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State: *Alaska*

DESCRIPTIVE REPORT.

Top. Sheet No. *3467.*

LOCALITY:

Schumagin I.
Koonin I.

1914

CHIEF OF PARTY:

J. B. Miller

11-4645

3467

DEPARTMENT OF COMMERCE
Coast & Geodetic Survey,

O. H. Tittmann, Supt.

ALASKA PENINSULA, SHUMAGIN ISLANDS

KOROVIN ISLAND

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET I 3467

Surveyed by the Steamer PATTERSON, September & October 1914

1. REPORT, LIMITS, SCALE, METHODS, OBSERVER.

I have the honor to report as follows upon topographic sheet I, which shows the topography of Korovin Island, Shumagin Islands, Southwest Alaska; as done by a party from the Steamer PATTERSON. The scale used was 1:20,000, and the plane-table used exclusively in the work. The work was done by a party in charge of Leroy P. Raynor, Aid, C. & G. Survey.

2. CONTROL, TRAVERSES, CONTOURS, HEIGHTS.

The traverses were all closed upon points located by triangulation with one exception and a proportional linear adjustment made. The greatest errors of closure were 40 meters in the traverse from Δ Gab to Δ Point, 20 meters in the one from Δ Gab to Δ Gro and 19 meters in the traverse from Δ Gab to Δ War. The rest of the traverses had errors of closure under 10 meters. The traverse from Gab to Has on the south side of Korovin could not be carried further around the point so the traverse was stopped at Has. As considerable care was taken in the handling of the instrument and short sights were taken it is the opinion of the observer that there is very little error in the traverse. In plotting distances in the field allowance was made for expansion or contraction of the sheet. As many inland stations, as time permitted, were occupied to insure accuracy in the contours. All heights and elevations are above high water level. The greatest discrepancy between independent values of the same mountain was not over 10 feet. The contour interval is 50 ft.

T.3467

3. GENERAL REMARKS, FORM OF LAND, MOUNTAINS, CHARACTER OF SHORE LINE, VEGETATION, ANIMAL LIFE.

In shape, the island of Koróvin is quite irregular, with its greatest length east and west. On the northern side it is indented by two bays, Grosvold Bay and a smaller one to the east; while on the south is Korovin Bay and a smaller one to the east. The east shore line ~~side~~ is fairly regular with only a few slight indentations; while the west and northwest shore line is quite regular. The western half of the island is quite mountainous. The top of the mountains on this part of the island are broad and flat. From the south shore the ascent is steep but fairly even to the top; but the west side is cut up very irregularly by many valleys and ridges. The highest peak on the island is at Δ Korovin which is 1816.5 ft. high. There is a wide low marsh in the center of the island extending across from north to south. In this marsh are several good sized fresh water lakes and a salt lagoon entering from Grosvold Bay. The large fresh water lake draining into Korovin Bay nearly meets this salt lagoon. The land rises evenly though steeply to the ridge west of the northern part of the lowland. West of the southern part a large valley extends some distance to the west before rising steeply to the ridge surrounding it: east of the lowland the slopes while more gradual, are more irregular. A ridge running from the northeast corner of the island in a southerly direction slopes very steeply to the east coast at the northern end; and more gradually at the southern end. The west side has a gradual slope. Two peaks at the south end of this ridge stand out sharply from the surrounding country. The southwestern one which is lower is ^{higher} very sharp and jagged; while the other peak is somewhat flat, and has steep sides, especially on the east where it drops vertically for 400 feet: it may be mistaken for Cape Devine when seen from a distance. Cape Devine is precipitous, its highest point being 883 ft. high, and joined to the main island by a low narrow neck less than 75 ft. high: the east face is almost a sheer cliff, gray in color. The south beach of Korovin except on the western part is generally sandy and subject to much swell especially if the wind is south or east. The east shore has a moderate swell at all times and proves a difficult place to land when there is a strong easterly breeze. On the north and west coasts there is not much surf except with a strong onshore wind. The island is covered with grass except on the mountain tops where it is either too steep and rocky or too high for much vegetation to grow. Alders are scattered all over the island but are thicker on the western part. Nearer the streams they grow more abundantly and to a larger size than anywhere else being from five to eight feet tall. In other places especially at

T-3467

high altitudes they are only from one to three feet high. A species of moss is found especially on hill tops and rocky places. Salmon-berries are abundant in season. There are numerous small birds on the island. Ptarmigan are plentiful. There are numerous saltwater ducks all round the island, while in the lakes, fresh water ducks are to be found. Small field mice are found on the island. There are numerous hawks and ravens, a few eagles, and many sparrows, while in the bays, gulls are plentiful. There are no game animals on the island. A few sea-lions were seen off the west coast. In nearly of the many streams on the island trout can be found in abundance. Silver salmon run into the large lake on the south side and into several of the large streams.

4. DETAILED DESCRIPTION OF SHORE; PROMINENT POINTS

Cape Devine forms the southeast point of Korovin Island. It is 883 ft. high, and has cliffs all round, ^{and is} connected to the island by a low neck of land. The shore line on all sides of the cape is foul with many rocks awash at low water, at distances from 10 to 100 meters from shore. South of the cape is a rock awash at low water 360 meters from shore. There is a moderate swell on the south and east shores of the cape at nearly all times. While the west side of it is exposed to a heavy surf when the wind blows strongly from the south or west. The shore is composed of rocks and boulders on the south and east sides with the exception of a small strip of sand beach on the south; while the west side is pebbles and coarse shingle up to the head of the bay west of the point. The beach at the head of the bay, from the lake shown on the sheet to where it suddenly bends southward is wide and sandy. Beginning at the western end of this beach are grey cliffs 200 to 350 ft. high with slightly inclined strata showing plainly. The west shore of this bay is pebbly to within 300 meters of the point. Beyond here the cliffs rise nearly vertical from the water's edge and prevent passing along the shore. Off this shore are several pinnacles about 50 ft. high and other outlying rocks from 5 to 14 ft. high to a distance of 100 meters from shore. O Up is located on a broad topped rock 100 ft. high and 400 meters offshore. The west side of the point is rocky and pebbly with steep rocky cliffs from 50 to 200 ft. high. These cliffs are highest near the end of the point. At the head of the small bight where O Tut is located, the shore is sandy with low bluffs about 20 ft. high, cut through by two good sized streams. The western stream has a narrow valley sloping gently far back into the interior of the island. West of it is a high rocky point impassible at high water. O Rol is a rock about 14 ft. high near the end of a rocky reef, bare at low water. The head of Korovin Bay extends west from here and the shore is wide and sandy. There are several rocky reefs with breakers at low water, extending out 200 to 400 meters from this shore. The low bluffs backing the eastern half of this beach are rocky while those to the west are of fine black sand, and are from 20 to 60 ft. high.

T-3467

Near the large lake shown at the head of this bay, a small two story wooden house owned by the Indians, shows plainly above the bluffs. The rest of the village of four or five houses is hidden from the sea by the bluffs in front. One can see across the island to the north from this point as the country between is very low. The west shore of Korovin Bay is composed of large rocks and boulders, with one good pebble beach at the southwestern-most stream. The cliffs rise nearly vertical to heights of 50 to 100 ft. so that one can pass along the shore only at low tide. Just off the pebble beach, 100 meters from shore is a rock 10 feet high between which and shore are several rocks awash at low water. Beyond the beach the cliffs have a sheer drop of 250 to 300 feet and one cannot pass here without a boat. There are several water-falls along this shore. Westward of Korovin Bay, the whole south shore line is rocky with steep black cliffs behind. Off the middle part of this shore line is a large pinnacle rock 54 feet high accessible from shore only at low water. At several places the cliffs rise directly from the water's edge, so that one can not pass along the shore even at low tide. The south shore line runs in nearly a true east and west direction. At the west end, which is a black rocky point, the shore line turns to the northwest and runs in a fairly straight line as far as Henderson Island. This shore is made up of shingle beaches with several high rocky points impassable at high water. Back of this stretch of shore line, the topography is very regular, the country being cut up by many streams, with long crooked valleys extending far back into the island. These valleys have a gentle slope from the six or seven hundred foot elevation, above which the rise is much steeper. The streams are quite large, having a good sized drainage area. The valleys except for the one at the northern end of the stretch are narrow near the shore line but widen as they go inland. Henderson Island is a small island off the coast west coast of Korovin. It is about 500 meters long and 200 meters wide with its longer axis lying east and west. It is fairly level and its highest point is 58 ft. high. The shore is composed of shingle and boulders. Between Henderson Island and Korovin there is some kelp and at low water with a heavy swell there are breakers right across. Δ And is located nearly on the center of this island. S 21°E 880 M. from Δ And, and 650 meters from the shore of Korovin is a rock about 8 ft. high. At high tide only a small portion shows above water, but at low tide, rocks 10 to 20 meters on all sides of the highest point show above water level. Beyond Henderson the shore line rounds in a fairly regular line towards the north and east as far as the valley where \odot Fed is located. This shore except for a small portion of pebble beach at the south end, is composed of large irregular rocks and boulders. A small ridge running parallel to the coast rises gradually toward the north-east to an elevation of 600 feet. The cliffs facing the shore are very steep.

T-3467

All along here are rocks awash at low water, 10 to 30 meters from shore. Back of ☉ Fed is a small low valley with a very gentle slope to the low divide separating it from the valley seen from the shore near Henderson Island. Off the point at the west end of this valley is a reef, bare at low water, the end of which is 120 meters from shore. N 56° E and 270 M from ☉ Fed is a rock awash at low water 100 meters from shore. From this valley the shore line runs in a very regular line a little to the north of east for about a mile where another valley with a good pebble beach is reached. Between the valleys the shore is composed of large boulders and rocks, while back of the shore, the cliffs rise very steeply about 400 feet. This valley runs towards the southeast for a short distance, and then turns abruptly at right angles and runs with a very gentle slope for a mile or more to the southwest. Its sides are very steep and from the shore a large waterfall may be seen. From this valley, the shore line continues to run in a direction a little north of east, and is quite regular to a point about one and one-half ^{miles} ~~meters~~ beyond the valley. This shore is composed of large rocks and boulders, with steep cliffs over 400 ft. high. Beyond here the shore has a fairly regular trend, a little south of east to Grosvold Bay. At the west end of this stretch is a small open bay at the mouth of a narrow ravine, offering protection to small boats except from a north wind. There is a pebble beach at the head of this bay. A short distance east of this bay is a good sized waterfall dropping vertically 33 feet. There is a pebble beach for a short distance on each side of this fall. With the exception of the valley and fall, the cliffs are very steep and rise to a height of 400 to 500 feet. At several places here it is impossible to pass along the shore except at low water. Grosvold Bay is the name given to the larger of the two bays on the north side of Korovin. At the northwest side of this bay is a high rocky point about 300 feet high with vertical sides. A narrow neck 50 feet high connects it to the island. The west shore of the bay has a shingle and boulder beach. Back of the shore line is a steep rise to the ridge on the west. At the head of the bay is a pebble and sand beach. A long lagoon, nearly dry at low tides, extends southwest more than half way across the island. East of this lagoon there are sand bluffs from 20 to 60 ft. high back of the beach. There are several rocky reefs along this shore extending out several hundred meters. A low point 200 feet high separates Grosvold Bay from another bay east of it. The sides of this point are of black rock and so steep and close to the water that one cannot pass along here except at low water. Off the end of the point, which is here 192 feet high, are several rocks awash at low water 50 meters from shore. At the head of the bay just east of Grosvold Bay is a sand beach backed by pebbles, behind which is a good sized fresh water lake. There is much drift-wood found on this beach. Outside of the sand beach and bare at very low water, are many sharp rocks. From the head of this bay the shore line extends in almost a straight line to the

T-3467

northeast point of Korovin Island. The shore line is rocky and foul with rocks awash at low water to a distance of 40 meters from shore. The cliffs, which are black in color and rise steeply from the shore, vary in height from 20 ft. at near the head to 200 ft. near the point. Back of the cliffs there is a gradual rise to the ridge behind. There are several vertical waterfalls along here, about one hundred feet high. At the northeast point of Korovin is a large bell shaped pinnacle 91 feet high. East of the pinnacle is a rocky reef, bare at low water extending out 120 meters beyond the pinnacle. From this pinnacle to Mart which is a large flat topped rock, 55 ft. high, and accessible from shore at low water, the shore line is fairly regular, with beaches ranging from large boulders to fine sand. The cliffs rise abruptly from the shore line on the northern part of this stretch. Near the middle is one small valley; while on the southern part the ascent is much less steep. 200 M. off Mart are rocks awash at low water. From here to Way which is at the head of a small bay suitable for a small boat, the cliffs are steep and about 100 feet high. From this bay, there are cliffs, black in color, and from 50 to 70 feet high, rising vertically from the water's edge, as far as the head of the bay just east of the narrow neck of land connecting with Cape Devine. Here the shore is sandy and the country inland quite low. Beyond here is Cape Devine which has already been described.

5. SETTLEMENTS: WHITE, NATIVE, RESOURCES: MINING, FISHING, FARMING, COMMERCE.

There are no white settlements and but one Indian settlement on this island. This is situated on the south shore of the island and just east of the mouth of the large fresh water lake. It consists of five houses and a church. At present a family of five are occupying two of the houses. Only one of the houses is visible from sea, the rest being hidden by the bluffs in front. Besides this settlement, there is one small house at the head of Grosvold Bay, used as a fishing camp. Enough salmon are caught by the natives for their own use. There is no farming, mining, or trade.

6. GEOGRAPHIC NAMES.

Below is given a list of the few geographical names available:

Cape Devine.	Grosvold Bay.
Henderson Island.	Korovin Bay.
Korovin Strait.	Gorman Strait.
	Scotland Point

7. MAGNETIC DECLINATION.

The magnetic declination was carefully determined with the table in orientation at station "And" on Henderson Island and found to be N 16° 41' E.

Respectfully submitted,

Leroy P. Raynor

APPROVED:

Aid, C. & G. Survey.

James B. Miller,
Assistant, C. & G. Survey,
Commanding.

Kodiak, Alaska,

October 26, 1914.

SHEET I
PLANE TABLE POSITIONS

Positions	Elev. ft.	Lat. ° ' "	D.M. M.	Adjust. M.	Long. ° ' "	D.P. M.	Adjusted M.	Remarks.
Ape	20	55°26'	1105	1107	160°12'	1045	1044	East of house
log pile & flag			747	748		11	11	Head Grosvold Bay
Bat	20	55 26	815	816	160 12	115	115	Near stream
stick in barrel			1037	1039		942	940	east side of bay
	12	55 26	1441	1442	160 11	774	772	black rock pt.
w.w.rock & pole			412	413		284	283	east side bay
Dad	10	55 27	469	470	160 10	924	922	green top
w.w.rock			1382	1383		134	133	rock on pt.
Edna	20	55 27	273	274	160 10	706	705	n.w.pt. of bay
sharp pt.rock			1578	1581		350	350	
Fun	± 50	55 26	1651	1654	160 10	929	928	top bluff w
tripod			200	201		127	127	side bay
Gap	25	55 26	960	960	160 10	880	882	log pile head
pole & cairn			895	895		173	173	of bay
Hula	35±	55 26	1160	1160	160 10	189	189	top bluff near
cairn & pole			695	695		864	866	stream
Imp	23	55 26	1466	1468	160 09	799	799	on large black
cairn & pole w.			387	387		256	256	rock on shore
Jen		55 26	1587	1590	160 09	546	545	4 ft. above
vert.waterfall			264	265		510	510	ground
Jam	35	55 26	1770	1773	160 09	416	415	large top heavy
pole on grass top rock			82	82		640	640	bl.rock on point
K	12	55 27	120	120	160 08	--	1019	w.w.
p & cairn			--	1735		36	36	rocky point
Let		55 27	166	166	160 08	--	776	4 ft above
waterfall			--	1689		279	279	ground
"Vin	91	55 27		152.8	160 08		119.3	w.e.point Korovin
bell shaped pinnacle				1702.8			935.3	Island
Nag	12	55 26	1594	1600	160 08	422	423	in small bay
w.w/cross & cairn			253	255		630	632	south of vin
Oat	56	55 26	974	978	160 08	500	502	50 m. off
pinnacle			873	877		551	553	shore
Or	12	55 26	801	805	160 08	677	675	on rock on
w.w.pole & Cairn			1045	1050		381	381	shore
Pres	35	55 26	251	253	160 08	1013	1012	sharp point off
w.w.ple & flag			1595	1602		44	44	Black rock
Quiz	40	55 25	1484	1483	160 09	141	141	top low grass
pole & flag			372	372		913	915	covered point
Rap	12	55 25	933	931	160 09	440	443	rock on sand
pole & flag			925	924		610	613	beach near high bluff
Sat	14	55 25	802	802	160 09	461	462	3 ft above
waterfall			1054	1053		593	594	ground
To		55 25	90	90	160 09	356	356	higher of 2
w.w.rock & cairn			1764	1765		690	690	lg.rocks by stream
"Marta	55	55 24	1774	1734.3	160 09		97.3	east coast
cap rock				121.2			958.7	Korovin
Urn	55	55 24	1000	1000	160 09	204	206	± 5 ft from
waterfall			854	855		845	850	ground

" located by triangulation.

[illegible]

Stations	Elev. ft.	Lat. °	D.M. M.	Adjust. M.	Long.	D.P.	Adjusted	Remarks.
Mike		55°24'	712	716	160°16'	271	273	
w.w.			1133	1139		777	783	
Nit		55 24	1188	1196	160 16	157	159	
w.w.			655	659		890	897	
Nip	116	55 24	1225	1232	160 16	230	233	
waterfall			621	623		817	823	
		55 24	1752	1757	160 15	484	490	
w.w.rock on shore			97	98		560	566	
Qua		55 24	1762	1772	160 14	525	530	
w.w.rock on shore			82	83		522	526	
Rol		55 24	1200	1208	160 13	1035	1048	
w.w.pin offshore			644	647		07	08	
Sot		55 24	985	987	160 13	561	568	
w.w.			866	868		482	488	
Tut		55 24	951	955	160 12	893	900	
w.w.			897	900		153	156	
Up		55 23	1683	1693	160 13	99	101	
w.w.offlying rock			160	162		940	955	
"Point	49	55 23		867.8	160 12		217.1	sharpest of
pinnacle				987.7			839.1	several
Sharp	42	55 23	984	991	160 12	310	314	
pinnacle			857	864		735	742	
Vim		55 23	1344	1355	160 12	52	53	
w.w.			495	500		996	1003	
		55 24	136	137	160 11	891	900	
w.w.			1716	1718		154	156	
Xon		55 24	158	159	160 11	00	00	small rock
w.w.near stream			1692	1696		1043	1056	pillar
Yam		55 23	1730	1739	160 10	250	253	below vertical
w.w.			114	116		796	803	grey cliff
Zap		55 23	580	584	160 09	972	984	
w.w.on point			1263	1271		70	72	
Lat		55 25	437	441	160 20	865	873	
pole & cairn			1403	1414		178	183	
Ma		55 25	750	756	160 20	885	891	
w.w. & pole			1092	1099		163	165	
Not		55 25	1100	1109	160 20	850	854	on sloping
w.w. & pole			738	746		200	202	rocky point
Arm		55 25	1396	1408	160 20	720	723	
pole & cairn			442	447		332	333	
But		55 26	00	00	160 20	510	513	on rock on
Cairn & pole w.w.			1850	1855		539	543	shore
Cap		55 26	380	381	160 20	187	189	foot of
w.w.cairn & pole			1470	1474		860	867	rock slide
D		55 26	638	639	160 19	1011	1020	on rock
w.w.cairn & pole			1213	1216		35	36	on shore
Elk		55 26	983	988	160 19	725	732	on rock
w.w.cairn & pole			862	867		320	324	on shore
Far		55 26	1285	1292	160 19	565	572	on rock
w.w.cairn & pole			560	563		477	483	on shore
Fed		55 26	1551	1554	160 19	237	239	foot of
pole & cairn			300	301		808	816	small valley
Gun		55 27	02	02	160 18	660	665	
w.w.cairn on pt.			1850	1853		385	390	

"located by triangulation.

Stations	Elev. ft.	Lat.	D.M. M.	Adjust M.	Long.	D.P. M.	Adjusted M.	Remarks.
Hop		55°27	107	108	160°18'	197	199	near small
w.w.cairn & pole			1742	1747		851	856	high fall
If	50 ⁺	55 27	336	337	160 17	923	924	on pt. west
pole in sod pile			1516	1518		118	121	of small bay
Jug		55 27	389	390	160 17	694	701	head of
w.w.cairn & pole			1460	1465		350	354	small bay
Tos		55 24	381	383	160 12	705	711	4 ft above
waterfall			1467	1472		340	344	ground
Knob	20 ⁺	55 27	606	608	160 17	582	590	foot of
w.w.cairn & pole			1243	1247		458	465	rock slide
Lass	17 ⁺	55 27	812	814	160 17	273	276	west tip
w.w.top rock			1039	1041		772	779	rock on shore
Mit	25 ⁺	55 27	1164	1172	160 16	743	746	foot large
w.w.cairn			680	683		307	309	rock slide
Nap	15 ⁺	55 27	1396	1403	160 16	382	384	
w.w.cairn & pole			450	452		668	671	
Off		55 27	1670	1680	160 15	863	869	2 ft above
waterfall			174	175		183	186	ground
Port		55 27	1615	1627	160 15	622	628	
small cairn on rock			226	228		423	427	
Quit		55 27	1254	1265	160 15	397	400	west side
log pile in bay			588	590		650	655	of stream
Rum		55 27	1415	1426	160 15	62	63	point east
cairn & pole			425	429		981	992	of bay
War		55 27		1149.1	160 14		598.2	1 mile west
vert. waterfall				706.3			456.2	of lg. bay
Fen		55 27	1105	1111	160 13	1026	1041	on rock
cairn & pole			740	744		13	14	on shore
End		55 27	1053	1059	160 13	191	194	on rock
cairn & pole			791	795		850	861	foot slide
Dot		55 27	789	795	160 12	807	813	n.w. shore
highest rk. off pt.			1052	1059		240	242	Grosvold Bay
Cop		55 27	317	319	160 13	418	424	rock on shore
pole & cairn			1529	1536		624	631	
Ben		55 26	1731	1744	160 13	481	490	near small
pole & cairn			110	111		557	565	lake
"Gro		55 27		449.6	160 10		780.9	
pole on point				1405.8			275.6	

" located by triangulation.