



U.S.G.S.
L. & A.
FEB 13 1917
Acc. No.

3639

Also see Topographic Dec. Report 2746a

Form 594
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: <i>Alaska</i>
EX-5013
DESCRIPTIVE REPORT.
<i>Top.</i> Sheet No. <i>3639.</i>
LOCALITY:
<i>Prince of Wales Id. NE Coast.</i>
<i>Pt. Colpoys to Shrubly</i>
<i>Id.</i>
1916
CHIEF OF PARTY:
<i>C. G. Dillion</i>

3639

DESCRIPTIVE REPORT
OF
TOPOGRAPHIC SHEET
OF
NORTHERN PART OF KASHEVAROT PASSAGE.

DESCRIPTIVE REPORT
of
TOPOGRAPHIC SHEET
of
NORTHERN PART OF KASHEVAROF PASSAGE.

The country embraced by the shore line of this sheet is for most part thickly wooded and hilly. The following shore line is included:-

Northern Part of Shrubby Island.
All of Bushy Island.
East Coast of Prince of Wales Island from
Exchange Cove to Point Colpoys?
Echo Id., Fire Id., Tide Id., and Rookery Ids.

SHRUBBY ISLAND

Shrubby Island is thickly wooded with spruce, hemlock and cedar and rises to an elevation of 700 feet. The shore line is extremely rocky with outlying ledges covered with kelp and affords no bays or anchorages.

BUSHY ISLAND

Bushy Island is about three square miles in area and rises to an elevation of about 600 feet. The shore line is also extremely rocky with outlying ledges covered with kelp. The ledges are particularly extensive off the Northwestern, Eastern, and Southeastern shore of Bushy Island. T

A medium sized vessel will find an anchorage with protection from Southeasterly weather just to the Northward of the indentation of the shore line at the Northern part of Bushy Island.. Smaller craft can find excellent protection well in the bight, care being taken to anchor clear of submerged rocks near center of bay.

Bushy Island Light House (Listed as #642 in Light List, Pacific Coast 1916) is on the Northern Extremity of the ledge running parallel to Eastern shore of Bushy Island.

EAST COAST of PRINCE of WALES ISLAND

from

EXCHANGE COVE to POINT COLPOYS.

The shore line from Exchange Cove north to Pt. Colpoys is very broken and for the most part rocky with extending ledges. In places they extend to a distance of 400 to 600 meters.

SALMON BAY is an anchorage for small craft up to 50 feet in length and affords protection in all weather. The bottom is muddy and the depth of water is about one to three fathoms..

All the other bays and coves are very nearly dry at low low water and have foul entrances. All these bays lead into a salt marsh which extends very nearly parallel to the shore line and is located about $\frac{3}{4}$ to 1 Mile back from beach. The narrow rocky entrances to the salt marsh from the bays are very dangerous at other times than high water due to heavy overfalls, riffles and currents from 4 to 10 knots. There are many pinnacled sunken rocks in these entrances. At high water slack there is no current for a short period.

Boats drawing up to 5 feet of water can make a passage from Salmon Bay to the first bay or large bight south, through the Salt Marsh at extreme high slack tide water. This passage is evidently used quite frequently by the fisherman with their seining boats.

ECHO ISLAND, FIRE ISLAND, TIDE ISLAND, and the ROOKERY ISLANDS are very small islands in the passage with shore lines rocky with extending ledges. In the case of Fire Island a ledge extends a distance of about 220 Meters off Northwestern part of Island. These small islands are wooded with hemlock, cedar and spruce and the heights to the top of tree lines are as follows.

Echo Id. 150 ft.
Fire Id. 130 ft.
Tide Id. 120 ft.
Rookery Islands average about 130 ft.

ROCKS and OTHER DANGERS

The tidal current in Kashevarof Passage is very swift attaining quite frequently a velocity of 5 knots. No particular spot seems free from eddies, rips and whirlpools and they are especially prevalent about Fire Island. The set of the current is variable owing to the many small passages between the islands and bearing this mind all points should be given a good berth in passing.

A rock which bares only about one foot at extreme minus tide lies 540 Meters N53-30E Magnetic from the green top rock to the Southward of Fire Island (Intersection station IRE is located on this green top rock). A sounding for L.L.W. shows that the rock is covered with 4 feet of water. Due perhaps to the swift current no kelp

indicates the position of this rock. Another rock which bares about 5 ft at extreme low tide lies about 300 meters N61-30E Magnetic from IRE. It is just awash at L.L.W. Kelp was observed at this rock the latter part of the summer.

Owing to the presence of these two dangers in the Passage East of Fire Island, it is recommended that the passage West of Fire Island be used, care being taken not to pass too close to the N.W. point of Fire Island, where there is a large extending ledge.

The passage between Echo Island and Shrubby Island is entirely blocked by very thick Kelp.

Ossipee Channel can be used by medium sized vessels provided mid channel courses are used to avoid the very thick kelp and extending ledges which line the banks.

CONTOURS

The contours and elevations of hills were obtained from beach and elevations and elevations are figured to top of ground. Seventy to one hundred feet may be added to obtain height to top of trees.

Respectfully,

Leonard H. Zeman
Aid.

Respectfully forwarded,

Ass,t. Commanding Str. Patterson.

SUBMERGED ROCKS

The position of the submerged rock shown 715 Meters N330E Magnetic from Signal "GLAD" on Topographic Sheet was located by a rod reading from the ledge making off of Signal "WHO". The rod was held in a skiff by the Rodman who saw the rock under water.

In making runs along shore to and from work this shoal was noticed on several occasions. No soundings were made on the shoal by the Topographer. Thick kelp is located around this shoal.

The position of the submerged rock shown 768 Meters N68E (Mag) from Signal "Ferg" was located by cuts to the very thick kelp located about this rock. This rock was noticed on several occasions while making runs to and from working grounds. A subsequent hydrographic development showed a least found depth of 5Ft. on this rock.

L.H.Z.

Three Point Fixes to Determine Position of Rocks

Outer rock just East of IRE. June 15th. 1916

6:30 A. M. Nip 76-00
 Ire 1/2 ft. of water on this rock
 Ledge 124-01 with no kelp.

6:35 A. M. Another rock just East of IRE

Ti 80-43
 Ire 4 ft. out of water.
 Ledge 137-55 (Kelp)

Outer rock just south of Lava June 15th. 1916

6:50 A. M. Change 82-23
 Bushy 4 ft out of water surrounded by
 Ti 67-07 thick kelp.
 Bushy-Tick 129-10

Outer Rock just South of BLUE July 19th. 1916

10:15 A. M. Snow 81-10
 Lad Bares 2ft. Kelp 60M
 Shrub 29-17 west of here
 Blue-Snow 98-35

T-3639

PLANE TABLE POSITIONS *

Name	No	D. L.	Long.	E. P.	How Marked.	Kind of Signal.
Am	56-13	1601 257	133-03	177 857	N. C.	E. F.
Pil	56-13	1346 510	133-04	1032 02	N. C.	E. F.
Dub	56-13	414 1442	133-04	647 385	C. B.	E. F.
Dec	56-14	1738 901	133-04	800 284	N. C.	E. F.
Le	56-14	955 340	133-04	734 300	N. C.	E. F.
Sti	56-14	1516 207	133-04	230 804	N. C.	E. F.
Put	5614	1649	133-05	988 46	N. C.	E. F.
Ail	56-14	286 1370	133-05	690 344	N. C.	E. F.
Bed	56-14	366 1490	133-05	105 929	N. C.	E. F.
Fat	56-14	476 1380	133-06	979 55	N. C.	E. F.
Dog	56-14	795 1061	133-06	649 385	N. C.	E. F.
Bit	56-14	363 1493	133-06	176 858	N. C.	E. F.
Lag	56-15	1634 222	133-06	238 795	N. C.	E. F.
Oven	56-15	981 875	133-06	221 219	N. C.	E. F.
Off	56-15	350 1506	133-07	627 406	N. C.	E. F.
Rat	56-16	1801 55	133-07	771 262	N. C.	E. F.
Sore	56-16	735 1121	133-07	786 347	N. C.	E. F.
Moo	56-16	627 12-29	133-07	486 546	N. C.	E. F.
Arm	56-16	260 1582	133-07	207 326	N. C.	E. F.
Jil	56-16	238 1618	133-08	410 620	N. C.	E. F.
Kero	56-17	1706 150	133-08	416 617	N. C.	E. F.
Cox	56-17	928 929	133-08	673 560	N. C.	E. F.
Nice	56-17	390 1466	133-08	429 604	N. C.	E. F.
Bert	56-17	35 1601	133-08	259 774	N. C.	E. F.

*N.C. means Nail in Cement.

Name	Lat.	Long.	D.P.	How Marked	Kind of Signal
Ol	56-18	1675 181	133-09	1020 12	-----
Fish	56-18	1644 212	133-09	934 198	-----
Mus	56-18	1613 248	133-09	497 835	-----
Herb	56-18	666 1190	133-09	832 230	N.C.
Ferg	56-19	1845 11	133-09	187 945	-----
Nik	56-19	1589 267	133-10	841 190	-----
Pin	56-19	1252 604	133-10	438 428	-----
Ray	56-19	1193 603	133-10	224 827	-----
One	56-19	919 937	133-10	568 422	-----
Hit	56-19	874 982	133-10	603 428	-----
U.	56-19	661 1195	133-10	496 235	N.C.
Egg	56-19	283 1568	133-11	417 634	-----
Rip	56-20	1676 180	133-11	241 702	-----
Fu	56-19	576 1290	133-09	402 629	-----
Is	56-16	229 1627	133-03	247 704	-----
It	56-12	48 1208	133-03	439 595	N.C.
Ko	56-13	324***** 1322	133-01	546 492	N.C.
Er	56-14	1543 312	133-01	703 332	N.C.
Cat	56-13	1060 796	133-00	634 425	N.C.
Kim	56-13	258 1596	129-59	181 358	N.C.
Ox	56-14	1409 447	133-00	704 270	N.C.
Jo	56-14	956 930	133-00	744 290	N.C.
Pe	56-14	934 922	129-58	58 276	N.C.
An	56-14	1211 645	129-58	1022 12	-----
					Fl.

NC - Nacah
Cannons

Name	Lat.	D. M.	Long	D. P.	How Marked	Kind of Signal
		1483		34		
Sex	56-14	373	129-56	1000	N.C.	Flag
		187		44		
Id	56-13	1669	129-56	990	----	Fl
		179		594		
Coq	56-13	1677	129-56	440	----	Fl.
		589		808		
Bl	56-13	1267	129-58	826	----	Fl.
		1494		315		
Jig	56-13	362	129-55	719	---	Fl.
		*343***		*371**		
Mut	56-14	1513	129-59	663	N.C.	B.P.
		956		833		
Bit	56-15	900	133-00	201	N.C.	W.W.
		15		871		
Ted	56-15	1841	133-00	163	N.C.	B.P.
		838		333		
Dove	56-16	1018	129-59	700	N.C.	B.P.
		856		839		
Rig	56-16	1000	129-59	194	N.C.	B.P.
		1153		73		
Lot	56-16	703	129-58	960	N.C.	B.P.
		1009		490		
Trip	56-16	847	129-58	543	N.C.	B. P.
		666		383		
Len	56-16	1190	129-58	650	N.C.	B.P.
		702		884		
Flat	56-16	1154	129-58	149	N.C.	W.W.
		1033		247		
Rox	56-16	823	129-57	786	**--	W.W.
		1277		493		
Ksl	56-16	579	129-57	540	---	W.W.
		79		253		
Lon	56-15	1777	129-57	780	---	W.W.
		1056		482		
Ape	56-15	800	129-57	551	---	W.W.
		1648		578		
Tart	56-15	208	129-57	455	---	B.P.
		1769		215		
Sip	56-15	87	129-57	817	---	W.W.
		256		776		
Wing	56-14	1600	129-58	258	N.C.	B.P.
		306		127		
Cur	56-14	1550	129-58	907	N.C.	B.P.
		435		763		
Os.	56-14	1421	129-59	270	----	Fl.

In the list of same table positions the distance in Meters "UP" from the Latitude of the given signal is on the same line with name of signal and Latitude.

The distance in Meters to the "LEFT" from the Longitude of the given signal is given on the same line with name of signal and Longitude; i. e.

"AS" Lat. 56-13. Distance "UP" from Parallel 56-13 - 257M.

Long. 133-03. Distance to "LEFT" from Meridian 133-03 - 857M.

The distances 1601 and 177 are the back distances respectively for Lat. and Long.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3639.

State . . . S. E. ALASKA

General locality . . Clarence Stait,

Locality . . Northern Part of Kashevarof Passage.

Chief of party . C. G. Quillian, Asst.

Surveyed by . L. H. Zeman

Date of survey . . During June, July and August. 1916.

Scale . . . 1 : 20,000

Heights in feet above . Ordinary High Water.

Contour interval . 100 . feet.

Inked by . L. H. Zeman. . Lettered by . L. H. Zeman

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet

Remarks: