

407

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

E. Lester Jones
Superintendent.

State: RHODE ISLAND

DESCRIPTIVE REPORT.

Wire Drag
HYDROGRAPHIC Sheet No. 4007

LOCALITY:

Narragansett Bay, Western Passage

Field Sheet No. 3

Scale 1:10,000

1917

CHIEF OF PARTY:

R. P. Strough

DESCRIPTIVE REPORT FOR WIRE DRAG HYDROGRAPHIC SHEET 4007.

Wire Drag Field Sheet No. 3.

The drag work shown on this sheet connects on the south with the work shown on field sheet No. 1. The northern limit extends to within about 600 feet south of Plum Beach Light House. The eastern and western limits in general extend to within several hundred meters of the shore line. A drag strip is also shown, running down the middle of the channel, from about 600 meters north of Plum Beach Light House to the parallel of latitude passing Conanicut Island Light. A division in the work is shown about 200 meters south of the parallel of latitude passing thru Narragansett Church spire; This was due to the fact that a submarine net was stretched across the channel at this point. The drag work on this sheet is about 1/4 finished; but for the fact that the party was ordered to carry on work in the neighborhood of New London, Conn. during the latter part of the season, it would no doubt have been completed.

In general the attempt was made to drag this area as close to the bottom as possible, without danger of hooking up on obstructions. 2

The control of this survey was obtained from signals located in most cases by previous triangulation. Signal "Stand pipe" on Conanicut Island was found to have been rebuilt, and a new location for this signal was obtained with the plane-table.

A 15 foot shoal spot was found 1060 meters N 1/4 E (true) from Dutch Island Light House where the charts shows between 22 and 49 feet.

28
A 26 foot sounding was obtained 1050 meters N W x N (true) from Dutch Island Light House. The chart shows between 30 and 46 feet in this spot.

Rocks awash at low tide were located 2315 meters S W x S 1/2 S (true) from Dutch Island Light House.

Positions for the spar buoys south of Plum Beach Light and Dutch Island Light were obtained and plotted.

The tidal reducers were obtained from readings on a tide staff located in Wickford Harbor.

No attempt was made to study the currents in this vicinity due to lack of time to spend from actual drag operations.

Respectfully submitted,

(Signed) H. W. Hemple

Desk Officer
U. S. C. & G. S.

Approved

Jr. H. & G. Engineer
Chief of Party.

STATISTICS WIRE DRAG HYDROGRAPHIC SHEET 4007.

Day	Date	Length of Drag	Miles Statute	Positions	Soundings
A	1917 Sept. 15	Feet 1800	1.2	8	2
B	Sept. 17	1500 1800	4.9	59	7
C	Sept. 20	1800	5.2	64	12
D	Sept. 24	1800	2.5	28	5
E	Sept. 25	1800	2.5	42	0
Total			16.3	201	26

PROGRESS CHART

SHOWING CONDITION OF RECORDS OF

Hydrographic Sheet No. 4007 Field No. 3

Wire drag survey of Narragansett Bay Entrance (Western Passage)

Scale 1:10,000 Date of Survey 1917

Surveyed by R. P. Strough.

Day	DATE	Signaled angles compared	Distances entered	Distances checked	Length of upright entered	Length of upright checked	Correction entered	Correction checked	Drag depth entered	Drag depth checked	Reducers entered	Reducers checked	Effective depth entered	Effective depth checked	Effective depth diagram entered	Effective depth diagram checked	Positions plotted	Dragged strip traced	Tracing checked	Area subdivided	Subdivision checked	Transferred and inked	Compared with chart
A	Sept 15	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
B	17	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
C	20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D	24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Department of Commerce,
Coast & Geodetic Survey.

E. Lester Jones, Superintendent.

Rhode Island
Narragansett Bay, Western Passage.

a description to accompany
Wire Drag Sheet. Hyd. 4007

Scale 1:10,000
1917

Wire Drag Party #2

R. P. Strough
Jr. N. & G. Engineer
Chief of Party

A Description to Accompany
Wire Drag sheet — 4007 —

Field sheet #3.

The drag work shown on this sheet connects on the south with the work shown on field sheet #1. The northern limit extends to within about 600 feet south of Plum Beach Light House. The eastern and western limits, ^{in general} extend to within several hundred meters of the shore line. A drag strip is also shown, running down the middle of the channel, from about 600 meters north of Plum Beach Light House to the parallel of latitude passing Conimicut Island Light. A division in the work is shown about 200 meters south of the parallel of latitude passing thru Narragansett Church spire; This was due to the fact that a submarine net was stretched across the channel at this point. The drag work on this sheet is about $\frac{1}{4}$ finished; but for the fact that the party was ordered to carry on work in the neighborhood of New London, Conn. during the latter part of the season, it would no doubt have been complete.

In general the attempt was made to drag this area as close to the bottom as possible, without danger of hooking up on obstructions.

The control of this survey was obtained from signals located in most cases by previous

triangulation. Signal "Stand pipe" on Conant Island was found to have been rebuilt, and a new location for this signal was obtained with the plane-table.

A 15 foot shoal spot was found 1060 meters $N \frac{1}{4} E$ ^(true) from Dutch Island Light House where the charts shows been 22 and 49 feet.

A 26 foot sounding was obtained 1050 meters $NW \times N$ ^(true) from Dutch Island Light House. The chart shows between 30 and 46 feet in this spot.

Rocks awash at low tide were located 2315 meters $SW \times S \frac{1}{2} S$ (true) from Dutch Island Light House.

Positions for the spar buoys south of Plum Beach Light and Dutch Island Light were obtained and plotted.

The tidal reducers were obtained from readings on a tide staff located in Wickford Harbor.

No attempt was made to study the currents in this vicinity due to lack of time to spend from actual drag operations.

approved

J. H. & G. Eng.
Chief of Party

Respectfully submitted

H. W. Temple

Deck Officer

U. S. C. & G. S.

Table of Statistics Sheet 4007

Day	Date	Length of Drag	Miles Statute	Positions	Soundings	
A	Sept. 15	1800	1.2	8	2	
B	Sept. 17	1500 1800	4.9	59	7	
C	Sept. 20	1800	5.2	64	12	
D	Sept. 24	1800	2.5	28	5	
E	Sept. 25	1800	2.5	42	0	
Total				16.3	201	26

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

June 18, 1918.

CHARTS (H) ←

LIBRARY

Place with descriptive report
of hydrographic sheet No. 21007

Division of Hydrography and Topography: HCS

Division of Charts:

Drawing Section. S

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

HYDROGRAPHIC SHEET 4007

Narragansett Bay, Western Passage, Rhode Island
R. P. Strough in 1917.

Plane of reference is
Mean low water, reading

0.8 ft. on staff at Wickford, Rhode Island.

L. P. Shidy

Acting Chief, Section of
Tides and Currents.

9-VEC

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

September 25, 1924.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet No. 4007

Narragansett Bay, R.I.

Surveyed in 1917

Instructions dated April 14, 1917.

Chief of Party, R. P. Strough.

Surveyed by R. P. Strough and R. L. Schoppe.

Protracted by H. W. Hemple and J. A. Bond.

Inked by H. W. Hemple.

Area and Depth Sheet by H. R. Edmonston.

Verified by A. L. Shalowitz.

1. For the area comprised by this sheet the instructions were not specific as to depth and extent of dragging. It is to be noted, however, that there are areas where the charted depths greatly exceed the effective drag depths. This is particularly true of the area west of Austin Hollow on Conanicut Island where in charted depths of 45 to 75 feet, the effective drag depths range from 14 to 27. There are other places on this sheet where it seems the drag could have been set to a deeper depth without endangering the equipment by hooking up on obstructions. Owing to the premature termination of the work here, this sheet was left incomplete.
2. The following shoals were discovered over which clearance depths were not obtained.
 - a. A 34 foot sounding in latitude $41^{\circ} 28'$, longitude $71^{\circ} 25'$. There is deeper water surrounding this spot.
 - b. A 28 foot sounding in latitude $41^{\circ} 30\frac{1}{2}'$, longitude $71^{\circ} 24\frac{3}{4}'$. A split in the work occurs here. This spot should be investigated as there is much deeper water inside. This 28 foot sounding is now shown on the charts as 26 foot, but should be changed as it was charted from a note in the descriptive report which is in error.

2 - Report on Wire Drag Sheet No. 4007

- c. The 14, 15 and 22 foot soundings in latitude $41^{\circ} 31\frac{1}{2}'$, longitude $71^{\circ} 24\frac{1}{4}'$ have not been cleared. When the work is continued here these spots should be dragged over.
 - d. A 23 foot sounding in latitude $41^{\circ} 32\frac{1}{2}'$, longitude $71^{\circ} 24\frac{1}{2}'$. This lies along the limits of the drag.
 - e. Other shoals that were discovered but not cleared lie close in-shore and generally in shoal water.
3. The overlaps are sufficient. No junction with H-4006 on the south was effected, this being contrary to the statement on the descriptive report.
 4. Additional work will be required to cover splits and other areas left not completed on account of the termination of the work. Besides these the areas noted in paragraph 1 should be redragged as well as the spots mentioned in paragraph 2.
 5. Attention is called to the following:
 - a. The 45 foot drag strips in the vicinity of Bonnett Point passed over several 41 and 42 foot soundings shown on H-3403. As these records are clear on this point and there is nothing to indicate that an error might have been made, the effective depths of the drag was accepted as correct.
 - b. At 2 A the drag grounded set at 39 feet three minutes after position was taken. No sounding was obtained and no indication at what buoy the drag grounded. It is possible, however, that the drag grounded in known depths of less water, since it continued for 3 minutes after position 2 A was taken before it grounded.
 - c. At 8 A with the drag set at 27 to 45 feet, the drag grounded two minutes after position was taken. No sounding was obtained and no location given for the grounding. As the time of the grounding would throw the 45 foot section of the drag in depths of 42 and 43 feet it is very possible that the drag grounded here and not in the 27 foot section. When work is resumed here a deeper drag than 27 foot should be carried over this section.
 - d. At 30 B two minutes after position, the drag set at 14 and 15 ft. grounded. A note in the record says "Aground in covered area," but no mention where. The covered area was cleared by a 14 ft. drag. A sounding of 18 foot was obtained close to buoy #2 which was set at 15 ft. To be on the side of safety, however, 14 ft. should be charted where the 18 ft. is shown.

3 - Report on Wire Drag Sheet No. 4007.

- e. At 42 C the drag grounded between N & 1. N was set at 14 ft. and 1 at 19 ft. The least water obtained was 19 ft. However, in order to conform to the adopted rule 14 ft. should be charted.
- 6. There is no verification report for this sheet, the substance having been incorporated in this review.
- 7. Reviewed by A. L. Shalowitz, September 25, 1924.