

6705 WIRE DRAG

Original

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Hydrographic~~ } Sheet No. _____
Hydrographic } Field No. 541 Wire Drag

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
JAN 26 1942
Iss. No. _____

State S.W. Alaska

LOCALITY

South side Alaska Peninsula

Entrance to Cold Bay

(Wire Drag)

1934

CHIEF OF PARTY

G. C. Mattison

6705
WIRE DRAG

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. 5.A.41 Wire Drag

REGISTER NO. **H6705 WIRE DRAG**

State S.W. Alaska

General locality Alaska Peninsula

Locality Entrance to Cold Bay

Scale 1:5000 Date of survey July - August, 1941

Vessel SURVEYOR - Launches 1, 3 and 4

Chief of Party G. C. Mattison

Surveyed by A. C. Thorson

Protracted by P. M. Fisher

Soundings penciled by P. M. Fisher

Soundings in ~~fathoms feet~~ fathoms. Effective depths in feet.

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by P. M. Fisher

Inked by _____

Verified by J. A. Mc Cormick

Instructions dated HT-219, 3/18/38 and April 26, 1941

Remarks: Report covers wire drag of entrance to Cold Bay.

Smooth sheet and plotting by Seattle Processing Office.

J. C. Partington was in charge of the End Launch assisted by C. LeFever.

G. A. Nelson filled the capacity of drag master in the Motor Sailer.

The personnel was inexperienced in wire drag but rendered excellent cooperation.

SURVEY METHODS:

On the first day 2500 feet of drag was used but due to difficulty in handling in the strong current and the narrow channel, only 1500 feet was used thereafter.

Standard methods for dual control wire drag as prescribed in Special Publication No. 118 were employed in the execution of the survey.

The clocks on the three launches were checked each morning with the chonometer aboard ship, but in plotting sheet it was concluded that on "C" day, positions 1 to 35 inclusive, the End Launch clock ran 2 minutes fast. On "F" day, positions 63 to 68 inclusive, the End Launch time recorded appears 5 minutes fast.

The predicted tides for Lenard Harbor and King Cove were meaned and used in determining the drag depths except on "A" day when Lenard Harbor predicted tides were used.

The fathometer recorder on Launch 3 was used while towing through the channel and a man assigned to constantly call out the depths. In this way it was possible to keep the end of the drag fairly close to the edge of the deep channel.

SHOALS:

The area covered by wire drag had been sounded previously this season by a party from the Str. DISCOVERER on a scale of 1:5000 using a close spacing of lines. H-6104 (1941)

On the shoal located in Latitude 55° 05' 40.7" and Longitude 162° 32' 03", the hydrographic party reported a depth of 38 feet. The drag grounded on this shoal at an effective depth of 36 feet and later cleared at ~~34~~₃₃ feet. No other shoals were found. 36 plotted.

STATISTICS

Day	Sq. Statute Miles Dragged	Stat. Miles Dragged	No. of Positions	No. of Soundings
A	0.60	1.7	58	
B	0.34	1.7	97	1
C	1.05	3.5	141	3
D	1.40	4.3	241	2
E	1.50	4.4	114	2
F	0.30	3.4	183	2
Totals:	5.1	19.0	834	9

Respectfully submitted,
A. C. Thorson
A. C. Thorson, H. & G. Engr.

ADDITIONAL NOTES BY SEATTLE PROCESSING OFFICE, Sheet 5A41

CHANNELS:

The instructions for this project say that "the deep water entrance to COLD BAY shall be wire dragged to an effective depth of not less than 42 feet". The dragging shows that the channel has a clear depth of at least 42 feet throughout its length.

The channel is not wide, but with the new light established on Kaslokan Point marking the east side, and the new black buoy marking the west side, no trouble should be experienced in entering Cold Bay.

WIRE DRAG GROUNDINGS:

From the records it appears that all groundings were investigated except for some of the groundings of the end buoys at the outer edge of the channel and for a temporary grounding of Buoy #2, Pos. 29D, at effective depth of 44 feet. The note states: "Buoy #2 grounded momentarily and pulled clear". The hydrographic sheet of this area, same year, same scale, shows 46 feet at this spot. This spot was cleared at a later date to an effective depth of 43 feet.

Notes of all groundings are shown directly on the smooth sheet. Notes removed. H-6704 (1941) shows weights to be scraping in known depths.

GEOGRAPHIC NAMES:

No new geographic names are recommended for this area.

RECORDS:

The record of the End Launch was copied into the Guide Launch book. This copying was done as neatly as possible but trouble was ✓ had in many places as the guide launch recording was not confined to its allotted place in the record form.

The data of the tender was copied in a new volume as the original tender record contained data applying to various widely scattered localities and sheets. ✓

All the transfers have been copy-checked. ✓

This is the first wire drag sheet to be plotted in the Seattle Processing Office and was new to all. The work was done slowly but thoroughly, Special Publication No. 118 being used throughout as a ✓ guide. Information on points not clear was obtained from the officers who made the survey. It is hoped that any new instructions or directions for plotting wire drag sheets will be called to our attention and copies furnished this office.

Philip C. Doran.
Philip C. Doran
Officer in Charge
Seattle Processing Office

Jan. 15, 1942

DESCRIPTIVE REPORT

H6705 WIRE DRAG

to accompany

<u>Field Sheet 5A41</u>	<u>Register No.</u>
<u>U.S.C. & G.S.S. SURVEYOR</u>	<u>G. C. MATTISON, Com'd'g.</u>
<u>Entrance to Cold Bay</u>	<u>Alaska Peninsula, Alaska</u>
<u>Project HT-219</u>	<u>Season 1941</u>

WIRE DRAG

INSTRUCTIONS:

Instructions for Str. DISCOVERER, Project HT-219 dated March 18, 1938. Supplemental Instructions dated Apr. 26, 1941. Transfer of project to Str. SURVEYOR in July 1941. ✓

EXTENT OF SURVEY:

This survey extends from Latitude 55°04' to Latitude 55°08' and from Longitude 162°30'30" to Longitude 162°33'. It covers the entrance channel to COLD BAY between the seven fathom curves. Instructions stated that the prescribed area should be dragged to an effective depth of 42 feet. ✓

EQUIPMENT USED:

Standard wire drag equipment was used in making this survey. End buoys - 55 gallon drums with hoists. Intermediate buoys - 15 gallon drums with hoists. End weight - 180 pounds. Intermediate weights - 35 to 40 pounds. Ground wire - galvanized steel strand wire. Uprights - galvanized aircraft cord. Toggles - aluminum. ✓

The testing line used by the tender was made of upright wire with painted graduations. ✓

ORGANIZATION OF PARTY:

Hydrographic Launch no. 3 was used as the guide Launch and Hydrographic Launch no. 4 as the end Launch. Open Motor Sailer no. 1 was used as a tender and also to carry all drag equipment. ✓

A hand operated reel for ground wire was mounted in the fore part of the Motor Sailer. A small roller was fitted and secured at the stern. The drag was set out over the stern and taken in over the bow. No difficulty was experienced in setting out the drag. The hand operated reel made it difficult to take in the drag. ✓

A. C. Thorson was in charge of the Guide Launch, assisted by C. R. Reed. ✓

LIST OF SIGNALS

Wire Drag Sheet Field No. 5A41

Triangulation:

GCS 1923

LAW 1923

Ly (See Descriptive Report for
Sheet Field No. 2241)

Steep (See Descriptive Report
for hydro. sheet, Field
No. 5A41). H-6704 (1941)

ZIP 1941 (See Descriptive Report
for hydro sheet, Field
No. 5A41).

From Topographic Sheet,
Field No. A-41: T-6860 (1941).

Ap	Gab	Pin
Ban	Gal	Pop
Bull	Kin	Ray
Cob	Lag	Ref
Eat	Na	Sun
		Tusk

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H6705** WIRE DRAG

Records accompanying survey:

Boat sheets two.; sounding vols. (1)..; wire drag vols. (4)..;
 bomb vols.; graphic recorder rolls;
 special reports, etc. one overlay tracing.....

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

Number of positions on sheet	.834.
Number of positions checked	..26
Number of positions revised1
Number of soundings recorded9
Number of soundings revised (refers to depth only)0
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 J.A.M. McCormick... Total time 32 hrs. Date 4/2/42.

Review by J.A.M. McCormick..... Time 4 hrs. Date 4/21/42.

Remarks

Decisions

	Remarks	Decisions
1		SS0625 U.S.G.B
2		"
3		SS0620
4		SS0625 O.S.G.B
5		
6		
7	Location of a tide staff	SS0620
8	For title	U.S.G.B
9		
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GEOGRAPHIC NAMES

Survey No. **H6705**

WIRE DRAG

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Kaslokan Point</u>											1
<u>Kelp Point</u>											2
<u>Lenard Harbor</u>											3
<u>Cold Bay</u>											4
											5
											6
<u>King Cove</u>											7
<u>Alaska Peninsula</u>											8
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L. Heck on 5/6/42

80

MEMORANDUM IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. H **H6705**
~~No. T~~ WIRE DRAG

received January 28, 1942
registered January 30, 1942
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 3	A. J. HARR	
26			
30			
40			
62			
63			
82			
✓ 83	Pg 3	WRE	
88			
90			

RETURN TO

82	R. W. Knox
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DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. 6705 W.D.
Field No. 5-A-41 W.D.

S. W. Alaska; Alaska Peninsula; Entrance to Cold Bay
Surveyed in July - August 1941, Scale 1:5,000
Instructions dated April 26, 1941 (DISCOVERER)

Wire Drag

Dual Control

Chief of Party - G. C. Mattison
Surveyed by - A. C. Thorson
Protracted by - P. M. Fisher
Subdivision of wire dragged areas by - P. M. Fisher
Inked by - P. M. Fisher
Verified by - J. A. McCormick
Reviewed by - J. A. McCormick, April 21, 1942
Inspected by - H. R. Edmonston

1. Shoreline and Signals

Shoreline and topographic signals are from T-6860 (1941). It was not considered necessary to complete the shoreline to the south end of the sheet from enlargements of old topographic surveys.

2. Results of Survey


Project instructions required dragging of the deep water entrance to Cold Bay to effective depth of not less than 42 feet. This was satisfactorily accomplished. The drag party obtained several soundings but none were materially less than those obtained by regular hydrographic development on H-6704 (1941). Because of the narrowness of the channel, the drag was scraping bottom at the edges much of the time resulting in apparent conflicts of 1 to 2 feet between soundings of H-6704 (1941) and effective drag depths. Such conflicts can be disregarded. Conflicts with chart 8703 are likewise negligible.

3. General Comment

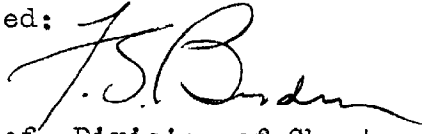
Recording in the Guide Launch records was not confined to the proper columns with the result that there was little room for entry of End Launch data (descriptive report, page 4). The plotting and inking of the smooth


sheet were excellent. Principal change in field processing contemplated for the forthcoming revision of S. P. 118 is the requirement that Area and Depth sheets be prepared in the field for all wire drag surveys. The A and D sheet for the present survey was made in the Washington Office.

Examined and approved:


Chief, Surveys Section


Chief, Section of Hydrography


Chief, Division of Charts


Chief, Division of Coastal
Surveys

LAC
HRE

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 4, 1942.

~~Division of Hydrography and Topography~~

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

Plane of reference approved in
5 volumes of sounding records for
and wire drag

HYDROGRAPHIC SHEET 6705

Locality Entrance to Cold Bay, Alaska Peninsula, Southwest Alaska

Chief of Party: G. C. Mattison in 1941
Plane of reference is mean lower low water reading
4.1 ft. on tide staff at Lenard Harbor
10.6 ft. below B. M. 1
6.3 ft. on tide staff at King Cove
23.0 ft. below B. M. 2

Tide reducers used are an average between the Lenard Harbor
and King Cove tides.

Height of mean high water above plane of reference is 6.2 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

after review
Applied to Oht. 8703 Apr. 24, 1942 K.R.
" " " 8859 & 8802 Jan. 2, 1943 S.M.A.