6670 WIRE DRAG

6670 WIRE DRAG

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ / Hydrographic } Wire Drag 1002 Sheet No.

State Maine

LOCALITY

~~Western~~ Casco Bay

~~Buckeye and~~ Broad Sound and ~~their~~

~~Vicinities~~ vicinity

~~19~~41

CHIEF OF PARTY

Fred. L. Peacock

U. S. GOVERNMENT PRINTING OFFICE

Form 537
Ed. Dec., 1930

REG. NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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 the Office.

Field No. WD-1002

REGISTER NO. H6670 (Wire Drag)

State Maine

General locality ~~Western~~ Casco Bay

Locality ~~Broken and~~ Broad Sound~~s~~ and ~~their~~ vicinity ~~vicinities~~.

Scale ~~1:10000~~ Date of survey June-October, 19 41

Vessel Sub-Party of the Ship OCEANOGRAPHER using Launches MARINDIN, RODGERS AND OGDEN.

Chief of Party Fred. L. Peacock

Surveyed by F. R. Gossett and H. C. Applequist

Protracted by H. S. Andros

Soundings penciled by H. C. Applequist and H. S. Andros

Soundings in ~~fathoms~~ feet

Plane of reference MLW

Subdivision of wire dragged areas by H.C.A. ∝ ABB

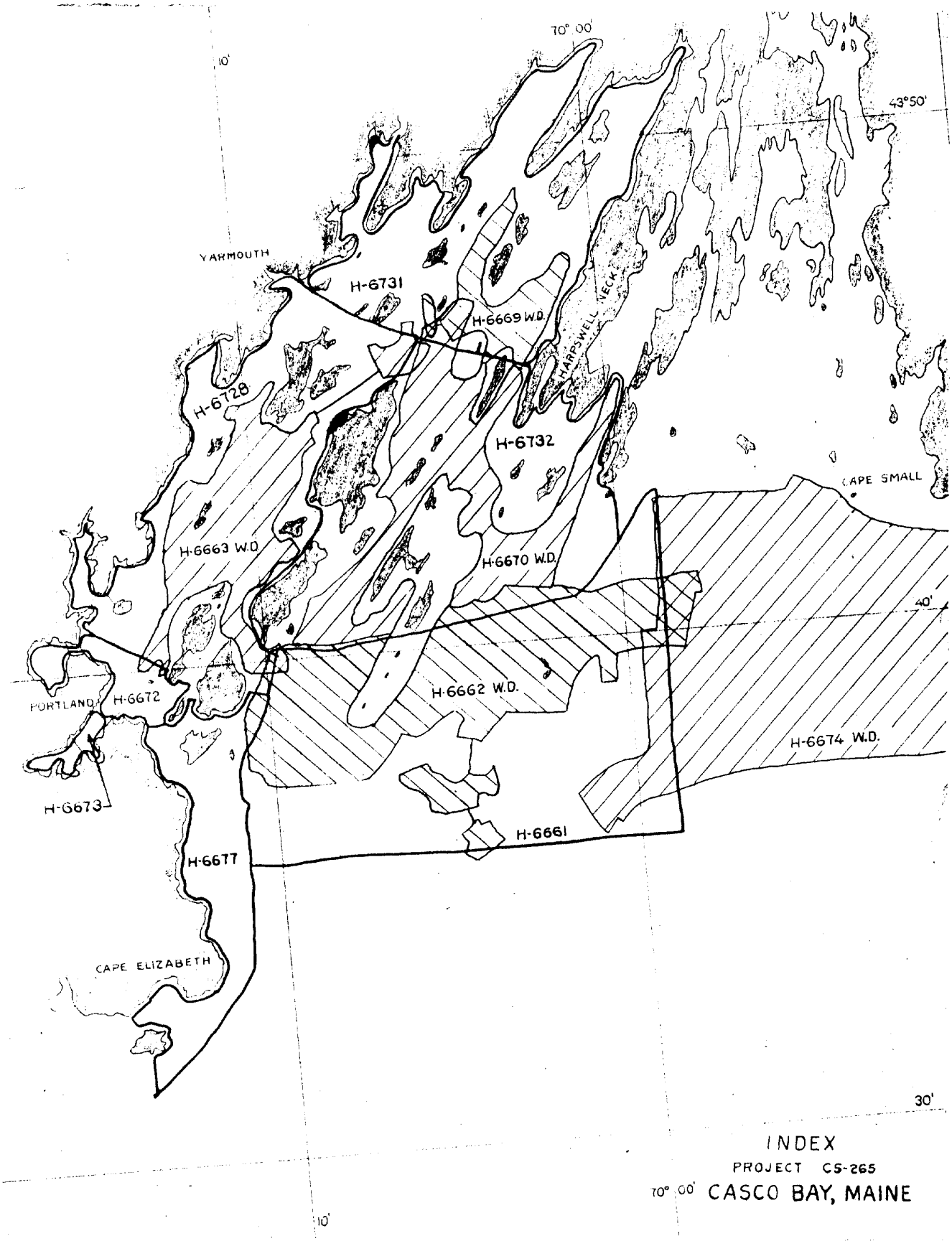
Inked by Strips by HSA & ABB

Verified by G.F. Jordan

Instructions dated May 7, 19 41

Remarks:

U. S. GOVERNMENT PRINTING OFFICE. 1933



INDEX

PROJECT CS-265

70° 00' CASCO BAY, MAINE

D E S C R I P T I V E R E P O R T

to accompany

WIRE DRAG SURVEY FIELD SHEET NO. 1002, WIRE DRAG.

CASCO BAY

INSTRUCTIONS:

This survey was executed in accordance with the Director's Instructions for Project C.S.-265, dated May 7, 1941.

The wire dragged area shown on the sheet extends from the entrances of Luckse, Broad, and Mericoneag Sounds to French Island, the north end of Whaleboat Island, and Stovers Point, including the general limits as outlined in the Instructions.

SURVEY METHODS:

In general, the survey methods used were standard practice for dual control as described in Special Publication No. 118. For detailed discussion of survey methods see report for Wire Drag Survey ~~Field Sheet No. 1001, W.D.~~ H-6663 (1941) WD The same remarks apply to this survey.

Signals were built and located by field parties operating direct from the Ship OCEANOGRAPHER. Reference should be made to the OCEANOGRAPHER's 1941 Graphic Control Sheets (Field (E, G, J, and K) registry numbers in review (Project C.S.-265) and to previous triangulation geographic positions for signal locations for this wire drag survey.

DISCREPANCIES:

No discrepancies are known to exist. Treatment of all apparent discrepancies is discussed in detail in the plotting descriptive notes that follow in this report. Pages of plotting notes removed. Discrepancies discussed in the review

on overlay tracings and transferred to the smooth sheet after being subdivided. Drag strips which were of no final surveying value, such as those where the bottom wire was merely cutting kelp off shoals, were not transferred to the smooth sheet. All overlay tracings are being forwarded to the Office with the smooth sheet, where they will probably facilitate reviewing of the sheet.

DANGERS:

Dangers in the area covered by wire drag are all treated in detail in this report under the heading "Groundings." Reference should also be made to the OCEANOGRAPHER's 1941 Launch Hydrographic Sheets. Pages on groundings were checked in verification, and now removed. Discrepancies are discussed in the review

Principal dangers covered by wire drag:

LATITUDE	LONGITUDE	LEAST DEPTH (W.D.)*	CLEARED BY
43-41.83	70-02.69	16 (Hydro. H-6732 ~~boat sh~~ sdg)	15
43-42.03	70-02.03	~~26~~23 ditto	23
43-43.22	70-01.02	34	31
43-44.38	70-05.71	~~22½~~20 (hydro.)	20
43-45.74	70-05.35	27	26
43-44.52	70-03.31	~~28~~27 (hydro.)	24
43-44.32	70-03.80	~~26½~~23 "	21.5
43-44.46	70-04.30	~~34 38~~ (hydro. ~~boat sh~~ sdg)	32.5

83

*In some instances the least depth was obtained by the hydrographic party and will be noted in the report on the hydrographic survey. In those cases the wire drag party's records are of value in showing what depth cleared the shoal. The wire drag operations in general were confined to showing where cleared deep water could be carried within the areas defined by the Office and to topping detached shoals. Ledges and other dangers within the area of the sheet were covered by the hydrographic survey.

CHANNELS:

42 feet can be carried through the principal channel from the bell buoy in the entrance to Broad Sound to good anchorages in Upper Broad Sound, to Middle Sound and to area off French Island and the north end of Chebeag Island.

42 feet also can be carried through Luckse Sound to the vicinity of Little Bang Island. There is a minimum effective drag depth of 27 feet through the channel east of Little Bang Island and a minimum effective drag depth of 20 feet through the channel from off the south point of Little Bang Island to off the north point of Chebeag Island. An inland channel used by inter-island ferry steamers, yachts and fishing craft extends from off the south point of Chebeag Island around either side of Little Bang Island and across Broad Sound through Potts Harbor to Mericoneag Sound.

ANCHORAGES:

Excellent anchorage for almost any size or type of vessel is available in dragged area of this sheet. The areas affording the most room for larger vessels are the upper part of Broad Sound, southern part of Middle Bay, and the areas east of French Island and the north end of Chebeag Island.

COMPARISON WITH PREVIOUS SURVEYS:

No previous wire drag survey has been made in the area covered by this survey.

This survey was compared with Chart No. 315. No greater depths were found on any charted soundings within the dragged area of this sheet. Shoaler depths found are ~~listed under "Groundings."~~ plotted

The wire drag survey was carried on in close cooperation with the new basic hydrographic surveys. Shoals in or near the drag area found by the launch hydrographic parties were cleared by the wire drag party and shoals found by the wire drag party were developed in detail by the hydrographic parties. The wire drag was also used to some extent to prove or disprove suspicious recordings on the fathometer depth records. These were usually found to be caused by heavy kelp growth.

JUNCTIONS:

This survey joins the 1941 wire drag survey H - 6662 of I. E. Rittenburg off the entrances of Luckse, Broad and Mericoneag Sounds. This party's survey field No. W. D. - 1001 is joined at the entrance of Hussey Sound and north of Chebeag Island, and No. W. D. - 1003 is joined in the vicinity of Upper Green and north end of Whaleboat Island. Satisfactory overlap was obtained in all cases. H-6663 (1941) WD H-6669 (1941) WD

AREA AND DEPTH SHEET:

A field area and depth sheet on tracing cloth is attached to this sheet. The office work was done under the direct supervision of Lieut. (j.g.) Applequist.

Respectfully submitted,

F. R. Gossett

October 25, 1941

F. R. Gossett, Lieutenant (j.g.),
Coast and Geodetic Survey,
In Charge Subparty.

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Approved and forwarded:

Fred. L. Peacock

Fred. L. Peacock, Lt. Comdr., C&GS,
Chief of Party

2

STATISTICS

Vol.	Date	Day Letter	Stat. Miles Drag Strip	Plotted Positions	Tender Positions	Tender Soundings
1	June 26	A	4.4	35	0	0
1	July 9	B	3.4	37	3	3
1	July 10	C	3.8	37	4	4
1	July 11	D	3.6	38	3	3
1	July 14	E	5.3	48	12	12
1	July 15	F	3.2	21	0	0
Total			23.7	206	22	22
2	July 15	F	4.0	40	3	3
2	July 16	G	2.5	37	5	5
2	July 21	H	2.4	27	0	0
2	July 22	J	5.2	54	9	9
2	July 23	K	4.0	47	6	6
2	July 24	L	0.7	7	0	0
Total			18.8	212	23	23
3	July 24	L	0.5	12	4	4
3	July 25	M	2.9	27	10	10
3	July 30	N	2.2	27	3	3
3	July 31	P	0.7	8	2	2
3	Aug 1	Q	4.1	47	16	14
3	Aug 4	R	2.0	22	1	1
3	Aug 6	S	2.9	32	11	11
3	Aug 7	T	1.4	19	13	13
Total			16.7	194	60	58
4	Aug 7	T	1.3	13	0	0
4	Aug 8	U	2.3	35	40	40
4	Aug 11	V	3.1	30	6	6
4	Aug 12	W	1.8	23	17	17
4	Aug 13	X	2.4	24	13	13
4	Aug 14	Y	2.0	30	20	20
4	Aug 15	Z	2.1	37	30	30
Total			15.0	194	80	83
5	Aug 18	AA	3.8	45	15	14
5	Aug 19	BB	1.6	20	7	7
5	Aug 20	CC	2.1	30	14	14
5	Aug 21	DD	2.7	28	18	18
5	Aug 22	EE	1.8	24	18	18
5	Aug 25	FF	3.3	34	11	11
5	Aug 26	GG	1.2	18	10	11
Total			16.5	199	93	93

STATISTICS

	Vol.	Date	Day Letter	Stat. Miles Drag Strip	Plotted Positions	Tender Positions	Tender Soundings
	6						
	6	Aug 26	GG	2.1	19		
	6	Sept 2	HH	1.7	21	18	18
	6	Sept 4	JJ	1.8	29	18	18
	6	Sept 11	KK	0.5	6	4	4
	6	Sept 12	LL	1.9	28	12	12
	6	Sept 16	MM	3.0	30	5	5
	6	Sept 25	NN	1.0	9	0	0
	6	Sept 26	PP	4.2	38	8	8
	6	Sept 29	QQ	0.8	12	11	11
Total				17.0	192	76	76
	7	Sept 29	QQ	3.7	39		
	7	Sept 30	RR	2.6	34	16	16
	7	Oct 2	SS	3.3	37	14	14
Total				9.6	110	30	30
TOTALS FOR SHEET				117.3	1307	384	385

RQC
HMS

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

November 7, 1941

~~Division of Hydrography and Topography:~~

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

Plane of reference approved in
19 volumes of sounding/~~records~~ and wire drag for

HYDROGRAPHIC SHEET 6670

Locality Broad Sound and Vicinity, Casco Bay, Maine

Chief of Party: F. L. Peacock in 1941
Plane of reference is mean low water reading
8.6 ft. on tide staff at Portland
10.0 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:

Ham

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154327

GEOGRAPHIC NAMES

Survey No. H6670

(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	
Broad Sound										1
Casco Bay										2
										3
										4
Portland										5
										6
										7
										8
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										26
										27

Names underlined in red approved by L. Heck on 10/27/42

M 234

	Remarks	Decisions
1	For title	
2		U.S.C.B.
3		
4		
5	Location of tide staff.	
6		
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M 234		

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. H6670 (WIRE DRAG)

Records accompanying survey:

Boat sheets .(2).; sounding vols. .(7).; wire drag vols. (12).;

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

special reports, etc. (1) bundle strip tracings will be found in the vault. (1) A & D sheet (tracing cloth)

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

Number of positions on sheet	1691.	
Number of positions checked	856.	
Number of positions revised	15.	
Number of soundings recorded	385.	
Number of soundings revised (refers to depth only)	3.	149 drag strips
Number of soundings erroneously spaced	—	
Number of signals erroneously plotted or transferred	—	
Topographic details	Time 4.	
Junctions	Time 4.	
Verification of soundings from graphic record	Time —	

Verification by G.F. Jordan ....Total time 163. Date Jan. 13, 1942

Review by ..... Time ..... Date .....

FORM M-238

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H H6670
~~No.~~ (WIRE DRAG)

received Nov. 4, 1941
registered Nov. 5, 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	Pg 25	HHL	
26			
30			
40			
62			
63			
82			
✓ 83	Pg 17	JFR	
88			
90			

RETURN TO

82	R. W. Knox

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY — REGISTRY NO. 6670 W.D.
Field No. 1002 W.D.

Maine, Casco Bay, Broad Sound and Vicinity
Surveyed June to October 1941; Scale 1:10,000
Instructions dated May 7, 1941

Soundings:
Hand Lead

Control:
Dual Control; Three-point Fix on Shore Signals

Chief of Party - Fred L. Peacock
Surveyed by - F. R. Gossett; H. C. Applequist
Protracted by - H. S. Andros
Subdivision of wire dragged areas by - H.C.A.; A.B.Brownell
Verified by - G. F. Jordan
Reviewed by - G. F. Jordan
Inspected by - H. R. Edmonston

1. Shoreline and Signals

The signals are from previously established triangulation stations and from the following graphic control surveys:

T-6845b	T-6847a	T-6849a
T-6846	T-6848a	T-6851

The following planimetric drawings are the source of the high water line:

T-5958	T-5960	T-5963
T-5959	T-5962	

The ledge detail is shown on hydrographic survey H-6732 (1941).

2. Junctions with Contemporary Wire Drag Surveys

Satisfactory junctions are made on the north with H-6669 (1941) W.D., on the west with H-6663 (1941) W.D., and on the south with H-6662 (1941) W.D. The latter is on a scale of 1:20,000.

3. Comparison with Hydrographic Surveys

The present survey satisfactorily covers the deeper areas of H-6732 (1941) and makes slight overlap with H-6731 (1941) on the north and H-6661 (1941) on the south. The development on these hydrographic surveys is so complete that nearly all the groundings of the wire drag have been satisfactorily disposed of. Exceptions are noted below:

a. The 41-ft. grounding charted on 201 at Lat. 43°46.2'; Long. 70°04.9' and falling in 54-ft. depths is believed to be erroneous; but the lack of conclusive disproval precludes disregarding this bumping of the buoy.

b. It is recommended that the 43-ft. grounding charted on 201 at Lat. 43°43.15'; Long. 70°05.9' be disregarded. The location of this apparent bumping in 65-ft. depths is indefinite, as no time is given in the records of the end launch. The notation was placed between positions 4 and 5W and transferred to the guide launch records at position 4W. The tender was making lift test at this time, at point of recorded grounding. H-6732 shows no indication of shoaling and neither the guide launch nor tender confirms any grounding or bumping of buoys. It is believed either the action of the buoy was misinterpreted or the grounding occurred at position 5W on coming to comparable depths. The recorded position was cleared by 42 feet.

c. The 42-1/2-(42) foot grounding charted on 3201 and 201 at Lat. 43°40.52'; Long. 70°07.6' appears erroneous in comparison with 51-ft. depths on H-6732. However, the strain was sufficient to break the drag near N-buoy. There is a 90-meter gap in the lines of soundings at this point.

4. Comparison with Prior Surveys

This is the first wire drag survey in this area. No disagreements exist with prior hydrographic surveys which have not been disposed of in the review of the hydrographic surveys.

5. Comparison with Chart 3201 (New chart of 2- 6-43)
201 (Drawing of 2-11-43)

A reprint of 201 is in the process of reproduction, so the latest print of October 28, 1942, with the corrections from the drawing dated February 11, 1943, was used in the comparison. This print of October 28, 1942, has been marked with corrections resulting from the verification and review of the completed smooth sheet and filed with the Nautical Charts Branch.

6. Condition of Survey

The sounding records, descriptive report and field plotting are satisfactory.

The area of the small insufficient overlap at Lat. 43°41.1'; Long. 70°04.5' falls on the southern part of the 42-ft. shoal. It is assumed the bight of the drag after the reversal was below the plotted straight line starting strip, which condition would give satisfactory coverage.

The uncharted gap at Lat. 43°44.6'; Long. 70°04.3' falls in 90-ft. depths, making the deficiency unimportant.

7. Compliance with Instructions for the Project

Satisfactory.

8. Additional Work Recommended

As the principal areas and waterways have been adequately covered, no additional wire drag is recommended.

Examined and approved:

Robert W. Knox
Chief, Surveys Branch

J. S. Borden
Chief, Division of Charts

Earl O. Heaton
Chief, Section of Hydrography

G. Rude
Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. H-6670 Wire Drag

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
July 1968	315	L.A.M.	Generalized dragged area added. ~~Before~~ After Verification and Review JMP
2-21-68	325 (Ext. at limits)	HRG	~~Before~~ After Verification and Review Added dragged areas.
			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
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.