

WIRE DRAG 6830

Additional work

WIRE DRAG
6830

Additional work

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Wire Drag
Field No.	Office No. H-6830 Add'l. Wk.
LOCALITY	
State	Maine
General locality	off Sheepscot River Entrance Bay
Locality	(Vicinity of Toms Rock)
1945	
CHIEF OF PARTY	
G. L. Anderson, I. E. Rittenburg	
LIBRARY & ARCHIVES	
DATE	

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-6830 Add'l. Wk. W. D.

Field No.

REG. NO. **H6830** WIRE DRAG
Additional work

State Maine

General locality Off Sheepscot ^{Bay} River Entrance

Locality (Vicinity of Toms Rock)

Scale 1:20,000 Date of survey Aug. 1, 1945

Instructions dated July 29, 1945

Vessel HILGARD & WAINWRIGHT

Chief of party G. L. Anderson, I. E. Rittenburg

Surveyed by

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

Protracted by G.F. Jordan

Soundings penciled by

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXXX~~

REMARKS: applied to H-6830 in Wash. Office

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
NORTHEASTERN DISTRICT HEADQUARTERS
TENTH FLOOR, CUSTOM HOUSE
BOSTON, 9, MASS.

IN YOUR REPLY REFER TO
FILE
AND DATE OF THIS LETTER

August 17, 1945

File 509. Records
with H-6922

Apply to
H-6922WD } ad wk
6830WD } 1945
FE No. 647(1945)

To: The Director
U.S. Coast and Geodetic Survey
Washington 25, D.C.

From: C.O. HILGARD & WAINWRIGHT

Subject: Report on Wire Drag Investigations, Maine.

Reference: Your letter dated 20 July, 1945 same subject,
number 22/MEK - 1975 Bo 4 and addressed to the
Supervisor, N.E. District, Boston 9, Mass.

In accordance with instructions contained in the second paragraph of above reference, work was discontinued in the Boston area and these vessels proceeded to Maine on 30 July, 1945 and arrived in Portland Maine that evening. The loan of a tender was secured from the Army and the Commanding Officer of the LYDONIA was contacted for information and control data.

On 1 August these vessels sailed from Portland and wire dragged in the vicinity of Toms Rock in accordance with paragraphs 4 and 5 of above reference and then proceeded Eastward. On 6 August the investigation of Three Fathom Ledge was made in accordance with paragraph 2. Compliance with paragraph 3, Rockland Trial Course, was made on 7 and 8 August while the drag work in Casco Bay, East of Bailey Id in compliance with paragraph 6 was done on 9 August.

The records for the entire project are contained in one wire drag volume and are lettered as follows.

- ← Applies to H-6830 (1945) only
- "A" day, 1 Aug., vicinity of Toms Rock, Me. Sheet number W. D. 6671, furnished by office. Plotted on H-6830 (1943) W.D. 43043.7, 6904.5
 - "B" day, 6 Aug., Three Fathom Ledge, work done on chart 225.
 - "C" day, 7 Aug., "D" day 8 Aug., Rockland Trial Course, work done on chart 310.
 - "E" day, 9 Aug., Casco Bay E of Bailey Id, sheet number W.D. 6922, furnished by office.

For that work done on the charts, the signals and signal names are shown thereon. For that work done on the sheets furnished by the office signals and names were used as shown thereon. A list of signals used is attached to the wire drag volumes.

The final results for "A" day and "E" day cannot be given at this time since the actual tides from the Portland gage are not available. Preliminary results using predicted tides are as follows:

2- Report on Wire Drag Investigations, Maine - Cont.

"A" day vicinity of Toms Rock, sheet ~~6671~~⁶⁸³⁰, paragraphs 4 & 5 of original letter- the 38 ft sounding par. 4, was covered by $34\frac{1}{2}$ feet and an actual fathometer sdg. of, $33\frac{1}{2}$ ft. was obtained (fathogram attached). This disproves the 26 ft sdg. in question and proves the 38 ft. sounding. Paragraph 5 - the 55 ft. sdg. was cleared by 51 ft and the 43 foot sdg. was cleared by 30 feet.

"E" day, Casco Bay, par. 6 of reference, sheet number 6922, the 16 ft sdg., the 14 ft. sdg., and the 34 foot sdg were all disproved having been covered with drags of 21 feet, 18 ft and 37 feet respectively.

"B" day, paragraph 2, Three Fathom Ledge. Final results. An actual fathometer sdg. reduced to $17\frac{1}{2}$ ft and M L W was obtained (fathogram attached). The drag hung at $17\frac{1}{2}$ and 17 feet but cleared at 16 feet.

This work is shown on chart # 225. On the guide launch line - the northwesterly line - whenever Matinicus Rock L. H. was behind Seal Island, a very poor fix was all that could be obtained. In most cases another angle was observed simultaneously hoping that by means of this angle the loci of points would assist in the final position of the fix. Sufficient fixes using Matinicus Id. L. H. were had to prove conclusively that Three Fathom Ledge was covered. Final results for "C" day, and "D" day, paragraph 3, Rockland Trial Course. This work is done on chart number 310. Natural charted objects such as Tanks, lights, targets and beacons were used throughout. All but Monroe Id. Light have been located by triangulation. The buoys on the trial course were removed by the U.S. Coast Guard so that no splits remain from this cause. A least depth of 49 feet was carried over the entire area dragged.

The portable automatic tide gage operated by the Ship LYDONIA at Matinicus Harbor, was used to obtain tide reducers for the work on Three Fathom Ledge and the Rockland Trial Course. The LYDONIA also operates a standard automatic gage at Rockland so that if desired, these tides can be used when received. The tide gage in operation nearest the work in Casco Bay and in the vicinity of Toms Rock is at Portland Maine. The records are not available at present. Rather than wait for these data, the record is being forwarded to your office where the tide reducers for A and E days can be entered and the effective depths diagrams can be drawn. The records are complete except for these entries on A and E days.

The results of the wire drag on Three Fathom Ledge using predicted tides was discussed with the Operations Officer, U.S. Navy, Portland.

George L. Anderson
George L. Anderson

I. E. Rittenburg

I. E. Rittenburg

NAUTICAL CHART BRANCH

REVIEW SECTION

Reviewer's Memoranda on H-6830 (1945) W.D., Add'l Wk.

This additional work in lat. $43^{\circ} 43.7'$, long. $69^{\circ} 43.0'$ fulfills satisfactorily the recommendations made in the review of H-6830 (1943) W.D., Par. 5a, b & c. The two soundings and one grounding on the prior work were covered by the present wire drag.

Reviewed, Oct. 12, 1945

George F. Jordan

Inspected by: H. W. Murray

CHART 150

SUBMARINE SIGNAL CO.

CHART 150

Revised procedure on chart 30 ft. above point 400 m. S of Tom
Kole buoy

Sequin 1. 93-48

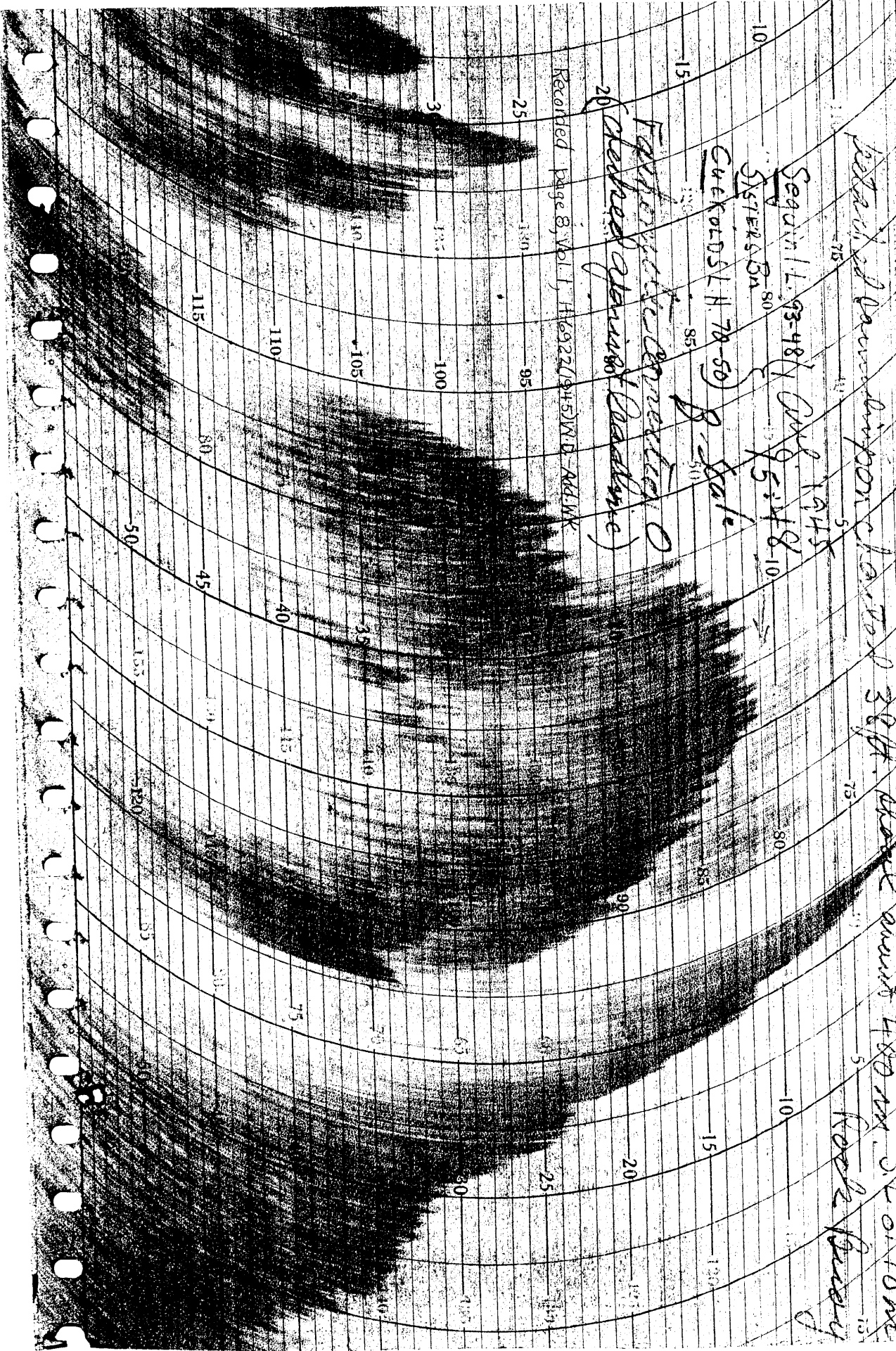
SYSTEMS DA

CATERDOL H. 78-50

P. scale

20 (checked opening procedure)
Fathometric Conversion

Recorded page 8, Vol. I, H16922(9445)W.D. ADD WK



Surveys Section (Chart Division)

WIRE DRAG

HYDROGRAPHIC SURVEY NO. **H6830** Additional work

Records accompanying survey:

Boat sheets **.1..**; sounding vols.; wire drag vols. **.3..**;
 (Filed under H-6922)
 bomb vols.; graphic recorder rolls **.2..**;
 special reports, etc. ~~Tidal Data~~ with F.E. No. 6 & 7 (V.D.) 1945.....

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

Number of positions on sheet	..16..
Number of positions checked	.....
Number of positions revised	.....
Number of soundings recorded	.....
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
Verification of soundings from graphic record	Time

Verification by *G.F. Jordan*..... Total time **..9..** Date **Oct. 8, 1945**

Review by *G.F. Jordan*..... Time **..1..** Date **Oct. 8, 1945**

WIRE DRAG

6830

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. MD 2001 Office No. 6830
H-6859

LOCALITY

State Maine
General locality ~~Maine Coast~~
Locality ~~Off Sheepscot River entrance~~ Bay

194 3

CHIEF OF PARTY

L. C. Johnson

LIBRARY & ARCHIVES

DATE

WIRE DRAG

6830

Department of Commerce
U. S. Coast & Geodetic Survey

H6830 WIRE DRAG

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to this office.

Field No. WD2001

REGISTER NO. H-6859
6830

State - - - - - Maine

General Locality - - - - - ~~Maine Coast~~

Locality - - - - - ~~off Sheepscot River entrance~~
Bay

Scale - - - 1/20,000 Date of Survey - - - - Aug.-Sept., 1943

Vessel - - - WAINWRIGHT & OGDEN

Chief of Party - - - - L. C. Johnson

Surveyed by - - - - L. C. Johnson

Protracted by - - - - M.E. Byrd

Soundings penciled by - - - - M.E. Byrd

Soundings in - - - - feet

Plane of Reference - - - - Mean low water

Subdivision of wire dragged areas by - - - -

Inked by - - - -

Verified by - J. A. McCormick

Instructions dated - - May 7, 1941 (original) & March 11, 1942, March 16, 1943 (Supplemental)

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

DESCRIPTIVE REPORT

to accompany

6830
H-6859

WIRE DRAG SHEET FIELD NO.2001

MAINE COAST

OFF SHEEPSHOT RIVER ENTRANCE

SCALE 1:20,000

PROJECT CS-265

1943

L.C. JOHNSON, CHIEF OF PARTY

Launches WAINWRIGHT & OGDEN

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 WAINWRIGHT and OGDEN as towing vessels. Lift tests were made using a white lead and lubricating oil mixture on a 3/8" iron pipe suspended by graduated stranded wire from a float. ✓

Launch No. 72 was used as a tender except when engine trouble or rudder repairs prevented its use. A 25 foot skiff powered by two 9 H.P. outboard motors was used as an alternative. Tender No. 101 was used on September 28th. ✓

RESULTS OF SURVEY:

Contemporary hydrographic surveys were verified except for a 24 foot sounding obtained in latitude $43^{\circ} 45.45'$, longitude $69^{\circ} 43.95'$ in the vicinity of a previous 34 foot sounding. The 24 has been added to H-6805 (1942) ✓

The charted 36 and 21 foot soundings in latitude $43^{\circ} 42.2'$, longitude $69^{\circ} 38.3'$ were dragged to 61 feet which disproves their existence. ✓ 83 Minkler Beach 9/27

TIDES:

Tides used were from the standard tide gage at Boothbay Harbor with the exception of September 3 (J day) when Damariscove Island tides were used. ✓

STATISTICS:

Statute miles of wire drag - - - - - 65.7
Area of wire drag (sq. statute miles)- - 35
Number of soundings - - - - - 7 ✓

Respectfully submitted,

Clarence R. Reed

Clarence R. Reed,
H. & G. Engineer,
U.S.C. & G. Survey.

Approved and forwarded,

I. C. Johnson.

I. C. Johnson,
Chief of Party.

ADDENDUM

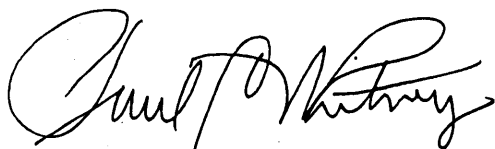
This sheet was processed at the Norfolk Processing Office.

Respectfully submitted,


Isadore M. Zeskind
Associate Cartographic Engineer

Norfolk, Va.
January 21, 1944

Approved and forwarded


Paul C. Whitney
Supervisor, S. E. District

Surveys Section (Chart Division)

H6830

HYDROGRAPHIC SURVEY NO. WIRE DRAG

Records accompanying survey:

Boat sheets ²...; sounding vols.; wire drag vols. ⁷....;
 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	..382
Number of positions checked	....15
Number of positions revised	....0
Number of soundings recorded	....7
Number of soundings revised (refers to depth only)	....0
Number of soundings erroneously spaced	.....
Number of signals erroneously plotted or transferred	....0
Topographic details	Time
Junctions	Time
Verification of soundings from graphic record	Time

Verification by J. A. McCormick Total time 20 hrs. Date 10/26/44.

Review by J. A. McCormick Time 8 hrs Date 10/26/44.

Remarks

Decisions

	Remarks	Decisions
1		USGB
2		
3		
4		
5		437696 USGB
6		
7		
8		
9		
10		
11		
12		
13		
14	Location of tide staff	
15	" " " "	
16		
17		
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20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. **H6830**

WIRE DRAG

Name on Survey											1
	A	B	C	D	E	F	G	H	K		
<u>Maine</u>											1
Maine Coast											2
Of Sheepscot River entrance											3
											4
<u>Sheepscot Bay</u>											5
											6
											7
											8
											9
											10
											11
											12
											13
<u>Boothbay Harbor</u>											14
<u>Damariscove I.</u>											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names described in this report
by L. Heck on 10/31/44

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSTAT OF	}	No. H	H6830 WIRE DRAG	}	received January 25, 1944 registered February 1, 1944 verified reviewed approved
		No. T			

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	Pg 1	<i>[Signature]</i>	Comdr Finnegan
88			
90			

RETURN TO

82	Comdr. R. W. Knox
----	-------------------

LCC
HAR

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 3, 1944

~~Division of Hydrography and Topography:~~

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

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

HYDROGRAPHIC SHEET 6830

Locality Off Sheepscot River Entrance, Maine

Chief of Party: L. C. Johnson in 1943
Plane of reference is mean low water reading
3.9 ft. on tide staff at Boothbay Harbor
18.5 ft. below B. M. 4
2.9 ft. on tide staff at Damariscove
16.4 ft. below B. M. 11

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

Condition of records satisfactory except as noted below:

C. K. Green
Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6830 W. D.

Field No. 2001

Maine, Sheepscot Bay
Surveyed in August and September 1943; Scale 1:20,000
Project C. S. 265

Wire Drag

Dual Control

Chief of Party - L. C. Johnson
Surveyed by - L. C. Johnson
Protracted by - M. E. Byrd
Subdivision of dragged areas by - M. E. Byrd
Inked by - M. E. Byrd
Verified and reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston, October 26, 1944

1. Junctions with Wire Drag Surveys

Satisfactory junctions were effected with H-6814 (1942) on the southwest and with H-6671 (1941) and H-6780 (1942) on the west. The area and depth sheet has been adjusted to those of the adjoining surveys. A fourth wire drag survey - H-6923 (1943) - adjoins on the north but has not yet been verified.

2. Comparison with Hydrographic Surveys

H-6675 (1941), H-6730 (1941-42),
H-6805 (1942), H-6858 (1943)

New hydrography available for comparison covers all of the dragged area except about one-half square mile at the northeast corner. There are no conflicts between effective drag depths and soundings and the reviews of the hydrographic surveys have, in all cases which might be affected by the drag work, made proper disposition of depths from old surveys or from outside sources. A case in point is the 21-ft. ledge charted in Lat. $43^{\circ}42.2'$, Long. $69^{\circ}38.2'$ from an 1889 report noted in pencil on H-696 (1859) and H-1836 (1888). The review of H-6858 (1943) recommended rejection of the 21 and a similarly reported 36 about 400 meters northwest. Well developed depths of 150 feet on that survey plus a clearing depth of 61 feet on the present survey are sufficient to disprove existence of shoal depths in the positions charted.

*Examined 11/26/44
on ch 1204
added 107 & 144
from H6858
JAW
3/5/44*

3. Comparison with Chart 314 (Print of July 14, 1944)

Only conflict between charted and effective depths is noted in the preceding paragraph.

4. Compliance with Project Instructions

Satisfactory.

5. Additional Field Work Recommended

Not immediately essential but noted for future reference is reduction of the undragged area immediately south of Tom Rock (Lat. 43°44', Long. 69°43'). Principal uncleared shoal indications in this area are:

- a. A 43-ft. sounding in Lat. 43°43.85', Long. 69°43.25' on H-6805 (1942). *cleared with 37 ft.*
- b. A 55-ft. grounding in Lat. 43°43.7', Long. 69°43.15' on the present survey. *cleared with 50 ft.*
- c. A 38-ft. depth in Lat. 43°43.75', Long. 69°42.8' on H-6730 (1941-42). This depth was originally interpreted as 26 feet and is so charted. Crossing depths of 41 to 47 feet on H-6805 (1942) caused the blurred fathogram to be rescanned and a most probable value of 38 feet placed on the questioned sounding. The 26 has been changed to 38 on H-6730 but drag coverage would be desirable. *cleared with 33 ft.*

original to 1204
original to 1204
accomplished
Add. wk. - 1945
original to 1204

It is also noted that a 36-ft. shoal in Lat. 43°45.2', Long. 69°43.1' on H-6805 (1942) is in the undragged area about the Black Rocks.

Examined and approved:

Robert W. King
 Chief, Surveys Branch

J. B. Borden
 Chief, Division of Charts

Earl O. Heston
 Chief, Section of Hydrography

G. H. Gude
 Chief, Division of Coastal Surveys

Partial application of sdgs and grounding to chs 314 and 1204
before reapplication #7R 5/9/44
applied to Ch. 1204 after review - jrw 3/5/45