6214

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic } *Sheet No.* 14

State New Jersey

LOCALITY

Atlantic ~~Coast~~ City

~~Beach Thorofare - Atlantic City~~
Beach, Great & Inside Thorofares

1935, 6 & 7.

CHIEF OF PARTY
B. H. Rigg - 1935
L. D. Graham - 1936 & 7.

U.S. GOVERNMENT PRINTING OFFICE: 1934

6214

Form 537

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.

Field No. 14

REGISTER NO. H6214

State New Jersey

General locality Atlantic ~~Coast~~ City

Locality Beach, ~~Thorofare, Atlantic City~~ Great & Inside Thorofares

Scale 1:5,000 Date of survey May, 1935 - Aug., 1936 & June 1937.

Vessel Party No. 19 & Launch MIKAWE

Chief of Party Lt. Benjamin H. Rigg & Lt. Comdr. L. D. Graham

Surveyed by J. B. Kinghorn, J. C. Bull and R. H. Carstens

Protracted by C. J. Harryman, G. E. Varnadoe and T. M. Williams

Soundings penciled by C. J. Harryman, R. H. Carstens & T. M. Williams

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated May 16, 1935

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NO. 14
1935

LT.BENJAMIN H. RIGG, CHIEF of PARTY.

DATE OF INSTRUCTIONS

Work on this Sheet was executed in accordance with instructions dated May 16, 1935. Also see Director's letters of May 2nd and 7th, 1935 - Reference 1990-19.

LIMITS

Work on this sheet comprises a section of the Inland Waterway laying between the southern limits of Newfound Thorofare and Albany Avenue Boulevard, with special attention to the portion of Great Thorofare, used as a yacht racing course by the Absecon Island Yacht Club.

SURVEY METHODS

Standard coast survey methods were used, namely: soundings were taken with lead line,and three-point sextant positions were taken on hydrographic signals previously located by topography and triangulation.

DISCREPANCIES

Additional development would be desirable in several areas on this sheet, if work is resumed in this section. Due to the short alloted time for the original survey, it was impossible to do additional work. At the time of this writing the sheet is being kept in Atlantic City in order that it may be turned over to the proposed party that will operate in this area during the summer of 1936.

DANGERS

A five foot spot* Lat. 39° 22.8' (13'), Long. 74° 26.8' in a general depth of 10 feet. A large shoal Lat. 39° 21.6' (56'), Long. 74° 27.0'. A five foot spot‡ in a general depth of 15 foot Lat. 39° 21.8' (8'), Long. 74° 27.2'.

* This spot investigated by 1936 field party. The 5ft. (sic) was not found, (See Suppl Rept. page 1) and is considered disproved.

‡ This shoal verified by the 1936 field party (See Suppl Rept page 1)

CHANNELS

In general, a depth of 8 to 10 feet can be carried thru this stretch of waterway; the limiting depths occuring in Lat. 39° 22.8' (17'), Long. 74° 26.7' (8') and at Lat. 39° 21.6' (76'), Long. 74° 26.9' (8').

As mentioned in the preceding heading, the first five foot sounding under DANGERS should be investigated further.

Respectfully submitted,

Lt. Benjamin H. Rigg,
Chief of Party.

STATISTICS FOR HYDROGRAPHIC SHEET NO. 14

Vol. No.	Statute Miles of Sounding Line	Number of Soundings	Number of Positions
1	25.3	1283	366
2	13.9	629	272
3	5.5	273	94
Total	44.7	2185	732

Area, Sq. Statute Miles, 2.3

REPORT OF TIDES TO ACCOMPANY
HYDROGRAPHIC SHEET 14.

0.5 = value determined on D.w. 47 + C rac.

Tidal reducers for this sheet were obtained from tide station Chelsea located on Inside Thorofare at Lat. 39° 21.2' and Long. 74° 27.5'.

This gauge was in operation from May 8, 1935 to May 13, 1935. The mean low water on the staff is 1.5 feet. This value was calculated by comparison with the standard gauge on the Atlantic City Steel Pier.

The entire sheet was controlled by tide station Chelsea direct.

The curves used in reducing soundings are forwarded with the tide records.

Lt. [illegible], C.&G.S.
Chief of Party.

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. 14

REGISTER NO.

State New Jersey

General locality Atlantic Coast

Locality Beach Thorofare, Atlantic City

Scale 1:5,000 Date of survey May, 1935 - Aug., 1936 & June 1937.

Vessel Party No. 19 & Launch MIKAWE

Chief of Party Lt. Benjamin H. Rigg & Lt. Comdr. L. D. Graham

Surveyed by J. B. Kinghorn, J. C. Bull and R. H. Carstens

Protracted by C. J. Harryman, G. E. Varnados and T. M. Williams

Soundings penciled by C. J. Harryman, R. H. Carstens & T. M. Williams

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated May 16, 1935

Remarks:

U. S. GOVERNMENT PRINTING OFFICE

SUPPLEMENTAL DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet 14.

INSTRUCTIONS - May 16, 1935 Project HT-205.

LIMITS

The area surveyed included that portion of the Intracoastal Waterway inside of Atlantic City, from Lat. 39° 23.5', Long. 74° 26.0' to Lat. 39° 22.4', Long. 74° 27.6' and from Lat. 39° 21.2', Long. 74° 27.4' to Shelter Island. A survey was also made of the slips in Gardners Basin and Snug Harbor, Atlantic City, just off the Main Channel.

SURVEY METHODS

Sounding lines were run on shore ranges and controlled by sextant fixes on hydrographic signals located by triangulation or planetable. Soundings were taken with a standard line with lead weighing 8 pounds. Where it was impossible to secure sextant fixes, positions were spotted on the boat sheet by means of approximate distances from surrounding topographic features.

Clam Creek and Delta Basin were surveyed by the U. S. Engineers on June 2, 1937. Blue print showing soundings is forwarded with the smooth sheet. This print is file No. 4305 (Dep 30560) on a scale 1 inch = 200 feet.

DISCREPANCIES

The crossings were very satisfactory being for the most part one foot or less.

An investigation was made of the dangers mentioned in the report of B. H. Rigg, 1935. Development of the 5 foot sounding in Lat. 39° 21.2', Long. 74° 27.2' revealed a spit extending 150 meters downstream from the end of the island north of the airport. Shoal soundings of 3 feet were found on the spit in the vicinity of the 5 foot sounding formerly discovered.

The 5* foot sounding in Lat. 39° 22.2' (13'), Long. 74° 26.8', was investigated by running 20 meter lines parallel and perpendicular to the lines run in 1935, and in drift sounding over the spot. No sounding less than 8 feet was found at this point. However, a general shoaling of about 1 foot was found in this area. From a study of this year's soundings and because the bottom appears to be changing at this point the existence of the 5 foot sounding is doubtful.

* The 5 Ft. sounding is considered disproved.

At Lat. 39° 22.65', Long. 74° 27.2', positions 169[d] and 146[d] plotted on shore as obtained from air-planimetric sheet T-5637. The shoreline was rodded on a chart paper print of this sheet. The section of the chart

paper print showing the revised shoreline in red, is forwarded with the sheet. It was found that the shoreline was not compiled correctly. The positions fall in the water area after the correct shoreline had been transferred to the smooth sheet. A sea weed grows on the bottom outside the edge of the marsh grass and it is possible that this was interpreted as high water line on the photographs. The edge of the marsh grass was rodded in.

This section of chart is attached to D.R. H-6214. Air-photo Section advised of change.

See note on boat sheet in regard to signal CENT.

see Par. 1a, Review H-6214

CHANNELS

The controlling depth found in the channel in the area surveyed is 7½ feet. This depth is found in Lat. 39° 20.2', Long. 74° 29.2' between Positions 116 and 117 f day. Elsewhere a depth of 8 feet can be carried for the full length of the channel on this sheet. See main report.

see 86, Review H-6214

JUNCTIONS

A satisfactory junction was made with the previous season's work on this sheet, and with sheet 10 to the north and sheet 12 to the south.

H-6213(1938)

ANCHORAGES

It is best to moor alongside in Gardners Basin, Snug Harbor or Delta Basin, however, craft may anchor in the wide reaches providing they keep clear of the channels. There are many small wharves along the waterways.

COMPARISON WITH PREVIOUS SURVEYS - CHART 3243

Due to the small scale of the chart, only a general comparison can be made. The general depths shown on the chart are nearly correct. At the entrance to Beach Thorofare a 19 foot sounding is shown at Lat. 39° 23.3', Long. 74° 26.0'. This sounding is correct but there are soundings of 8 to 10 feet to the eastward which are not indicated on the chart.

GEOGRAPHIC NAMES

Names were obtained from air-planimetric sheets T-5637 and T-5638.

LANDMARKS FOR CHARTS

Landmarks for charts were forwarded with the graphic control sheets and are shown on the air-planimetric sheets Nos. T-5637 and T-5638.

Approved and forwarded:

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

Submitted by,

Raymond H. Carstens
Raymond H. Carstens
Deck Officer

STATISTICS FOR HYDROGRAPHIC SHEET NUMBER 14

1936

Date	Day	Statute Miles	Positions	Soundings
Aug. 8	a	1.7	155	193
10	b	1.8	39	186
12	c	1.95	43	149
13	d	13.5	203	1174
14	e	9.5	153	679
19	f	9.1	132	598
27	g	4.8	19	115

1937

June 8	h	1.3	15	56
9	j	1.8	11	30
		45.4	770	3198

Smooth Sheet No. 14 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. Engr.
Chief of Party

Verification of Hydrographic Survey No.6214(1935-36-37 Field No.14.
Beach - Great and Inside Thorofares
Atlantic City, New Jersey.
Chief of Party(1935)B.H. Rigg.
Chief of Party(1936-37)L.D. Graham.

1. Records.
The plane of reference used for reduction of soundings in Vols. 1,2 and 3 was found to be one foot too high. Therefore one foot has been subtracted from all reduced soundings in said volumes. See Tide note in Descriptive Report.

See p.4 D. Rept. Marginal note by LAC (Div. T+C)

2. Shoreline and Control.
The shoreline and control originate with Air Photographic Surveys T-5637(1936), T-5638(1935) and Graphic Control Survey T-6503a&b(1935-36) T-6502b (" ")

3. Aids to Navigation.
(a) The four buoys* shown in mid stream north and east of the Airport on T-6503b are not located by this survey.
(b) A black barrel buoy and a red barrel buoy are located by sextant angles Lat. 39° 21.55', Long. 74° 27.07' and Lat. 39° 21.62', Long. 74° 27.06' respectively. (Page 14, Vol. 3).

*These are race course buoys and are temporary

4. Sounding Line Crossings.
No system of crosslines was used; soundings on parallel lines are in satisfactory agreement.

5. Depth Curves.
The depth curves can not be completely drawn in some places due to insufficient development.

6. Junction with Contemporary Surveys.
(a) The junction with H-6213(1936) on the north will be considered in the verification report of that sheet.
(b) This survey is joined on the southwest by field sheet No. 12 (not registered).
(c) Gardner Basin and Snug Harbor are joined by U.S.E. surveys (1936).

7. Field Plotting.
(a) The field plotting was satisfactory except that signal CENT* and the soundings fixed by it should have been corrected. The position of CEN has been used instead of CENT. In checking the plotting of the soundings very little change in position of the soundings resulted from using CEN. (See D.R. T-6503a)
(b) It was necessary to revise 2,185 soundings due to change in tide reducers in Vols. 1, 2 and 3.

*Covered in par. (a) in Review.

Verified and inked by

Leo S. Straw

October 14, 1937.

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTATIC OF~~

No. H-6214
~~No. I~~

received Sept. 2, 1937
registered Sept. 7, 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	Jones		See page 5 (section of air photo survey)
83			
88			
90			

RETURN TO

82	J. A. Bond

✓

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6214

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

Number of positions on sheet	1502
Number of positions checked	31
Number of positions revised	4
Number of soundings recorded	5,383
Number of soundings revised	2,185
Number of signals erroneously plotted or transferred	See D.R. for 0 CENT

Date: Oct 13. 1937

Verification Inkt by Leo Straw Time: 62 hr.

Review by G. Risegari Time: 33 "

HYDROGRAPHIC SURVEY NO. H-6214

Smooth Sheet Yes

Boat Sheet Yes

Sounding Records 6 Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes (Vol.#1)

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

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

Remarks HYDROGRAPHY
Total Days 9
Last Date June 9 1937

Rae

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

Sept. 16, 1937.

Division of Hydrography and Topography:

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

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

HYDROGRAPHIC SHEET 6214

Locality Beach Thorofare, Great and inside Thorofare, New Jersey.

Chief of Party: B. H. Rigg and L. D. Graham, 1935 - 1936.- 1937.
Plane of reference is mean low water reading
0.5 ft. on tide staff at Chelsea
9.8 ft. below B.M.1
0.8 ft. on tide staff at Main Channel
5.7 ft. below B. M. 1
0.9 ft. on tide staff at Turnpike Bridge
8.7 ft. below B. M. 1
0.8 ft. on tide staff at Beach Thorofare
6.1 ft. below B. M. 1
1.2 ft. on tide staff at Gardners Basin
8.5 ft. below B. M. 1
Height of mean high water above plane of reference is 4.0 feet at Chelsea; 3.4 ft. at Main Channel; 3.8 ft. at Turnpike Bridge; 3.9 ft. at Beach Thorofare; 3.6 ft. at Gardners Basin.

Condition of records satisfactory except as noted below:

Plane of reference used for reduction of soundings in Vols. 1, 2 and 3 was found to be one foot too high. The reducers have been corrected but all reduced soundings in these volumes in the columns headed "Field" should be diminished by 1 foot before using. Plane of reference in Vols. 4, 5 and 6 found correct and has been approved.

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

	Remarks	Decisions
1		see T-5637
2		" "
3		
4		" "
5		See T-5638
6		see T-5637
7		" "
8		" "
9		" "
10		" "
11		
12		
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14		
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17		
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22		
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25		
26		
27		

GEOGRAPHIC NAMES

Survey No. H-6214

Name on Survey	A, On Chart No. 1217	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	K,	
Beach Thorofare	✓ appd									1
Great "	✓ appd									2
Airport	✓									3
Inside Thorofare	✓ appd									4
West Canal	✓ (appd)									5
Gardner Basin	✓ appd									6
Snug Harbor	✓ appd									7
Clam Cr.	✓ app'd									8
Chelsea Hbr.	✓ appd									9
Atlantic City	✓ appd									10
										11
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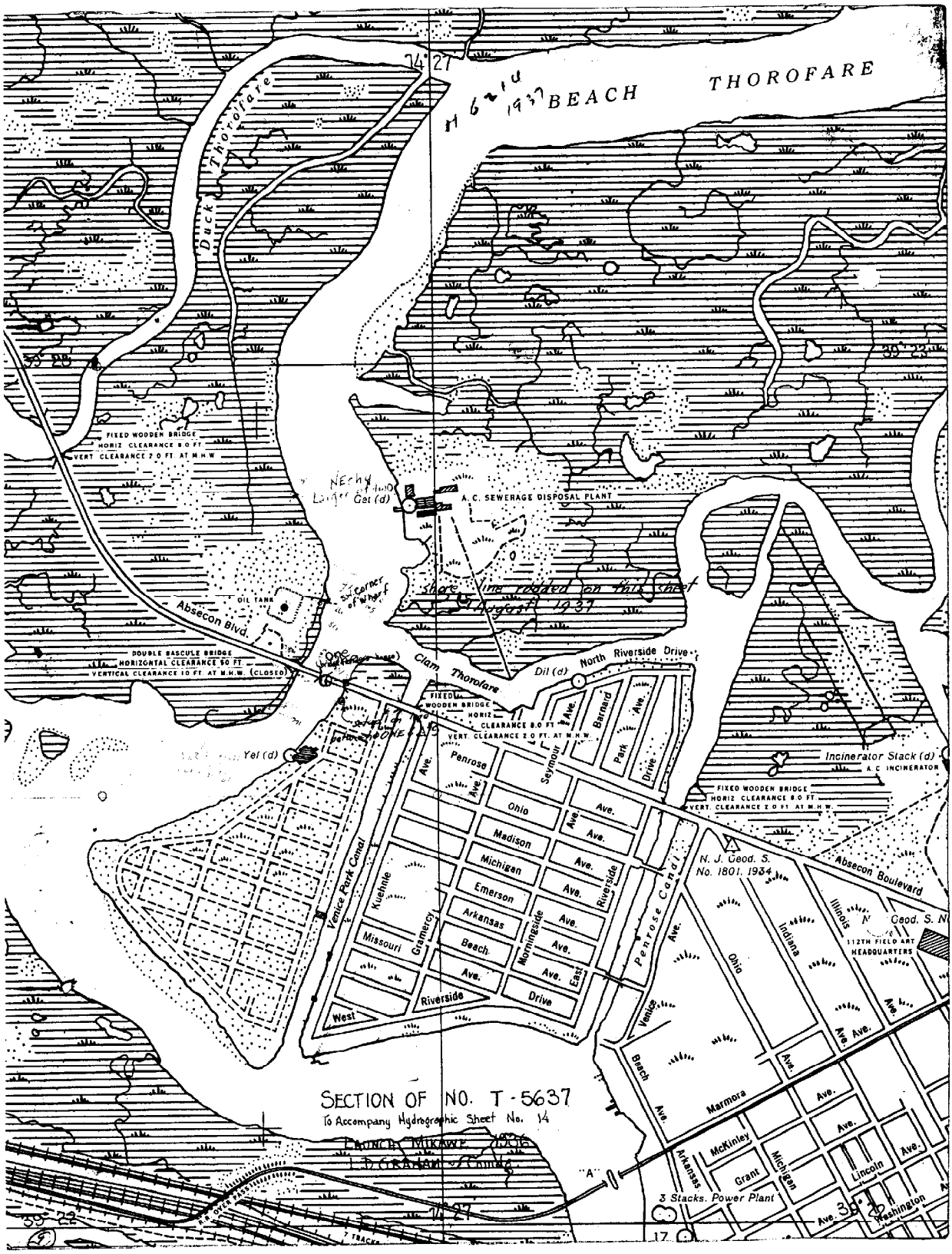
Names underlined in red approved by GHE on 8/4/37

M 234


BEACH THOROFARE
Duck Thorofare
FIXED WOODEN BRIDGE
HORIZ CLEARANCE 8.0 FT.
VERT CLEARANCE 2.0 FT. AT M.H.W.
A.C. SEWERAGE DISPOSAL PLANT
OIL TANK
Absecon Blvd.
DOUBLE BASCULE BRIDGE
HORIZONTAL CLEARANCE 50 FT.
VERTICAL CLEARANCE 10 FT. AT M.H.W. (CLOSED)
Clam Thorofare
North Riverside Drive
Incinerator Stack (d)
A.C. INCINERATOR
Penrose Ave.
Ohio Ave.
Madison Ave.
Michigan Ave.
Emerson Ave.
Arkansas Ave.
Missouri Ave.
Beach Ave.
Riverside Drive
West
Seymour Ave.
Barnard Ave.
Park Drive
Riverside
Kuehnle
Gramercy
Venice Park Canal
Normandside
East
Penrose Canal
Venice
Indiana
Illinois
Absecon Boulevard
N. J. Geod. S. No. 1801, 1934
112TH FIELD ART HEADQUARTERS
Marmora
McKinley
Grant
Lincoln
Washington
3 Stacks. Power Plant
SECTION OF NO. T-5637
To Accompany Hydrographic Sheet No. 14
LAUNCH MIKAWE
J.B. GRAHAM, Commdg.
7 TRACKS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. H-6214 (1935-36-37) FIELD NO. 14

Great and Inside Thorofares, Atlantic City, N.J.
Surveyed in May 1935, Aug. 1936, June 1937, Scale 1:5,000
Instructions dated May 16, 1935 (B. H. Rigg, J. C. Sammons, E. H. Kirsch)

Hand Lead Soundings. 3 Point fixes on shore signals. Positions spotted on boat sheet from topographic features.

Chief of Party - B. H. Rigg, L. D. Graham.
Surveyed by - J. B. Kinghorn, J. C. Bull, R. H. Carstens.
Protracted by - C. J. Harryman, R. H. Carstens, T. M. Williams.
Soundings plotted by - C. J. Harryman, R. H. Carstens, T. M. Williams.
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. The 1935 location of signal CENT (lat. 39° 21.2', long. 74° 27.4') was found to be 14 meters in error by the 1936 field party (see Descriptive Report T-6503a, Suppl. Rept.) The corrected location has been plotted on the smooth sheet and is called signal CEN. Wherever necessary as a result of the change the hydrography was replotted.

b. The tide reducers applied to the 1935 work were erroneous. This necessitated the revision in the office of 2185 soundings.

The Descriptive Report is complete as to essential details and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The instructions for the project have been complied with except as noted in par. 10, this review.

3. Shoreline and Signals.

The shoreline originates with topographic maps T-5637 (1936) and T-5638 (1935).

The topographic signals are from graphic control sheets T-6502b (1935-36) and T-6503a and b (1935-36).

4. Sounding Line Crossings.

No general system of crosslines was run but those that were run as well as the adjacent lines, show good agreement.

5. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn except in some areas the curves could not be completed on account of insufficient detail. This is particularly true in Beach and Great Thorofares.

6. Junctions with Contemporary Surveys.

The junctions with H-6213 (1936) in Beach Thorofare is satisfactory. The junction with Field Sheet 12 in Great Thorofare and West Canal will be considered when that sheet is received in the office. The junction in Clam Creek was made with the U. S. Engineers' survey of 1936 (U.S.E. file No. 3993). This blueprint is not in the office files, but soundings that were transferred from this survey to the boat sheet in the field show a good junction with the present work. The latest Engineer survey (B.P. 30860) of this area in the office files was done in 1937 and satisfactorily joins the present survey.

7. Comparison with Prior Surveys.

a. H-1160 (1871-72) Scale 1:10,000.

This survey covers the area of the present survey with only a few sounding lines, some of which are zig-zagged and widely spaced in the more open areas of the thorofares, and others are just single lines in channels and adjacent creeks.

Numerous changes have occurred over most of the area as a result of artificial and natural causes, some of which are of considerable extent, and are as follows:

(1) In the vicinity of the air port (lat. 39° 21.2', long. 74° 27.3') a great amount of filling in and shoreline construction has completely changed the old shoreline. The hydrography in Great Thorofare and Inside Thorofare in this area bears no resemblance to that of the old survey, the present depths being generally deeper and in some places as much as from 20 to 30 feet.

(2) Considerable deepening and shoaling has occurred in the vicinity of lat. 39° 22.5', long. 74° 27.5'.

(3) The stretch of Beach Thorofare between lats. 39° 21.5' and 39° 22.1' has changed generally. The present depths here are deeper in most places.

(4) An islet has been built up where Beach Thorofare meets Great Thorofare.

Further listing of the many changes has been omitted since it would serve no useful navigational purpose. Because of the changes in the area, and because the present survey is on a larger scale and is more closely developed, it should supersede H-1160 (1871-72) for charting purposes.

b. T-2054 (1891) Scale 1:20,000; H-2694 (1904) Scale 1:10,000

These surveys have a few soundings on single lines that fall in the area of the present survey. The former, in Great Thorofare between longs. 74° 28.0' and 74° 28.5', and the latter in Gardner Basin. The old depths are not in agreement with the present ones. Those on T-2054 (1891) are shoaler by 1 to 9 feet while the depths on H-2694 (1904) vary as much as 3 feet shoaler in the north end of Gardner Basin and as much as 4 feet deeper near its south end.

The present survey has adequately covered these areas and should supersede the old surveys for chartingpurposes.

8. Comparison with Chart No. 1217 (New Print Dated Aug. 27, 1937)
Chart No. 3243 (New Print Dated July 7, 1937)

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and U. S. Engineers' surveys and Chart Letter 148 (1928), which are discussed in the following paragraphs:

(1) The Engineers' survey of 1914 (Bps. 14958, 14959) covers the Inland Waterway and is not as closely developed as the present survey. The comparison with the present work shows general changes in the depths and also in the position of the main channel axis. Because of the time elapsed since the Engineers' surveys were made and the changes that have occurred the present survey should supersede Bps. 14958 and 14959 for charting purposes.

(2) Chart Letter 148 (1928) is a section of a chart on which is indicated by the N. J. Board of Commerce and Navigation, the position of a new cut in lat. 39° 22.5', long. 74° 27.5'. This is in agreement with that shown on the present survey.

b. Controlling Depths.

The controlling depths for the Inland Waterway as indicated by a note on Chart 3243 were from 4 to 10 feet, Sept. 1935. The controlling depth on the present survey appears to be within these limits. The actual controlling depth in the main thorofares cannot be stated at this time, because of the incomplete development in some of the channel areas. (See par. 10, this review.)

c. Aids to Navigation.

(1) No aids to navigation are shown in this area on Chart 1217.

(2) The light at the northern end of West Canal shown on Chart 3243 is in agreement with the position located by the present survey.

(3) The light shown on Chart 3243 in lat. 39° 23.33', long. 74° 26.98' was not located by the present survey. This was charted subsequent to the present work on authority of the New Jersey Board of Commerce and Navigation. (See B.P. 30623)

(4) Two buoys were located on the present survey in the vicinity of lat. 39° 21.6', long. 74° 00.5' neither of which are at present charted.

9. Field Plotting.

The field protracting and plotting were satisfactory.

10. Additional Field Work Recommended.

The following additional work is required to complete the survey of this area:

a. A line of soundings should be run closer to the south shore of Beach Thorofare in the vicinity of lat. 39° 23.3', long. 74° 26.5'.

b. In Beach Thorofare, between lat. 39° 21.5' and lat. 39° 22.4' more development is required, commensurate with the development in other portions of the main channel. This area was left incomplete because of the shortness of time allotted for the original survey (see Descriptive Report, page 1 - Discrepancies).

c. More sounding lines should be run in the harbor in lat. 39° 20.7', long. 74° 28.6', and in the area in lat. 39° 20.4', long. 74° 29.3'. The development of the latter should be to the head of navigation.

d. There is a winding channel in the upper part of Great Thorofare with an indicated depth of 5 to 6 feet. A channel line should be run to determine the maximum depth available.

e. The 11-foot sounding in lat. 39° 20.56', long. 74° 28.90' falls very close to the main channel and appears to be a detached shoal. This area should be more fully developed.

f. The area in Great Thorofare between longs. 74° 27.35' and 74° 27.85' in approximate lat. 39° 21.85' should have additional lines to determine the maximum channel depths.

11. Superseding Old Surveys.

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

H-1160 (1871-72) in part
T-2054 (1891) " "
H-2694 (1904) " "

12. Reviewed by - G. Risegari, October 28, 1937.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

L. O. Colbert
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 - Mar 30, 1938 - JFC
Applied to chart 826. April 13, 1939 HHC.

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