

5142

WD

Diag. Cht. No. 1213-3

Form 504  
Ed. June, 1928

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

U. S. COAST & GEODETIC SURVEY  
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APR 26 1932

State: N. Y. and Conn.      Acc. No. \_\_\_\_\_

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 5142  
Hydrographic } Field # 1

LOCALITY

Long Island Sound

Porgy Shl., to Eaton Pt.

1931

CHIEF OF PARTY

H. E. Finnegan

5142

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5142

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. 1

REGISTER NO. 5142

State New York and Conn.

General locality Long Island Sound

Locality Porgy Shl., to Eaton Pt.

Scale 20,000 Date of survey May - Nov., 1931

Vessel Marindin and Ogden

Chief of Party H. E. Finnegan

Surveyed by H. E. F.

Protracted by C. R. Reed

Soundings penciled by C. R. R.

Soundings in ~~fathoms~~ feet

Plane of reference M.W.

Subdivision of wire dragged areas by C. R. R.

Inked by C. R. R.

Verified by P. L. J. sds & groundings

Instructions dated June 2, 1930 - June 26, 1931, 19

Remarks:

DESCRIPTIVE REPORT

TO ACCOMPANY

WIRE DRAG SHEET NO. I

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

The sheet extends from a junction with wire drag sheet H-5078 executed by B. H. Rigg, 1930, eastward to a line between Asharoken Beach, L. I., and Copp Island in the Norwalk Islands group. A junction was made with sheet No. 2, 1931, at the entrances to Oyster Bay and Huntington Bay. The sheet covers the full width of Long Island Sound except for a narrow strip along the Connecticut shore eastward from Long Neck Point.

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 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 four<sup>1</sup> areas, 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 5 feet were used.

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.

In several instances near the end of drag strips, when one or both end buoys grounded but continued to advance slowly, the actual lift was so reduced that the whole drag grounded at a depth greater than the applied effective depth.

Recommended Chart Changes.

Numerous notations relative to chart changes have been forwarded under separate cover as a chart letter <sup>#62</sup> composed of sections of charts on which recommendations have been made in red ink.

The more important shoals and obstructions have been listed under a succeeding paragraph. A list of soundings for hand correction has been forwarded as chart letter #64, 1932.

LEAST DEPTH OVER THE MORE CRITICAL SHOALS  
AND OBSTRUCTIONS

Least Depth	Covered by	Latitude Long.	d.m. d.p.	Dist. & Direction From	Pos. NO.	Chart Numbers.
16		40 57	182	2063 S 38 W	S'yly Point	3 dd 52, 222, 1213
		73 40	962		Manursing I.	
8	6	40 57	627	1656 S 44 W	do	1 ee do
		73 40	846			
15	7	40 57	637	1548 S 41 W	do	2 ee do
		<del>73 37</del> 40	708			
6	5	40 57	1063	740 S 06 E	do	7 gg do
		73 39	998			
8		40 58	1640	2418 S 87 W	Gt. Capt. I.	3 lck do
		73 39	224		L. H.	
7		40 59	893	1119 N 29 W	do	3 qq do
		73 37	1139			
15	13	40 59	1641	1090 N 37 E	Little Capt. I.	6 ss do
		73 36	67		I. (center)	
* 23	21	40 59	735	1527 S 31 W	Greenwich Pt.	3 bn do
		73 34	1096		East Tang.	
* Probably sunken buoy; cleared from two directions with 20 and 21 feet.						
9	7	40 55	1258	1330 N 36 W	Center Id.	9 ab 52, 224, 1213.
		73 31	1275		Point	
16	16	40 59	1345	4622 N 00 E	Eaton Point	1 an do
		73 23	1020		L. H.	
7	5	40 57	1677	1260 N 12 E	do	9 at do
		73 23	802			
29	26	41 01	342	1414 S 36 E	Bold Rock	2 aw 52, 221, 1213
		73 28	1338		(Smith Reef)	
31	29	41 01	948	1850 S 05 W	Greens Lg.	7 v do
		73 26	1084		L. H.	
25	22	41 00	1542	3592 S 30 E	do	13 s do
		73 25	463			
25	24	41 00	1212	3931 S 29 E	do	3 r do
		73 25	364			
34	31	41 00	854	4352 S 29 E	do	5 l do
		73 25	118			

This is only a partial list of shoals and is included in the complete list forwarded as Chart Letter # 64, 1932. Bottom characteristics, surrounding depths, etc. can be found in the complete list.

LIST OF SOUNDINGS

TAKEN ABOARD THE DRAG LAUNCHES.

( Recorded in H and K records )

Vol.	Page	Pos. No.	Reduced Depth	Taken aboard Launch
I			None	
II			None	
III			None	
IV	7	23 X	15	H
	10	1 Y	40	H
	13	15 Y	32	H
	13	17 Y	35	H
	19	6 Z	24	H
	20	11 Z	23	H
	43	3 CC	32	H
V	30	1-5 JJ	<del>None</del>	
VI	12 <sup>1/2</sup>	3 <sup>1/2</sup> PP	10 <sup>28</sup>	H
	34	11 RR	35 <sup>10</sup>	H
VII			None	
VIII	25	16 AE	21	H
	35	10 AF	59	H
IX	29	28 AL	24	H
	29	29 AL	17	H
X	11	10 AR	59	K
	11	10.6 AR	57	K
	11	11 AR	36	K
	12	12 AR	37	K
	12	13.5 AR	41	K
	12	14 AR	45	K
	12	15 AR	41	K
	12	15.5 AR	42	K
	13	16 AR	42	K
	13	17.2 AR	36	K
	13	17.5 AR	28	K
	13	18 AR	26	K
	13	18.5 AR	26	K
	13	19 AR	23	K
	23	6 AS	52	H
	54	11 AV	34	H
XI			None	
XII	4	29 BF	9	K
	9	8 BG	11	H
	38	4 BL	18	H



LIST OF GROUNDINGS \* \* \* SHEET NO. I.

Vol.	Page	Pos. No.	Effective Depth	
I	8	13A	43	N bumping- pulled clear at 13.4A. ✓
	9	18A	44	Aground on buoy which was picked up by drag. ✓
	31	28.8D	47	F aground - set up by tender. ✓
II	11	12.8J	43	N dragging bottom - cleared at pos. 13.4J. ✓
	39	27M	45	F bumped, came clear immediately and proceeded. ✓
	44	2.9N	41	N bumped - came clear at 3.ON. ✓
III	14	13.9R	31	N " " " " 14.OR. ✓
	31	6.3T	41	Buoy # 2 bumped - came clear at 7.OT on set up. ✓
IV	12	12Y	40	N aground - pulled clear by tender and proceeded. ✓
	13	14.4Y	32	N bumping - set up by tender and proceeded. - N.P. ✓
	19	6Z	24	N aground - set up, cleared and proceeded. ✓
	20	10Z	23	Hung between # 4 and # 5 - pulled clear at 10.3Z. ✓
	20	11Z	23	N, #1, and #2 bumping. ✓
	20	11Z	23	N aground on charted shoal. - N.P. ✓
V	1	2FF	14	N touched bottom. ✓
VI	34	10RR	40	N touched bottom. ✓
	34	10RR	40	N touched bottom. ✓
VII	1	237UU	46	N bumping, Pos.2.9 # 1 bumping, Pos. 3.0 all clear. ✓
	1	3.2UU	40	N bumping - 3.8UU cleared and proceeded. ✓
	8	35UU	31	N touched bottom. N.P. close to 27' sdg at pos. 12 uu ✓
	34	20.8XX	34	N bumped and came clear immediately. ✓
VIII	34	21.5XX	34	N " " " " " " " " ✓
	25	17.5AE	18	N bumping - cleared at 17.8AE. ✓
	41	53AF	41	F grounded on end of line. ✓
IX	57	14.9AH	11	Buoy #2 grounded - cleared at 15.5AH - aground at 15.7AH ✓
	3	9.2AJ	34	N bumping - cleared at 10AJ. ✓
	4	14.9AJ	34	N dragging on charted shoal - cleared at 16AJ. ✓
	4	16.7AJ	34	N dragging to Pos 18 at end of line. ✓
	4	18.0AJ	34	N " " " " " " " " ✓
	7	29.5AJ	40	N bumping - set up and cleared at 30AJ. ✓
	9	40.7AJ	34	Buoy # 3 bumping. ✓
X	25	11.5AL	34	Buoy # 3 barely touching bottom - cleared at 13.5AL. ✓
	34	8AM	14	Buoy # 1 caught and pulled off immediately. ✓
	33	11AT	9	N bumped for one minute ( See Pos. 16 - 17 AV ). ✓
	41	5AV	26	N - ditto - ✓
	48-5	15.8AV	13	N and # 1 bumped several times (See page 33, Pos. 11AT) ✓
XI	58	19AV	16	Drag caught momentarily - Probably buoy anchor. N.P. ✓
	10	8.2AX	21	Buoy # 2 bumped - set up immediately and cleared. ✓
	10	8.3AX	33	Buoy # 3 bumped - - Ditto - ✓
	40	3.7BD	30	N bumping. ✓
	48	4BE	14	Buoy # 5 caught and pulled clear immediately. ✓
XIII	58	11.6BF	14	N bumped and came clear immediately. ✓
	19	6.4BS	21	N bumping bottom - set up by tender and continued. ✓
	20	9.7BS	19	F bumping - K came in to clear. N.P. close to shoal grounding 13' at pos 1.6BT ✓
	29	1.6BT	13	N bumping - Set up by tender. ✓

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

*C. King*

# LANDMARKS FOR CHARTS

Washington, D. C.

February 15, 193 **2**

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. **(AIDS TO NAVIGATION)**

Henry E. Finnegan

Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D. M. METERS	°	'	D. P. METERS			
Channel, Stam. Har. Bl. & Wh. Beacon, West	41	01	1452	73	32	601	N. A. Triang.	221, 1213	
Range, Stamford Har. R. & Wh. Beacon, Rear	41	01	1702	73	32	399	N. A. "	221, 1213	
Range, Stam. Harbor. B. & Wh. Beacon, Front	41	01	1509	73	32	388	N. A. "	221, 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.

2

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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 1361.5	73	41 818.4	N. A.	Triang.	222, 1213	
Power on Building	40	59 1618.0	73	41 1510.0	"	"	222, 1213	
Windmill	41	01 508.6	73	39 1349.1	"	"	222, 1213	
Church Spire	41	02 221.7	73	37 575.5	"	"	1213	
South Gable, house.	40	58 1717.6	35 37 1071.4	"	"	222, 1213		
Tall Black Stack	41	01 1468.3	73	35 1213.3	"	"	222, 1213	
Wreck	41	00 275.1	73	35 528.0	"	"	222, 1213	
Tall Stack--Gas Plant	41	02 814.8	73	32 821.3	"	"	221, 1213	
Church Spire	41	02 1825.4	73	31 699.2	"	"	221, 1213	
Red Easterly Cone (house) chimneys)	41	01 829.0	73	31 302.6	"	"	221, 1213	
N. W. Chimney (House many)	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. Bluff.	40	54 573.7	73	28 393.5	"	"	224, 1213	
N. W. end of Yellow Sand	40	56 788.1	73	28 688.8	"	"	224, 1213	
Cone, summer house. Bluff.	40	56 1060	73	22 1147	"	Topo	224, 1213	
N. end of Yellow Sand	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	23 1245.2	"	Triang.	224, 1213	

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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.

c-f-y

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## LANDMARKS FOR CHARTS

Washington, D. C.

January 12, 19 31

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

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

Henry E. Finnegan

Chief of Party.

DESCRIPTION	POSITION For identification only.					Datum	METHOD OF DETER- MINATION	CHARTS AFFECTED
	Latitude			Longitude				
	°	'	D. M. meters	°	'			
Tall Tower	40	58	107	73	40	547	N. A. Triang.	221, 1213
Flagstaff	40	54	270	73	30	1180	" "	224, 1213
Cupola	40	53	482	73	31	776	" "	224, 1213
Church Spire	40	52	632	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	1363	" "	224, 1213
Tall Tower	40	53	1000	73	28	500	" "	224, 1213
Water Tanks (conical tops)	40	55	1699	73	27	1390	" "	224, 1213
Old Tower	40	54	1676	73	26	136	" "	224, 1213
Weather Bureau Flgstff.	40	57	514	73	23	1228	" "	224, 1213
Note: The D.M.s and D. P. s were scaled from Chart #224.								

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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.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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LANDMARKS FOR CHARTS

Washington, D. C.

January 12, 1951

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

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

Henry E. Finnegan

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	For identification only.							Datum
	Latitude		Longitude					
°	'	D. M. meters	°	'	D. P. Meters			
Chimney	40	52	950	73	31	892	224, 1213	
Stack	40	54	2	73	28	750	224, 1213	
Flag Staff	40	53	118	73	28	412	224, 1213	
Windmill	40	55	700	73	26	600	224, 1213	
Tower	40	54	556	73	25	1063	224, 1213	
Tank	40	54	436	73	23	810	224, 1213	
Sand Elevator *	40	55	315	73	24	365	224, 1213	
Tank	40	56	230	73	22	1170	224	
<p>* Brick wall (probably foundation of sand elevator) remaining. There are two brick houses on this point.</p>								
<p>Note: D. M.'s and D. P.'s scaled from charts.</p>								

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.

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STATISTICS


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	4.9	0	1	18	32
	B	4.2	2	1	21	24
	C	3.7	1	1	17	19
	D	8.8	1	1	33	36
	E	3.2	2	2	16	15
	F	5.9	1	1	34	35
	G	4.4	10	10	26	29
	Totals	<u>35.1</u>	<u>17</u>	<u>17</u>	<u>165</u>	<u>190</u>
II	H	3.3	4	4	25	26
	J	3.4	3	3	21	19
	K	4.8	1	2	27	25
	L	4.8	7	6	29	32
	M	6.1	6	8	37	36
	N	2.1	3	3	11	20
	P	4.2	3	3	27	29
	Totals	<u>28.7</u>	<u>27</u>	<u>29</u>	<u>177</u>	<u>187</u>
III	Q	5.3	2	2	28	27
	R	3.7	3	3	22	19
	S	3.9	13	13	27	23
	T	1.8	16	10	9	10
	U	3.0	13	13	24	24
	V	4.3	9	9	25	27
	W	1.9	8	7	15	14
	Totals	<u>23.9</u>	<u>64</u>	<u>57</u>	<u>150</u>	<u>144</u>
IV	X	3.9	5	5	25	25
	Y	2.8	2	2	23	22
	Z	1.2	4	3	14	16
	AA	8.1	0	0	37	36
	BB	3.9	3	3	22	22
	CC	2.0	20	20	16	15
	DD	1.2	3	3	6	8
EE	1.7	5	5	14	15	
	Totals	<u>24.8</u>	<u>42</u>	<u>41</u>	<u>157</u>	<u>159</u>
V	FF	1.4	8	8	14	19
	GG	2.5	28	20	23	33
	HH	4.8	17	18	24	23
	JJ	3.5	6	6	24	23
	KK	3.4	10	10	30	29
	LL	3.5	16	16	26	25
	MM	2.6	22	21	27	25
	Totals	<u>21.7</u>	<u>107</u>	<u>99</u>	<u>168</u>	<u>177</u>
VI	NN	2.6	1	1	13	14
	PP	2.7	11	11	22	19
	QQ	3.6	16	16	39	34
	RR	2.8	20	20	28	21
	SS	3.2	18	16	27	20
	TT	5.1	7	7	34	35
	Totals	<u>20.0</u>	<u>73</u>	<u>71</u>	<u>163</u>	<u>143</u>

Volume No.	Day Letter	Drag Line stat. mi.	No. of Sdgs. Tender	Number of Positions		
				Tender M	Guide Lch. H	End Lch. K
VII	UU	6.5	16	16	36	32
	VV	3.0	0	0	19	19
	WW	5.2	12	12	38	32
	XX	3.2	3	3	24	17
	YY	4.9	26	26	33	28
	ZZ	1.6	10	10	16	15
	AB	3.1	10	10	24	22
	Totals	<u>27.5</u>	<u>77</u>	<u>77</u>	<u>190</u>	<u>165</u>
VIII	AC	4.1	6	6	34	29
	AD	3.0	8	9	25	20
	AE	4.4	3	3	32	37
	AF	4.8	16	16	33	27
	AG	3.2	14	14	16	17
	AH	1.4	12	12	18	20
		Totals	<u>20.9</u>	<u>59</u>	<u>60</u>	<u>158</u>
IX	AJ	5.7	11	11	42	41
	AK	6.4	0	1	35	35
	AL	4.4	4	4	30	35
	AM	2.0	7	7	19	21
	AN	4.0	1	1	21	20
	AP	6.0	10	10	32	33
		Totals	<u>28.5</u>	<u>33</u>	<u>34</u>	<u>179</u>
X	AQ	2.5	3	3	17	11
	AR	5.3	9	9	42	35
	AS	3.5	8	8	27	23
	AT	2.5	9	9	23	19
	AU	3.6	12	12	25	26
	AV	3.2	16	16	23	39
		Totals	<u>20.6</u>	<u>57</u>	<u>57</u>	<u>157</u>
XI	AW	2.8	3	3	20	20
	AX	2.4	6	6	15	12
	AY	0.7	8	8	4	4
	AZ	4.7	16	16	30	29
	BC	1.8	13	13	20	26
	BD	1.3	6	6	13	14
	BE	2.5	11	11	22	20
	BF	2.1	12	12	18	21
	Totals	<u>18.3</u>	<u>75</u>	<u>75</u>	<u>142</u>	<u>146</u>
XII	BF	1.7	6	7	11	9
	BG	1.5	5	5	15	18
	BH	0.5	2	2	6	8
	BJ	4.8	6	7	31	29
	BK	2.3	1	1	15	16
	BL	1.5	3	3	18	16
	BM	1.5	0	0	8	7
	BN	3.2	3	3	26	24
	Totals	<u>17.0</u>	<u>26</u>	<u>28</u>	<u>130</u>	<u>127</u>

Volume No.	Day Letter	Drag Line stat. mi.	No. of Sdgs. Tender	Number of Positions		
				Tender M	Guide Lch. H	End Lch. K
XIII	BP	2.0	1	1	23	23
	BQ	.5	3	3	5	6
	BR	1.1	0	0	5	6
	BS	2.7	11	11	27	25
	BT	2.0	0	0	16	15
	BU	1.4	4	4	11	12
	BV	2.6	10	10	18	14
	BW	.7	2	2	5	5
	BX	1.6	4	4	14	9
	Totals	<u>14.6</u>	<u>35</u>	<u>35</u>	<u>124</u>	<u>115</u>
XIV	BX	3.0	3	3	18	16
	BY	3.0	3	3	24	24
	Totals	<u>6.0</u>	<u>6</u>	<u>6</u>	<u>42</u>	<u>40</u>
Sum Totals		<u>307.6</u>	<u>698</u>	<u>686</u>	<u>2102</u>	<u>2081</u>

Miles of drag strip 307.6  
Soundings 698  
Positions (M) 686  
Area - sq. stat. mi. 101.1

Henry E. Finnegan,  
Chief of Party.

Report forwarded by  S. B. Grenell.



July 8, 1932

Division of Hydrography and Topography:

✓ Division of Charts:

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

HYDROGRAPHIC SHEET 5142

Locality Porgy Shoal to Eaton Point, Long Island Sound

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

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.

*W. H. Hammer*  
Chief, Division of Tides and Currents.

SECTION OF FIELD RECORDS  
Review of Wire Drag Survey, H. 5142.  
Long Island Sound, New York and Connecticut.  
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 - C. R. Reed.  
Soundings and groundings verified and inked by - R. L. Johnston.  
Area and depth tracing by - C. R. Reed.

1. The records are clear and well kept and conform to requirements.
2. The plan, character and extent of the survey satisfy the specific instructions except that a definite statement should have been made in the descriptive report about item c and d on page 3. (Original instructions).
3. The area and depth tracing, prepared by the field party, was checked by comparing it with the plotting of the dragged areas on the smooth sheet. A few minor errors were found and corrected. While this method of verification is not infallible, it is believed the A and D tracing may now be accepted as correct in so far as the limits of the dragged areas are concerned. Soundings and groundings were verified on the smooth sheet only and should not be charted from the A and D tracing.
4. The field plotting of drag limits, overlaps and subdivisions was not generally verified except in the areas where groundings occurred.

The field plotting was found to have been carefully, accurately and neatly done.

5. Chart Changes.

Chart 221.

The results of this survey have not been applied to Chart 221 at the present time.

The only sounding on Chart 221 to be definitely disproved by the drag is a 29 ft. sounding from H. 1698 shown in Lat. 41°-01.7', Long. 73°-27.6'. This was cleared by drag strips on H. 5142 and H. 5219 and is further discredited by the two hydrographic surveys H. 1698b and H. 5221. This 29 ft. spot should be removed from Chart 221 and Chart 1213. (The removal of this sounding has been approved by Chief, Section of Field Records. For history, see Review for H. 5219, par. 7).

Chart 222.

The shoals found on this survey have been applied to Chart 222 from advance information. The soundings should be closely examined as the final results differ in some places from the preliminary reports. No soundings shown on Chart 222 are disproved by the wire drag with the exception of an 8 ft.

H-5142.

sounding, from the records of H. 1699a in Lat. 40°-59.5', Long. 73°-37.45'. This spot was cleared by 12 and 13 ft. drag strips. The area is to be further investigated in 1933 and the 8 ft. sounding should be retained on the chart until the new examination is completed.

Attention is called to a 30 ft. shoal in Lat. 40°-58.2', Long. 73°-38.2' which was not charted.

The obstruction on which 38 ft is charted in Lat. 40°58.35', Long. 73°-33.9' should be charted as 41 ft. This point was cleared by 39 and 40<sup>1</sup>/<sub>2</sub> ft. drag strips while the least effective depth to strike was 42 ft. The shoalest sounding which could be obtained was 54 ft. as the lead kept sliding off. A 41 foot grounding has been shown on the sheet.

Chart 224.

Most of the critical shoals have been applied to this chart from advance information but the soundings on the smooth sheet should be closely examined as the final results are more complete and sometimes differ from the preliminary reports.

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 by Letter 426, 1927, which mentioned its probable removal. While the field party made no recommendation as to the disposition of this wreck, since the position of the wreck was passed by drag strips with depths of 12 and 17 ft. it is recommended that it be removed from the chart. (Concurred in by Chief, Section of Field Records).

The following soundings shown on Chart 224 are from H. 1732a (survey of 1916) and are considered to be disproved by the wire drag and should be removed from the chart.

a. The 33 foot sounding in lat. 40°-57.6, long. 73°-29.95 (pos. 39 B) although corroborated by a 34 foot sounding just prior has been cleared by a 39 and a 40 foot drag.

b. The 34 foot sounding in lat. 40-57.8, long. 73°-29.6 (pos. 8 B) was cleared by 38 and 39 foot drags. It is quite possible that the original recorded sounding of 7 fathoms should have been 11 fathoms.

The charted 33 foot sounding in lat. 40°-57.7, long. 73°-29.95 is evidently an error in charting and should be 39 feet (pos. 38 - 39 B, H. 1732a). It was cleared by a 39 to 40 foot drag which ofcourse is inadequate for removing from the charts.

The charted 39 foot sounding in lat. 40°-57.55, long. 73°-30.18 (pos. 74 - 75 B, H. 1732a) may possibly be a 63 foot sounding. The originally recorded sounding of 7 fathoms may have been mistaken for 11 fathoms. However, since it was cleared by only 39 and 40 foot drag strips it will have to be retained on the charts.

Attention is called to the obstruction in Lat. 40°-58.35', Long. 73°-33.9'

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which is shown on Chart 222 but not on Chart 224. This is described in the paragraph under Chart 222.

A 39 ft. shoal in Lat.  $40^{\circ}-59.8'$ , Long.  $73^{\circ}-30.9'$  has not been charted.

6. The junction on the west with the wire drag survey of 1930, H. 5078 is satisfactory. The junction at the entrances to Oyster Bay and Huntington Bay with the contemporary wire drag survey H. 5143 is satisfactory. A satisfactory junction has been made on the northeast by the 1932 wire drag survey, H. 5219.
7. The character of the work on this survey is considered excellent. There are a few splits the worst of which, in Lat.  $41^{\circ}-01.7'$ , Long.  $73^{\circ}-27.1'$ , has since been covered by the 1932 work, H. 5219. The other splits are of small extent and are generally caused by buoys or impassable known shoals. Overlaps are ample and the entire area is believed to have been thoroughly covered.
8. No additional dragging is necessary.
9. Reviewed by R. L. Johnston - May 3, 1933.
10. Sheet Inspected by A. L. Shalowitz.  
*K.T. Adams*  
Approved: Chief, Section of Field Records.  
  
Approved: Chief, Section of Field Work.