6262

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

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } Sheet No. 17

State New Jersey

LOCALITY

Intracoastal Waterway

Peck Bay to Corson Inlet

1937

CHIEF OF PARTY

L. D. Graham

U. S. GOVERNMENT PRINTING OFFICE

6262

Form 537

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. 17

REGISTER NO. H·6262

State New Jersey

General locality Intracoastal Waterway

Locality ~~Corson Inlet~~ Peck Bay to Corson Inlet

Scale 1:10,000 Date of survey July - September, 1937

Vessel Launch MIKAWE

Chief of Party L. D. Graham

Surveyed by Raymond H. Carstens & T. M. Williams

Protracted by ~~George W. Lavesee~~

Soundings penciled by ~~George W. Lavesee~~

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by Leonard A. McGann.

Verified by Leonard A. McGann.

Instructions dated May 16, 1935

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet 17. H-6262

INSTRUCTIONS - May 16, 1935 Project HT-205

SURVEY METHODS

The usual hydrographic survey methods were used on this sheet. The soundings in Corson Inlet, and off-shore near the inlet, were taken from a 30 ft. hired motor launch, with a hand lead line, graduated in fathoms and feet. This work was done by Raymond H. Carstens, previous to the general work done on the sheet.

The inside work was done with a 24 ft. skiff propelled by outboard motors. In general the lines were run on ranges. However, in small winding creeks the lines were run by following the general trend of the shoreline and as described in the sounding volumes.

The positions in general were taken with sextants on shore signals that had been located on aluminum mounted graphic control sheets. In some small unimportant creeks and at places where a sextant fix was not practicable, positions were taken by estimating the location with respect to topographic features that could be identified on the compiled shoreline. The shoreline and geographic names were obtained from the air-planimetric sheets T-5639, T-5642 and T-5644. This shoreline was checked on the graphic control sheets. No lines were run in places where it was found to be too shoal for sounding, but at low tide, sextant positions were taken at various points to describe these areas as shown on the boat sheet.

DISCREPANCIES

The shoreline in places on Peck Bay and islands in the area between triangulation stations Boy and Stack, Large, appear to disagree with that shown on the air-planimetric sheet. These parts of shoreline and islands are not actually fast land but places where the water is very shoal and thickly overgrown with marsh grass, and covered by a few inches of water at high tide. See par. 3a, review.

The shoreline on the north side of the channel near the Corson Inlet bridge is shown to differ with that of the air-photo compilation. Three sextant positions, 99, 100 and 101 H day were taken to show the correct high water line. Lat. 39°13', long. 74°39' See par. 3a, review.

At Lat. 39° 12.62', Long. 74° 39.1', on position 6 J day, a one ft. sounding fell directly over a 17 ft. sounding, taken on a previous day. It was immediately noted when plotting the days work on the boat sheet and since the lines in this area were for development of a channel and known to have been run within two or three meters from shore, it is evident that the right angle was misread by two degrees. By changing this, the time and course check exactly. These depths referred to are reduced from predicted tides.

LIST OF STATISTICS FOR HYDROGRAPHIC SHEET 17 H-6262

Date	Day	Statute Miles	Soundings	Positions
July 27	A	10.2	338	69
29 30	B	25.5	901	169
30	C	16.4	489	93
Aug. 13	D	6.5	340	72
16	E	15.0	545	152
17	F	4.8	226	36
18	G	7.0	290	66
19	H	10.5	513	109
20	J	8.5	498	118
25	K	21.2	851	160
26	L	23.3	988	185
27	M	20.2	732	135
30	N	3.8	191	32
		172.9	6902	1396

Area = 5.96 square statute miles.

CHANNELS

The New Jersey Intra-Coastal Waterway crosses this sheet, beginning near the southern end of Great Egg Bay at Beach Thorofare. It follows a dredged channel through Pecks Bay and into Crook Horn Creek, then through Middle Thorofare to reach Ben Hand Thorofare, proceeding through Main Thorofare to the southern extremity of the sheet.

If going to Strathmere, swing southeastward at the confluence of Main Thorofare and Ben Hand Thorofare and proceed by way of Main Thorofare. The controlling depth from Ben Hand Thorofare to Strathmere is 7 ft.

The channel through Middle Thorofare into Corson Inlet is not navigable due to two fixed bridges with 6.2 ft. vertical clearances and horizontal clearances of not more than 11.0 ft. The controlling depth for the entire Intra-Coastal Waterway, within this sheet, is 4½ ft. at Lat. 39°13.68',46 Long. 74° 39.10'3.

AIDS TO NAVIGATION

There are no lighted or floating aids to navigation on the inside route in the area of this sheet. Stakes which display red crosses are to be left on the port side, while stakes displaying black triangules are to be left on the starboard side when proceeding northward. These stakes are of a temporary nature and subject to change. During the winter months ice usually destroys all channel markers and they are renewed in the spring by the State Board of Commerce and Navigation.

ADJOINING SHEETS

This sheet joins sheet 13 on the north (H-6254 (1937)) and sheet 18 on the south (H-6231 (1937)). The soundings at the northern and southern limits of the sheet check well with soundings on the adjoining sheets, differences being one foot or less.

BRIDGES AND CLEARANCES

All bridges and clearances on this sheet were submitted with the graphic control sheets of this area.

COMPARISON WITH CHART 3243, NEW PRINT No. 37,7-7

Considerable change has occurred at Corson Inlet, the northern shore having receded about ¼ mile. A middle ground, baring at low water has appeared ¼ mile N.E. of R.R. bridge at Strathmere, where the chart shows deep water. Corson Sound is much shoaler now than shown on the chart.

Approved and forwarded,

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

Submitted by,

T. M. Williams
Hydrographer

#-6262

Smooth sheet field no. 17 was plotted under the immediate supervision of the Chief of Party. The sheet and accompanying records have been inspected and are approved.

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

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 6262

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

Number of positions on sheet	1396
Number of positions checked	167
Number of positions revised	3
Number of soundings recorded	6902
Number of soundings revised	11
Number of signals erroneously plotted or transferred	-

Date: May 18, 1938

Verification by Leonard A. McLamore Time: 64 hrs.

Review by Harold W. Murray Time: 8¾ "

Verifier's Corrections by " 2 "

Verifier's Report on H-6262 (1937)

The requirements of the Hydrographic Manual instructions are complied with in the Records except in this detail: The field party failed to consistently give the name of the leadsman and the weight of the lead used during the day, at the beginning of the recorded day's work.

The signals shown in red and the corrections or revisions to shoreline originate with the following:-

CS. 128 M (EE)
CS 127 M (FF)
CS 126 M (GG)

There are a few revisions of shoreline which originate elsewhere. Shoreline in vicinity of lat. 39° 12.7 long. 74° 39.0 originates with boat sheet. Shoreline in vicinity of lat 39° 13.0 long. 74° 39.0 originates with sound. record Vol. 4, page 52.

Signals shown in green were spotted on CS 127 M from detail shown on planimetric map T-5642. They have been checked by at least one "cut" on plane table.

The shoreline and other topography of H-6262 (1937) originates with T-H-5639 (1932-1936) T-H-5642 (1932-1936) and T-H-5644 (1932-1936)

The junctions with all adjoining sheets are satisfactory. On the South H 6231 (1937) joins H-6262 (1937) on the north H-6254 (1937) joins. These sheets are all on 1/10,000 scale. On the east junction was made with H-6226 (1937) 1/20,000 scale. H6226 was enlarged by photostat to join.

Bridge clearances shown were copied from topographic maps of this area (given above).

Leonard A. McKann
May 18, 1937.

HYDROGRAPHIC SURVEY NO. H-6262

Smooth Sheet Yes

Boat Sheet Yes

Records; Sounding 7 Vols., Wire Drag ___ Vols., Bomb ___ 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 (Circular Nov.30, 1933) Yes

Hydrography: Total Days 13 ; Last Date August 30, 1937

Remarks

3776

	Remarks	Decisions
1		See T- 5642
2		" "
3		see T-5639
4		" "
5		see T- 5642
6		" "
7		" "
8		" "
9		" "
10		" "
11		" "
12		" "
13		
14		" "
15		" "
16		" "
17		" "
18		" "
19		see T-5644
20		" "
21	See C.S. 126 M (Correction Sheet)	" "
22		" "
23		see T-5642
24		see T-5644
25	For Title	USGB decision
26		
27		
M 234		USGB decision

GEOGRAPHIC NAMES

Survey No. H-6262

	Name on Survey	On Chart No. 1217 A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
V	Peck Bay	✓									1
V	Ben Elders Creek	GNS									2
V	Back Thorofare	✓									3
V	Ocean City	✓									4
V	Mill Creek	GNS									5
V	Upland Thorofare	GNS									6
V	Run Creek	GNS									7
V	Edward Creek	GNS									8
V	Crook Horn Creek	✓									9
V	Blackman Island	✓									10
V	Beach Creek	✓									11
V	Peck Beach	✓									12
	Atlantic Ocean	✓									13
V	Devils Island	✓									14
V	Devils Thorofare	GNS									15
V	Weakfish Creek	GNS									16
V	Middle Thorofare	GNS									17
V	Corson Inlet	✓									18
V	Main Channel	GNS									19
V	Flat Creek	✓									20
V	~~White~~ Whale Flat Creek	GNS									21
V	Strathmere	✓									22
V	Corson Sound	✓									23
V	Ben Hands Thorofare	✓									24
	Intracoastal Waterway										25
	Names underlined in red on chart by GFE on 4/16/38										26
											27
V	Great Egg Bay	✓									M 234

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT COPY

No. H-6262
No.

received Mar. 21, 1938
registered Mar. 26, 1938
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	✓	PHB	Page 2
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

✓82	T. B. Reed

✓

RAC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

April 5, 1938.

Division of Hydrography and Topography:

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

Plane of reference
~~Tide Reducers~~ are approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 6262

Locality Peck Bay to Corson Inlet, Intracoastal Waterway, N. J.

Chief of Party: L. D. Graham in 1937.
Plane of reference is mean low water reading
1.8 ft. on tide staff at P eck Bay
9.4 ft. below B.M.1
0.7 ft. on T. S. at Ocean City
8.8 ft. below B.M. 1
2.9 ft. on T. S. at Devil Island.
4.6 ft. below B.M. 1
2.9 ft. on T. S. at Ben Hand Thoro.
6.7 ft. below B.M. 1
2.4 ft. on T. S. at Corson Inlet
12.1 ft. below B.M. 1
4.1 ft. on T. S. at Atlantic City. off Limit of Sheet H-6262
15.8 ft. below B.M. 32

Height of mean high water above plane of reference is 3.6 ft. at Devil Island; 3.7 ft. at Peck Bay, Ocean City & Ben Hand Thoro.; 3.9 ft. at Corson Inlet; 4.1 ft. at Atlantic City.
Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6262 (1937) FIELD NO. 17

Peck Bay to Carson Inlet, Intracoastal Waterway, New Jersey
Surveyed in July - September 1937, 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.
Surveyed by - R. H. Carstens and T. M. Williams.
Protracted by - G. W. Lovesee.
Soundings plotted by - G. W. Lovesee.
Verified and inked by - L. A. McGann.

1. Condition of Records.

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

a. Bridge clearances shown on the contemporary topographic sheets were not shown on the smooth sheet. These were added in the office.

b. The name of the leadsman and weight of lead used was not consistently entered in the sounding records at the beginning of each day's work.

The Descriptive Report is clear 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.

3. Shoreline and Signals.

a. The shoreline originates with 1932-36 topographic maps T-5639, T-5642 and T-5644 and has been supplemented by revisions shown on 1937 correction sheets CS 126M, CS 127M and CS 128M. Revisions originating with the boat sheet or sounding records have been shown on the supplements to the 1932-36 topographic maps.

b. The signals originate with the above mentioned topographic maps and are supplemented by several signals (shown in green) which were spotted on topographic features from T-5642 (1932-36) and were checked by at least one cut on CS 127M (1937).

4. Sounding Line Crossings.

Agreement of depths at sounding line crossings is satisfactory.

5. Depth Curves.

The usual depth curves may be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

The junctions with H-6254 (1937) on the north, H-6231 (1937) on the south and H-6226 (1937) at the entrance to Corson Inlet are satisfactory.

The junctions with other authorized field work in the inshore areas to the north and south of Corson Inlet will be considered when that work is received from the field.

7. Comparison with Prior Surveys.

a. H-116 (1843) and H-1696 (1886) Scales 1:40,000.

A few soundings from these surveys fall within the present survey limits in the area off Corson Inlet. Good agreement exists in but a few places since the 1843 depths are generally from 1 to 10 feet shoaler and the 1886 depths, 1 to 4 feet shoaler than the present survey depths.

Shoreline changes in the vicinity of the inlet have been extensive. The northern point in 1843 was 600 m. S of the present survey position. By 1886, it had receded 930 m. N.W. where it then advanced 450 m. SE to its present survey position. The point on the south has steadily advanced northward to its present survey position which is approximately 550 m. N of that shown in 1843. The middleground shown in lat. 39° 12.8', long. 74° 38.7' on the 1886 survey is now enclosed partly by the high water line and partly by the low water line.

Because of the changes noted, the present survey should supersede this survey in future charting.

b. T-2054 (1891) and H-2165 (1891), Scales 1:20,000.

This topographic sheet containing hydrography, together with the hydrographic sheet covers the entire inland area of the present survey except that a number of the minor streams were not surveyed. The hydrography is unusually sparse and an adequate comparison cannot be made with the present survey. It is noted, however, that the dredged channels in Peck Bay and in lat. 39° 13.2', long. 74° 39.3', are subsequent to the 1891 survey. The general depths in Peck Bay and on the east side of Corson Sound are unchanged. At Corson Inlet, general depth changes of 1 to 38 feet have occurred. Shoreline changes in the vicinity of the inlet are similar to those noted above in the comparison with H-1696 (1886). The present survey covers the essential features in greater detail and should supersede these

surveys in future charting.

8. Comparison with Chart 1217 (New Print dated Aug. 27, 1937)
Chart 3243 (New Print dated Dec. 27, 1937).

a. Hydrography.

Hydrography shown on the chart originates with surveys discussed in preceding paragraphs and no further consideration in this review is necessary.

b. Controlling Depths.

A general note on chart 3243 states that the controlling depth in the New Jersey Inland Waterway is 4 to 10 feet as of September 1935. The present survey shows a controlling depth of 4 feet.

c. Aids to Navigation.

Only one aid, Bell Buoy "A" off Corson Inlet is shown on the charts, the remainder being omitted as they are frequently shifted in position. The present survey position of this buoy agrees closely with that charted. The position of this aid as well as the other uncharted aids shown on the present survey in the inlet area satisfactorily mark the features intended.

9. Field Plotting.

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

10. Additional Field Work Recommended.

The 6 foot sounding shown on the present survey in lat. 39° 13.6' long. 74° 37.6', should be developed when the inshore hydrography authorized by the Instructions dated March 4, 1938, OCEANOGRAPHER, on the north is accomplished. The undeveloped 6 is a single sounding on line and is the shoalest depth obtained on this shoal area.

11. Superseded Prior Surveys.

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

H-116 (1843)	in part
H-1696 (1886)	in part
H-2165 (1891)	in part
T-2054 (1891)	in part (hydrography only)

12. Reviewed by - Harold W. Murray, May 20, 1938.

Inspected by - J. A. McCormick, and E. P. Ellis.

Examined and approved:

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

K. T. Adams
Chief, Division of Charts.

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

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

Applied to drawing of Chart 1217 - July 12, 1938 - J.T. Walker
Review - written in pencil - read and contents noted - J.P.W.
Applied to Chart 827, July 1939 B.R.
" " " 826-SC 6-3-63 Frazier