DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

### DESCRIPTIVE REPORT

Topographic | Sheet No. H-6603

W. S. COAST & GEODETIC STRYFT

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NOV 4 1941

Acc. No.

State Maryland

LOCALITY

Chesapeake Bay

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Crab Alley Bay a nd Vicinity

**193**\_40

CHIEF OF PARTY

F. L. Gallen

### 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. 1007

### REGISTER NO. H-6603

State Maryland	***************************************
General locality Che	esapeake Bay
Crab Al	ley Bay and vicinity partxpfxEasternxBayx£xTributaries
Scale 1:10,000	Date of survey Oct. & Nov. , 1940
	MITCHELL & OGDEN
	. L. Gallen
-	
Surveyed byR	. A. Gilmore
Protracted byC.	H. Bishop
Soundings penciled by	C.H. Bishop
Soundings in fathons-	feet
Plane of reference	M.L.W.
	ragged areas by
Inked by Meng	ye RByan
Verified by Mean	ye RByan
Instructions dated	April 17 , 19 40
Remarks: Soundings pen	ciled and positions protracted by the Norfolk
Processing Office und	er the supervision of H. Arnold Karo, Officer in
Charge.	U. S. GOVERNMENT PRINTING OFFICE

#### DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet H-6603

### INSTRUCTIONS

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

### LIMITS

This survey embodies that portion of Eastern Bay north of Lat. 38° 54.07, and includes Shipping Creek, Cox Creek and branches, Crab Alley Bay and branches, and Prospect Bay to Lat. 38° 56.98. Hydrography was carried up Cox Creek as far as the highway bridge.

The southern limits of this sheet joins with the northern limits of hydrographic sheet No. H-6605 of this project, and the northeastern limits joins hydrographic sheet No. H-5295 (J. A. Bond, 1932).

### SURVEY METHODS

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

All triangulation stations used on this sheet were recovered stations of previous surveys.

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

Hydrographic signals, in addition to those furnished, were located by sextant cuts from triangulation stations; sextant fixes at the signal; or by sextant cuts and sextometer distances from previously located signals. In some cases, along open shoreline, signals were located from cuts taken at anchored positions of the boat. In a few cases, such as at the heads of small streams, signals were located by pricking the location from inspection of the shoreline and other topographic detail. These signals are shown by 3 mm. green circles on the smooth sheet.

All shoreline for this sheet was furnished by the Washington Office in pencil, and then inked-in in the field. A few revisions in shoreline were made during the progress of the work and these have been indicated in blue on the beath sheet.

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, and occationally at the heads of very

narrow streams, where a fix could not be taken, positions were estimated from the adjacent shoreline. All sounding lines were run by ranges.

All floating aids to navigation within the limits of this sheet were located by sextant fixes and check angles.

### DISCREPANCIES

No known discrepancies exist on this sheet except those noted under "Survey Methods", regarding signals and shoreline.

### DANGERS

There are no known dangers in the buoyed channel routes on this sheet for the size of boats using these waters. The Cox Creek channel at Lat. 38° 55.97'is very narrow and hazardous for craft drawing 6 feet or more.

### CHANNELS

The channel in Prospect Bay approaching Kent I. Narrows is buoyed with a least depth of 12 feet, which occurs at Lat. 38° 55.67, Long. 76° 14.45. These waters are used almost exclusively by shallow draft fishing boats and occasional small pleasure boats.

There is a buoyed channel in Crap Alley Bay to the entrance to Crab Alley Creek affording at least & feet of water and from thence on up the creek 6 feet can be carried for about 1 miles. These waters are used almost exclusively by fishing boats.

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There are no other buoyed channels on this sheet. There is a good channel in Cox Creek except for the narrow gut at Lat. 38° 55.97' and 7 feet can be carried as far as Lat. 38° 57.35'. From there on the channel shoals to a depth of 1 ft. Hydrography could only be carried up to the highway bridge in this creek. This is a fixed bridge and the vertical clearance would not allow the sounding skiff to pass. Six feet can be carried in Thompson Creek for a distance of about ½ mile and from there on the creek narrows and shoals very fast. Seven feet can be carried in Warehouse Creek for about a mile with a gradual shoaling from this point to the head. Approaching from the southeast there is a crooked channel into Shipping Creek with at least 6 feet to Lat. 38° 54.9. This creek and the adjacent waters to the east are used only by shallow draft fishing boats and duck hunters.)

### COMPARISON WITH PREVIOUS SURVEYS

This survey compares very well with previous surveys of this area, particularly in the deeper water areas. There is a certain amount of shoaling noted in the inshore areas and at the heads of the various creeks. This condition is to be expected in this area due to extensive erosion and silting. The following islets shown on chart 1225 should be deleted as they no longer exist:

### COMPARISON WITH PREVIOUS SURVEYS - CONTINUED

(1) Lat. 38° 55.01; Long. 76° 14.88. (2) Lat. 38° 54.05; Long. 76° 15.07' (3) Lat. 38° 55.56; Long. 76° 17.28. (4) Lat. 38° 54.60; Long. 76° 19.50'

There is a small islet in Lat. 38° 54.98, Long. 76° 19.66, that does not appear on chart 1225. Ishown as cock awash of the chart 1225.

A good junction was made with the survey of J. A. Bond, 1932, hydrographic sheet No. H-5295, in Prospect Bay, just south of Kent I. Narrows. A good junction was made on the southern limits of this sheet with the hydrography of sheet No. H-6605 of this project. Considerable variance was noted between the present position of navigation buoys and their charted position on chart 1225.

### 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 accordingly.

### RECOVERABLE H & T STATIONS

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

Submitted by,

Approved by,

F. L. Gallen

H. & G. Engr.

Chief of Party

Ross A. Gilmore

Jr. H. & G. Engr.

### STATISTICS

Date	Day	Statute Miles	Soundings	Positions
Oct. 9	a.	4.6	157	34
10	ъ	26.0	889	164
11	C	27.3	855	178
14	d	30.0	942	172
15	Θ	20.3	674	151
16	f	21.3	677	149
17		<b>23.</b> 5	691	150
18	g h	12.4	432	118
21	j	24.0	752	162
22	k	16.4	507	114
23	1	23.5	848	162
24	m	2 <b>2.4</b>	718	130
25	n	19.7	624	116
28	p	18.2	<b>54</b> 8	111
29	q	21.6	633	137
30	r	18.3	533	121
31	S	19.7	633	<b>15</b> 8
Nov. 1	t	22.8	703	163
2	u	18.6	629	144
4	▼	18.5	603	143
5	w	16.3	595	148
6	x	9.6	<b>32</b> 8	96
7	. y	11.0	450	126
8	z Z	7.8	277	77 ·
9	a'	19.3	637	126
11	<b>b</b> ¹	14.7	<b>547</b>	123
12	c¹	9.3	337	73
13	ď,	16.7	572	143
14	e¹	5.8	181	46
	•	519.6	16,972	3,735

## (1946) STATISTICS FOR HYDROGRAPHIC SHEET NO.H-6603 (Field No.1007)

POSITIONS	3735
SOUND INGS	
STATUTE MILES OF SOUNDING LINES	
AREA, SQUARE STATUTE MILES	- 18.7

(/14/0) SMOOTH SHEET NO. H-6603/(Field No.1007)

1:10,000

Prepared in Washington Office 12/13/40
Projection made on the ruling machine
Shoreline & Hydrographic Signals transferred
in the projector from Air Photographic
Surveys T-5721, T-5722, T-5705 and T-5706, by -------R.M.S.
Shoreline & Signals checked in the projector by ----R.E.E.

(/440) BOAT SHEET NO. H-6603 $_{\wedge}$ (Field No. 1007)

Prepared in the Washington Office
Projection made on the ruling machine
Shoreline & Hydrographic Signals transferred
in the projector from Air Photographic Surveys
T-5721, T-5722, T-5705, T-5706, by -----Shoreline & Signals checked in the projector by --

### ADDENDUM

50 - 52 g (blue) 132 - 134 d (blue); Latitude 35 55.28' and Longitude 76 13.90'

These two lines do not have the same relative position as those shown on the Boat Sheet. There appears to be a slight discrepancy between the positions of hydrographic signals as shown on the Boat Sheet and those shown on the Smooth Sheet.

The field draftsman who plotted the location of the hydrographic signals shown on the smooth sheet informs this office that the signals were hurriedly plotted on the Boat Sheet and discrepancies were noted in the location of these signals when plotted on the Smooth Sheet. The location of the signals as plotted on the Smooth Sheet were gotten from a mean location of all cuts used in locating the signals.

In general, while some of the sounding lines are displaced when compared to the Boat Sheet, there are no apparent serious discrepancies in relative hydrography.

Respectfully submitted,

fsadore M. Zeskind
Asst. Cartographic Engr.

Oct. 30, 1941.

Forwarded and approved.

H. Arnold Karo,
Officer in Charge,

Norfolk Processing Office.

### 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 13 volumes of sounding records for

HYDROGRAPHIC SHEET 6603

Locality Crab Alley Bay and Vicinity, Chesapeake Bay

Chief of Party: F. L. Gallen in 1940 Plane of reference is mean low water reading

- 1.8 ft. on tide staff at Kent Island Narrows
- 2.3 ft. below B. M. 2
- 2.4 ft. on tide staff at Cox Creek
- 8.8 ft. below BM 1
- 1.9 ft. on tide staff at Claiborne
- 3.5 ft. below BM 1

Height of mean high water above plane of reference is 1.2 feet at Kent Island Narrows; 1.3 feet at Cox Creek; 1.1 feet at Claiborne.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

7 PRINTING OFFICE 1548

en e	GEOGRAPHIC NAMES Survey No. 1660	3	ar.	Mo Or	S. Weder	Se la side	a de la	Giide d' Me	Q Metaliy ALL	S Jen Je	;//
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~ ,	Name on Survey	A, (	/ B,	/ C,	/ D	E	/ F	/ G /	/ H	<u> </u>	
	Chesapeake Bay										1
	Crab Alley Bay									<del></del>	2
	Kent I.										3
•	Crab Alley Cr.	~		ļ							4
	Crab Alley Hear				/	<u> </u>					5
	Parson I.										6
	Prospect Bay			<u> </u>	<u> </u>	<u> </u>					7
•	Brian Pt.			ļ							8
	Hood Pt.										9
	Turkey Pt.			-	-						10
	Cox Neck			-	-						11
	Cox Cr.				-		-	<u> </u>	· · ·		12
	Shipping Cr.		-					<del>                                     </del>			13
	Batts Neck-			-		-				-	14
	Warehouse Cr.		-						<del> </del>	-	15
	Thompson Cr.	1	-				-		-	-	16
	Ment Island Na	rvow	\$				· ·		+		17
	Johnson I.		Ţ	_				-	-	-	18
,	Little Cr.		ļ						<u> </u>	-	19
•	Claiborne			-				+	-		20
	Hoghole Cr.						-	-	<del> </del>		21
	Cabin Cr.						s Inderli		a ppor		22
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1		0.2.6.13
2	Between Cox Neck and Crab Alley Neck	389762
3	•	389763 U.S.6.B
4		389762
5		389 762
6		389762
7	Not hitherto charted = avea East of Crab Alley Neck and north of Parson I.	389762
8		11 U.S.6.B
9		11
10		11
11		r, 4
12	Location of one tide staft.	381763
13		ч
14		ч 4
15		ıç.
16	•	9
17	P. 2 of report: also location one tide staff (north of this sheet)	389762
18	(4044 24 4412 24564)	· ·
19	( <del>)                                     </del>	4
20	Location of one tide staff (sneet)	388762
21	Inside Brian Pt.	389762
22	e. ot Hood Pt.	<b>Y</b>
23		м
24	·	
_25		
26		
_ 27		. :
м 234		

### Surveys Section (Chart Division)

## hydrographic survey no. 16603

Records accompanying survey:		
Boat sheets .(1); sounding vols.	(13);	wire drag vols;
bomb vols; graphic recorde	r roll	s;
special reports, etc(11) Forms	#524	••••••
***************************************		•••••
The following statistics will be sub rapher's report on the sheet:	mitted	with the cartog-
Number of positions on sheet		3,7.35
Number of positions checked		.208
Number of positions revised		
Number of soundings recorded		16,972
Number of soundings revised (refers to depth only)		
Number of soundings erroneou spaced	sly	
Number of signals erroneously plotted or transferred		see Verifier's Report - No.31
Topographic details	Time	.18.
Junctions	Time	2
Verification of soundings from graphic record	Time	<b>.</b>
Verification by Many R. Byggrotal Review by R. H. Cartens	time	2.19. Date $6-23-43$
Review by R.H. Carstens.	Time	19405 Date .6/.28/43

# MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT REMOXIMENTATION	No. H	H6603		received Nov. 5, 194 registered Nov. 6, 19 verified reviewed approved	
			(	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
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82 R. W. Knox

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### DIVISION OF CHARTS

### REVIEW SECTION - SURVEYS BRANCH

### REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-6603

Field No. 1007

Maryland, Chesapeake Bay, Crab Alley Bay and Vicinity Surveyed October - November, 1940, Scale 1:10,000 Instructions dated April 17, 1940.

### Soundings:

Control:

Hand lead

Three-point fix on shore signals

Chief of Party - F. L. Gallen
Surveyed by - R. A. Gilmore
Protracted by - C. H. Bishop
Soundings plotted by - C. H. Bishop
Verified and inked by - G. R. Bryan
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston Date - June 28, 1943

### 1. Shoreline and Signals

The shoreline and topographic signals originate with T-5705, T-5706, T-5721 and T-5722 of 1937-40. Additional hydrographic signals were located by sextant cuts and fixes recorded in the sounding records of the present survey and H-6605 (1940).

### 2. Sounding Line Crossings

Satisfactory.

### 3. Depth Curves

Satisfactory.

### 4. Junctions with Contemporary Surveys

A satisfactory junction was made with H-5295 (1932) on the north. The junction with H-6605 (1940) on the south will be considered in the review of that survey.

### 5. Comparison with Prior Surveys

A. H= 177 (1847) 1:20,000
Agreement with this early survey is fairly good. In some spots there are differences in depth of as much as 4 ft. as for example in lat. 38° 55.3° long.

76° 13.3° where former depths of 10 ft. fall in present depths of 14 ft. The bottom has washed 2-3 ft. deeper in certain inshore areas as for example, in lat. 38° 55.0° long. 76° 16.0° where former depths of 2 ft. fall in present depths of 4-5 ft. Because of this erosive action some of the small islets have decreased in size or washed away completely. The present survey is adequate to supersede the earlier survey within the common area.

B. H-2464 (1899) 1:20,000 H-2465 (1899) 1:20,000

The agreement with these prior surveys is very good. The differences in depth are generally within 1-2 ft. and the curves are in good agreement. The present survey reveals all the necessary hydrographic information and is adequate to supersede the prior survey within the common area.

### 6. Comparison with Chart 1225 (Latest print date 5/19/43)

### A. Hydrography

The charted hydrography within the limits of the present survey, originates with the previously mentioned surveys which need no further consideration. The small islets in lat. 38° 55.15¹ long. 76° 15.0¹ had washed away at the time of the present survey, leaving the remains of a concrete foundation ½ ft. below M.L.W.

### B. Aids to Navigation

The present survey position of the buoys differs from the charted position by as much as 270 m. as in the case of, buoy S-2 in lat. 38° 55.3' long. 76° 14.15'. However, the position of the buoys still satisfactorily marks the features intended.

### 7. Condition of Survey

Satisfactory.

8. Compliance with the Instructions for the Project

Satisfactory.

### 9. Additional Field Work Recommended

This is an excellent survey and no additional field work is recommended.

### 10. Superseded Surveys

H- 177 (1847) H- 2464 (1899) H- 2465 (1899)

Examined and approved:

Chief, Surveys Branch

Chief, Section of Hydrography

Chief, Division of Charts

Chief, Division of Coastal Surveys

applied to Chart 550 - 7/20/43 - gtw.

applied to Chart 1225 7el. 4, 1944 g. H.S.

Applied to Reconstr of 550 Dec 16.1946 Dec.