

3941
See Topo. 2746a

Diag. Cht. No. 8201-2

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	HYDROGRAPHIC
Field No.	Office No. H-3941
LOCALITY	
State	ALASKA
General locality	ROCKY BAY, MCHENERY INLET &
Locality	BURNETT INLET
1916	
CHIEF OF PARTY	
C. G. Quillian	
LIBRARY & ARCHIVES	
DATE	MARCH 14, 1917

6-1870-1 (1)

3941

Also see Topo 2746a

DESCRIPTIVE REPORT SHEET NO.....

ROCKY BAY AND BURNETT INLET

I. ROCKY BAY

GENERAL DESCRIPTION

Rocky Bay lies between Point Stanhope and a line to the entrance of Mosman Inlet.

As the name implies this area is thickly dotted with rocky islets and sunken rocks. This locality was examined during extreme low tide and can only be described as a mass of rocks with a few narrow channels between.

This body of water is very difficult to navigate and strangers should approach with caution and only with the use of charts. It is recommended that Rocky Bay be navigated only during low water as the narrow channels are most clearly defined at that time.

In sharp distinction to Kashevarof Passage, the rocks and dangers obstructing navigation were not marked by kelp, and are therefore seen with difficulty until one is dangerously near them. The south end of Point Stanhope, however, is marked by kelp.

At extreme high tide only the rocky islets are visible and the Bay has a deceptively clear appearance.

The outside limits of reefs and the positions of rocks bare at M.L.L.W. were located at extreme low tides by sextant angles.

This body of water is used during the salmon season by cannery and fishing boats which are run by persons with local knowledge. It has been noticed that the channel between Stanhope Island and Etolin Island is used by cannery people only at flood tide. No sounding lines were run in this channel and nothing can be said regarding it.

The hydrography is not quite complete. A small cove NW of signal EM, the channels between Stanhope Island and Etolin Island, the area in the vicinity of the west entrance to Mosman Inlet are untouched because the launch was not in working order, and by the time it was repaired bad weather set in, making hydrography impossible.

DANGERS IN ROCKY BAY

A ROCK bearing 46° true from the small island off Point Stanhope and distant 1640 meters is awash at M.L.L.W.

A ROCK bearing 52° true from the same island and distant 2340 meters bares 11 feet at M.L.L.W. and another rock 200 meters east true, bares 2 feet at M.L.L.W.

A ROCK bearing 35° true from the same island and distant 3000 meters bares 6 feet at M.L.L.W.

A ROCK bearing 34° true from the same island and distant 3360 meters is awash at M.L.L.W.

A ROCK bearing $20^{\circ} 30'$ from the same island and distant 3140 meters is awash at M.L.L.W.

The three rocks above form the outlying dangers of a rocky area whose center lies 28° true from the same island and distant 3050 meters, which bares 5 feet at M.L.L.W. The extreme east end on the 5 fathom curve bears 41° true from the same island, the extreme north end on the 5 fathom curve bears 19° true and the shoal area extends east and west 1130 meters and north and south 970 meters between the 5 fathom curve.

A ROCK bearing 250° true and distant 3820 meters from Mosman Point, baring 3 feet at M.L.L.W. forms the south end of a rocky shoal area in a ridge, with occasional rocks baring at M.L.L.W. extending north to a small island distant 1300 meters, This small island forms the center of a rocky reef extending in a semicircle to the N.E. and S. at a distance of about 370 meters from the shore of the island.

A ROCK bearing 283° true and distant 2300 meters from Mosman Point, and distant 400 meters from two small islands to the north is awash at M.L.L.W. and lies between the 5 and 10 fathom curves. This rock forms the south end of a series of small islands and rocks extending 328° true from this rock to the shore.

A ROCK bearing 303° true and distant 2540 meters from Point Mosman bares 9 feet at M.L.L.W. and forms the S.E. end of a shoal area baring 10 feet at M.L.L.W. and extending to the N.W. 200 meters between the low water line. The area between this shoal and the island to the W. and S.W. is foul.

A ROCK 220 meters, 85° true from the shore of a small island at the head of the easterly arm of the Bay bares 8 feet at M.L.L.W. and lies within the 5 fathom curve.

A SHOAL area 1750 meters, 255° true from Point Mosman bares 3 feet at M.L.L.W. and extends 700 meters toward Point Mosman. At the end nearest Point Mosman is a rock in 5 fathoms baring 6 feet at M.L.L.W. The area between this shoal and Point Mosman is foul extending out from Point Mosman fan shaped. The extremities of this area which are marked by two rocks with 4 feet at M.L.L.W. bear 232° true and 272° true from Point Mosman and are distant 1275 and 1350 meters respectively from it.

ANCHORAGES

Small boats may find an anchorage at the northwest end of Rocky Bay opposite signal CHIN, behind behind a group of small sparsely wooded islets. Three to four fathoms, soft bottom.

At the north end behind signal PALM shelter may be had in severe S.E. weather. The bottom is not uniform and the holding ground is uncertain.

There are several small coves and bights near the west shore and they offer anchorage to small motorboats in any weather.

WATERSUPPLY

A large stream ~~empties~~ empties at the N.W. end and connects Street Lake with Rocky Bay. Mud flats extend about 200 meters south of a prominent

cabin. Water may be boated in a flat bottomed boat at high tide.

There is another stream about 150 meters east of the cabin and boats may be watered without any difficulty.

During the salmon season these streams are full of salmon which are bound for the lakes.

At the north end a stream empties about 300 meters S.E. of signal CORD. At high tides Launch No. 47 anchored right off the stream with the stern hauled alongside the steep rocky beach and the water was passed aboard with buckets.

CURRENTS

Little or no current was experienced by the sounding parties as the lines were run North and South in the direction of the currents.

II. McHENRY INLET

GENERAL DESCRIPTION

The entrance to McHenry Inlet is situated about 5 miles East of Point Stanhope and is blocked by several small wooded islets and bare rocks. The Inlet is horn/shaped, about 4 miles long, and about $\frac{3}{4}$ mile wide in its widest part. The approaches are deep and an entrance may be found ~~####~~ north of Range Island (so called by the sounding party).

ROCKS AND DANGERS

The shores are more or less foul and bare from about 50 to 100 meters.

A ROCKY SHOAL located by wire drag (see boat Sheet) with about 8 feet over it at M.L.L.W. lies about 700 meters, 210° true from signal HARD.

A ROCK bare about 1 foot at M.L.L.W. lies 700 meters, 0° true from Range Island. This rock covers an area of about 160 square meters.

The area between signals ZERO and LICH is foul with deep water between the rocks.

Jadski Cove is apparently clear inside. The entrance, however, is obstructed by rocks, and a passage is not recommended for small boats except at high water.

A LEDGE which bares at half tide lies about 1300 meters, 222° true from Range Island. The exact location is given on the topographic sheet.

No hydrography was done in the area between signals FOUR and NAV, but this area is known to be more or less foul.

RANGE ISLAND (so called by the hydrographic party because of its use as a range in entering McHenry Inlet) lies just South of the channel and forms the end of an irregular half moon of islands extending towards the South and East to within about 300 meters of the shore.

Mc Henry Islet (so called by hydrographic party) is a small wooded

islet lying south, true, and distant 2925 meters from Range Island. The area to the North, true, of Mc Henry Inlet is foul and studded with rocks, some of them bearing at M.L.L.W. for a distance of 500 meters to the 5 fathom curve.

A ROCK 500 meters, 75° true from Mc Henry Islet lies in about 10 fathoms with 1½ feet over it at M.L.L.W.

NUT ROCK (so called by hydrographic party) is a bare rock 675 meters, 220° true from McHenry Islet.

The low water line at the head of McHenry Inlet runs well out from the shore line.

A LEDGE bearing 6 feet at M.L.L.W. lies 180° true from the south point of a small island at the head of the Inlet and 200 meters distant.

BURNETT INLET is apparently free from rocks and contains plenty of water.

SAILING DIRECTIONS AND ANCHORAGE

When approaching McHenry Inlet from Point Stanhope steer 81° true (N.E. ½ E. mag) from a point about 1 mile south of Point Stanhope. This course should lead about 150 meters north of Range Island. When about 300 meters off Range Island, steer 91° true (N.E. x E. 3/8 E. mag) heading for the south end of a prominent slide. This course leads between Nut Rock and McHenry Islet, favoring Nut Rock. Continue this course until well past McHenry Islet and steer for a house (known as signal GAB) on a course 67° true (N.E. ¾ N. mag) leaving Nut Rock over the stern. Follow this course until a rock with a prominent large tree is 500 meters on the port hand, then steer 39° true (N. 7/8 E. mag) heading for a large prominent dead tree. Then haul midchannel until the dead tree is abeam and anchor in 14 to 18 fathoms sticky bottom.

WATER SUPPLY

Two large streams enter at the head of the Inlet but there are no means to boat the water.

A smaller stream is located behind the house (signal GAB). To water Launch No. 47 a skiff with two barrels was hauled up to the stream as close as possible and filled with the aid of buckets, which was a slow process indeed.

CURRENTS

Little or no tidal current was experienced in Mc Henry Inlet.

METHOD EMPLOYED IN THE SURVEY OF ROCKY BAY AND MCHENRY INLET.

The work was executed according to the Superintendent's instructions dated Febr. 1916.

With the exception of one day Launch No.47 was used with Cosmos Steam

Sounding Machine.

Hand lead was used up to 10 fathoms.

The shores, rocks and Islets were approached as closely as possible without endangering the launch.

Lines were run about 350 meters apart and development was ^{not} done, as all obstructions were located at extreme low tides and this area not considered important enough.

Off McHenry Inlet the lines were run from 150 to 200 meters apart. Inside of McHenry Inlet five lines were run in midchannel about 75 meters apart and inside of Nut Rock the spacing varies, depending on the nature of the bottom. Several cross lines were run to verify the depths.

The work was controlled by signals located by tertiary triangulation and by the plane table.

Respectfully Submitted
H. Hiddick. Mate U. S. Survey

Statistics Sheet No.
of
McHenry Inlet, Rocky Bay and Burnett Inlet.

Date 1916	Letter	Vol- ume	Posi- tions	Sound- ings	Miles Statute	M. to Boat work	M. from work
Jul 15	A	6	26	5		Reconnaissance	
Jul 16	B	6	123			Reconnaissance	
Jul 17	X	6	4			Reconnaissance	
Sep 1	a	1	50	192	8.5	#38	2.5 8.5
Sep 8	a	2	39	155	6.4	#47	0.0 7.0
Sep 9	b	2	70	261	14.6	#47	0.0 0.0
Sep 12	c	2	64	269	11.8	#47	0.0 5.5
Sep 13	d	2	45	238	8.1	#47	8.0 11.0
Sep 14	e	2&3	123	549	18.8	#47	0.0 8.0
Sep 15	f	3	68	255	8.8	#47	0.0 8.0
Sep 19	g	3	126	442	18.1	#47	0.0 4.5
xxx21xxxxxx22xxxx48xxxx27x							
Sep 21	h	3&4	96	354	15.8	#47	0.0 0.5
Sep 23	j	4	103	419	15.0	#47	0.0 5.0
Sep 28	k	4	77	300	12.3	#47	0.5 4.5
Oct 2	A	4	4	4		Skiff	
Oct 4	B	4	24	35		Skiff	
Oct 19	a	5	16	60	3.5	"Delta"	0.0 3.5
			#47	2538	141.7		11.0 66.0

NOTE

Mean

Soundings on this sheet are in fathoms, the plane of reference being Low Low Water. The height of tide was referred to the automatic tide gauge at Lake Bay, Lat. 56 01.3 N, Long. 132 55.2 W from Sept. 1, to Sept. 9 inc. and to the tide staff at McHenry Inlet, Lat. 56 00' 14.0m. Long. 132 23' 16.0m. from Sept. 12 to ~~Sept. 28~~ Oct. 4 inc. and to the tide staff at Burnett Inlet cannery on the 19th of Oct.

Plane of reference on tide gauge Lake Bay	3.0 ft.
" " " tide staff McHenry Inlet	4.26 Ft.
Lowest tide observed McHenry Inlet	-2.9 ft. Sept. 12, '16
Highest tide observed " "	18.6 ft. " "
Lowest tide observed Lake Bay	-1.2 ft. Jul. 16, 1916
Highest tide observed Lake Bay	20.6 ft. Jul. 17, 1916

J.S.S.

ADDRESS
U. S. COAST AND GEODETIC SURVEY
WASHINGTON, D. C.

REFER TO NO. 5-VEC

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

LIBRARY

Place with descriptive report
of hydrographic sheet No. 3941

J
Drawing Section.

October 1, 1917.

Division of Hydrography and Topography: *20*

Division of Charts:

Tidal reductions are approved in
6 volumes of Sounding records for

HYDROGRAPHIC SHEET 3941

Rocky Bay, McHenry Inlet, and
Burnett Inlet, S.E. Alaska
C.G. Quillian in 1916.

Plane of reference is
Mean lower low water, reading

3.0	ft.	on	tide	staff	at	Lake	Bay
4.3	"	"	"	"	"	McHenry	Inlet
2.8	"	"	"	"	"	Burnett	Inlet.

L. P. Shady

Acting Chief, Section of
Tides and Currents.

craftsmans

Report - Hyd - 3941.

Development

Rocky Bay — Rocky Bay was evenly but not closely developed. It was possible to draw the important depth curves continuously.

Burnett Inlet — would have been better developed if the single line had been run as a mid-channel line instead of a range line.

McHenry Inlet — was well developed except for the shoal in Lat. $56^{\circ}00'30''$ Long. $132^{\circ}26'30''$.

Plotting

The soundings and positions were well plotted by the field party.

Records

The records were well kept and legible

E. K. Ellis.
skts.