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# 3214

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Department of Commerce and Labor
COAST AND GEODETIC SURVEY

*Superintendent.*

*State:* Alaska

## DESCRIPTIVE REPORT.

Hyd c *Sheet No.* 3214

LOCALITY:

Wrangell Strait
Bunt I. to No Thorofare Pt.

1900

CHIEF OF PARTY:

R. B. Derickson

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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. Chief of Party.

J.M.Coleman, Mate, In charge of Sounding Pty.

Plotted and checked by H.R.D.

Verified by R.L.J.

Soundings shown in feet.

3214

COAST AND GEODETIC SURVEY
JAN -9 1911
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Descriptive Report

to accompany

Hydrographic Sheet No. 2.

Wrangell Straits,

S.E.Alaska.

U.S.S."GEDNEY"

1910.

R.B.Derickson, Asst.,Comdg. Chief of Party.

J.M.Coleman, Mate, Hydrographer.

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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 old 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 pole 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

6 knots north of Burnt Island. No actual current observations 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

Department were engaged in drilling the highest point of Spike Rock 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 plane-table party located the rock when bare.

Respectfully submitted,

J M Coleman

Mate, C.& G.Survey,

Hydrographer.

Approved,

R B Alexander

Asst., Comdg H Gedney

Chief of Party.

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LIST OF PERMANENT POSITIONS ON HYDROGRAPHIC SHEET NO. 2.

| Object | Lat. | D.M. | Long. | D.P. | Height | Remarks. |
|---|---|---|---|---|---|---|
| "Y" | 56° 36' | 666 | 132° 58' | 499 | 40 ft. | W.Beacon S.end Burnt Island. |
| "X" | 56 36 | 276 | 132 58 | 442 | 40 ft. | W.Beacon S.and opp-site Burnt Island. |
| Spike Rock Spindle Hole | 56 35 | 1606 | 132 58 | 583 | awash | L.W. Center Spike Rk. |

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

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STATISTICS SHEET NO. 2.

| Date | Letter | Vol. | Pos. | Sdgs. | Mls. | Boat. |
|---|---|---|---|---|---|---|
| Sept. 14, | p | 8 | 2 | 7 | .2 | Launch 117. |
| Sept. 15, | q | 8 | 16 | 63 | 1.8 | " " |
| Sept. 15, | q | 9 | 106 | 663 | 9.8 | " " |
| Sept. 16, | r | 9 | 185 | 981 | 13.25 | |
| Oct. 12, | h' | 16 | 168 | 905 | 11.0 | |
| TOTAL | | | 477 | 2619 | 36.05 | |

V.E.C.
Feb.28,191[redacted]

HYDROGRAPHIC SHEET 3214.

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

TIDES.

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

Coast and Geodetic Survey
MAR 1 1911
TIDAL DIVISION.

Hyd. Sheet No. 3214. May 1, 1911.

The ground within the limits of this work is well covered.

The records were kept in a satisfactory manner

H. L. Simons

Verified; Dec 8th, 1911.

R. L. Johnston