83 SHA 1910 D

# 3214

C. & C. SURVEY

Diag. Cht. No. 8201-2

Department of Commerce and Labor COAST AND GEODETIC SURVEY
Superintendent.
State: Waska
DESCRIPTIVE REPORT.
Hyde Sheet No. 3214
LOCALITY:
Hrangell Strait Bunt I. to no Thorofose Pt
Bunt I. to no Thorofasel
1900
CHIEF OF PARTY:
R. B. Derickson

3214

Hydrographic Sheet No. 2.3214

Wrangell Straits,

S.E. Alaska.

Between Burnt Id. and No Thorofare Pt.

Scale 1:5000

Launch No.117

From August 15, to October 12,

1910.

U.S.S. "GEDNEY"

R.B.Derickson, Asst., Comdg. J.M.Coleman, Mate,

Chief of Party. In charge of Sounding Pty.

Hotte det inhed by A.L.J.

Loundings shown in feet.

JAN -9 1911

RELEARING 10

C. & G. SURVEY, JANG - 1011

### Descriptive Report

to accompany

Hydrographic Sheet No. 2.

Wrangell Straits,

S.E. Alaska.

U.S.S. "GEDNEY"

1910.

R.B. Derickson, Asst., Comdg. J.M. Coleman, Mate,

Chief of Party.

Hydrographer.

Descriptive Report to accompany Hydrographic Sheet
No.2, Wrangell Straits, S.E.Alaska.

The Signals in this work No.57, 53, 55, 51, 48, 50, 52, and 54 were eld stations determined by the Army Engineers in 1902 and were recovered and rebuilt. Signals "X" and "Y" are the Beacons. "Y" is the Beacon on Burnt Island and "X" on the shore opposite to it. Sextant angles were taken at the foot of these beacons and entered in the sounding record. The Beacons were also determined by the plane-table party, and this determination is used as they observed on the center pale of the Beacon whereas the sextant angles were taken in a boat alongside the Beacons and are about one and half meters from the center; they only give the approximate location.

### SOUNDINGS.

All soundings are with the hand lead. A close watch was kept on the soundings and whenever on account of the current up and down soundings could not be obtained the work was discontinued and changed to another locality. As many soundings as possible were taken between positions.

### CURRENTS.

The velocity of the tidal current is a little less in this locality than it is north of Burnt Island, probably about one knot less on a large tide. If the current is running 5 knots here, which is about its greatest velocity, it will be

were made in this locality as holding ground could not be found for the anchors, but estimates were made at odd times when running over this course, the estimates were based upon the speed of the launch and known distance between points on shore.

#### DANGERS AND AIDS TO NAVIGATION.

Spike Rock, right in the center of the Straits. This rock bares at extreme low water; it has been reported that at extreme spring tides it has been seen five feet out of the water. The position of the rock was determined, when bare, by the plane-table party. The shoal is not very extensive and there is a channel on either side of it. It is marked by three buoys an horizontal striped buoy to the east of the shoal and two buoys, red and black, marking the channel west of the shoal. The Channel east of Spike Rock is preferred and is used by most. vessels. The Pacific Coast Pilot, on page 45, giving directions for passing to the eastward of Spike Rock directs vessels to leave the horizontal striped buoy 60 to 75 yds. on the port hand. In the present position of this buoy vessels may pass very close to it, in fact it could be moved in closer to the shoal giving a wider and straighter channel.

The Sailing Directions, Pacific Coast Pilot, page 48, for passing west of Spike Rock are correct.

During the time this work was in progress the Light-House

Spike Fock with the object of erecting an iron spindle or some other mark on the rock. The work was carried on with great difficulty on account of the short time the rock was bare and strong currents prevailing. The mark is not yet in place.

The location of the highest part of Spike Rock taken from the plane-table sheet is plotted on this sheet. The planetable party located the rock when bare.

Respectfully submitted,

Am Caliman

Mate, C.& G.Survey,

Hydrographer.

Approved,

RBAlvertow

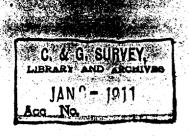
Asst., Comdg Oh Geeney

Chief of Party.

### DIST OF PERMANENT POSITIONS ON HYDROGRAPHIC SHEET NO. 2.

0	bject	La	t.	D.M.	Long	• •	D.P.	Height	Remarks.	_
пYп		<b>5</b> 6°	36'	666	1320	581	499	40 ft.	W.Beacon S.end Burnt Island.	•
nX n		56	36	276	132	58	442	400 ft.	W.Beacon S.and o site Burnt Islan	
	e Rock dleHole	56	35	160 <b>6</b>	132	58	<b>5</b> 8 <b>3</b>	awash L.	W. Center Spike F	₹k.

For list of Permanent Marked Positions see Geographic Positions forwarded with Triangulation Computations of Wrangell Straits.



# STATISTICS SHEET NO. 2.

Date	Letter	Vol.	Pos.	Sdgs.	Mls.	Boat.
Sept. 14,	р	8	2	7	.2	Launch 117.
Sept. 15,	, ď	8	16	6 <b>3</b>	1.8	11 0
Sept. 15,	q	9	106	66 <b>3</b> .	9.8	. 19 17
Sept. 16,	r	9	185	981	13.25	
Oct. 12,	h:	16	168	90/5	11.0	
̈́υ	OTAL		477	2619	36.05	

# HYDROGRAPHIC SHEET 3214.

SOESON

Wrangell Strait, Alaska, Burnt Island to No Thorofare
Point, by Asst. R. B. Derickson in 1910.

### TIDES.

	ft.
3 ft.below mean lower low water, or plane of reference on state	ff -0.8
Lowest tide observed " "	-1.2
Highest " " " "	21.2
Mean range of tide	13.0

MAR 1 1911
TIDAL DIVISION.

The records were keft in a naturfactory. Dec 8th, 1911. R.L.Johnston Verified;