

6363

U. S. COAST & GEODETIC SURVEY
LIBRARY AND EXHIBITS

APR 10 1939

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. H-6363
Hydrographic }

State Maryland

LOCALITY

Chesapeake Bay

Lower Elk River

1938

CHIEF OF PARTY

F. L. Gallen

U. S. GOVERNMENT PRINTING OFFICE

6363

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.
APR 10 1938
U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

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. 1002

REGISTER NO. R-H-6363 (1938)

State Maryland

General locality Chesapeake Bay

Locality Lower Elk River

Scale 1:10,000 Date of survey Aug. & Sept., 1938

Vessel Launch MIKAWA

Chief of Party F. L. Gallen

Surveyed by J. C. Partington

Protracted by George E. Varnadoe

Soundings penciled by George E. Varnadoe

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by R. H. Carstens

Verified by R. H. Carstens

Instructions dated March 31, 1938

Remarks:

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet H6363 (Field No. 1002) (1938)

INSTRUCTIONS - March 31, 1938.

LOCALITY - This sheet includes the inshore hydrography on the west side of Elk Neck south of Lat. 39° 31' and the hydrography of the Elk River from its mouth to Town Point.

SURVEY METHODS - The hydrography on this sheet was done by visual fix and depths measured with hand leadline using an 8 pound lead. Two boats were used for sounding; the deeper water was sounded with a 30 foot gasoline launch and shoaler water was sounded with a 20 ft. skiff powered by two 9 H.P. outboard motors. In general lines were run by ranges on navigational buoys or objects ashore.

SIGNALS - The smooth sheet and boat sheet were printed in the Washington Office and show the triangulation and air photographic stations already printed on the sheets. Where necessary, additional hydrographic signals were located by three or more sextant cuts, by sextant fixes taken at the signals, or by a direction and taped distance from a nearby triangulation or air photographic signal, or a combination of the above methods.

Hydrographic signals on the west side of Elk Neck were located by Lieut. (j.g.) E. B. Brown, while those in the Elk River were located by Lieut. (j.g.) J. C. Partington. The position of signals Sex, Pok and Air were transferred from sheet H6362. The positions of signals Jong and Ike were transferred from sheet H6370. The position of signal Boy was transferred from sheet H6360 (1938).

Signals Bar and Wop are pilings at the north and south ends of a wood bulkhead, which projects about 1 foot above high water. This bulkhead was used as a retaining wall during dredging operations in the Elk River. All other signals outside the low water line are temporary stakes except Boy, which is a lighthouse.

WRECKS - The only wreck found on this sheet is about 285 meters WSW of Turkey Pt. Lighthouse. Its position is shown by position lx day, vol. 8, page 54. The wreck was found during an extreme low tide and was not seen at any other time during the season. The wreck is about 10 meters long in an east west direction. Only the motor and the frame to which it was bolted remain. The motor is bare $\frac{1}{2}$ foot at low water. In rounding Turkey Point this wreck is easily avoided by keeping far enough offshore to have the top of Turkey Pt. Lighthouse visible from the surface of the water.

CHANNELS - In the Elk River there is a dredged channel with project depth of 27 feet at mean low water. This channel is well marked with lights and buoys. It is the main channel to the western end of the Delaware Chesapeake Canal.

83
25
See par. 5b,
review.

COMPARISON WITH PREVIOUS SURVEYS

From Lat. 39° 28' to 39° 31', along the western limit of sheet, Susquehanna flat is building farther east. Changes of 2 to 9 feet were found here. The most noticeable difference being at Lat. 39° 31', Long. 75° 59.5', where the former survey shows a depth of 12 to 14 feet, is now 3 to 4 feet. Except in the dredged channel and basin, Elk River compares well with the previous survey, the depths checking close up to the three fathom curve. ✓ ✓

WIRE DRAG INVESTIGATION

A small area west of hydrographic signal Sex was dragged in order to locate a submerged rock, which was rumored to exist. This area was sounded with a leadline on c day and e day and no indication of a rock was found. Local rumor. Nothing on chart or in office files. ✓

On September 29, 1938, this area was dragged with a rope drag and the rock was not found. Later inquiry from local fishermen disclosed that although they had fished in this area many years they had never known of a rock in this locality. Furthermore, much of this fishing was done with nets and no rocks were encountered. ✓

GEOGRAPHIC NAMES

The stretch of beach on the eastern shore of the Elk River between stations 11(U.S.E.) and 10(U.S.E.) is locally known as Crystal Beach. It is a summer resort used for bathing and boating. The name is advertised by road signs and a large sign at the entrance to this resort. Station Chrystal is named after the resort although the triangulation name is erroneously spelled. Because this beach is frequented to a large extent by small power boats the name Crystal Beach is recommended for charting. ✓

All of the other charted geographic names of this area appear to be well established and in local use. ✓

DISCREPANCIES

The 4 ft. sounding following Position 3 b day has been rejected and removed from smooth sheet on account of failing to compare with soundings in same area on sheet 1003 at Lat. 39° 30.95', Long. 75° 59.80'. It is believed this sounding is either in error or incorrectly spaced. ✓

lines develop the area etc

*Adjacent
Probably incorrectly
spaced. Disposition
satisfactory.*

BASINS - In Lat. $39^{\circ} 26.25'$, Long. $75^{\circ} 59.2'$ there is a small dredged basin with depths of 20 to 22 feet. This basin was used for dumping the dredged material and from here the material was pumped ashore into Pearce Creek.

Submitted by,

J. C. Partington
J. C. Partington
Jr. H. & G. Engineer

Approved and forwarded,

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

STATISTICS

Day Letter	Statute Miles	Soundings	Positions
a	13.8	448	90
b	20.4	618	123
c	19.0	592	113
d	23.4	762	151
e	1.8	85	22
f	7.5	229	34
g	25.5	843	140
h	25.6	885	148
j	20.1	712	128
k	26.0	889	152
l	23.0	768	135
m	11.1	361	73
n	23.3	717	136
p	17.6	593	121
q	12.6	427	86
r	10.7	406	84
s	18.6	634	126
t	15.5	554	114
u	16.6	469	100
v	1.7	91	16
w	4.5	118	23
x	0	1	1
	<hr/>	<hr/>	<hr/>
	338.3	11202	2116

(938)
Smooth sheet No. H6363 (field No. 1002) was plotted under the
immediate supervision of the Chief of Party. The sheet and records ✓
have been inspected and are approved.

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

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6363** (1938)

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

Number of positions on sheet	711.6
Number of positions checked	...50
Number of positions revised	...6
Number of soundings recorded	112.02
Number of soundings revised	...6
Number of soundings erroneously spaced	...13
Number of signals erroneously plotted or transferred	...0

Date: 1/3/40

Verification by *R.H. Carstens* Time: 92³

Review by J.A. Mc Cormick 1/10/40. Time: 8 hrs.

HYDROGRAPHIC SURVEY NO. H-6363 (1938)

Smooth Sheet Yes

Boat Sheet Yes

Records; Sounding 8 Vols., Wire Drag Vols., Bomb Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes (Vol.#1)

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) ---

Special Chart for Lighthouse Service Yes
(Circular Nov.30, 1933)

Hydrography: Total Days 22 ; Last Date Sept. 13, 1938

Remarks _____

	Remarks	Decisions
1		395759
2		394759
3		
4		394760
5		394759
6		394759
7		394759 U S G B
8		394759
9		394759
10		394759
11		394759
12		394759 U S G B
13		394759 U S G B
14		394759
15		395759
16		395759
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M 234		

GEOGRAPHIC NAMES

Survey No. **L-6363**

Name on Survey	Source										
	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.		
<u>Elk Neck</u>											1
<u>Elk River</u>											2
<u>Chesapeake Bay</u>											3
<u>Turkey Point</u>											4
<u>Bohemia River</u>											5
<u>Town Point</u>											6
<u>Cabin John Creek</u>											7
<u>Crystal Beach</u>											8
<u>Wroth Point</u> <i>off sheet</i>											9
<u>Arnold Point</u>											10
<u>Rogues Harbor</u>											11
<u>Pearce Creek</u>											12
<u>Thackery Point</u>											13
<u>Ford Landing</u>											14
<u>Piney Creek</u>											15
<u>Hylands Point</u>											16
											17
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											26
											27

Names underlined in red approved
by L. Heck on 5/3/39

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MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H - 6363
~~PHOTOSTATIC COPY~~ } ~~No. 1~~

{ received April 10, 1939
 registered April 13, 1939
 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	✓		Page 1 ←
26			
30			
40			
62			
63			
82			
83	✓		Page 1 wreck { Copymade HBC
88			
90			

RETURN TO

82	T. B. Reed
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✓ TBR

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TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

May 4, 1939

✓ Division of Charts: Attention: Mr. E. P. Ellis

Plane of reference approved in
8 volumes of sounding records for

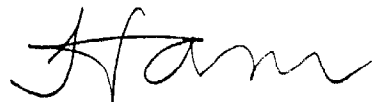
HYDROGRAPHIC SHEET 6363

Locality Lower Elk River, Chesapeake Bay, Md.

Chief of Party: F. L. Gallen in 1938
Plane of reference is mean low water reading
0.9 ft. on tide staff at Town Point
5.8 ft. below B. M. 3 (U.S.E.D.)
1.3 ft. on tide staff at Aberdeen
12.7 ft. below B. M. 6
0.8 ft. on tide staff at Charlestown
4.9 ft. below B. M. 1

Height of mean high water is 2.1 feet at Town Point; 1.8 feet at
Aberdeen; 1.9 feet at Charlestown.

Condition of records satisfactory except as noted below:



Acting Chief, Division of Tides and Currents.

Verifier's Report of Hydrographic Survey No. H-6363 (1938)

1. The shoreline and air photographic signals were printed on the sheet from T-5654 (1937) and T-5655 (1937)
2. Depth curves were satisfactory ✓
3. Sounding crossings were satisfactory ✓
A sounding of 9 fms. between 28-29 b & 39-30.6
λ 75-59.55 was evidently taken 1 fm. too shoal
as investigation p00144-151 d failed to confirm
it and the general depths are 1 fm. deeper.
The 9 fms. sounding was omitted Satisfactory.
4. Junctions with contemporary surveys were satisfactory ✓
5. Condition of sounding records was satisfactory ✓
6. The protracting was satisfactory ✓
7. The field plotting of soundings was satisfactory ✓

Respectfully submitted
R. H. Carstens

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6363 (1938) FIELD NO. 1002.

Maryland, Chesapeake Bay, Lower Elk River.
Surveyed in Aug.-Sept., 1938, Scale 1:10,000.
Instructions dated March 31, 1938. (MIKAWA)

Soundings: Control:
Hand Lead. 3 Point fixes on shore signals.

Chief of Party - F. L. Gallen
Surveyed by - J. C. Partington
Protracted by - G. E. Varnadoe
Soundings plotted by - G. E. Varnadoe
Verified and inked by - R. H. Carstens
Reviewed by - J. A. McCormick, January 10, 1940
Inspected by - H. R. Edmonston

1. Shoreline and Signals.

Shoreline is from topographic maps T-5654 and T-5655.
Signal locations are discussed in the descriptive report,
page 1.

2. Depth Curves.

Satisfactory.

3. Sounding Line Crossings.

Satisfactory.

4. Junctions with Contemporary Surveys.

Junctions with H-6360 (1938) on the northeast, H-6361 (1938) on the east and H-6370 (1938) on the southwest are satisfactory. Verification of H-6362 (1938) on the northwest had not been completed at the date of this review nor had the survey on the west been received in the office.

5. Comparison with Prior Surveys.

- a. H-172 (1846), 1:10,000; H-185 (1846), 1:10,000;
H-186 (1846), 1:10,000.

Development on the 1846 surveys is much more open than on the present survey. The dredged channel is responsible for many of the differences between old and new surveys while outside the channel the agreement is fair to poor. The present survey supersedes the old surveys in the common area.

- b. H-2366a (1902), 1:10,000; H-2367a (1902), 1:10,000;
H-2393 (1898), 1:20,000; H-2432 (1899), 1:20,000;
H-2512 (1901), 1:10,000.

The combined area of the above surveys includes that of the present survey. Considerable dredging has been done in the main channel into Elk River in the interim between old and new surveys but outside the channel limits, agreement of depths is fairly good. West and north of Turkey Point, however, changes have been pronounced.

The wreck (charted) in lat. $39^{\circ}29.4'$, long. $75^{\circ}55.6'$ on H-2367a was neither verified nor disproved on the present survey. It has probably disintegrated but has been carried forward to the present survey in order to be on the safe side.

The snag (charted as a low water curve) in lat. $39^{\circ}27.4'$, long. $75^{\circ}57.0'$ on H-2366a falls 100 meters off-shore in 3 feet of water on the present survey. Soft, grassy bottom was recorded on the old survey and as the snag was in relatively unimportant Cabin John Creek it has not been carried forward.

The 10 foot sounding (charted) in lat. $39^{\circ}28.3'$, long. $76^{\circ}00.2'$ on H-2432 falls in depths of 13 feet on the present survey. Soft bottom was recorded and although depths in the immediate vicinity on the two surveys are in fair agreement, changes in the general area have been extensive. The sounding has not been carried forward.

The present survey, with the single addition noted above, supersedes the old surveys in the common area.

6. Comparison with Chart 1226 (New Print of September 8, 1939.)

a. Hydrography.

Soundings charted in the area covered by the present survey are from surveys discussed in the foregoing paragraphs. Channel limits and controlling depths are furnished at frequent intervals by the U. S. Engineers. The wreck charted off Turkey Point from Chart Letter 531 of 1930 was more accurately located on the present survey.

b. Aids to Navigation.

Positions of navigational aids on the present survey are substantially the same as those charted. Some of the charted aids were established subsequent to the survey.

7. Condition of Survey.

Satisfactory except for poor condition of southwest portion of smooth sheet caused by pasting on of large tab in that area. Such extensions of smooth sheets should be avoided where possible.

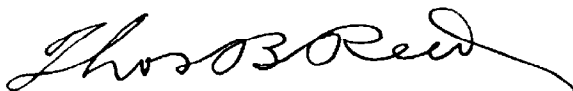
8. Compliance with Instructions for the Project.

Satisfactory except for non-investigation of items discussed in par. 5b.

9. Additional Field Work Recommended.

None.

Examined and Approved:



T. B. Reed,
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.

Applied to Cht. 572 - May 1940 - J.P.S.

Applied to Cht. 570 May 1941. S.P.