6674

WIRE DRAG

6674

WIRE DRAG

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. H-6674 W.D.
Hydrographic }

State Maine

LOCALITY

Eastern part of Casco Bay

South of Cape Small

*1934*1

CHIEF OF PARTY

I.E.Rittenburg

U.S. GOVERNMENT PRINTING OFFICE: 1934

Form 537
Ed. Sept., 1929

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. 2

REGISTER NO. 6674 W.D.

State Maine

General locality Eastern part of Casco Bay

Locality South of Cape Small

Scale 1:20,000 Date of survey Aug.-Oct., 1941

Vessel Mitchell & Ogden

Chief of Party I.E.Rittenburg

Surveyed by I.E. RITTENBURG & R.A.GILLMORE

Protracted by G.E.VARNADOE & H.F. STEGMAN

Soundings penciled by DITTO

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by G.E.Varnadoe & H.F.STEGMAN

Inked by DITTO

Verified by H.F. Stegman

Instructions dated MAY 7, 1944

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1929

Apparently no A&D sheet

DESCRIPTIVE REPORT

To Accompany Wire Drag Sheet H-6674
Project C.S. -265. Casco Bay, Maine

Instructions, Limits & Time of Survey

This survey was executed in accordance with instructions for Project C.S. 265 dated May 7, 1941 and addressed to the Commanding Officer, Ship Oceanographer.

The area covered by this sheet extends eastward from approx. Long. 70° 01'W to approx. Long. 69° 46' and North from Lat. 43° 37'N to approx. Lat. 43° 42 1/2'N to the 10 fm curve at Long. 69° 54' thence SE ward following the 10 fm curve to a point South of Fuller Rk. L.H. then eastward along Lat. 43° 41 1/2'N. Wire Drag Operations extended from Aug. to Oct. 1941. The limits of the sheet on the North, South, and East were arbitrarily laid down, the selection being governed by the size and scale of the sheet and the 10 fm curve and those shown on copy of Chart 201 furnished this party. It is now possible for vessels proceeding to Portland, Maine from the Eastward to navigate mostly on wire dragged areas from a point on Lat. 43° 39' to the entrance of Portland Harbor.

Junctions & Overlaps

Junctions were made with other surveys as follows: On the west with wire drag sheet H-3677, 1914 and sheet H-6662, 1941; none with other sheets on the North, South and East.

Overlaps of adjacent and adjoining lines and at junction points are sufficient and satisfactory except at Lat. 43° 40-8 Long. 69-52.1 where overlap is reduced to a minimum.

Splits

A small holiday was left on Lumbo Ledge due to the buoy not being lifted. A sdg. of 8 ft. is shown on Chart No. 315 in the area of this split. The split in Lat. 43-42.3 Long. 69-53.7 is really an uncovered area as the inshore limit of the drag was moved out after the grounding of 1 s. The spot mentioned in preceeding paragraph as being insufficiently overlapped may be called a technical split. Due to the closing of the season, a holiday of approx. 2 sq. miles exists between the limits of sheet H-6671 (1944) and this survey in the vicinity of Lat. 43-40 and Long. 69-46.

Survey Methods & Equipment

Standard dual control methods as authorized in S.P. No. 118 were used throughout the entire sheet.

Towing launches were as follows: "Rodgers" (exchanged with the Oceanographer for the "Odgen" because of hoisting engine) guide launch, "Mitchell" end launch, chartered launch Glenarnet as tender. No regular drag master was available. Seaman A. B. J. C. Phillips was detailed to test, raise and lower buoys. On groundings an officer went out in the tender from the Guide Launch to supervise soundings and take the fixes.

Lift tests were entered in the drag volumes to the nearest foot and were considered the same as tide reducers, i.e., changes occurred at three tenths of a foot. As an example, a lift of 2 ft. 3 inches was considered a 2 ft. lift while a lift of 2 ft. 4 inches was considered a 3 ft. lift. Ground wire used was 1/8" in size. In this connection, this entire sheet was dragged with wire made up into sections, utilizing the new splice devised by this party. Aluminum floats, intermediate buoys and weights were furnished from the subparty of the Oceanographer and were all standard sizes. End buoys were built and were slightly larger than the 55 gal. drums shown in S.P. No. 118.

Soundings and shore line for the boat sheet to be used in laying out drag strips were obtained by enlarging sections of charts 315 and 314.

Datum, Control & Shoreline

This sheet is on the N. A. 1927 datum.

Three point sextant fixes and dual control were used to locate all the buoy paths on this sheet. Triangulation stations were located mostly by C. A. Durgin in 1933. One topographic signal, TOW, was located by Graphic Control by the Oceanographer in 1941. Two signals, Cus & Wing were located by sextant cuts which are indexed in the record books. Shoreline is from enlargements of the charts of this area. It should be noted that none of the topographic features were located by this party and should not be considered in charting.

G.C. sheet showing ⊙ Tow not in office at time of review.

Comparison with Previous Survey & Charts 315 and 314

A comparison with previous surveys and charts of this area failed to disclose any soundings shoaler than the effective depths dragged over any of this area.

Discrepancies

None

I. E. Rittenburg
H & G Engr.
Chief of Party

Statement to Accompany Wire Drag Sheet H-6674

The plotting of the drag position on this sheet was done by G. E. Varnadoe and H. F. Stegman.

The sub-division and inking of drag strips was also done by G. E. Varnadoe and H. F. Stegman. That portion done by G. E. Varnadoe was under the immediate supervision and was checked by I. E. Rittenburg.

The smooth sheet was inspected and approved.

I. E. Rittenburg
H & G Engr.
Chief of Party

STATISTICS H-6674 WD

Date 1941	Letter	Vol.	Position G.L.	Position E.L.	Drag Length Feet	Length of Strips Statute Mile
Aug. 5	A	1	52	51	4800	5.0 ✓
11	B	1	55	54	6600	5.7
13	C	1	33	32	6600	4.2
14	D	1	61	60	6600	7.1
18	E	2	53	54	6600	6.0
20	F	2	38	37	6600	5.6
21	G	2	58	57	6600	7.5
25	H	2	34	33	6600	4.0
27	J	2&3	55	54	6600	7.1
28	K	3	35	32	6600	4.6
29	L	3	20	20	6600	1.9
Sept. 2	M	3	19	17	6600	2.0
3	N	3	44	43	6600	5.0
4	P	3	41	41	6600	4.6
8	Q	3	22	21	3600	3.0
9	R	4	13	12	5000	1.0
11	S	4	23	21	5000	2.0
18	T	4	39	40	5000	3.6
19	U	4	36	38	(5000)	
					(3200)	3.4
23	V	4	30	30	4800	2.5
24	W	4	38	38	5500	3.4
25	X	5	25	24	5500	1.8
26	Y	5	48	50	6600	5.0
29	Z	5	21	21	5000	2.2
30	AA	5	41	40	(5000)	
					(5500)	3.9
Oct. 2	BB	5	20	22	6000	2.6
6	CC	5	34	30	6600	3.5
7	DD	6	42	41	5000	4.1
9	EE	6	43	43	5000	4.3
W.D. Total			1,070	1,056		116.6

Area 73.4 square statute miles

Tender	Position	Sdg.
f	1	3
l	1	1
m	2	2
p	1	1
r	9	8
s	2	2
t	20	20
u	10	10
v	2	2
w	15	16
x	13	13
y	2	2
z	9	9
aa	3	5
bb	2	3
dd	2	2
ee	1	-
Total	95	99

Charts

8'2 Rwlc

821

21 ajc
1975 NO

December 4, 1941

To: Officer in Charge
U.S.C.& G.S. Processing Office
600 Flatiron Building
Norfolk, Virginia

From: The Director
U. S. Coast and Geodetic Survey

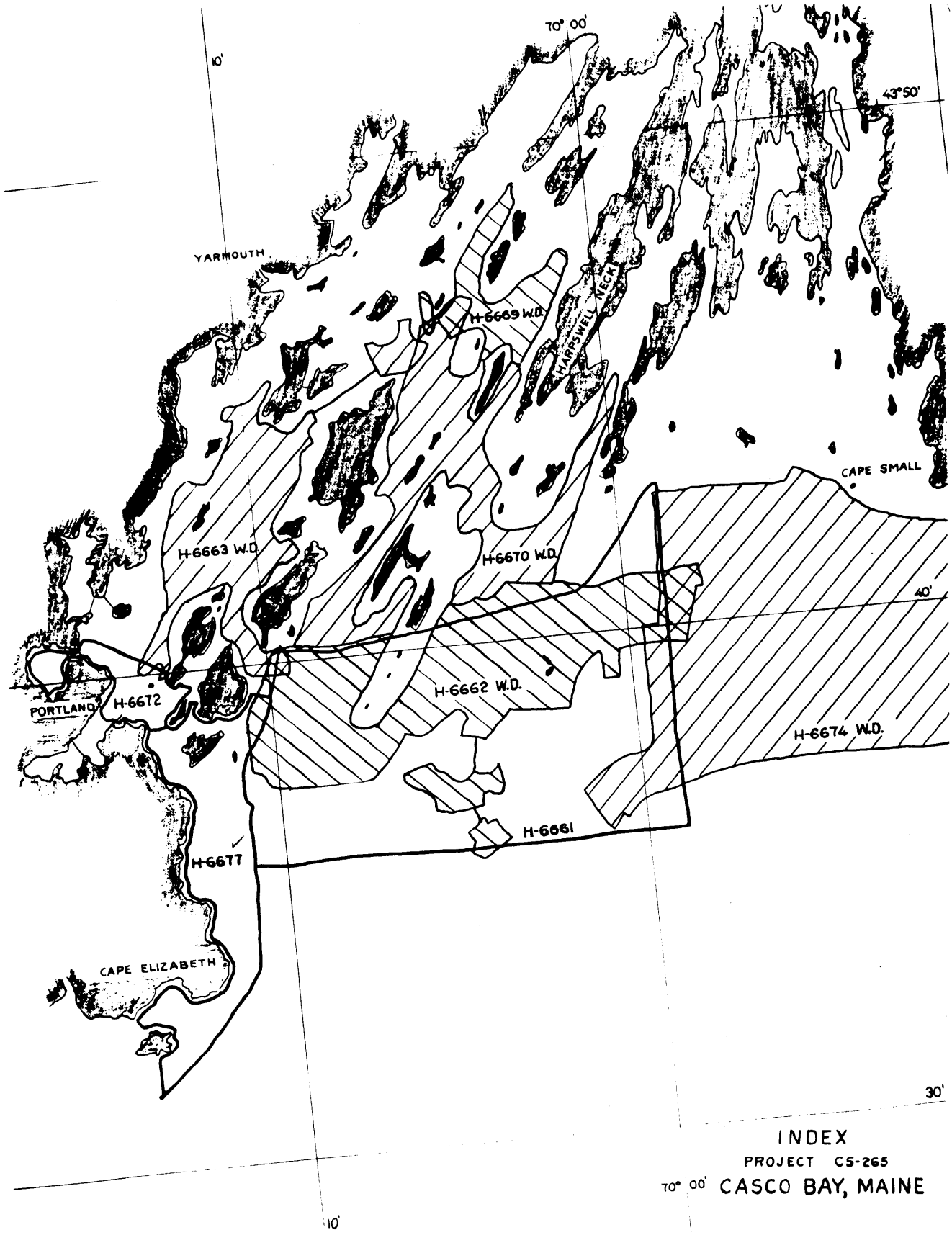
Subject: Smooth plotting - Survey H-6663 6674 (1941) WD

It is understood that George E. Varnadoe was to have completed the smooth plotting of Survey H-6663, 6674 (1941) WD the wire drag sheet of Casco Bay accomplished by the party of Lieutenant Rittenburg, between Halfway Rock and Cape Small. Since Varnadoe has been detached from your party, it is desirable that this survey be forwarded to the Washington office in order that it may be completed under the supervision of Lieutenant Rittenburg as expeditiously as possible. You will, therefore, please forward the smooth sheet, two boat sheets, and all records and pertinent data at your earliest convenience.

(Signed) L. O. COLBERT

Director

CC: Lt. Rittenburg
Charts
Comdr. Raynor



INDEX

PROJECT CS-265

70° 00' CASCO BAY, MAINE

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. H6674 WIRE DRAG

Records accompanying survey:

Boat sheets (2).; sounding vols. (2)..; wire drag vols. (11).;

bomb vols. .....; graphic recorder rolls .....;

special reports, etc. (1) cover sheet.....

.....

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

Number of positions on sheet		2221
Number of positions checked		72
Number of positions revised		3
Number of soundings recorded		99
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	3
Verification of soundings from graphic record	Time	.....

Portion of sheet from Sday to EE day (Final date)
Protracting, drag strip subdivisions, inking 129 hrs

Verification by H.E. Stegman.....Total time 71.. Date Sep. 26, 1942

Review by J.A. McCormick..... Time 13 hrs. Date 3/5/42

GEOGRAPHIC NAMES

Survey No. H6674

WIRE DRAG

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Cape Small										1
Casco Bay										2
E. Brown Cow										3
Lumbo Ledge										4
Temple Ledge.										5
Fuller Rock										6
										7
										8
Portland										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved by L. Heck on 3/17/42

M 234

RQC
THE

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

December 12, 1941

~~Division of Hydrography and Topography~~:

✓ Division of Charts: Attention: Mr. H. R. Edmonston.

Plane of reference approved in
13 volumes of sounding records for

HYDROGRAPHIC SHEET 6674

Locality South of Cape Small, Eastern part of Casco Bay.

Chief of Party: I. E. Rittenburg in 1941
Plane of reference is mean low water reading
8.6 ft. on tide staff at Portland
19.0 ft. below B. M. 1

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

Condition of records satisfactory except as noted below:

Paul C. Whitney

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154327

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H H6674 WIRE DRAG
~~No. Tx~~

received Dec. 8, 1941
registered Dec. 9, 1941
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			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	R. W. Knox

RWK

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. H-6674 W.D.
FIELD NO. W.D.-2

Maine; Eastern Part of Casco Bay; South of Cape Small
Surveyed in Aug. - Oct. 1941, Scale, 1:20,000
Instructions dated May 7, 1941 (OCEANOGRAPHER)

Wire Drag.

Dual Control.

Chief of Party - I. E. Rittenburg.
Surveyed by - I. E. Rittenburg; R. A. Gillmore.
Protracted by - G. E. Varnadoe; H. F. Stegman.
Subdivision of dragged areas - G. E. Varnadoe; H. F. Stegman.
Inked by - G. E. Varnadoe; H. F. Stegman.
Verified by - H. F. Stegman.
Reviewed by - J. A. McCormick, March 5, 1942.
Inspected by - H. R. Edmonston.

1. Shoreline and Signals.

The subject is satisfactorily covered in the Descriptive Report, page 2. Note that shoreline is from present charts.

2. Adjoining Wire Drag Surveys.

Satisfactory junctions were effected with H-3677 (1914) W.D. and H-6662 (1941) W. D. on the west. H-6671 (1941) W. D. barely touches the present survey on the east but the two surveys were accomplished independently without intent to join during the 1941 season.

3. Hydrographic Surveys.

The present drag work overlaps only a small part of the area covered by H-6661 (1941) on the west. There are no conflicts. Other hydrographic surveys of the area are too old to be considered except as they are represented on the charts.

4. Results of Survey.

The area was dragged as close to 50 feet as was possible. Inspection of the smooth sheet shows the shoal soundings concentrated mostly in three areas. Two of these areas are in the vicinities of Lumbo and Temple Ledges. The drag was wrapped on Lumbo Ledge and several shoal soundings were obtained but the charted least depth of 8 feet was left for future hydrographic surveys to verify. The previous least depth of 30 feet on Temple Ledge was reduced to 25 feet. The third area is southwest of E. Brown Cow Island where a least depth of 33 feet was found. Several other depths considerably less than those charted are plainly indicated on the survey.

5. Comparison with Chart 314 (New Print of June 17, 1941).
Chart 315 (New Print of Jan. 7, 1942).
Chart 1204 (New Print of Aug. 28, 1941).

There are no conflicts between charted depths and effective drag depths. Some of the drag soundings were applied in advance of verification but are substantially as shown on the survey.

6. Compliance with Project Instructions.

Satisfactory.

7. Additional Field Work Recommended.

Several soundings and groundings south of East Brown Cow Island (lat. 43°42', Long. 69°53') were not cleared. Such clearance should be attempted with a drag set for an effective depth of 31 feet only if further drag work is to be done in the vicinity. Attention is also called to the point split in lat. 43°40.8', long. 69°52.1' which probably could be cleared with an effective depth of 31 feet. The reviewer makes no recommendations concerning extension of drag limits.

Covered on H-6777 (1944) W.D.

Examined and approved:

Robert W. Knox
Chief, Surveys Section

J. B. Boodman
Chief, Division of Charts

J. P. Raynor
Chief, Section of Hydrography

G. Rude
Chief, Division of Coastal Surveys

	Remarks	Decisions
1		437698
2		436700 U.S.G.B.
3		437698
4		436699
5		436698
6		436698 U.S.G.B.
7		
8		
9	Location of tide staff.	
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		


57'
56'
A6674 fmt
dkt 315
1958
55'
42'
53
54
52
50
49
35
36
48
47
49
41'
46
44
43
48
50
49
43
41
44
48
47
46
40'
51
52
53
54


70° 00'
10'
43°50'
YARMOUTH
H-6731
H-6669 W.D.
HARPSWELL NECK
H-6728
H-6732
CAPE SMALL
H-6663 W.D.
H-6670 W.D.
40'
H-6662 W.D.
PORTLAND
H-6672
H-6674 W.D.
H-6661
H-6677
CAPE ELIZABETH
#6674
30'
INDEX
PROJECT CS-265
70° 00' CASCO BAY, MAINE
10'

43
44
46
45
47
47
46
45
42
43
56
55
44
44
43
42
45
41
43
43
43
45
46
44
45
44
47
46
45
51
55
54
52
56
50
53
38
57
48
53
54
55
52
51
54'
63'
H 6674
for Cht 315
1958

Applied to chart 315 4/25/42 J.M.A. (no a.+d. sheet)
" " " 1204 6/11/42 G.R.
" " " 50 6/17/42 G.R.
Applied to chart 314 9/4/42 L.A.M.

Partially applied to Cor Proof Drawing 1106 March 11, 1943. H.E.M.

applied to chart 1000 apr. 23-1943 GHE.

Applied to reconstruction of chart 315 12/3/43 - J.T.W.
Applied to new Chart 238 12/27/45 GHE
Applied to " " 314 9/23/46 - J.T.W.
Generalized dragged area applied chrt. 315 July 1958 L.A.M.