

6923

WIRE DRAG

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. W.D. 3 Office No. H-6923

LOCALITY

State MAINE
General locality Sheepscoot River and
Locality Boothbay Bay

194 3

CHIEF OF PARTY

John H. Brittain

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

WIRE DRAG
6923

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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.

Field No. W.D. 3

REGISTER NO. H-6923

State Maine

General locality Sheepscot River and Booth Bay

Locality _____

Scale 1:10000 Date of survey Sept. 9 to Oct. 14, 19 43

Vessel HILGARD and MARINDIN

Chief of Party John H. Brittain

Surveyed by John H. Brittain

Protracted by M.E. Byrd & A. Kaupa

Soundings penciled by M.E. Byrd & A. Kaupa

Soundings in ~~sections~~ feet _____

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated May 7, 1941; March 11, 1942
March 16, 1943, 19 _____

Remarks: This sheet was processed at the Norfolk Processing
Office.

DESCRIPTIVE REPORT
to accompany
WIRE DRAG SURVEY NO. 3(Field)

INSTRUCTIONS

Work was accomplished under original instructions dated May 7, 1941, and supplemental instructions dated March 11, 1942, and March 16, 1943. ✓

SURVEY METHODS AND EQUIPMENT

Standard dual control wire drag methods were used with the Launches HILGARD and MARINDIN as towing vessels. Lift tests were made using a coating of white lead and tallow on a 3/4" iron pipe suspended by graduated stranded wire from a float. ✓

Launch No. 101 was used as a tender. ✓

RESULTS OF SURVEY

Contemporary hydrographic surveys were made in the area of this survey. An attempt was made to clear shoal soundings obtained by sounding with an effective depth of two to three feet less than the soundings. ✓

The principal discrepancies between the wire drag and the hydrography are listed as follows:

Lat. & Long.	Boat Sheet Soundings	Hand Lead Sound*	Cleared by effective depth
43°47.85' 69°42.32'	42 ft.	38 ft.	36 ft.
43°52.05' 69°41.35'	29 ft.	24 ft.	—*
43°48.08' 69°37.00'	10 ft.#	—	13.5 ft.

Disregard.
See Review.

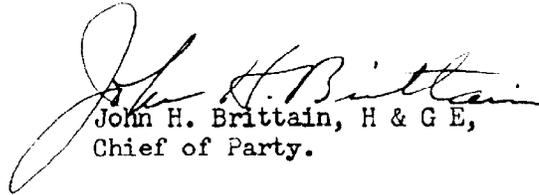
* Not cleared # doubtful sounding on record

The area to be covered by this survey was not completed. Boothbay Harbor, the area between Squirrel Island and Burnt Island, and in close to Squirrel Island remains to be done on account of unfavorable weather near the end of the season. Completed in 1944. See Rev.

TIDES

Hourly heights taken from the record of the Standard Gage operated at Boothbay Harbor were used for the reduction of drag depths and soundings in Booth Bay and in the Sheepscot Bay and River south of Harding Ledge. The gage at Boothbay Harbor was used for the Sheepscot River north of Harding Ledge with the same height and a plus correction of 10 minutes in time. The gage at Boothbay Harbor was operated only during the field season. ✓

Respectfully submitted,


John H. Brittain, H & G E,
Chief of Party.

STATISTICS - WIRE DRAG SHEET NO. 3

Date	Letter	Vol.	Drag Length	Pos.	Statute Miles	Hand Lead Soundings
9-9-43	A	1	3600	39)		
9-9-43	A	1	3200	28):-	5.9	1
9-10-43	B	1	3600	54	4.3	-
9-13-43	C	1	2800	16	1.2	4
9-14-43	D	1	3200	21)		
9-14-43	D	1	2000	30):-	6.8	3
9-16-43	E	1	3200	33)		
9-16-43	E	1 & 2	2800	52):-	4.6	2
9-17-43	F	2	2400	44	3.1	2
9-20-43	G	2	3600	35	2.9	-
9-21-43	H	2	1800	72	6.4	1
9-22-43	J	2	2000	23	1.3	-
9-24-43	K	2 & 3	3600	46	3.6	4
10-4-43	L	3	2400	39	4.1	4
10-5-43	M	3	2100	30)		
10-5-43	M	3	1800	14):-	3.7	-
10-6-43	N	3	1800	46	3.8	-
10-7-43	P	3	2800	36):-	4.4	4
10-7-43	P	3 & 4	1500	19):-		
10-8-43	Q	4	3200	16	1.8	-
10-12-43	R	4	3200	25	2.3	1
10-13-43	S	4	2400	35)		
10-13-43	S	4	2100	17):-	5.2	4
10-14-43	T	4	1800	32	2.0	1
				<u>80 2</u>	<u>67.4</u>	<u>31</u>

Square Statute Miles 18.3

GEOGRAPHIC NAMES
Survey No. H6923

Name on Survey	Source										
	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			
Damariscove I.			437	696				(U.S.G.B.)			1
Booth Bay			438	696							2
Spruce Pt. ✓			"								3
Southport I. ✓			"								4
Boothbay Harbor ✓			"					"			5
Sheepscot R. ✓			"					"			6
MacMahan I. ✓			438	697							7
Isle of Springs ✓			438	696				"			8
Fowle Pt.			439	696							9
											10
											11
											12
											13
Boothbay Harbor											14
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											M 234

Names underlined in this Appendix
by L. Heck on 12/30/44

(location of tide staff)

Remarks

Decisions

	Remarks	Decisions
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Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H. 0923**

Records accompanying survey:

Boat sheets; sounding vols.; wire drag vols.;
bomb vols.; graphic recorder rolls;
special reports, etc.
.....

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

Number of positions on sheet	.802.
Number of positions checked	...71.
Number of positions revised2.
Number of soundings recorded	...31.
Number of soundings revised (refers to depth only)0.
Number of soundings erroneously spaced
Number of signals erroneously plotted or transferred
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time

Verification by...**J.A. McCormick**...Total time **56 hrs.** Date **12/18/44.**

Review by**J.A. McCormick**..... Time **16 hrs.** Date **12/19/44**

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT }
PHOTOSTAT OF }

No. H **H6923**
No. T

{ received
registered
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
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RETURN TO

82	
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VRWC

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RCC

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 5, 1944

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
5 volumes of sounding ~~records~~ ^{& wire drag} records for

HYDROGRAPHIC SHEET 6923

Locality Sheepscot River and Booth Bay, Maine.

Chief of Party: J. H. Brittain in 1943
Plane of reference is mean low water reading
3.9ft. on tide staff at Booth Bay Harbor
18.5ft. below B. M. 1

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

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

DIVISION OF CHARTS

Review Section — Surveys Branch

REVIEW OF HYDROGRAPHIC SURVEY, REGISTRY NO. 6923 W.D.

Field No. WD-3

Maine; Sheepscot River and Booth Bay
Surveyed in Sept. - Oct., 1943, Scale 1:10,000
Project CS-265

Wire Drag

Dual Control

Chief of Party - J. H. Brittain
Surveyed by - J. H. Brittain
Protracted by - M. E. Byrd; A. Kaupa
Inked by - M. E. Byrd; A. Kaupa
Verified and reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston, December 19, 1944

1. Shoreline and Signals

For shoreline and control data, see reviews of contemporary hydrographic surveys.

2. Adjoining Wire Drag Surveys

A satisfactory junction was effected with H-6830 (1943) W.D. on the south. A and D sheets of the two surveys have been adjusted to show the combined effective depths of both in the overlap.

3. Contemporary Hydrographic Surveys

H-6675 (1941), H-6805 (1942), H-6838 (1943),
H-6839 (1943), H-6858 (1943)

New hydrography covers the entire dragged area but at this writing only about three-fourths of it is in this office and available for comparison. All conflicts between effective depths and surveys listed above have been eliminated. The three "discrepancies" listed in the Descriptive Report are not sufficiently important for involved marginal explanations or for detailed discussion here. Not mentioned in the Report were a grounding at 28 feet shown as cleared with 45 feet (lat. $43^{\circ}53.1'$, long. $69^{\circ}41.6'$) or a clearance of 54 feet over the position of a 46 foot sounding on H-6839 (lat. $43^{\circ}50.95'$, long. $69^{\circ}41.35'$). The 28-foot grounding actually occurred on a 24 foot shoal (H-6839) outside the 45 foot strip and the 54 foot strip was reconciled to the 46 foot sounding by taking into account the large course changes and distance between

positions. No rejections were necessary in either case.

4. Comparison with Chart 230 (Print of July 12, 1944)
Chart 314 (Print of July 14, 1944)

Major discrepancy between charts and survey is a 24 foot sounding in lat. 43°47.9', long. 69°41.5' on chart 314 as compared with 150 feet on H-6839 (1943) and an effective depth of 58 feet on the present survey. The 24 was charted from a report by the Lighthouse Board in 1898 but was removed when the Steamer HYDROGRAPHER, in 1902, found a least depth of 23 feet (22 charted) about 0.2 mile southeast of the previously reported position. When the chart was reconstructed in 1920, the 4-fathom sounding was mistakenly re-applied from a pencil note on H-771 (1860). The 23 foot depth corresponds in position with a 25 foot depth on H-6839 (1943) and was cleared with effective depths of 19 to 21 feet on the present survey. Decision to retain or reject the 23 will be made in the review of H-6839.

In lat. 43°48.3', long. 69°42.6', depths of 42 and 51 feet charted from H-771 (1860) were cleared with an effective depth of 43 feet on the present survey. Disposition is left to the review of H-6839 (1943), that survey showing a least depth of 66 feet in the vicinity.

In areas for which new hydrography has not yet been received, there are several minor discrepancies between effective drag depths and depths charted from old surveys. These will automatically be taken care of in the verification and review of the new hydrography.

5. General Comment

It will be noted that the reviewer has, in several cases, accepted lead line soundings 1 to 4 feet deeper than the effective depths at which the drag is shown as grounding. With a lift of 5 feet not unusual in this area, some consideration must be given to the variation in that lift over the width of the drag and under different conditions of towing. In this connection it is obvious that the showing of effective depths to 1/2 feet on several of the other wire drag surveys in this general area was an unnecessary refinement.

6. Compliance with Project Instructions

Satisfactory.

7. Additional Field Work Recommended

The Descriptive Report recommends extension of the survey in Booth Bay. Progress charts in the Section of Hydrography indicate that this was accomplished in 1944.

Examined and approved:

Charles Pierce
Chief, Surveys Branch

Carl O. Heaton
Chief, Section of Hydrography

J. Borden
Chief, Division of Charts

G. W. Lude
Chief, Division of Coastal
Surveys

24' sdg at ϕ 43-52.05; 1 69-41.35 applied to chart 230
before review. GHE. 6/5/44
Inspected after review - no further correction 12/6/45 GHE