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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. H. TITTMANN,
Superintendent.

State: ALASKA

DESCRIPTIVE REPORT.

Hyd. _____ Sheet No. 3578

LOCALITY:

Shumagin Islands
Delarof Harbor,
and Entrance.

1913

CHIEF OF PARTY:

J. B. MILLER

11-4845

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DEPARTMENT OF COMMERCE
Coast and Geodetic Survey

O. H. Tittmann, Supt.

ALASKA

Shumagin Islands

ORIGINAL HYDROGRAPHIC SHEET 3578

DELAROF HARBOR AND ENTRANCE.

Surveyed in September and October, 1913 by the party on the C. &
G. Survey Str. PATTERSON

James B. Miller, Assistant, C. & G. Survey, Chief of Party.

George C. Mattison, Aid, C. & G. Survey in charge of hydro-
graphic party.

SCALE 1: 10,000

POSITIONS PLOTTED BY

George C. Mattison

DEPARTMENT OF COMMERCE
Coast and Geodetic Survey,

O. H. Tittmann, Supt.

SOUTHWEST ALASKA

Shumagin Islands

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET NO. 3578

Surveyed by the Steamer PATTERSON, September - October,
1913.

1. REPORT, LIMITS, SCALE, METHODS, OBSERVER.

I have the honor to report as follows, upon hydrographic sheet No. 5, which shows hydrography in Delarof Harbor, Shumagin Islands, Southwest Alaska, as executed in September and October, 1913, by a party from the Steamer PATTERSON. The work done, extends from the head of the bay to a line drawn from Half Way Rock to the pinnacle rock, just south of the entrance. The scale is 1: 10,000. All the sounding was done with the hand lead, from Launch No. 47, lines being spaced 50 meters in the outer harbor and 100 meters near the head of the bay. The closing of the season's work left an unfinished strip in the center of the bay, between longitude $160^{\circ} - 31' - 30''$ and $160^{\circ} - 32'$. The observer was George C. Mattison, Aid, C. & G. Survey.

2. DANGERS.

There is a rock, which bares at extreme low water, in the center of the entrance. It is 800 meters S. (true) from the southeast end of Cross Island. There is a rocky ledge 10 meters across, which bares 2 feet at low tide. It is 400 meters S. (true) from the wharf at Unga, and 230 meters E. (true) from the end of the rocky point, opposite Unga. The whole inner part of the bay is shoal. In the center of the part not sounded over, is a rocky ledge about 150 meters across which bares at extreme low tide.

3. CHARACTER OF BOTTOM.

The bottom is all sandy, except for a few rocky patches. There is a rocky reef around almost the whole bay, close to shore. The head of the bay is sandy, with several large grass patches scattered through it. The deep bight southwest of Unga Village, on the opposite side of the harbor, is very foul with boulders. The bottom between the little island, near the south shore of the entrance, and the shore is shoal and rocky, and covered with kelp.

4. ANCHORAGES.

The holding bottom is not very good in Delarof Harbor, for the heavy winds and seas to which the place is exposed. Large vessels anchor in various places in the outer harbor in from 5 to 10 fathoms. Small vessels anchor usually in 2 or 3 fathoms, from 100 to 250 meters W or SW from the rocky island southwest of Flagstaff Hill. This place is not very safe for heavy blows, unless the ground tackle is very heavy. The sloops and schooners that usually anchor here, run to the head of the bay in threatening weather, and anchor 100 or 150 meters south of the sand island, in the northwest corner. This is also their winter anchorage.

5. CURRENTS.

Tidal currents are very strong at the narrow entrance to the upper part of the bay, flowing at an estimated speed of 2 1/2 knots at maximum flood or ebb.

6. DIRECTIONS

For entering the harbor, when the point opposite Unga Village bears N 74° W (true), run towards this point on course N 74° W (true.)

Respectfully submitted,

G. C. Mattison

Aid, C. & G. Survey.

APPROVED:

James B. Miller
Assistant, C. & G. Survey,
Chief of Party.

To the Superintendent,
Coast and Geodetic Survey,
Washington, D. C.

At Sea, November 10, 1913.

SHEET NO. 3578

SHUMAGIN ISLANDS,

S. W. ALASKA

DATE 1913.	BOAT	LETTER	VOL.	HOURS	POSITIONS	SDGS.	MILES (stat.)
Sept. 23	Launch No.47	a	1	9.5	159	477	21.4
" 24	" "	b	1	0.8	8	21	0.8
" 30	" "	c	1	4.0	101	356	10.1
Oct. 1	" "	d	1&2	2.5	82	573	11.6
" 6	" "	e	2	2.0	54	327	5.4
				18.5	404	1754	49.3

Sq. statute Miles: 2

VEC
Mar. 28, 1914.

HYDROGRAPHIC SHEET 3578.

Delarof Harbor and Entrance, Shumagin Island, Alaska,
by Asst. J. B. Miller in 1913.

TIDES.

	Sand Point ft.
Mean lower low water, or plane of reference on staff	3.5
Lowest tide observed " "	1.6
Highest " " " "	13.1
Mean range of tide	5.1

REPORT ON HYDROGRAPHIC SHEET 3578. Nov. 5, 1915.

(Delarof Hbr. Shumagin Ids., Alaska.)

The protracting, plotting, and curves on this sheet were verified by me. No appreciable errors were found, though one or two fractional soundings were altered, and the curves were smoothed out. The altered curves were checked and the work was well done; soundings well spaced, lines well spaced, and quite straight, except in one spot where there appeared to have been trouble with currents.

A very slight criticism could be made relative to the penciled soundings: though the dots along the lines between the positions were correctly spaced, the soundings were written over them in such large, and slanting, figures that it was sometimes difficult to tell directly where the inked figures should be placed.

The soundings and curves were inked by the undersigned.

Colin R. Hart

 LIBRARY

Place with descriptive report
of hydrographic sheet No. 3578

G.P.T.
Drawing Section.

H. 3578.

Sufficient soundings to carry the 3 fm curve continuously along the shores of the surveyed area should have been obtained. Sheet examined in Div. of Hyd'y & Top'y.

Applied to chart 16553 NOV. 1977 Martof