

4319

Diag. Chart No. 8302-B

4319

<p>Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY</p>	
<p>State: <u>S.E. Alaska</u></p>	
<p>11-5615</p>	
<p>DESCRIPTIVE REPORT.</p>	
<p>Hydrog. ⁽⁵⁾ Sheet No. <u>4319</u></p>	
<p>LOCALITY:</p>	
<p><u>Icy Strait</u></p>	
<p><u>Port Frederick</u></p>	
<p>1923</p>	
<p>CHIEF OF PARTY:</p>	
<p><u>J.H. Hawley</u></p>	

DESCRIPTIVE REPORT
TO ACCOMPANY HYDROGRAPHIC SHEET #5.

Fort Frederick

and

Neka Bay

S. E. Alaska

Season 1923.

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USS EXPLORER

Date of this report is
January 26, 1924.

DESCRIPTIVE REPORT
to Accompany Hydrographic Sheet #5.

This report is made in accordance with instructions issued to Captain J. H. Hawley, dated February 16, 1923.

Location:

This hydrography extends in Port Frederick, Chichagof Island, S.E. Alaska, from former hydrography just inside entrance of Port Frederick to its head, close to Tenakee Inlet. This distance is about 16 statute miles.

Sounding Lines:

Sounding lines are run normal to the shore and approximately 400 meters apart in depths over 20 fathoms. In depths of about 20 fathoms and less 200 meter lines are run, and in depths indicating shoals these lines are closer. At the former hydrography and where the new work started, one overlap line is run for check.

Shoals and Wire Drag:

About 2/3 of a mile NNE from signal "Fred" a 33 fathom sounding rises from 66 fathoms. This is dragged over with an effective depth of 85 feet.

On the shoal 9/10 of a mile WNE from Chimney Rock there is 33 feet, obtained by the wire drag. On the shoal N x W from Chimney Rock there is 37 feet, also developed by the wire drag.

General Features:

Entering Port Frederick over the present hydrography the depths ranged from about 80 fathoms in the center of the channel, near signal "Long", to about 55 fathoms near mid channel off Midway Island. The depths fronting Neka Bay are abrupt but then continuing in the bay the soundings even and gradually rise to the mud flats at the head. A ridge of 25 or 30 fathoms extends across Port Frederick at Midway Island and then deepens abruptly to 80 fathoms through the narrows and then rising to 20 odd fathoms off signal "Gin". It then deepens for about a mile to 30 odd fathoms and then gradually shoals up to the mud flats west of signal "Ten". Midway rocks are very abrupt and of small extent. The low tide shore line is very abrupt throughout the sheet. At high water it is believed an ordinary gas boat drawing 2 or 3 feet can travel all over the tide flats at the head of Neka Bay. The current at ebb and flood at the neck ^{in the vicinity} of signal "Gun" is very strong.

The mud flats west of signal "Ten" to the narrow portage to Tenakee Inlet are also navigable at high water by an ordinary gas boat drawing a few feet. This portage which is about 20 feet high has skids across the 100 meters to the Inlet ~~or~~ ^{er} ~~se~~, for small boats to be hauled across. At the Tenakee side of the portage are three 15 foot square Indian smoke houses.

Anchorage:

Besides the anchorage off the town of Hooniah, Neka Bay and in the bight off signal "Bite" should make good anchorages. The bottom is mud. The writer has never been at either of the latter places during a storm and is not familiar with the wind effects. However, it would seem

likely the wind would draw through the Neka Bay head.

At the head of Salt Lake Bay southwest of signal "Bad" is a fine halibut boat anchorage. The neck at signal "Bad" has strong currents at ebb and flood tide.

Neka Bay, Port Frederick and Mud Bay, Icy Strait.

An "Old Timer" at Hoonah says there is low land from the mud flats at the head of Neka Bay across Chichagof Island and into the deep level valley of Mud Bay. This is forwarded for rough "form lines" or for what it may be worth for the charts.

Lake:

Up in back of the large bight midway between signals "Hump" and "Back" there is a lake about a mile in diameter about 2 miles inland and toward the north.

Tide Gauges:

An automatic tide gauge was established at the cannery at Hoonah. The soundings down to Chimney Rock were reduced to M.L.L.W. from this gauge. A plane staff was established near signal "Bad" in Salt Lake Bay and all soundings south of Chimney Rock were reduced from this station's data.

Supplies:

Small ship chandlery, sea stores and lumber can be obtained in limited quantities at Hoonah. Water is limited except during rainy seasons. Water can be obtained at the cannery at Excursion Inlet entrance and probably at the cannery at the head, also at the cannery in Dundas Bay and in Port Althorp. During the cannery season it is thought emergency sea stores in limited quantities can be obtained at all the canneries.

Scale of sheet and Depth Unit:

Scale of sheet is 1 : 20,000.
Depths are in fathoms.
Wire drag soundings are in feet.

Coloring:

On the smooth sheet the system for coloring the wire drag work is as follows:

19 feet and under	- - - - -	-Brown
20 to 29 feet	- - - - -	-Yellow
30 to 39 feet	- - - - -	-Blue
40 to 59 feet	- - - - -	-Red
60 to 79 feet	- - - - -	-Purple
80 feet and over	- - - - -	-Orange.

Boat used:

Soundings were taken from Tender #1 using hand sounding machine with the dial set at 0 with the lead at the water surface.

Landing Fields for Airplanes.

It is believed in the farming country north of Icy Passage just east of Salmon River mouth a good landing field is available. This is approachable from all directions, by air.

3.

Wireless Stations:

Besides the Naval Radio Station at Soapstone Point, Cross Sound the Deep Sea Salmon Cannery at Port Althorp maintain a private wireless station during the cannery season.

Charles Shaw

Charles Shaw, Commanding Str. EXPLORER.

Note: This report should be referred to J. H. Hawley for additional remarks if desirable.

STATISTICS SHEET NO.5.
Hydrographic.

Date:	1923:	Letter:	Vol.:	Positions:	Sndgs:	Stat.Miles:	Vessels:
Sept.	3	a	1	72	150	16.5	Tender #1
"	4	b	1	81	165	20.5	"
"	5	c	1	19	37	4.5	"
"	6	d	1	74	158	20.0	"
"	7	e	1-2	94	200	21.0	"
"	13	f	2	89	231	20.7	"
"	14	g	2	101	253	23.0	"
"	15	h	2-3	85	203	15.0	"
"	17	j	3	139	289	18.0	"
"	18	k	3-4	100	214	14.5	"
"	20	l	4	68	170	15.0	"
"	21	m	4	117	292	27.0	"
Oct.	1	n	4-5	92	297	19.0	"
"	2	p	5	77	218	16.0	"
Total.....				1208	2877	250.7	

Soundings in fathoms.

Reference plane Mean Lower Low Water.

Automatic tide gauge and staff at Hooniah Cannery used for soundings to Chimney Rk.

Tide staff at Salt Lake Bay used for soundings from Chimney Rk. to Portage.

Hooniah tides corrected for Salt Lake Bay used for 1 day, Sept. 20.

M.L.L.W. reading on gauge at Hooniah 5.9; on staff at Salt Lake 2.7

Lowest tide observed at Hooniah 4.3 (Sept. 13); at Salt Lake 1.6 (Sept. 13)

Highest tide observed at Hooniah 23.9 (Sept. 13); at Salt Lake 21.5 (Sept. 13)

STATISTICS SHEET NO. 5.

Wire Drag.

Date:	1923:	Letter:	Vol.:	Positions:	Sndgs:	Stat. Miles:	Vessels:
Sept.	21	A	1	78	2	8.7	Scandinavia & Helianthus
Oct.	2	B	1	<u>135</u>	<u>2</u>	<u>3.3</u>	"
Total.....				213	4	12.0	

Soundings in feet.

Reference plane Mean Lower Low Water.

Automatic tide gauge and staff at Hooniah Cannery used in reduction of soundings.

Report on Hyd. Sheet #4319

Surveyed in 1923

Chief of Party: J. W. Hawley.

Surveyed by: Charles Shaw, W. T. Combs.

Inked and
Verified by: S. Ricegani

(Soundings)
Drag Work: R. L. Johnston.

1. The character and completeness of the records and notes fulfill the requirements of the General Instructions.
2. The plotting is excellent.
3. The plotting of soundings was satisfactory and the time intervals were carefully adhered to. Attention at this instance may be called to the fact that owing to the inability to locate by cuts, signal "House" four soundings from 44j to 45j had to be rejected. This signal was missed by the topographer on account of its obscurity, but cuts to "House" were made later while running to drag Barney Channel, which work was done on another sheet.
4. The area covered by the sounding work on this sheet appears to be sufficiently developed. In addition to this work, two shoaler areas were wire dragged.

Drag Work Report by R. L. Johnston.

No Area and Depth tracing was prepared for this drag work. The areas covered by the drag are indicated by a tint on the sheet.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REFER TO No. 4-DEM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON June 10, 1924.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4319

Port Frederick, Alaska

Surveyed in 1923

Instructions dated February 16, 1923

Chief of Party, J. H. Hawley.

Surveyed by C. Shaw and W. T. Combs.

Protracted by H. E. MacEwen.

Soundings plotted by A. A. Parker.

Verified and inked by G. Risegari.

Wire drag work verified by R. L. Johnston.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development satisfy the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The plotting was completed to the extent prescribed by the General Instructions and none of it had to be done over in the office.
7. The junction with the adjoining work on the north is satisfactory.
8. No additional lead line work is required within the area covered by this sheet. The entrance to North Bight and the vicinity of Midway Island should be dragged.
9. The character and scope of the surveying and field drafting are excellent.
10. Reviewed by E. P. Ellis, June, 1924.

March 25, 1924.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
6 volumes of sounding records for
1 " " wire drag
HYDROGRAPHIC SHEET 4519

Locality: Port Frederick, S. E. Alaska.

Chief of Party: J. H. Hawley in 1923.
Plane of reference is mean lower low water reading
2.7 ft. on tide staff at Salt Lake Bay
5.9 " " automatic gauge at Hooniah Cannery.

For reduction of soundings, 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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET
#5

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. (5) 4319

State . S.E. Alaska

General locality . ^{Icy Strait} ~~Chichagof I.~~

Locality . Port Frederick

Chief of party . J. H. Hawley

Surveyed by . Charles Shaw, W. T. Combs

Date of survey . September 1923

Scale . 1: 20000

Soundings in . Fathoms

Plane of reference . Mean Lower Low Water

Protracted by . H. E. M. ^{ac Ewen} . Soundings in pencil by . A. A. Parker

Inked by *S. Prigun* . Verified by *S. Prigun* .

Records accompanying sheet (check those forwarded):

Des. report, 8 Tide books, — Marigrams, 1 Boat sheets,

6 Sounding books, 1 Wire-drag books, — Photographs.

Data from other sources affecting sheet . none

Remarks: