

83
STA
1913
M

3433

C. & G. SURVEY,
LIBRARY AND ARCHIVES
MAR 18 1914
Acc. No. _____

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

O. Pittmann
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Top. Sheet No. *3433*

LOCALITY:

Popof Island
Northern Part

1913

CHIEF OF PARTY:

James B. Miller

11-466

3433

DEPARTMENT OF COMMERCE
Coast and Geodetic Survey

O. H. Tittmann, Supt.

ALASKA

Shumagin Islands

ORIGINAL TOPOGRAPHIC SHEET X 3433

POPOF ISLAND , NORTHERN PART

Surveyed in August and September by the party on the C. & G. Survey

Steamer PATTERSON

1913.

James B. Miller, Assistant, U. & G. Survey, Chief of Party

William V. Hagar, Aid, C. & G. Survey, in charge of topographic party.

SCALE 1:20,000

AREA 16 SQ. STAT. MILES.

Inked by William V. Hagar

STATION	LATITUDE			LONGITUDE			REMARKS
		Seconds in M's before after adjusting			Seconds in M's before after adjusting		
Cap	55 - 21		1681.2 774.4	-160 - 28		780.8 336.3	W.W. ✓
Top	21	570 1286	571 1285	28	540 517	536 521	W.W. ✓
Mut	21	69 1787	70 1786	28	449 608	442 615	W.W. ✓
Cove	20	1749 107	1751 105	28	34 1023	24 1033	W.W. ✓
See	20	1609 247	1611 245	27	537 520	523 534	W.W. ✓
Am	20	1619 237	1623 233	26	682 375	660 397	W.W. ✓
My	20	1296 560	1300 556	26	509 548	484 573	W.W. ✓
Go.	20	748 1108	753 1103	25	990 68	959 99	W.W. ✓
Is	20	1071 785	1077 779	25	463 594	428 629	W.W. ✓
Mar	20	1640 216	1647 209	24	1013 44	972 85	W.W. ✓
Sed	21	281 1575	289 1567	24	131 926	84 973	W.W. ✓
Pun	21	773 1083	783 1073	23	228 829	174 883	W.W. ✓
Oh	21	1031 825	1042 814	22	831 226	774 283	W.W. ✓
Kil	21	1407 449	1418 438	22	793 264	734 323	W.W. ✓
Cove	21	1621 235	1632.3 223.3	22	621 436	541.9 495.0	Intersection station. ✓
Der	21		1412 444	22		386 671	Derrick on wharf ✓
Flag	21		1433 423	22		496 561	Flag pole ✓

STATION		LATITUDE		LONGITUDE		REMARKS
		Seconds in M's before adjusting	after	Seconds in M's before adjusting	after	
Hub.	55 - 21		1276 580	160 - 22	439 618	Post on shore. ✓
Hal.	21		1140 716	22	246 811	Post on shore. ✓
Rat.	21		1442 414	21	649 408	W.W. ✓
Pie.	21		1181 675	20	654 403	W.W. ✓
Lit.	21		350.1 1505.5	20	130.9 926.3	Pinnacle Rk. ✓
Son.	20		1625 231	20	827 230	W.W. ✓
But.	20		1171 685	21	370 687	Waterfall ✓
Dun.	20		663 1193	21	793 265	Waterfall ✓
Tent.	20		395 1461	21	805 253	Board signal ✓
Ray.	19		1846 10	21	586 472	Center of house. ✓
Her.	20		379 1477	21	170 888	Drift pile ✓
Berg.	20		712 1144	20	891 167	W.W. ✓
Bum.	20		937 919	20	487 571	White streak on cliffs ✓
Sup.	20		470 1386	19	1034 24	W.W. ✓
Fox.	20		613.6 1242.0	19	689.4 368.2	W.W. ✓
Rot.	19		1743 113	20	50 1008	W.W. ✓
Sat.	19		726 1130	19	955 103	W.W. ✓

DEPARTMENT OF COMMERCE
Coast and Geodetic Survey,

O. H. Tittmann, Supt.

SOUTHWEST ALASKA

Shumagin Islands

DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET ~~N~~ 3433

Surveyed by the Steamer PATTERSON, August
and September 1913.

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

I have the honor to report as follows upon topographic sheet H, which shows the topography of the northern and eastern parts of Popof Island, Shumagin Islands, Southwest Alaska, as done in August and September, 1913 by a party from the Steamer PATTERSON. At the north and west the sheet starts near Δ Green where it connects with sheet A and extends east and south, connecting with sheet B at a point about four miles north of Popof Head. The scale used was 1:20000 meters and the plane table was used exclusively in the work. The work was done by a party in charge of William V. Hagar, Aid, C. & G. Survey.

2. CONTROL: TRAVERSES. CONTOURS: HEIGHTS.

On the north coast of Popof Island a continuous traverse was run and the traverse closed upon Δ Cove with an error of 50 meters. A proportional linear adjustment of this traverse was made and the amount of adjustment for error of closure of each hydrographic signal is shown in the list of positions of plane table signals. On the east coast, owing to the inaccessible nature of the shore a continuous traverse could not be run, but numerous signals were cut in by triangulation so as to afford adequate control for the plane table work. In most cases the shore of bights was accessible and, a signal having been located in the bight, a traverse was run from it each way as far as possible and the shore line sketched in with the aid of tangent cuts. In plotting distances in the field allowance was made for expansion or contraction of the sheet. All heights and elevations were obtained by the plane table and are given above high water level. In determining the height of mountains the greatest discrepancy between independent values for the same mountain was ten feet. Especial attention was given to contouring and every effort made to insure accuracy. Several inland stations were occupied for this purpose. The contour interval is 50 feet.

T-3433

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

Popof Island is approximately twice as long as it is wide, the greatest length being in the east and west direction. Taken as a whole the island is fairly regular in shape with few large indentations. Little Harbor on the eastern coast is the largest indentation. The greater part of the island is covered with mountains. They are not as high as the mountains on Unga Island, however, none of them being over 1500 feet high. At the northwestern corner of the island is quite a large comparatively level section. East of a line running north from Red Cove there is practically nothing but mountains, there are, however, two valleys in this eastern part that are quite wide. The mountains in the western part of the island are neither as high nor as rugged as those in the eastern part. The snow was gone from the mountains by the first of June and the first snow to be seen on them in the fall came the first week in October. The shore of Popof is quite rugged. The eastern shore especially is very rocky and in many places impassable owing to the fact that the cliffs rise from the water's edge. From Pirate Cove west as far as the sand spit below Sand Point the shore is all passable at low tide. South of the sand spit there are frequent places where the shore is impassable even at low tide. South of Red Cove there is always considerable surf which makes landing rather difficult. North of Red Cove as far as Range Island there is practically never any surf, while from Range Island east as far as Pirate Cove there is no surf except with a wind from the north. On the east coast there is always considerable surf from the east except with a stiff off-shore breeze. Vegetation and animal life are practically the same as on Unga Island. Grass, often waist-high, is found throughout the lowland. Patches of alders growing from six to eight feet high are found throughout the lowland while on the mountain slopes the alders are usually considerably stunted in growth and are only a couple of feet high. Above a height of about a thousand feet the mountains are generally bare. A variety of flowering plants grow in the valleys and on the lower hills, while salmon berries are also thick in the valleys and last from about the first of August until September. Ptarmigan are if anything more abundant than on Unga Island. A few fresh-water ducks nest on the island. These constitute all the game that is to be found. There are several varieties of small birds found around the land as well as eagles, hawks, and owls; while around the water are gulls, sea parrots, and several varieties of saltwater ducks. A few foxes are on the island but they are not as numerous as on Unga; and, like Unga, the lowland is quite generally overrun with mice. Trout is abundant in the small streams and salmon run in a few of the larger streams.

4. DETAILED DESCRIPTION OF SHORE: PROMINENT POINTS.

Commencing below Δ Green the shore bears south and east for a distance of about a mile and a half. Throughout this stretch the beach is generally rocky with two short sand beaches. Back of the beach is a very steep bank averaging about 300 feet high. A mile and a half from Δ Green is a high rocky point 350 feet high, 300 meters wide and projecting about 550 meters. East of the point is a wide bight with a sand beach. Half a mile east of this bight is a smaller bight with a sandy beach, locally known as the Salmon Ranch. Quite a large valley extends inland from the Salmon Ranch. From the Salmon Ranch the shore bears about east northeast as far as Pirate Cove, a distance of about two miles, and is rocky with perpendicular bluffs which can be passed only at low tide. Pirate Cove is

T-3433

shut in by a rocky point about 60 feet high and projecting nearly 500 meters. From near the outer end of the point an arm projects 200 meters to the eastward and affords the protection for the harbor. The extreme outer end of the point is a narrow rock only a few meters wide and undermined by the action of the water. The arch thus formed is conspicuous for a considerable distance. Pirate Cove is a very small harbor being only 480 meters long and 250 meters wide within the cove itself. From Pirate Cove the shore bears east about a mile and then south to the end of the sheet. South of Pirate Cove the shore is very bold and rocky with bluffs reaching in places a height of nearly 600 feet. Two miles below Pirate Cove is Little Harbor, a narrow harbor nearly a mile and a half in length. The shore of either side is rugged but at the head of the harbor is a sand beach of which is a broad valley. The water at the head of the bay is rather shallow. High Island is a rocky island located about midway between Pirate Cove and Little Harbor and 600 meters off shore. It is 293 feet high, 430 meters long and 310 meters wide. The island lies with its longest axis north and south. The highest point is close to the northeastern point of the island, on which sides the slope is very steep. ~~To the south and west the slope is very steep.~~ To the south and west the slope is more gradual. Ten meters off the shore near the northern entrance to Little Harbor and tangent to the entrance as seen from High Island is a pinnacle rock 90 feet high. At the southern entrance to Little Harbor is a large rocky point 480 feet high and 550 meters wide. It is connected with the shore by a narrower neck of land about 300 feet high. At either side of this neck is a bight with rocky shores. South of Little Harbor the shore is rocky, open, and bordered by high bluffs. About three and a half miles south of Little Harbor is a large sandy bight at the lower end of which the sheet terminates. The entire coast south of Little Harbor is open with no protecting bights and in many places the shore is impassable.

5. SETTLEMENTS: WHITE; NATIVE. RESOURCES: FISHING; MINING. COMMERCE.

The only settlement is a white settlement at Pirate Cove. While this is the fishing station there are several houses other than the company's bunk house. The settlement is located well inside the point at Pirate Cove and is not very conspicuous from the outside of the harbor. There is only this one fishing station within the limits of the sheet. This station, however, is during the summer at least the most important station on either Popof or Unga Islands. A few salmon are usually put up during the summer at Little Harbor and at the stream on the north coast locally known as the Salmon Ranch. There is no mining carried on at present. Commerce is confined mostly to the fish trade. The company has a store at Pirate Cove but do not carry a very complete stock and trade is almost entirely local with the fishermen. The station is the headquarters for the company's stations in the Shumagin Islands. There is a good wharf at Pirate Cove but the harbor is so small that a vessel of much size can not get in readily.

6. GEOGRAPHIC NAMES: AUTHORITIES: LIST.

Below is given a list of the geographic names of the most important points. The authorities taken were the old charts and names obtained from the older residents. Owing to the unsettled condition of this part of the island names were hard to get and few secured. On the old charts

Little Harbor is called Fox's Hole but the former name is used exclusively by the residents.

Salmon Ranch
High Island
Korovin Strait

Pirate Cove
Little Harbor

7. MAGNETIC DECLINATION.

The magnetic declination was carefully determined with the table in orientation at Δ Cove and the declination found to be $17^{\circ}18'$.

Respectfully submitted,

William V. Hagar

APPROVED:

Aid, C. & G. Survey.

James B. Miller
Assistant, C. & G. Survey,
Chief of Party.

To the Superintendent,
Coast and Geodetic Survey,
Washington, D. C.

At Sea, November 10, 1913.