8180
WIRE DRAG

Diag. Cht. No. 1204-3.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey WIRE DRAG

Field No. WA-III-1153 Office No. H-8180 W.D.

LOCALITY

State Maine

General locality Damariscotta & Johns Rivers

Locality Northern Parts

19 53

CHIEF OF PARTY

E. B. Brown

LIBRARY & ARCHIVES

DATE September 15, 1955

8-1870-1 (1)

8180
WIRE DRAG

Form 537
(Ed. June 1946)

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-8180WD~~

Field No. ~~Wa-Hi-1153~~

State MAINE

General locality ~~JOHNS BAY~~

Locality (DAMARISCOTTA & JOHNS RIVERS) Northern Parts.

Scale 1:10,000 Date of survey 19 May thru 11 Sept. 1953

Instructions dated 6 February 1953

Vessel WAINWRIGHT & HILGARD

Chief of party E.B. BROWN

Surveyed by E.B. BROWN, JOHN C. TRIBBLE, H.J. SEABORG & R.A. PARKER

Soundings taken by ~~echo sounder~~, graphic recorder, hand lead, ~~wire~~

Fathograms scaled by

Fathograms checked by

Protracted by A. KAUPA

Drag Strips Inked By
~~Soundings penciled by~~ A. KAUPA

Soundings in ~~fathoms~~ feet at MLW ~~and are true depths~~

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT

TO ACCOMPANY

WIRE DRAG FIELD SHEET NO. HI-WA 1153

PROJECT CS-265

COAST OF MAINE, 1953

SCALE: 1:10,000

CHIEF OF PARTY ********** E. B. BROWN

A. PROJECT

The authority for this survey was contained in Supplemental Instructions, Project CS-265, Wire Drag, dated 6 February 1953, reference 22/MEK S-W&H.

B. SURVEY LIMITS AND DATES

The locality of the survey is the Damariscotta River and Johns River, Maine. The sheet covers the area between latitude 43°52'N and 44°00'N and longitude 69°30'W and 69°36'W. The beginning date of the survey was 19 May 1953 and ending date 11 September 1953.

Junction was made with contemporary wire drag survey HI-WA 1253 (H-8181, 1953) to the south.

C. VESSELS AND EQUIPMENT

The Ships WAINWRIGHT and HILGARD were used as the guide launch and end launch respectively. USC&GS Launch No. 171 was used as the tender. During the period E day, 17 June through L day, 25 June Launch No. 171 was used as guide launch, a chartered lobster boat as end launch, and the WAINWRIGHT'S skiff as the tender. On M day, 26 June and N day, 29 June the WAINWRIGHT was used as guide launch, Launch No. 171 as end launch and the skiff as tender. Standard wire drag equipment was used. The WAINWRIGHT was equipped with 808 type fathometer No. 58S, the HILGARD with 808-J type fathometer No. 139-SPX and launch 171 with 808 type fathometer No. 53.

D. TIDES AND CURRENTS

Tidal data for the reduction of soundings and effective drag depths were obtained from portable automatic tide gages, installed and maintained by this party and located at East Boothbay, Maine; Newcastle, Maine; Fort Point, Pemaquid, Maine.

No current stations were observed.

E. SMOOTH SHEET

~~To be~~ W&S prepared by the Norfolk Office.

F. CONTROL STATIONS

Control stations used for this survey were recoverable topographic stations previously located by aerial photogrammetry. Two signals, POP and NEW, were located by hydrographic means by the personnel of this party. (See list of signals) Four signals, HOP, HUX, MID, and ODD were identified by this party on the aerial photographs and pricked directly from the film positive. (See list of signals) Rap, Fit,

H. SOUNDINGS & DRAG TESTS

Soundings were obtained with the 808 type fathometer. 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 methods of sextant control and wire drag plotting were used throughout the survey. Fixes were taken on both towing vessels. Cuts were taken to near buoy and other towing vessel and recorded in that order, as plus when object was right of signal and minus when left.

J. ADEQUACY OF SURVEY

The survey is considered adequate and no further wire drag investigations are considered necessary. The junction with contemporary wire drag survey HI-WA 1253 is considered satisfactory and no holidays exist. (H-8181, 1953)

L. COMPARISON WITH PRIOR SURVEYS & CHARTS - DANGERS & SHOALS

TP 4 Review

In general this survey was in good agreement with the previous hydrographic surveys of the area and with Chart 314. The following listed hangs are specific instances in which there is disagreement. Hang numbers refer to the Hang Data Sheet, Attachment No. 6 of this report.

PREVIOUS SURVEY NO. H-6842 (1943)

Hang No. 13 - The 30-foot curve on both sides of the channel projects outward at this point. The drag was hung at both the N & F buoys and seems to indicate that the 30-foot curve should be drawn 30 meters west of its charted position.

On H-6842 30' curve has been extended on both sides of channel to conform to this new data.

Hang No. 26 - There are known shoal areas on both sides of the channel at this point, however, this hang is in an area of depth range 25 to 42 feet. A detached position taken over the hang gave a depth of 16 feet at latitude 43°58.02' longitude 69°34.47'. It was cleared at effective depth of 15 feet. On the previous survey, H-6842, this point lies between two sounding lines of 60 meter spacing, however adjacent soundings do not indicate a depth of this nature. It is considered that this is a detached pinnacle to the immediate east of the charted 22-foot ledge in mid channel. It is recommended that this be charted as a 16-foot rock. The 30' curve on the east was moved 60m farther offshore to enclose the 16-22' shoal. The existing 22' shoal in midstream was extended 40 m southward.

H-6842 was revised to indicate a narrow chan of 36' controlling depth between the 22' shoal on the west and the 16-22' shoal originating with this sunky on the east

Hang No. 29 - Hung at effective depth of 18 feet, cleared at effective 17 feet. Prior survey shows a 19-foot sounding here on this shelf but line spacing is wide. It is recommended that a 17-foot sounding be charted here. (The smooth sheet must be examined carefully here to determine which is the maximum clearing strip, unable to determine from boat sheet.) *Cleared by 1-C 19 at 14' 10-3CK at 17'*

PREVIOUS SURVEY NO. H-6843 *(1943)*

Hang No. 8 - This is a known shoal area. The relief is very pronounced at the southern tip of the shoal ~~but this survey indicates that the shoal may extend a few meters farther in a southerly direction than shown on survey H-6843.~~ *27' effective hang plots on 24' sdg from H-6843. Cleared by 19'.*

Hang No. 12 - Previous survey indicates a submerged ledge extending from shore in the vicinity of this hang. This hang at effective depth of 25 feet, in charted depths of 27 to 28 feet was cleared at effective depth of ~~22~~ *24* feet. *(1E to 1LE)* *30' curve extended farther offshore. D.R.G.*

Hang No. 18 - This hang indicates lesser depths than charted. On the prior hydrographic survey a holiday exists at this location, which is immediately outside the 30-foot curve. It is recommended that the 30-foot curve be drawn 25 meters farther south than its position on H-6843 at this point. *Effective dragging very doubtful. Strip not plotted. D.R.E.*

Hang No. 25 - This hang at effective depth of $24\frac{1}{2}$ feet, occured in the vicinity of a charted 31-foot pinnacle in general depths of 40 feet. The hang however indicates lesser depths. The shoal was cleared at $21\frac{1}{2}$ feet effective. On the prior survey a holiday exists just to the north of the shoal area and northeast of the hang. *Hang at 1st pos. Not plotted. Insufficient and uncertain information. Only 29' sounding plotted. 6E & 16E strip cleared this area at 25' effective*

Hang No. 32 - This hang is on a submerged ledge which extends NNW of a small island (signal FATE). Hang indicates less water than shown on sheet H-6843. Minimum hang is 26 feet effective ~~with maximum clearance of 24 feet effective.~~ *NOT CLEARED* *Hang falls outside of limits of drag whose eff. depth is 24 ft (29P).* *Detached shoal in 38'-48' of water.*

Hang No. 33 - Previous hydrographic survey shows depths ranging from 22 to 36 feet in the near vicinity of this hang. There is a holiday in the previous survey at the point of hang but indications are that there may be shoaler depths. An 18-foot drag grounded momentarily on this shoal then immediately came free. It is recommended that this shoal be charted as ~~17~~ *18* feet. *(not cleared)*

Hang No. 36 - Hung at ~~21~~ *19* feet effective on known shoal of 24 feet. Indicates lesser depth than charted. Cleared at effective depth of $18\frac{1}{2}$ feet.

Hang No. 39 - This hang at 21 feet was on a charted 25-foot shoal. It was cleared at an effective 20 feet.

O. COAST PILOT INFORMATION

See special report, Coast Pilot Notes, submitted under separate cover.

P. AIDS TO NAVIGATION

Reference is made to Attachment 4 of this report.

Q. LANDMARKS FOR CHARTS

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

Z. TABULATION OF APPLICABLE DATA

ATTACHMENT:
1. List of Signals
2. Tidal Note
3. Statistics
4. Aids to Navigation
5. Fathometer Corrections
6. Hang Data Sheet

Respectfully submitted,

E. B. Brown, Comdr., USC&GS
Chief of Party

PROCESSING OFFICE
LIST OF SIGNALS
H-8180

TOPOGRAPHIC SIGNALS

COMPILATION T-5991

Bib	H-6843	Gas	H-6843	Quit	H-6843
Big	"	Hug	"	Rid	"
Dip	"	Ice	"	Sag	"
Doe	"	Lip	"	Sal	"
Eva	"	Mice	"	Sic	"
Fed	"	Nut	"	Ski	"
Fox	"	Pad	"	Wad	"
Gag	"	Pin	"	Yet	"

COMPILATION T-5992

Abel	H-6843	Hulk	H-6843	Pike	H-6843
Ado	"	Jib	"	Pit	"
Aim	"	Jim	"	Prop	"
Ant	"	Just	"	Rear	"
Barn	"	Kid	"	Rig	"
But	"	Lop	"	Rom	"
Cam	"	Mane	"	Sack	"
Cast	"	Max	"	Slug	"
Cup	"	Met	"	Sour	"
Dock	"	Nay	"	Spat	"
Fate	"	Neo	"	Tot	"
Fop	"	Nip	"	Up	"
Grin	"	Oboe	"	Wag	"
Hod	"	Ohm	"	Wasp	"
Home	"	Pil	"	Yea	"
Hope	"	Pink		Zoo	"

COMPILATION T-5993

Act	H-6843	Jane	H-6842	Nub	H-6842
Ale	H-6842	Jut	H-6843	Odd	"
Blow	"	Ken	"	Pier	"
Bolt	"	Kit	H-6842	Reef	"
Con	"	Leo	"	Red	"
Day	"	Lit	"	Sky	"
Dial	"	Log	"	So	"
Dope	"	Lop	H-6843	Try	"
Gay	"	Mot	H-6842	Web	"
Hoe	"	Mule	"	Wet	"
				Yam	"

PHOTOGRAMMETRIC STATIONS

Fit	T-5992	Hop	T-5992	Hux	T-5992	Mid	T-5992
Odd	T-5993	Rap	T-5992				

HYDROGRAPHIC STATIONS

New	E.L. Vol. 1, pg. 1
Pop	E.L. Vol. 1, pg. 48

ATTACHMENT I

LIST OF SIGNALS - 1153

Film Positive No. T-5992 No. T-5991 No. T-5993

Signal Name	Number	Sig. Name	Number	Sig. Name	Number
ABEL	444	BIB	434	ACT	1036
ANT	676	BIG	353	ADO	1007
BARN	470	DIP	656	AIM	1005
BUT	678	DOE	432	ALE	1067
CAST	443	EVA	859	BLOW	968
DOCK	440	FOX	658	BOLT	966
FATE	897	FED	860	CAM	1009
FOP	703	GAG	861	CON	981
GRIN	401	GAS	850	DAY	1063
HOD	683	HUG	853	DIAL	1071
HOME	753	ICE	851	DOPE	970
HOP	Established 1953	LIP	852	FIT	1013
HOPE	680	MICE	766	GAY	927
HULK	454	NUT	433	HOE	1051
HUX	Established 1953	PAD	652	JANE	977
JIB	670	PIN	438	JUT	955
JIM	1015	QUIT	359	KEN	1035
JUST	762	RID	651	KIT	977a
KID	868	SAG	352	LEO	1053
MANE	754	SAL	437	LIT	1069
MAX	672	SIC	431	LOG	930
MET	999	SKI	348	LOP	993
MID	Established 1953	WAD	650	MOT	1060
NAY	1000	YET	647	MULE	925
OBOE	450			NEO	1021
PIL	896			NIP	1033
PINK	764			NUB	932
PIKE	448			ODD	Established 1953
PROP	765			OHM	1022
REAR	760			PIER	984
ROM	674			PIT	1012
SLUG	447			REEF	1061
SOUR	757			RED	983
SPAT	758			RIG	1025
TOT	681			SKY	1057
WASP	755			SO	921
YEA	661			TRY	973
				UP	987
				WAG	1003
				WEB	1058
				WET	926
				YAM	963

See Processing office list of signals

LIST OF SIGNALS (cont)

Signal	Source
NEW	Hydrographic Location recorded in Vol. 1, page 3 End Launch record.
POP	Hydrographic location recorded in Vol. 1, page 48 End Launch record.

ATTACHMENT 2

TIDAL NOTE

Portable automatic tide gages were established and maintained by this party at; Fort Point, Pemaquid Beach, Johns Bay, Maine, Latitude 43°52.6' Longitude 69°31.5': *East Boothbay, Maine, Latitude 43°51.9' Longitude 69°35.0': and *Newcastle, Maine, Latitude 44°02.0' Longitude 69°32.2'. * Falls outside limits H-8180

Height of Mean Low Water above the zero of the tide staff at these three gages was 3.4 feet, 2.7 feet and 2.5 feet respectively.

Hourly heights were scaled from the marigrams by the personnel of this party. All times noted on the marigrams are Eastern Daylight Savings Time while this time was in effect. (29 April to 27 September)

Records from the Pemaquid Beach, Johns Bay tide gage were used without correction for differences in time and height for the work in the Johns River. Records from the Newcastle tide gage were used without correction for time and height differences for the work in the Damariscotta River north of Latitude 43°58.00'. East Boothbay tide gage records were used without correction for time and height differences for all work south of Latitude 43°58.00' in the Damariscotta River.

ATTACHMENT 3

STATISTICS

VOLUME	DATE	DAY LETTER	NUMBER OF POSITIONS	STATUTE MILES
1	5/19/53	A	44	2.9
1	5/25/53	B	38	3.2
1	5/26/53	C	40	3.2
2	5/27/53	D	23	1.7
2	6/17/53	E	16	1.0
2	6/18/53	F	32	2.5
2	6/19/53	G	33	2.5
3	6/22/53	H	44	3.4
3	6/23/53	J	51	2.4
3	6/24/53	K	36	2.1
4	6/25/53	L	39	2.1
4	6/26/53	M	42	3.7
4	6/29/53	N	28	2.1
4 & 5	6/30/53	P	54	4.4
5	7/1/53	Q	25	1.5
5	7/6/53	R	39	3.0
5	7/7/53	S	33	2.2
5	9/11/53	T	8	1.1
		TOTALS FOR SHEET	605	45.0

4 of 4 Hilgard 9-10-53 LL

4

FLOATING AIDS TO NAVIGATION Processing Office List.
H-8180 W.D.

BUOY	LAT.	LONG.	DEPTH	POS. NO.	DATE
Corvette Ledge Buoy 1	43-52.29	69-32.80	16'	Wain. 1Aa	5-19-53
McFarlands Ledges Buoy 2	43-52.48	69-32.89	35'	Wain. 2Aa	5-19-53
Damariscotta River Buoy 9	43-53.00	69-35.01	81'	Hilg. Vol. 4, pg. 20	7-10-53
Damariscotta River Buoy 10	43-53.22	69-34.96	47'	Wain. 1H'	6-22-53
Damariscotta River Buoy 11	43-55.90	69-35.15	52'	Hilg. Vol. 4, pg.20	7-10-53
Damariscotta River Buoy 12	43-57.12	69-34.73	35'	Hilg. Vol. 4, pg.20	7-10-53
Johns River Ledge Buoy 2	43-53.68	69-32.62	22'	Wain. 1A Hilg. Vol. 4, pg. 21	5-19-53 9-11-53

ATTACHMENT 5

FATHOMETER CORRECTIONS

WAINWRIGHT - Fathometer 808 type, No. 58S (Initial set at 2.0 ft.)

A RANGE		B RANGE	
DEPTH	CORRECTION	DEPTH	CORRECTION
0 - 23	0.0	40.5	-0.5
24 - 39	-0.5	41 - 45	-1.0
40 -	-1.0	45.5	-1.5

HIIGARD - Fathometer 808-J type, No. 139-SPX

No bar check records

Launch 171 - Fathometer 808 type, No. 53 (Initial set at 0.5 ft.)

Fathometer correction for No. 53 in launch 171 is zero.

ATTACHMENT 4

AIDS TO NAVIGATION

Chart # 314

See Processing office List of Floating Aids

NAME	POSITION	DEPTH	LOCATION	DATE
Black Spar, S-1	43°52.28'N 69°32.80'W	16'	WAINWRIGHT VOLUME 1	5/19/53
Red Spar, S-2	43°52.48'N 69°32.88'W	35'	WAINWRIGHT VOLUME 1	5/19/53
Red Nun, N-10	43°53.22'N 69°34.95'W	54'	WAINWRIGHT VOLUME 3	6/22/53
Red Nun, N-12	43°57.12'N 69°34.72'W	35'	HILGARD VOLUME 4	7/10/53
Black Can, C-11	43°55.89'N 69°35.14'W	52'	HILGARD VOLUME 4	7/10/53
Black Can, C-9	43°53.00'N 69°35.00'W	81'	HILGARD VOLUME 4	7/10/53
Red Spar, "S 2"	43°53.68'N 69°32.62'W	22'	WAINWRIGHT VOLUME 1 HILGARD VOLUME 4	5/19/53 9/11/53

The positions of these aids, as charted on Chart No. 314, are in agreement with the locations as obtained during this survey. ✓

ATTACHMENT 6 — HANG DATA — Page 1

	Latitude Longitude	General Depth (Ft.)	Fath Sdg. (Ft.)	Min Hang (Ft.)	Position No.	Maximum Clearance (Ft.)	Position No.	Remarks
#1	43°53.16' 69°32.69'	30–40	---	33 NP *	(2 to 7A) N.P.*	31	8 to 24A (Plotted)	*Effective dragging doubtful. ~~Hung~~ on ledge extending from shore.
#2	43°53.23' 69°32.76'	12–30	---	31 NP *	8 to 24A	---	---	(Dragging bottom. *~~Hung~~ on ledge extending from shore. *F dragging bottom section F-3 not plotted.
#3	43°52.68' 69°32.86'	18	---	29 NP	36 to 42A	---	---	Known shoal. 25ft pos. 2b
#4	43°52.43' 69°32.18'	2–30	---	17 NP	1 to 7B	---	---	Wrapped known shoal. 13ft pos. 1b
#5	43°52.72' 69°32.88'	30–60	---	30	19 to 28B	---	---	" " "
#6	43°52.~~38~~ 43 69°32.~~05~~ 08'	2–30	---	18	13 to 21C	---	---	" " "
#7	43°52.52' 69°32.25'	17–30	---	17 NP	~~24~~ to ~~27~~C	---	---	Guide launch passed over known shoal, N hung and then came free. Section N-1 removed.
#8	43°52.47' 69°32.~~93~~ 88'	6–30	---	27	30 to 33C	19	20 to 23D	Hung on southern tip of known shoal (See section L of report).
#9	43°52.50' 69°33.25'	32	---	30 NP	7 to 11D	---	---	Drag hung at start of line, probably due to sag in ground wire while starting line. Pos. 7-9D sect. between buoys 1-3 not plotted. Covered by 28ft check depth pos. 1-6D.
#10	43°52.72' 69°32.~~33~~ 83'	6–30	---	31 NP	12–19D	---	---	Wrapped known shoal. Hung at 27ft 30-33C
#11	43°52.48' 69°32.~~80~~ 89'	6–30	---	19 NP	20 to 23D	---	---	" " Apparently hung Spar buoy 52"

Latitude Longitude	General Depth (Ft.)	Fath Sdg. (Ft.)	Min Hang (Ft.)	Position No.	Maximum Clearance (Ft.)	Position No.	Remarks
#12 43°55.07' 69°34.~~42~~38'	27–28	—	25	3 to 5E	~~22~~ 24	~~19 to 20N~~ 6-16E	Lesser depth than charted. (See Section L of report.)
#13 43°58.32' 69°34.10'	30	—	29	1 to 7F	19	~~23~~ 21 to 31L	" " " "
#14 43°57.29' 69°34.62'	10–30	—	25	8 to 14F	—	—	Hung on shelf adjacent to known shoal.
#15 43°57.80' 69°34.47' NP	10–30	~~18~~ 18' (22')	~~19~~ NP-Insufficient information	~~10 to 11G~~	—	—	Known shoal - Detached 18ft. sounding on pos. 22F.
#16 43°57.~~81~~ 85' 69°34.48'	6–30	—	24	23 to 25F	—	—	Known Shoal extends farther seaward than charted. 30' curve revised on H-6842.
#17 43°~~58.02~~ 57.99' 69°34.~~50~~ 52'	22	—	22	27 to 32F	~~18~~ 20	~~12 to 19G~~ 1 to 5K	Narrow channel, Shoals on both sides. Hung at F & N. See Sect. L, Hang # 26.
#18 43°57.28' ? NP 69°34.73'	33	—	~~27~~ 28' NP	1 to 3G N.P. * Pos. of hang indefinite.	—	—	Lesser depth than charted. Not plotted (See Section L of report.)
#19 43°56.97' 69°34.~~95~~ 85'	30–40	—	~~26~~ 29	4 to 9G	—	—	Adjacent to known shoal. Hung on shelf portion of shoal.
#20 43°55.50' 69°34.05'	30	—	23	20 to 32G	—	—	Known shoal ledge.
#21 43°53.24' 69°34.95'	6–30	—	26 NP	1 to 4J	—	—	Known shoal ledge.
#22 43°53.41' 69°34.90'	10–30	—	25 NP	5 to 15J	—	—	Known shoal ledge. Section of drag removed.
#23 43°55.66' 69°34.27'	30	—	28	16 to 25J	—	—	Hung adjacent to charted 26 ft. sounding steep bottom profile here.

Latitude Longitude	General Depth (Ft.)	Fath Sdg. (Ft.)	Min Hang (Ft.)	Position No.	Maximum Clearance (Ft.)	Position No.	Remarks
#24 43°55.33' 69°34.31'	6-30	---	21 NP	37 to 44J	---	---	Wrapped known shoal.
#25 43°55.25' 69°34.27'	30-60	29 2E	~~24½~~ Hang not plotted occurred at start of line	~~18~~	~~21½~~ 25	~~37 - 44J~~ 6-16E	Lesser depth than charted. (See Section L of report.) 29' sdg plotted
#26 43°58.02' 69°34.46'	25-42	16½	20	1 to 5K	15	1 to 8L	NOTE:- See Hang #17 also. Same area. " " " " Pos. 7K DP (16' sdg)
#27 43°58.25' 69°34.43' *	10-30	---	15	1 to 8L*	---	---	*Wrapped known shoal. (Buoy #2) At 9 43° 58.16', F grounded temporarily at 15' effective. A 15' depth was applied to H-6842 thus moving the 18 ft. curve farther offshore.
#28 43°58.32' 69°34.45'	10-20	---	17 NP	9 to 16L	---	--- (1-8L)	N and F hung on shelf bordering the channel. Section of drag removed.
#29 43°58.75' 69°33.77'	19	---	18	17 to 20L	~~14~~ 17	~~1 to 6M~~ 10 to 36K	Lesser depth than charted. (See Section L of report.) ~~Unable to determine clearing strip fr. boat sheets.~~
#30 43°58.79' 69°33.86'	10-20	---	14	1 to 6M	---	---	Known shoal area. 14' applied to H-6842 in 15-18' depths.
#31 43°55.90' 69°35.17'	30	---	28 NP	31 to 42M	---	---	Wrapped known shoal.
#32 43°54.12' 69°34.40'	38-48	---	26	1 to 6N	~~24~~ NOT CLEARED	~~29 to 44P~~	Lesser depth than charted. (See Section L of report.)
#33 43°55.47' 69°34.68'	30	---	18' Temporary grounding 19N-28N 21	15 to 18N	~~18~~ NOT CLEARED	~~19 to 26N~~	Lesser depth than charted. (See Section L of report.)
#34 43°53.52' 69°34.95'	30	---	30 NP	45 to 54P	~~27~~	~~29 to 44H~~	Drag hung on west side of channel in known depths of 30 ft. Strip ended at moment end buoy grounded on edge of channel.

Latitude Longitude	General Depth (Ft.)	Fath Sdg. (Ft.)	Min Hang (Ft.)	Position No.	Maximum Clearance (Ft.)	Position No.	Remarks
#35 43°53.99' 69°34.57'	30	---	29 NP	1 to 11Q	---	---	Known shoal.
#36 43°53.~~62~~ 60' 69°34.87'	24	---	19	12 to 18Q	18	16 to 21R	Lesser depth than charted. (See Section L of report.)
#37 43°52.~~28~~ 29' 69°34.~~87~~ .88'	33	~~31~~ 29	~~29~~	~~23 to 25Q~~ N.P	13 not verified see H-8131 '53	23 to 33Q Sheet 1253 H-8181 (not verified 5/15/59)	Hung from start. Known shoal D.P. Pos. 15R. Strip not plotted. 29's sounding at this position.
#38 43°52.92' 69°35.13'	38	---	?	~~1 to 4R~~ NP	24	22 to 30R	This hang was at the beginning of the strip while the drag was loose. The depth of the hang is indeterminate. The drag was apparently hung on the 38 Ft. pinnacle which seems to be well developed on Sheet H-6843. Strip not plotted. Area adequately covered by other strips.
#39 43°52.~~95~~ 93' 69°34.16'	25	---	21	31 to 33R	20	1 to 9S	Known shoal. (See Section L of report.)
#40 43°52.99' 69°35.05'	30	---	34	1 to 9S	---	---	Wrapped known shoal.

ADDENDUM
To Accompany

WIRE DRAG SURVEY H-8180 WD (Field No. Wa-Hi-1153 WD)

GENERAL

All drag strips were plotted on seperate overlays and are being forwarded with the smooth sheet. These overlays contain pertinent notes which should be of some value to the verifier.

Drag strips 2 to 7A, 1 to 3G, 10 to 11G, 23 to 25Q and 1 to 4R, were not smooth plotted as the lines appeared to be questionable.

Drag strip 26 to 33S, will increase the dragged area slightly, but was not smooth plotted due to the congestion of lines in this area.

CONTROL

All topographic control had been removed from air-photo compilations covering this area and it was necessary to transfer most of the stations from bromoils of previous hydrographic surveys. These bromoils were furnished by the Washington Office.

Respectfully submitted,

Hugh L. Proffitt
Cartographer.

Norfolk, Va.
9 Sept. 1955

GEOGRAPHIC NAMES

Survey No. H- 8180 W.D.

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	
Maine										1
Johns Bay										2
Johns River										3
Damariscotta River										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

for title only

Names approved
9-29-55. L. Heck

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8180.W.D.

Records accompanying survey:

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

bomb vols. .....; graphic recorder rolls 1-Envelope

special reports, etc. 1-Descriptive report, 1-Smooth sheet, 1-A & D Sheet W.D, & 1-Envelope of overlay tracings.

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

Number of positions on sheet		1200
Number of positions checked		250
Number of positions revised		15
Number of soundings revised (refers to depth only)		2
Number of soundings erroneously spaced		-
Number of signals erroneously plotted or transferred		0
Topographic details	Time	8
Junctions	Time	0
Verification of soundings from graphic record	Time	1

Verification by D. K. Engle .... Total time 387 * Date 4-23-59

Reviewed by Ira Zeskind .... Time 51 Date 5-26-59

* First W.D. survey for Engle

M-2232-1

DIVISION OF CHARTS

Review Section - Nautical Chart Branch

REVIEW OF HYDROGRAPHIC SURVEY — REGISTRY NO. H-8180

Maine, Damariscotta & Johns River, Northern Parts — Field No. WA-HI-1153

Surveyed - May-Sept. 1953 — Scale: 1,10,000

Project No. CS-265

Soundings: — Control:

808 Depth Recorder — Sextant fixes on shore signals

Chief of Party - E. B. Brown
Surveyed by E. B. Brown, J. C. Tribble, H. J. Seaborg and R. A. Parker
Protracted by - A. Kaupa
Drag Strips inked - A. Kaupa
Verified by - D. R. Engle
Reviewed by - I. M. Zeskind 5-26-59
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with reviewed air-photographic surveys T-5991, T-5992 and T-5993 of 1941-42,

The source of the control is given in the Descriptive Report.

2. Junctions with Wire Drag Surveys

The junction with H-8181 (1953) WD on the south will be considered in the review of that survey. The present survey extends to the limit of the Project on the north.

3. Comparison with Hydrographic Surveys

A. H-791 (1860-1912) 1:10,000
H-903 (1866) 1:10,000

The above listed surveys have been superseded by H-6843 of 1943 and will not be considered in the review of the present wire-drag survey.

B. H-6842 (1943) 1:10,000
H-6843 (1943) 1:10,000

Effective depths of the present wire drag survey do not conflict with the depths on the above listed surveys. Soundings and groundings from the present survey have been transferred to these basic surveys.

4. Comparison with Chart 314 (Latest print date 10/6/58)

A. Hydrography

No conflicts were noted between the charted depths and the effective wire drag depths of the present survey. Several groundings and a sounding have been applied to the chart prior to verification and review of the present survey. Attention is directed to the following:

1. The 30-ft. curve charted in lat. 43°58.02', long. 69°34.48' should be moved about 40 meters westward. The curve originates with H-6842 (1943) where it was revised to include a 16 ft. sounding which falls on a shoal on the present survey.

2. The 30-ft. curve charted in lat. 43°56.97', long. 69°34.96', should be moved about 40 meters eastward. The curve originates with H-6843 (1943) where the curve was revised to include a 29-ft. grounding falling on the present survey.

B. Aids to Navigation

The present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended.

5. Condition of Survey

a. The Descriptive Report is complete and comprehensive.

b. The smooth plotting is neat and carefully executed.

6. Project Instructions

The survey adequately complies with the Project Instructions.

7. Additional Field Work Recommended

No additional field work is recommended.

Examined and Approved:

Max G. Ricketts
Chief, Nautical Chart Branch

Ernest B. Lewey
Chief, Chart Division

Lorin F. Woodcock
Chief, Hydrographic Branch

Samuel B. Grenell
Chief, Coastal Surveys Division

R-4 C

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Coastal Surveys: 10 October 1955

Division of Charts: R. H. Carstens

Plane of reference approved in
11 volumes of ~~soundings~~ records for
wire drag

HYDROGRAPHIC SHEET 8180

Locality Johns Bay, Maine

Chief of Party: E. B. Brown
Plane of reference is mean low water, reading
3.4 ft. on tide staff at Fort Point
14.5 ft. below B. M. 1 (1943)

2.7 ft. on tide staff at East Boothbay
16.6 ft. below B.M. 1 (1943)

2.5 ft. on tide staff at Newcastle
31.2 ft. below B.M. 1 (1943)

Height of mean high water above plane of reference is as follows:

Fort Point:	8.8 ft.
E.Boothbay:	9.0 ft.
Newcastle:	9.4 ft

Condition of records satisfactory except as noted below:

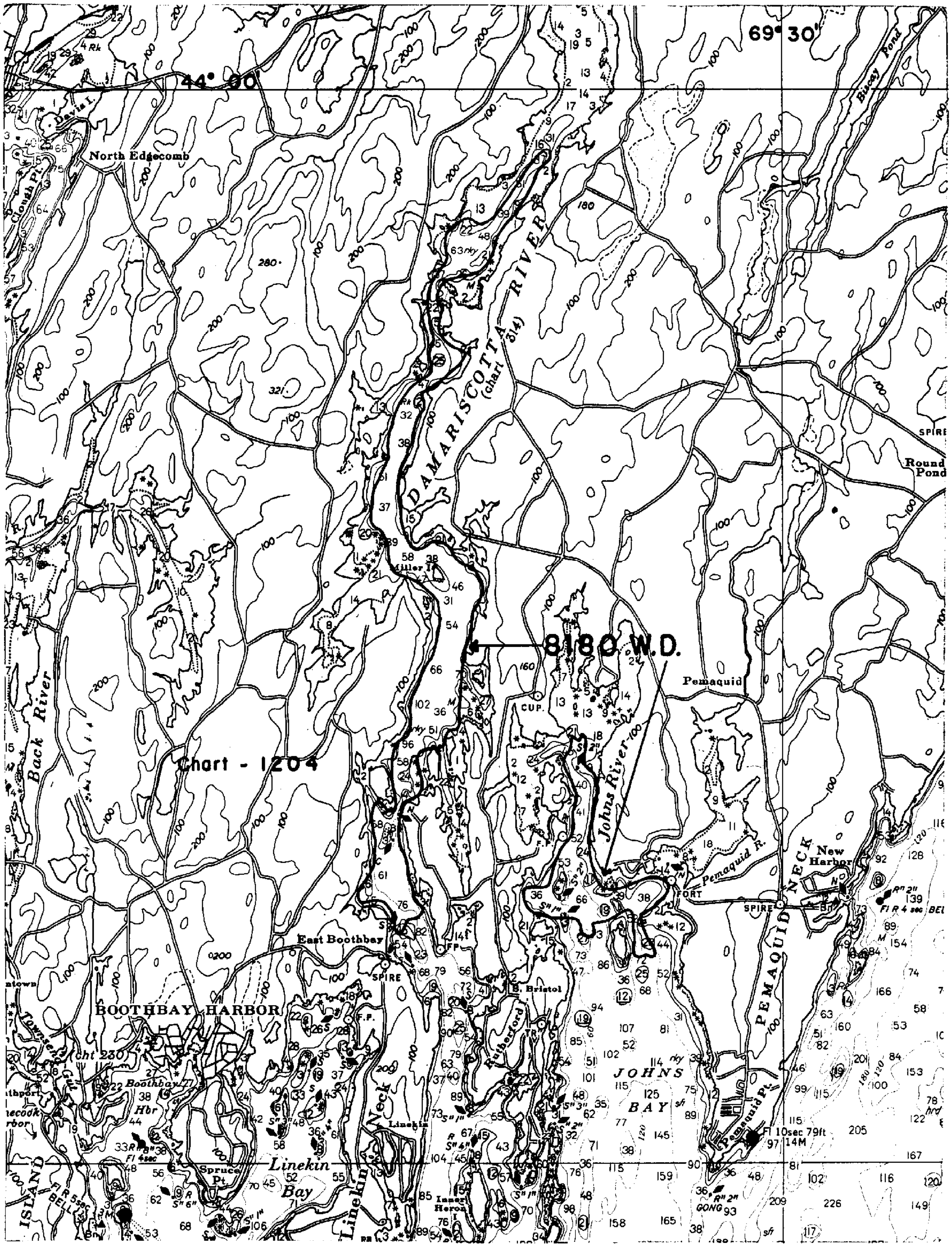
NOTE: Tide reducers for the positions listed below have been revised in red and verified:

Volume	Position
I	25A - ~~30~~ 35A ✓
II	1G - 9G ✓

Applied D.R.E.

William Shafer
Acting Chief, ~~Division of~~ Tides ~~and Currents~~ Branch

U. S. GOVERNMENT PRINTING OFFICE 877033



44° 00'
69° 30'
North Edgecomb
DAMARISCOTTA RIVER
(Chart 314)
8180 W.D.
Pemaquid
Round Pond
Back River
Chart - 1204
Johns River
Pemaquid R.
PEMAQUID NECK
New Harbor
East Boothbay
BOOTHBAY HARBOR
S. Bristol
Rutherford
JOHNS BAY
Linekin Neck
Linekin Bay
Spruce Pt
Boothbay Hbr
Pemaquid Pt.
Fl 10sec 79ft 14M

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8180 W.D.

Record of Application to Charts

Reviewed 5-26-59

DATE	CHART	CARTOGRAPHER	REMARKS
11/29/55	1204	J.J. Walker	Before ~~After~~ Verification and Review
			Examined - not applied
9-10-56	314	J.J. Walker	Before ~~After~~ Verification and Review Partially
12/17/59	314	S.C. McGann	~~Before~~ After Verification and Review Fully. SMcG
12/17/59	1204	S.C. McGann	~~Before~~ After Verification and Review Fully. SMcG
			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.