

# 6560

# 6560

<p>Form 504 Rev. Dec. 1933 DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR</p> <h2 style="text-align: center;">DESCRIPTIVE REPORT</h2> <p><i>Topographic</i> } Sheet No. <b>H 6560</b> <i>Hydrographic</i> }</p>	
<p>State <b>New York</b></p> <p style="text-align: center;">LOCALITY</p> <p><b>Long Island Sound</b></p> <p><b>Fort Jefferson Harbor</b></p> <p><b>Lawrence Point</b></p> <p style="text-align: center;"><b>1930</b></p> <p style="text-align: center;">CHIEF OF PARTY</p> <p><b>Fred. A. Riddell</b></p>	

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. \_\_\_\_\_

REGISTER NO. **H6560**

State New York

General locality Long Island Sound

Locality Port Jefferson Harbor and Lawrence Point

Scale 1:10,000  
1:5,000 Date of survey June - August, 1940

Vessel Launch Elsie III

Chief of Party Fred A. Riddell

Surveyed by F. A. R.

Protracted by J. A. Ferguson (in office)

Soundings penciled by do.

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by Harold W. Murray

Verified by \_\_\_\_\_

Instructions dated \_\_\_\_\_, 1940

Remarks: \_\_\_\_\_

70  
82  
88

POST-OFFICE ADDRESS: Launch ELSIE III  
620 Federal Office Bldg.  
TELEGRAPH ADDRESS: 90 Church Street  
New York, N. Y.  
EXPRESS ADDRESS:

42 60

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

September 13, 1940

To: The Director  
U.S. Coast and Geodetic Survey  
Washington, D. C.  
From: Fred A. Riddell  
Chief of Party  
Launch ELSIE III  
Subject: Investigations at Port Jefferson Harbor, N. Y.

Reference: ITEMS FOR FIELD INVESTIGATION  
Long Island Sound - No. 4 H-6560(1940)  
CHART 361 - Port Jefferson Harbor.

} Letter filed in Special File  
in Chart Section

The sounding volumes and boat sheet of the work done in this area are being forwarded under separate covers. Also a topo sheet showing major changes in topography is being forwarded.  
T-6130(1940)

METHOD OF SURVEY All soundings were taken with a leadline and positions were controlled by sextant fixes. The signals used were mostly natural objects which had been located either by triangulation or by topography. T-6739(1940)

List of Signals

NAME	DESCRIPTION	METHOD OF LOCATION
Ban	Banner signal	Topo.
Cup	Cupola of house	Tri.
Dog	Pile alongside wreck	Topo.
East	Light on steel tripod	Tri.
Flag	Flag pole, Yacht club	Topo.
Jef	Banner signal	Tri.
Old	Old light tower on bldg.	Tri.
Pile	Brush stake over pile of rocks	Topo.
Rock	Large rock midway between high and low water lines	Topo.
Sow	Light on steel tripod	Tri.
Tauk	Banner signal	Tri.
West	Light on steel tripod	Topo.

TIDES A portable automatic tide gauge and staff were installed on the Ferry dock at Port Jefferson. The staff was connected to bench marks by means of a loop of spirit levels.

A. ENTRANCE TO PORT JEFFERSON HARBOR.

A close development of this area failed to reveal any depth less than 12 feet in the channel. A shoal, however, does make out about fifty meters east of the west breakwater. The Port Jefferson-Bridgeport Ferry drawing about 10 feet makes several trips in and out of here each day and the Captain when questioned did not recall ever having touched in this area.

B. 1 $\frac{1}{2}$  FOOT ROCK OFF DOCKS IN PORT JEFFERSON HARBOR. (from #1283(1971))

This area was dragged with a marline drag. The drag consisted of three twenty five foot sections of marline supported by can buoys, weighted by sounding leads and towed by two pulling boats. Dragging was done within two feet of the bottom in four directions over the charted spot of the rock. There was no evidence of any obstruction in this area.

C. REMOVAL OF BARREL I. (from Chart Letter 646-2 of 1939)

Barrel Island as shown by the survey has been completely removed and there was no evidence of the charted barge just to the south of it. A one foot shoal, however, still exists about 100 meters to the southeast of the old position of the island. The surrounding area as shown by the survey, has a very bumpy irregular bottom. No soundings were taken in the dredged area south of Mt. Misery Pt. as this cove was filled with barges and partially blocked off by a pipeline used in the dredging operations which were in progress at the time the survey was made. See Rev., par. 6 b (2)

D. NEW CHANNEL SOUTH OF SETAUKET BEACH.

The channel has been completed to a depth of twelve feet or greater as shown by the heavy dashed lines on chart 361 which accompanies the boat sheet for Port Jefferson Harbor. At the present time it is not marked and is used only by the tugs and sand barges operating in conjunction with the dredges. Proposed work is shown by a dot and dashed line. Mr. James B. Strong who owns most of Strongs Neck is pushing this project with the idea of increasing the value of his real estate development at Strongs Neck. At the present rate of progress he expects the anchorage in Conscience Bay will be completed in about three years but as this work is being done by Sand and Gravel Companies whose primary object is obtaining commercial sand and gravel, the development of channels and anchorages is more or less of a hit and miss proposition. To be filed as a  
Chart Letter.

*Fred A. Riddell*

Fred A. Riddell  
Chief of Party  
Launch ELSIE III

LCC  
HNE

TIDE NOTE FOR HYDROGRAPHIC SHEET

September 30, 1940

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. H. R. Edmonston

Tide Reducers are approved in  
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6560

Locality Port Jefferson Harbor and Lawrence Pt., Long Island, N. Y.

Chief of Party: Fred. A. Riddell in 1940  
Plane of reference is mean low water reading  
1.2 ft. on tide staff at Port Jefferson  
15.3 ft. below B.M. 9

For soundings in the vicinity of Hunt's Point, and Lawrence Point  
predicted tides were used.

Height of mean high water above plane of reference is 6.5 feet  
at Port Jefferson; 7.0 feet at Hunt's Point; 6.4 feet at Lawrence Point.

Condition of records satisfactory except as noted below:

Acting Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6560**

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

Number of positions on sheet	..607..
Number of positions checked	..24..
Number of positions revised	...0...
Number of soundings recorded	..2217.
Number of soundings revised	...6..
Number of soundings erroneously spaced	15 ✓ .....
Number of signals erroneously plotted or transferred	✓ .....

Date: *Nov. 6, 1940*

Verification by *Harold W. Murray*

Time: *23½ hrs.*

Review by

*do*

Time: *7 "*

HYDROGRAPHIC SURVEY NO. H6560

Smooth Sheet Yes

Boat Sheet One

Records; Sounding 3 Vols., Wire Drag     Vols., Bomb     Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes

Landmarks for Charts (Form 567) ---

Statistics -----

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) ----

Special Chart for Lighthouse Service ---  
(Circular Nov.30, 1933)

Hydrography: Total Days       ; Last Date       

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Remarks

Decisions

	Remarks	Decisions
1		
2		409 730
3		-
4		407739 USGB.
5	See Tide Note	408738
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES  
 Survey No. **H6560**

On Chart No.  
 On previous survey No.  
 On U. S. quadrangle Maps  
 From local information  
 On local Maps  
 P. O. Guide or Map  
 Rand McNally Atlas  
 U. S. Light List

Name on Survey

	A	B	C	D	E	F	G	H	K	
<u>Long Island Sound</u>										1
<u>Port Jefferson</u>										2
<u>Port Jefferson Harbor</u>										3
<u>Lawrence Point</u>										4
<u>Hunts Pt.</u>										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in rec approved  
 by L Steek on 1/9/40

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSTAT OF	}	No. H <b>H6560</b> <del>No. H</del>	{	received Sept. 25, 1940 registered Sept. 25, 1940 verified reviewed approved
--	---	--	---	--

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25	✓	<i>HBC</i>	<i>Page 2</i>
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ *TBR*

DIVISION OF CHARTS

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6560 (1940) FIELD NO. —

New York, Long Island Sound,  
Port Jefferson Harbor and Lawrence Point  
Surveyed in June - August 1940, Scales 1:5,000 and 1:10,000  
Instructions dated April 10, 1940 (ELSIE III)

Soundings:  
Hand Lead

Control:  
Three point fixes on shore signals

Chief of Party - Fred A. Riddell.  
Surveyed by - Fred A. Riddell.  
Protracted by - J. A. Ferguson (in office)  
Soundings plotted by - J. A. Ferguson (in office)  
Verified and inked by - Harold W. Murray.  
Reviewed by - Harold W. Murray, November 4, 1940.  
Inspected by - H. R. Edmonston.

Field Examination

1. Shoreline and signals.

The origin of the shoreline (where shown) and the signals is given in the descriptive report, page 1. This survey is of the nature of a field examination and the shoreline has been rerun only in areas where changes were known to have occurred. At the entrance to Port Jefferson; the breakwater, and shoreline on the west are from T-4625 (1931).

2. Sounding Line Crossings.

Agreement of cross lines is very good. The bottom, however, is extremely irregular throughout most of the area surveyed.

3. Depth Curves.

The usual depth curves may be satisfactorily drawn within the limits of the survey.

4. Junctions with Surveys.

There are no contemporary surveys adjoining the present survey work. Satisfactory junctions with prior surveys, however, are made with the hydrography shown on the chart.

5. Comparison with Prior Surveys.

The recent 1931 surveys considered below are basic

surveys. No comparison is, therefore, made with surveys prior to the work accomplished in 1931.

- a. H-5132 (1931) and H-5136 (1931). Scales 1:5,000 and 1:10,000.

These two surveys taken together cover the entrance to Port Jefferson. H-5132 on a scale of 1:5,000 is twice the scale of the present survey. The area common to these surveys is quite irregular due to continuous sporadic dredging for sand and gravel. The present survey depths are in good agreement in many areas but in some instances vary as much as 16 feet deeper and 9 feet shoaler in others. Barrel Island in lat.  $40^{\circ} 58.0'$ , long.  $73^{\circ} 05.2'$  (shoal area shown on Chart 361) has disappeared, depths as deep as 42 feet being obtained here. A shoal area, least depth of one foot, however, remains just southward of the island. For charting purposes, and in view of the sporadic nature of the dredging operations, an occasional wide spacing of lines on the present survey, these surveys should be used, with discretion, in supplementing the present survey.

- b. H-5333 (1933) scale 1:10,000.

This survey entirely covers the present survey development near Lawrence Point. General agreement of depths is within 2 feet and the present survey should be used to supplement the hydrography shown on the chart from this 1933 work.

6. Comparison with Chart 226 (New Print dated Jan. 5, 1940)  
Chart 361 (New Print dated July 2, 1940)

- a. Hydrography.

Hydrography shown on the chart originates with surveys discussed in previous paragraphs of this review and also other information. Of particular interest are the following:

- (1) The charted 13 foot sounding, Chart 226, in lat.  $40^{\circ} 47.38'$ , long.  $73^{\circ} 54.18'$  originates with blue print 18860 of 1906 and falls in depths of 17 to 21 feet on the present survey and between sounding lines spaced about 20 m. apart. Since no specific investigation was made of the 13, it should be retained on the chart.

(2) The removal of Barrel Island and substituting of the sunken wreck symbol for the barge formerly awash is by authority of Chart Letter 648-2 of 1939. The removal of the island was apparently done by dredging since the present survey shows depths as deep as 9 feet and also pockets with depths of 36 to 41 feet. The sunken wreck of the barge, if not removed, now lies in depths of 10 to 34 feet. This barge was not specifically searched for by feeling around with the lead line or by dragging and may, therefore, still lie on the bottom and should be retained on the chart.

b. Controlling Depth.

The charted controlling depth in the channel leading to Port Jefferson (Chart 361) is 14-1/2 feet as of April 1937. This depth can be still carried but local knowledge is necessary to avoid the several 12 foot spots lying near the limits of the channel. In view of these projecting 12 foot spots, the broken line limits of the channel shown on the chart are somewhat misleading.

c. Aids to Navigation.

The aids to navigation located in the vicinity of Port Jefferson (Chart 361) agree with the charted positions. The lighted beacon on the breakwater in lat. 40° 58.2', long. 73° 05.6' is about 10 m. south of its charted position. The light, located by triangulation in 1939 in lat. 40° 58.6', long. 73° 07.1', is about 10 m. south of its charted position. These aids satisfactorily mark the features intended.

The floating aids to navigation located near Lawrence Point (Chart 226) generally differ from 10 to 95 m. with the charted positions. The aids in either position satisfactorily mark the features intended for vessels drawing 13 to 16 feet.

7. Condition of Survey.

- a. The sounding records are neat and legible and conform to the requirements of the Hydrographic Manual.
- b. The descriptive report is clear and satisfactorily covers all items of importance.

- c. The protracting and plotting of soundings were excellent.
- d. Additional bottom characteristics may be obtained for charting purposes from prior surveys discussed in par. 5 of this review.

8. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

9. Additional Field Work Recommended.

No additional field work is required. Mention is made of the fact that the bottom in the vicinity of the entrance to Port Jefferson is lumpy and irregular, due to sporadic dredging operations and that future surveys of this area should be on a scale of 1:5,000 or larger. It is also desirable that the 13 foot spot, in lat. 40°47.38', long. 73°54.18', originating with the Engineers' 1906 survey, blue print 18860 be specifically investigated. (See par. 6a(1) above).

10. Superseded Surveys.

None.

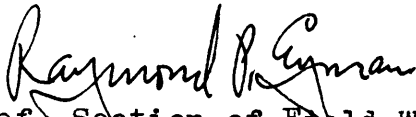
Examined and approved:



Thos. B. Reed,  
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division of H. & T.

Applied to chart dwg 361. April 5, 1941 LAM.  
Applied (Lawrence Pt) to chart 226 Apr. 24, 1941 - JTW  
Applied (Lawrence Pt.) to chart 274 Apr. 29, 1941 - ~~LL~~