

6216

U. S. COAST & GEODETIC SURVEY  
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6216

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

**DESCRIPTIVE REPORT**

~~Topographic~~ } Sheet No. 7  
Hydrographic }

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State New Jersey

LOCALITY

Atlantic Coast  
Little Egg Harbor & Beach Haven Inlet  
~~Beach Haven Inlet & Little Egg Harbor~~

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1935 & 6

CHIEF OF PARTY  
L. D. Graham - 1936  
B. H. Rigg - 1935

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. 7

REGISTER NO. 6216

State New Jersey

General locality Atlantic Coast

Locality ~~Beach Haven Inlet~~ & Little Egg Harbor & Beach Haven Inlet

Scale 1:10,000 Date of survey July 1935 & Sept., 1936

Vessel Launch MIKAWA - 1936 and Shore Party No. 19 - 1935.

Chief of Party L. D. Graham - 1936 and B. H. Rigg - 1935

Surveyed by George W. Lovesee and Karl B. Jeffers

Protracted by K. B. Jeffers, G. E. Varnadoe, T. M. Williams & E. B. Brown

Soundings penciled by K. B. Jeffers & E. B. Brown

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by G. C. Mc Glossoon

Verified by G. C. Mc Glossoon

Instructions dated \_\_\_\_\_ May 16, 1935

Remarks: The positions inked in red were for 1935 work, B. H. Rigg  
Chief of Party. Those in blue for 1936 work, L. D. Graham, Chief of Party

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET NO. 7. H-6216  
BEACH HAVEN INLET and LITTLE EGG HARBOR.

July 1935.....Benjamin H. Rigg, Chief of Party.

INSTRUCTIONS

This work was done under authority of instructions dated May 16, 1935.

SCALE 1:10,000

SURVEY METHODS:

- (a) Horizontal Control was expanded from first order scheme established by C. D. Meaney in 1932; the triangulation executed by this party was of second order accuracy. The shore line was delineated by air photo compilations by R. C. Bolstad and checked by graphic control sheet M, N. and O. Additional stations for hydrographic control were located by plane table on these same graphic control sheets.
- (b) The hydrography was done in a leased launch, using standard methods for lead line sounding. It was necessary to plan the work according to the time of high water in order to cover the shoal areas with this launch. No unusual methods were necessary.
- (c) Tidal Control was obtained from observations at Tucker Island and at Beach Haven. The zoning for reduction of soundings is fully explained on the tidal data sheet. When this work is continued, additional tide stations at Bonds Coast Guard and at Story Island are desirable as a check on the zoning. The soundings at junction of zones cross very well and indicate satisfactory application of tide reducers.
- (d) INCOMPLETED AREAS. Due to the uncertainty of appropriations for

this project, an effort was made to sound the channels in the inland water route first, as this part of the work was considered of primary importance. This part of the work was nearly accomplished; the channel to Tuckerton (Marshelder Channel) being the only one not sounded. A few additional lines in the other channels, particularly along the edges of dredged channels, are necessary for accurate plotting of depth curves. The incompleated areas include channels between the group of islands north of Story Island, part of Little Egg Harbor, a shoal area east of Shelter Island, all creeks and slues, and Marshelder Channel, mentioned above.

Additional lines  
accomplished  
in 1936

DANGERS:

There are no particular dangers in this area. The sand points and bars are continually shifting and assistance of local knowledge should be obtained in navigating Beach Haven Inlet. The inside channels are well marked; boats of the draft ordinarily found in these waters (4 ft. or less) should experience no difficulty.

The channel into Beach Haven at Beacon No. 38 has partially filled and boats of more than 4 ft. draft should cross this bar at high tide. This bar will be dredged out sometime this fall, according to information received from the New Jersey Board of Commerce & Navigation.

There is a shoal spot extending 200 meters south of Beacon No. 34 with least depth of 4 feet at low water.

CHANNELS:

The channel from Great Bay and Little Egg Inlet, west of Tucker Island, is about 200 meters wide, with spoil banks on both sides. It is marked by buoys and lighted beacons and has a least depth of seven (7) feet at the north end near Beacon No. 34. The four foot bank south of this light may be avoided by following close to the east edge of the

channel marked by a black can buoy and the spoil bank. There are strong tidal currents in this channel.

From Beacon 34 to Beacon 36 there is a narrow dredged channel with least depth of seven (7) feet. The channel is marked on both sides with brush stakes at very frequent intervals. These stakes are of a temporary nature and are placed each spring by the Board of Commerce and Navigation.

Beach Haven Inlet was not surveyed and least depth on the bars cannot be given. There are two channels in common use; one leads south past Tucker Island and out to sea and is marked by buoys; the other follows close in shore around Bonds point to the north. There are strong currents here and the bar and sand points are subject to change with each passing storm. Inside the bar the channel is wide and deep, gradually narrowing at the bend about a mile west of Bonds Point where the current is strongest and small tide rips frequently occur.

The channel runs East North East towards Bonds Coast Guard Station and then North North East to the entrance to Beach Haven Yacht Club and is wide and deep with suitable anchorages anywhere. Here the channel is constricted to 200 meters with a sand spoil bank on the west side, marked by stakes. The channel into the Yacht Club at Beacon No. 37 is about 30 meters wide and marked by temporary drum buoys in mid-channel. At Beacon No. 38 the channel divides, one channel going in close to the main land, being wide and having a least depth of seven (7) feet, to the limit of this sheet; the other is a dredged cut with least depth of  $5\frac{1}{2}$  feet at the entrance (see DANGERS) and well marked on each side by temporary stakes maintained by the New

Jersey Board of Commerce and Navigation.

There is a good, public dock at Beach Haven where all necessary supplies may be obtained, and wharfage for a limited time.

COMPARISON WITH CHART 1216, APRIL 1933:

(a) The channel from Tucker Island to Story Island is the same general depth but is about 200 meters less in width; the east side has a spoil bank of sand and mud, bare at low water.

(b) The dredged cut from Beacon 34 to Beacon 36 is not correctly plotted on the chart. The channel is nearly straight, rather than winding as shown. Bp. 30623(1937) states that this channel has been abandoned, H.W.M.

(c) Beach Haven Inlet is changed altogether. The channel is approximately four-tenths of a mile farther south and runs in a Northwesterly direction for half a mile before turning north to Bonds Coast Guard. This section from the Inlet to the Coast Guard Station has changed completely. Resurveyed on H-6195 (1936)

(d) From Bonds Coast Guard Station, north to the limit of the sheet, the present hydrography agrees very closely with the charted soundings. The channel at Beach Haven in Lat.  $39^{\circ} 34.0'$ , Long.  $74^{\circ} 15.5'$  has shifted slightly to the north and east. The area south of Shelter Island has filled in and there is no channel there at present.

NEW GEOGRAPHIC NAMES:

Reference - Special report on Geographic Names.

(a) Changes in charted names.

Geographic names as printed on Chart 3243 and Chart 1216 (with insert of Little Egg Harbor) are correct with the following exceptions.

Parker Run is called Parkertown Creek.

Jessie Point as charted is Jeremy's Point. This correction is made from an old deed of the property at this point. Jessie Point is north of

Edge Cove as shown.

Willet Thorofare is known as such only by those who use the chart, the most common name in local use is Big Thorofare. This name is very well known to Great Bay and Little Egg Harbor fishermen.

The name Gall Island is unknown. This island is called Little Island by people in Beach Haven and Tuckerton.

Sheephead Creek is known as Big Sheephead Thorofare.

Little Sheephead Creek is known as Little Sheephead Thorofare.

Goosebar channel has been closed. The dredged channel north of Goosebar Sedge is called "The Cut" and has no other name.

(b) New Names.

New geographic names not found on any of our charts are as follows:

- Lower Little Island
- Parker Sedge
- Ash and Pocket Island
- Middle Sedge
- Roses Point
- Roses Cove
- Thompson Creek ✓
- Thorofare Point ✓
- Little Thorofare ✓
- Soldiers Hole ✓
- Foxboro Point ✓
- Main Channel

All Geographic names, particularly changes in charted names and new place names have been thoroughly checked from reliable sources. When any differences were found in various localities, the charted name was given preference unless the evidence was overwhelmingly against it.

All new names listed above are believed to be old and well established local names.

TIDAL DATA AND STATISTICS:

Tidal Data and Statistics Sheets are appended.

Respectfully submitted.

*Karl B. Jeffers*  
Karl B. Jeffers,  
Jr. H. & G. Engineer.

Approved & forwarded

*[Handwritten Signature]*  
Lt. J. J. [unclear]  
Chief of Party.

✓

TIDAL DATA SHEET  
TO ACCOMPANY HYDROGRAPHIC SHEET NO. 7  
BEACH HAVEN INLET AND LITTLE EGG HARBOR

Party No. 19 - Benjamin H. Rigg,  
Chief of Party

All soundings on sheet seven are reduced for tide as observed at Tucker Island and Beach Haven. The area sounded was divided into four zones as follows:

The first zone includes Beach Haven Inlet to the constricted bend in the channel, and the Tucker Island Channel to the Story Island Channel.

The second zone includes the soundings in Story Island Channel, those in the dredged channel east of Story Island to the junction with the main channel in Lat.  $39^{\circ} 32.8'$ , Long.  $74^{\circ} 16.1'$ , and the area from the limit of Tucker Island zone to Holgate.

The third zone lies between Holgate <sup>and</sup> ~~to~~ a point about half way from Holgate to Beach Haven.

The fourth zone includes all of the area north of zone three. The zones are marked on boat sheet in red pencil.

Corrections were applied as follows:

Zone one -- Tucker Island direct.

Zone two -- Tucker Island + 0.5 hrs and -0.4 ft.

Zone Three -- Tucker Island + 1.0 hr. and -0.8 ft.

Zone Four -- Beach Haven direct.

In applying time and height corrections in zones two and three, an average difference of 0.3 feet in the low waters of Tucker Island and Beach Haven was considered in plotting the tide curve, Beach Haven having the less range.

Location of Tide Stations.

Tucker Island Station #6195

Lat. 39° 30.3' ✓  
Long. 74° 17.9'

Tucker Island at Little Egg  
Inlet (inside)

M.L.W. on staff 2.0 ft.  
Highest Tide 5.8 Ft, June 18, 1935  
Lowest Tide -0.8 ft, May 29, 1935  
and July 19, 1935

Portable automatic Tide Gauge No. 357 operated from May 28 to June 26, 1935.

Portable automatic Tide Gauge No. 357 operated from July 7 to Aug. 1, 1935.

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Beach Haven Station  
Beach Haven Yacht Club

Lat. 39° 34.0' ✓  
Long. 74° 14.8'

M.L.W. on staff 1.1 ft.  
Highest Tide 3.4 ft., July 15, 1935  
Lowest Tide -0.1 ft., July 17, 18,  
& 19, 1935.

Portable automatic Tide Gauge No. 294 operated from July 9, 1935  
to August 5, 1935.

STATISTICS FOR HYDROGRAPHIC SHEET NO. 7

Vol. No.	Statute Miles of Sounding Line	Number of Soundings	Number of Positions
1	29.6	1857	276
2	21.0	1590	256
3	28.7	1748	270
4	31.4	1886	272
5	34.7	1847	255
6	31.6	1654	247
7	31.1	1470	202
Total	211.1	12052	1778

Area, Sq. Statute Miles, 8.2

STATISTICS FOR HYDROGRAPHIC SHEET 7

1935 Date	Day	Statute miles	Soundings	Positions	Volume
July 15	a	16.0	940	144	1
16	b	18.8	1263	189	1 & 2
17	c	6.4	482	79	2
18	d	4.6	319	54	2
19	e	12.2	705	109	2 & 3
22	f	18.3	1134	165	3
23	g	18.0	1048	162	3 & 4
24	h	25.3	1533	218	4 & 5
25	j	13.7	727	104	5
26	k	18.2	994	133	5 & 6
29	l	15.5	772	110	6
30	m	26.2	1357	205	6 & 7
31	n	16.9	778	106	7
1936 Sept.	1	2.5	106	18	8
	2	27.2	1063	72	8
	3	16.5	612	83	8 & 9
	4	20.9	939	143	9
	8	17.7	694	97	9 & 10
	9	14.4	564	80	10
	10	16.5	681	96	10
	11	23.7	931	143	11
	14	18.0	804	141	11 & 12
	15	30.5	1114	173	12
	16	26.0	877	146	13
	17	16.6	654	127	13 & 14
	21	10.0	383	64	14
	22	15.5	613	97	14
	23	18.0	689	136	15
	24	18.0	693	126	15
	25	19.3	795	149	16
	26	12.5	458	66	16
	28	18.3	662	129	17
	29	17.8	728	147	17
		<u>570.0</u>	<u>27112</u>	<u>4011</u>	

Smooth sheet No. 7 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. & C. Engineer  
Chief of Party

SUPPLEMENTAL DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet 7 H-6216

INSTRUCTIONS - May 16, 1935

Project HT-205

LIMITS OF SHEET

This sheet includes all the inland bay from Long Beach, on the north, to Tucker Island, on the south. All thoroughfares between islands and creeks emptying into the bay were sounded to the head of navigation.

The soundings in the vicinity of Tucker Island and Beach Haven Inlet were taken in 1935 by the party of B. H. Rigg. In 1936 it was found that these soundings were no longer correct because of storms which had changed the channel in the inlet. This area was resurveyed on sheet 15, 1936. H-6195

About one-quarter of the sheet was surveyed in 1935 by the party of B. H. Rigg. The remainder of the sheet was finished by this party in 1936. Where a good junction with the 1935 work was not obtained, the 1935 area was resurveyed until a good junction was obtained. The 1936 hydrography, shown on the sheet with blue positions, should supersede that of 1935, when there is a discrepancy between the two season's work.

SURVEY METHODS

All work on this sheet, in 1936, was accomplished with a skiff and two outboard motors. A standard line, with lead weighting 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.

Standard Coast Survey methods were used throughout. The smaller creeks were sounded and positions located by the sea boat sheet (S.B.S.) method.

DISCREPANCIES

At Lat. 39° 33.8', Long. 74° 18.45', the small grass island was not shown on the boat sheet, therefore, fixes were taken to locate the island: Positions 45 and 46 f day. This island is shown on the air planimetric sheet. The hydrographic location does not check the photographic location. The area in which this island appears is unimportant and as the discrepancy was small no attempt was made to check with the planetable. Topo location accepted. H.W.M.

At Lat. 39° 34.3', Long. 74° 18.7', the lines of g and h days turn because distortion in the boat sheet caused a slight jump when changing fixes. The lines do not plot on the smooth sheet in the same relative positions that they do on the boat sheet. Attention is called to the fact that no obstruction exists between the lines of g day and those of h day.

At Lat. 39° 32.25', Long. 74° 17.5', the soundings between positions 3 and 4 <sup>g</sup> day of 1936 work are 3 to 4 feet deeper than soundings 3 and 4 b day of the 1935 work. The same condition exists between positions 127 to 128 a day of 1936 work. The bottom is uneven and is also changeable 1935 depths here fudged to permit 1936 outlet to channel. H.W.M.

in this vicinity. The 1936 soundings should supersede those of 1935.

The only other discrepancies noted on this sheet was the change in the 1935 soundings as mentioned under the heading of LIMITS OF SHEET. Cross lines checked to the nearest foot.

#### DANGERS

At Lat.  $39^{\circ} 32.77'$ , Long.  $74^{\circ} 16.24'$ , at edge of channel, a concrete trough that bares  $3\frac{1}{2}$  feet at low water is 12 feet long and  $\frac{1}{4}$  feet wide. This was located on b day 1935, Positions 105 to 106, page 65, volume 1. No note of this is made in 1935 report.

The only other dangers to be found on this sheet are the shoal areas. Unless local knowledge is obtained, all boats navigating in this area should remain in the well marked channels.

#### CHANNELS

The main inland waterway channel crosses this sheet and is well marked with the standard New Jersey Department of Commerce and Navigation symbols. The controlling depth across this sheet in the main inland waterway channel is about 7 feet at mean low water. The alternate route across the west side of this sheet is clear of obstructions and well marked in the dredged and narrow parts and has a controlling depth of about  $3\frac{1}{2}$  feet south of Gaunts Point. The dredged channel to Tuckerton is well marked and has a controlling depth of  $6\frac{1}{2}$  feet at Lat.  $39^{\circ} 33.4'$ , Long.  $74^{\circ} 19.15'$ , Positions 97 to 98 k day. *6'st outlet*

#### ANCHORAGES

Good anchorage can be obtained behind Tucker Island, in the natural channel southwest of Story Island, in the natural channel northwest of Long Beach and east of Beach Haven, and in the natural channel northwest of Beach Haven. This last mentioned channel is another alternate inland waterway route and is well marked with buoys and beacons and has a controlling depth on this sheet of about  $7\frac{1}{2}$  feet near the north edge of the sheet.

#### COMPARISON WITH PREVIOUS SURVEYS

The survey checks well with previous surveys available, except near and in Beach Haven Inlet, where the channel changes with each storm and season. *See Rev. par. 7 for further details.*

#### GEOGRAPHIC NAMES

See descriptive reports for graphic control sheets.

#### LANDMARKS FOR CHARTS

See descriptive reports for graphic control sheets in this area.

SHORELINE

Some change in the shoreline was found from that compiled by the air-photo parties. In all cases the air-photos were not clear and the shoreline had been marked approximate. These areas were surveyed by the topographer, see graphic control sheets.

DOCKS

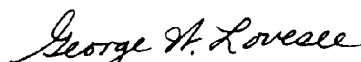
Numerous good docks with ample water for boats drawing up to 6 and 7 feet can be found at Beach Haven and in Tuckerton Creek. Gas and supplies can be obtained at Beach Haven and Tuckerton. There are numerous marine railways and storage places in Tuckerton Creek for the largest yachts cruising in these waters.

Submitted by,

Approved and forwarded:



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



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

NOTES ON DESCRIPTIVE REPORT OF B. H. RIGG, 1935.

SURVEY METHODS (c)

Tide gages were not installed at Bonds C.G. and Story Island as recommended.

Page 1 (d) All incompleted areas were completely surveyed in 1936.

NEW GEOGRAPHIC NAMES Page 5

Big Thorofare is shown on air-planimetric sheet as Big Creek. T-5446

Roses Cove is shown on air-planimetric sheet as Rose Cove. T-5446

app'd name  
(corrected.)

app'd name

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6216** .....

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

Number of positions on sheet	<i>.40.11</i>
Number of positions checked	<i>.48.</i>
Number of positions revised	<i>..2..</i>
Number of soundings recorded	<i>27.112</i>
Number of soundings revised	<i>..3.46</i>
Number of signals erroneously plotted or transferred	<i>..0..</i>

Date: *12 Oct., 1937.*

Verification by *S. C. McBlanton*

Review by *Harold W. Murray*

Time: *13 days 5 hours*

Time: *4 " + "*

HYDROGRAPHIC SURVEY NO. H-6216

Smooth Sheet. Yes

Boat Sheet Yes

Sounding Records 17 Vols. \_\_\_\_\_

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes

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 ..... 33 .....

Last Date Sept. 29, 1936

Remarks

Decisions

1		see T-5446
2		" "
3		" "
4		" "
5		" "
6		" "
7		" "
8		" "
9		" "
10		
11		USGB decision
12		
13		see T-5446
14		" "
15	* Do not ink on this sheet .	" T-5445
16	* " " " " " "	" "
17		USGB decision
18	* Do not ink on this sheet	
19	* 2 Islands called "Parker Is." on N.W. Atlas Sh. #33	
20	+ called "Parker Id." USG.S.	
21	* <del>do not ink on this sheet</del>	see T-5444
22		USGB decision
23		
24		see T-5445
25		" ✓
26		" "
27		USGB decision
M 234		

#16216

# GEOGRAPHIC NAMES

Survey No. H-6216

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. On local Maps N.J. Atlas # 33	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.	
✓ <u>Thompson Creek</u>	GNS									1
✓ <u>Parkertown Creek</u>	GNS 1216- Parker Run			D.R. pg. 4						2
✓ <u>Rose Point</u>	GNS									3
✓ <u>Parker Cove</u>	appd									4
✓ <u>Tuckerton Creek</u>	✓ appd									5
✓ <u>Jeremy Creek</u>	Jeremy Cr. G.N.S.									6
✓ <u>Jessie Point</u>	GNS			D.R. pg. 4						7
✓ <u>Edge Cove</u>	✓ appd									8
✓ <u>Long Point</u>	✓ appd									9
✓ <u>Main Channel</u>				D.R. pg. 5						10
✓ <u>North Marshelder Islands</u>										11
✓ <u>Thorofare Point</u>	GNS			D.R. pg. 5						12
✓ <u>Gaunts Point</u>	GNS Gaunt									13
✓ <u>Little Egg Harbor</u>	✓ appd									14
( <u>West Sedge</u> ) *	✓ appd									15
( <u>East Sedge</u> ) *	✓ appd									16
✓ <u>Shelter Island</u>	✓									17
( <u>Little Island</u> ) *	✓ GNS 1216 Gull I.			D.R. pg. 5						18
<u>Lower Little Island</u> }	*									19
<u>Parker and Pocket Island</u> }	( <del>S</del> ) ( <del>B</del> )		Parker I.	see D.R. T. 5444 Name List	Parker Is.	a duplication in this area				20
( <u>Parker Sedge</u> ) *										21
✓ <u>South Marshelder Islands</u>										22
✓ <u>Big Thorofare</u>	GNS 1216 - WillctH.			D.R. pg. 5						23
✓ <u>Little Thorofare</u>	GNS			D.R. pg. 5						24
✓ <u>Marshelder Point</u>	✓ (appd)									25
✓ <u>Story Island</u>	✓ appd									26
✓ <u>Hither Island</u>	✓									27

Remarks

Decisions

1		USGB decision
2		" "
3		See T-5445
4	* Do not ink on this sheet	" "
5		see T-5445
6		" "
7		" "
8		" "
9		USGB decision
10		see T-5445
11		USGB decision
12		
13		
14	* Big sheephead Th (4N3) Sheep head Cr (1216)	see T-5445
15		" "
16		" "
17		see T-5446
18		see T-5445
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. E-6216

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
✓ <u>Middle Island</u>	✓										1
✓ <u>Johnny Sedge</u>	✓										2
✓ <u>Bunting Sedge</u>	appd										3
( <u>Middle Sedge</u> ) *	GNS										4
✓ <u>Garrel Island</u>	✓ appd										5
✓ <u>Mordecai Island</u>	GNS										6
✓ <u>Beach Haven</u>	✓										7
✓ <u>Long Beach</u>	✓ appd										8
✓ <u>Marshelder Channel</u>	✓										9
✓ <u>Foxboro Point</u>					D.R. Pg. 5						10
✓ <u>Goodluck Sedge</u>	✓										11
✓ <u>The Cut</u>					D.R. Pg. 5						12
✓ <u>Main Channel</u>					D.R. Pg. 5						13
✓ <u>sheepshead Cr</u> <u>Big Sheephead Thorofare</u>	GNS*										14
✓ <u>Beach Haven Inlet</u>	✓ appd (one word)										15
✓ <u>Tucker Island</u>	✓ appd GNS										16
✓ <u>Jeremy Pt</u>	1246 Jessie Pt				D.R. Pg. 4						17
✓ <u>Goosebar Sedge</u>	✓ appd										18
<del>Island and Rocks</del>					D.R. Pg. 5						19
											20
											21
											22
											23
											24
											25
											26
											27

Names underlined in red approved  
by LHE on 9/14/37

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT  
~~PHOTO STAT COPY~~

} No. H -6216  
~~NOXX~~

{ 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
----	-------------



200

### TIDE NOTE FOR HYDROGRAPHIC SHEET

September 14, 1937.

Division of Hydrography and Topography:

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

Plane of reference

~~Tide Records~~ approved in  
17 volumes of sounding records for

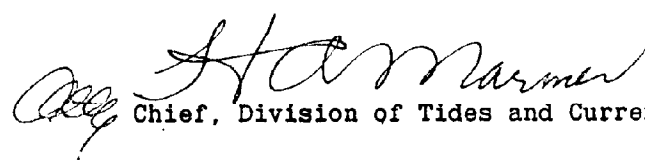
HYDROGRAPHIC SHEET 6216

Locality Little Egg Harbor and Beach Haven Inlet, N. J.

Chief of Party: B. H. Rigg and L. D. Graham in 1935, 1936.

- Plane of reference is mean low water reading
- 2.0 ft. on tide staff at Tucker Island, 1935
- 7.1 ft. below B.M. 1
- 1.4 ft. on tide staff No. 1, Tucker Island, 1936
- 7.1 ft. below B. M. 1
- 0.0 ft. on tide staff No. 2, Tucker Island, 1936
- 6.9 ft. below B. M. 1
- 1.4 feet on tide staff at Tuckerton
- 3.5 ft. below B. M. 1
- 1.1 ft. on tide staff at Beach Haven
- 4.8 ft below B. M. 1
- 1.5 ft. on tide staff at Long Point
- 3.5 ft. below B. M. 1

Height of mean high water above plane of reference is 3.8 feet at Tucker Island, 1935; 3.3 feet at Tucker Island, 1936; 2.4 feet at Tuckerton; 2.2 feet at Beach Haven and Long Point.  
Condition of records satisfactory except as noted below:

  
Chief, Division of Tides and Currents.

12 October, 1937.

Report on H- 6212  
Verifying and Inking

1. The records, in general, conform to the requirements of the General Instructions. ✓
2. The usual depth curves can be completely drawn within the limits of the survey. The one half foot was added to the six and twelve foot soundings, when warranted, in order to smooth out the one and two fathom curves. ✓
3. The field plotting was completed to the extent prescribed in the Hydrographic Manual. However in many cases the field plotter was very careless and used poor judgment in his selection of soundings. *not considered of sufficient importance to mention in Review H.W.M.*
4. The office draftsman did not have to do over any part of drafting done by field party except as noted on statistic sheet. However, on a big portion of the sheet the shoreline was not inked. *necessary portion inked in office.*
5. The junctions with the contemporary adjacent sheets were found to be satisfactory, except H- 6195 (1936).  
H - 6195 (1936) was surveyed a year later and due to a storm during the winter of 1935-36, the shoreline and sandy bottom changed materially. Therefore we find a discrepancy which will be adjusted by the Reviewing Section. *See Rev. Par. 6c for disposition H.W.M.*
6. The signals and shoreline were taken from the following topographic maps: T - 6400a (1935), T - 6401 a&b (1935-36), T - 6399 b (1938), T - 5444 (1932), T - 5445 (1932-33), T - 5446 (1932), and T- 5447 (1932). ✓
6. The aids to navigation on the smooth sheet were located by topography and hydrography. Discrepancies were found to exist which probably is caused by these buoys being located in two different years. The above discrepancy will be studied and adjusted by the Reviewing Section. *Disposed of. H.W.M.* ✓

Respectfully submitted,

*G. C. McGlasson*

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6216 (1935-36) FIELD NO. 7

Little Egg Harbor and Beach Haven Inlet,  
Atlantic Coast, N. J.

Surveyed in July 1935 and Sept. 1936, Scale 1:10,000.  
Instructions dated May 16, 1935 (E. H. Kirsch)

Hand Lead Soundings.

3 Point fixes on shore signals.

Chief of Party - L. D. Graham and B. H. Rigg  
Surveyed by - G. W. Lovesee and Karl B. Jeffers  
Protracted by - K. B. J., G. E. Varnadoe, T. M. Williams  
and E. E. Brown  
Soundings plotted by - K. B. J. and E. B. B.  
Verified and inked by - G. C. McGlasson

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

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

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project (see par. 6c).

3. Shoreline and Signals.

- a. The shoreline is from topographic maps: T-5444 (1932), T-5445 (1932-36), T-5446 (1932) and T-5447 (1932).
- b. The signals are from graphic control sheets: T-6399b (1935), T-6400a (1935), T-6400b (1935-36), T-6401a (1935-36) and T-6401b (1935) and have been supplemented by several hydrographic signals, the cuts for which are listed in the index of the sounding records.

4. Sounding Line Crossings.

General agreement of sounding line crossings is satisfactory. Differences of 1 to 3 feet, however, occur in some areas such as in lat. 39° 32.3', long. 74° 17.5' where the 1935 development (red position numbers) crosses the 1936 development (blue position numbers). This is due to small changes in bottom occurring between the two season's work and will cause no particular difficulties in charting.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including portions of the low water curve.

6. Junctions with Contemporary Surveys.

- a. The junction to the northeastward with H-6215 (1936) is satisfactory.
- b. The junction to the southwestward with H-5893 (1935) is satisfactory.
- c. H-6195 (1936) joins the present survey in Beachhaven Inlet. The overlap is extensive because of the radical changes having taken place in the inlet since the work on the present survey (1935) was done. The 1936 work on H-6195 was carried inside the inlet to effect a satisfactory junction with the less changeable areas. This was accomplished except in the vicinity of lat. 39° -32.1' long. 74° -17.3' where the 1936 work was not carried far enough in the channel to determine the northern limit of the shoal area here, the result being 2 to 4 foot depths on the 1936 work joining 7 to 10 foot depths on the 1935 work. Since this channel is no longer the used channel (see latest chart), this deficiency is of no great importance at this time.

For the convenience of the compiler, the portion of the present survey that was resurveyed in 1936 on H-6195 has been inked in red and should not be used in charting the common area. A junction has been shown on H-6195 (1936) with the black work only from the present survey, none of the red work having been transferred.

7. Comparison with Prior Surveys.

H-109 (1840), H-110 (1840), H-1125 (1871), H-1158b (1874),  
H-1196 (1873), H-1197a (1873), H-2657 (1903) and H-4387 (1924).

Portions of each of the above surveys which are on scales of 1:10,000 except H-4387 (1924) which is 1:5,000 fall within the limits of the present survey.

The vicinity of Beachhaven Inlet which is included in all of the above sheets except H-1197a (1873) is an exceedingly changeable one with respect to both shoreline and hydrography. The instability even for a period of one year being well borne out by the 4 to 9 foot 1935 depths in lat. 39° 31.5', long. 74° 16.5' which one year later were enclosed by the highwater line. (See shoreline of June 1936 on T-6400b). A detailed discussion of changes noted would serve no useful navigational purpose and is therefore omitted. It is to be noted, however, that in 1840 the inlet was 2150 meters wide (from T-119). By 1871-74 the point at Long Beach Island had advanced 2 miles southwestward and the inlet was then closed. By 1924 the point had receded to a position approximately 1/2 mile NE of that on the present survey and had then apparently completed one cycle.

for since then it again moved southwestward to the position shown on the present survey and by June 1936 (T-6400b) was an additional 300 m. further to the SW., the inlet on the present survey being 1300 meters wide and in June 1936 only 800 meters wide. The northern and eastern limits of Tucker Island have also been subjected to changes but they are not so extensive.

Of the above sheets, portions of H-1125 (1871), H-1196 (1873) and H-1197a (1873) taken together cover the main part of the present survey. Aside from several artificial channels shown on the present survey which were dredged subsequent to 1873, the main topographic and hydrographic features have persisted. Changes of 1 to 5 feet, however, are noted in portions of the main thoroughfare leading to Beachhaven Inlet. In the broad flat areas, portions of several narrow channels with depths varying 1 to 6 feet deeper than the present survey have been filled in. In Big Sheephead Creek, the present survey depths show a general shoaling of 1 to 17 feet.

The present survey should supersede the above surveys in future charting.

8. Comparison with Chart No. 3243 (New print dated July 7, 1937).

a. Hydrography.

Hydrography shown on the charts originate with surveys discussed in previous paragraphs of this review except the 5 foot sounding in lat.  $39^{\circ} 35'$ , long.  $74^{\circ} 16'$  which originates with Bp. 14965 (1914) and is in good agreement with the present survey depths. The present survey should supersede this survey in future charting.

b. Controlling Depths.

- (1) The charted controlling depth in the dredged channel in the vicinity of lat.  $39^{\circ} 34'$ , long.  $74^{\circ} 20'$  is 6 feet as of June 1936. The present survey shows slightly deeper depths. Chart Letter 534 of 1937 which is subsequent to the present survey states that the controlling depth is 6 feet as of June, 1937.
- (2) Bp. 30623 (1937) which is subsequent to the present survey states that the dredged channel in the vicinity of lat.  $39^{\circ} 32.5'$  long.  $74^{\circ} 16.7'$  has been abandoned, the natural channel to the southeastward being used instead (See par. 8b(5) for further details). This correction has already been applied to the chart.
- (3) The charted controlling depth in the dredged channel in the vicinity of lat.  $39^{\circ} 34.3'$ , long.  $74^{\circ} 14.4'$  is  $5\frac{1}{2}$  feet as of 1935 (authority: Chart Letter 802 of Sept. 1935). This is subsequent to and supersedes the present survey information.

- (4) The charted controlling depth in the dredged channel in Parker Cove in vicinity of Lat. 39° 36.4, Long. 74° 17.2' is 6 feet and originates with Chart Letter 383 of 1931 received from the Board of Commerce and Navigation, New Jersey. This channel was not specifically developed on the present survey but such depths as were obtained show no evidence of its existence.
- (5) A general note on the chart states that the controlling depth in the continuous inside route is 4 to 10 feet as of September 1935. This is borne out by the present survey, except in the Alternate Route Channel where several depths of  $3\frac{1}{2}$  feet (1936 development) are shown in Lat. 39° 34.3, Long. 74° 19.8. Another exception is at the junction of the two channels in Lat. 39° 31.8, Long. 74° 17.3 where the present survey shows controlling depths of 1 foot. H-6195 (1936) however, which supersedes the present survey here (see Par. 6c, this review) shows maximum depths of 2 to 3 feet just northward which is also less than that charted. The northeasterly channel here originates with Bp. 30623 (1937) and is subsequent to the present survey. It is possible that deeper depths exist here although they are not borne out by the 1936 work.

c. Aids to Navigation.

Inasmuch as the present survey is composed of two season's work, most of the aids located during the 1935 season's work were found to have been destroyed, removed or re-established in different geographic positions when field work was resumed in 1936 and were therefore relocated. For the purpose of the record, both locations are shown on the smooth sheet. The beacons that were destroyed in 1936 or relocated in 1936 have been so designated. The buoys in each case, however, are accompanied by the date of establishment.

The charted aids to navigation are shown in a portion of the inland waterway only, maintained aids at the entrance to Beachhaven Inlet being omitted as they are frequently moved in position. The inland waterway aids are maintained from March to November. (See general notes on chart). The piles on which the lighted beacons are located are usually destroyed during the winter (see D. R., T-6400b (Ad. Wk. 1936), page 7).

The present charted aids originate with B. P. 30623 (June 14, 1937) and L. H. N. to M 30 (July 30, 1937) and are subsequent to the present survey information. A comparison would be of no material value at this time and is therefore omitted.

9. Field Plotting.

Field protracting and plotting were satisfactory and conform to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

No additional field work is required.

11. Note to Compiler.

The compiler's attention is called to the following:

- a. Par. 6c of this review relative to treatment of the junction with H-6195 (1936).
- b. Par. 8c of this review relative to the status of the various aids to navigation.

12. Superseded Prior Surveys.

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

H-109 (1840) in part  
 H-110 (1840) in part  
 H-1125 (1871) in part  
 H-1158b (1874) in part  
 H-1196 (1873) in part  
 H-1197a (1873) in part  
 H-2657 (1903) in part  
 H-4387 (1924) in part

## 13. Reviewed by Harold W. Murray, October 19, 1937.

Inspected by A. L. Shalowitz.

Examined and approved:

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

*L. O. Dolbert*  
 Chief, Division of Charts.

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

*G. H. Hude*  
 Chief, Division of H. & T.

*Applied to drawing of Chart 1216 - Jan. 8, 1938 - J.W.  
 Applied to chart 8254 July 1938 W.H.C.  
 Applied to chart 825 June 1939 W.H.C.*