

4786 W.D.

Diag. Cht. No 8152-2

ORIGINAL

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

State: S. E. Alaska

11-5013

DESCRIPTIVE REPORT.

WIRE DRAG Sheet No. 4786

LOCALITY:

TELEWAK STRAIT

S. E. Alaska

McFarland Is. to Corlies Is.

192 7

CHIEF OF PARTY:

H. A. Cotton

4786 W.D.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

ORIGINAL

WIRE DRAG
~~HYDROGRAPHIC~~ TITLE SHEET

C. & G. SURVEY
L. & A.
JUN 8 1928
Acc. No.

REG. NO. 4786

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. _____

REGISTER NO. ⁴⁷⁸⁶ 4786

State S. E. Alaska

General locality Tlevak Strait

Locality McFarland Is. to Corlies Is.

Scale 1:10,000 Date of survey July 11-14, 1927

Vessel EXPLORER

Chief of Party H. A. Cotton

Surveyed by H. A. Cotton

Protracted by D. M. Watt

Soundings penciled by _____

Soundings in ~~fathoms~~ feet

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by D. M. Watt

Inked by D. M. Watt

Verified by _____

Instructions dated February 18, 1927

Remarks: _____

DESCRIPTIVE REPORT

to accompany

WIRE DRAG SHEET NO. _____ (FIELD NO. II)

McFARLAND AND CORLIES ISLANDS, S. E. ALASKA

EXTENT:

The drag work on this sheet covers the approaches to and interisland passages between the McFarland and Corlies Islands along the east side of Tlevak Straits, S. E. Alaska. In the approaches from the straits on the south and west the work extends well beyond the 100 fathom curve.

The following particular areas are included in this work:

(a) Inside the 100 fathom curve between the McFarland and Corlies Islands there is a relatively large area of deep, clear water. As much of this area was dragged as was considered practical or necessary.

(b) From the above central area the drag work extended through the main passage between the Corlies Islands. This passage is quite close to South Pass into Sukwan Straits.

(c) The channel east of the McFarland Islands was dragged from Tlevak Straits into the deeper water of the central area--the area referred to under (a)

(d) From this channel east of the McFarland Islands the passage to Island Cove anchorage was dragged. This anchorage is described in the Descriptive Report of the Hydrographic Sheet (Field No. 2); it is the most desirable anchorage in the locality.

The completed drag work covers an interisland route from Tlevak Straits into South Pass to Sukwan Straits. This passage east of the McFarland Islands and through the Corlies Islands is frequently used by smaller vessels going to and from Hydaberg and vicinity.

METHODS OF SURVEY:

Three-sixteenth inch bottom wire was used with wooden floats tested for buoyancy. Single toelines (not bridled) were used; the length of toeline was sufficient to prevent any large lift.

The drag tests indicated lifts of from nothing to two feet. Most of the time no lift was found, and the maximum lift of two feet was found but on two occasions, both on the "A" strip, Pos. 1 - 19A. On the latter strip (Pos. 1 -19A) the usual two feet lift was allowed in the records. Otherwise no lift was allowed; this it is believed was well substantiated by the drag tests.

All of this work was done during ideal weather conditions and little or no current was experienced during the work. It was unnecessary to make any allowance for swell.

When dragging through the Corlies Island passage the guide launch end of the drag was kept south of the island to the east of the passage while the end launch dragged close along the opposite shore until well through the passage and then wrapped the drag around the west side of the island until it grounded.

The two boat method of control was used throughout the work.

PLOTTING AND RECORDS:

In addition to plotting the dragged strip, launch positions were plotted and the towline position indicated for all of the work. Placing the launch and towline position on the smooth sheet greatly facilitates a review of the completed work. It also is of material assistance in correctly placing the normal position of the drag, which position is considered to be that of the celluloid strip shaped to pass through the two buoy positions.

All end launch positions were copied into the guide launch record. If simultaneous positions were not obtained the end launch position most nearly coinciding with the guide launch position was copied opposite the guide launch position. The end launch position numbers were retained as originally recorded, but simultaneous position of launches is properly indicated by the short cross lines reaching in-drag from each position. Capital day letters indicate guide launch positions while end launch positions are simply numbered.

Grounds recorded are prominently indicated in the record by a red "G" with a red circle around the letter.

GROUNDINGS:

39A - 40A - 69A - 29C - 33C - 11D - 28D - These groundings occurred in charted depths or so close inshore that little or no further investigating was considered necessary.

In the case of 40A the end launch large buoy was raised to clear the ground--this was done without instruction from the guiding launch. No record was made of the amount the buoy was raised but a raise of 20 - 25 feet would have been ample to clear. Under the $2\frac{1}{2}\%$ rule regarding the difference in height of adjacent uprights, a difference of 25 feet would have to extend over two sections. Accordingly the effective width of the drag was considered to be reduced by two sections between Positions 46 - 48c (end launch positions).

17B - 19B - 3C - 41C - 47C - 18D - These groundings occurred along the edge of channel. In redragging the new strip was carried just outside of the position of grounding and accordingly the ground was not later cleared.

19A - 44B - These groundings were later cleared with drag set at less effective depth.

In the case of 44B considerably less water was later found in the same general locality.

LENGTH OF DRAG "A" DAY:

On the occasion of setting out the drag the second time on "A" day (Pos. 20A) it was intended to put out a 5000 ft. drag of ten 500 ft. sections. After getting started a question came up as to how many sections were actually out, the boatswain always talking in terms of buoys instead of sections. At the time the result of the discussion was believed to be that there were but nine sections out. Accordingly dragging was discontinued at Pos. 25A, when a new section was placed in the drag, and then dragging continued from Pos. 26A. It would seem that after the question once came up there should have been no difficulty in definitely determining the correct number of sections out, but a review of the plotted drag work discloses situations where the drag length is too short for the distance between the large buoy positions. There is no question regarding doubtful positions, for the control was excellent; neither is there any question as to the continuity of the bottom wire. The strip between large buoys was dragged, but there is a question regarding the actual length of drag in use. It seems that possibly a 5000 ft. drag was originally set out and that when later another section was added the length of drag became 5500 ft. These lengths have been assumed in the plotting.

POSSIBLE SPLITS "A":

Considerations of the theoretical principles of plotting would probably consider a split at the junction of the strip ending at Pos. 26A and the strip commencing at Pos. 27A. It is not believed this should be considered a split. The launch positions at either end of the drag clearly indicate that

the drag was behind the launches and accordingly behind the large buoys. This consideration in connection with the drag length would indicate plenty of overlap between the two strips.

Similarly there is a possibility of considering a split at the junction of the strip ending at 39A and the one commencing at 40A. In this case the position of the drag at the first position of the second strip (Pos. 40A) has been shown as a reversed curve. The relative position of the towing launches would indicate that this was about the true position of the drag. But there is really no question in this case, as the dead-line strip 25C - 27C drags over any possible split. For this reason this dead-line strip has been plotted. Attention is called to the most probable path of the end launch from Pos. 24c to 25c (end launch positions). The end launch was making a wide swing to the right with every indication that the actual path of the launch was well to the west of a straight line connecting the positions.

RESULTS OF SURVEY:

Under EXTENT there is a detailed description of the general features which were covered by this examination. The result of the work shows that all these features were found deep and clear, no dangers to navigation being encountered.

There follows a statement of the main points.

(a) There is a good channel, deep and fairly wide, passing east of the McFarland Islands and through the center of the Corlies Islands.

(b) The entrance to Island Cove anchorage is clear and wide.

(c) All the deeper area between the McFarland Islands and the Corlies Islands (for about a mile around Profit Island) is deep and clear.

Respectfully submitted,



Harold A. Cotton,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.

STATISTICS FOR WIRE DRAG SHEET TLEVAK STRAIT, S. E. ALASKA.

DATE	DAY	No.OF POS.	SDGS.	STATUTE MILES OF DRAG	BOATS
July 11	A	69 75 1	1	6.9	EXPLORER Scandinavia Dinhey
July 12	B	45 38 2	2	5.7	No. 67 Scandinavia Motorskiff Tender No. 1
July 13	C	66 62 8	8	8.6	No. 67 Scandinavia Motorskiff
July 14	D	36 34 2	2	4.5	No. 67 Scandinavia Motorskiff
TOTALS		438	13	25.7	

(11)

P.S.H.

Copy for Section of Field Records files.

June 19, 1928.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 4788

Locality: **TELEVAK STRAIT, S.E. ALASKA**

Chief of Party: **H. A. Cotton, 1927.**

Plane of reference is **M L L W**
5.2 ft. on tide staff at **Island Cove.**

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Chief, Division of Tides and Currents.

Remarks

Decisions

	Remarks	Decisions
1	<i>For Title Only</i>	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. H-4786

Name on Survey	Sources									
	A	B	C	D	E	F	G	H	K	
	On Chart No. 8148	On previous survey No. 7-2838, 4329	On U. S. quadrangle Prince Maps Atlas I.	From local information	Baker's Dict. on Coast Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>TLEVAK STRAIT</u>	✓	✓	✓		✓					1
<u>CORLIES ISLANDS</u>	✓	✓	✓		✓					2
<u>SUKKWAN ISLAND</u>	✓	✓	✓		✓					3
<u>KELLOGG POINT</u>	✓	✓	✓		✓					4
<u>ISLAND BAY</u>	✓	F-4342 ✓	✓							5
<u>McFARLAND ISLANDS</u>	✓	✓	✓		✓					6
<u>DUNBAR INLET</u>	✓	✓	✓		✓					7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

GTE
 1/20/38