U.S.G.B.
19		
20		
21		
22		
23		
24		
25		
26		
27		

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6599**

Records accompanying survey:

Boat sheets *.(1).*; sounding vols. *.(11).*; wire drag vols.;
 bomb vols.; graphic recorder rolls *.(2).*;
 special reports, etc. *(3) Forms #524*.....

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

Number of positions on sheet	2848	
Number of positions checked	54	
Number of positions revised	5	
Number of soundings recorded	15734	
Number of soundings revised (refers to depth only)	15	
Number of soundings erroneously spaced	45	
Number of signals erroneously plotted or transferred	0	
Topographic details	Time .9 hr. + 4 JAM = 13	
Junctions	Time 0 4 J.A.M.	
Verification of soundings from graphic record	Time .2 hr.	
Verification by <i>C.E. Dennis</i>	Total time 100 <i>96</i> <i>+ 8</i> <i>104</i>	Date <i>1/27/42</i> .
Review by <i>J.A.M. Cormick</i>	Time 14 hrs.	Date <i>2/2/42</i> .

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H **H6599**

~~No. H~~

received Nov. 5, 1941
registered Nov. 6, 1941
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
✓ 25	Pg 1 & 2	HBL	
26			
30			
40			
62			
63			
82			
✓ 83	Pg 1	HE	
88			
90			

RETURN TO

82	R. W. Knox
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RWK

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. 6599
FIELD NO. 1003

Maryland; Chesapeake Bay; Chester River
Surveyed in July 1940, Scale 1:10,000
Instructions dated April 17, 1940
(MITCHELL & OGDEN)

Soundings:

Control:

Hand Lead
808 Recorder

Sextant Fixes on Shore Signals

Chief of Party - F. L. Gallen
Surveyed by - C. A. Schanck
Protracted by - J. T. Burke
Soundings plotted by - J. T. Burke; L. L. Lawrence
Verified and inked by - C. E. Dennis
Reviewed by - J. A. McCormick, February 2, 1942
Inspected by - H. R. Edmonston

1. Shoreline and Signals

Shoreline and topographic signals are from topographic maps T-5701, T-5703, T-5705, and T-5706. Signals located on these maps will not appear on the printed maps unless they are prominent objects and in no case will the topographic name be shown. Cuts and distances locating hydrographic signals are indexed in Vol. 1, page 1, of the sounding records.

2. Depth Curves

Satisfactory.

3. Sounding Line Crossings

Satisfactory.

4. Adjoining Surveys

H-6600 (1940) on the north and H-6598 (1940) on the west have not been verified. Junctions with these surveys will be discussed in their respective reviews. A satisfactory junction was effected with H-5295 (1932) on the southwest. Depths on the older survey averaged about one foot deeper than those of the present

and it was necessary to omit many of the soundings in the transfer to the present survey in order to maintain uniformity in the depth curves.

5. Previous Surveys

H-174 (1846), 1:20,000; H-2375 (1898), 1:10,000;
H-2377 (1898), 1:10,000

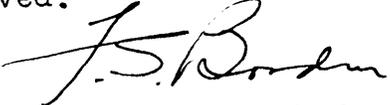
The survey of 1846 gives a much better representation of the area than is usual in a survey of its age. However, it is not of an accuracy approaching that of later surveys. Comparison of the 1898 surveys with the present work presents some interesting points. In general, the area may be considered unchangeable; yet there have been several changes in shoreline and small islands. It is probable that some of the differences in depths are due to poor timing between positions on the old surveys. This is believed to be particularly true of the 20-foot depth (charted) in Lat. $39^{\circ}00.6'$, Long. $76^{\circ}11.4'$ on H-2375 falling in 26 feet of water on the present survey. A crossline on H-2375 places a 25-foot sounding squarely on the plotted position of the 20. The shoaler sounding should be disregarded. Brief mention is made below of some of the other discrepancies, however, no information has been carried forward.

- a. Fourteen feet (charted) in Lat. $39^{\circ}04.0'$, Long. $76^{\circ}10.9'$ on H-2375 falls in 19 feet on the present survey. The 14 is probably one fathom in error but, if not, is close enough to similar depths on the present survey to be disregarded.
- b. Bogle Island and small shoal to the northwest (charted) in Lat. $39^{\circ}01.8'$, Long. $76^{\circ}12.3'$ on H-2375 no longer exist (Descriptive Report, page 2) and should be disregarded. The present survey shows depths of 3 feet in this vicinity.
- c. Four foot depth (charted) in Lat. $39^{\circ}03.1'$, Long. $76^{\circ}09.75'$ on H-2377 is no longer in existence according to the present field party (D. R., page 2). This may also be a one-fathom error and the 4 is to be disregarded.
- d. Five-foot depth (charted) in Lat. $39^{\circ}01.5'$, Long. $76^{\circ}12.3'$ on H-2375 falls in depths of 10 feet on the present survey. It may be in error but can be disregarded as being sufficiently close to similar depths inshore on the present survey.

- e. Cockey Island (charted) in Lat. $39^{\circ}00.4'$, Long. $76^{\circ}13.1'$ on H-2375 no longer exists according to the Descriptive Report, page 2. The present survey shows depths of 2 feet in the vicinity. A low water shoal from H-2375 is charted about 0.4 mile to the northwest and falls in present depths of 3 feet. Both features may be disregarded.
 - f. Eleven-foot depth (charted) in Lat. $38^{\circ}59.8'$, Long. $76^{\circ}10.8'$ on H-2375 and questioned thereon falls in 16 feet on the present survey. Disregard.
 - g. Five-foot depth (charted) in Lat. $38^{\circ}59.1'$, Long. $76^{\circ}11.8'$ is in general disagreement with depths in the vicinity on the present survey. The Descriptive Report, page 2, recommends its rejection and it is therefore to be disregarded.
 - h. Fryingpan Island (charted) in Lat. $39^{\circ}02.3'$, Long. $76^{\circ}13.0'$ on H-2575 no longer shows above high water. It bares just a few inches at M.L.W. (D. R., page 2).
6. Comparison with Chart 548 (New Print of May 15, 1941)
- a. Hydrography
Depths charted in this area are entirely from surveys discussed in the preceding paragraph.
 - b. Navigational Aids
Two lights in Lat. $39^{\circ}03'$, Long. $76^{\circ}12'$ and a nun buoy in Lat. $39^{\circ}01'$, Long. $76^{\circ}11'$ have been added in the area since the survey was made. Other buoys and lights charted in the area are substantially as found on the survey except for changed numbers.
7. Compliance with Project Instructions
Excellent.
8. Additional Field Work Recommended
None.
9. Superseded Surveys
- | | |
|--------|---------|
| H- 174 | in part |
| H-2375 | " " |
| H-2377 | " " |

Examined and approved:


Chief, Surveys Section


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of Coastal
Surveys

Applied to drawing of Chart	549	- May 13, 1942	- jfw.
" " Reconstruction	" 548	" 14 "	jfw
" " drawing	" 1224	July 22, 1942	g. H. S.
" " "	" 1225	Aug. 4, 1942	g. H. S.