5143

Diag. Cht. No. 1213-3

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New York

DESCRIPTIVE REPORT

~~Topographic~~
Hydrographic (Wire Drag)

Sheet No. Field # 2 5143

LOCALITY

Long Island Sound

Oyster, Huntington and Northport Bays

1931

CHIEF OF PARTY

H. E. Finnegan

U. S. GOVERNMENT PRINTING OFFICE: 1930

5143

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5143

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. 2

REGISTER NO. 5143

State New York ~~and Conn.~~

General locality Long Island Sound

Locality ~~Great Captain Island to Eaton Point~~ Oyster, Huntington and Northport Bays

Scale 1 : 10,000 1 : 20,000 Date of survey April to Nov., 1931

Vessel Wire Drag Party

Chief of Party Henry E. Finnegan

Surveyed by Henry E. Finnegan and party

Protracted by S. B. Grenell

Soundings penciled by S. B. Grenell

Soundings in ~~fathoms~~ feet

Plane of reference MLW

Subdivision of wire dragged areas by (all wire drag)

Inked by S. B. Grenell (drag strips only)

Verified by

Instructions dated June 2, 1930, (B. H. Rigg), 1930

Remarks: Sheet No. 2 joins with sheet NO. 1 and completes the area between the east and west limits of sheet NO. 1.

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT

TO ACCOMPANY

WIRE DRAG SHEET NO. II

Project No. 64, Long Island Sound

1931

Instructions

The original instructions were issued to B. H. Rigg, June 2, 1930. June 26, 1931, supplemental instructions were issued covering a small topographic and hydrographic survey of Eaton Point Harbor, L. I., and vicinity.

Limits

Sheet #2 (5143) is supplemental to sheet #1 (5142) and covers Huntington Bay, Oyster Bay, and Cold Spring Harbor, L. I., and makes a junction with sheet #1 (5142) at the entrances to these bays.

Control

The control consists of recovered triangulation stations supplemented by additional triangulation executed in 1931 and signals located on topographic sheet A 1931.

The 1931 triangulation has been submitted under a separate report. Topographic sheet A with the accompanying reports was forwarded to the Washington office on August 15, 1931.

Survey Methods

Dual control was used throughout the entire season with the launches Marindin and Ogden acting as guide and end launch respectively. In a few instances, where it was desired to drag in or along the edge of foul area, the tender acted as end launch and tests were made with one of the dinghies.

The entire drag with the exception of buoy F and the towline was set out and picked up by the guide launch. All lines were laid out on the guide launch and strip tracings sent to the end launch for guidance in running their lines. All hook-ups were determined aboard the guide launch.

Following the instructions, an attempt was made to drag three feet from the bottom where possible, with the exception that no attempt was made to obtain an effective depth of more than 40 feet.

In general, dragging was carried in to the 18-foot curve, but in channels and open areas used extensively as yacht anchorages, drags as shoal as 8 feet were used. This was particularly true in the area west of Cold Spring Harbor, L. H., and in the yacht anchorage at the head of Cold Spring Harbor.

Critical shoals, wreckage, or obstructions were cleared from at least two directions to assure determination of least water within one foot if possible. When buoys bumped along sand ridges or over flat mud areas, note was made in the record and these areas covered again with a slightly shoaler drag.

Drag Tests

The improved drag tester, as evolved by the Wire Drag Party of 1930, was used throughout the season. Detailed information regarding the construction and operation of this tester may be found in the special report - Wire Drag Tester, B. H. Rigg, 1930.

The following rules were used in applying values for lift:

1. Following a change in the setting of the upright, while dragging, the value of lift obtained by the test shall be applied from the time the change in setting becomes the new drag depth.

2. The maximum lift obtained in any one section of a drag shall be the value of lift applied to all sections set at that depth. No tests are made in or lift applied to sloping sections.

3. The value of lift obtained by a test shall be applied until the next test, unless some noted condition (change in current, direction, wind, speed, etc.) seems to indicate the point of change. In such a case the new lift shall be applied from the time at which the change of condition occurred.

Tides

Portable automatic tide gauges were installed at the wharf of the Petroleum Heat and Power Co., Stamford, Conn., and at an abandoned wharf on the west side of Eaton Point, L. I. The Eaton Point gauge was operated for a short time only to secure comparisons for that area. The Stamford gauge was operated for the entire season and all reducers were taken from the records of that gauge.

Difficulties

During the early part of the season, considerable difficulty was experienced with lobster pots in along-shore and shoal areas. Later on, however, in the bays more trouble was encountered with oyster ground markers. These are poles from 20 to 30 feet in length and 5 to 8 inches in diameter at the base which are anchored with a short line and a 300-pound rock. They are set out by the oyster dredges to mark the areas where oysters have been planted, which may be in depths up to 5 fathoms.

It was found that these could be moved by the tender, but considerable time was lost when this was necessary. The oyster companies offered no objection to our moving these markers.

Discrepancies

In most cases where charted depths or soundings obtained by the tender are greater than the effective depth of the drag at the point of grounding, the apparent discrepancy is due to the fact that, while tide alone is applied to soundings, the drag depth is corrected for both tide and lift. The actual lift may not be as great in the grounding section as the maximum lift which is applied throughout the drag.

In addition to this the weights - which usually ground first - are suspended below the ground wire; about eight inches in the case of the intermediate weights and fifteen to eighteen inches on the end weights.

Recommended Chart Changes

In Lat. 40° - 56!3, Long. 73° - 25!5 a charted depth of 20 feet was covered with three drag strips of 26 feet, 26 feet and 23 feet with no indication of grounding. It is recommended that this sounding be removed from the charts.

The position of the reported wreck - Chart Div. file 481 - 1925 - at the east end of the Northport Bay entrance channel was covered once by the pipe drag at 20 feet, and later with the wire drag from two directions at 22 feet with no indication of an obstruction. It is recommended that this obstruction be removed from the charts.

There are two charted six-foot depths at distances of 130 and 280 meters N. 70° W. of Cold Spring Harbor Lighthouse. On "P" day this area was covered with an eight-foot drag in one direction and a nine-foot drag in the opposite direction. There was no indication of the six-foot depth and it is recommended that eight feet be charted for this area.

See Review O.L.S.

Henry E. Finnegan,
Chief of Party.

GROUNDINGS

Positions where the drag grounded but pulled over and continued.

Note: In many cases where the large weights on buoys N and F touched bottom, note was made in the record. Most of these groundings are of little importance, occurring along the edge of charted shoal areas where it was attempted to drag too close to the depth curve at which the drag was set.

Volume I

Page 31, pos. 12-13E, F bumping bottom; charted shoal area. N.P. close to shoal sdg pos 2g

Page 39, pos. 11-12F, buoy F bumping bottom; charted shoal area. N.P. close to shoaler sdgs.

Page 44, pos. 26.8F, buoy F grounded in very soft mud then pulled clear at pos. 28F. This area covered by shoaler drag.

Page 49, pos. 4.6G, drag grounded between buoys #3 and #4 but pulled off immediately. This covered by shoaler drag.

Page 50, buoy F grounded as pos. 10.2G and pulled off again at pos. 10.7G. Drag rendered on same shoal to small buoy #8. See pos. 2G; tender record. N.P. same as pos 2g tender record

Page 52, pos. 15.3G, drag grounded near F; pulled clear when drag was set up at pos. 16.4G and continued. N.P. same as pos 3g - tender record

Page 53, pos. 20.7G, buoy #9 bumping; cleared about pos. 21.2G when K came in on line. This area covered at shoaler depth.

Page 55, pos. 29.3G, Buoy #4 grounded but pulled clear immediately. A sounding of 13 ft. pos. 8g, was secured as the drag slipped over. Area covered at 10 feet.

Volume II.

Page 6, pos. 21.8H, buoy F bumped and pulled clear immediately. The ground is the same place as the 11 ft. sounding pos. 3h. NP

Page 9, buoy F bumped bottom on pos. 34.5H; pulled off at pos. 34.7H. Charted shoal area.

Page 14, pos. 3.7J, drag grounded at buoy #1 then pulled clear and continued as the tender took a sounding of 10 ft., pos. 1j. This area covered at 9 feet on sheet #1 on A B day. NP

Page 29, pos. 5.7L, buoy N bumping bottom; cleared at pos. 6.0L when tender set up the drag. Charted shoal area.

Page 29, pos. 6.1L, buoy F grounded; pulled clear at pos. 6.4L and advanced to pos. 6.9L where it again grounded and dragged along edge of shoal to 9.0L. Charted shoal area.

Page 31, pos. 12.0L, buoy #1 bumped bottom. Tender sounding in one foot deeper than effective depth of #1 buoy due to the fact that only tide is applied to sounding whereas lift is applied to buoy. N. P.

Pages 35 & 36, pos. 2M to 8M, the drag caught several times on submerged oyster stakes but pulled clear and continued advancing. N P

Page 38, pos. 14.8M, buoy F bumped on edge of charted shoal but came clear immediately when end launch came in on line.

Page 39, pos. 21 M Aground at N + F

Page 50, pos. 23.4N, buoy #4 caught on oyster stake but pulled clear immediately and continued advancing. Same as 15h. Grounding not plotted, probably caused by stake. Area sounded by tender on "n" day.

Page 56, pos. 5.8P, buoy #2 bumped bottom but was immediately set up by the tender and continued advancing. Charted shoal area.

Page 57, pos. 12.5P, the drag hung at buoy #5 and pulled clear at pos. 13.5P. No sounding was obtained; probably caught on a submerged oyster stake.

oo - oo - oo - oo

THE LEAST DEPTH FOUND ON CRITICAL SHOALS AND OBSTRUCTIONS

Depth: ft. : MLW	Description	Distance Direction°	Latitude: °	'	sec. meters	Longitude: °	'	sec. meters
10	A small patch of rock and boulders with deeper water surrounding.	345 true from Center I. PT.	40	55	1132	73	31	775
6	A small detached patch of large boulders	11 true from Center I. Pt.	40	55	692	73	31	389
10	A small, hard obstruction buried in soft mud.	90 true from Cooper Bluff	40	53	1324	73	28	1090
11	A soft mud bank.	03 true from Clock Tower	40	52	1370	73	28	1305
11	Wreckage with 17 ft. soft mud surrounding.	208 true from Sand Elevator	40	54	~~1409~~ 1509	73	24	697
12	A small bank of oyster shell	194 true from Sand Elevator	40	54	1097	73	24	~~634~~ 614

LIST OF SOUNDINGS TAKEN ABOARD DRAG LAUNCHES
(Recorded in H and K records)

Vol.	Page	Time	(H record): Pos. No.	Pos. of Sdg. at	Sdg. ft.	Reducer	Reduced Sgd.	Notes
I	29	12:45	5.5 E	Lch. K	23	1.5	21.5	
	29	1:04	7.8 E	Buoy N	23	1.0	22.0	
	31	2:45	15.0 E	" N	19	1.0	18.0	
	39	11:35	10.0 F	Lch. K	25	4.0	21.0	
	39	11:40	10.3 F	" K	27	4.0	23.0	
	39	11:45	11.1 F	" K	23	4.0	19.0	
	39	11:50	12.0 F	" H	14	3.5	10.5	
	42	1:30	21.0 F	Buoy N	12	2.0	10.0	
	49	10:30	8.0 G	Lch. H	29	6.5	22.5	
	50	10:38½	9.0 G	" H	29	7.0	22.0	
II	23	2:30	24.0 K	Lch. H	22	6.0	16.0	sft M
	24	3:21	27.0 K	" H	22.5	6.5	16.0	
	31	3:30	16.0 L	" H	23	6.0	17.0	
	56	12:10	8.0 P	" H	17.5	8.5	9.0	
	56	12:17	9.0 P	" H	18	8.5	9.5	hrd

EXPLANATORY NOTES

(For check plotting)

Vol. I, Page 10, Pos. 10B - From this position on the drag was in the lee of the point and the lift of 1.0 ft. found at 11:20 should be applied.

Vol. I, Page 37, Pos. 7F should be plotted on the arc of the total angle Lud - Plum and time from the guide launch cuts. After position 8F the line was not plotted; too big a bight for effective dragging.

Vol. II, Page 59 - The line from Pos. 16 to 19P is plotted in pencil only on the smooth sheet. The dragging was not effective and the strip was plotted as a check only on sounding positions and groundings.

Note:

When the triangulation was checked at the end of the season, it was found that Station "Tank E" was in error. The smooth sheet had already been plotted and inked, so no change was made in drag strip plotting. All soundings, however, where "Tank E" was used, were replotted on the smooth sheet.

STATISTICS FOR SHEET No. II.

Volume No.	Day Letter	Drag Line stat. mi.		No. of Sdgs. Tender		Number of Positions Tender M		Guide Lch. H		End Lch. K	
I	A	3.3		1		1		18		18	
	B	1.1		9		0		18		15	
	C	1.8		182		44		16		17	
	D	1.2		11		11		13		11	
	E	2.0		8		8		19		19	
	F	3.4		13		12		31		30	
	G	4.1		8		8		31		33	
	Totals		16.9		223		84		146		143
II	H	7.8		3		3		39		43	
	J	0.8		3		3		8		8	
	K	4.5		19		19		32		30	
	L	2.5		8		9		17		20	
	M	4.0		3		3		21		20	
	N	2.8		20		20		25		23	
	P	2.3		10		10		19		20	
	Totals		24.7		66		67		161		164
III	P	0.3		2		2		4		7	
	Totals		0.3		2		2		4		7
	Sum Totals		41.9		291		153		311		314

Area Dragged 10.3 sq. stat. miles

Total number of Drag Tests 34

Duplicate

Form 567

H- 5143 DIVISION OF CHARTS, FILE NO.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D. C.

January 12, 1931

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

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

Henry E. Finnegan

Chief of Party.

DESCRIPTION	POSITION For identification only. Latitude °	'	D. M. meters	Longitude °	'	D. P. Meters	Datum	METHOD OF DETERMINATION	CHARTS AFFECTED
Tall Tower	40	56	107	73	40	547	N. A.	Triang.	221, 1213
Flagstaff	40	54	270	73	30	1180	"	"	224, 1213
Cupola	40	55	482	73	31	776	"	"	224, 1213
Church Spire	40	53	652	73	31	960	"	"	224, 1213
Church Spire	40	52	572	73	31	1050	"	"	224, 1213
Standpipe	40	51	1764	73	32	650	"	"	224, 1213
Clock Tower	40	52	609	73	28	1563	"	"	224, 1213
Tall Tower	40	53	1000	73	28	500	"	"	224, 1213
Water Tanks (common tops)	40	55	1699	73	27	1590	"	"	224, 1213
Old Tower	40	54	1676	73	26	156	"	"	224, 1213
Weather Bureau Flagstaff.	40	57	514	73	25	1230	"	"	224, 1213

Note: The D.M.s and D. P. s were scaled from Chart #224.

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, flagstaffs and like objects are not sufficiently permanent to chart.

GOVERNMENT PRINTING OFFICE

H- 5143 Duplicate

DIVISION OF CHARTS. FILE NO.

Form 567

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D. C.

January 12, 1951

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following ~~determined~~ charted objects are prominent, ~~can be readily distinguished from seaward from the description given below~~ no longer, and should be ~~charted~~ removed from charts.

Henry E. Finnegan
Chief of Party.

DESCRIPTION	POSITION For identification only. Latitude ° '	Latitude D. M. meters	Longitude ° '	Longitude D. P. Meters	Datum	METHOD OF DETERMINATION	CHARTS AFFECTED
Chimney	40 52	950	75 31	892			224, 1213
Stack	40 54	2	75 28	750			224, 1213
Flag Staff	40 53	118	75 28	412			224, 1213
Windmill	40 55	700	75 26	600			224, 1213
Tower	40 54	566	75 25	1065			224, 1213
Tank	40 54	436	75 25	630			224, 1213
Sand Elevator *	40 55	515	75 24	365			224, 1213
Tank	40 56	230	75 22	1170			224

* Brick wall (probably foundation of sand elevator) remaining. There are two brick houses on this point.

Note: D. M.'s and D. P.'s scaled from charts.

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GOVERNMENT PRINTING OFFICE

Form 567

H-5143 Duplicate

DIVISION OF CHARTS, FILE NO. _____

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D. C.

January 12, 1931, 19

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.

Henry E. Finnegan

Chief of Party.

DESCRIPTION	POSITION						Datum	METHOD OF DETERMINATION	CHARTS AFFECTED
	Latitude			Longitude					
	°	'	D. M. meters	°	'	D. P. Meters			
Gas Tank	40	58	1561.5	73	41	818.4	N. A.	Triang.	222, 1213
Tower on Building	40	59	1616.0	73	41	1310.0	"	"	222, 1213
Windmill	41	01	508.6	73	39	1549.1	"	"	222, 1213
Church Spire	41	02	221.7	73	37	578.5	"	"	1213
South Cable, house.	40	58	1717.6	73	37	1071.4	"	"	222, 1213
Tall Black Stack	41	01	1462.5	73	35	1215.5	"	"	222, 1213
Wreck	41	00	278.1	73	35	528.0	"	"	222, 1213
Tall Stack—Gas Plant	41	02	834.8	73	32	821.3	"	"	221, 1213
Church Spire	41	02	1325.4	73	31	699.2	"	"	221, 1213
Red Easterly Cone (house)	41	01	829.0	73	31	302.6	"	"	221, 1213
N. W. Chimney(House many chimneys)	40	54	1788.4	73	31	707.2	"	"	224, 1213
Small Stone House	40	54	147.5	73	30	711.8	"	"	224, 1213
Dome on large building.	40	54	575.7	73	28	393.5	"	"	224, 1213
N. W. end of Yellow Sand Bluff.	40	56	736.1	73	28	606.8	"	"	224, 1213
Cone, summer house.	40	56	1030	73	22	1147	"	Topo	224, 1213
N. end of Yellow Sand Bluff.	40	56	572	73	24	275	"	Topo	224, 1213
Water Tank	40	52	132.0	73	26	971.3	"	Triang.	224, 1213
Water Tank	40	53	1764.7	73	25	1246.2	"	Triang.	224, 1213

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, flagstaffs and like objects are not sufficiently permanent to chart.

GOVERNMENT PRINTING OFFICE

SECTION OF FIELD RECORDS
Review of Wire Drag Survey, H-5143.
Oyster, Huntington and Northport Bays, Long Island Sound, N. Y.
Surveyed in 1931
Original instructions dated June 2, 1930. (B.H.Rigg).
Supplemental instructions dated June 26, 1931.

Chief of party - H. E. Finnegan.
Surveyed by - H. E. Finnegan.
Drag work and soundings plotted by - S. B. Grenell.
Soundings and groundings verified and inked by - R. L. Johnston.

1. The records conform to the requirements.

2. The area and depth tracing, prepared by the field party, was compared with the smooth plotting and inspected for any gross errors but was not completely verified. Several minor errors were corrected and the tracing now appears to be correct. However all soundings and groundings should be taken from the smooth sheet and not from the area and depth tracing.

3. The field plotting of drag limits, overlaps and subdivisions was not generally verified except where groundings were affected, but was accurately done in these cases. Due to later revision of the triangulation an incorrect position of station "Tank E" was used in plotting the drag work in Huntington Bay and Northport Bay, Test lines plotted from the true position of Tank E showed that the shift affected the drag lines only slightly. Only those drag lines on the western and eastern limits of the work were replotted. The corrected position of Tank E was used for all soundings and groundings.

4. Chart Changes.

a. In Lat. 40°-56.3', Long. 73°-25.5' a sounding of 20 feet was covered twice by drag strips of 26 feet without grounding. The sounding was found to have been incorrectly shown on H. 3944, and should have been 29 feet instead of 20 feet. This sounding has been removed from the charts.

b. The position of the wreck reported in Letter 481, 1925, at the east end of Northport Bay entrance channel was covered several times by the drag with depths of 20 and 22 feet without striking. This wreck symbol has been removed from the charts.

c. There are two soundings of 6 feet shown on Chart 224 at distances of 130 and 280 meters N. 70° W. of Cold Spring Harbor Lighthouse. These soundings are from an examination in 1887 plotted on H. 1710. In 1914 a depth of 7 feet was obtained. (H. 1710a). While this bar may have deepened slightly the difference between the plane of the drag (8 ft.), which cleared, and the depths of the soundings is hardly great enough to warrant their removal at the present time.

In any case the 6 foot spot, which is only 130 meters from the lighthouse, is so close to the limits of the drag work at the split around the lighthouse that there is some doubt as to whether it was actually covered. (see notes by A. L. S. attached).

d. The wreck symbol shown on the western side of the entrance to Oyster Bay in Lat. 40°-55.85', Long. 73°-31.5' was reported in Letter 426, 1927. While the field party made no recommendation as to the disposition of this wreck, since the position of the obstruction was passed by a drag strip with a depth of 12 feet on this sheet and by drag strips with depths of 12 and 17 feet on H. 5142 it is recommended that the wreck symbol be removed from the charts. This wreck has also been considered in review of H. 5142.

5. The character of the work on this sheet is very good. The junction with H. 5142 is adequate, overlaps are ample and no additional work is necessary.

6. Reviewed by R. L. Johnston - April 12, 1933.

7. Sheet Inspected by - A. L. Shalowitz.

Notes by A. L. Shalowitz.

1. Regarding the two 6 foot soundings mentioned in paragraph 4 c of the review, it should be noted that in addition to the 8 foot drag strip which cleared the spots, a 9 foot drag (pos. 16-19P, not plotted) was also run over the area to check the existence or non-existence of the 6 foot shoals. It is noted in the drag records, however, that the buoys were dragging bottom the entire length of the strip. In the absence of a close hydrographic examination around the 6 foot shoals, it is not believed there is sufficient evidence that the shoals do not exist and there is no basis for substituting an 8 foot sounding here, as recommended by the chief of party. It is therefore recommended that the two shoals be retained on the charts until such time as a leadline examination will show the area to have deepened.

2. Regarding the reported rock (6 feet at MLW) in vicinity of Can Buoy 17 (Chart Letter 438-1924) and referred to in par. 11, d of the S. I., it is to be noted that the present survey shows an effective depth of 12 feet to exist in the reported position. The rock has never been charted and it can be dismissed from any further consideration.

Examined and approved:

Sgd. L. O. Colbert.

L. O. Colbert
Chief, Field Record Section.

L. O. Colbert
Chief, Chart Division.

T. H. Borden
Chief, Field Work Section.

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

March 28, 1932.

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in
7 volumes of sounding and wire drag records for

HYDROGRAPHIC SHEET 5143

Locality Oyster, Huntington and Northport Bays, Long Island Sound, N. Y.

Chief of Party: H. E. Finnegan in 1931
Plane of reference is mean low water
3.7 ft. on tide staff at Stamford, Conn.
18.5 ft. below B. M. 3A

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 P. Whitney

Chief, Division of Tides and Currents.