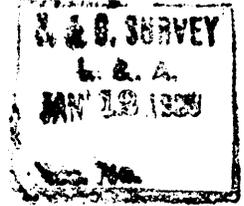


4005



Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *R. I.*

11-5013

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DESCRIPTIVE REPORT.

Hyd. Sheet No. *4005*

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LOCALITY:

*Block Island Sound*

*North and East of Block I.*

---

1919

---

CHIEF OF PARTY:

*F. B. J. Siems*

4005

4005

4005

AND REFER TO NO. 41-~~CMK~~

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

March 23, 1920.



Division of Hydrography and Topography:

Division of Charts: ✓

Tidal reductions have been approved in  
3 volumes of Wire Drag and sounding records for

HYDROGRAPHIC SHEET 4005 add.

Approaches to Narragansett Bay, Coast of R.I.  
F.B.T. Siems in 1919.

Plane of reference is  
Mean low water, reading

1.2 ft. on tide staff at Point Judith, R.I.

Condition of records; satisfactory.

A handwritten signature in cursive script.

Chief, Section of Tides  
and Currents.

A large handwritten signature in cursive script.

Chief, Division of Hyd'y & Top'y

802

ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 4-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON January 9, 1926.

SECTION OF FIELD RECORDS

Report on Wire Drag Sheet H. 4005

Approaches to Narragansett Bay -- Offshore, R. I.

Surveyed in 1917, 1918 and 1919

Instructions dated Apr. 14, 1917 (Strough); June 18, 1919 (Siems).

Chiefs of Party, R. P. Strough, J. A. Daniels, and F. B. T. Siems.

Surveyed by R. P. S., J. A. D. and F. B. T. S.

Protracted and inked by field party.

Verified and Area and Depth Sheet (1917 work) - R. L. Johnston.

Verified and Area and Depth Sheet (1918, 1919 work) - A. L. Shalowitz

1. This sheet represents the combined work of three parties.

The 1917 work executed by R. P. Strough is indicated on the smooth sheet by red day letters and runs from A to Q.

The 1918 work executed by J. A. Daniels is also designated by red day letters and runs from A to D. This work can be distinguished from the 1917 work by the fact that it lies in the vicinity of Block Island and Pt. Judith whereas the 1917 work lies in the approaches to Narragansett Bay.

The 1919 work executed by F. B. T. Siems is indicated by purple day letters.

2. The Area and Depth sheet represents the results of the three seasons' work. The Area and Depth sheet originally made for the 1917 work is still retained for reference.

3. The depth of dragging conforms to the requirements of the <sup>Specific</sup> ~~General~~ Instructions.

4. Due to the exigencies of the War the work on this sheet was left incomplete. Whenever work is again resumed in the locality, a reference should be made to Special Charts 1210 and 1211 on file in the Section of Field Records which clearly show the areas left undragged.
5. There were practically no dangerous shoals discovered on this sheet. Some of the shoals discovered that were not subsequently dragged over are the following:
  - a. The 75 ft. sounding in lat.  $41^{\circ} 17'$  long.  $71^{\circ} 36'$  was not cleared.
  - b. The 52 ft. sounding (grounding depth) in lat.  $41^{\circ} 20'$ , long.  $71^{\circ} 32'$  was not dragged over. This spot lies well outside the 10 fathom curve.
  - c. The 49 ft. sounding (grounding depth) in lat.  $41^{\circ} 20'$ , long.  $71^{\circ} 30 \frac{1}{2}'$  was not dragged over.
  - d. The 54 ft. sounding (grounding depth) in lat.  $41^{\circ} 18 \frac{1}{2}'$ , long.  $71^{\circ} 29'$  was not cleared. This spot lies well outside the 10 fathom curve and should be cleared.
  - e. The 79 ft. sounding in lat.  $41^{\circ} 18'$ , long.  $71^{\circ} 09 \frac{1}{2}'$  was not cleared. A large split in the work occurs around here which should be covered inasmuch as there is a distinct shoaling around here.
6. Two important charted shoals were not dragged over:
  - a. East Ground Shoal with 44 ft. over it in the vicinity of lat.  $41^{\circ} 10'$ , long.  $71^{\circ} 27'$ , and
  - b. The 55 ft. shoal about 4 miles S X E of Pt. Judith.Both of these should be investigated.
7. There are several large splits on this sheet which should be covered when work is again resumed. These are all appropriately indicated on the Area and Depth sheet.
8. The overlaps within the sheet were generally adequate.

The junction with H. 4006 and H. 3668<sup>a</sup> is inadequate in several places. These are shown on the Area and Depth sheet.

The junction with H. 4041 and H. 4098 will be taken up in the review of those sheets.

9. The plotting of the 1917 work was well executed and very few changes had to be made in the office. This was not true of the 1918 and 1919 work. Many changes were made by the office cartographer, some due to changed tide reducers, but a large number of them being due to careless plotting and erroneous interpretation of the records.

It is not deemed necessary to outline the changes made but a glance at the smooth sheet will show the extensive erasures that were made.

10. Attention is called to the following:

- a. At 13 O the record says "Drag aground". Later the tender obtained a sounding of 65 ft. in a location that would indicate that that portion of the drag was aground that was set to an effective depth of 54 ft. It is assumed that soundings were taken in the vicinity of the grounding. Therefore a 54 ft. sounding will be shown where the 65 ft. sounding is now located.

- b. At 23 N a similar condition occurred and 52 ft. will be charted in place of the 65.

- c. A day (1919 work) was not plotted by the field party, a note appearing in the record that on account of the notes appearing incorrect it was omitted. This matter was taken up with the Chief of Section and it was decided to accept the recommendation of the plotter.

11. There is no verification report for the 1918 and 1919 work, the substance having been incorporated in this review.

Reviewed by A. L. Shalowitz, December, 1925.

Descriptive Report to accompany  
Hydrographic Sheet # 4005.  
Wire Drag Party No. 1 -- 1919

Locality surveyed: The wire drag work of 1919 includes some work between Pt Judith R. I. and Block Island and the greater portion of the offshore dragging to the 20 fathom curve ENE of Block Island and South of Narragansett Bay.

Tidal Reductions: for drag depths and soundings were made, using automatic tide observations made at Pt. Judith. Where the observations are of a doubtful character, those at Block Island were used.

Control. Considerable trouble was experienced in seeing objects for fixes while engaged in the offshore work, except on a few very clear days. A large buoy signal was anchored in the center of the offshore work to furnish fixes in conjunction with shore objects.

Results of the Survey: No obstructions or shoals were found in the offshore area. The drag went aground in several places between Pt Judith and Block Island, but no dangerous shoal places were found after investigating same with hand lead. There was not sufficient time to redrag over these shoal places.

Respectfully submitted

*J. B. Williams*

Chief, Wire Drag Party No. 1

Washington, Jan 10, 19<sup>20</sup>~~19~~

Date of Superintendent's Instructions June 18, 1919.

Work on sheet was not examined nor approved  
Chief of Party transferred to another party before  
sheet was plotted J.B.S.



4005

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: *Rhode Island*

11-5613

DESCRIPTIVE REPORT.

*Hyd.* Sheet No. *4005*

LOCALITY:

*North of Block Island  
and Approaches to  
Narragansett Bay.*

1918

CHIEF OF PARTY:

*John A. Daniels.*

4005

DESCRIPTIVE REPORT FOR WIRE DRAG HYDROGRAPHIC SHEET 4005.

Wire Drag Field Sheet # 2.

The drag work shown on this sheet connects on the north with the work shown on Field Sheet # 1. Part of the eastern limit, that to the north, connects with the drag work shown on Sheet 3668 A. The southern part of the eastern limit is represented by about longitude  $71^{\circ} 06' 30''$  W. on the west the limit extends to about longitude  $71^{\circ} 23'$ ; from latitude about  $41^{\circ} 19' 20''$  to latitude  $41^{\circ} 23'$ ; longitude about  $71^{\circ} 15'$  is the western boundary from latitude  $41^{\circ} 19' 20''$  to latitude  $41^{\circ} 16'$ . The southern limits are latitude  $41^{\circ} 19' 20''$ , from longitude  $71^{\circ} 15'$  to  $71^{\circ} 23'$ , and about latitude  $41^{\circ} 16'$ , from longitude  $71^{\circ} 06' 30''$  to  $71^{\circ} 15'$ . A portion of dragged area, entirely separated from the main area, is shown between about longitude  $71^{\circ} 17' 30''$  and  $71^{\circ} 23'$ , and about latitude  $41^{\circ} 16'$  to  $41^{\circ} 17' 30''$ .

The area was dragged to a depth of 85 feet where the charted depths made this possible; in shoaler depths the drag was set from 10 to 20 feet from the bottom.

The control of this work was obtained by signals established in most cases by previous triangulation. The location of signals Soc and Hit, were determined by this party.

A split occurs between about longitudes  $71^{\circ} 09'$  and  $71^{\circ} 13'$ , and latitudes  $41^{\circ} 17'$  and  $41^{\circ} 18'$ . This represents about a days work, and would have been done but for the fact that the party was ordered to drag the area in the vicinity of Bartletts Reef, off New London, Conn. ✓

A very small split occurs at about longitude  $71^{\circ} 20' 50''$  and latitude  $41^{\circ} 22'$ . This was due to the fact that the drag between positions 5 N and 8 N was stretched to its full length, and the split had occurred before the two launches could manoeuvre so as to prevent it. ✓

An 80 foot spot was found at approximate longitude  $71^{\circ} 08'$ , latitude  $41^{\circ} 20' 21''$ , where the chart shows 90 feet. ✓

An 83 foot spot was located at about longitude  $71^{\circ} 08' 34''$ , latitude  $41^{\circ} 21'$ , where the chart shows 90 feet. ✓

Shoals of 79 feet and 82 feet were found at about longitude  $71^{\circ} 09' 20''$ , latitude  $41^{\circ} 18'$ . The chart shows 90 feet in this vicinity. ✓

A 74 foot spot occurs at about longitude  $71^{\circ} 11' 55''$ , latitude  $41^{\circ} 21' 7''$  where the chart shows 90 feet. ✓

A 50 foot shoal, rocky bottom, was found at about longitude  $71^{\circ} 05'$ , latitude  $41^{\circ} 23'$ . The chart shows 69 feet in this vicinity. ✓

The tidal reduction was obtained from readings on a staff erected on the dock in Sakonnet Harbor.

## DESCRIPTIVE REPORT FOR WIRE DRAG HYDROGRAPHIC SHEET 4005.

## Wire Drag Field Sheet # 2.

No attempt was made to determine the strength and directions of the currents due to lack of time to spare from actual drag work.

The work on this sheet, being far off shore, was done mostly with a drag length of 9,000 feet. The work could only be done when the weather conditions were exceptionally good. Due to the fact that the weather on many days was hazy, to a greater or less extent, the work is not as near that degree of completion as was hoped for. The work is about 1/3 completed.

Respectfully submitted

(Signed) W. H. Hemple

Deck Officer  
U. S. C. & G. S.

Approved

-----  
Jr. Hydro. & Geod. Engineer  
Chief of Party.

STATISTICS WIRE DRAG HYDROGRAPHIC SHEET 4005.

Day	Date	Length of Drag	Miles Statute	Positions	Soundings
A	May 14, 1917	9000	6.9	29	0
B	May 17, 1917	9000	4.7	24	2
C	May 31, 1917	9000	3.9	19	0
D	June 25, 1917	9000	7.2	32	0
E	June 28, 1917	9600	3.1	15	2
F	July 10, 1917	9000	9.0	33	0
G	July 28, 1917	8400	6.8	35	0
H	Aug. 3, 1917	9000	5.0	33	1
J	Aug. 4, 1917	5000	2.3	12	0
K	Aug. 30, 1917	6000	9.0	40	1
L	Aug. 31, 1917	6000	6.1	34	1
M	Sept. 1, 1917	6000	3.8	28	0
N	Sept. 11, 1917	9000	4.7	17	0
O	Sept. 12, 1917	9000	5.5	30	0
P	Sept. 19, 1917	9000	5.0	24	0
Q	Oct. 12, 1917	8400	4.6	21	0
Total			87.6	426	7

# PROGRESS CHART

SHOWING CONDITION OF RECORDS OF

Hydrographic Sheet No. **4005** Field No. 2

Wire drag survey of Narragansett Bay Entrance

Scale 1:50:000

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	May 14	✓	Long	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
B	" 17	✓	Drag	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
C	" 31	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
D	June 25	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E	" 28	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F	July 10	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
G	" 28	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
H	Aug. 3	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
J	" 4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
K	" 30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
L	" 31	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
M	Sep 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
N	" 11	✓	Long Drag	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
O	" 12	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P	" 19	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Q	Oct 12	✓	"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Department of Commerce  
Coast & Geodetic Survey

(#2)

E. Lester Jones, Superintendent.

Rhode Island  
Narragansett Bay & Approaches

a Descriptive Report to Accompany  
Wire Drag Sheet - Hyd. 4005

Scale 1 to 50,000

1917

Wire Drag Party #2

R. P. Strong  
J. H. & J. Engineer  
Chief of Party

a Descriptive Report to accompany

Win Drag sheet Hyd. 4005

Field sheet # 2

on the north

The drag work shown on this sheet connects with the work shown on field sheet #1. Part of the eastern limit, that to the north, connects with the drag work shown ~~on~~ sheet 3668A. The southern part of the eastern limit is represented by about longitude  $71^{\circ}-06'-30''$  W. on the west the limit extends to about longitude  $71^{\circ}-23'$ , from latitude about  $41^{\circ}-19'-20''$  to latitude  $41^{\circ}-23'$ ; longitude about  $71^{\circ}-15'$  is the western boundary from latitude  $41^{\circ}-19'-20''$  to latitude  $41^{\circ}-16'$ . The southern limits are latitude  $41^{\circ}-19'-20''$ , from longitude  $71^{\circ}-15'$  to  $71^{\circ}-23'$ ; and about latitude  $41^{\circ}-16'$ , from longitude  $71^{\circ}-06'-30''$  to  $71^{\circ}-15'$ . A portion of dragged area, entirely separated from the main area, is shown between <sup>about</sup> longitudes  $71^{\circ}-17'-30''$  and  $71^{\circ}-23'$ ; and <sup>about</sup> latitudes  $41^{\circ}-16'$  to  $41^{\circ}-17'-30''$ .

(In stereograph) (See 2<sup>nd</sup> page from here and insert)  
In general the attempt was made to drag to a depth of approximately 85 feet. Where this was not possible, the drag was set a few feet above the bottom.

The control of this work was ~~maintained~~ by signals established <sup>in most cases</sup> by previous triangulation, ~~in most cases~~. The locations of signals Soc and Kit, were determined by this party.

A split occurs between about longitudes  $71^{\circ}-09'$  and  $71^{\circ}-13'$ , and latitudes  $41^{\circ}-17'$  and  $41^{\circ}-18'$ . This represents about a days work, and would have been done but for the fact that the party was ordered to drag the area in the vicinity of Bartlett's Reef, off New London, Conn.

A very small split occurs at about longitude<sup>2</sup>  $71^{\circ}20'50''$  and latitude  $41^{\circ}22'$ . This was due to the fact that the drag between positions 5N and 8N was stretched to its full length, and the split had occurred before the two launches could maneuver so as to prevent it.

An 80 foot spot was found at approximate longitude  $71^{\circ}08'$ ; latitude  $41^{\circ}20'21''$ , where the chart shows 90 feet.

An 83 foot spot was located at about longitude  $71^{\circ}08'34''$ , latitude  $41^{\circ}21'$ , where the chart shows 90 feet.

Shoals of 79 feet and 82 feet were found at about longitude  $71^{\circ}09'20''$ , latitude  $41^{\circ}18'$ . The chart shows 90 feet in this vicinity.

A 74 foot spot occurs at about longitude  $71^{\circ}11'55''$ , latitude  $41^{\circ}21'7''$ , where the chart shows 90 feet.

A 50 foot shoal, rocky bottom, was found at about longitude  $71^{\circ}05'$ , latitude  $41^{\circ}23'$ . The chart shows 69 feet in this vicinity.

The tidal reduction was obtained from readings on a staff erected on the dock in Sakonnet Harbor.

No attempt was made to determine the strength and directions of the currents due to lack of time to spare from actual drag work.

The work on this sheet, being far off shore, was done merely with a drag length of 9,000 feet. The work could only be done when the weather conditions were exceptionally good. Due to the fact that the weather on many days was hazy, to a greater or less extent, the work,



Table of Statistics Sheet 4005

Day	Date	Length of Drag	Miles Statute	Positions	Soundings
A	May 14, 1917	9000	6.9	29	0
B	May 17, 1917	9000	4.7	24	2
C	May 31, 1917	9000	3.9	19	0
D	June 25, 1917	9000	7.2	32	0
E	June 28	9600	3.1	15	2
F	July 10	9000	9.0	33	0
G	July 28	8400	6.8	35	0
H	Aug. 3	9000	5.0	33	1
J	Aug. 4	5000	2.3	12	0
K	Aug. 30	6000	9.0	40	1
L	Aug. 31	6000	6.1	34	1
M	Sept. 1	6000	3.8	28	0
N	Sept. 11	9000	4.7	17	0
O	Sept. 12	9000	5.5	30	0
P	Sept. 19	9000	5.0	24	0
Q	Oct. 12	8400	4.6	21	0
		Total	87.6	426	7

~~Respectfully submitted~~

~~Beck Officer~~

~~W. A. C. G. A.~~

~~Signed~~

~~J. H. G. E.  
Chief Party~~

Hyd. 4005.

Work of 1917.

As stated in the descriptive report, this work is only about one third completed. The work is very good in every respect and there is only one possible criticism to which it is open. That is that in several places the overlap was cut down too fine, amounting in two or three places to point or line splits or entire lack of overlap. These spots have been indicated by arrows on the final tracing as well as the actual splits of which there are three. Two of these splits are described in the descriptive report, the third occurs at about Long.  $71^{\circ}-07'$ , Lat.  $41^{\circ}-20'-30''$ . In the field plotting this showed up as a line split or lack of overlap, but a careful replotting of K day and L day showed it to be a decided split.

Shoal soundings located by the drag are described and located in the descriptive report.

When haze or fog prevented either of the launches from getting angles, its position was fixed by frequent cuts and estimated distance from the remaining launch.

In conclusion the work is well done, the records clear and well kept and the plotting is carefully and in most cases accurately done.

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

LIBRARY

June 5, 1916

Place with descriptive report  
of hydrographic sheet No. 4005

CHARTS (H) ←

Drawing Section. ✓

Division of Hydrography and Topography: *HC9*

Division of Charts:

Tidal reductions have been approved in  
1 volume of Wire Drag Records for

HYDROGRAPHIC SHEET 4005 Add.

Approaches to Narragansett Bay, Rhode Island,  
R. P. Strough in 1917.

Plane of Reference is  
Mean low water, reading

0.70 ft. on staff at Sakonnet Harbor,  
Rhode Island.

*E. P. Shidy*

Acting Chief, Section of  
Tides and Currents.

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

REFER TO NO.

5-EMK

LIBRARY

Place with descriptive report  
of hydrographic sheet No. 4005

CHARTS (H)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC ~~DRAWING~~ Section. *SPX.*

WASHINGTON

May 25, 1918.

~~PRINTING & SALES~~  
~~Furnish ~~Drawing~~ Section with~~  
~~one black and white proof on~~  
~~paper~~

~~Drafting~~

Division of Hydrography and Topography:

Division of Charts:

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

HYDROGRAPHIC SHEET 4005

Approaches to Narragansett Bay, Rhode Island  
R. P. Strough in 1917.

Plane of reference is  
Mean low water, reading

0.70 ft. on staff at Sakonnet Harbor,  
Rhode Island.

*L. P. Shidy*

Acting Chief, Section of  
Tides and Currents.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

E. Lester Jones, Superintendent

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 4005

John A. Daniels, Jr. H. & G. E.  
Chief of Party

1918

COPY

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 4005

John A. Daniels, Jr. H. & G. E.  
Chief of Party

1918

LIMITS, SCALE USED, PURPOSE, ETC.

Hydrographic sheet 4005 was used for work North of Block Island and the Approaches to Narragansett Bay. It was found necessary to use this sheet on the three days work done North of Block Island in order to secure better fixes. The days work done East of Block Island connects with the Eastern limit of sheet 1 (field). The limits of sheet 1 (field) are indicated by a dotted red line.

In addition to this work there is also plotted on this sheet work done by R. P. Strough in 1917.

The scale is 1:50,000 and the work was done on a boat sheet of the same scale.

The purpose of this work was to verify the depth of water as shown by the soundings on the chart. The maximum effective depth of 100 feet was used. The general effective depth was 50 feet in areas with depths less than 10 fathoms. It was found in the latter case best to drag with 2 to 4 feet of the bottom and to determine the least depths on all shoals found in this manner.

SHOALS.

No shoals were found in this work.

SURVEY METHODS, CONTROL, PARTY, ETC.

Independent control was used entirely on this work.

The party was very nearly an average size wire drag party. It consisted of a Chief of Party, an executive officer, 2 aids, 1 deck officer, 2 apprentice draftsmen, 1 dragmaster, and 10 hands. The signals used were mostly old triangulation stations located in previous years, with the exception of the signal CHY which was located by this party by sextant triangulation. It is near the old triangulation station CLAY HEAD and was found to be very useful in off-shore work.

Respectfully submitted,

*John A. Daniels*

Jr. H. & G. E., U. S. C. & G. S.  
Chief, Wire Drag Party No. 5

STATISTICS

Hydrographic Sheet No. 4005

Day	No. Miles	Soundings	Positions	Angles
A	7	1	28	116
B	2.4		21	138
C	2.3		24	177
D	9.2	1	46	302

ADDRESS THE SUPERINTENDENT  
U. S. COAST AND GEODETIC SURVEY

AND REFER TO NO. 41-ACC

DEPARTMENT OF COMMERCE

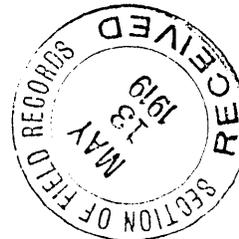
U. S. COAST AND GEODETIC SURVEY

WASHINGTON May 9, 1919.

~~HYDROGRAPHY ETC., (HT)~~

~~CHART~~

FIELD RECORDS (C)



Division of Hydrography and Topography: *HCS*

Division of Charts:

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

HYDROGRAPHIC SHEET 4005 Add.

Block Island Sound. Rhode Island.  
J. A. Daniels in 1918.

Plane of reference is  
Mean low water, reading

1.6 ft. on staff at Breakwater, Great Salt Pond,  
Block Island R. I.

*St. Luce*  
Chief, Section of Tides  
and Currents.



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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

E. Lester Jones

Superintendent.

State: RHODE ISLAND

DESCRIPTIVE REPORT.

Wire Drag  
HYDROGRAPHIC

Sheet No. 4005

LOCALITY:

Narragansett Bay, Western Passage

Field Sheet # 2

Scale 1 to 50,000

1917

CHIEF OF PARTY:

R. P. Strough