

AUG 18 1944

6983

WIRE DRAG

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

Drag 1204-3

DESCRIPTIVE REPORT

Type of Survey Wire-drag

Field No. 1244 Office No. H-6983

LOCALITY

State Maine

General locality Booth Bay

Locality _____

1944

CHIEF OF PARTY

L. C. Johnson & John H. Brittain

LIBRARY & ARCHIVES

DATE _____

6983
WIRE DRAG

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO.

116983

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. 1244

REGISTER NO.

State Maine

General locality Boothbay Bay

Locality ditto

Scale 1:10000 Date of survey June, July, August, 1944

Vessels WAINWRIGHT & HILGARD

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

Surveyed by same

Protracted by A.G. Atwill

Soundings penciled by A.G. Atwill

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by - - -

Verified by G. F. Jorda R. D. Goodrich

Instructions dated Mar. 11, 1942, Mar. 16, 1943, Mar. 11, 1944

Remarks: This sheet was processed in the Hydrographic Section of the S.E. District, Norfolk, Va.

DESCRIPTIVE REPORT

to accompany

SHEET 1244, WIRE-DRAG

U. S. C. & G. S. L. WAINWRIGHT, L. C. Johnson, Comdg.

U. S. C. & G. S. L. HILGARD, J. H. Brittain, Comdg.

Authority:

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

Limits:

This sheet comprises a wire-drag survey of parts of Booth^{Bay}, Linkin Bay, Fisherman Island Passage and eastward of Damariscove and Fisherman Island.

Methods:

The wire drag was accomplished with the Launches WAINWRIGHT and HILGARD as drag launches and launch 101 as tender.

Standard dual control methods were used. The drag strips were controlled by three point sextant fixes on shore signals. Lift was determined on most sections of the drag by tests taken 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 stranded 1/8" wire.

Control:

Stations located on air-photographic map drawings and some triangulation stations furnished adequate control for this survey.

As the boat sheet used for hydrography for the part at the mouth of The Damariscotta River was not available, the names of the signals will not agree with those used for hydrography.

Comparison with hydrography & charted soundings:

To the westward of Damariscove Island there is 11 feet charted. This was verified by the drag, a handlead sounding of 11 feet being obtained here. This spot was covered in southerly direction with drag at effective depth of 16 feet. This drag showed tendency to "V" but under steady strain it seemed to pull through kelp. In a northerly direction with drag at 15 feet the "V" was pronounced, but it appeared to be pulling through the kelp. However, when dragging in an easterly direction, the drag grounded at all depths down to 10 feet. The grounding at the 10 foot strip is believed to be due to kelp on the bottom wire in the section that covered the spot. This section was underrun and cleared of kelp, and spot then cleared with no indication of grounding with effective drag depth of 9½ feet.

At position 10 D the end launch noted that the drag grounded between buoys 6 and 7, near 7. The drag cleared itself and indications were that the depth was but little shoaler than setting of the drag. The launches maintained tension on the drag at all times. This grounding was near a 35 foot sounding, by the hydrography, and was overlapped on the next strip with effective depth of 32½ feet.

Boat sheet No. 2

At 31 0' day the drag grounded with effective depth of $24\frac{1}{2}$ feet on area with depth of 28 feet by hydrography. A handlead sounding of $20\frac{1}{2}$ feet was obtained here and the spot was cleared with effective depth of 18 feet.

Tides

The tide station at Boothbay Harbor furnished reducers for reducing the drag depths to mean low water. No time or height corrections were applied to the values from the gage.

Miscellaneous:

It was planned to have this survey on two sheets, but as the season was ended too early to undertake other projects, it was decided to have all this work plotted on one sheet. The record books are separate for the two boat sheets, except one of the smooth tender records contains data for both of the sheets. The day letters were not changed in the books as it will be more convenient to have them the same as on the boat sheets. It is suggested that the day letters be changed in the volumes while plotting the smooth sheets to get rid of the duplications. The boat sheets have been numbered 1 and 2 and the books lettered in pencil as to which boat sheet they apply.

L. C. Johnson

L. C. Johnson
Officer in Charge
Launch WAINWRIGHT

John H. Brittain
John H. Brittain
Officer in Charge
Launch Hilgard

STATISTICS

Sheet 1244

<u>Date</u>	<u>Day</u>	<u>Statute Mile Strip</u>	<u>Number of Positions</u>	<u>No. of Soundings</u>
<u>Boat Sheet #1</u>				
June 22	A	3.6	19	0
"	23	B	5.7	0
July 10	C	3.8	26	0
Aug. 9	D	8.9	65	1
"	25	E	1.5	2
<u>Boat Sheet #2</u>				
Aug. 15	A	3.4	25	0
"	17	B	2.5	1
"	23	C	9.1	1
"	25	D	5.1	0
Totals		<u>43.6</u>	<u>330</u>	<u>5</u>

Area covered: 10.4 square statute miles.

A D D E N D U M

To Accompany

WIRE DRAG SHEET H - 6983 (Field No. 1244)

* It was necessary to transfer all hydrographic signals from the boat sheets, as the field party did not furnish the sextant cuts or fixes with their records.

All references to depths in the descriptive report are based on predicted tides, and refer to those depths shown on the boat sheets.

*Remove -
Please note in
review -
Pink*

Respectfully submitted,

Isadore M. Zeskind
Isadore M. Zeskind
Cartographic Engineer.

Norfolk, Va.
August 17, 1945.

Approved and forwarded.

Paul C. Whitney
Paul C. Whitney
Supervisor SE District.

* Note: The hydrographic signals originated with the 1943 hydrographic surveys. A check with these surveys resulted in a 15 meter change in position of signal "Yak". Three positions of the drag were changed where this signal was used. Minor corrections to some other positions was not considered warranted.

G.F.J. (reviewer)

GEOGRAPHIC NAMES
 Survey No. **H6983**

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local maps	F P. O. Guide or Map	G RARE MENARLY Atlas	H U. S. Light List	K
<u>Booth Bay</u>									1
<u>Linekin Bay</u>									2
<u>Boothbay Harbor</u>				(also location of tide staff)				USGA	3
<u>Damariscotta R.</u>									4
<u>Fisherman I. Passage</u>									5
									6
<u>Damariscove I.</u>								USGB	7
<u>Southport I.</u>									8
<u>Fisherman I.</u>									9
<u>White Is.</u>									10
									11
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									27

Names unclassified in this appendix
 by L. Heck on 3/22/46

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. .. **H6983**

Records accompanying survey:

Boat sheets .2...; sounding vols. 4...; wire drag vols. .4...;
 bomb vols.; graphic recorder rolls;
 special reports, etc. ...1. A & D sheet.....
1. envelope - . Tidal . corrections & hourly heights.....

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

Number of positions on sheet	330
Number of positions checked	.33.
Number of positions revised	..15.
Number of soundings recorded	..5..
Number of soundings revised (refers to depth only)	..0..
Number of soundings erroneously spaced
Number of signals erroneously plotted or transferred
Topographic details	Time ..2.. hrs
Junctions	Time ..18.. "
Verification of soundings from graphic record	Time

Verification by R. D. Goodrich . Total time .112. hrs. Date Mar. 13, 1946

Review by J. F. Jordan . Total time .22. Date Mar. 18, 1946

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6983 W.D.

FIELD NO. 1244

Maine, Booth Bay
Surveyed in June to August 1944 Scale 1:10,000
Project No. CS-265

Soundings:

Control:

Hand lead

Dual

Chiefs of Party - L. C. Johnson and J. H. Brittain
Surveyed by - L. C. Johnson and J. H. Brittain
Protracted and inked by - A. G. Atwill
Verified by - R. D. Goodrich
Reviewed by - G. F. Jordan, March 18, 1946
Inspected by - H. W. Murray

1. Shoreline and Signals

The source of shoreline and signals is listed in detail in the descriptive reports and reviews of the contemporary hydrographic surveys referred to in par. 3, below.

2. Adjoining Wire-Drag Surveys

The present survey completes the dragging within the limits of H-6923 (1943) W.D. and extends the coverage eastward past White Islands. It makes a satisfactory junction on the southwest with H-6830 (1943) W.D.

3. Contemporary Hydrographic Surveys

H-6840 (1943), H-6844 (1943), H-6858 (1943)

These three surveys are satisfactorily covered in part by the present survey. Conflicts between depths on these surveys and effective depths on the present survey have been eliminated during verification.

4. Comparison with Chart 313 (Latest print of Sept. 1, 1945)
Chart 314 (Latest print of July 14, 1945)

Groundings charted from the present survey before verification present the only conflicts between the charts and the present survey. The following groundings, have been eliminated on the smooth sheet and should be removed from the charts.

- (1) 28-ft., lat. $43^{\circ} 48.4'$, long. $69^{\circ} 34.86'$, chart 313, 155-ft. depths.
- (2) 26-ft., lat. $43^{\circ} 46.5'$, long. $69^{\circ} 34.4'$, chart 313, 97-ft. depths.
- (3) 42-ft., lat. $43^{\circ} 44.5'$, long. $69^{\circ} 36.3'$, chart 314, 91-ft. depths.
- (4) 34-ft., lat. $43^{\circ} 45.7'$, long. $69^{\circ} 37.5'$, chart 314, 148-ft. depths.

5. Condition of the Survey

The 28-ft. grounding referred to in par. 4, above falls in Fisherman Island Passage and is recorded as a "grounding at navigation buoy". This grounding obviously should not have been smooth plotted.

The smooth plotting of all inclined sections was corrected to conform to paragraph Number 2 on page 37 of the Wire-Drag Manual, Special Publication No. 118.

The transfer of several hydrographic signals from the boat sheet in lieu of requesting the Washington Office to furnish the correct scaled positions is not satisfactory. Errors in the positions of these signals caused discrepancies in plotting of as much as 70 meters.

6. Compliance with Instructions

Satisfactory.

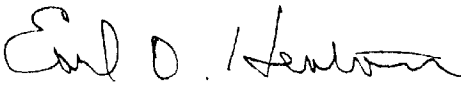
7. Additional Work Recommended

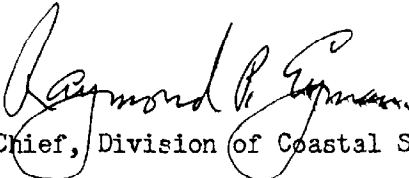
No additional wire-drag work is recommended within the limits of the present survey.

Examined and approved:


Chief, Nautical Chart Branch


Chief, Chart Division


Chief, Section of Hydrography


Chief, Division of Coastal Surveys

TIDE NOTE FOR HYDROGRAPHIC SHEET

September 7, 1945

~~Division of Hydrography and Topography:~~

Division of Charts: Attention: H. W. MURRAY

Plane of reference approved in
8 volumes of ~~sounding~~ records for
wire drag

HYDROGRAPHIC SHEET 6983

Locality Vicinity Boothbay Harbor, Me.

Chief of Party: L. C. Johnson & J. H. Brittain in 1944

Plane of reference is mean low water, reading

2.4 ft. on tide staff at Boothbay Harbor

13.2 ft. below B. M. 6

Height of mean high water above plane of reference is 8.8 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

NAUTICAL CHARTS BRANCH

SURVEY NO. **H6983**

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
3/6/46	1204	G. K. Pumminger	Before After Verification and Review Partially
3-27-46	314	G. H. E. }	Before After Verification and Review Partial
4/26/46	314 Reconst.	G. H. E. }	> Before After Verification and Review Completely
7/2/46	018 313	J. J. Walker	Before After Verification and Review Completely
2-23-	2/2/47		Before After Verification and Review
2/21/47	230 Reconst	G. H. E. }	> Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review

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.