

6597

FORM 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. H-6597

State Maryland

LOCALITY

Chesapeake Bay, Md.

Rook Hall Harbor and vicinity

~~1937~~ 1940

CHIEF OF PARTY

F. L. Gallen

6597

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 1001

REGISTER NO. H-6597

State Maryland

General locality Chesapeake Bay,

Locality Rock Hall Harbor and vicinity

Scale 1 - 10,000 Date of survey June - July, 19 40

Vessel Mitchell & Ogden

Chief of Party F. L. Gallen

Surveyed by Ross A. Gilmore

Protracted by J. T. Burke

Soundings penciled by J.T. Burke

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by R. J. Christman

Verified by R. J. Christman March 7, 1944

Instructions dated April 17, 1940, Project HT 250, 19

Remarks: Positions ~~plotted~~ protracted and soundings plotted at the Norfolk Processing Office under the supervision of H.A.Karo.

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet H-6597 (1940)

INSTRUCTIONS

The instructions for the work covered by this sheet are dated ✓
April 17, 1940, for Project HT-250.

LIMITS

The northern limits of this sheet join with the southern limits of hydrographic survey H-6374, (1938) at Lat. 39 12.0. The western limits extend from a point at Lat. 39 12.0, Long. 76 16.0 and extend southwestward to a point at Lat. 39 08.2, Long. 76 19.3, thence south to Lat. 39 05.7, Long. 76 19.3. The southern limit is from this last point thence inshore to Lat. 39 04.9. The southern limits of this sheet joins with the hydrography of sheet H-6598¹⁹⁴⁰ of this project. ✓

This survey includes Rock Hall Harbor, ✓ Tavern, ✓ Swan and Hunting-
field Creeks. ✓

SURVEY METHODS

The hydrography on this sheet was controlled by signals located ✓
by triangulation, air photographic compilation, graphic control, sextant cuts and fixes, and sextometer distances.

All triangulation stations were recovered stations of previous ✓
surveys. Signal "Ur" is the recovered reference mark of triangulation station "Urie 1909" which station has been lost due to erosion.

All air photographic signals used are shown on the smooth sheet by small black circles and were obtained from radial plots made by the Baltimore Compilation Office. In some cases, where a radial plotted position didn't check in the field, a new location was determined by ✓
sextant cuts from other signals and these new positions have been indicated as hydrographic signals (in blue) on the sheet.

A small amount of graphic control work, with planetable, was executed at Rock Hall Harbor, where numerous changes have been made since the air photographs were taken. All signals located by this means have been shown by 3 mm. red circles on the sheet. Some revision of shoreline was necessary in this vicinity, also. No differentiation was made on the smooth sheet of these changes, but they have been indicated on the boat sheet in red. Graphic control survey discarded after pertinent information had been added to smooth sheet.

Hydrographic signals were located by sextant cuts from triangulation stations, sextant fixes, sextant cuts from anchored positions of the boat offshore, or by sextant cuts and sextometer distances from previously located signals. Signals Fox and Gin are recovered hydrographic signals located in 1938 on Hydrographic Survey H-6374. Check cuts were ✓
taken to these signals and found to be satisfactory.

All sextant cuts were plotted on the smooth sheet with a tested steel protractor and where possible, an initial closest to the cut was used to minimize error due to distortion. The projection was found to be about 8 meters long in Long. and only 1.5 meters long in Lat. at the time the signals were plotted. A lot of this distortion is no doubt due to excessive humidity in this locality (Cocoa, Florida) at this time of year.

The shoreline for this sheet was furnished by the Washington Office, in pencil, and then inked-in in the field. In some instances, where revision was found necessary during the hydrography, changes were made ~~and shown in blue on the smooth sheet~~ (these were mostly near signals where differences in regards to the distance to H.W.L. were apparent). Shoreline from topographic maps T-5695, T-5698 and T-5701.

In general, the hydrography was accomplished by the usual sextant fix method and all soundings were taken with the hand lead. In a few cases, along the shoreline, positions were determined by estimated distance and direction to signals. Occasionally, at the heads of very narrow streams, where a fix could not be obtained, positions were estimated from the adjacent shoreline. All sounding lines were run on ranges. All floating aids to navigation within the limits of this sheet were located by sextant fixes and check angles.

DISCREPANCIES

No known discrepancies are known to exist on this sheet except those noted in the paragraph Survey Methods.

DANGERS

Except for the following, there are no new dangers to navigation: The shoal water ^{in lat. 39° 08' Long. 76° 16'} ~~about 1/4 mile south of the south end of Little Neck Island~~ has shoaled to the east. This condition will make it necessary to change the Swan Creek lighted range accordingly. 6 ft curve has moved about 100 m. east to within 50m. of the range.

The two hulks shown on chart 548 in Lat. 39 08.46, Long. 76 15.75, have been removed, but at the time of this survey the paddle wheel of the westernmost hulk still remained with 0 feet of water on it. It was planned to remove this obstruction also at the time of the survey. Shown as sunken wreck.

There is a hulk in Lat. 39 08.68, Long. 76 15.83, near the edge of the channel entering Swan Creek.

The hulk shown on chart 548 in Lat. 39 08.88, Long. 76 15.55, is now all broken up and only one frame remains, projecting about 1 foot above water. There is a new hulk on the beach just N.W. of this former hulk.

Numerous fish net stake traps have been located on this sheet but in all cases they fall within the lawful limits as indicated on chart 1226.

CHANNELS

The controlling depth into Tavern Creek is governed by the shoal water around the entrance, which at the time of this survey was 2 feet, entering from the east at the north end of Little Neck Island. After passing the entrance there is at least 4 feet in the channel for about 0.8 mile.

Entering Swan Creek, 8 feet can be carried for about 0.3 mile past the entrance, whence 6 feet is the controlling depth for a distance of $\frac{3}{4}$ mile, with a gradual shoaling continuing north. The controlling depth to the wharves at Rock Hall Harbor is 7 to 8 feet, however, deeper water exists outside the harbor entrance. There is no channel into Huntingfield Creek and should be avoided.

COMPARISON WITH PREVIOUS SURVEYS

In general, this survey compares closely with previous surveys of this area except in the area covered by Swan Point Bar, where deeper water was found to prevail, particularly on the axis of the bar where differences of 3 feet were noted. These cases are too numerous to itemize individually, but a comparison with chart 548 and this survey will readily show what is meant. The shoal on this bar at Lat. 39 08.05 Long. 76 16.60, now has 4 to 5 feet on it. The heads of the creeks on this sheet show indications of filling and Huntingfield Creek has filled considerably. A good junction was made with Hydrographic Survey H-6374 (1938) on the northern limit of this sheet and also with Hydrographic Survey H-6598 (1940) at the southern limit.

GEOGRAPHIC NAMES

All geographic names for this sheet have been investigated by the Baltimore Air Photographic Compilation Office just prior to this survey and have been used on this sheet accordingly. It is recommended that the place named "Gratitude" on chart 548 in Lat. 39 08.5, Long. 76 15.5, be reduced in size as this is a very small place and the present size of lettering is misleading as to its relative importance.

RECOVERABLE HYDROGRAPHIC AND TOPOGRAPHIC STATIONS

Recovery notes on Forms 524 have been submitted for all recoverable H. & T. stations located by the hydrographic party. No notes have been submitted for recoverable stations located by the Air Photographic Compilation party on this sheet.

Approved by,

F. L. Gallen

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

Submitted by,

Ross A. Gilmore
Ross A. Gilmore
Jr. H. & G. Engr.

STATISTICS FOR SHEET NO.H-6597 (Field No.1001)

POSITIONS -----	3335
SOUNDINGS-----	18358
STATUTE MILES OF SOUNDING LINES-----	529.7
AREA, SQUARE STATUTE MILES -----	23.2

BOAT SHEET NO.H-6597 (Field No.1001) 1:10,000

Prepared in Washington Office 4/30/40.
Projection made on ruling machine by ~~J.P.Dunich~~ J.P.Dunich
Shoreline & Hydrographic Signals transferred in
projector from Air Photographic Surveys T-5695,
T-5698, and T-5701 by ----- F.H.McBeth
Shoreline & Signals checked 5/20/40 by ----- J.P.Dunich

SMOOTH SHEET NO.H-6597 (Field No.1001) 1:10,000

Same data as for BOAT SHEET.

H6597

STATISTICS

Date	Day	Statute Miles	Soundings	Positions
June 19	a	21.1	753	124
20	b	10.0	559	83
21	c	16.0	651	134
24	d	14.0	803	175
25	e	21.5	826	142
26	f	13.2	535	131
27	g	20.7	654	106
28	h	20.0	672	113
July 1	j	11.7	555	105
2	k	22.1	708	123
3	l	10.0	297	53
5	m	22.2	692	129
8	n	30.0	878	151
9	p	20.0	607	122
10	q	18.3	565	105
11	r	23.0	772	134
12	s	14.0	525	68
15	t	20.6	634	106
16	u	23.0	759	123
17	v	24.6	713	131
18	w	24.5	683	119
19	x	20.8	606	111
22	y	26.0	766	140
23	z	13.0	473	88
24	a'	16.0	631	120
25	b'	15.2	658	124
26	c'	17.0	475	94
29	d'	11.8	528	112
30	e'	9.4	380	69
		<hr/>	<hr/>	<hr/>
		529.7	18358	3335

LAC
H.C.

TIDE NOTE FOR HYDROGRAPHIC SHEET

September 15, 1941

~~Division of Hydrography and Topography:~~

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

Plane of reference approved in
12 volumes of sounding records for

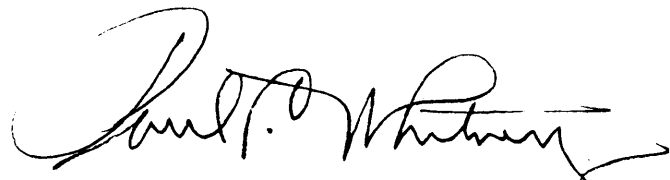
HYDROGRAPHIC SHEET 6597

Locality Rock Hall Harbor and vicinity, Chesapeake Bay

Chief of Party: F. L. Gallen in 1940
Plane of reference is mean low water reading
2.0 ft. on tide staff at Swan Creek
3.2 ft. below B. M. 1
1.2 ft. on tide staff at Tolchester Beach
6.3 ft. below B.M. 1

Height of mean high water above plane of reference is 1.1 feet
at Swan Creek; 1.2 feet at Tolchester Beach.

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

Remarks.

Decisions

1		U.S.G.B
2		391762 "
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		" U.S.G.B
13		" "
14		"
15		"
16		
17		
18	Location of one tide staff	392762
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No.

H6597

Name on Survey	<div style="display: flex; justify-content: space-between; font-size: small;"> On Chart No. On previous survey No. On U. S. quadrangle Maps From local information On local Maps P. O. Guide or Map Rand McNally Atlas U. S. Light List </div>											
	A	B	C	D	E	F	G	H	K			
<u>Chesapeake Bay</u>												1
<u>Rock Hall Harbor</u> ✓												2
<u>Huntingfield Pt</u>												3
<u>Huntingfield cr.</u> ✓												4
<u>Windmill Pt.</u>												5
<u>Swan Pt.</u> ✓												6
<u>Swan Point Bar</u>												7
<u>Little Neck I.</u>												8
<u>Tavern Cr.</u> ✓												9
<u>Swan Cr.</u> ✓												10
<u>The Haven</u>												11
<u>Gratitude</u>												12
<u>Rock Hall</u>												13
<u>Deadman Pt.</u>												14
<u>DEEP landing</u>												15
												16
												17
<u>Tolchester Beach</u>												18
												19
												20
												21
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												24
												25
												26
												27

Names underlined in red approved
 by L. Heck on 6/20/42

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H.6597**

Records accompanying survey:

Boat sheets ~~979~~.; sounding vols. (¹²); wire drag vols.;
 bomb vols.; graphic recorder rolls;
 special reports, etc.

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

Number of positions on sheet	333.5
Number of positions checked	.190
Number of positions revised8
Number of soundings recorded	1835.8
Number of soundings revised (refers to depth only)14
Number of soundings erroneously spaced
Number of signals erroneously plotted or transferred
Topographic details	Time
Junctions	Time <u>3 hrs</u> -
Verification of soundings from graphic record	Time

Verification by R. J. Christman. Total time 194 hrs. Date Mar. 7, 1944

Review by J. A. M^c Cormick. Time 32 hrs. Date Mar. 23, 1944

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H **H6597**
~~No. T~~

received Sept. 2, 1941
 registered Sept. 3, 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	✓	ABC	Pages 2 and 3
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
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DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6597

Field No. 1001

Maryland; Chesapeake Bay; Rock Hall Harbor and Vicinity
Surveyed June - July 1940; Scale 1:10,000
Project H. T. 250

Soundings:

Control:

Hand lead

Three-point fix on shore signals

Chief of Party - F. L. Gallen
Surveyed by - R. A. Gillmore
Protracted by - J. T. Burke
Soundings plotted by - J. T. Burke
Verified and inked by - R. J. Christman
Reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston, March 23, 1944

1. Shoreline and Signals

The subject is discussed in considerable detail in the descriptive report.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory.

4. Adjoining Surveys

A satisfactory junction was effected with H-6374 (1938) on the north. Verification of H-6598 (1940) on the south had not been completed at this writing.

5. Previous Surveys

H- 166 (1845) , 1:20,000; H- 175 (1847), 1:20,000;
H-2345 (1896-97), 1:20,000; H-2375 (1898), 1:20,000

Differences between the present survey and those of 1845-47 are not excessive but the best evaluation of probable changes is afforded by comparing the present

survey with the surveys of 1896-98. In general, changes have been few and the differences seldom exceed one foot. Depth curves follow the same patterns, even on the detached shoals and deeps. The channel to Rock Hall Harbor has changed very little. Notable exceptions to the general stability of the bottom are: (1), in Lat. $39^{\circ}08.05'$, Long. $70^{\circ}16.60'$ where closely developed depths of 4 and 5 feet on the present survey compare with depths of one foot or less on H-2345; and (2), west and north of Lat. $39^{\circ}07'$, Long. $76^{\circ}19'$ where some of the deeps (over 50 feet) have filled in as much as 15 feet. The old surveys can be superseded in the subject area.

6. Comparison with Chart 548 (Print of Feb. 13, 1943)
Chart 549 (Print of Nov. 5, 1943)

a. Hydrography

Both charts were recompiled from the penciled smooth sheet of the present survey. Verification and review have changed some of the curves and inshore detail. Some minor changes in compilation would be desirable.

b. Navigational Aids

Several of the aids have been changed since the survey was completed. (Fl W) "7" Bell in Lat. $39^{\circ}12'$, Long. $76^{\circ}16'$ was moved to its present charted position (C. G. N. to M. 40 of 1941); fixed red light "2" was established in Lat. $39^{\circ}08'$, Long. $76^{\circ}14'$ (N. to M. 45 of 1941); buoy S"2" in Lat. $39^{\circ}07'$, Long. $76^{\circ}15'$ was removed (N. to M. 33 of 1941); and buoys S"1" and S"4" in Lat. $39^{\circ}07'$, Long. $76^{\circ}15'$ were changed to can and nun, respectively. Buoys at Rock Hall Harbor jetties are not charted nor are some of the temporary markers inside the Harbor. The descriptive report suggests shifting the Swan Creek lighted range to clear the 6-ft. curve to the west by a more comfortable margin.

7. Compliance with Project Instructions

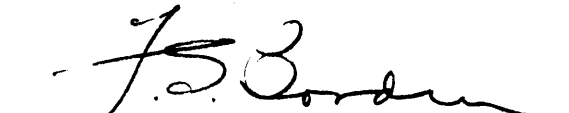
Satisfactory.


8. Additional Field Work Recommended


None.

Examined and approved:


Chief, Surveys Branch


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of
Coastal Surveys

Unverified smooth sheet applied to drawing of Ch. 549-5/18/42 - jfw
(Tracing on acetate made of material used)

Originally applied to Chart 548 thru Chart 549 in 1942
Examined and some corrections made to Chart 548 after review 6/27/44 jfw
Applied to chart 549 after review via 548 J.M.A. 2-21-45
Examined for " 1226 " " " J.M.A. 2-26-45