

6362

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 10 1939

77-6

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

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. H-6362
Hydrographic }

State Maryland

LOCALITY

Chesapeake Bay

Northeast River

1938

CHIEF OF PARTY

F. L. Gallen

6362

CP

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

REG. NO.

APR 10 1939

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-6362

State Maryland

General locality Chesapeake Bay

Locality Northeast River

Scale 1:10,000 Date of survey June, 19 38

Vessel Launch MIKAWA

Chief of Party F. L. Gallen

Surveyed by E. B. Brown

Protracted by F. L. Gallen

Soundings penciled by F. L. Gallen

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, 19 38

Remarks:

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet H-6362.

INSTRUCTIONS - March 31, 1938, Project HT-215.

LIMITS - Northeast River - Carpenter Pt. to Head of Navigation. ✓

SURVEY METHODS

The projection, shoreline, triangulation stations, and air photographic signals were printed on the sheet in the Washington Office. The signals on the sheet that are shown in red circles are air photographic signals that were transferred from sheets H-6363 and H-6364. The signals shown in blue were located by sextant cuts, sextant fixes, sextant distances or a combination of these methods. Signals Fuz and Not were located by sextant angles on sheet H-6364 and transferred to this sheet. In some cases, where the air photographic signal was too far inshore for a good hydrographic signal, an additional signal was built and located by sextant cut and taped distance from the air photographic signal. Signal Sot was located by placing it on the fence line extended, on which signal Wag is located, and a taped distance from signal Wag. A check out was taken from signal Buk. The tide gage was spotted on the wharf at Lat. $39^{\circ} 34.4'$, Long. $75^{\circ} 58.1'$ and a check angle was taken; it is shown on the sheet in green ink. Signals A & B were spotted on the shoreline in the narrow upper reaches of the river and are shown on the sheet in green ink. ✓

The following signals, which fall outside the high water line are temporary hydrographic signals: ✓

Ebb (banner on end of fish trap), Mac (banner on 2x4), Jig (banner on 2x4 in thin marsh grass), Bru (banner on 2x4), Der (banner on 2x4) Urn (banner on 2x4), Sky (banner on 2x4 on east side of small island), Ala (banner on old post about 4x4); Tit, Run, For, Ace, Erg, and Boy are banners on 2x4s; Fix is a banner on offshore end of fish trap. ✓

Signal Sex is a diving platform on the southwest corner of a small wharf at the boy scout camp. Signal Drum is a temporary 55 gallon oil drum on a stake (channel marker) ✓

DISCREPANCIES

No discrepancies are known to exist. ✓

CHANNELS

There is a dredged channel, with controlling depth of 9 feet, to the wharf of the Arundel Corporation, from which sand and gravel are shipped. The deep holes to the southward of the wharf were dredged for obtaining building sand. The channel is marked with unlighted spar and nun buoys on the east side. One quarter of a mile south of the Arundel Wharf a 1 foot shoal point extends from the westward. The channel rounding this point is marked with a temporary, privately maintained drum

Lat. $39^{\circ} 35.5'$
Long. $75^{\circ} 14'$ 5

channel marker and temporary bush stakes. The drum marks the west side of the channel. The channel in this vicinity is very crooked and hard to follow with a controlling depth of 9 feet.

The controlling depth is 5 feet in the natural channel leading to the wharves in the town of Northeast. These wharves are about $\frac{1}{2}$ mile above the point at which the river narrows. Above the wharves the river is very shoal with no channel.

There is a channel with a 2 ft. controlling depth to the shipyard in Northeast Heights. The yard has a marine railway with 20 ton capacity. Gasoline and supplies may be obtained there.

There is a channel with a 3 ft. controlling depth to the wharves in Hance Point Creek. At the easterly wharf gasoline and minor repairs are available.

DANGERS

The dredged channel is bounded on the west side by 3 to 6 ft. flats and on the east side by 6 to 8 ft. shoals. At Lat. $39^{\circ} 35.16'$, Long. $75^{\circ} 57.34'$, there is a detached 5 ft. shoal developed by feeling around, see position 35c. At Lat. $39^{\circ} 34.85'$, Long. $75^{\circ} 57.4'$ a 5 ft. shoal point extends from the northeastward. The end of the shoal point is located between positions 115 to 116 b day; this point was verified by feeling around and no sounding shoaler than 5 ft. was obtained. There are several 1 ft. detached shoals in vicinity of Lat. $39^{\circ} 35.25'$, Long. $75^{\circ} 57.4'$; see positions 27 to 34 c day. Marsh grass grows on these 1 ft. shoals extending about $\frac{1}{4}$ feet above the surface of the water.

Fish traps are set near the eastern side of the channel. Those that were in place when the survey was made were located. They are removed in the fall so that they will not be destroyed by ice, then replaced in the Spring in a new location. Therefore, only the general location should be shown on the chart.

On the flats to the southeastward of Carpenter Point and generally in all water of $\frac{1}{4}$ feet or less depth, a submerged grass grows on the bottom. At low tide the top of this grass floats on the surface of the water making it impassable. At high tide the top of the grass is submerged 1 to $1\frac{1}{2}$ feet making passage possible for boats of shoaler draft. Weedless wheels are more satisfactory than the general type wheel, but they are not entirely satisfactory, in that the grass accumulates in front of the wheel, blocking passage. The grass becomes wound around the general type wheel to such an extent that the wheel cannot turn. It is then necessary to cut the grass away with a knife. It is reported that this grass is killed by the cold in winter. The new growth reaches its maximum density in mid-summer.

ANCHORAGES

Vessels should encounter no difficulty anchoring in the area covered by this sheet. Many small yachts anchor in the cove to the northward of Northeast Heights and in the cove to the northeastward of Hance Point.

COMPARISON WITH PREVIOUS SURVEYS

Chart No. 1226, print No. 38-2/9 and sheet H-2432. - There has been a general shoaling of 1 to 3 ft. since surveys shown on sheet H-2432. ✓

The 12 ft. dredged channel shown on chart 1226 has shoaled to a controlling depth of 9 ft. in the northern reaches. The northern section of the channel has shoaled to 4 ft. $\frac{1}{4}$ mile south of the Arundel Wharf. The controlling depth around the eastern side of this shoal is 9 feet. ✓

GEOGRAPHIC NAMES

All geographic names shown on the chart seem to be in general local use. Northeast Heights, a residential section on the southern side of the village of Northeast. Ford Run, a very small creek on the north side of Northeast Heights, named after a former owner of the adjoining property. Hance Point Creek, the creek that enters on the north side of Hance Point. There are a few residents that know the wide opening at the mouth of the creek as Hance Point Cove. However, the majority of residents call the whole water area Hance Point Creek. ✓

Submitted by,

E. B. Brown

E. B. Brown
Jr. H. & G. Engr.

Approved and forwarded,

F. L. Gallen

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

LIST OF STATISTICS

Day	Statute Miles	Soundings	Positions
a	16.0	763	125
b	17.0	702	136
c	10.8	514	98
d	17.7	812	131
e	18.6	741	153
f	16.0	730	117
g	21.9	724	142
h	20.0	825	137
j	20.8	863	178
k	18.0	756	117
l	14.4	771	137
m	10.7	429	81
n	<u>7.1</u>	<u>331</u>	<u>57</u>
	209.0	8961	1609

Smooth sheet No. H-6362 was plotted under the immediate supervision of the Chief of Party. The sheet and records have been inspected and are approved.



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

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6362**

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

Number of positions on sheet	160.9
Number of positions checked	5.8
Number of positions revised	7.
Number of soundings recorded	896.1
Number of soundings revised	13.
Number of soundings erroneously spaced	23.
Number of signals erroneously plotted or transferred	9.

Date: Jan 15, 1940

Verification by { R.H. Casstens ;
J.A. Mc Cormick

Time: 60' hr
7 hr.

Review by J.A. Mc Cormick 1/17/40

Time: 7 hr.

HYDROGRAPHIC SURVEY NO. H-6362

Smooth Sheet Yes

Boat Sheet Yes

Records; Sounding 6 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 13 ; Last Date June 22, 1938

Remarks _____

H6362

Remarks

Decisions

	Remarks	Decisions
1		395759
2		"
3		"
4		395760
5		395759
6		"
7		"
8		"
9		" U.S.G.B.
10		"
11		"
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 4, 1939.

Division of Hydrography and Topography:

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

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 6362

Locality Northeast River, Chesapeake Bay, Md.

Chief of Party: F. L. Gallen in 1938.
Plane of reference is mean low water reading
0.8 ft. on tide staff at Charlestown
4.9 ft. below B. M. 1

Height of mean high water above plane of reference is 1.9 feet.

Condition of records satisfactory except as noted below:



Acting Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No. H-6362

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>Northeast River</u>											1
<u>Ford Run</u>											2
<u>Northeast Heights</u>											3
<u>Carpenter Point</u>											4
<u>Hance Point</u>											5
<u>Hance Point Creek</u>											6
<u>Roach Point</u>											7
<u>Carrot Cove</u>											8
<u>Northeast</u>											9
<u>Stony Run</u>											10
<u>Charlestown</u>	Names underlined in red approved by L. Heck on 5/10/59										11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

82

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT } No. H-6362
~~PHOTOSTAT OF~~ } ~~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	✓		Pages 1 and 2 copy made <i>JBR</i>
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ JBR

Verification Report of H-6362 (1938)

1. The shoreline and most of the signals were printed on the sheet, and originate with T-5651 (1937) and T-5654 (1937). Other signals were located in the field by hydrographic methods as explained in the descriptive report.
2. Sounding line crossings were satisfactory.
3. Junctions with contemporary surveys were satisfactory.
4. The condition of the sounding records was satisfactory.
5. The protracting was satisfactory.
6. The field plotting of soundings was satisfactory.
7. The drawing of depth curves, the comparison of the shoreline with ~~the~~ topographic sheets and the boat sheet, and other items were accomplished by the reviewer.

Respectfully submitted

R. H. Carstens

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6362 (1938) FIELD NO. 1003.

Maryland, Chesapeake Bay, Northeast River.
Surveyed in June, 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 - E. B. Brown
Protracted by - F. L. Gallen
Soundings plotted by - F. L. Gallen
Verified and inked by - R. H. Carstens
Reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston

1. Shoreline and Signals.

Shoreline is from topographic maps T-5651, T-5654 and T-5673. Signal locations are discussed on page 1 of the descriptive report.

2. Depth Curves.

Satisfactory.

3. Sounding Line Crossings.

Satisfactory.

4. Junctions with Contemporary Surveys.

Junctions with H-6363 and H-6364 of 1938 on the southwest are satisfactory. A third survey on the southwest had not been received from the field at the date of this review.

5. Comparison with Prior Surveys.

- a. H-173 (1846), 1:10,000; H-185 (1846), 1:10,000;
H-2432 (1899), 1:20,000.

Dredging has been done in the buoyed channel in the interim between old and new surveys. Outside the channel, differences are most pronounced on the flats to the northeast of Carpenter Point where the old surveys show depths of 7 to 9 feet as compared with 2 to

6 feet on the present survey. Elsewhere, the shoaling has not been so extensive. Deep holes at the head of the river on the present survey were made by sand dredges. The present survey supersedes the old surveys in the common area.

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

a. Hydrography.

Hydrography charted in the area covered by the present survey is mostly from surveys discussed in the foregoing paragraphs. Controlling depth in the channel, some depths off the town of Northeast and the island in lat. $39^{\circ}35.5'$, long. $75^{\circ}57.2'$ are from the U. S. Engineers' surveys and other outside sources. The present survey supersedes all such information of dates prior to its own.

b. Aids to Navigation.

Survey positions of navigational aids north^{of} lat. $39^{\circ}34'$ differ from charted positions by as much as 300 meters. South of lat. $39^{\circ}34'$ there is substantial agreement of positions. The nun buoy in lat. $39^{\circ}35.1'$, long. $75^{\circ}57.4'$ is the only aid in the area which might be shifted to some advantage. It was apparently placed to mark the turn in the dredged channel.

c. Controlling Depth.

The controlling depth in the channel is charted as 12 feet as of 1927. This was after dredging by the private concern which furnishes building sand and gravel from this area. Apparently little effort has been made to maintain the channel as originally dredged, for north of lat. $39^{\circ}35'$ the survey shows the channel shoaled to 4 feet. To the northeast, marked by a private drum beacon, is a deep passage left by dredging operations with a controlling depth of 10 feet. Between lat. $39^{\circ}32'$ and lat. $39^{\circ}35'$ the controlling depth was found to be 8 to 9 feet.

7. Condition of Survey.

Satisfactory.

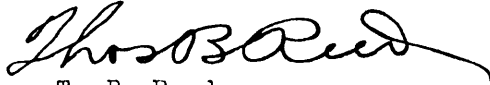
8. Compliance with Instructions for the Project.

Satisfactory.

9. Additional Field Work Recommended.

None.

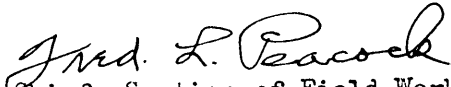
Examined and Approved:



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



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.

Applied to est. 572. May 1940. J.S.D.