

2833

Diag. Cht. No. 8551-1 & 8552-



Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. P. Tittmann
Superintendent.

State: *Alaska*

U. S. C. & G. SURVEY.
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DESCRIPTIVE REPORT.

Hyde Sheet No. *2833*

LOCALITY:

Latouche Passage
Prince William
Sound

1906

CHIEF OF PARTY:

R. B. Derickson

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Descriptive Report
to accompany
Boat Sheet
Showing Hydrography of
Latauch Passage and Approaches
Prince William Sound, Alaska.

July to September 1906
R. B. Bevilson
Asst. C. & G. Survey
Chief of Party

Report to accompany Hydrographic Boats Sheet
of Latauche Passage and Approaches.

Prince William Sound, Alaska

This sheet which is to scale of 1/40000 represents
the Hydrographic Survey of Latauche Passage and
approaches; Prince William Sound, Alaska.

The triangulation stations shown on this sheet were plotted
and carefully checked by intersecting distances from the triangle
sides; all other signals used in the Hydrography and in
the plotting of this work were transferred from the Plane Table
sheet as they were located during the progress of the work.

While the Hydrography was in progress each position on the
sounding lines was plotted on this sheet, also the depths of
each cast, without reduction of tide.

As shown on the sheet the sounding lines were run
approximately in the same direction as the channel, at
varying intervals of 100 to 300 meters apart, and these lines
were crossed with sounding lines running approx. E. and W.
at varying intervals according to the depth of water, and
character of the bottom.

All soundings over 20 to 25 fathoms were made with the
sounding machine and wire; the dial being used to
record the number of fathoms of wire run out, at each
sounding the ship was stopped dead in the water in order
to have the wire vertical at each sounding. The character of

the bottom was recorded according to the specimen brought up at each cast.

All soundings less than 20 fathoms were usually made with the hand lead such as important crossings and the anchorages.

Tidal observations were made during the progress of the work at Lataouche wharf.

Represented on this boat sheet are 368 miles of sounding lines with 5121 soundings covering an approximate area of 55 square miles. The record of this work is contained in 4 volumes of sounding records, and 4 volumes of tide observations.

The approach to Lataouche Passage on the North end, has a depth of 100 to 160 fathoms of water. The channel here is 17 miles wide with steep sides. The two points are clear. The N.W. Point has a large rock 20 ft high and 60 meters off the point which is clear on all but the west side. 5 miles from the North end the channel is divided by Eberington Id. From the North end of Eberington Id. the East or Main Pass has a varying depth of 127 fathoms at the North end to 9 fathoms at the crossing between Eberington and Danger Islands at its South end. The narrowest part of the channel is about 2 miles from the North end of Eberington Id. where it is 6 mile wide.

In this channel there are two small islands which lie close to the East shore. The North Id called "Chicken Id." is separated from

at low water
Latauche Id. by a channel 130 meters wide, and a depth of 14 fathoms. It is clear, but is never used by other than amper boats.

The South Id. is separated from Latauche by about 200 meters. The channel has a depth of 8 fathoms but is full of steep and is never used. From this Id. South the main channel is clear with a depth of 25 to 35 fathoms to a point directly west of Danger Island, where the water shoals to 9 fathoms.

Danger Island which lies S.W. of the South Point of Latauche Island is separated from it by a channel one mile wide which is apparently foul and full of steep. The water around Danger Id. for a distance of $\frac{1}{2}$ mile is very foul with steep and submerged rocks and the sea breaks heavily in this vicinity protecting the entrance to the channel. From Danger Island to the South and west to the coast of Eberington Island is clear, the water having an average depth of 20 to 40 fathoms. The beach and outlying boulders are steep to.

The channel to the West of Eberington Id. is confused with a piece of Wall's Pass as shown on the general chart of Prince William Sound, but as it is given no name on the chart, and being apparently part of Latauche Passage, it was called "West Channel" in all the Survey records. The narrowest part of the channel is at its West end.

when it separates the North end of Enderington Id. and the Eastern end of the chain of Small Islands extending from the West shore; At this point it is 1/2 mile wide with a depth of 40 fathoms. The North side is steep to, and the South side or directly off the North point of Enderington Id here is a depth of 5 fathoms, 25 meters from shore.

The average width of this channel from the North end is one mile; Its narrowest part is 0.7 mile wide, This is at the Islet near the turn at the South end, This Islet on which the signal "Stub" was located is steep to. It is separated from the West side of Enderington by a channel 50 meters wide and is very conspicuous from the North and South.

"West channel" has a depth of 25 to 75 fathoms It is clear throughout.

The Small bay off this channel, at the foot of the Mountain on which the signal "Walls" is located, is approximately 2/3 mile in diameter. It has 27 fathoms of water, The bar at the West end of this little Bay has 4 ft on it at low water.

The water between the South end of Enderington Id and Cape Puyt which covers the approach to Bainbridge and Prince of Wales Passes, and the South entrance of West channel of Latauch Pass, has an average depth of 30 to 40 fathoms

The two Bays opening on the South at the South end of Enderington Id, have 15 to 20 fathoms of water. With South...

winds the sea breaks heavily on all the headlands, the swell entering to the town in West channel near its South end,

On entering Lataouche Passage from the North the first anchorage is off Lataouche Wharf, 5 to 10 fathoms mud bottom 200 to 300 meters from the end of the wharf, a depth of 8 ft. can be taken along the inner of the wharf at low water. The point of land 500 meters S.W. of the wharf has a line of submerged rocks extending 50 meters out from the low water line, also there is a point of rocks 800 meters North of the wharf which bare at low water, a course of sextant angles were taken at these points and recorded in the sounding record,

The anchorage at "Wilson's" is 800 meters off shore 10 to 15 fathoms mud bottom; $\frac{2}{3}$ mile N. West of "Wilson's" camp there is a shoal with 3 to 4 fathoms of water, it is about 300 meters from shore, but well to the N. and E. of the anchorage.

at "Horse Shoe Bay" there is an anchorage in 15 to 20 fathoms of water 400 meters West of the entrance to the little Bay. 8 ft. can be taken in this little Bay at low water, but there is only room for small craft. A wharf and ore bunkers on the South point was projected and will have 20 to 30 feet along its face at low water. The bottom is rocky in this vicinity. The anchorage at "Montgomery Bay" is 500 meters

off shore in 5 to 10 fms of water sandy bottom. -

Most any point in the Pass, where the water is of convenient depth, can be used as an anchorage, as the current only averages from one to two knots, and ice is seldom seen in this pass.

The Flood tide enters from the South and Ebbs from the North. The water passing in and out of Prince William Sound does not effect this channel, but passes through Montgomery Straits.

The bend in the West channel at its South end serves as a good anchorage in 5 to 20 fathoms of water mud bottom, ²⁴⁹ clear of the channel. No swell was noticed at this point during progress of the work.

On entering the West Channel from the South end the Headlands on Eberington Id. and Hoodo Ids appear very much alike, and vessels have made the mistake of entering the Cove at the South end of Eberington Id. expecting to get through. The South end of Prince of Wales Pass is very close to the South end of the West channel, this apparently clear, but no survey was made owing to the continuous bad weather which delayed all work.

Most all vessels passing between Valdez and Seward use Latouche Passage both channels being used. The West Channel is sometimes preferable in southerly weather owing to the swell.

The course and distances for entering and passing through Latouche

Pass as follows.

Entering from the N. with the South end of Straight Is. ahead distant one mile Steer S.S.W. 8 miles, from this position either channel can be taken. If the main channel Steer S. $\frac{7}{8}$ W. 2.8 miles to abreast the second small island in the main pass, then the channel is .6 mile wide, from this position steer S. $\frac{7}{8}$ W. 1.9 miles leaving the sand spit at this point 500 meters on starboard hand. (The spit is steep to with no extending reef). From this position S. $\frac{5}{8}$ E. $3\frac{1}{2}$ miles to abreast of Dange Island, favoring the Eberington Is. side of the channel, from this point the coast of Eberington Is. can be followed on S.W. $\frac{3}{8}$ S. course from $\frac{1}{2}$ to 1 mile off the shore, with the South end of Eberington Is. ahead distant one mile the course can be shaped for the entrance to Resurrection Bay, leaving Cape Puyet $2\frac{1}{2}$ to 3 miles on the starboard hand.

Entering the West channel on S.W. $\frac{1}{2}$ S. course 1.7 miles to between the North end of Eberington Is. and the Small Is. to the N. then change course to W. x S. $\frac{1}{8}$ S. for 7 miles keeping in mid channel, at this position the North end of Eberington Is. will bear E x S. changing course to S x W. $\frac{3}{8}$ W. keeping in mid channel for 5.1 miles at this position change course to W. $\frac{7}{8}$ S. for 3 miles then change to S.S.W. $\frac{1}{2}$ W. for 7 miles when Cape Puyet will be ahead distant 2 to 3 miles. A mid channel course will keep clear of everything throughout the channel.

The large bay formed by the chain of islands at the head of

The West Channel and the turn of the shore line on the East side of Hoodo Id. north of Ellerington Id. has 25 to 40 fathoms of water. This Bay was not thoroughly developed owing to the close of the season. There are numerous shoals along the shore line, and the Bay is never used as an anchorage.

The Hydrography shown on this sheet was accomplished under the most adverse circumstances caused by the continuous rain. The most of the work was done from the Steamer Taku and Signals in close proximity only, could be used to locate the lines.

The Hydrography was done mostly by J. C. Gauger and S. Schottschneider Aids C. S. S.

Respectfully submitted.

R. B. Devison

Asst C. S. Survey

Chief of Party

Sheet No 2883

Latouche Passage
Prince William Sound,

Alaska

Scale 40,000

Surveyed by R.B. Derickson Asst.

Began July 29th Ended September 29th

R.B. Derickson, Asst 1906

Observers

John C. Ganger, aid

Sylvester Schattschneider, aid

Copists

Charles Ekland Boatswain

John C. Ganger aid

Reliefs

Sylvester Schattschneider, aid

John C. Ganger aid

Elias Paulsen, sea

Robert Bowers, sea

Joseph Tomlinson, sea

Willis Tipton sea.

Lithographers

Fred. Seibert, & Co.

Joseph Levy, sea

Thomas McPherson, sea

Willis Tipton, sea

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1906

June 29	a	1
July 10	b	1
" 13	c	1
" 14	d	1
" 16	e	1
" 18	f	1
" 19	g	1
" 20	h	1
" 21	i	1
" 25	k	1
" 26	l	1
" 27	m	2
" 28	n	2
" 30	o	2
" 31	p	2
August 7	r	2
" 8	s	2
" 11	t	2
" 14	u	2
" 15	v	2
" 16	w	3
" 21	x	3
" 22	y	3
" 23	z	3
" 27	a'	3
" 28	b'	3
" 29	c'	3
" 31	d'	3
September 6	e'	3
" 7	f'	3
" 8	g'	3.4
" 14	h'	4
" 15	i'	4

September 17	k'	4
" 19	l'	4
" 20	m'	4
" 21	n'	4
" 24	o'	4
" 27	p'	4
" 29	r'	4

Steamer Taku
Whaleboat

Total

Days	Remaining	Miles
4889	4830	355.4

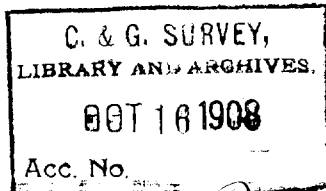
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The soundings are expressed
in fathoms and refer to the
mean of Lower Low water

The 10	fathom	curve	is	shown	in	Brown
"	20	"	"	"	"	Red.
"	30	"	"	"	"	Blue
"	50	"	"	"	"	Yellow
"	100	"	"	"	"	Purple
"	150	"	"	"	"	Scarlet.

Tide table will be furnished by
Tide division



Sheet 2833 Lalouche Passage

The position numbers were drawn in black and so close to the position mark that it was found necessary to re-ink the numbers in red and erase the black numbers, otherwise they would have interfered with the soundings.

The names of signals are inked ^{with} the West for the top of the sheet.

The soundings were plotted in pencil without tide reduction which caused additional work to erase them before plotting corrected soundings.

Within the limits of the work the ground seems to be well covered and all shoals developed, except one of $3\frac{3}{4}$ fathoms 600 metres off Fall signal, which may show less water with more work done in vicinity.

January 9, 1907.

J. C. Donn,