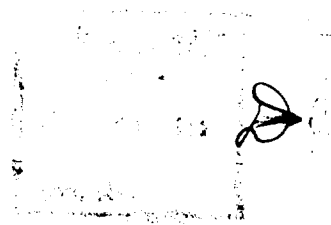


4017



Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *Long Island*
N. Y.

11-5613

DESCRIPTIVE REPORT.

Hyd. Sheet No. **4017**

LOCALITY:

Port Jefferson

1918

CHIEF OF PARTY:

J. Hawley

10

11-5613

11-5613

DESCRIPTIVE REPORT

Hydrographic Sheet No. (1) 4017

The work shown on this sheet is the hydrographic survey of the submarine trial course established by the Lake Torpedo Boat Company off Port Jeffersen, Long Island, N.Y.

The beacons and range lines are shown on the sheet. As it is evident that submarines using this course must navigate waters to the westward of longitude $72^{\circ} 06'$, the work was extended to longitude $72^{\circ} 07'$ instead of $72^{\circ} 06'$ as called for in my instructions.

The survey was made with the launches Pilot and Survey. All soundings were obtained by leadline, using a 12-pound lead. When the depth was too great to obtain soundings under way, the launch was stopped for 30 seconds. In this case the time of going ahead was entered between the soundings in the record. All soundings were obtained at $1\frac{1}{2}$ minute intervals and recorded to the nearest foot.

The bottom in the area surveyed is mud and sand and no evidence of the existence of boulders or pinnacle rocks was disclosed by the survey.


As the area was later surveyed with the wire drag, no effort was made to closely develop shoal indications.

In the vicinity of the 96 foot sounding near the northwest limit of the area covered, a mud shoal was discovered with the drag, the least depth being 78 feet. This sounding is shown on the wire drag sheet.

During the hydrographic work tidal observations were obtained on a staff located on the east breakwater at the entrance to Port Jeffersen harbor. The location of the gauge and of the two stations at which current observations were obtained are shown on the sheet.

The two buoys marking the approximate ends of the trial course were not in position at the time the survey was made.

Respectfully submitted,


Chief of Party.

STATISTIC SHEET NO. (1) 4017

Date	Letter	Vol.	Positions	Soundings	Miles, statute	Launch
1918						
Apr. 30	A	1	40	117	12.5	Survey
May 1	B	1	65	194	20.5	Pilot
" 2	C	1	31	83	8.0	"
Total			136	394	41.0	

Note. All soundings were made in fathoms and feet, reductions being made to the nearest foot.

Plane of reference, 2.1 on staff. M. L. W.

Lowest tide observed, 1.8

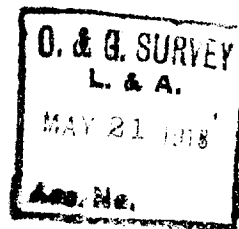
Highest tide " 8.0

A plain staff tide gauge, located near the Eastward Breakwater at the entrance of Port Jefferson Harbor, was used.

Duplicate

DESCRIPTIVE REPORT

Hydrographic Sheet No. (1) 4017



The work shown on this sheet is the hydrographic survey of the submarine trial course established by the Lake Terpede Boat Company off Port Jeffersen, Long Island, N.Y.

The beacons and range lines are shown on the sheet. As it is evident that submarines using this course must navigate the waters to the westward of longitude $72^{\circ} 06'$, the work was extended to longitude $72^{\circ} 07'$ instead of $72^{\circ} 06'$ as called for in my instructions.

The survey was made with the launches Pilot and Survey. All soundings were obtained by leadline, using a 12-pound lead. When the depth was too great to obtain soundings under way, the launch was stopped for 30 seconds. In this case the time of going ahead was entered between the soundings in the record. All soundings were obtained at $1\frac{1}{2}$ minute intervals and recorded to the nearest feet.

The bottom in the area surveyed is mud and sand and no evidence of the existence of boulders or pinnacle rocks was disclosed by the survey.

As the area was later surveyed with the wire drag, no effort was made to closely develop shoal indications.

In the vicinity of the 96 foot sounding near the northwest limit of the area covered, a mud shoal was discovered with the drag, the least depth being 78 feet. This sounding is shown on the wire drag sheet.

During the hydrographic work tidal observations were obtained on a staff located on the east breakwater at the entrance to Port Jeffersen harbor. The location of the gauge and of the two stations at which current observations were obtained are shown on the sheet.

The two buoys marking the approximate ends of the trial course were not in position at the time the survey was made.

Respectfully submitted,

James Hawley
Chief of Party.

STATISTIC SHEET NO. 1

Date	Letter	Vol.	Positions	Soundings	Miles, statute	Launch
1918						
Apr. 30	A	1	40	117	12.5	Survey
May 1	B	1	65	194	20.5	Pilot
" 2	C	1	31	83	8.0	"
	Total		136	394	41.0	

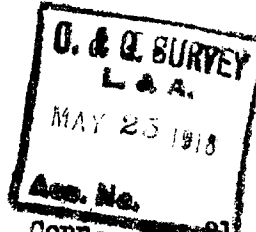
Note. All soundings were made in fathoms and feet, reductions being made to the nearest foot.

Plane of reference, 3.1 on staff. M. L. W.

Lowest tide observed, 1.8

Highest tide " 8.9

A plain staff tide gauge, located near the Eastward Breakwater at the entrance of Port Jefferson Harbor, was used.



Stonington, Conn., May 21, 1918.

The Superintendent,
Coast and Geodetic Survey,
Washington, D.C.

R.F.S.

The following named records, sheets, packed in 2 packages, were forwarded to you on May 21, 1918, by registered mail:

-
- 1 Vol. soundings, Survey of trial course off Port Jefferson, N.Y.
 - 1 Vol, wire drag record, do.
 - 1 Vol, tidal observations, Port Jefferson entrance.
 - 1 Vol. Leveling record.

 - 1 Boat sheet, survey of trial course off Port Jefferson, N.Y.

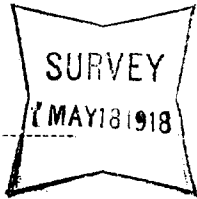
Hyd. 4017 + 4017^a

Chief of Party, C. & G. Survey.

Received the above:

H. & G. E. in charge of Office,
Coast and Geodetic Survey.

LETTER TRANSMITTING FIELD RECORDS

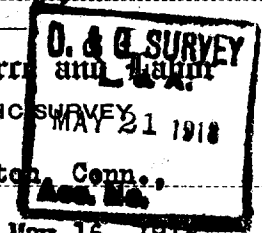


Post-Office Address: Stonington, Conn.

Department of Commerce and Light

COAST AND GEODETIC SURVEY

Stonington, Conn.



H. & G. ENGINEER IN CHARGE (S)

May 16, 1918.

191

R. F. J.

Superintendent, Coast and Geodetic Survey,
Washington, D. C.

Sir:

I have the honor to transmit, under separate cover, by registered mail the following ~~field records, computations,~~ sheets:

1 smooth sheet, hydrographic, field No. 1, survey of trial course off Port Jefferson, N.Y.

1 smooth sheet, wire drag, field No. 1a, (tracing of sheet No. 1)

Hyd. 4017 + 4017 a

Respectfully,

[Handwritten Signature]
Chief of Party C. and G. Survey.

Hyd. Sheet. No. 4017

Within the limits of the work the ground is well covered. No close developements were made because the area was later covered with the drag.

The signals used were all triangulation points with the exception of signal Crane which was located by two sextant cuts from the ship and a cut from Stratford Shoal L.F.. In verifying these, ~~it~~ a slight error was found to have been made in plotting the position of the boat from which cut No.2 was taken. This would place the correct position of signal Crane about twenty meters north of its plotted position. This would change the soundings, depending on signal Crane for control, slightly but the correction would be so small (less than the width of a sounding) that they were not retracted.

R. L. Johnston

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO NO.

5-EMK

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

May 27, 1918.

LIBRARY

Place with descriptive report
of hydrographic sheet No. 4017

Drawing Section. *g*

CHARTS (1) *←*

Division of Hydrography and Topography:

Division of Charts:

Tidal reductions have been approved in
2 volumes of Sounding and Wire Drag
records for

HYDROGRAPHIC SHEET 4017

Long Island Sound, Off Port Jefferson
J. H. Hawley in 1918.

Plane of reference is
Mean low water, reading

2.1 ft. on staff at Port Jefferson,
Long Island, New York.

L. P. Shidy

Acting Chief, Section of
Tides and Currents.

HYDROGRAPHIC SHEET No. 4017.

LONG ISLAND SOUND, OFF FORT JEFFERSON, N.Y.

Surveyed April - May, 1918 - Scale 1-20,000.

WIRE DRAG WORK.

Area included in broken line surveyed with wire drag. Drag set to effective depth of 90 to 100 feet at low water over greater part of area. Drag set at 73 feet passed over 78-foot shoal at north edge of area, and drag set at 87 feet passed over 30-foot shoal near center of area. Along south edge of dragged area, drag set to effective depth of 67 to 78 feet.

CURRENTS.

Station	Slack	Strength	Slack	Strength
	h.m.	of Flood h.m.	h.m.	of Ebb h.m.
1	L+0 20	H -2 50	H +0 20	L -2 50
2	L+0 15	H -2 55	H +0 15	L -2 55

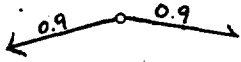
← Flood ← Ebb

The numbers on the shafts of the arrows give the velocity of the current at strength in knots. H and L represent, respectively, the times of predicted high and low water at Boston.

DEPARTMENT OF COMMERCE

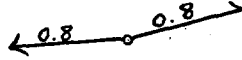
Note for Drawing Current Arrows

Station 1.



Flood Ebb
S 75 W S 80 E

Station 2.



Flood Ebb
S 85 W N 75 E

HYDROGRAPHIC SHEET 4017.

No. 204
Ed. 10-25-15-500,000