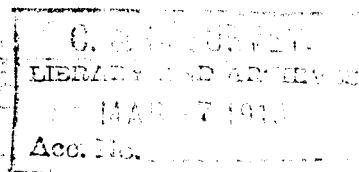




3416



Diag. Ch. 8152-1

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent

State *Alaska*

DESCRIPTIVE REPORT

Hydro Sheet No. *3416*

LOCALITY:

Prince of Wales Passage
Jackson Passage
Healy Strait

1902

CHIEF OF PARTY

R. B. Herrickson

3416

3416

Hydrographic Sheet No. 1. (Ship's number)

Title : Kevak Straits. Alaska.
S.E. portion.

Work performed under direction of
R. B. Derickson. Asst. U. S. G. Survey.
Commanding Str "Gedney.

In charge of sounding party: Thos. Jamieson. Mate.

Positions on Smooth Sheet plotted by Thos. Jamieson. Mate.

Tide Staff at Kasook Inlet.

Plane of reference, reading on Gauge.
Lowest Tide Observed, reading on Gauge.
Highest Tide Observed, reading on Gauge.

Observed
Tide
Dec 1912

The following signals used for determining position
depend on Sextant Angles taken by members of the
Sounding party.

- "Ran" flag. see Vol. 1 page 61.
- "Sly" flag. see Vol. 1 page 61.
- "Peg" w.w. see Vol. 2 page 61.
- "Fair" w.w. see Vol. 2 page 61.
- "Fig" prom. boulder. see Vol. 4 page 61.

The remaining signals used; except the Triang-
ulation Stations; depend on Plane Table locations.

Tlevak Strait, S.E. Alaska.

This sheet takes in the S.E. portion of Tlevak Strait from its junction with Cordova Bay and Kaigani Strait, northwest to a line drawn across the Strait from a point $\frac{3}{4}$ of a mile W.N.W. of Rose Inlet to another prominent point $1\frac{1}{2}$ miles W. of Kasook Inlet. This work was done mostly on the Str. COSMOS, using Cosmos sounding machine and wire, and hand lead in critical places.

This section is described in the Alaska Coast Pilot Part 1, pages 84 and 85, Lacey and Jackson Islands and 87 - 89 Kaigani and Tlevak Straits. The descriptions there given seem accurate and no discrepancies were found. A little amplification might not be amiss and some dangers found which do not appear in the charts or Coast Pilot are noted below:

JACKSON ISLAND, described on page 84, has prominent cliffs at its S.E. extremity which are very prominent and form a good landmark when passing up and down this channel. About 300 yards S.S.W. of these cliffs, a small rocky patch, kelp covered, uncovers at L.W. springs, and must be carefully avoided.

The sunken rock which lies 200 yards south of the point W. of Jackson Id. and which is described on page 84 under Jackson Id., is in reality a small patch of sand and rock, steep on all sides and on which the least water found was 6 feet after allowing for Tide Reduction.

A shoal spot of sand and rock covered by a depth of 6 feet at L.W. springs, was found close to the anchorage in Kasook Inlet, described on

on page 89. To avoid this shoal the S.W. shore of the easterly arm should be favored when anchoring.

On the south side of the Strait just inside of a line, and nearly midway, between Δ Shoe and Δ Nice, a kelp patch was found and sounded around close to. The least sounding obtained about 15 meters from the kelp patch was 6 fathoms, but there is probably a good deal less water here.

Vessels coming from the eastward bound to Howkan or Rose Inlet, may pass between the above mentioned kelp patch and the Islets lying W. of Shoe Rock and steer S.W. for $2\frac{1}{2}$ miles to pass E.S.E. of the rocks awash at H.W. lying off the S.E. end of Aston Island. Deep water may be carried all the way through.

The group of Islands, Rocks, and Reefs, described on page 88, have many intricate passages between them of little use for purposes of navigation. Grand Island, the largest of the group, shown on the chart as one large island, is divided into three Islands by narrow and shoal passages which are almost dry at L.W. springs.

The cluster of rocks 10 to 20 feet high at the N.W. end of this group, mentioned on page 88, have an extensive kelp patch lying about $\frac{1}{3}$ of a mile W. of them. The least water found over this patch was $5\frac{1}{2}$ fathoms, but there is probably less water than that found, and this patch should be carefully avoided.

ROSE INLET, is easily recognized by three patches of light colored cliffs on the north side of entrance. The larger and more southerly patch is roughly of triangular shape. The usual course followed

passes to the northwest of the outermost islands and favors a small prominent and wooded rocky islet which lies close to and E.S.E. of a larger one on the W. side of the channel. This islet is nothing but a good sized rock with trees of fair height on it and is used as a signal "NED" in the sounding work. The point lying $\frac{1}{2}$ mile S. of this islet has a rock 50 yards S.E. of it which is awash at L.W.springs, and should be carefully avoided. A large cannery and wharf are near the head of the Bay on the N.W. side of same. The wharf is about 120 feet on the face and extends about the same distance from shore. The piles forming the face of the dock are driven in 30 feet of water at low water and deepens rapidly off shore, and vessels of any draft may tie up to the wharf. A rock which dries only at extreme low water springs, lies about 200 yards E.S.E. of the wharf. This rock is marked by a Barrel Buoy placed there by the Manager of the Cannery and may be passed on either side. The rocky point 200 yards East of the Cannery is steep to.

Vesta Bay and Grace Harbor need no description. Good anchorage in moderate depths may be found ⁱⁿ either, tho' rather confined for vessels ~~for vessels~~ of any size.

The Saltery in Grace Harbor mentioned in the Alaska Coast Pilot, Part 1, page 87, is now abandoned and the wharf in ruins.

Bearings are Magnetic and approximate. Distances given are approximate.

Thos Jamieson

Mate, C. & G. Survey.
Hydrographer.

Approved,
R.B. Anderson
Asst., Comdg.

The work on this sheet is contained in five volumes of Sounding Records and the plane of reference used for the reduction of soundings that of Kasook.

Scale 1:20000.

The Sailing Directions now published in the Coast Pilot, hold good over this sheet.*

Signals SLY and RAN in the bay north of Jackson Island were located by sextant angles. All other signals except the regular triangulation signals were transferred direct from the topographic sheet. Owing to the distortion of the plane table sheet the projections on the hydrographic sheet does not agree with that of the topographic sheet.

The individual "squares" of Latitude and Longitude agree and the position of the signals agree in each "square".

A list of Geographical Positions of signals and flags used is forwarded as part of this report.

END.

GEOGRAPHICAL POSITIONS OF PLANE TABLE SHEET NO. 1.

<u>Object.</u>	<u>Lat.</u>	<u>D.M.</u>	<u>Long.</u>	<u>D.P.</u>	<u>Remarks.</u>
Gent	55° 00'	786.6 1068.8	132° 41'	983.1 83.5	Whitewash on high- est part of point.
Skin	55 00	1277.7 577.7	132 42	718.1 348.5	White flag in scrubby trees.
Pine	55 00	662.4 1193.0	132 43	501.2 565.4	White flag in small tree.
Big	55 00	331.2 1524.2	132 44	154.7 911.9	Tripod whitewashed
Fix	55 00	657.5 1197.9	132 44	1049.6 17.0	Flag propped up by stones.
Rud	54 59	1237.1 618.3	132 44	799.9 266.7	Whitewash.
Lit	54 59	449.3 1406.1	132 44	1022.5 44.5	Small white pen- dant (plain flag)
Chip	54 59	567.7 1287.7	132 43	372.3 694.7	Log of drift wood stood on end, w/ flag.
Jap	54 59	429.4 1436.0	132 44	242.5 824.5	Whitewash.
Woe	54 58	1619.2 236.2	132 42	1017.4 49.2	Whitewash.
Wall	54 58	1007.9 847.5	132 42	966.0 100.6	Whitewash.
Con	54 58	1640.5 214.9	132 44	423.1 643.9	Flag & banner.
Low	54 58	1450.8 1404.6	132 41	513.8 552.8	Topographers set up flag.
White	54 58	1019.4 836.0	132 41	455.2 611.8	Large tripod, flag and banner.
Slat	54 59	416.0 1439.4	132 45	322.9 743.7	Tripod & flag.
Poke	54 59	1090.8 764.6	132 45	436.7 629.9	Banner

Object.	Lat.	D.M.	Long.	D.P.	Remarks.
Ant.	55° 00'	14.5 1840.9	132° 46'	71.8 994.8	Flag & whitewash.
Hy.	55 00	547.0 1308.4	132 46	447.3 619.3	Flag & Whitewash
Pry	55 00	834.4 1021.0	132 46	1006.8 59.8	Tripod & flag.
Sop	55 00	1542.4 313.0	132 47	219.8 846.4	Tripod & flag.
Sea	55 00	1835.4 20.0	132 47	177.7 888.5	Tripod & flag.
Sok	55 01	60.3 1795.1	132 46	739.9 326.3	Tripod & flag
Tide	55 01	266.0 1589.4	132 46	972.4 92.8	Tide staff.
Fo	55 01	44.1 1811.3	132 46	530.5 545.7	Tripod & flag.
Let	55 00	1680.1 175.3	132 46	486.2 580.6	Tripod & flag
Pi	55 01	528.8 1326.6	132 46	658.4 407.8	Tripod & flag.
Zu	55 01	839.1 1016.3	132 46	718.2 348.0	White flag.
Yo	55 01	864.3 991.1	132 46	997.1 69.1	Tripod & flag
We	55 01	658.0 1197.4	132 47	281.2 785.0	Tripod & flag.
Di	55 01	226.0 1629.4	132 47	519.8 545.4	Tripod & flag.
Al	55 00	1822.2 33.2	132 47	528.1 528.1	Tripod & flag.
Grass	54 58	134.4 1721.0	132 49	262.4 805.1	Highest pt of rk. about 18' high
Ker	54 58	1817.8 37.6	132 50	662.4 404.6	Banner & flag on small rocky islet.
Shot	55 01	231.8 1623.6	132 50	1025.1 41.1	Whitewash.

Object.	Lat.	D.M.	Long.	D.P.	Remarks.
Bug	55° 00	845.8 1009.6	132° 48'	277.9 788.3	Tripod & flag.
Nat	55 00	295.2 1560.2	132 47	421.1 645.1	Tripod & flag.
Bly	54 54	1397.4 458.0	132 55	466.1 603.2	Flag & banner in a tree
Bar	54 54	865.9 989.5	132 55	500.3 569.0	Whitewashed barrel on N.cor of wharf.
Rel	54 54	822.5 1032.9	132 54	890.8 178.5	Whitewash & flag
Dry	54 54	1111.9 743.5	132 54	10.8 1058.5	Flag & banner on reef cov.at H.W. ✓
Flop	54 54	18.5 1836.9	132 52	639.0 430.3	Whitewash, banner and flag.
How	54 55	338.5 1516.9	132 49	765.8 303.0	Small P.T. flag.
Cap	54 55	863.3 992.1	132 48	1048.2 20.6	Flag & banner
My	54 55	535.2 1320.2	132 48	493.6 575.2	Flag in cleft of rocks.
So	54 54	1797.3 58.1	132 48	327.8 741.0	Planetable flag.
Me	54 54	816.9 1038.5	132 47	1052.8 16.5	Planetable flag.
Fa	54 54	238.6 1616.8	132 47	683.3 386.0	Planetable flag.
Say	54 54	545.3 1310.1	132 47	580.0 489.3	Planetable flag.
Zu	54 55	163.8 1691.6	132 47	972.2 96.6	Planetable flag.
Fe	54 55	898.2 967.2	132 47	767.9 300.9	Planetable flag.
No.	54 55	1232.4 628.0	132 48	406.0 662.4	Planetable flag
Foo	54 54	1071.8 783.6	132 54	832.8 236.0	Planetable flag

Object.	Lat.	D.M.	Long.	D.P.	Remarks.
Joc	54° 57'	290.1 1565.3	132° 55'	650.0 417.9	Flag & banner
Ves	54 56	511.4 1344.0	132 54	363.1 605.3	P.T.flag.
All	54 56	462.4 1393.0	132 54	609.8 458.6	Whitewash.
Hay	54 56	367.8 1437.6	132 55	531.0 537.4	Flag & banner
Ter	54 56	208.3 1647.1	132 55	858.1 210.3	Whitewash & flag.
Kil	54 55	1528.0 817.4	132 55	1035.3 33.1	Boundary monument for mining claim.
Lik	54 55	1159.3 696.1	132 55	429.8 538.6	Whitewash & flag.
Din	54 55	1514.0 341.4	132 55	390.1 678.3	Flag & banner.
She	54 55	1641.0 214.4	132 54	866.4 202.0	Flag & banner.
Rug	54 55	852.5 1002.9	132 54	06.5 1061.9	P.T.flag.
Rue	54 55	450.0 1405.4	132 54	592.5 476.3	P.T.flag.
Tie	54 54	1467.4 388.0	132 54	811.9 256.9	Flag & banner
Pea	54 54	1381.3 474.1	132 54	867.3 201.5	Flag & banner.
Rock	55 02	637.4 1168.0	132 43	766.5 299.2	Whitewash rock
We	55 02	835.0 1020.4	132 48	430.7 635.0	Whitewash rock
Tom	54 58	74.4 1781.0	132 51	394.5 673.0	Whitewash.
It	54 57	925.0 920.4	132 51	715.0 352.5	White wash & flag.
Der	54 57	1721.4 134.0	132 53	377.5 690.0	Whitewash.

Object.	Lat.	D.M.	Long.	D.P.	Remarks.
Piz	54° 58'	274.8 1580.6	132° 53'	688.5 379.0	Tripod, flag and whitewash.
Wall	54 58	1188.4 667.0	132 52	506.8 560.7	Whitewash
Flo	54 57	1167.0 688.5	132 56	961.2 106.3	Flag on small rky islet.
Bo	54 57	879.4 976.0	132 56	806.5 861.0	Small P.T. flag on rock.
Bob	54 57	442.0 1413.0	132 56	335.0 732.5	Whitewash
Ned	54 57	498.4 1357.0 *	132 56	778.0 269.5	Center of small islet with trees on it.
Ann	54 56	1516.5 339.0	132 57	156.4 912.0	Flag & banner
Bill	54 56	987.4 868.0	132 56	758.3 310.1	Flag supported by boulders.
Bat	54 56	665.0 1190.4	132 57	588.4 480.0	Flag & whitewash.
Den	54 56	994.3 861.1	132 57	1008.4 60.0	Small tripod and flag
If	54 56	824.8 1030.6	132 58	499.0 569.4	Small P.T. flag.
Dick	54 56	1527.1 328.3	132 58	641.8 425.1	Banner nailed to NE cor. of Rose Inlet Cannery dock.
Bib	54 56	1846.9 08.5	132 58	369.0 698.9	Flag & whitewash.
Can	55 00	263.4 1587.0	132 47	522.2 544.0	Tripod and flag.
Tar	55 00	529.6 1315.8	132 47	608.4 457.8 *	Tripod, flag and whitewash.
Bat	55 00	610.5 1244.9	132 47	789.8 276.4	Tripod, whitewash and flag
Rat	55 00	777.2 1078.2	132 47	889.1 177.1	Whitewash, tripod, and flag.
Cry	55 00	1046.8 808.6	132 47	931.6 135.0	Whitewash, tripod, and flag.

Object.	Lat.	D.M.	Long.	D.P.	Remarks.
Be.	55° 00'	* 1201.5 653.9	132° 48'	116.3 949.9	Whitewash & flag.
Chi	55 00	1576.2 279.2	132 48	100.6 965.6	Flag & banner
Son	55 00	1794.3 61.1	132 47	762.5 303.7	Whitewash & flag.
Up	55 01	288.7 1566.7	132 48	155.7 910.5	Whitewash rock
Scale	55 01	543.1 1312.3	132 48	96.8 969.4	Whitewash rock
Jib	55 01	715.5 1139.9	132 48	312.7 753.5	Whitewash rock
Ga6	55 01	1007.0 848.4	132 48	229.5 836.7	Whitewash rock
Dot	55 01	1028.4 827.2	132 48	484.2 582.0	Whitewash rock
Head	55 01	1453.3 402.1	132 48	497.0 569.2	Whitewash rock
Tin	55 01	1627.1 228.3	132 48	254.2 601.5	Whitewash rock
Low	55 01	1699.0 156.4	132 48	525.4 540.3	Whitewash rock
Pile	55 02	238.2 1617.2	132 48	688.8 376.9	Whitewash rock
Prop.	55 02	548.4 1307.0	132 48	845.5 280.2	Whitewash rock
Bank	54 55	1726.3 129.1	132 48	582.8 485.6	Whitewash, flag and banner.
Doe	54 55	1725.5 129.9	132 47	741.8 326.6	Whitewash & flag.
Loo	54 56	33.3 1822.1	132 46	775.2 293.2	Tripod and flag.
Mix	54 55	698.6 1156.8	132 46	356.5 712.3	P.T. flag.
Lot	54 55	1785.3 70.1	132 45	876.0 192.4	P.T. flag.

Object	Lat.	D.M.	Long.	D.P.	Remarks.
Ace	54° 56'	545.2 1310.2	132° 45'	566.4 502.0	Whitewash, tripod and flag.
So	54 56	107.6 1747.8	132 44	871.8 196.6	P.T.Flag.
Sin	54 56	635.8 1219.6	132 43	938.1 127.3	Whitewash & flag.
Fly	54 56	1215.0 640.4	132 44	812.4 255.5	P.T.flag.
Cook	54 56	1701.6 153.8	132 45	124.7 943.2	Tripod, banner and flag.
Ear	54 57	1064.0 791.4	132 46	359.3 708.1	Whitewash & flag
Few	54 55	1632.3 223.1	132 49	725.2 343.2	P.T.flag on highest pt. of rk. awash H.W.
Krag	54 57	814.0 1041.4	132 49	166.9 901.0	Tripod & flag.
Fir	54 58	798.0 1057.4	132 50	516.0 551.5	Highest point of rk.
Gem	54 56	1613.1 242.3	132 58	887.1 180.8	Small rock cover- ed at high water.

3416

Table of Statistics to accompany
Hydrog. Sheet No. 1. Alaska.
Olevar Straits. S.E. portion.

Date	1912	Letter	Vol.	Position	Number of Soundings	Stat. miles	Vessel.
June	25	a	1	28	49	9.2	"Cosmos"
	26	b	1	79	131	17.4	" "
	27	c	1	102	136	20.1	" "
	28	d	1	48	95	8.1	" "
	29	e	1	79	95	18.2	" "
July	1	f	1	84	93	19.6	" "
	2	g	1	83	127	17.8	" "
	3	h	2	43	51	11.6	" "
	9	i	2	74	113	14.1	" "
	10	j	2	74	86	16.7	" "
	11	k	2	40	43	10.3	" "
	12	l	2	57	104	19.6	" "
	13	m	2	42	69	15.5	" "
	15	n	2	67	144	22.8	" "
	16	o	3	85	208	21.9	" "
	17	p	3	67	103	20.2	" "
	19	q	3	83	130	25.3	" "
	20	r	3	57	105	15.5	" "
	22	s	3	40	87	14.0	" "
	23	t	3	74	165	25.3	" "
	25	u	4	17	40	2.7	" "
	26	v	4	77	236	11.5	" "
	27	w	4	29	66	4.7	" "
	29	x	4	39	80	5.8	" "
	30	y	4	63	156	13.0	" "
	24	a	5	12	12	4.5	Launch No 27
	25	b	5	57	60	15.8	" "
September	11	z	5	40	114	6.5	"Cosmos"
October	4	a'	5	19	55	3.0	" "
Totals			5	1659	2953	411.2	

VEC
Mar. 24, 1913.

HYDROGRAPHIC SHEET 3416.

Tlevak Strait, Alaska, by Assistant R. B. Derickson
in 1912.

CCS
2/24/13

TIDES

	Kasook Inlet ft.	North Bay ft.
Mean lower low water, or plane of reference on staff	2.5	9.6
Lowest tide observed " "	0.3	7.2
Highest " " " "	15.8	24.5
Mean range of tide	10.5	10.9

U.S. DEPT. OF COMMERCE

MAR 24 1913

TIDAL DIVISION

VEC
June 7, 1913

HYDROGRAPHIC SHEET 3416.

Tlevak Strait, Alaska, additional work by Assistant
R. B. Derickson in 1913.

TIDES.

	Kasook Inlet Staff 1913 feet
Mean lower low water, or plane of reference on staff	5.8
Lowest tide observed " "	3.7
Highest " " " "	19.2
Mean range of tide	10.5

Coast and Geodetic Survey
JUN 7 1913
TIDAL DIVISION

Hyd. Sheet No. 3416.
"Ilewaik Strait, S E Alaska"

All positions were protracted by "Field Party" and have been taken as correct although checked in questionable locations.

The work is good, sufficient lines being run and soundings taken to develop channels, shoals and rocks.

The records, in general, are well kept but in many cases the position of sounding, by time, is indefinite.

Verified;
J. D. Torrey

June 19, 1913.

Although the ground has been systematically and fairly thoroughly covered, this is not yet a complete hydrographic survey. The area involved, is too large to permit good developement and there are numerous shoal indications and suspicious spots which should be examined further.

At the shoal just west of Δ "Cent", a minimum depth of 35 feet was found, but a recent letter, No 218-1913, reports a ~~sunken~~ rock with from 6 to 12 feet on it. Some later work, just received, includes a developement of this spot. This work was protracted and plotted and is now shown on the sheet. At the place mentioned, it shows two separate shoals, with a minimum depth of 16 ft & 18 ft respectively.

A number of rocks awash, were located in the records, by
(over)

the bearing and approx. distance from the sounding lines.
All of these were shown, but it is possible that the same rock,
when noted more than once, may be shown as several different
rocks, as these locations are very indefinite.

R. L. Johnston