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Department of Commerce and Labor

COAST AND GEODETIC SURVEY

O. H. Tittmann
Superintendent.

State: Alaska

DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2984

LOCALITY:

Prince William Sound,
Knight Island, Snug
Harbor to Lower
Passage

1908

CHIEF OF PARTY:

Gilbert T. Rude

2984

2984

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Descriptive Report

to

accompany Hydrographic Sheet No ——

~~Lower Pass to Discovery Bay,~~ Snug Harbor to Lower Passage

Knight Isld, Prince William Sound,

Alaska

1908.

Scale 1-20,000.

Chief of Party Gilbert T. Rude.

The instructions for this work called for a hydrographic survey along the shore of Knight Island to join that already done off shore, the hydrography of the Bays, hydrographic examination in the vicinity of and location of the rock on which the Manning struck in 1907 and a hydrographic examination in the vicinity of the 9 fath. spot, about, one mile north east of Seal Island.

For this work a plain tide staff was built in Bay of Isles, South Arm, and a datum plane established by a series of observations extending over a period of twenty-eight days.

An examination of vicinity of Manning Rock by running a close system of parallel lines over the suspicious area and afterwards the most suspicious soundings were visited in a dinghy and the rocks were found by "feeling" with the

lead and following it to the summit. The same system of development was used over the suspicious area north of Seal Island and the rock found on which the "Pennsylvania" struck in July, 1908. These rocks were the subjects of my reports of July 27th, August 17th and 24th, 1908.

A shoal was found and developed at the north limits of the work, another in the cove about a mile south of the northern limit. A rock was found and developed about a half mile S.E. of Hunter Point.

There is from 6 to 50 fathoms of water in the Bay of Islands, but the bottom is rocky, making it a very poor anchorage. It also abounds in pinnacle rocks, some awash at extreme low water and some never uncovering. About thirty were located in and at the mouth of the Bay. The entrance to the Bay of Islands is along the north shore, the south entrance being filled with pinnacle rocks, bare only at extreme low water. These were located and are shown on hydrographic sheet.

Marsha Bay, from 9 to 60 fathoms deep, is landlocked by a small island across its mouth. It is a poor anchorage on account of the rocky bottom and it would be difficult for large steamers to enter the narrow and crooked entrance. The channel on the north side of the island is wider but it is foul and could not be

used. A rock was found and thoroughly developed off the south point, at the entrance to the bay.
The signals for this work were located by triangulation of 1905 and topography of 1908.

Respectfully submitted
Gilbert T. Rude,
Asst, C&G. Survey,
Chief of Party.

Statistics for Hyd. Sheet No. 2984

Date	Letter	Volume	Positions	Soundings	Miles (Naut)	Boat
August 11, 1908	a	1	79	200	6.0	Str. "Taku" & Whaleboat
" 14, "	b	1	82	113	9.3	" "
" 18, "	c	1+2	137	144	11.6	" "
" 19, "	d	2	100	226	11.0	" "
" 20,	e	2	52	124	3.7	" "
" 21,	f	2	44	53	6.2	" " & Whaleboat
" 22,	g	2+3	76	75	11.9	" "
" 25,	h	3	15	15	1.0	" "
" 26,	i	3	112	171	15.5	" "
" 27,	k	3+4	132	264	16.0	" "
" 28,	l	4	115	177	12.0	" " & Dinghy
" 29,	m	4	17	48	1.3	" "
" 30,	n	4	2	2	0.0	" "
" 31,	o	4	50	79	3.4	" "
September 2,	p	4+5	53	53	10.4	" "
" 3,	q	5	82	82	15.0	" "
" 4,	r	5	117	249	7.7	" " & Dinghy
" 5,	s	5	3	3	0.0	" "
" 12,	t	5	12	26	0.9	" "
" 18,	u	5	19	19	2.6	" "
12,	a	6	9	28	0.4	Dinghy
Totals		6	1,308	2,151	145.9	Totals

Soundings plotted in feet.

Protracted by Field Party
Plotted and inked by H. L. Simons
Verified and curves drawn by R. L. Johnston

Hyd. Sheet No. 2984. Apr. 12, 1909.

This work is altogether too open for a good development of the area especially within the 50 fath curve as the bottom is unusually broken and felled with pinnacles. In many places it is impossible to draw the curves on account of the weak development.

There are several suspicious areas which should have been examined.

11c is given as the position of a sunken rock with a depth of 2 feet over it at low water while a note, on the same page of the records, states that the rock could not be approached for a sounding on account of rough water.

There are an unusual ~~large~~ number of no-bottom soundings on this sheet.

H. R. Simons

11b, which is given as the position of a rock in the Bay of Isles, is somewhat doubtful. It is impossible to protract this, by using the signals in the order recorded. Either the angles or signals are reversed, but as the angles are nearly equal it does not change the location perceptibly to reverse them, therefore it is approximately correct. This work is very good but the lines should have been run more closely in some places. Verified Nov. 8th, 1910.

R. L. Johnston

V.E.C.
March 23,1909.

HYDROGRAPHIC SHEET NO. 2984.

Lower Pass to Discovery Bay, Knight Island, Prince William Sound, Alaska, by Asst. Gilbert T. Rude, in 1908.

TIDES.

	Bay of Isles ft.
Mean lower low water, or plane of reference on staff	5.1
Lowest tide observed " "	1.9
Highest " " " "	18.5
Mean range of tides	9.6

Coast and Geodetic Survey
MAR 23 1909
TIDAL DIVISION.