

8219

Diag. Cht. No. 1216-2.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. BN-1254 Office No. H-8219

LOCALITY

State New Jersey

General locality

Locality Vicinity of Beach Haven

19/54

CHIEF OF PARTY

H..J. Seaborg

LIBRARY & ARCHIVES

DATE November 4, 1957

8-1870-1 (1)

8219
6128

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8219 ✓

Field No. BN - 1254 ✓

State New Jersey ✓

General locality ~~South Jersey Coast~~

Locality Vicinity of Beach Haven
~~Beach Haven Inlet and north of~~

Scale 1:10,000 Date of survey 9/30 to 10/28, 1954

Instructions dated 4 May 1954, 8 October 1954.

Vessel LAUNCH CS - 175

Chief of party Harold J. Seaborg

Surveyed by J. R. Plaggmier, R. H. Houlder

Soundings taken by fathometer, ~~graphic recorder, hand lead, wire~~ sounding pole

Fathograms scaled by ship's personnel

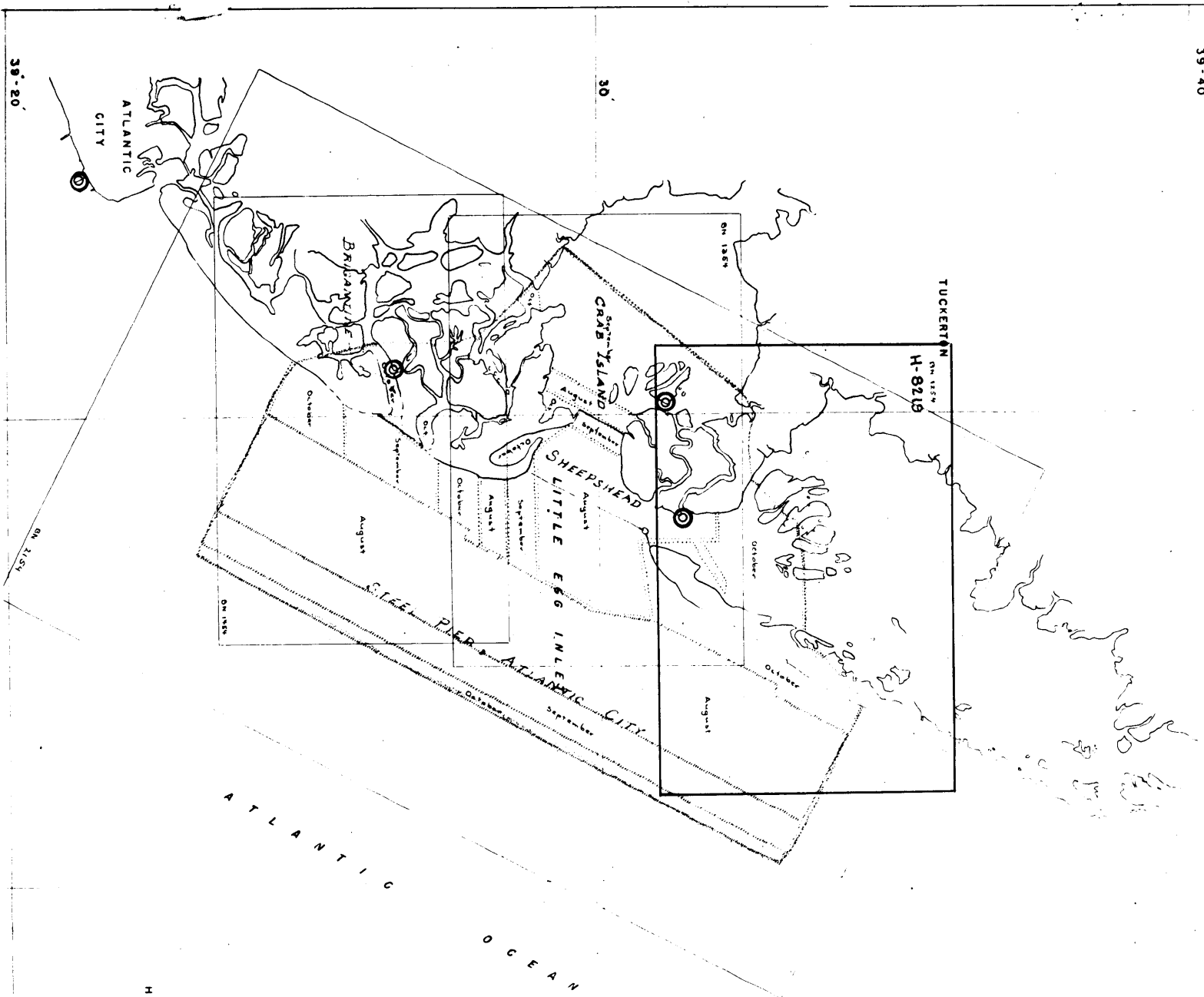
Fathograms checked by R. H. Houlder

Protracted by Paula George & R.D. Lynn

Soundings penciled by A. Kaupa

Soundings in ~~fathoms~~ feet at MLW MLLW AND ARE TRUE DEPTHS

REMARKS: _____



LEGEND

- SHIP HYDRO
- LAUNCH HYDRO
- TIDE GAGE

TIDAL AREAS

MONTHLY PROGRESS SKETCH
 TO ACCOMPANY SEASONS REPORT
 HYDROGRAPHY

LITTLE EGG INLET - N.J.

PROJECT GS-373
 28 JULY 1954
 AUGUST 1954
 SEPTEMBER 1954
 28 OCTOBER 1954

U.S.C.B.G.S.S. BOWEN
 H.J. SEABORG CHIEF OF PARTY
 SECTION CHARTS 1216-1217
 SCALE 1:80,000

DESCRIPTIVE REPORT

to accompany

INSHORE HYDROGRAPHIC SURVEYS

FIELD NOS. BN-1254, 1354, 1454

U. S. C. & G. S. Ship BOWEN

Harold J. Seaborg, Commanding

Scale 1:10,000

11 August to 28 October, 1954

A. PROJECT:

Project CS-373 was performed under instructions dated 4 May, 1954 and supplemental instructions in the letter dated 8 October 1954.

B. SURVEY LIMITS AND DATES:

A basic hydrographic survey was accomplished in the vicinities of Beach Haven, Little Egg, and Brigantine Inlets, New Jersey.

H-8217(1954)
I. BN-1254: Work commenced on 30 September and ended on 28 October, 1954. Junctions were made with contemporary surveys BN-1354 and BN-2154, and with prior surveys H-6216, 1:10,000, 1935, and H-6225, 1:10,000, 1937, and H-6225 Add'l. Work 1939. Limits of the survey on this sheet are Latitudes 39°-32', 39°-34.5', and Longitudes 74°-12', 74°-20.1'.

H-8220(1954)
II. BN-1354: Work commenced on 11 August and ended on 28 October, 1954. Junctions were made with contemporary surveys BN-1254, BN-1454, and BN-2154, and with prior surveys H-5893, 1:10,000, 1935. Limits of the survey on this sheet are Latitudes 39°-28', 39°-32' and Longitudes 74°-23.5' and 74°-14.7'.

H-8221(1954)
III. BN-1454: Work commenced on 9 September and ended on 25 October, 1954. Junctions were made with contemporary surveys BN-1354 and BN-2154, and with prior surveys H-6144, 1:10,000, 1936, and H-6196, 1:10,000, 1936. Limits of the survey on this sheet are Latitudes 39°-24.3', 39°-28.1', and Longitudes 74°-17', 74°-21.7'.

IV. A graphical presentation of the Sheet Limits is shown on chart section appended to this report entitled "TIDAL AREAS".

C. VESSELS AND EQUIPMENT:

The survey was accomplished using LAUNCH CS-175 and an aluminum skiff. LAUNCH CS-175 is a 31 foot plywood boat drawing one foot, ten inches of water. It has a turning radius of about 10 meters at the sounding speed of 10 knots.

The launch was mostly based at the Little Egg Inlet Coast Guard Life-boat Station.

All soundings were obtained using 808-J type portable depth recorders and sounding poles. Fathometers 100s and 157spx were used on the three sheets. A sounding pole was used only at the extreme inshore ends of sounding lines and when passing over shoals, to supplement the fathometer.

D. TIDE AND CURRENT STATIONS:

I. Tides: See tide note appended to this report.

II. Currents: No current stations were observed.

Strong currents were found thru the access channel to Brigantine Channel, and thru the deep water areas inside Beach Haven and Little Egg Inlets.

E. BOAT SHEETS:

Boat sheets were prepared and furnished by the Washington Office.

F. CONTROL STATIONS:

A list of control stations, ^{by Norfolk Office} is appended to this report. These stations were located by triangulation, topographic, hydrographic, and photogrammetric methods.

G. SHORELINE AND TOPOGRAPHY:

1950 Photogrammetric surveys, <sup>F9502-N45 (1950-51)
F9501-5 (for H-8219)</sup> provided the basic source for shoreline and topographic details. Extensive changes around the entrances to the inlets necessitated partial relocation of the high water line by sextant fixes. The revised shoreline is shown in red on the photogrammetric manuscripts *and on the smooth sheets of this area.*

H. SOUNDINGS:

All soundings were obtained by using Submarine Signal Company type 808-J portable depth recorders, and sounding poles.

Standard procedure was used in obtaining all the usual corrections applicable. These corrections have all been entered and checked in the sounding volumes and the analysis forwarded to the Norfolk Processing Office.

Leadline soundings and bottom characteristics were obtained in accordance with the Hydrographic Manual.

I. CONTROL OF HYDROGRAPHY:

The survey was controlled by visual fixes except in the upper reaches of creeks, where hydrography was referred to topographic details.

J. ADEQUACY OF SURVEYS:

The survey on Sheet BN-1254, ^{H-8219 (1954)} is considered complete and adequate along the outer coast. The inland survey is as complete as time would allow. Additional work would be necessary to make this an adequate basic survey; however the present hydrography clearly indicates the character of the area.

The surveys on Sheets BN-1354 ^{H-8220 (1954)} and BN-1454 ^{H-8221 (1954)} are considered adequate and complete.

K. CROSS LINES:

Cross lines were run in compliance with Paragraph 357 ⁸⁺¹⁰⁷ of the Hydrographic Manual.

L. COMPARISON WITH CHART AND PRIOR SURVEYS:

A comparison was made with prior surveys Nos. H-6216, 1:10,000, 1935-6; H-6225, 1:20,000, 1937; H-6195, 1:10,000, 1936; ~~████████████████████~~ H-5893, 1:10,000, 1935; H-6145, 1:10,000, 1935; H-6196, 1:10,000, 1936; and with charts Nos. 825, 826, 1216, and 1217. A satisfactory junction was made with prior surveys in the Great Bay area; however in the areas near the inlets the bottom has changed extensively.

With reference to that part of the preliminary review dated 18 March 1954, which relates to the three launch sheets, the following conclusions were derived.

Item No. 1.

The areas referred to are undergoing rapid and erratic changes as evidenced by the difference in character of the shore line and the shoals between the photogrammetric survey in 1950 and the present hydrographic survey.

4. Shoalest depth in this area is apparently 8 feet. 6 foot depths were found .3 miles and 2 foot depths found .5 miles northwest of the area.
5. The wreck was located but it has subsequently been removed and should not be shown on the charts.
- 6, 8. The piles referred to were not found after a careful examination of the area.
7. The pile was located as charted (Vol. 1, p. 35, Pos. ²le, skiff)

See
Descriptive
Report
H-8220
(1954)

Misc.

(steel obst.) (wreck awash at MHW on T-9501-5)
a.) A mass of hard material, 2 ft. in diameter was located as shown on the preliminary review at Latitude $39^{\circ}-32.34'$, Longitude $74^{\circ}-16.91'$, by position 48f; Volume 3, Sheet 1254. (H-8219)

b.) The pile circled on the preliminary review at Latitude $39^{\circ}-30.90'$, Longitude $74^{\circ}-17.87'$ was not verified.. Although there was no extensive investigation of the area, the pile is believed to be extinct.

c.) Piles shown on chart 826 at Latitude $39^{\circ}-25.47'$, Longitude $74^{\circ}-20.68'$, and at Latitude $39^{\circ}-25.44'$, Longitude $74^{\circ}-20.31'$, were not found. Although no extensive investigation was undertaken, the piles are believed to be extinct. The piles further south, however, were verified. See Review H-8221 (1954)

H-8220
(1954)

N. DANGERS AND SHOALS:

1.* A 6" steel pipe, awash at MHW was located at Lat. $39^{\circ}-30.37'$, Long. $74^{\circ}-17.48'$, by pos. 106 c, Volume 1, Sh. 1354. Not on H-8219 ⊗

2. A mound of rocks, 5 meters in diameter, awash at MLW, was located at Lat. $39^{\circ}-30.53'$, Long. $74^{\circ}-19.85'$, by pos. 106 aa, Volume 12, Sh. 1354. ⊗

3.* A 2 foot shoal in fringes on the Intracoastal Waterway channel, near Beach Haven Inlet at Lat. $39^{\circ}-31.35'$, Long. $74^{\circ}-17.55'$. ⊗

H-8220
(1954)

4.* Shoaling action is rapidly closing Beach Haven Inlet. Presently, breakers close off the channel on all but the calmest days.

5. The north channel at Brigantine Inlet has shifted and closed to a controlling depth of about 2 feet,

The south channel is unmarked, has breakers across it almost continuously and has a controlling depth of about 6 feet. Strong currents are encountered in the areas deeper than 12 feet.

DANGERS AND SHOALS (continued):

6. There is a suspended cable across a creek at Lat. $39^{\circ}-27.70'$, Long. $74^{\circ}-19.52'$. The vertical clearance at MHW is 10 feet. $\textcircled{H-8221(1954)}$

7. Investigation and developement of a shoal sounding at Lat. $39^{\circ}-25.06'$, Long. $74^{\circ}-19.33'$, obtained by the Ship BOWEN, failed to substantiate the sounding. $\textcircled{\text{Sounding from H-8222 considered to be astray by R.H.C.}}$

* Note: These three items reported in letter to the Director dated 28 October 1954.

O. COAST PILOT INFORMATION:

A separate report, copy of which is appended, has been submitted to the Director on Coast Pilot changes.

P. AIDS TO NAVIGATION AND LANDMARKS FOR CHARTS:

Separate reports of Floating and Non-Floating Aids to Navigation and Landmarks for Charts are appended to this report. The dm's and dp's were not entered on form 567 because of excessive distortion of the boat sheet.

Q. MISCELLANEOUS:

The new type sounding volumes were used on sheet No. BN-1454 and proved to be most unsatisfactory. The lack of color contrast and transparency of the pages materially increased the difficulties of recording. $\textcircled{H-8221(1954)}$

Respectfully submitted,

Richard H. Houlder

Richard H. Houlder,
Ensign, USC&GS.

Approved and Forwarded,

Harold J. Seaborg
Harold J. Seaborg,
Commander, USC&GS,
CHIEF OF PARTY.

Seasons Report: H.J. Seaborg 1954/132

TIDE NOTE

I. SHEET BN 1253: H-8219(1954)

Tide reducers for the survey of the inland waters were based on recorded tides at the Big Sheepshead Creek portable tide gage station. (Lat. $39^{\circ}31.4'$, Long. $74^{\circ}-17.8'$) (MLW reading on staff 2.2 ft.)

Tide reducers for the survey along the outer coast were based on recorded tides at the Atlantic City Steel Pier standard tide gage station (Lat. $39^{\circ}-21.30'$, Long. $74^{\circ}-25.10'$), for which hourly heights were furnished by the Washington Office.

II. SHEET BN-1354: H-8220(1954)

All outer portions of Beach Haven and Little Egg Inlets are based on the standard tide gage at Steel Pier, Atlantic City, N.J.

The west portion of Great Thorofare and that portion of Great Bay west of the line from the Little Egg Coast Guard Station south to the nearest point of land at Little Beach, utilize the tides obtained at the Crab Island portable tide gage station, Lat. $39^{\circ}-31.1'$, Long. $74^{\circ}-20.2'$. (MLW reading on staff 2.5 ft.)

All the area east of the line defined for the Crab Island station and west of the junction of the area controlled by the Steel Pier tide gage is controlled by the portable tide gage at Big Sheepshead Creek.

Reference is made to letter from the Assistant Director (36-rjb) dated 15 September 1954, approving the above described zoning.

III. SHEET BN-1454: H-8221(1954)

All outer portions of Brigantine Inlet and along the outer coast are based on tides from Steel Pier, Atlantic City, N. J.

All reducers for sounding from the breaker line inland are based on recorded tides at the Brigantine Channel portable tide gage station. (Lat. $39^{\circ}-26.6'$, Long. $74^{\circ}-21.0'$) (MLW reading on staff 0.4 ft.)

IV. SHEET BN-2154: H-8222(1954)

Tide reducers for this survey were based on recorded tides at the Atlantic City Steel Pier standard tide gage station for which hourly heights were furnished by the Washington Office.

* NOTE: See appended sheet for graphical presentation .

APPLIED BAR CHECK CORRECTIONS

PROJECT CS - 373

I. FATHOMETER 157 SPX (Sheets BN - 1254, 1354, 1454):

Date (1954)		Depths (feet)		Correction (feet)
From	To	From	To	
11 August	1 October (except 18 Sept.)	0.0	50.0	0.0
18 September	18 September	0.0	3.0	- 0.4
		3.2	6.2	- 0.2
		6.4	8.6	0.0
		8.8	11.4	+ 0.2
		11.6	14.8	+ 0.4
		15.0	20.4	+ 0.6
		20.6	28.4	+ 0.8
		28.6	36.2	+ 1.0
		36.4	44.4	+ 1.2
		44.6	52.6	+ 1.4

II. FATHOMETER 100 S (Sheets BN - 1254, 1354, 1454):

20 September	28 October	0.0	7.6	0.0
		7.7	13.6	+ 0.2
		13.7	40.0	+ 0.4
		40.1	55.0	+ 0.6

III. FATHOMETER 160 SPX (Sheet BN - 2154):

12 August	8 October	0.0	20.0	"A" Scale 0.0
		20.1	40.0	+ 0.2
		40.1	60.0	+ 0.4
		35.0	40.0	"B" Scale + 0.4
		40.1	60.0	+ 0.6
		60.1	80.0	+ 0.8

STATISTICS FOR HYDRO SURVEY H -
 (FIELD) BN - 1254
 USC&GS Ship B O W E N
 CS - 373

LAUNCH CS - 175

<u>Date</u> 1954	<u>Day</u> <u>Letter</u>	<u>Volume</u> <u>Number</u>	<u>Number of</u> <u>Positions</u>	<u>Detached</u> <u>Positions</u>	<u>Statute Miles</u> <u>of Sounding</u>
Sept.. 30	a	1	11	0	2.8
Oct. 1	b	1	151	0	32.5
2	c	1	15	0	2.5
5	d	2	97	0	17.5
21	e	3	94	0	16.1
22	f	3	100	5	13.2
23	g	3	36	3	6.7
25	h	4	108	0	13.8
26	j	4	76	0	6.9
27	k	4 & 5	110	0	11.5
28	l	5	49	0	4.6
Totals (LAUNCH CS-175) - - - - -			847	8	128.1

Aluminum Skiff

Oct. 11	a	1	62	62	0.0
12	b	1	19	19	0.0
Totals (Aluminum Skiff) - - - - -			81	81	0.0
TOTALS FOR SHEET BN - 1254 - - - - -			928	89	128.1

NORFOLK PROCESSING OFFICE
LIST OF SIGNALS
H-8219

TRIANGULATION STATIONS

FISH SEVEN ISLANDS, FISH FACTORY, WATER TANK, 1950
PIPE STANDPIPE (1), 1932-35
WAT BEACH HAVEN WATERTANK, 1932-35
SAINT JAMES, 1932

MARKED TOPOGRAPHIC STATIONS

HAV HAVEN, 1954 ← card set lost.

SOURCE T-9501S (1950-52)
*GPS computations with
H-8220*

TOPOGRAPHIC STATIONS

Ago Cup Daw End Har Him Old Oto She
Tow Woo

SOURCE T-9501S (1950-52)

Aft Gab Gee Mat Mid Not Ray Stack

¹⁴
SOURCE T-9502S (1950-51)

HYDROGRAPHIC STATIONS

Ant Vol. 5, pg. 23
Nat " 5, pg. 23
Pot " 5, pg. 23
Ski " 5, pg. 23
Tan " 5, pg. 23
Jon " 1, pg. 58

NORFOLK PROCESSING OFFICE
FLOATING AIDS TO NAVIGATION

H-8219

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
Marshelder Chan. Buoy 2	39-31.93	74-17.27	16'	49f	10/22/54 [✓]
Marshelder Channel Buoy 3	39-32.20	74-17.44	6'	50f	10/22/54 [✓]
Marshelder Channel Buoy 4	39-32.40	74-17.56	9'	51f	10/22/54 [✓]
Marshelder Channel Buoy 5	39-32.55	74-17.85	13'	52f	10/22/54 [✓]
Little Egg Harbor Buoy 66A	39-32.11	74-16.40	10'	62a	10/11/54 [✓]

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8219(Field No. Bn-1254)

GENERAL

This appears to be an excellent survey of the area covered. Soundings agree very well at crossings and no unusual conditions were encountered during the smooth plot.

SHORELINE

The new channel at Lat. 39-33.0 and Long. 74-15.2 was given the same width as shown on the boat sheet, approximately 60 feet. A note in the volume states that it is 60 meters wide.

All positions showing high-water-line changes were replotted on adjoining survey Bn-1354. ^{H-8220} The corrected shoreline was then transferred to this survey and inked in red. There are only minor differences when compared to changes shown by field party on black-line impression T-9501(S).

Norfolk, Va.
28 Oct. 1957

Respectfully submitted, —

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

GEOGRAPHIC NAMES

Survey No. H-3219

Name on Survey										
	A	B	C	D	E	F	G	H	K	
	On Chart No.	On Previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>New Jersey</u>			(title)							1
<u>Beachhaven Inlet</u>			(not Beach Haven)							2
<u>Long Beach</u>										3
<u>Beach Haven</u>			(town)							4
<u>Liberty Thorofare</u>										5
<u>Little Egg Harbor</u>										6
<u>Barrel I land</u>										7
<u>Barrel Channel</u>										8
<u>Middle Channel</u>										9
<u>Hither Channel</u>										10
<u>Marshelder Channel</u>									BGN	11
<u>Foxboro Point</u>										12
<u>Big Sheepshead Creek</u>			(tide station)							13
										14
										15
										16
Tide station off sheet:										16
<u>Steel Pier, Atlantic City</u>										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved 12-9-57

L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8219....

Records accompanying survey:

Boat sheets *.1*...; sounding vols. *.6*...; wire drag vols.; bomb vols.; graphic recorder rolls *4*-Envelopes special reports, etc. *1*-Smooth sheet and *1*-Descriptive report.

.....
Black line prints T-9502 N 45, T-9501 N 45, T-9505 N 45, T-9504 N and tracings of shoalme changes are with boat sheet H-8220.
 The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	<i>928</i>
Number of positions checked	.....	<i>77</i> ✓
Number of positions revised	.....	<i>0</i> ✓
Number of soundings revised (refers to depth only)	.....	<i>16 all minus sdgs.</i>
Number of soundings erroneously spaced	.....	<i>0</i>
Number of signals erroneously plotted or transferred	.....	<i>0</i>
Topographic details	Time	<i>2</i> ...
Junctions	Time	<i>0</i>
Verification of soundings from graphic record	Time	<i>2</i>

Verification by *J. C. Klemm*..... Total time *56*.. Date *8/6/58*

Reviewed by *[Signature]*..... Time *48*..... Date *29 Apr 1959*

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH
REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8219

FIELD NO. BN-1254

New Jersey - Vicinity of Beachhaven Inlet

Surveyed: September-October 1954

Scale 1:10,000

Project No. CS-373

Soundings:

Control:

808 Depth Recorder
Sounding Pole

Sextant fixes on shore
signals

Chief of Party - H. J. Seaborg

Surveyed by - J. R. Plaggmier, R. H. Houlder

Protracted by - Paula George and R. D. Lynn

Soundings plotted by - A. Kaupa

Verified and inked by - J. C. Chambers

Reviewed by - L. S. Straw

Date 29 January 1959

Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with T-9501 S (1950-52) and T-9502 N and S (1950-51) and with subsequent revisions by the hydrographer shown in red on the smooth sheet.

The source of the control is given in the Descriptive Report.

2. Sounding Line Crossings

The depths at sounding line crossings are in adequate agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves, including the 3-foot curve, where appropriate, were adequately delineated.

Principally because of the swift currents near the inlets in the inshore channels, the bottom is extremely changeable, particularly in the vicinity of lat. $39^{\circ} 32.00'$, long. $74^{\circ} 17.00'$. Along the outer coast it is generally smooth but contains low sand ridges which form at about a 30° angle with the shoreline. For example, lat. $39^{\circ} 33.35'$, long. $74^{\circ} 14.00'$ and lat. $39^{\circ} 32.15'$, long. $74^{\circ} 15.00'$.

4. Junctions with Contemporary Surveys

The junctions with H-8220 (1954) on the south and H-8222 (1954) on the east are adequate.

In accordance with Project Instructions the present survey was extended over the areas of the prior surveys both inland and along the outer coast far enough to make adequate junctions with our 1935-1937 surveys. Junctional soundings from prior surveys H-6216 (1935-36) and H-6225 (1937) on the north are shown on the present survey, except in lat. $39^{\circ} 33.7'$, long. $74^{\circ} 14.8'$ in Liberty Thorofare where dredging subsequent to prior survey H-6216 (1935-36) has been done.

In the vicinity of lat. $39^{\circ} 32.34'$, long. $74^{\circ} 20'$, soundings from the present survey have been transferred to H-6216 to supplement prior depths.

5. Comparison with Prior Surveys

- a. H-670 (1859) H-1558 (1882-83)
 H-1196 (1873) H-2657 (1903)
 H-1197a (1873)

These prior surveys have been compared with and are superseded by the 1935 to 1937 surveys which are discussed in the succeeding paragraph. Further consideration of the earlier surveys is deemed unnecessary in the present review.

- b. H-6195 (1936)
 H-6216 (1935-36)
 H-6225 (1937), Additional Work 1939

The area covered by the present survey is extremely changeable. Strong currents together with dredging operations at various times and places account for substantial shoreline and bottom changes; for example: The half mile long Goosebar Sedge (island) on H-6216 (1935-36) is shown on the present survey as a small oval-shaped land area in lat. $39^{\circ} 32.5'$, long. $74^{\circ} 16.55'$. Only a trace of the former 7-foot dredged channel northwest of Goosebar Sedge is visible. The depths in parts of Liberty Thorofare, lat. $39^{\circ} 33.7'$, long. $74^{\circ} 14.8'$ are in disagreement because of dredging subsequent to the 1935-36 survey.

A considerable amount of scouring has occurred from the shoreline to one-half mile seaward. Southward from lat. $39^{\circ} 34.00'$ the depths are progressively deeper on the present survey as compared to the depths on the prior surveys. The present survey is adequate to supersede these prior surveys within the common area.

6. Comparison with Chart 825 (latest print date 6-30-58)
 826 (latest print date 6-16-58)
1216 (latest print date 8-19-57)

A. Hydrography

1. The charted information originates with critical information from the present survey applied before verification and review, reported information, and 1952 surveys by the Bureau of Navigation, State of New Jersey, in Liberty Thorofare east of Mordecai Island (Bp. 49826-27).
2. The shape of the island in lat. $39^{\circ} 32.9'$, long. $74^{\circ} 16.50'$ does not agree with T-9505-S (1950-52).
3. The preliminary review of this area (dated March 18, 1954) indicated that several items within the limits of the present survey should be investigated:
 - (1) the charted rock awash in lat. $39^{\circ} 32.75'$, long. $74^{\circ} 16.25'$ which is a concrete trough according to survey H-6216 (1935-36), was not verified and is therefore carried forward to the present survey.
 - (2) The wreck originating with T-9501 S (1950-52) and charted in lat. $39^{\circ} 32.34'$, long. $76^{\circ} 16.91'$ was identified on the present survey as a steel cylinder 2 meters in diameter.
 - (3) The charted wreck originating with T-9501 (1950-52) in lat. $39^{\circ} 32.66'$, long. $74^{\circ} 18.35'$ was not verified by the present work and is therefore carried forward.
 - (4) The charted wreck (item 5 of the preliminary review) originating with Notice to Mariners No. 38 (1947) in lat. $39^{\circ} 32.10'$, long. $74^{\circ} 16.12'$ was located by the contemporary adjacent survey H-8220 (1954) but according to the Descriptive Report the wreck was subsequently removed.
 - (5) The wreck originating with T-9501 (1950-52) and plotted on the smooth sheet in lat. $39^{\circ} 32.31'$, long. $74^{\circ} 15.81'$ is not charted because of the small scale of the chart (1:40,000). The above information indicates that items (1), (2), and (3) should remain as presently charted, and item (4) deleted from the chart.

B. Aids to Navigation

The aids have been renumbered and additional fixed and floating aids have been established in the east entrance to Little Egg Harbor subsequent to the present series of surveys.

The buoys marking Marshelder Channel are in substantial agreement with the present survey.

Within the limits of the present survey all of the charted aids properly mark the channels for navigation.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.
- c. The minus soundings were incorrectly plotted. The smooth plotter had increased minus units at -0.8 and -1.8 instead of at -0.3 and -1.3.


8. Compliance with Project Instructions

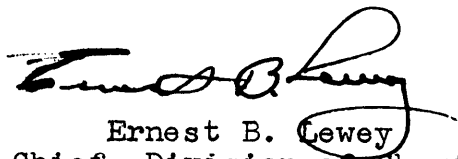
The survey adequately complies with the Project Instructions. However, it would have been desirable to dispose of items mentioned in paragraph 6A, 3 (1) and 6A, 3 (3).

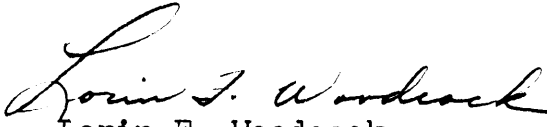
9. Additional Field Work


Paragraph "J" of the Descriptive Report indicates that time limitations prevented the execution of an adequate basic survey. The deficiencies within the area of this survey are of minor importance. With the few indicated additions from prior surveys, the area is adequately covered. No additional work is recommended.

Examined and approved:


Max G. Ricketts
Chief, Nautical Chart Branch


Ernest B. Lewey
Chief, Division of Charts


Lorin F. Woodcock
Chief, Hydrography Branch


Samuel B. Grenell
Chief, Division of Coastal Surveys

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

18 November 1957

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 8219

Locality Beach Haven Inlet, N.J.

Chief of Party: H. J. Seaborg in 1954

Plane of reference is mean low water, reading

2.2 ft. on tide staff at Big Sheepshead Creek Entrance

6.6 ft. below B.M. 1 (1954)

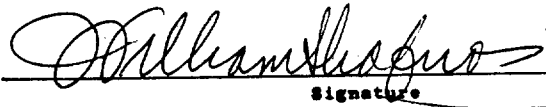
4.3 ft. on tide staff of 1922 at Atlantic City

12.1 ft. below B.M. 34 (1922)

Height of mean high water above plane of reference is:

Big Sheepshead Creek Entrance	3.1 ft.
Atlantic City	4.1 ft.

Condition of records satisfactory except as noted below:



Signature

Chief, Tides Branch

