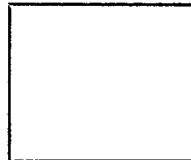


5516

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton., Director



State: New York

DESCRIPTIVE REPORT

Hydrographic } Sheet No. 4 5516

LOCALITY

Eastern End of Long Island

Fort Pond Bay - Naueague Harbor -

Threemile Harbor

1934

CHIEF OF PARTY

Wm. D. Patterson, Lieut.

5516

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
SEP 24 1934
REG. NO. 5516
Acc. No.

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. 4

REGISTER NO. 5516

State New York

General locality Eastern End of Long Island

Locality Fort Pond Bay - Napeague Harbor - Threemile Harbor

Scale 1:10,000 Date of survey May - July 1934

Vessel Field Party No. 5

Chief of Party Lieut. Wm. D. Patterson

Surveyed by D. S. Ling, Surveyor.

Protracted by J. C. McIlwaine

Soundings penciled by J. C. McIlwaine

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by J.W. Day

Verified by J.W.D.

Instructions dated May 14, 1934

Remarks:

Landmarks and Chart containing aids to navigation submitted. Hymn.

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SHEET No. 4 (Field Number)

VICINITY OF THREE MILE & NEPEAGUE HARBORS, AND FORT POND BAY, N.Y.

DATE OF INSTRUCTIONS

Director's Instructions dated May 14, 1934.

SURVEY METHODS

Positions were obtained by sextant angles between shore stations located by triangulation and planetable topography. Soundings were obtained by hand leadline marked in fathoms and feet.

In Three Mile Harbor three shoals baring at low water were located by walking around the shoal at low water and taking fixes at several points.

DISCREPANCIES

No discrepancies were found.

DANGERS

Three Mile Harbor: There are no rocks in this harbor. Sand shoals in the northern part of the harbor form the only dangers.

Napeague Harbor: This harbor is all shoal except a small area along the northeast side. At two places along the northeast shore there are piles of rocks which are the remains of former small wharves at these places. These are located at Latitude $41^{\circ} 00.63'$, Longitude $72^{\circ} 02.33'$, positions 41L & 42L, baring $\frac{1}{2}$ to 1 foot at low water; and at Latitude $41^{\circ} 01.02'$, Longitude $72^{\circ} 02.77'$, positions 46L & 47L, covered with $\frac{1}{2}$ foot of water at low water. At the entrance to this harbor a sand spit runs in a southerly direction from the point southwest of triangulation station GOFF, ending in a 5^v foot spot near the middle of the channel.

1/2 ft low water according to Records

Fort Pond Bay: No dangers were found in this harbor except in the shallow waters close to shore there are a great many boulders off the point near triangulation station ROCK and at the small point north of the northerly wharf in the harbor.

CHANNELS

Three Mile Harbor: The entrance to this channel is marked by two Lighthouse Service buoys. The entire channel is marked by spar buoys made of painted 2 x 4s and placed by the Town of East Hampton. These were not located as they are destroyed practically every winter and often shifted when replaced. A jetty of stone with a white flashing light on the end is east of the entrance and a jetty of steel sheet piling on the west. The channel was dredged to a general 10' foot depth but dredging was very spotty and depths of from 7' to 18 or 20 feet occur in it. Outside of the harbor a sand bar to the west of the entrance is encroaching on the entrance channel. The least depth found here was 6 feet at Latitude $41^{\circ} 02.2'$, Longitude $72^{\circ} 11.35'$.

From the "Town Dock" at Latitude $41^{\circ} 00.0'$, Longitude $72^{\circ} 10.9'$ a dredged channel with a prevailing depth of about 10 feet, marked by 2 x 4 spars, leads out to the deep water in the main harbor.

Napeague Harbor: This harbor is used only by a few local fishing boats. The entrance channel is a natural channel with a least depth of 7' feet, which is the general depth just outside the harbor. No buoys mark this channel except for a small flag on a wooden float placed by local fishermen on the end of the sand spit extending southward to an extremity at about Latitude $41^{\circ} 01.15'$, Longitude $72^{\circ} 02.32'$. This buoy was there at the time of this survey (June 1934). The channel can be quite readily located since the edges of the sand shoals can usually be seen by the contrast in color. *Buoy not found in use. (H.M.)*

COMPARISON WITH PREVIOUS SURVEYS

No prominent changes from present charts was noted.

Respectfully submitted,

D. S. Ling

D. S. Ling, Surveyor,
U. S. Coast & Geodetic Survey.

Approved:

Wm. D. Patterson

Wm. D. Patterson, Lieut.,
U.S. Coast & Geodetic Survey,
Chief of Field Party No. 5.

STATISTICS HYDROGRAPHIC SHEET NO. 4

DAY	COLOR	DATE	VOLUME	STATUTE MILES	POSITIONS	SOUNDINGS
A	Red	May 24	1	15.0	124	820
B	"	" 25	1	8.3	54	356
C	"	" 28	1	18.0	124	782
D	"	" 31	2	6.2	94	435
E	"	June 1	2	2.7	55	299
F	"	" 5	2	0.7	13	61
G	"	" 7	2	7.6	61	340
H	"	" 8	2	1.9	13	75
J	"	" 15	2	3.9	22	139
K	"	" 21	3	6.6	46	312
L	"	" 25	3	7.0	53	266
M	"	" 26	3	11.0	91	696
N	"	" 27	3	5.8	61	365
P	"	July 3	4	13.8	63	321
R	"	" 6	4	9.3	74	401
S	"	" 7	4	3.5	40	173
T	"	" 12	4	2.0	13	82

17	Red		4	123.3	1001	5922

AREA 5.5 SQUARE STATUTE MILES

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5516..

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

Number of positions on sheet	.100!.
Number of positions checked	...89.
Number of positions revised	...13.
Number of soundings recorded	.5922.
Number of soundings revised	..492. (approx.)
Number of signals erroneously plotted or transferred0.

Date:... Nov. 14, 1934

Cartographer:..... J. W. Day

Verification of plotting	} J. W. Day	Time: 82 hr.
Verification & fixing of spots and abscissae)		Time:
Verification of fixing by		
Review by	H. W. Murray	Time: 13 "

To: Mr. Bacon
 From L.S.S.

GEOGRAPHIC NAMES

Survey No. H 5516

Date. October 5, 1934

Chart No. 1211

Names underscored in red ink approved Oct. 6, 1934.
H.B.

Diagram No. 1211-2

* Approved by the Division of Geographic Names, Department of Interior.

☒ Not Approved by the Division of Geographic Names, Department of Interior.

R, Referred to the Division of Geographic Names, Department of Interior.

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
<i>H.B.</i>	-----	<u>Gardiners Bay.</u> ✓	-----	-----	41° 03.3' 72° 11.6'
<i>H.B.</i>	-----	<u>Sammys Beach</u> ✓ ✓	-----	-----	41° 01.9' 72° 11.8'
<i>H.B.</i>	<u>Threemile Harbor</u> ✓	Same ✓	-----	-----	41° 01.2 72° 11.5'
<i>H.B.</i>	<u>Napeague Harbor</u> ✓	Same ✓	-----	-----	41° 00.5' 72° 03.0'
<i>H.B.</i>	-----	<u>Goff Pt.</u> ✓ ✓	-----	-----	41° 01.4' 72° 03.2'
<i>H.B.</i>	-----	<u>Rocky Pt.</u> ✓ ✓	-----	-----	41° 02.9' 71° 59.1'
<i>H.B.</i>	<u>Fort Pond Bay</u> ✓	Same	-----	-----	41° 03.1' 71° 58.3'
<i>H.B.</i>		<u>Hicks I.</u> ✓ ✓			41° 01.0 72° 03.7
<i>H.B.</i>		<u>Lazy Pt.</u> ✓ ✓			41° 00.7 72° 03.5
		<u>Napeague Bay</u> ✓			

LCC

October 20, 1934.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 5516

Locality Port Pond Bay to Napeague Harbor to Three Mile Harbor,
Long Island, New York

Chief of Party: W. D. Patterson in 1934.

Plane of reference is mean low water reading

1.3 ft. on tide staff at Three Mile Harbor Jetty

11.8 ft. below B.M. 1

0.7 ft. on tide staff at Three Mile Harbor, East Side

6.8 ft. below B.M. 1

1.1 ft. on tide staff at Napeague Harbor

9.4 ft. below B.M. 1

1.8 ft. on tide staff at Great Pond Entrance

3.5 ft. below B.M. 1 (1934)

Height of mean high water above plane of reference is
2.4 ft. at Three Mile Harbor and 2.0 ft. at
Napeague Harbor and Great Pond Entrance.

Condition of records satisfactory except as noted below:

H. Hammer
Acting Chief, Division of Tides and Currents.

Section of Field Records

Report on H 5516 Surveyed in May - July 1934
Chief of Party W.D. Patterson Surveyed by D.S. King
Protracted by J.C. McD. Soundings plotted by J.C. McD.
Verified and inked by J.W. Day

The six, twelve, eighteen and thirty foot curves were completely drawn within the limits of the sheet. The plane of reference curve was partially drawn.

The shore line of Napeague Harbor and Fort Pond Bay was revised in places and was inked by the writer.

The junction with H 5515 at approx. $\phi 41^{\circ}-03.9$ $\lambda 71^{\circ}-57.0$ was not very satisfactory. The sixty foot depth curve is irregular according to the hydrography of sheet H 5516. The soundings were checked and reductions verified. The positions involved were verified for protracting. The curve was modified on H 5515 to correspond with the work on H 5516. Other joining sheets not verified.

On line 69C-71C approx. $\phi 41^{\circ}-02.3$ $\lambda 72^{\circ}-11.3$ bad crossings occur at the junction of line 38G-39G with soundings of 11 feet and 20 feet, and at the junction of the line 42C-43C where 10 feet and 14 feet occur on the respective lines. mentioned in review

At approx. $\phi 41^{\circ}-02.3$ $\lambda 72^{\circ}-11.3$ lines 49B-50B and 24C-25C run closely parallel. A depth

of 18 feet on C line plots near a 13 feet sounding
on B line. Line 46G-47G crossing line 49B-50B
records a depth of 6 feet close to the 13 feet depth
on line B. ^{narrow channel here} ~~Spotted dredging~~

At approx $\phi 41^{\circ}-01.7$ $\lambda 72^{\circ}-10.9$ a sounding of
6 feet occurs next before the sounding on position 75C
This sounding is near the middle of the channel
and looks out of order with the surroundings. All
work at this immediate vicinity was carefully
checked but a better disposition of the soundings
could not be obtained. <sup>Revised and lines and
and to open wide channel
and as shown in P.S.
Heron</sup>

Numerous weak fixes occur in Napeague Harbor.
Position 5N appeared to be a revolver, approx $\phi 41^{\circ}-01.1$
 $\lambda 72^{\circ}-03.0$ and was replotted so as to fit the
surroundings in a better manner.

Positions 39N and 40N are revolvers and
terminate a line transverse of the channel,
approx. $\phi 41^{\circ}-01.2$ $\lambda 72^{\circ}-03.5$ These positions
were adjusted to make more favorable crossings.

At position 56N approx. $\phi 41^{\circ}-01.1$ $\lambda 72^{\circ}-03.05$
a sounding of 12 feet was recorded. A sounding
of 5 feet coincides with it from the line 5L-6L.
The 5 feet sounding was plotted.

The soundings between positions 72R and 73R
were swung in an arc to the right to clear the
end of a fish trap as was shown by the boat
sheet. No additional authority was available.

Approx. $\phi 41^{\circ}-03.8$ $\lambda 71^{\circ}-57.8$ <sup>Line swung out on B.S.
Improves crossings here</sup>

A sounding of 10 feet just preceding sounding at position 19P approx. $\phi 41^{\circ} 03.7$ $\lambda 71^{\circ} 57.8$ seems not to correspond well to the soundings in the parallel line 5S-6S ^{logs adjusted to allow for slowing of boat speed} as indicated by their internal detour positions. 74001

The plotting of line 27S-28S seems very unsatisfactory when regarding the nearby lines and also what might be the correct direction of the line. Approx $\phi 41^{\circ} 02.6$ $\lambda 71^{\circ} 57.8$ The fixes are weak and the data for plotting position 28S ^(single angle) is unsatisfactory. ^{line appears satisfactory - line deep soundings are assumed near dist to SW - 4000.}

The junctions of numerous lines with line 25D-26D indicate an abrupt change in depth, particularly near position 19G at approx. $\phi 41^{\circ} 01.4$ $\lambda 72^{\circ} 11.3$

Approx. $\phi 41^{\circ} 01$ $\lambda 72^{\circ} 03'$, line 75M-76M makes bad crossings with other lines. Depths of 3 feet and 4 feet plot close to depths of 6 feet and 10 feet. mentioned in review.

Respectfully submitted

J. W. Day

Nov. 15, 1934

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5516 (1934)

Fort Pond Bay-Napeague Harbor-Threemile Harbor, Eastern End of Long Island, New York.

Instructions dated May 14, 1934 (W. D. Patterson)

Surveyed in 1934

Hand Lead Soundings - Three Point Control on Shore Signals

Chief of Party - W. D. Patterson.

Surveyed by - D. S. Ling.

Protracted and Soundings Plotted by - J. C. McIlwaine.

Verified and Inked by - J. W. Day.

1. Condition of Records.

The records are neat, legible and conform to the requirements of the Hydrographic Manual, with the exception that the chart submitted for use by the Lighthouse Bureau did not contain information regarding the aids to navigation of Napeague Harbor.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project and the instructions contained in the Hydrographic Manual except that the aids to navigation off Napeague and Threemile Harbors have not been located on this survey.

3. Sounding Line Crossings.

General agreement of soundings at crossings varies from 1 to 2 feet except in irregular bottom where differences of 3 and 4 feet occur. In Napeague Harbor channel in the vicinity of lat. $41^{\circ}01.1'$, long. $72^{\circ}03.0'$ differences of 3 and 4 feet occur, among which is the 7 foot sounding just after position 75M (lat. $41^{\circ}01.1'$, long. $72^{\circ}02.9'$). This sounding falls in mid-channel in depths of 10 to 13 feet. No satisfactory adjustment of these lines could be made in the office. The importance of this 7 is minimized by the fact that the controlling depth in this channel is no more than 7 feet.

4. Depth Curves.

The usual depth curves may be satisfactorily drawn, including most of the 6 foot curve and portion of the 0-foot curve.

5. Junctions with Contemporary Surveys.

a. The junctions with H-5515 (1934) and H-5514 (1934) are satisfactory.

b. The junction with H-4893 (1928) as prescribed by the instructions for the project is satisfactory. The present survey is deeper in some spots and shoaler in others. The variations are

from 1 to 2 feet, except at the extreme northwest portion where greater differences occur. In view of possible changes and the more detailed nature of the present survey, only a fringe of soundings from H-4893 (1928) at the outer junction was shown on H-5516 (1934) which within its limits should supersede chartings from H-4893 (1928).

6. Comparison with Prior Surveys.

- a. H-80 (1838) H-88 (1845)
 H-86 (1839) H-89 (1845).

Soundings on the above surveys are very sparse and vary from 1 to 4 feet shoaler than those shown on the present survey.

- b. H-1539 (1882).

Soundings of this survey in Fort Pond Bay are from 1 to 5 feet shoaler than those of the present survey. The 11 foot sounding (uncharted) of line 9-10g in lat. 41°02' 1630 m., long. 71°57' 873 m. falls in depths of about 17 feet on the present survey. The sounding is preceded on the northeastward by a 13 and 17 respectively and is followed by a 41. Hydrography on the present survey and the Engineers survey, EP. No. 21826 (1925) is insufficient for confirmation or disproval. The 11 foot sounding appears quite doubtful and should not be charted pending further investigation.

- c. H-1543 (1882).

Soundings of this survey in Napeague and Threemile Harbors vary from 1 to 2 feet shoaler than those of the present survey in the flat areas. In channels and channel entrances greater changes have occurred. Marked changes are also noted in the shoreline. In the entrance to Napeague Harbor, the 18 foot curve appears to be encroaching on the deep channel in the bay.

7. Comparison with Charts No's. 298 and 1211.

These charts are based on surveys discussed in the foregoing paragraphs, together with surveys of 1925 and 1931 by the U. S. Engineers (Blueprints No. 21826, 21829 and 25475).

- a. Soundings from Ep. 21826 in Fort Pond Bay are from 1 to 2 feet shoaler than those of the present survey. Those of Ep. 21829 in Threemile Harbor are generally in good agreement in the flat areas but are considerably shoaler than those of the present survey in the channels which have been dredged.

- b. Blueprint 25475 is the authority for the dredged 10 foot channel in Threemile Harbor and the accompanying charted note regarding the controlling depth of 10 feet as of May, 1931. Soundings of the present survey show the channel blocked in several places by controlling

depths of 7 feet although depths of 8 and 9 feet may probably be carried with local knowledge.

c. The charted deep in ^{Napeague} ~~Nespeague~~ Harbor just east of Lazy Point originates with H-1543 (1882). This is an erroneous interpretation of the 6 foot curve on that survey. The conditions are essentially the same as exist in the present survey.

8. Field Plotting.

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

9. Doubtful Soundings.

The 11 foot shoal sounding falling about 1/3 mile outside of Three-mile Harbor and in depths of 19 feet may be 1 fathom in error. However, sufficient information could not be obtained from other surveys made in this area to confirm or disprove the sounding. The 11 has been retained.

10. Additional Field Work Recommended.

a. An examination of the vicinity of the uncharted 11 foot sounding in lat. 41°-02'-1630m, long. 71°-57'-873m (mentioned in par. 6, b, this review) and its existence confirmed or disproved. *J.H.*

11. Superseding Previous Surveys.

Within the area covered, H-5516 (1934) supersedes the following surveys for charting purposes:

H-80	(1838)	In part.
H-86	(1839)	" "
H-88	(1845)	" "
H-89	(1845)	" "
H-1539	(1882)	" "
H-1543	(1882)	" "

12. Reviewed by - Harold W. Murray, December 8, 1934.

Inspected by - A. L. Shalowitz.

Examined and approved:

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

F. B. Borden
Chief, Section of Field Work.

*Applied to chart 278
Jan. 28 - 1935 R.A.C.*

L. O. Polbat
Chief, Division of Charts.

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

*Applied to chart 1211
July 17, 1935 G.H.S.*

25 J. 13, 1936
1018

Applied to chart 362 RDC 9/27/49