

5544

Diag. Cht. No. 1213-3.

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 3 Office No. H-5544

LOCALITY

State New York

General locality South Shore of Long Isl-
and Sound

Locality Weeks Point to Oak Neck Point

19 ~~34~~ 34

CHIEF OF PARTY

I. E. Rittenburg

LIBRARY & ARCHIVES

DATE October 25, 1934

5544

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5544

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. 3

REGISTER NO. 5544

State New York

General locality South shore, Long Island Sound

Locality Weak Point to Oak Neck Point *Large*

Scale 1:10,000 Date of survey Aug., Sept., 19 34

Vessel Shore Party # 15

Chief of Party I. E. Rittenburg

Surveyed by W. C. Huebner, M. D. Cooper

Protracted by A. O. Dority, M. D. Cooper, J. A. McCormick

Soundings penciled by J. A. McCormick

Soundings in ~~fathoms~~ feet

Plane of reference Mean low water

Subdivision of wire dragged areas by _____

Inked by M. Silverberg

Verified by [Signature]

Instructions dated June 13,, 19 34

Remarks: _____

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET, FIELD NO. 3.
PROJECT H&T #186, LONG ISLAND SOUND?, NEW YORK.

1. AUTHORITY.

Work on this sheet was done in accordance with instructions of June, 13, 1934. Hydrography was done in August and September, 1934. ✓

2. AREA COVERED AND JUNCTIONS.

This sheet takes in the area inside the five fathom curve on the south shore of Long Island Sound from Weeks Point on the eastern side of Hempstead Harbor to Oak Neck Point. It joins Sheet H-1732-A on the north and northwest. It also makes a junction with Sheet 2, executed by this party, on the southwest. Development along the shoreline between Glen Cove Beacon and Weeks Point was done on this sheet to facilitate the completion of Sheet No. 2. ✓

3. CONTROL AND SURVEY METHODS.

Control was based on the triangulation executed by B. H. Rigg in 1930. Supplemental stations were located in Hempstead Harbor by this party. Topographic stations and shorelines were obtained from the 1933 topographic sheets of H. A. Cotton. Hand lead soundings were obtained throughout this sheet. ✓

4. DATUM.

This sheet is on the North American datum. ✓

5. CHANNELS.

This sheet is a straight development of the area between the shoreline and the five fathom curve. No channels are involved. Bottom slopes gradually from the shoreline and depth curves are more or less symmetrical with respect to the shoreline. ✓

6. DANGERS.

There are no unnatural dangers on this sheet. ✓

7. COMPARISON WITH CHART 222.

Wreck shown on chart at Lat. 40-53.6, Long. 73-38.9 was not found but was located by wire drag in 1930. Outlying rocks and shoal spots north and west of Oak Neck Point were not found but it is recommended that they be retained on the chart in view of the rocky nature of this area. ✓

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET, FIELD NO. 3.
PROJECT H&T #186, LONG ISLAND SOUND, NEW YORK.

1. AUTHORITY.

Work on this sheet was done in accordance with instructions of June, 13, 1934. Hydrography was done in August and September, 1934.

2. AREA COVERED AND JUNCTIONS.

This sheet takes in the area inside the five fathom curve on the south shore of Long Island Sound from Week Point on the eastern side of Hempstead Harbor to Oak Neck Point. It joins Sheet H-1732-A on the north and north-west. It also makes a junction with Sheet 2, executed by this party, on the southwest. Development along the shoreline between Glen Cove Beach and Week Point was done on this sheet to facilitate the completion of Sheet No. 2.

3. CONTROL AND SURVEY METHODS.

Control was based on the triangulation executed by B. H. Rigg in 1930. Supplemental stations were located in Hempstead Harbor by this party. Topographic stations and shorelines were obtained from the 1933 topographic sheets of H. A. Cotton. Hand lead soundings were obtained throughout this sheet.

4. DATUM.

This sheet is on the North American datum.

5. CHANNELS.

This sheet is a straight development of the area between the shoreline and the five fathom curve. No channels are involved. Bottom slopes gradually from the shoreline and depth curves are more or less symmetrical with respect to the shoreline.

6. DANGERS.

There are no unnatural dangers on this sheet.

7. COMPARISON WITH CHART 222.

Wreck shown on chart at Lat. 40-53.6, Long. 73-58.9 was not found but was located by wire drag in 1930. Outlying rocks and shoal spots north and west of Oak Neck Point were not found but it is recommended that they be retained on the chart in view of the rocky nature of this area.

8. STATISTICS.

Statute miles of soundings. 175.5

No. of soundings 5278

No. of positions 1301

9. TIDES.

Portable automatic gage at Glen Cove was used for the reduction of all soundings. Mean low water on this gage as furnished by the office was 1.6.

10. LANDMARKS FOR CHARTS.

List of landmarks was submitted by H. A. Cotton in 1933. All were examined and found O.K.

L. E. Hittsburg, Lieuten.
Coast and Geodetic Survey,
Chief of Party.

8. STATISTICS.

Statute miles of soundings.	175.3
No. of soundings	5278
No. of positions	1301

9. TIDES.

Portable automatic gage at Glen Cove was used for the reduction of all soundings. Mean low water on this gage as furnished by the office was 1.6.

10. LANDMARKS FOR CHARTS.

List of landmarks was submitted by H. A. Cotton in 1933. All were examined and found O.K.

I. E. Rittenburg, Lieut.,
Coast and Geodetic Survey,
Chief of Party.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5544

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

Number of positions on sheet	.1301
Number of positions checked	..10..
Number of positions revised	..1...
Number of soundings recorded	.5278
Number of soundings revised5
Number of signals erroneously plotted or transferred0...

Date: Jan. 19, 1935

Verification by *M. Sibley*

Time: 43 hrs.

Review by *John G. Reed*

Time: 34 "

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

Survey No. H 5544

GEOGRAPHIC NAMES
 NEW YORK

Chart No. 1213

Date Nov. 15, 1934

Diagram No. 1213-3

*Names underlined in red approved Nov. 27, 1934
 H. Bacon*

- * Approved by the Division of Geographic Names, Department of Interior.
- φ Not Approved by the Division of Geographic Names, Department of Interior.
- R, Referred to the Division of Geographic Names, Department of Interior.
- Q. Being investigated*

Status	Name on Survey	Name on Chart and other authorities	New Names in local use	Names assigned by Field	Location
	<u>Glen Cove</u>	Same	-----	-----	
	<u>Red Spring Pt.</u>	-----			
	<u>G/N Stan. 222 marked by H.B. Weeks Pt. Q Hvb.</u>	<u>Weeks U.S.G.S WEEK on 1213</u>	-----	-----	
	<u>Dosoris Id.</u>	-----			
	<u>East Island</u>	-----			
	<u>Matinicock Pt.</u> <i>out</i>	<u>Matinicock Pt 1213 + USGS</u>	-----	-----	
	<u>Peacock Pt.</u>	Same	-----	-----	
	<u>Fox Pt.</u>	"	-----	-----	
	<u>Oak Neck Pt.</u>	"	-----	-----	
	<u>Oak Neck</u>	"	-----	-----	
	<u>Lettingtown</u>	----- ¹			
	Note: Names on Survey were inked on the sheet by the Field				

Rac

December 1, 1934

Division of Hydrography and Topography:

✓ Division of Charts: Attention E. P. Ellis

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5544

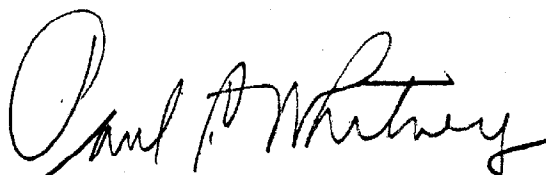
Locality Week Point to Oak Neck Point, Long Island Sound

Chief of Party: I. E. Rittenburg in 1934
Plane of reference is mean low water reading
4.8 ft. on tide staff at Willets Pt.
13.6 ft. below B.M. Serial No. 267

1.5 ft. on tide staff at Glen Cove,
15.5 ft. below B.M. 1 (1934)

Height of mean high water above plane of Reference is 7.3 ft.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

I. Conformity to Hydrographic Manual

The sounding records are neat and legible and conform to the requirements of the hydrographic manual. ✓

The position numbers in places are too large. ✓

No degree nor minute symbols were shown on the smooth sheet. ✓

II. 6 ft Curves

The low water line as plotted from the topographic surveys was modified to conform with the hydrography. ✓

The six foot, twelve, eighteen and thirty foot curves are complete within the limits of the survey. They conform in general with the shore line. ✓

III. Field Plotting

The field plotting was complete to the extent required for the soundings. The rocks and reefs as shown were verified from the topographic surveys. Several were added as noted in the sounding records. Especially Positions 18D and 19D (Lat. $40^{\circ}-54.1'$, Long. $73^{\circ}37.7'$) ✓

Position 11P (Lat. $40^{\circ}-53.85'$, Long. $73^{\circ}38.35'$) was plotted on range, the right angle and time, since its original position was clearly in error. ✓

No description as to when each rock was bare was shown and had to be added. ✓

IV. Office Plotting

The office plotting as done by the verifier consisted of corrections as outlined under III (Field Plotting). ✓

V. Junctions

Junction with H-5545 to the west could not be made since the survey had not been verified. the junction has now been made and is O.K. ✓

Junction to the north was made with H-5078. This was a wire drag survey but was the latest survey in that area. In several places the agreement wasn't so good but they may be explained by the fact that in certain instances they were grounding. ✓

Several Boulders and the wreck mentioned in the descriptive report were also transferred. ✓

All transfers were made by means of proportional dividers. ✓

VI. Remarks

There were not air photo-Compilation sheets available for Topo. sheets, are plane Table work. ✓
~~checking~~

The exact description of what are evidently buoys in the south east corner of the survey could not be found and will probably be indicated when the information is available. ✓

Respectfully submitted,

Morton Silverberg

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5544 (1934)

Long Island Sound, South Shore, N.Y.
(Weeks Point to Oak Neck Point)
Surveyed in 1934
Instructions dated June 13, 1934

Hand Lead Soundings - 3-Point Fixes on Shore Signals.

Chief of Party - I. E. Rittenburg.
Surveyed by - W. C. Huebner, M. D. Cooper.
Protracted and soundings by - A. O. Dority, M. D. Cooper, J. A. McCormick.
Verified and inked by - M. Silverberg.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual with the following exceptions:

a. Evidence that the triangulation stations and signals used on smooth sheet had been checked was lacking since the initials of the checker were omitted. This has been accomplished in the office.

2. Compliance with Instructions.

The survey satisfies the instructions for the project with the exception that no attempt was made to verify or disprove the numerous charted rocks and shoal soundings as called for in the instructions. This especially applies to the area off Oak Neck Point. (See Par. 6C-1, this review).

3. Sounding Line Crossings.

No regular system of cross lines were run. Those that result from the normal development of the area together with the parallel adjacent lines are in good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn including portions of the low water line.

5. Junctions with Contemporary Surveys.

a. H-1732a (1914)

The junction and overlap with this survey is not as satisfactory as might be desired. Numerous soundings on H-1732(1914) are found to be shoaler by 2 to 5 feet (particularly in the area northeast of Matinecock Point) than the depths as shown on the present survey, indicating changes in this area. Although there

is already an overlap of 1/3 to 1/2 mile between H-1732a (1914) and the present survey it would have been more satisfactory to have extended the present survey further offshore until a better agreement in depth was effected. In as much as the present survey is a complete and adequate development of the area, none of the soundings from H-1732a (1914), common to both surveys should be used in future charting.

b. H-1710a (1914) and H-5545 (1934).

Satisfactory junctions are made with these two surveys on the northeast and northwest respectively.

c. H-5078 W.D. (1930).

This survey overlaps the present survey to about the 30 foot curve. None of the effective drag depths are in conflict with the depths on the present survey. The drag soundings from H-5078 W.D.(1930) have been carried forward in blue to the present survey. Most of these fall in greater depths and generally uniform bottoms which indicates the existence of boulders in this area. Inasmuch as the present survey is a complete survey of the area covered it was considered unnecessary to transfer any of the overlapping soundings from H-1710a(1914) and H-1732a(1914) except a fringe at the outer end.

d. H-5142 W.D. (1931) (See addenda to this review.)

6. Comparison with Prior Surveys.

a.	H-3(1836-7)	H-10 (1837)
	H-4(1836-7)	H-11 (1837)
	H-5(1836-7)	H-12 (1836-7)
	H-7(1836-7)	H-13 (1836-7)
	H-8(1836)	H-14 (1836-7)

These sheets constitute but one survey of the area. Each sheet contains a large overlap from some or all of the others, but as plotted appear as though all the work on each was original with it. Considering the time elapsed between these surveys and the present one, and the fact that they were among the first surveys executed by this Bureau when methods and equipment were in the developmental stage, they are in fair agreement with the present survey. There are a number of discrepancies between the two surveys, the most important of which are the following:

(1) The sunken rock on H-3(1836-7), H-4(1836-7) and H-5(1836-7) at lat. 40°53.55', long. 73°38.70' falls on the new survey in depths of 20 feet. An examination of the sounding records for these surveys shows that the position controlling this rock is very weak and could just as easily be plotted inshore along the rocky shoreline. The rock is not charted at the present time, having been removed from the charts in 1896 when the 1886 survey(H-1710) was applied. It should be disregarded in future charting.

(2) The sunken rock on H-4(1836-7) and H-5(1836-7) at lat. $40^{\circ} 54.35'$, long. $73^{\circ} 38.02'$ falls on the new survey in depths of 14 feet. An examination of the sounding records for these surveys shows that the position controlling this rock is weak and can be plotted about 100m. shoreward where it would be verified by a rock awash on the present survey. Its position on the old survey is therefore considered approximate and should not be used in charting. This rock is not charted at the present time having been removed from the chart in 1896 when the survey of 1886, (H-1710) was applied.

(3) The group of sunken rocks on H-4 (1836-7) and H-5 (1836-7), at Lat. $40^{\circ} 54.4'$, Long. $73^{\circ} 38.1'$ fall on the new survey in depths of 15 to 21 feet. The rock in the center of the group is the only one that is accounted for in the sounding volume which shows a 12 foot depth (unreduced) over the rock. A tide reduction of 1.5 feet (supplied by Division of Tides, February, 1935) reduces the depth to $10\frac{1}{2}$ feet. This rock was originally shown on Chart 116 but was removed in 1896 when the 1886 survey was applied. In 1930 this area was dragged to an effective depth of 18 feet, (H-5078), the drag grounded in the vicinity of the 10. A sounding of 15 feet was obtained close to the position of the 10 but no clearance depth was obtained. Therefore, the 15 foot sounding does not necessarily represent the least depth in the area and the reduced sounding of 10 feet from H-4 and H-5 (1836-7) has been carried forward to H-5544 (1934) in red and should be charted until disproved.

(4) The sunken rock on H-8(1836) and H-10(1836-7) at Lat. $40^{\circ} 55.2'$ Long. $73^{\circ} 33.8'$ falls on the new survey in depths of 42 feet. This rock was originally charted as a 15 ft. sounding on chart No. 116 but was removed in 1896 when the 1886 survey(H-1710) was applied. An examination of the sounding records for H-8 and H-10 (1836-7) discloses that the charted 15 ft. depth was the unreduced sounding over the rock and that the rock was surrounded by 4 fathoms (also unreduced). The time of obtaining this soundings was not recorded. In replotting the position controlling the rock it was found to be almost a revolver. However from the facts known it is considered that a danger unquestionably exists in this area (which is not disproved by the present survey). Since the correct reducer cannot be determined, a value of 3 feet, ($\frac{1}{2}$ the tide range) has been used, and the resulting 12 foot sounding carried forward in red to the present survey. It has been plotted on the locus of one of the angles, in depths of about 21 feet (4 fathoms less 3 feet for $\frac{1}{2}$ the range of tide). This is about 220meters inshore of its position shown on H-8 and H-10.

b. H-692(1859)

This survey which overlaps the southwestern end of the present survey is in satisfactory agreement with it, with the exception of the 3 foot sounding which falls on the new survey in depths of 12 feet at Lat. $40^{\circ} 52.78'$, Long. $73^{\circ} 39.28'$. An examination of the records for H-692(1859)

and a replotting of pos. 2 and 3b disclosed that pos. 3b is incorrectly plotted. When plotted correctly it falls further inshore where it makes a satisfactory agreement with the present survey. It should not be used in future charting.

c. H-1700(1886), H-1710(1886) and H-1732(1886).

These surveys completely cover the area of the present survey. The agreement is satisfactory with the following exceptions:

(1) A number of rocks and shoal soundings (most of which are charted) originating with H-1732(1886) and located thereon by 3-point fixes, were not verified by the present survey, but at the same time, were not disproven. The correctness of the soundings as plotted on H-1732(1886) has been verified. They have been carried forward to the present survey in red and should be charted until disproven. This action is in conformity with the recommendation of the Chief of Party as stated in D.R. page 2, par. 7 of H-5544(1934). (Also see paragraph 2, this review.)

(2) The small reef on H-1732(1886) at Lat. $40^{\circ}55.08'$, Long. $73^{\circ}34.24'$ (charted as a rock awash). has not been carried forward to the present survey inasmuch as no authority for its existence could be found. It could not be identified as such in the sounding records, for H-1732(1886) and it is not shown on the present or any prior Hydrographic or Topographic survey. It falls on the present survey in depths of 6 to 8 feet. A detached 8 foot sounding in the records for H-1732(1886) plots on this same spot and a note in the remarks column states "Locates rock, small round one, in one fathom, 5 feet of water". It is considered that the reef was inadvertently plotted as such from this note. It should be disregarded in future charting.

(3) The numerous clusters of bare and sunken rocks, (exclusive of those mentioned in the above paragraph) shown along shore on these old surveys are considered to be a generalization only of the rocky shoreline, and should be superseded by the more accurate delineation of the area as shown on H-5544(1934).

7. Comparison with Chart No. 222. (Overlaps Chart 224).

a. Hydrography.

Within the area of the present survey the chart is based on surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

b. Aids to Navigation.

The two buoys, "bell" and "C21" off Matinicoek Point are about 160 meters south of the position as shown on the chart. However in the position as shown on H-5544(1934) they adequately mark the feature intended.

8. Field Plotting.

The field plotting was satisfactory.

9. Additional Field Work Recommended.

When work is again resumed in this locality, the rocks and soundings carried forward in red and brown to the present survey from surveys prior to 1914 should be investigated and their existence verified.

10. Superseding Old Surveys.

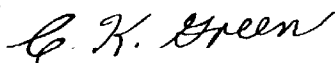
Within the area covered the present survey with the indicated additions from previous surveys supersedes the following surveys for charting purposes.

H-3 (1836-7) in part.	H-12 (1836-7) in part.
H-4 (1836-7) " "	H-13 (1836-7) " "
H-5 (1836-7) " "	H-14 (1836-7) " "
H-7 (1836-7) " "	H-692 (1859) " "
H-8 (1836) " "	H-1700(1886) " "
H-10(1837) " "	H-1710(1886) " "
H-11(1837) " "	H-1732(1886) " "

11. Reviewed by - John G. Ladd, February 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:


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


Chief, Division of Charts.


Chief, Section of Field Work.


Chief, Division of H. & T.

Note to compiler:

see addenda to this review, attached.

ADDENDA TO REVIEW OF H-5544 (1934)

5. Junctions with Contemporary Surveys.

d. H-5142 W. D. (1931).

A comparison of this survey with the present survey shows no conflicts between the effective drag depths and the depths on the present survey. However, the 12 foot "RK" sounding at lat. $40^{\circ}55.2'$, long. $73^{\circ}33.8'$ from H-8 (1836), discussed in par. 6a(4) of this review, falls close to the edge of the 14 foot effective drag depth. Because of this small margin and the fact that the clearance depth is only 14 feet, it is not considered a disproof of the 12 foot rock. The 21 and 25 foot drag soundings at lat. $40^{\circ}54.98'$, long. $73^{\circ}32.74'$ and lat. $40^{\circ}55.05'$, long. $73^{\circ}32.82'$, respectively, which fall on the present survey in depths of 7 and 3 feet deeper, have been carried forward ~~in~~ to H-5544 (1934).

C. K. Green



Applied to ch. 222 I.M.G. August 20 1935

" " " 223 I.M.G. " " " "

Partly

(Area covered by ch. 223)

25 June 13, 1936

call

chart 222 - reexamined for rocks, reefs, low water & critical depths

April 1949 - RDC

" 223 - ditto June 16, 1949 RDC