

6977

WIRE DRAG

Diag'd. on Diag. Ch. No. 1204-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG
Field No. 1044 Office No. H-6977 W.D.

LOCALITY
State Maine
General locality Casco Bay
Locality Approaches to New Meadows River

194 3-'44
CHIEF OF PARTY
L.C. Johnson & J.H. Brittain

LIBRARY & ARCHIVES

DATE Sept. 21, 1945

B-1870-1 (1)

6977
WIRE DRAG

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H6977 WIRE DRAG SURVEY.

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. 1044

REGISTER NO. H-6977 W. D.

State Maine

General locality Casco Bay Coast of Maine

Locality Approaches To New Meadows River Casco Bay (Eastern Part)

Scale 1/10,000 Date of survey Aug. 1943 May to July 1944

Vessel WAINWRIGHT, HILGARD and MARINDIN

Chief of Party L. C. Johnson and John H. Brittain

Surveyed by L. C. Johnson and John H. Brittain

Protracted by R. J. Auld

Soundings penciled by R. J. Auld

Soundings in ~~fathoms~~ feet M/L W.

Plane of reference

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated March 11, 1942, March 16, 1943, March 11, 1944, 19

Remarks: This sheet was processed in the Hydrographic Section, Southeastern District, Norfolk, Va.

DESCRIPTIVE REPORT

to accompany

WIRE DRAG SURVEY FIELD NO. 1044

H.- 6977

AUTHORITY:

This wire drag survey was executed under Supplemental Instructions, Project CS-265, dated March 11, 1942, March 16, 1943, and March 11, 1944.

DATE OF SURVEY:

The field work on this survey was done on August 17 and August 19, 1943, and between May 25 and July 19, 1944.

SCOPE AND JUNCTIONS:

The extension of wire drag surveys in the Eastern part of Casco Bay between Fuller Rock on the east, Ragged Island on the west, from ~~Cow Island~~ on the south to the vicinity of Cundy Harbor in the New Meadows River on the north. Quohog Bay and Small Point Harbor were included.

A Junction was made with wire drag Survey H-6674⁽¹⁹⁴¹⁾ on the south and with wire drag Survey H-6783, in the area covered by ⁽¹⁹⁴²⁾ this Survey. A Junction was made with the 1943 wire drag Survey Field No. 1001⁽¹⁹⁴³⁾ on the west and with 1144⁽¹⁹⁴⁴⁾ on the North in New Meadows River. Several splits were dragged near the junctions with Surveys H-6674 and H-6783. ^{H-6978(1944)}

CONTROL:

Existing triangulation and graphic control executed by the LYDONIA in 1942 furnished the necessary control. Additional signals were located by sextant cuts in the vicinity of Small Point.

SURVEY METHODS:

The 1944 wire drag was done with the WAINWRIGHT as guide launch and the HILGARD as end launch. Launch 101 was used for a tender. The two days work in 1943 was done with the HILGARD as guide launch, the MARINDIN as end launch, and Launch 101 as a tender.

Standard dual control methods were used. The drag strips were controlled by three point fixes on shore signals. Lift was determined on each section of the drag by tests from the tender, using a graduated rod coated with a mixture of white lead and tallow, and suspended from a float by means of a graduated wire.

DESCRIPTIVE REPORT

Wire Drag Survey Field No. 1044

COMPARISON WITH HYDROGRAPHY:

Shoal soundings determined on the hydrographic Surveys were transferred from copies of those surveys to the boat sheets. In general these shoals were cleared by an effective depth of 2 to 3 feet.

In the following listed instances shoaler depths were found:

- ✓ 1. Latitude 43.45.^{88'} Longitude 69 55.^{09'} grounded at effective depth of 11.5 feet, cleared at 10 feet effective depth. Hydrography shows 15 feet.
- ✓ 2. Latitude 43 46.13 Longitude 69.54.^{68'} grounded at effective depth of 16 feet, cleared at 11.5 feet effective depth. Hydrography shows 18 feet. (14 1/2 ft. sdg. at pos. 2p) *14 ft. sdg. plotted on Smooth Sheet.*
- ✓ 3. Latitude 43 42.72 Longitude 69 53.05 grounded at 20 feet, cleared at 18 feet. Least depth on hydrography is 22 feet. *see last P 20. notes*
- ✓ 4. Latitude 43 45.80 Longitude 69 53.^{18'} grounded at 16.8 ft; hand lead sounding of 17 ft. obtained. Cleared at 15.5 ft. Hydrography shows least depth of 18 1/2 ft. *17 ft. sdg. cleared by 1 1/2 ft drag strip on smooth sheet.*
- ✓ 5. Latitude 43 45.^{68'} Longitude 69 53.20 grounded at 15.5 ft., sounding of 15 ft. obtained. This was cleared with an effective depth of 12 ft. Hydrography shows least depth of 17 ft.

H-6806(1942) In Latitude 43-44.^{18'} Longitude 69-54.05^{19'} the hydrographic survey shows a least depth of 17 ft. This shoal was covered with the wire drag at effective depth of 17.5 feet, 19.5 ft., 19.0 ft., and 17.0 feet. The drag grounded on the 19 foot depth and then slipped over before a hand lead sounding could be obtained. There was no indication of grounding on the other strips. It is possible that the grounding indication was due to kelp rather than an actual grounding. However, it is recommended that the effective depth of clearance be taken as 17.5 feet. *19 ft. griding not shown on Smooth Sheet. Prior 19 ft. sdg. cleared by 1 1/2 ft. W.D. strip. 19 ft. effective depth shown*

TIDES:

Hourly heights taken from the standard gage at Portland, Maine were used in the reduction of effective depths to mean low water. These tides were used without time on range corrections.

L. C. Johnson
L. C. Johnson

John H. Brittain
John H. Brittain

A D D E N D U M

to accompany

WIRE DRAG SHEET NO. H-69⁷97 (Field No. 1044)

Drag Strip 12 to 19 P (red); Latitude 43° 45.5' to 46.2" and Longitude 69° 54.8'.

The records show a lift of 6.5 ft. for this wire drag strip. Since this was considered excessive, it was deemed advisable to show this wire drag strip in pencil, until final disposition of this strip could be determined after verification by the Washington Office.

Strip rejected

14 ft. soundings, 3 - 4 p (red); Latitude 43° 46.10' and Longitude 69° 54.85'.

These soundings fall in an area covered by 3 drag strips which have effective depths of 24 to 25 ft.

Is reversed, Hydro. in harmony with W.D.

28 $\frac{1}{2}$ ft. Grounding; Latitude 43° 42.^{92'}85" and Longitude 69° 53.^{52.96'}00". This 28 $\frac{1}{2}$ ft. grounding is cleared by a drag strip whose effective depth is 34 ft. It is believed this 28 $\frac{1}{2}$ ft. grounding is part of the same shoal as the 34 ft. grounding which is located about 150 meters southward.

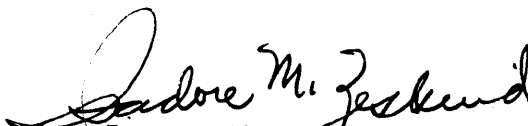
erroneously plotted in its correct position it agrees with contemporary hydrog. and is in harmony with W.D.

Page 2 this descriptive report, Comparison with Hydrography, item No. 3,

In addition to clearing this shoal with an 18 ft. depth, drag strip 29 to 30 K (red) apparently clears at 20 ft..

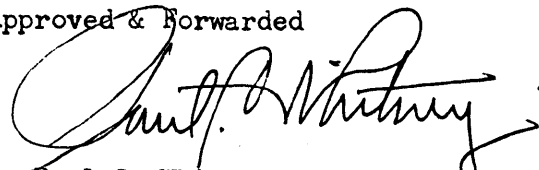
18ft. clearance accepted and shown on Sheet & A&D Sheet.

Respectfully submitted,


Isadore M. Zeskind
Cartographic Engineer

Norfolk, Virginia
Sept. 19, 1945

Approved & Forwarded


Paul C. Whitney
Supervisor SE District

747m.

TIDE NOTE FOR HYDROGRAPHIC SHEET

5 December 1945

~~Division of Hydrography and Topography:~~

Division of Charts: Attention: H. W. MURRAY

Plane of reference approved in
13 volumes of sounding ^{and wire drag} records for

HYDROGRAPHIC SHEET 6977

Locality Casco Bay (Eastern Part), Coast of Maine

Chief of Party: L. C. Johnson and John H. Brittain in 1943 and 1944
Plane of reference is mean low water, reading
8.6 ft. on tide staff at Portland
19.0 ft. below B. M. 31

Height of mean high water above plane of reference is 8.9 feet.

Condition of records satisfactory except as noted below:

L. H. Green
Chief, Division of Tides and Currents.

GEOGRAPHIC NAMES

Survey No.

H6977

WIRE DRAG SURVEY.

- Name on Survey

	A	B	C	D	E	F	G	H	K
	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	
<u>New Meadows River</u>								USG-B	1
<u>Quohog Bay</u>							(1948 USG-B)		2
<u>Ridley Cove</u>									3
<u>Bear I.</u>									4
<u>Harbor I.</u>								US-B	5
<u>Wood I.</u>									6
<u>Small Pt. Harbor</u>									7
<u>East Brown Cow</u>									8
<u>Cape Small</u>									9
<u>Ragged I.</u>									10
<u>Casco Bay</u>			(for title)					US-B	11
<u>Maine</u>			"						12
									13
									14
									15
									16
									17
									18
<u>Portland</u>			(location of tide gage)					US-B	19
									20
									21
									22
									23
									24
									25
									26
									27

Names underlined in red are approved 1-17-50
L. H. T. C. H.

Surveys Section (Chart Division)

WIRE DRAG SURVEY.

HYDROGRAPHIC SURVEY NO. **H6977**

Records accompanying survey:

- Boat sheets .1.; sounding vols. .13.; wire drag vols. 13....;
- bomb vols.; graphic recorder rolls;
- * special reports, etc. .1. A & D. Sheet.....
-

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

Number of positions on sheet	1454	.....
Number of positions checked	125	.....
Number of positions revised	22	.....
Number of soundings recorded	12	.....
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	24	.....
Verification of soundings from graphic record	Time	.....
Verification of critical infor. only (J. A. Dinsmore)	28 hrs.		Febr. '48
Verification by... <i>J. A. Dinsmore</i> Total time	155	.....	Date 7 Oct. 1949
Review by <i>Am Jeskeid</i>	Time	47	..... Date Jan. 17 '50.

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-6977 W.D.

FIELD NO. 1044

Maine, Casco Bay, Approaches to New Meadows R.
Surveyed in Aug. 1943, May-July, 1944 Scale 1:10,000
Project No. CS-265

Wire Drag:

Control:

Soundings by leadline

Sextant fixes on shore signals

Chief of Party - L.C. Johnson and J.H. Brittain
Surveyed by - L.C. Johnson and J.H. Brittain
Protracted by - R.J. Auld
Soundings plotted by - R.J. Auld
Verified and inked by - L. V. Evans III
Reviewed by - I. M. Zeskind, January 17, 1950
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline for this survey originated with air photographic surveys T-5969, T-5970, T-5971 and T-5972 of 1942.

The control for this survey originates with triangulation stations of 1933 to 1941 and with graphic control surveys T-6912b, T-6928b and T-6929b of 1942. Supplementary hydrographic signals originate with sextant fixes recorded in Vol. 2, Smooth Tender Record, of the present survey.

2. Junctions with Wire Drag Surveys

Adequate junctions were effected with H-6978 W.D. (1944) on the north, H-6922 W.D. (1945) on the west, H-6674 W.D. (1941) on the south and H-6783 W.D. (1942) on the southwest. South of lat. $43^{\circ} 45'$, the present survey overlaps a large portion of H-6783 W.D. Effective depths of both surveys have been combined in making the A and D sheet of the area of the present survey.

3. Comparison with Hydrographic Surveys

The effective depths of this wire-drag survey do not conflict with depths on hydrographic survey H-6805 (1942), H-6806 (1942) and H-6810 (1942). Minor conflicts with these hydrographic surveys were disposed of during verification.

The soundings, groundings and bottom characteristics obtained on the present survey have been transferred to the hydrographic surveys.

4. Comparison with Chart 315 (Latest print date 10/11/48)

a. Hydrography

The charted hydrography originates with the previously discussed surveys which need no further consideration, and with the present survey prior to verification and review.

The following differences between the chart and the present wire-drag survey are noted:

- (1) The 15-ft. clearance depth charted in lat. $43^{\circ} 45.86'$, long. $69^{\circ} 53.20'$ is shown to be cleared by a depth of only 12 ft. on the present survey.
- (2) The 42-ft. grounding shown on the present survey in lat. $43^{\circ} 44.99'$, long. $69^{\circ} 52.40'$ is not charted.

1204
315 CHART
Not necessary on 1904

b. Aids to Navigation

No floating aids to navigation are shown 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, except as noted in paragraph c below.
- c. The effective drag depth, soundings and groundings were originally plotted on the smooth and A and D sheet in half feet. The A and D sheet was revised in the Washington Office to show these depths in whole feet. The half-foot depth units on the smooth sheet were not changed.

d. The attention to detail in the execution of this survey was adequate. However, in a few instances grounding notes were not clear. Soundings were obtained at most groundings and adequate lift tests were made. Except for the unimportant split in lat. $43^{\circ} 33.47'$, long. $69^{\circ} 55.40'$, there are no splits or insufficient overlaps within the area of the survey.


6. Compliance with Project Instructions

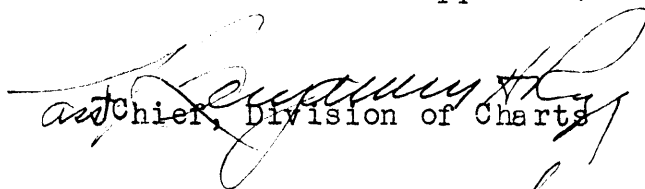
The survey adequately complies with the Project Instructions.

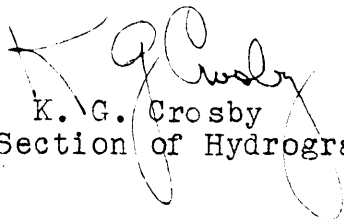
7. Additional Field Work Recommended

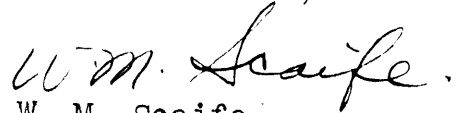
No additional field work is recommended.

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

