

7029

WIRE DRAG

Diag'd. on Diag. Ch. No. 1210-3

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

(Shoal and Wreck
Type of Survey WIRE DRAG Investigations)

Field No. WA-HI-2248 Office No. H-7029 W.D.

LOCALITY

State Rhode Island

General locality Narragansett Bay

Locality Vicinity of Brenton Reef and Point
Judith

1948

CHIEF OF PARTY

W.F. Malnate

LIBRARY & ARCHIVES

DATE January 7, 1949

B-1870-1 (1)

7029

WIRE DRAG

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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.

REGISTER No. H-7029 WD

Field No. Wa-Hi 2248

REG. NO. H7029-J.D.

State RHODE ISLAND

General locality NARRAGANSETT BAY

Locality VICINITY OF BRENTON REEF AND POINT JUDITH

Scale 1:20,000 Date of survey May-June 1948

Instructions dated 12 Feb. & 24 Mar. 1948

Vessel WAINWRIGHT AND HILGARD

Chief of party W.F. MALNATE

Surveyed by W.F. MALNATE

Soundings taken by fathometer, graphic recorder, ~~hand lead, wire~~

Fathograms scaled by J.H.S.

Fathograms checked by W.F.W.

Protracted by W.W. FEAZEL

Drag strips inked

Soundings punched by W.W. FEAZEL

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~

REMARKS:

W.W. 11/1/48

DESCRIPTIVE REPORT TO ACCOMPANY
WIRE DRAG SURVEY ~~H-7029~~ (FIELD NO. WAHI-2248)
SPECIAL WIRE DRAG INVESTIGATION OFF BRENTON REEF
AND POINT JUDITH, RHODE ISLAND

MAY - JUNE 1948

SHIPS WAINWRIGHT & HILGARD W.F. MALNATE, CHIEF OF PARTY

PROJECT:

These investigations were made in accordance with special instructions dated 12 February 1948 & 24 March 1948.

Report of shoal on Marine Data form, from the Master Mr. A.J. Beck, of the S/S PERRYVILLE dated 17 October 1947.

SURVEY LIMITS & DATES

- (1) To prove or disprove the existence of a reported 7 1/2 fathom shoal.
- (2) To wire drag over the two wrecks, wreck No. 760 and wreck of the SS BLACK POINT, with an effective depth of 55 feet.

Field work was started on 19 May and ended 7 June 1948.

Work covers a small section of wire drag sheet H-4006 (1917) WD.

One days hydro was done on this sheet, May 24, 1948, in the vicinity of a grounding on "B" day which fell in a large split area of wire drag survey registered No. 4006.

Progress of work was rather slow due to Fog and strong winds.

VESSELS & EQUIPMENT

Ship WAINWRIGHT was used as Guide Launch and Ship HILGARD was used as End Launch and Launch M-306 was used as tender.

Ship WAINWRIGHT was used on the hydrographic survey and investigation of groundings, using type 808 J Fathometer No. 63.

TIDES

The primary tide station maintained at Newport, Rhode Island was inspected by the Ship GILBERT prior to the beginning of field work in this area.

Tidal data was not immediately available for use so *Actual tides used* predicted tides were used for tide reducers in the field. *on smooth sheet*

SMOOTH SHEET

No smooth sheet is being prepared in the field. The drag strips with their effective depths have been plotted on Guide Launch boat sheet. The hydrography was run on the End Launch boat sheet and the soundings as obtained using predicted tides are plotted thereon.

*Smooth & A & B
Sheets plotted
by Process Of.*

CONTROL STATIONS

The control used was the previously located 2nd and 3rd order triangulation stations, Narragansett Bay as listed in the geographic position, form 28B furnished by the Washington office, and geographic position of the Main Breakwater Center Light, Pt. Judith, Harbor of Refuge was established by the Ship GILBERT in 1948.

SURVEY METHODS

Wire drag standard dual control methods were used. The drag strips were controlled by three point fixes observed on fixed shore objects. Lift was determined by tests from the tender using a graduated rod coated with a mixture of white lead & tallow.

On 62 B day the drag grounded, it was first thought that the drag grounded on lobster pots. The drag parted before the ground could be investigated. Soundings of 57 and 47 feet were obtained with type 808J fathometer while picking up the drag. The next work day, hydrographic development was run to determine the least depth.

*Least depth
from hydro-
development
is 43 ft. - cleared
by 42 ft drag.*

The End launch reported that on position 8 B the ship was pulled in for some unknown reason, so the area in the vicinity of 8B was recovered on "C" day to make certain no shoal existed.

On "E" day the tender was in the repair shop at Fort Adams so the grounding on the wreck SS BLACK POINT was investigated by the Ship WAINWRIGHT using the 808 fathometer, while picking up the drag.

Special effort was made to cover the large split area left on Wire Drag Survey H 4006. This split is shown on the boat sheet in yellow. *Split adequately covered by present survey.*

RECORDS

Wire drag standard records were kept. The diagrams have been drawn in the books and the effective depth to the nearest foot entered. Predicted tides were used for tide reducers. *Actual tides entered in records by Process Off.*

ECHO SOUNDING: Standard hydrographic methods were used. The fathogram was scanned at the end of the day to check the recorded soundings.

Bar checks were taken at the beginning and ending of the sounding day and the corrections were entered in the sounding volume. *Bar Ch. Comps. filed with fathograms.*

Predicted tides were used for tide reducers. *Actual tides used by Process Off.*

RECOMMENDATIONS

It is recommended that:

- 1891 (1) The shoal as reported by the SS PERRYVILLE in Latitude $41^{\circ}24'$ north, Longitude $71^{\circ}20.5'$ west be deleted from the chart. *Shoal not found - 56 drag cleared to 56 ft.*
- 1895 (2) The wreck No. 760, in Latitude $41^{\circ}24'30''$ north, Longitude $71^{\circ}22'30''$ west be shown as cleared with Wire drag, effective depth $58\frac{1}{2}$ feet. *Barge*
- 1874 (3) The wreck SS BLACK POINT, in Latitude $41^{\circ}19'46''$ north, Longitude $71^{\circ}25'47''$ west be charted as $46'$ feet and cleared with Wire drag at $45\frac{1}{2}$ feet effective depth. *74*
- 1903 (4) The $44\frac{1}{2}$ foot sounding in Latitude $41^{\circ}25.39'$ north, Longitude $71^{\circ}21.05'$ west, be charted. This shoal was cleared with effective depth of $42'$ feet. *23 ft. Least depth of 43 ft. falls about 100 m S. of the 44 ft. sdg. No Cor on Ch 70*
- 1901 (5) The $43\frac{1}{2}$ foot sounding, in Latitude $41^{\circ}25.25'$ north, Longitude $71^{\circ}21.12'$ west, be charted. This shoal was cleared with effective depth of $42'$ feet. *15.0 See note (4) No Cor on Ch 70 1108 2.7 m L.S.S.*
- (6) The 60 foot curve, as determined by the hydrography on 24 May 1948 be shown on USC&GS charts Nos. 1210 and 353.

Respectfully submitted

Walter J. Chovan
Walter J. Chovan
Lt. Comdr. C&GS

Forwarded and approved
W.F. Mainate
W.F. Mainate, Lt. Comdr.
Comdg. WAINWRIGHT & HILGARD

STATISTICS FOR WIRE DRAG SURVEY WAHI 2248

WIRE DRAG

Date	Day	Positions	Stat. Miles	Sdgs.
19 May	A	118	7.7	---
20 May	B	124	8.3	2
2 June	C	96	5.1	---
3 June	D	60	2.9	---
4 June	E	84	5.2	2
7 June	F	40	3.0	---
		TOTAL 522	32.2	4
		Area 32.6 Sq. Stat. Miles		

HYDROGRAPHY

Date	Day	Positions	Stat. Miles
5 May	C	74	14.1
		Area 0.25 Sq. Stat. Miles	

TIDE NOTE

Heights are referred directly to mean low water and are based on observed tides at Newport R.I. modified for necessary ~~time~~ and range differences. Tidal corrections were entered in records corrected to 60th meridian time.

^T
DST

H-7029

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON 25

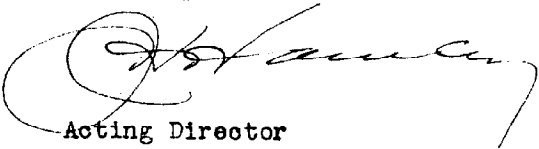
IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER
AND REFER TO NO. 36-tmo

. 8 July 1948

To: Supervisor, Southeastern District
U. S. Coast and Geodetic Survey
Room 418, U. S. Post Office Building
Norfolk 10, Virginia

Subject: Tide Data, Rhode Island

Enclosed for the periods requested in your letter of
23 June 1948 are tidal hourly heights^{*} for the reduction of sound-
ings off Narragansett Bay. Heights are referred directly to mean
low water and are based on observed tides at Newport modified for
necessary time and range differences.


Acting Director

Enclosure

** Hourly Heights filed with fathograms*

LIST OF SIGNALS

H-7029

TOW - NEWPORT, ST. GEORGE'S TOWER, 1932-40
FLAG - JAMES ESTATE, FLAGPOLE, 1933
DAVIS - NEWPORT, DAVIS HOUSE, CUPOLA, 1912-35
HILL - CASTLE HILL, LIGHTHOUSE, 1897, 1940
TAIL - BEAVERTAIL LIGHTHOUSE, 1869, 1940
HAZ - HAZARD TOWER, 1940
TANK - PT. JUDITH TANK, 1940
JUD - PT. JUDITH LIGHTHOUSE, 1839, 1940
GEN - MAIN BREAKWATER, CENTER LIGHT 2, 1948
(Ship GILBERT Location)

Lat. 41° 21' 14.90" 459.8 m.
Long. 71° 30' 27.96" 650.0 m.

ADDENDUM
To Accompany

WIRE DRAG SURVEY H-7029 W.D. (Field No. Wa.Hi.-2248)

SOUNDINGS

Due to the lack of bar check corrections, detached
tender soundings were omitted from smooth sheet.

*Bar ck corrections
for 5-24-48 applied
to tender sdgs. for
e day.*

Hydrography done by Ship WAINWRIGHT on C day 5/24/48
was plotted on an overlay and submitted with the smooth
sheet. (*Overlay incorporated with D.R.*)

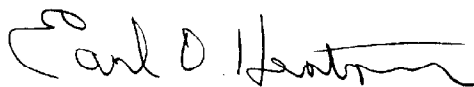
Respectfully submitted,



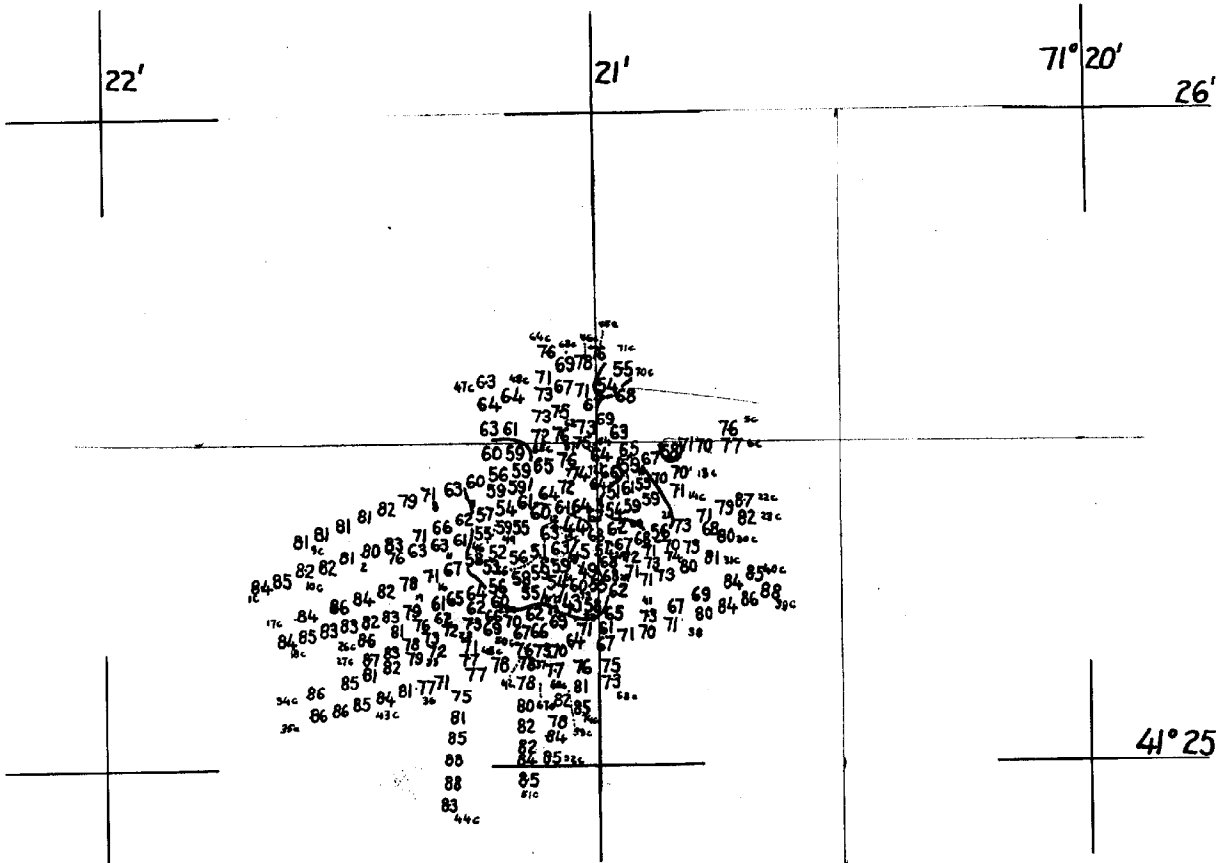
Hugh L. Proffitt
Cartographer

Norfolk, Virginia
May 25, 1949

Approved and forwarded.



Earl O. Heaton
Supervisor, SE Dist.



H-7029 WD

OVERLAY
of
Hydrographic Development

scale 1:20,000

*soundings of 1948
in ft. at MLW*

24'

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7029 W.D.

Records accompanying survey:

Boat sheets²; sounding vols.²; wire drag vols.⁴;
 bomb vols.; graphic recorder rolls 1 envel.
 special reports, etc. Drag strip tracings, 1 Overlay showing
 hydrography, 1 A & D Sheet

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

Number of positions on sheet	.....	335
Number of positions checked	.....	10
Number of positions revised	.....	1
Number of soundings revised (refers to depth only)	.....	-
Number of soundings erroneously spaced	.....	-
Number of signals erroneously plotted or transferred	.....	-
Topographic details	Time	.....
Junctions	Time	6
Verification of soundings from graphic record	Time	1

Verification by *[Signature]* Total time 27... Date 25 Aug. '49

Reviewed by *[Signature]* Time 15... Date 20 Jan. '50

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7029 W.D.

FIELD NO. WA-HI-2248

Rhode Island, Narragansett Bay, Vicinity of Brenton Reef and
Pt. Judith

Surveyed in May - June, 1948

Scale 1:20,000

Project No.; Special
Instructions dated 2/12/48 and 3/24/48

Wire Drag:

Control:

Leadline
808 Fathometer

Sextant fixes on shore signals

Chief of Party - W.F. Malnate
Surveyed by - W.F. Malnate and W.J. Chovan
Protracted by - W.W. Feazel
Soundings plotted by - W.W. Feazel
Verified and inked by - L. V. Evans III
Reviewed by - I. M. Zeskind, January 19, 1950
Inspected by - R. H. Carstens

1. Shoreline and Control

The control for this survey originates with triangulation stations established from 1839 to 1948.

No shoreline is shown on this offshore survey.

2. Junctions with Wire Drag Surveys

No wire drag surveys adjoin the detached area covered on the present survey in the vicinity of lat. $41^{\circ} 20'$, long. $71^{\circ} 26'$. Except for this area the present survey falls within the area covered by surveys H-4006 W.D. (1917) and H-4005 W.D. (1917-19). The A and D sheet for H-4006 W.D. was revised to include the effective drag depths of the present survey. No revision was made to the A and D sheet of survey H-4005 W.D., inasmuch as its effective drag depths within the common area are deeper than those of the present survey.

3. Comparison with Hydrographic Surveys

There are no contemporary hydrographic surveys by this Bureau in the area covered by the present survey.

A comparison between prior surveys H-6444 (1939) and H-1787 (1887) and the present survey reveals no conflict between prior depths and the effective wire-drag depths.

4. Comparison with Chart 1210 (Latest print date 8/1/49)

a. Hydrography

There are no conflicts between charted depths and the effective depths of the present survey.

b. Aids to Navigation

No aids to navigation were located on the present survey.

5. Condition of Survey

a. The Descriptive Report and sounding records are complete and comprehensive.

b. The smooth plotting of the survey was well done.

c. The attention to detail in the execution of this survey was good. Adequate lift tests were made. There are no splits and only one area of insufficient overlap.


6. Compliance with the Project Instructions

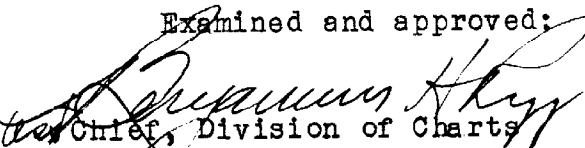
The survey adequately complies with the Project Instructions.

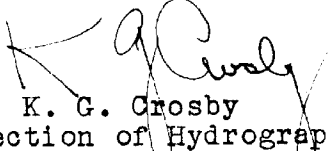
7. Additional Field Work Recommended

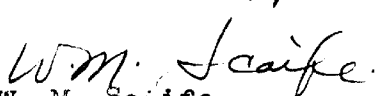
This is an excellent survey and adequately serves the purpose intended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


Chief, Division of Charts


K. G. Crosby
Chief, Section of Hydrography


W. M. Scaife
Chief, Division of Coastal Surveys

EHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 15, 1949

~~Division of Hydrography and Topography:~~

Division of Charts: R. H. Carstens

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 7029

Locality Narragansett Bay, Rhode Island

Chief of Party: W. F. Malnate in 1948
Plane of reference is mean low water, reading
1.4 ft. on tide staff at Newport
36.0 ft. below B. M. 1 (1930)

Height of mean high water above plane of reference is 3.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, ~~Division of Tides and Currents.~~

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7029 W.D.

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6/22/49	236	H.F. Stegman	Examined - not applied - no critical Before After Verification and Review <i>corrected to</i> <i>chart 236.</i>
6-27-49	1210	M. Adams	Before After Verification and Review <i>Partially</i> <i>Applied</i> Before After Verification and Review
9/14/49	353	H.F. Stegman	Before After Verification and Review <i>before</i> <i>Partially applied -</i> <i>(Complete except for possible changes noted in review)</i>
11-7-49	1108	M. G. Mason	Before After Verification and Review <i>Appd from</i> <i>CP drawing 1210 dated 7-5-49</i>
11/1/50	70	Straw-Walker	Before After Verification and Review <i>Completely applied direct from H7029 & R.</i>
1/16/51	353	M. Gann	Before <u>After</u> Verification and Review <i>Completely applied to reconstruction</i>
3/9/51	236	J.P. Walker	Before After Verification and Review <i>Completely applied - no correction</i>
7/9/51	1210	J.P. Walker	Before After Verification and Review <i>Completely</i>
8-13-51	1108	J. H. Eaton	Before After Verification and Review
8/28/52	N.C. #268	M. Alinden	After Ver. & Review - <i>Completely applied</i> <i>No correction</i>
10/27/51	1210 Recon	M. Rogers	After ver. & review - <i>Complete</i>
2/15/95	13221 (extension)	John Barber	After ver. & reviews - Exam. no corr's.

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.