

8184

WIRE DRAG

Diag. Cht. Nos. 1203-3 & 1204-36

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Wire Drag

Field No. HI-WA 1654 W.D. Office No. H-8184 W.D.

LOCALITY

State Maine

General locality Gulf of Maine

Locality Monhegan Island

1954

CHIEF OF PARTY

E. B. Brown

LIBRARY & ARCHIVES

DATE April 21, 1961

USCOMM-OC 5087

8184

WIRE DRAG

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-8184 W.D.

Field No. Wa-HI-1654WD

State MAINE

General locality GULF OF MAINE

Locality MONHEGAN ISLAND

Scale 1:10,000 Date of survey 15 thru 29 Sept. 1954

Instructions dated 6 FEB. 1953 & 9 MARCH 1954

Vessel WAINWRIGHT & HILGARD

Chief of party E. B. BROWN

Surveyed by E. B. BROWN, L. G. TAYLOR, G. L. SHORT & J. B. WATKINS, JR.

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

Fathograms scaled by SHIP PERSONNEL

Fathograms checked by SHIP PERSONNEL & NORFOLK PROCESSING OFFICE

Protracted by W. W. FEAZEL (NORFOLK PROCESSING OFFICE)

DRAG STRIPS SUB-DIVIDED & INKED BY:

~~Soundings plotted by~~ W. W. FEAZEL

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

REMARKS:

DESCRIPTIVE REPORT

To Accompany
Wire Drag Field Sheet No. HI-WA-1654 W.D.

Project CS-265
Coast of Maine, 1954
Scale 1:10,000

E. B. Brown*****Chief of Party

A. PROJECT

Supplemental Instructions dated 6 February 1953 and 9 March 1954, ref. 22/MEK, S-2-W&H.

B. PROJECT LIMITS AND DATES

The locality of the survey is Monhegan Island, Maine. The sheet covers the ^{approximate} specific area from latitude $43^{\circ} 48.0'$ to $43^{\circ} 44.5'N$ and longitude $69^{\circ} 18'W$ to longitude $69^{\circ} 21'W$. Field work commenced on 15 September 1954 and was completed on 29 September 1954.

Junction was made with contemporary survey ^{H-8465 W.D. (1953-55)} (HI-WA-2253).

C. VESSELS AND EQUIPMENT

The Ships WAINWRIGHT and HILGARD acted as guide launch and end launch respectively. CGS Launch No. 171 was used throughout this survey as drag tender. Standard wire drag equipment was used at the start through the completion of the project. The Ship WAINWRIGHT was equipped with fathometer No. 58-S, the Ship HILGARD with fathometer No. 138-SPX and launch 171 with fathometer No. 139-SPX.

D. TIDES AND CURRENTS

Hourly heights for the reduction of soundings and effective depths were obtained from the portable automatic tide gages at Port Clyde and Monhegan Island, Maine.

On letter "A" day records from the Port Clyde tide gage were used with a (-)0.2foot correction applied to the high water. Records from the Monhegan Island gage were used for all other work accomplished on the sheet. ✓

There were no current stations observed. ✓

E. SMOOTH SHEET

~~To be~~ ^{was} prepared ^{and plotted} by the Norfolk Processing Office.

F. CONTROL STATIONS

Nine control stations used for control of the wire drag were natural objects such as lighthouses, towers, day beacons and houses previously located by aerial photogrammetry. Fourteen signals were located by photogrammetric means by the 1954 photo support party from topographic map No. 11135-S. One signal (JIM) is a rock awash and was plotted on the boat sheet from a position scaled from hydrographic sheet No. H-6992 (1944). No other position of this rock was available. ⊙ JIM not on topo

See list
of signals
prepared by
Norfolk
Processing
Office.

sheet T-11135S. Shown as
hydrographic signal on smooth
sheet of present survey.

H. SOUNDINGS AND DRAG TESTS

Soundings were obtained using the 808 fathometer. The wire drag tests were made using a graduated iron pipe suspended from a small float by upright wire. The pipe was coated with white lead to determine the point of contact with the ground wire. ✓

I. CONTROL OF WIRE DRAG

Standard dual control methods were used to control the wire drag. Sextant fixes were taken every three (3) minutes as a general rule, with a cut to the end buoy and opposite vessel immediately after the fix. The cuts are recorded as plus (+) if the object was clockwise and minus (-) if counter-clockwise from the signal. The first cut is to the end buoy and the second cut to the opposite vessel unless otherwise noted.

The distance from the center of the wheelhouse to the end buoy was 74 meters with a 200 foot towline, 104 meters with a 300' towline and 134 meters with a 400' towline. The distances were measured on the pier with the ship alongside. The 74 meter towline was used in restricted and shoal waters. The 104 and 134 meter towlines were used in open and deep waters.

J. ADEQUACY OF SURVEY

This survey is considered adequate and no further field work is considered necessary.

L. COMPARISON WITH PREVIOUS SURVEYS

In general this survey is in good agreement with the previous hydrographic survey of the area and with Chart No. 313. The following listed hangs are specific instances in which there is disagreement. Hang numbers refer to the hang data sheet, Attachment No. 7 of this report.

PREVIOUS SURVEY NO. H-6992(1944)

Hang No. 1 ← See Addendum -

Lat. 43° 46.26'
Long. 69° 19.40'

This drag hung at effective 52 feet in known depths of 117 feet. A tender investigation was made and a reduced sounding of 40 feet obtained. This was the shoalest sounding obtained. On letter "B" day position 51 to 59 the towline of the ship HILGARD caught on this same pinnacle and snapped. At this time the drag was set at effective 46 feet. The hang was cleared at effective 38 feet position 20 to 26C. The previous survey has extremely wide line spacing and shows definite indications of a possible shoal. No hydrographic development was accomplished on the previous survey. This is a lesser depth than charted and it is recommended it be charted as swept clear at 38 feet. Reference is made to chart letter of 5 November 1954, HI-WA.

← hang strip rejected.

(CL 991, 1954)

← charted thus on Ch. 313 11th Ed., Rev. 8/10/64

Hang No. 2

Lat. 43° 46.82'
Long. 69° 19.83'

The drag hung at effective 29.5 feet in known depths of 33 feet. The Ship WAINWRIGHT accomplished drift sounding over the area and obtained a reduced sounding of 30 feet. This hang was cleared at effective 29 feet. The previous survey shows a lack of development over a shoal indication and is considered inadequate. It is recommended this be charted at 29 feet. See chart letter of 5 November 1954 HI-WA (CL 991, 1954)

See Par. e (1.) Review

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As per the instructions on the preliminary review for this project an investigation of the charted ~~25~~²⁴-foot sounding at latitude $43^{\circ} 45.90'$, longitude $69^{\circ} 19.81'$ was made. The drift sounding produced nothing shoaler than 25 feet reduced. This is believed to be the least depth. See chart letter of 5 November 1954 HI-WA. (991, 1954)

See Par. 2.(1)

Review

Cleared by
20ft.

The least depth desired on the charted 23-foot sounding at latitude $43^{\circ} 45.6'$, longitude $69^{\circ} 18.5'$ was obtained by clearing it with the wire drag at effective 20 feet. This is considered to be adequate. Drift sounding was not possible because of weather and strong tidal currents in the area.

At Latitude $43^{\circ} 46.57'$, longitude $69^{\circ} 18.80'$ a wire drag investigation was made over the charted 21-foot sounding as per instructions on the preliminary review. This shoal was cleared at effective 17 ~~1/2~~ feet. Drift sounding by the Ship HILGARD was accomplished over the area but nothing shoaler than 25.5 feet was found. This investigation is considered adequate and the 21-foot sounding is considered good.

O. COAST PILOT INFORMATION

See special report, Coast Pilot Information project CS-265 submitted under separate cover.

P. AIDS TO NAVIGATION

See attachment 4 of this report.

Q. LANDMARKS FOR CHARTS

No new landmarks for charts are recommended for the area covered by this survey.

U. FATHOMETER CORRECTIONS

Fathometer No. 58-S was used on the Ship WAINWRIGHT throughout the field season. Three bar checks were obtained during this period. An "A" to "B" scale comparison was taken on the first and third bar check and the mean value for correction to the "A" scale obtained. The value thus determined was (-) 0.87 feet to be applied to "B" scale readings. The value actually applied was (-) 1.0 feet in accordance with paragraph 822 of the Hydrographic Manual. A very definite

change in corrections was noted between the first bar check and the latter two bar checks. After study of previous conditions of the same general locality it was decided best to use the first bar check for all corrections in the period April through May. The latter two bar checks were found to be in reasonable agreement and corrective values were meaned. Curves were plotted of Correction vs Depth, corrections to be applied to soundings were then scaled from the curves in accordance with paragraph 822 of the Hydrographic Manual. All bar checks for the Ship WAINWRIGHT were referred to a 2.0 foot initial and index corrections were applied when necessary.

On the Ship HILGARD fathometer No. 139 SPX was used through the period 12 May and No. 138 SPX for the remainder of the season. One bar check was made while No. 139 SPX was in use and a curve plotted as explained in above paragraph. The corrections to be applied were determined in the same manner as stated above. No "A" to "B" scale comparison was made while this fathometer was in use aboard the HILGARD but a value of (✓) 2.38 feet was determined from comparisons made when the fathometer was installed in Launch No. 171. This type of error is inherent in the machine and will remain constant in either vessel. The actual correction applied was (✓) 2.5 feet in accordance with paragraph 822 of the Hydrographic Manual. During the period while fathometer No. 138 SPX was in use two bar checks were made. However the latter bar check was considered to be very poor and was rejected. A curve was plotted as explained above and corrections thus determined and applied. All checks were referred to a 2.0 ft. initial.

An "A" to "B" scale comparison was made with fathometer No. 138 and the value determined to be (-) 2.98 feet. The correction applied to all "B" scale readings was (-) 3.0 feet.

Fathometer No. 138 SPX was used in launch 171 to 12 May but no bar checks were made during this period. Because of lack of information the corrections as determined while this machine was aboard the HILGARD were used referring the bar check to a zero initial.

During the remainder of the field season fathometer No. 139 SPX was used in Launch C&GS-171. Two bar checks were obtained and the mean value of the two used in plotting the velocity curve. An "A" to "B" scale comparison was made during each bar check and the mean value determined to be (✓) 2.38 feet as mentioned in paragraph two (2) above. A correction of (✓) 2.5 feet was applied to all "B" scale readings.

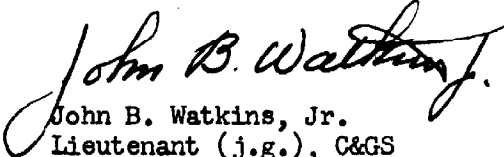
The effective radius of the stylus arms was measured on all fathometers and found to be within the proper limits.

See attachment 5 for abstract of bar checks and attachment 6 for abstract of fathometer corrections.


Z. TABULATION OF APPLICABLE DATA

Attachment: 1. List of Signals
2. Tidal Note
3. Statistics
4. Aids to Navigation
5. Abstract of Bar checks
6. Abstract of Fathometer Corrections
7. Hang Data Sheet

Submitted,


John B. Watkins, Jr.
Lieutenant (j.g.), C&GS

APPROVED AND FORWARDED


Lorne G. Taylor
LCDR, USC&GS
Chief of Party

JPR/rog

ATTACHMENT 1

LIST OF SIGNALS

Note:

See correct list by
N.P.O. which follows.

<u>NAME</u>	<u>SOURCE</u>	<u>NAME</u>	<u>SOURCE</u>
DOG	Hydrographic Sheet	BOX	From Topographic Manuscript
ELK	No. H-6992	CAT	T-11135 S
GAG	do	DON	do
KEA	do	DOT	do
LOP	do	EBB	do
NAPU	do	EEL	do
OX	do	FOX	do
PIG	do	POT	do
RAD	(Mix)do	SAT	do
		TOP	do
		WET	do
		CAR	do
		TEAL	do
		WAT	do

<u>NAME</u>	<u>SOURCE</u>	<u>NAME</u>	<u>SOURCE</u>
MON	Monhegan Island, 1859	JIM	Hydrographic (See Sec. F)

NORFOLK PROCESSING OFFICE
LIST OF SIGNALS
H-8184

TRIANGULATION STATIONS

MON ✓ MONHEGAN LIGHT, 1859-1934

TOPOGRAPHIC STATIONS

SOURCE T-11135 S

✓Box ✓Car ✓Cat ✓Don ✓Dot ✓Ebb ✓Eel ✓Fox ✓Pot ✓Rad ✓Sat
Teal ✓Top ✓Wab ✓Wet

SOURCE H-6992 (1944)

✓Dog ✓Elk ✓Gag ✓Kea ✓Lop ✓Napu ✓Ox ✓Pig

COMPILATION FEATURES

H-6992

~~SOURCE T-11135~~

Jim

Hydrographic location

ATTACHMENT 2

TIDAL NOTE

Portable automatic tide gages were established and maintained by the Ship GILBERT at Port Clyde, Maine, latitude $43^{\circ} 55.4'$, longitude $69^{\circ} 15.6'$ and by the Ship STIRNI at Monhegan Island, Maine, latitude $43^{\circ} 45.9'$, longitude $69^{\circ} 19.3'$. ✓

Height of Mean Low Water above the zero of the tide staff was 3.5 and 4.5 feet respectively. ✓

Hourly heights were scaled from the marigrams by the personnel of the Ships GILBERT and STIRNI. All times noted on the Port Clyde Marigrams are Eastern Standard Time while times noted on the Monhegan Island marigrams are Eastern Daylight Saving Time. ✓

Records from the Monhegan Island gage were used without correction. Records from the Port Clyde gage have a -0.2 foot correction applied to the high water. ✓

ATTACHMENT #3

STATISTICS

VOLUME	DATE	DAY	POSITION	STAT. MILES
1	9/15/54	A	36	2.7
1	9/27/54	B	72	4.5
1	9/29/54	C	<u>66</u>	<u>4.8</u>
		TOTALS	174	12.0

ATTACHMENT #4

AIDS TO NAVIGATION — See correct N.P.O. list
which follows.

<u>NAME</u>	<u>POSITION</u>	<u>DEPTH</u>	<u>LOCATION</u>	<u>DATE</u>
Duck Rock Bell Buoy #7	43°46.76' 69°20.05'	11.5 fms	Vol. 1 P. 12 HILGARD	9/15/54
Sunken Duck Rock Can Buoy #5	43°46.78' 69°19.62'	38.0'	Vol. 1 P. 9 WAINWRIGHT	9/15/54

The position of these aids, as charted on Chart No. 313 are in agreement with the locations as obtained during this survey.

NORFOLK PROCESSING OFFICE
 FLOATING AIDS TO NAVIGATION
 H-8184

<u>BUOY</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
Monhegan I. Gong Buoy	43- ⁴⁶ 69 .90	69-18.80'	-	51-52B	9/27/54
Sunken Duck Rock Buoy 5	46.78'	19.62'	^{44'} 37'	3a	9/15/54
Duck Rocks Bell Buoy 7	46.77'	20.0 ⁵ 0	69'	2a	9/15/54

BAR CHECK NO.	DATE	A SCALE					B SCALE					PHASE CORRECTION B TO A SCALE				
		10	15	20	25	30	35	40	45	50	35	40	45	50	55	
VALMWEIGHT FATH. 58-S																
1	4/19/54	0.0	0.0	Initial -0.1	-0.2	-0.4	-0.8	-1.2	-1.1	-1.4	-0.8	-1.0	-1.1			
2	6/3/54	∅0.50	∅0.40	∅0.30	∅0.20	∅0.25	∅0.10	∅0.25	∅0.20	-0.15						
3	7/20/54	∅0.15	0.0	0.0	-∅0.05	-∅0.10	-∅0.10	-∅0.15	-∅0.20	-∅0.20						
Mean of 2K3 ∅0.32 ∅0.20 ∅0.15 ∅0.08 ∅0.08 ∅0.00 ∅0.05 0.0 -0.18 Mean B to A correction is (-)0.87'																
HILGARD FATH. 139 SPX 2.0' Initial																
1	4/19/54	∅0.70	(0.0)	∅0.25	(-∅0.30)	0.0	∅0.15	∅0.15	0.0	0.0						
2	6/3/54	0.0	0.0	Initial -0.30	-0.10	-0.30	-0.40	-0.90	-1.20	-1.0						
3	7/20/54	(0.0)	(-∅0.30)	(∅0.40)	(-∅0.40)											
Mean B to A Correction (-)2.98'																
FATH. 138 SPX 2.0' Initial																
2	6/3/54	0.0	0.0	-0.30	-0.10	-0.30	-0.40	-0.90	-1.20	-1.0						
3	7/20/54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.3						
Mean B to A Correction (-)2.98'																
LAUNCH #171 FATH. 139 SPX																
1	6/3/54	0.0	0.0	-0.10	0.0	-0.10	-0.3	-0.45	-0.50	-0.4						
2	7/20/54	∅0.20	∅0.15	0.0	∅0.10	∅0.05	0.0	0.0	0.0	-0.15						
Mean of 1K2 ∅0.10 ∅0.08 -∅0.05 ∅0.05 -∅0.02 -∅0.15 -∅0.22 -∅0.25 -∅0.28 Mean B to A correction is (∅)2.38'																

() values indicated thus have been rejected

(Bar Check taken in fathoms)

ATTACHMENT 6

FATHOMETER CORRECTIONS

Launch 171 Fathometer No. 139 SPX - Initial set at 0.0 feet

A RANGE		B RANGE	
<u>DEPTH</u>	<u>CORRECTION</u>	<u>DEPTH</u>	<u>CORRECTION</u>
0 - 44'	0.0'	35' - 44'	0.0
45' - 50'	-0.5	45' - 90'	-0.5'
Range correction B to A use (✓)2.5'			

Launch 171 Fathometer No. 138 SPX - Initial set at 0.0 feet

0 - 30'	0.0	35' - 44'	-0.5'
31' - 44'	-0.5'	45' - 55'	-1.0'
45' - 50'	-1.0'	56' - 64'	-1.5'
		65' - 73'	-2.0'
		74' - On	-2.5'
Range correction B to A use (-)3.0'			

Ship HILGARD Fathometer No. 139-SPX - Initial set at 2.0 feet

A RANGE		B RANGE	
<u>DEPTH</u>	<u>CORRECTION</u>	<u>DEPTH</u>	<u>CORRECTION</u>
0 - 21.5'	✓0.5'	35' - 90'	0.0
22' - 50'	0.0		
Range correction B to A use (✓)2.5'			

Ship HILGARD Fathometer No. 138-SPX - Initial set at 2.0'

0 - 30'	0.0'	35' - 44'	-0.5'
31' - 44'	-0.5'	45' - 55'	-1.0'
45' - 50'	-1.0'	56' - 64'	-1.5'
		65' - 73'	-2.0'
		74' - on	-2.5'
Range correction B to A use (-) 3.0'			

(Continued)

ATTACHMENT 6 Continued

Ship HILGARD Fathometer No. 138 SPX - Initial set at 0.33 fms.

A RANGE CORRECTION

0 - 13 fms. 0.0 fms.

13 - on -0.50 fms.

* Ship WAINWRIGHT Fathometer No. 58-S, Initial set at 2.0'

<u>A RANGE</u>		<u>B RANGE</u>	
<u>DEPTH</u>	<u>CORRECTION</u>	<u>DEPTH</u>	<u>CORRECTION</u>

0 - 24'	0.0'	35' - 45'	-1.0'
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25' - 34'	-0.5'	46' - 59'	-1.5'
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35' - 46'	-1.0'	60' - 74'	-2.0'
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47' - 50'	-1.5'	75' - 90'	-2.5'
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Range correction B to A use (-) 1.0'

** 0 - 13'	0.5'	35' - 64'	0.0'
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14' - 50'	0.0'	65' - 90'	-0.5'
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Range correction B to A use (-) 1.0'

* Period of April through May)

** Period of June through October)

ATTACHMENT 7

H A N G D A T A

Latitude & Longitude	General Depth Ft.	Min. Hang Feet	Position No.	Max'm Clear	Position No.	Path. Sdgs. Ft.	Remarks
1. 43° ²⁶ 46.39' 69°19.39'40	117'	52'	31A to 34A <small>This strip rejected</small>	38'	20C to 26C	40'	See Section I of this report
2. 43°46.83' 69°19.82'	33'	29.5'	36C to 48C	29.0' 28.0	34B to 50B	29'	See Section I of this report

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

WIRE DRAG SURVEY H-8184 (Wa-H1-1654WD)

GENERAL

Pertinent hang data have been flagged on the smooth sheet in pencil. inked during verification.

All drag strips were plotted on overlays which are being forwarded with the smooth sheet. These overlays were used to check agreement of effective depths against the latest hydrographic surveys. They also contain notes by the smooth plotter explaining procedures used to resolve some of the problems encountered.

DISCREPANCIES

Line 31 thru 34A is being submitted on an overlay. It was not smooth plotted as it is not considered effective drag work. The drag was apparently aground due to sag at the beginning of the line. The 40 foot sounding, obtained by the Tender in the same area, was smooth plotted; however, the bathogram confirming this shoal could not be found.

Detached position 4a (Tender), could not be plotted. ✓

Norfolk, Va.
18 April 1961

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer

GEOGRAPHIC NAMES

Survey No. H-8184 W.D.

Name on Survey	Source											
	A	B	C	D	E	F	G	H	K			
Duck Rocks	✓											1
Manana Island	✓											2
Menhegan Island	✓											3
												4
												5
												6
												7
												8
												9
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												27

George M. Lane
Geographic Names
5/2/61

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys:~~

11 May 1961

Division of Charts: R. E. Carstens

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 8184

Locality Monhegan Island, Gulf of Maine

Chief of Party: E. E. Brown (1954)
Plane of reference is mean low water, reading
4.5 ft. on tide staff at Monhegan Island
14.9 ft. below B. M. 1 (1943)

Height of Mean high water above plane of reference is 8.8 FT.

Condition of records satisfactory except as noted below:

Burt W. Wilcox

Chief, Tides & Currents Branch

~~Chief, Division of Tides and Currents.~~

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8184 W.D.

Records accompanying survey: Smooth sheets ¹...;
 boat sheets ²...; sounding vols. ²...; wire drag vols. ²...;
 Descriptive Reports ¹...; graphic recorder envelopes ¹...;
 special reports, etc. 1-A. & D. Sheet; 1-Roll, Plotting Overlays;
 9-Sheets, Drag Set Data; 1-Film-Positive T-11135(S); 1-Air-Photo,
 No. 1-183 & 1-Air-Photo, No. 1-184.

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

Number of positions on sheet	..174..
Number of positions checked	..52..
Number of positions revised	...0..
Number of soundings revised (refers to depth only)	...1..
Number of soundings erroneously spaced	...0..
Number of signals erroneously plotted or transferred0
Topographic details	Time ...2 hrs.
Junctions	Time ...0 hrs.
Verification of soundings from graphic record	Time ...1/2 hr.
Special adjustments	Time ...0 hr.

Verification by *Ralph E. Westbrook* Total time 29.5 hrs. Date 8/19/64

Reviewed by *Ralph E. Westbrook* Time 17.0 hrs. Date 8/19/64

C. Junctions with Wire-Drag Surveys

An adequate junction was effected with H-8465 W.D. (1953-55) on the north and south. No other wire-drag surveys join the present survey.

D. Comparison with Hydrographic Surveys

H-6861 (1:20,000) 1943, 44
H-6992 (1:10,000) 1944

The effective depths shown on the present wire-drag survey do not conflict with the depths on the above listed surveys.

E. Comparison with Chart 313, 11th ED., Rev. 8/10/64

1. Hydrography

The charted hydrography originates with the above listed hydrographic surveys supplemented by a few soundings from the boat sheet of the present wire-drag survey. There are no conflicts with the charted hydrography.

Attention is directed to the following:

The 24-ft. sounding charted in Lat. $43^{\circ}45.90'$, Long. $69^{\circ}19.81'$ originates with the boat sheet information of the present wire-drag survey Chart Letter 991 (54). The sounding was revised to 25-ft. on the smooth sheet. The 24-ft. sounding should be deleted and should be replaced by the 25-ft. sounding originally charted from H-6992 (1944).

The cleared depth of 29-ft. charted in Lat. $43^{\circ}46.82'$, Long. $69^{\circ}19.85'$ originates with boat sheet information of the present wire-drag survey Chart Letter 991/54. This clearance was revised during verification to 28-ft. The cleared depth of 29-ft. should be changed to a cleared depth of 28-ft. to bring the chart into agreement with the present survey.

2. Aids to Navigation

The present survey position of Gong buoy "3" is in substantial agreement with its charted position, while the other floating aids have been relocated and renumbered subsequent to the present survey.

The aids adequately mark the features intended.

F. Condition of the Survey

1. Field Work

The field work was adequately accomplished except as stated in paragraph g below.

2. Records

The information recorded in the sounding volumes is adequate.

3. Descriptive Report

The Descriptive Report is complete and comprehensive.

4. Field Plotting

The field plotting was satisfactory, except that in one strip where the "2 1/2% rule" was applied, the effective depths, instead of the upright lengths, were used to determine the maximum effective depth of the deeper adjoining section.

G. Compliance with Project Instructions


The survey does not adequately comply with the Project Instructions because three important shoals within the area of the present survey were not cleared within 2 feet of their least depths as follows:

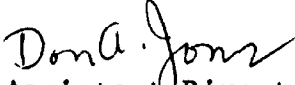
<u>Charted Depth</u> ft.	<u>Location</u>		<u>Cleared by</u> ft.
	<u>Latitude</u>	<u>Longitude</u>	
23	43°45.60'	69°18.53'	20
25	43°45.90'	69°19.81'	20
21	43°46.57'	69°18.80'	17

H. Additional Field Work Recommended

No additional field work is recommended.

Examined and Approved:


Chief, Marine Chart
Division


Assistant Director, Office of
Hydrography and Oceanography

