

4821

Diag. Cht. No. 1217-1

4821

Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

....., *Director*

State: New Jersey

DESCRIPTIVE REPORT

Topographic } Sheet No. ⁵ 4821
Hydrographic }

LOCALITY

Hereford Inlet

Hereford Inlet to Five Fathom

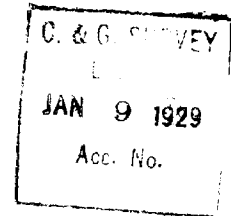
Bank

1928

CHIEF OF PARTY

J. Senior

GOVERNMENT PRINTING OFFICE



Descriptive Report to accompany

Hydrographic Sheet #5 4821

Wildwood, coast of New Jersey

surveyed by party of M.V. Natoma
Jack Senior, Comdg,
Season of 1928.

HYDROGRAPHIC SHEET #5.

(Comment by Chief of Party)

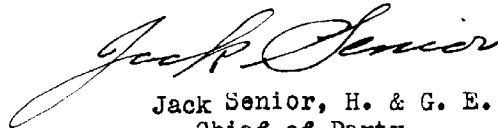
The descriptive report for this sheet was written by Ensign W. R. Porter, who was engaged on this work. Further comment follows.

This survey was undertaken near the end of the season, following the completion of work in the NATOMA'S instructions. This sheet is a continuation of work completed by the RANGER, and joins to the south and the inshore end with ship and launch hydrography completed by the RANGER. This sheet is on a scale of 1:20,000, and the work was carried to the edge of the sheet, which also marks the approximate limit of visual fixes. The hydrography was executed in accordance with the RANGER'S instructions of May 23, 1928.

The survey did not develop any uncharted dangers or marked discrepancies. However, the recent survey indicates a change in the configuration of the bottom from that shown on Chart 1217. Shoal soundings do not exist where charted. No indication was found of the 15 foot spot shown on Chart 1217, in the position, Lat. $38^{\circ}-59'$; Long. $74^{\circ}-37'$.

A list of landmarks for charts is forwarded on a standard form. Wildwood Standpipe and white dome on prominent building are ~~permanent~~ and should be shown on Chart 1217.
prominent

^{as}
~~and~~ The sheet and records have been examined and are approved and forwarded.



Jack Senior, H. & G. E.
Chief of Party.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET #5

INSTRUCTIONS AND LIMITS:

This survey was made in accordance with instructions from the Director to the Commanding Officer of the Str. RANGER, dated May 23, 1928. This survey was made by the M. V. NATOMA, Jack Senior, Commanding and connects to the southward with that hydrography completed by the Str. RANGER in 1928. It includes an area from Wildwood, N. J. eastward to Long. $74^{\circ} - 36'$ W. and between Lat. $38^{\circ} - 58.3'$ N. and Lat. $39^{\circ} - 01'$ N.

SURVEY METHODS:

The M. V. NATOMA was used to execute this hydrography. The soundings were obtained throughout by the hand lead method, using standard bronze center hand lead lines. Triangulation stations, located by the Str. RANGER, were used for control. A list of the Triangulation Stations used and plotted on this sheet is submitted with this report.

DISCREPANCIES:

Some difficulty was found in running straight lines due to currents encountered. Very few discrepancies in crossings occurred. These are due for the most part to currents and irregular bottom. A detailed review of these discrepancies was made by Ensign W. R. Porter and a list of these accompanies this sheet. There were no discrepancies of a critical nature.


STATISTICS:

A statistical sheet is submitted with this report.


A list of buoy positions is also attached.

Landmarks for charts on a standard form is appended.

The tidal data was obtained from the automatic portable tide gauge located at Cold Springs, N. J. and attended by the Str. RANGER.


W. R. Porter, Aid.

Examined and Approved.


Jack Senior, H. & G. E.
Chief of Party

LIST OF DISCREPANCIES
(TO ACCOMPANY REPORT FOR HYDROGRAPHIC SHEET #5)

1. A sounding of 36 feet, position 108A+1, falls on one of 33 feet, position 43E+3. Difference probably due to uneven bottom. The shoaler sounding was used.
2. A sounding of 21 feet, position 93F+3, falls on one of 18 feet, position 213D+4. The bottom slopes rapidly here; both soundings are probably correct. The shoaler sounding was plotted.
3. A sounding of 40 feet, position 27K+3, coincides with one of 37 feet, position 33K+3. The difference probably due to current. The shoaler sounding was obtained while running with the current and was used.
4. A sounding of 52 feet, position 97C, falls close to one of 48 feet, position 135D. Both soundings were plotted. Difference probably due to current and unevenness of bottom in this locality.
5. A sounding of 31 feet, position 75A, falls on one of 35 feet, position 24F+3. The shoaler sounding having been obtained on a position was plotted. The bottom is slightly uneven here.
6. A sounding of 48 feet, position 1H, falls near one of 43 feet, position 101F+1. Both soundings were plotted. The one of 48 feet, when compared with others in that locality, appears one fathom too great.
7. A sounding of 49 feet, position 183M+2, when compared with the soundings in that locality appears one fathom too great.

LIST OF BUOYS SHEET #5

Bell Buoy #1 Lat. $39^{\circ}-00'$, 570 Meters; Long. $74^{\circ}-44'$, 1010 Meters

Black and White Lat. $38^{\circ}-59'$, 1355 Meters; Long. $74^{\circ}-46'$, 110 Meters/

LIST OF SIGNALS SHEET #5.

Triangulation Stations:

Real Estate Tower 1927.--- Tat.

White Dome Flagpole, 1927.--- Dome.

Funchaser, East Dome, 1927.--- Fun.

North Wildwood Standpipe, 1927.---.North.

Wildwood Standpipe, 1927.--- Wild.

Coast Guard, Stone Harbor., 1927.--- Coast.

Stone Harbor, 1927.--- Stone.

Avalon Standpipe, 1927.--- Avalon.

Tank, N. B., 1927.--- Tank

STATISTICS FOR HYDROGRAPHIC SHEET #5

Date	Letter	Volume	Soundings	Positions	Miles	Vessel	Miles to and From Work.
1928							
Sept. 17	A	1	816	207	45	NATOMA	22
" 21	B	1 & 2	849	229	44	"	22
" 24	C	2	808	216	43	"	22
" 25	D	2 & 3	836	248	47	"	24
Oct. 4	E	3	688	180	38	"	20
" 8	F	4	667	177	38	"	22
" 11	G	4	585	151	30	"	22
" 12	H	5	752	196	41	"	23
" 15	J	5 & 6	827	225	43	"	24
" 16	K	6	128	36	8	"	28
" 18	L	6	38	11	2	"	28
" 22	M	6	772	209	41	"	25
" 23	N	7	230	64	12	"	22
Total		7	7996	2168	432		304

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Norfolk, Virginia.

December 29, 1928

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Jack Senior, H. & G. E.

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	Latitude			Longitude				Datum
	°	'	D. M. meters	°	'			
Wildwood, S. P.	38	59	1018.15	74	48	1202.04	Triangulation	
Stone Harbor, S. P.	39	03	443.95	74	45	766.13	"	
C. G. Stone Harbor.	39	02	665.52	74	46	241.72	"	
Avalon, S. P.	39	06	705.30	74	42	1189.99	"	
Tank, N. B.	38	56	1504.00	74	50	238.20	"	
White Dome Flagpole	38	59	36.07	74	48	1202.77	"	

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 4821

Locality: Vicinity of Wildwood, N. J.

Chief of Party: J. Senior in 1928.

Plane of reference is mean low water, reading

2.5 ft. on tide staff at Cold Spring Inlet (C.G. Sta.), N. J.

~~2.5 ft. below R. M.~~

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Paul C. Whitney

Chief, Division of Tides and Currents.

Section of Field Records

Report on Sheet No. 4821
Chief of Party Jack Senior
Protracted by W. J. Chovan
Verified and Labeled by J. W. Walker

Surveyed in 1928
Surveyed by Jack Senior
Soundings plotted by
John Laskowski.

The sounding records were neat and complete. The protracting was accurately done. There was very little shrinkage in the sheet and the positions farthest from the signals checked closely. The positions farthest from the signals could not be checked with the ordinary protractor and as the extra long armed protractor is inaccurate, these ~~on~~ positions were not checked, except in a few instances. Any small error which may have thus been overlooked is of small consequence in view of the depth, distance from shore, and reduction in scale when charted. The omission of this protracting was advised by Capt. Sobierski.

The soundings were carefully plotted and the time intervals were adhered to.

The sheet was received in fair shape except for the yellow stain in the southeast corner of the work.

The drafting conformed to
General Instructions for Field Work.

Reviewed by

Respectfully submitted
J. T. Walker
7/25/29

Section of Field Records
Report on Hyd. Sheet No. 4821
Hereford Inlet to Five Fathom Bank, New Jersey.
Surveyed in 1928.

Instructions dated May 23, 1928 (Ranger)

Chief of Party - Jack Senior

Surveyed by - Jack Senior

Protracted by - H. J. Chovan

Soundings plotted by - J. Laskowski

Verified and inked by - J. T. Walker

1. The records are well kept and conform to the requirements.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of the survey satisfy the specific instructions.

4. There are not many cross lines but agreement between adjacent lines is good and the cross lines shown are satisfactory. The discrepancies in crossings listed in the descriptive report are unimportant.

5. The information is sufficient for drawing the usual depth curves.

6. The junction with the inshore sheet, H. 4859, is satisfactory and the junction on the south with H. 4870 and H. 4858 is also satisfactory.

There is no contemporary work on the northern and eastern limits.

A comparison was made with the old work, H. 1696 and H. 3255 and a number of differences noted. This work, H. 4821, should supersede all previous surveys. Concurred in by A. M. S.

No indication was found of the reported 15 foot spot, shown on chart 1217⁴¹²¹⁹ in Lat. $38^{\circ}59.3'$, Long. $74^{\circ}37.2'$. This was placed on the chart by authority of letter 594 of 1915. It is probable that the fisherman who reported this had no means of determining its position and

it does not appear to exist in the position shown on the chart. Its removal from the chart is approved by Capt. A. M. Sobieralski.

7. The usual amount of field plotting was well done by the field party. The positions, on the extreme eastern limits of the work, do not check closely. These are beyond the range of the regular protractor and a test shows that no two protractors give precisely the same position. The field plotting was therefore accepted.

8. Character and scope of survey - Excellent.

9. No additional work is necessary.

Reviewed by P. L. Johnston Aug. 2, 1929.

A. M. Sobieralski

J. S. Bond

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

4821

U. S. Coast and Geodetic Survey.

Register No. ^{5 4821} 4821

State . **New Jersey**

General locality . ~~Wildwood~~ ~~— outside coast~~ **Hereford Inlet**

Locality ~~Wildwood~~ **Hereford Inlet to Five Fathom Bank**

Chief of party . . **Jack Senior, H. & G. E.**

Surveyed by . . . **Jack Senior, H. & G. E.**

Date of survey . . **September - October, 1928**

Scale **1 : 20,000**

Soundings in . . . **Feet**

Plane of reference . . **Mean Low Water**

Protracted by **W.J. Chovan** . Soundings in pencil by **John Laskowski**

Inked by **J.T. Walker** . Verified by **J.T.W.**

Records accompanying sheet (check those forwarded):

Des. report, _____ Tide books, _____ Marigrams, _____ Boat sheets,

_____ Sounding books, _____ Wire-drag books, _____ Photographs.

Data from other sources affecting sheet

Remarks:

1904

Long 74-37 to 74-39 } Five Fath. Bank
Lat 38-51 to 38-59 }

1904

[Faint, mostly illegible text, possibly a list or log of observations]

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 4821

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

Number of positions on sheet . 2168
Number of positions checked . 234
Number of positions revised . . . 5
Number of soundings recorded . 7996
Number of soundings revised . . 54
Number of signals erroneously
plotted or transferred 0

Date: --- July 25, 1929 ---
Cartographer: --- JTW alker ---

Apprentice 826-50 6-3-63 Frayin