

6215

U. S. COAST & GEODETIC SURVEY
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6215

Form 501
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Sheet No. 6
Hydrographic }

State New Jersey

LOCALITY

Intracoastal Waterway

West of Brant Beach

193⁶

CHIEF OF PARTY

L. D. Graham

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

PROJECT HT-205

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. 6

REGISTER NO. 6215

State New Jersey

General locality Intracoastal Waterway

Locality West of Brant Beach

Scale 1:10,000 Date of survey August, 19 36

Vessel Launch MIKAWA

Chief of Party L. D. Graham

Surveyed by G. W. Lovesee

Protracted by G. W. Lovesee

Soundings penciled by G. W. Lovesee

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by _____

Inked by L. S. Straw

Verified by L. S. Straw

Instructions dated _____ May 16, 19 35

Remarks: _____

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet 6

INSTRUCTIONS - May 16, 1935

Project No. HT-205

LIMITS OF SHEET

This sheet includes all of the inland bay from Long Beach on the south, to Manahawkin Bay on the north. All creeks emptying into the bay from the inland side of the bay were thoroughly developed to the head of navigation.

SURVEY METHODS

All work on this sheet was accomplished with skiff and two outboard motors. A standard line and lead weighing about 8 pounds was used. Soundings were taken to fathoms and feet and reduced to feet. Sextant fixes were taken to signals on shore located by triangulation and topography.

The shoreline was determined by the air-photo party of Lieutenant (j.g.) E. H. Kirsch at Atlantic City, N. J. and checked well with the hydrography.

Standard Coast Survey methods were used throughout.

DISCREPANCIES:

No discrepancies were noted when surveying this sheet. Cross lines checked to the nearest foot.

In comparing this sheet with adjoining sheets 5 and 7^A, only one serious discrepancy was noted. This occurred on sheet 5 in ⁴⁻⁶¹⁴²⁽¹⁹³⁵⁾ Lat. 39° 38.76', Long. 74° 11.43', where a 2 foot sounding on sheet 5 falls on a 7 foot sounding on sheet 6, 84-85 d day. As this occurs on passing from a shoal area into a channel where a change in depth is very rapid, a slight displacement in soundings probably accounts for the discrepancy. ⁴⁻⁶²¹⁶⁽¹⁹³⁶⁾
Soundings accepted as recorded - the agreement is satisfactory. L.S.C.

DANGERS

No dangers were found within the limits of this survey. Most of this sheet consists of shoal areas and the bottom is mostly sandy with no rocks. The sheet appears to be overdeveloped with 50 meter sounding lines covering the entire sheet. Many small pleasure boats and sail boats use this bay and for this reason the close development was carried throughout. Also there are several small channels crossing the bay which carry 1 to 2 feet more of water and can be used with local knowledge and there are occasional bush stakes to mark these channels, which stakes are placed in position each year by local residents.

CHANNELS

The main inland waterway channel is well marked with the standard New Jersey Department of Commerce & Navigation marker stakes. The controlling depth across this sheet is $5\frac{1}{2}$ feet at mean low water, Lat. 39° 36.75', Long. 74° 12.60'. The alternate route across this sheet near the west side of

the bay is well marked and has a controlling depth of about $5\frac{1}{2}$ feet near the north end of the sheet. Creeks and other channels in local use should be entered with care or with local knowledge as they are marked only by local residents.

ANCHORAGES

A good anchorage can be obtained by boats drawing five feet or more on the alternate inland route near the southwest limit of the sheet, where the channel widens to about 500 meters. Smaller boats can find good anchorages in numerous places or tie up to local docks.

COMPARISON WITH PREVIOUS SURVEYS

The survey checks well with previous surveys available.

GEOGRAPHIC NAMES

No new geographic names are suggested. Geographic names shown are taken from the air-photo compilation covering this sheet.

LANDMARKS FOR CHARTS.

See descriptive reports for graphic control sheets in this area.

SHORELINE

The shoreline checked well on the boat sheet, as compiled by the photo-topographic party of Lieutenant (j.g.) E. H. Kirsch.

DOCKS

All docks on this sheet are small and intended only for boats of 3 to 4 feet or less in draft and ample water can be found at all docks for boats of this size. There is a small marine railway at the West Creek Yacht Club and gas and a few supplies can be obtained there.

Submitted by,

George W. Lovesee
George W. Lovesee
Jr. H. & G. Engineer

Approved and forwarded:

L. D. Graham

L. D. Graham
H. & G. Engineer
Chief of Party

STATISTICS FOR HYDRO. SHEET No. 6.

Day	Date	Statute Miles	Positions	Soundings
a	July 31	11.8	101	591
b	Aug. 3	18.0	131	765
c	4	22.0	128	849
d	5	20.0	199	1022
e	6	22.0	165	947
f	7	17.7	141	737
g	10	24.0	133	956
h	11	22.4	142	915
j	12	26.4	149	1046
k	13	19.5	127	882
l	14	20.6	124	861
m	15	16.3	116	678
n	17	23.8	169	1014
p	18	22.6	161	868
q	19	28.3	181	1216
r	20	30.0	182	1244
s	21	25.6	148	1008
t	24	11.4	85	477
u	25	23.5	114	804
v	26	20.0	153	754
w	27	23.0	168	889
x	28	<u>24.0</u>	<u>184</u>	<u>1063</u>
		472.9	3201	19586

Smooth Sheet No. 6 was plotted under the immediate supervision of the Chief of Party. The sheet and accompanying records have been inspected and are approved.

A handwritten signature in cursive script, appearing to read "L. D. Graham".

L. D. Graham
H. & G. Engineer
Chief of Party

Verification of Hydrographic Survey 6215(1936) Field No. 6
Intracoastal Waterway
West and Brant Beach, New Jersey
Chief of Party - L. D. Graham

1. Records.

The records conform to the requirements of the Hydrographic Manual. ✓

2. Shoreline and Control.

The shoreline is from T-5443, T-5444 and T-5446. The control is from Graphic Control survey T-6399 a and b. Also Hydrographic signals BEA, ART, MUD and AND. ✓

3. Aids to Navigation.

Floating aids to navigation shown on this sheet were located by pulling along side and obtaining three point fixes on shore signals except the buoy in Lat. $39^{\circ} 35.7'$ Long. $74^{\circ} 13.67'$ which is located by a distance of 15 meters SW of position 106x (page 6, vol. 13). ✓

4. Sounding Line Crossings.

The agreement of soundings at crossings is very good throughout the sheet. ✓

5. Depth Curves.

The depth curves are satisfactory. A penciled note placed on the sheet by the Field party states that "A marked channel leads to Brant Beach. At least ~~depth~~ ~~of~~ 6 feet can be carried in Aug. 1936." (Lat. $39^{\circ} 37.38'$ Long. $74^{\circ} 12.08'$.) The six foot curve has been drawn accordingly. ✓

6. Junctions with Contemporary Surveys.

The junction with 6142(1936) on the north is satisfactory. The junction with 6216(1936) on the south will be considered when that sheet is verified. ✓

7. Field Plotting.

The field plotting is satisfactory.

8. Remarks.

- (a) In narrow creeks the soundings have been inked outside of the shore line to avoid congestion.
- (b) Signal AM Lat. $39^{\circ} 35.96'$ Long. $74^{\circ} 13.5'$ has two different sets of cuts on T-6399b. These were obtained in 1935 and 1936 respectively. This station is not recoverable.

A discrepancy of 20 meters exists between the locations on T-6399b. The smooth sheet ^{and boat sheet} shows the location to the west. Six positions use signal AM in their location.

90, 91r. and 163r; 157, 158x and 184x. Positions 157, 158x and 184x are not effected because they are on a line with the shift. Positions 90, 91r and 163r change somewhat but the displacement considering the depth and location is unimportant. Therefore the location of AM as shown on the Hydrographic sheet has not been altered.

The hyd. pos. of O Am is considered satisfactory. Either Topo or Hydro. Using either of the two locations of O Am does not materially change the hydrography.
G.R.

- (c) The following docks were located by three point fixes and recorded in the sounding volumes. They are not shown on the Topographic sheets.
1. One dock Lat. $39^{\circ} 34.7'$ Long. $74^{\circ} 13.9'$, Volume 9, page 10, not shown on T-5444.
 2. Three docks Lat. $39^{\circ} 37.3'$ Long. $74^{\circ} 11.97'$, Volume 3, page 43, not shown on T-5444.
 3. Two docks Lat. $39^{\circ} 37.0'$ Long. $74^{\circ} 16.25'$, Volume 5, page 9, not shown on T-5446.
- (d) A note on page 31, Volume 2 states "2 meters off diving platform". (Lat. $39^{\circ} 38.52'$ Long. $74^{\circ} 11.2'$). This platform is not shown on T-5444 or on the Boat sheet.
- (e) Signal SAW Lat. $39^{\circ} 38.86'$ Long. $74^{\circ} 14.13'$ is not shown to be on a topographic feature either on the Smooth Sheet, T-6399a, (Graphic Control) or T-5443. It is probably a temporary signal.
- (f) The dock shown on T-5443 Lat. $39^{\circ} 38.6'$ Long. $74^{\circ} 14.77'$ has been destroyed and only the piling remain. (See Volume 4, page, 65.)
- (g) The vertical clearance of the bridge in Lat. $39^{\circ} 37.35'$ Long. $74^{\circ} 16.87'$ is 4 ft. at H.W. (See Volume 11, page 54.)

Verified and inked by



September 27, 1937.

Leo S. Straw

Field Records Section (Charts).

HYDROGRAPHIC SHEET NO. **H6215**

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

Number of positions on sheet	3201
Number of positions checked	25
Number of positions revised	2
Number of soundings recorded	19,586
Number of soundings revised	75
Number of signals erroneously plotted or transferred	See Verification Report for 2 AM

Date: Sept. 27, 1937

Verification by *L. L. Brown*

Time: 43 hours

Review by *G. Rieyari*

Time: 19 "

HYDROGRAPHIC SURVEY NO. H-6215

Smooth Sheet Yes

Boat Sheet Yes

Sounding Records 13 Vols. _____

Descriptive Report Yes

Title Sheet Yes

List of Signals Vol#1

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

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

Remarks _____ **HYDROGRAPHY**

Total Days 22

Last Date Aug. 28, 1936

Remarks

Decisions

1		see T-5443
2		" "
3		see T-5446
4		
5		see T-5446
6		see T-5443
7		" "
8		" "
9		" "
10		" "
11		see T-5446
12		" "
13		" T-5445
14		" "
15		
16	* Do not ink on this sheet	
17		see T-5444
18		see T-5446
19		see T-5444
20		USGB decision
21		see T-5446
22		
23		
24		
25		
26		
27		

46215

GEOGRAPHIC NAMES

Survey No. H-6215

Name on Survey	Sources									
	A. On Chart No. 1216	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. N. d. Atlas 34, 33	F. On local Maps 33	G. P. O. Guide or Map	H. Rand McNally Atlas	K. U. S. Light List	
<u>Mill Creek</u> ✓	✓									1
<u>Manahawkin Bay</u> ✓	✓									2
<u>Dinner Point Creek</u> ✓	✓									3
<u>Channel Creek</u> ○					✓					4
<u>Horse Point</u> ○	✓									5
<u>Cedar Run</u> ✓	✓									6
<u>Popular Point</u> ✓	✓									7
<u>Reed Island</u> ○	✓									8
<u>Cedar Bonnet</u> ✓	✓									9
<u>Flat Island</u> ○	✓									10
<u>West Creek</u> ✓	✓									11
<u>Dinner Point</u> ○	✓									12
<u>High Island</u> ○	✓									13
<u>Ham Island</u> ○	✓									14
<u>Brant Beach</u> ○	✓									15
<u>(Daniel Island)</u> *	✓									16
<u>Long Beach</u> ○	✓									17
<u>Long Point</u> ○	✓									18
<u>Little Egg Harbor</u> ✓	✓									19
<u>Marshelder Islands</u> ✓	✓									20
<u>Parker Cove</u> ✓	✓									21
										22
										23
										24
										25
										26
										27

Names underlined in red approved
 by [Signature] on 9/14/37

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTO STAT COPY~~

} No. H-6215
~~XXXX~~

{ received Sept. 1, 1937
 registered Sept. 10, 1937
 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			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	C. K. Green
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TIDE NOTE FOR HYDROGRAPHIC SHEET

Sept. 13, 1937.

Division of Hydrography and Topography:

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

Plane of reference is
~~the datum~~ approved in
13 volumes of sounding records for

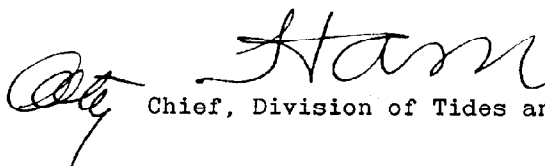
HYDROGRAPHIC SHEET 6215

Locality West of Brant Beach, Intracoastal Waterway, N. J.

Chief of Party: L. D. Graham in 1936
Plane of reference is mean low water reading
2.5 ft. on tide staff at Manahawkan Drawbridge
4.1 ft. below B.M. 1
1.5 ft. on tide staff at Long Point
3.5 ft. below B. M. 1
1.1 ft. on tide staff at Beach Haven
4.8 ft. below B. M. 1

Height of mean high water above plane of reference is 1.5 feet at
Manahawkan Drawbridge; 2.2 feet at Long Point and Beach Haven.

Condition of records satisfactory except as noted below:


Chief, Division of Tides and Currents.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6215 (1936) FIELD NO. 6

West of Brant Beach, Intracoastal Waterway, N. J.

Surveyed in August 1936, Scale 1:10,000

Instructions dated May 16, 1935 (B. H. Rigg,
J. C. Sammons, E. H. Kirsch)

Hand Lead Soundings

3 Point fixes on shore signals.

Chief of Party - L. D. Graham
Surveyed by - G. W. Lovesee
Protracted by G. W. Lovesee
Soundings plotted by - G. W. Lovesee
Verified and inked by - L. S. Straw

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- (a) No description was furnished relative to signal SAW (lat. $39^{\circ} -38.9'$ long. $74^{\circ} -14.1'$) which falls in 1 foot of water and outside the high water line. However, this signal is close to shore and is assumed to be of a temporary nature.
- (b) Failure to note in the records information relative to hydrographic signals, ART and MUD, located southwest of Ham Island and of signal BEA off Long Point. These are in all probability assumed to be of a temporary nature.
- (c) The information for locating the marine railway referred to in the Descriptive Report, page 2, was not submitted.

The Descriptive Report is complete and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The plan, character and extent of development are in accordance with the instructions for the project except that a split line should have been run in the channel in the vicinity of lat. $39^{\circ} -38.8'$ long $74^{\circ} -12.3'$ to better delineate the channel limits, and the channel leading to Brant Beach in lat. $39^{\circ} -37.36'$ long. $74^{\circ} -12.1'$ should have been more fully developed. Although in the latter case, a penciled note on the smooth sheet states that a least depth of 6 feet can be carried to Brant Beach.

3. Shoreline and Signals.

The shoreline originates with air photographic surveys T-5443 (1932), T-5444 (1932) and T-5446 (1932).

The topographic signals originate with graphic control sheets T-6399a and b (1935).

Several hydrographic signals were also used, the pages and volumes in which the cuts are recorded being listed in the index of Vol.1.

4. Sounding Line Crossings.

The depths on crosslines are in satisfactory agreement.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn, including portions of the low water line.

6. Junctions with Contemporary Surveys.

The junction with H-6142 (1936) on the north is satisfactory.

The junction with H-6216 (1936) on the south will be considered in the review of that sheet.

7. Comparison with prior Surveys.a. H-1197a (1873).

This survey on a scale of 1:10,000 covers the area of the present survey. In general, the two surveys are in very good agreement except in the following areas where changes have been the result of artificial or natural causes. The more noticeable of these are:

- (1) The dredged channel between Flat Island and Long Beach, formerly a shallow flat area, is now a part of the main channel.
- (2) The old channel between Reed I. and High I. has filled up in places and only a few detached sections of it still remain.
- (3) The channel running eastward on approximate lat. $39^{\circ} - 37.5'$ between long. $74^{\circ} - 14.5'$ and long. $74^{\circ} - 13.5'$ has filled up and is no longer discernible.
- (4) The most outstanding change in shoreline appears to have occurred to the island in lat. $39^{\circ} - 36'$ long. $74^{\circ} - 16'$ which has greatly diminished in size.

Because of the age of the old survey and because the present survey is more detailed and better developed, H-1197a (1873)

should be superseded by the present survey for future charting.

8. Comparison with Chart 1216 (New Print Oct. 7, 1937)
Chart 3243 (New Print July 7, 1937)

a. Hydrography.

Within the area of the present survey the charts are based on the survey discussed in the foregoing paragraphs and the U. S. Engineer's surveys, Eps. 14965 and 14966 of 1914.

- (1) The engineers surveys covers the alternate waterway between Popular Point and Long Point. The surveys are not so closely developed as the present survey but the depths are in general fair agreement with the present ones. The 6 foot spot in the channel northeast of Long Pt. originates with Ep. 14965 and falls on the present survey in a closely developed area between a $7\frac{1}{2}$ and an 8 foot sounding and is about 110 m. south of 2 - $6\frac{1}{2}$ ft. soundings located by the present party. Comparison of the depths in this area with the present ones, shows the area has slightly deepened. Because the present survey is of a much later date and more closely developed, it should supersede the above engineers surveys for charting purposes.
- (2) The same spots shown in the open shallow areas originate with H-1197a (1873) where they are shown as $1/2$ foot soundings. Most of these spots have deepened to a foot or more on the present survey.

b. Controlling Depths.

- (1) The controlling depth of the main Inland Waterway is charted as " $5\frac{1}{2}$ feet 1935" from Chart Letter 802 of 1935. This is in agreement with the present survey.
- (2) The controlling depth of 5 feet "from the mouth to the public landing" stated in the reference chart note for Cedar Run is from a note based on Coast Pilot information recorded on a copy of Chart 3243, filed as Bp. 29078(1935). This depth is in agreement with the present survey from the mouth to about 0.5 of a mile upstream which probably is in the vicinity of the public landing mentioned in the note. Between the mouth and the alternate route of the Intracoastal Waterway, the controlling depth is 3 feet through a winding channel.

c. Aids to Navigation.

- (1) No aids to navigation are shown in this area on Chart 1216.

- (2) The only aids shown on Chart 3243 are fixed aids and these are in agreement with those located by the present survey. The light in Lat. $39^{\circ} -36.45'$ long. $74^{\circ} -15.55'$ (sig. Sep) shown on the present survey, originates with T-6399b (1935) and has been taken off the charts subsequent to the present survey on authority of N. J. State Board of Commerce and Navigation. (See Bp. 30623).
- (3) No marker stakes were located in the main Intra-coastal Route by the present survey. These aids are undoubtedly of a temporary nature and are probably destroyed during the winter season by the ice and replaced again in the following spring. (See note on chart "Aids to Navigation.")
- (4) A number of mid-channel buoys in the alternate Intra-coastal route were located by the present survey and are recorded in the sounding records. These are not shown on the chart individually but are indicated by a general note along the axis of the channel as follows, "mid channel spar buoys only."
- (5) Three buoys in the main Intracoastal Route, South of Ham Island were located by the present survey, and are not charted. From the positions they are evidently mid-channel buoys.

9. Field Plotting.

Field protracting and plotting were well done.

10. Additional Field Work Recommended.

Except as noted in par. 2, this review, this survey is very satisfactory and no additional work is required.

11. Note to Compiler.

The compiler's attention is called to the following items:

- a. Paragraph 8 c (2) of this review relative to the light in lat. $39^{\circ} -36.5'$ long. $74^{\circ} - 15.5'$.
- b. The docks in the following locations have been located by the present hydrographic party and are not shown on the latest topographic surveys:

Lat. $39^{\circ} -34.7'$ long. $74^{\circ} -13.9'$; lat. $39^{\circ} 37.3'$
long. $74^{\circ} -11.97'$; lat. $39^{\circ} -37.0'$ long. $74^{\circ} -16.25'$
- c. The dock shown on T-5443 (1932) in lat. $39^{\circ} -38.6'$ long. $74^{\circ} -14.77'$ has been destroyed and only the piling remains.

- d. Par. 1,(c), this review, relative to the marine railway mentioned in the descriptive report.

12. Superseding Old Surveys.

Within the area covered the present survey supersedes the following survey for charting purposes:

H-1197a (1873) in part

13. Reviewed by G. Risegari, October 2, 1937.

Inspected by A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

L. D. Robert
Chief, Division of Charts.

Fred. L. Peacock
Chief, Section of Field Work.

G. H. de
Chief, Division of H. & T.

Applied to drawing of Chart 1216 - Jan 4, 1938 - J.W.

Applied to Chart 825 June 1939 AHLE.

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