

2553

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey *Topographic*

Field No. Office No. *2553*

LOCALITY

State *Alaska*

General locality *Sannak*

Locality *Islands*

1961

CHIEF OF PARTY

F. Westdahl

LIBRARY & ARCHIVES

DATE

B-1870-1 (11)+ +

2553

2553

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey *Topographic*
Field No. Office No. *2553*

LOCALITY

State *Alaska*
General locality *Lannak*
Locality *Islands*

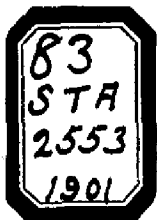
1961

CHIEF OF PARTY

F. Westdahl

LIBRARY & ARCHIVES

DATE



2553

U. S. COAST AND GEODETIC SURVEY.

U. H. Fittmann, Superintendent.

State: *Alaska*

U. S. C. & G. SURVEY.
LIBRARY AND ARCHIVES

FEB. 26 1902

Acc. No. 2553

Class.

DESCRIPTIVE REPORT.

Topographic Sheet No. 2553.

LOCALITY:

Sannak Islands

1901.

CHIEF OF PARTY:

F. Westdahl

2553

W.D. Insp't of Hyd'y & Top'g. JAN. 31. 1902. 02243

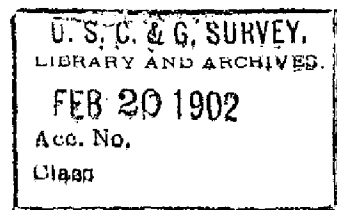
Assistant in charge of the Office.

Library and Archives.

Descriptive Report

to accompany topographic sheet entitled

Treasury Department
U. S. Coast and Geodetic Survey
O. H. Tittmann, Superintendent
Sannak Islands
Alaska

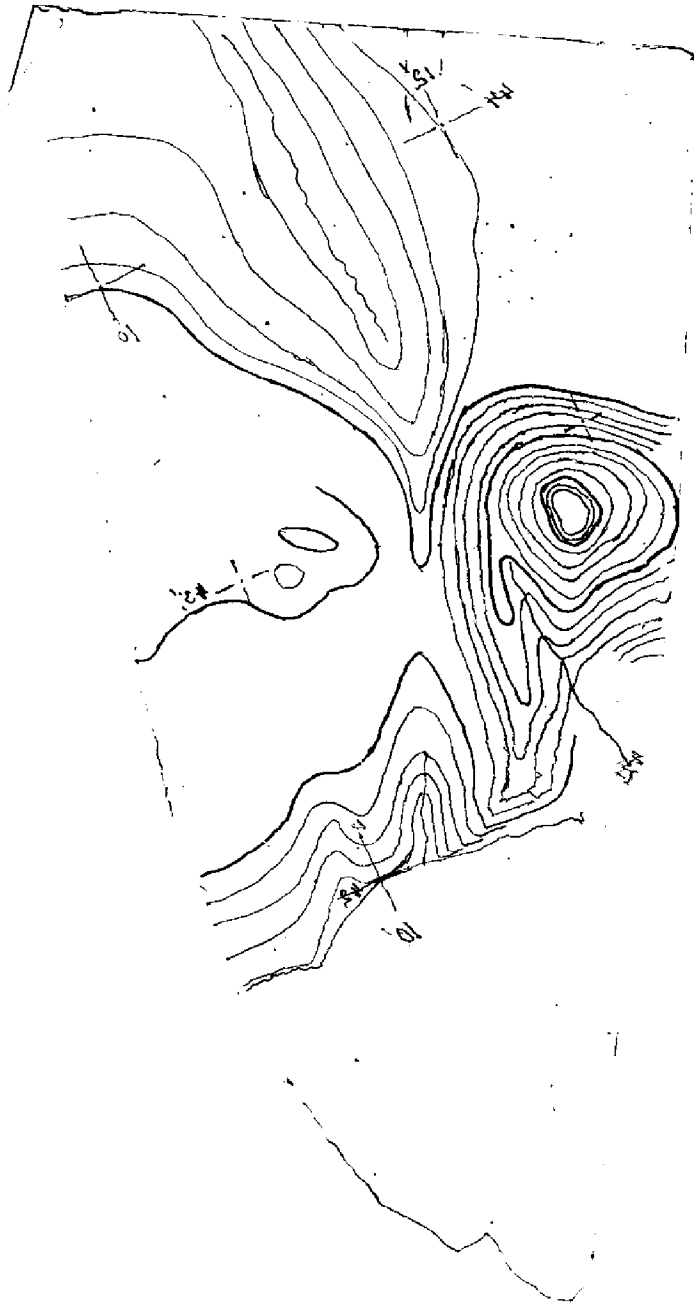


Surveyed in August and September, 1901, by the party in
Steamer "McArthur"

Ferdinand Westdahl, Assistant, Commanding

Scale $\frac{1}{40,000}$

There are two original field sheets for this work; the first, covering the main island nearly and the majority of the outlying islands, was begun and finished, without computed triangulation points, by Mr. O. M. Leland, Aid; the other, embracing the vicinity of Peterson Bay and the whole of Caton Island, after the triangulation had been completed, by Assistant R. L. Farris. Like the preceding sheet of Skatok Peninsula, both of these were executed in wet weather, between showers of mist and rain, often in the midst of a shower when it was necessary to secure the station occupied, and it was therefore impracticable to put projections on the field sheets on account of uneven shrinkage. All the field work was transferred to, and adjusted upon, a new sheet and projection by Mr. O. M. Leland, and is the sheet to which this



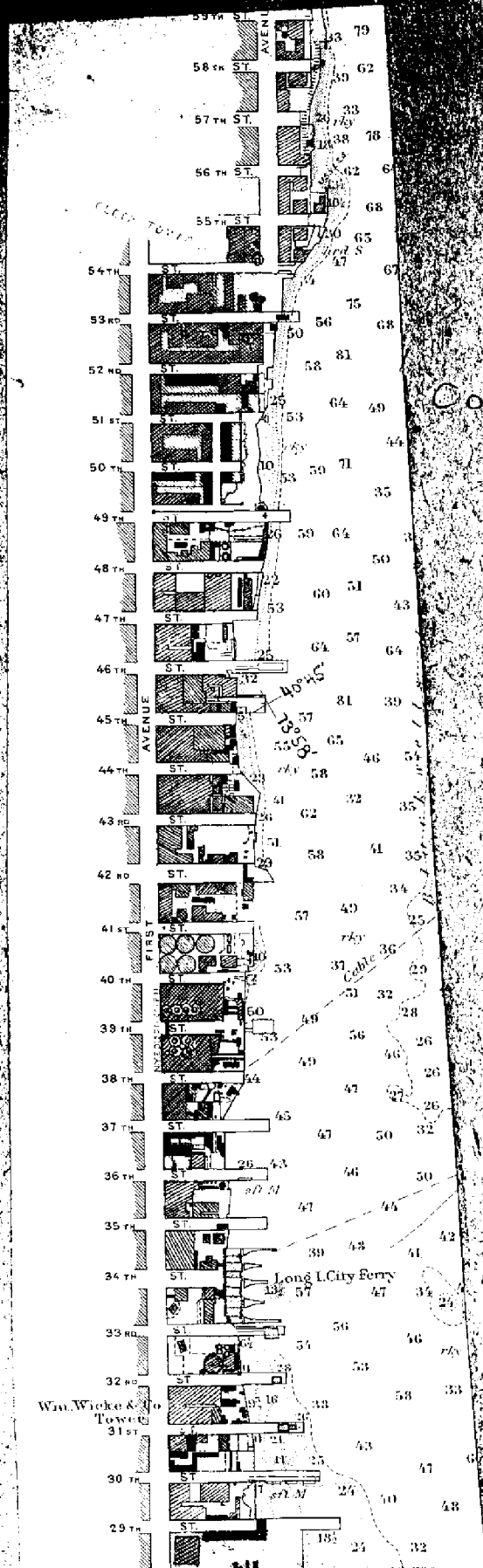


Chart
3694
Cor. to Nov. 1911 H. R. R.

Sannak Mountain, from near Pankof Δ

Sannak Δ
Granite Δ



Descriptive Report refers. The original field sheets have also been forwarded to the Office. The contours are drawn for every hundred feet difference of elevation above ordinary high water mark and are sketched mainly, the tops of mountains, hills, and bluffs only being determined by vertical angles.

The Sannak group has an extreme length between its outermost visible rocks and breaks of twenty and a half nautical miles East and West (mag.) nearly, and a breadth of ten and a half miles. The nearest point of the mainland is Cape Pankof to the northwest, with a clear passage eleven miles in width between them, and to the northeastward, at a distance of eight miles, lies Midway Rock which may be considered to be the farthest outlying point of the Sandmann Reefs and Islets. The Sannak group consists of two main islands, the Sannak and Caton Islands, on the same ridge, with a great number of smaller islands and rocks disposed in almost parallel ridges to the southward of the former. Near the northeastern extremity of the main island lies Sannak Mountain, about three miles in length by one in width, and rising to seven hundred feet above the sea. Four and a half miles to the eastward from its highest point this ridge again rises to two hundred feet and more above the sea at Middle Δ ; but all the remainder of the group consists of low ridges and irregular lumps rising to little more than one hundred feet in places on the main ridges at the north side

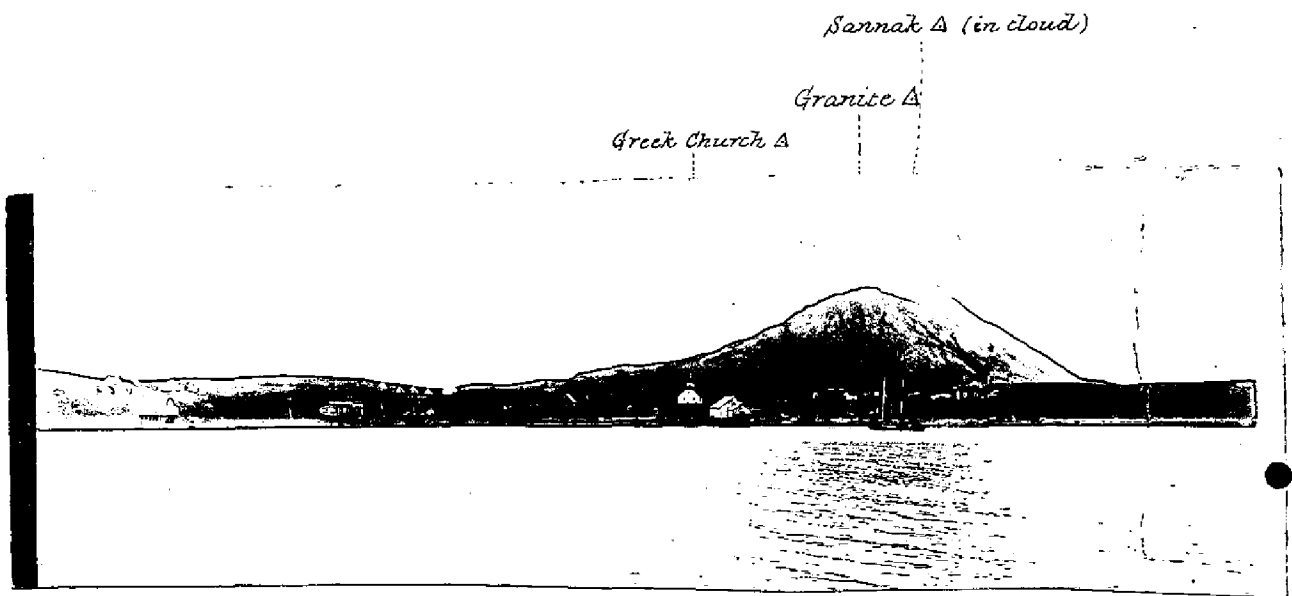
of the islands, and gradually sinking to less than forty feet along the ridges forming the islands and rocks on the south side. This low, lumpy area is covered with a luxuriant tundra vegetation, moss, grass, berries, and flowers in the short summer season; and in the innumerable depressions between the ridges and lumps are lakes and rivulets. The rocky foundation under this carpet of vegetation, as seen along the cliffs of the shores, is of a dark slate color and, where most exposed to the action of air and water, of a cleavage resembling slate. The layers are divided by transverse cracks, sometimes filled with quartz but mostly with a stain resembling iron rust. The cliffs above the action of the waves are covered with bright colored lichen. Some of the sharp projecting points on the beach bear a curious resemblance to petrified trunks of trees. Among the angular debris along the shore, apparently fallen from the cliffs above, are numerous smooth and lighter colored granite boulders from the size of a cobble stone to about one foot in diameter. The sand formed by the disintegration of these rocky ledges is coarse and angular, and, when wet, black in color. The beaches on the north side of the islands are generally shingle mixed with a little sand; on the south side a brighter colored sand prevails.

When the Sannak Islands are approached from a distance nothing is seen except Sannak Mountain, which in its outline resembles the engraved outlines of the mainland and other

islands in the vicinity. When approaching still nearer, especially from the southward where the low land stretches out farthest, the sudden rising above the horizon of this extensive and, in the present imperfect state of our published charts, unlooked for low land with its far outlying rocks and breakers, gives a nervous shock to the most daring navigators and has caused the locality to be most carefully avoided by them. The southern and western approaches ^{to Sannak Island} certainly are dangerous, especially so in the season of fogs and thick weather; but on the north and east sides it is not so, the only hidden danger so far discovered there being the Crowley Rock. No others have been reported, and in former years at least, when the bra otter was more abundant, the horizon was almost constantly scanned from the highest elevations by the native hunters.

The low islands and reefs of the Sannak group, and the similar ones in the Sandmann Reef group to the northward, with the comparatively shallow water surrounding them, have been, and still are, the favorite haunts of the bra otter, which seeks its food at the bottom of these waters, and resting places on the low lying rocks and islands within instant reach of the bra. Marvellous are the tales told of how some lucky hunters would discover the sleeping places of these wary animals, approach them cautiously at night in their noiseless kayaks, land, and club them to death by the hundred. Not so, however, during the supremacy of the Russian American Fur

Company, which allowed the natives to kill only a limited number each year, and was so careful not to disturb them otherwise that no native nor white man was permitted to live on the islands at all, except at one place at its northwestern extremity. I am informed that this regulation was implicitly obeyed by this docile people and has given the name, Achek, to the harbor, Achek or Achak being the Russian for "place of fire". Since Alaska was ceded to the United States white traders established themselves at the various harbors in the group, and the natives, spurred on by the rich rewards offered by the traders for the pelts which was probably not one-twentieth of the price obtained for them finally in the London fur market, killed the ~~pr~~otter indiscriminately. Before the Government of the United States finally adopted and enforced restrictive legislation these traders fitted out small schooners and, taking on board a dozen or more native hunters with their kayaks for the purpose, pursued the otter at its feeding grounds among the farthest outlying ledges so that now the valuable animal is all but exterminated. During the entire season cruising in this vicinity we saw but two ~~pr~~otter, and that was while searching for the Leonard Rock when lines of soundings were run half a mile apart over the reported locality. A sleeping otter was twice seen in a space between two adjacent lines, and it might have been the same otter both times as I would not permit any shooting at it.



View of Acherk, or Company, Harbor, from Acherk Hill Δ

Harbors and Anchorages. Achrek, or Company, Harbor, at the northwestern extremity of Sannak Island, is a very contracted anchorage with barely room enough to round to. It is open to winds from northwest to east, but offers good protection in southerly and westerly winds. When it is blowing strong from the westward there is an unpleasant swell rolling in around the point, and in strong winds from north to northeast a vessel must leave the harbor. The land on the west side of the harbor rises to one hundred feet at its highest point and is an island at high water. Almost under this highest point lies the wreck of a schooner blown ashore here in a sudden northeast gale, when laden with codfish and ready to sail, with both anchors down and ninety fathoms of chain on each. Vessels drawing more than ten feet should not run in farther than abreast this schooner wreck. The houses of the settlement do not show until well inside the points forming the harbor. There are sunken rocks off these points on both sides of the entrance but they are marked by kelp and can be readily avoided. If bound in, bring the northwestern end of Long Island over the low point of land at the southern end of the harbor, on about S. $\frac{1}{2}$ E. bearing, and run in on it, keeping midway between the points, until the peaks of Sannak Mountain are in line and the row of houses on the east side of the harbor directly under them. Anchor here in about five to six fathoms over sand and broken shells. The water is sometimes so clear that

the bottom can be seen here. Care should be taken in approaching from the westward to avoid the reef lying one mile to the westward of the West point, and a sunken rock lying one mile further to the westward, or two miles from the West point. The area to the southward of this visible reef and sunken rock is very foul and should be avoided. In approaching from the northward and eastward the only known danger is the Cowdry Rock, which lies two and one-tenth miles N.E. by N. $\frac{5}{8}$ N. from the East point of the harbor, two and three-tenths miles N.E. $\frac{1}{8}$ N. from the extreme West point, and a little more than one and a half miles off the nearest point of land to the eastward of Achuck Harbor. This rock has several small pinnacles very close together. The least water found upon it is about twelve feet, but there may be less, and from nine to fifteen fathoms immediately around it. The safest way to approach from the eastward is to keep within three-quarters of a mile of the north shore of Sannak Island from abreast of Northeast Point. Achuck Harbor has been sounded and the hydrography of it is plotted on a separate sheet.

The village here is quite an old settlement, mutely but eloquently testified to by the numerous memorial crosses in the two cemeteries on the hillside back of the dwellings of the living. The largest and most conspicuous buildings are the Greek Church, two stores, and two warehouses, now used as salting houses for codfish. One

of these has a short landing wharf for boats in front of it to which our tide-gauge was fastened. The dwelling houses number about twelve to fourteen, all small but neat looking and are principally occupied by white fishermen married to native women. Since the extermination of the bra-otter the importance of the settlement has departed. The stores are empty and the only profitable industry carried on at present is codfishing. We saw about twelve to fifteen head of cattle browsing in the luxuriant grass covering the entire land. Cattle were imported here many years ago, but the experiment of raising them has not proved an unqualified success owing to the necessity for housing them in winter and the difficulty of curing grass sufficient for feeding them at such times during the short and wet summers.

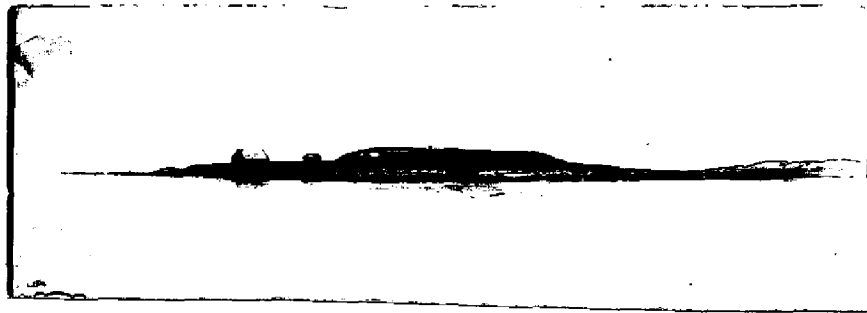
Murphy's Crack. On the north shore of the island, a little more than a mile from Achek Harbor, is an indentation in the shoreline to which the above, euphonious name is locally applied. It is protected by a reef in the offing and is a good harbor for boats. A fishing station with a crew of about twelve men is located here. It is much nearer and handier to the codfishing grounds in the deep water bordering the north side of Sannak Island than Achek Harbor, and nearly all the fishermen living in the latter place now fish for and from this station. Larger houses were being built here this season.

Pavlof Harbor, named for, and first occupied by Paul W. Pavlof, the pilot employed on the ship during the season, as another hunting station, is a small and well protected bay about one mile eastward from the eastern base of Sannak Mountain. It is reported to be a good harbor for small craft but intricate to enter on account of the protecting reefs. Vessels drawing more than seven or eight feet can not use it. The most important fishing station in the group is now located here, and the only store on the island where supplies may be purchased.

Unimak Bay, one mile to the eastward of Pavlof Harbor, is open and of no importance; it derives its name from a schooner of that name which capsized off the island and the wreck drifted ashore here.

Johnsons Bay, the next indentation about one mile further to the eastward, is at the base of the highest hill on the islands outside of Sannak Mountain and upon which Middle Δ is located. It has an inner harbor for boats and small craft, and larger vessels may anchor in the outer bight closer to the east shore in about nine fathoms protected from southerly and westerly winds. There are a few rocks lying close in off the west point which should be given a reasonable berth in entering. A fishing station is located around the point in the inner part of the bay.

Northeast Harbor is an open and readily accessible bay, well protected in northerly and westerly winds but exposed to southerly and easterly. The point forming the north side of the harbor is about one hundred feet high, narrow, and projects about three-quarters of a mile to the eastward beyond the general direction of the shore and forming a cove about three-quarters of a mile in length and breadth to the southward of it. The whole of this area is, however, not available for anchorage. In the middle, or slightly nearer the southwest shore, lies Eagle Rock, an islet about fifty feet above the sea, at high tide seemingly consisting of two almost inaccessible, black rocks close together and with some grass on top, but at low tide seen to be surrounded by an extensive area of flat, rocky ledges. The north side of it is bold to, but from the west end, in the direction of Sannak Mountain, runs a sunken reef and joining another running from the beach in the inner end of the cove. To the southward of Eagle Rock the cove is foul and more exposed, but to the northward of it is good anchorage in from ten to five fathoms over sandy bottom. To enter, give the north point a berth of about one-quarter of a mile and run around and past it until Chinnabura Island is just open from it. Anchor in ten fathoms between the north shore and Eagle Rock, but slightly nearer the former. When filling water from the outlet of a lake in the western extremity of the cove I anchored in five fathoms abreast, and to the northward of the west end of Eagle Rock, only temporarily however.



View of Lida Island, from the anchorage.

as this bush is very contracted and when the wind blew hard from the northward over the point the ships stern swung too uncomfortably close to Eagle Rock. There is a considerable amount of drift-wood in this cove, and some all along the north shore of the island. North-east Harbor has been partially sounded out and the hydrography of it is plotted on a separate sheet. d

Lida Island Anchorage. To the southward of Lida Island and north-westward of the west end of Caton Island is a plateau of sandy bottom with about six to eight fathoms of water over it where vessels may anchor in safety during southerly and south-westerly winds. I anchored here on two occasions and remained over night in calm weather however. There are two entrances to this anchorage, on either side of Lida Island. If approached from the eastward run in close to the visible rocks off the east end of Lida Island where depths of eleven fathoms will be found until well in past the point when it decreases to eight and seven and a half. The danger here lies in the partially covered reef projecting north-north-westward from Caton Island. If approached from the westward look out for the rock awash which lies three-quarters of a mile north-eastward from Finney's Island and one mile west-south-west from Lida Island; but do not approach the west end of Lida Island closer than half a mile as foul bottom reaches out from it. There are some rocks marked by kelp close under Caton Island but otherwise this anchorage seems to be free from dangers. Care should be taken not to

approach too close to the south side of this anchorage, where extensive areas of foul ground exist, except as directed under the head of Caton Harbor. There is an abandoned fishing station on Lida Island. Search was made for fresh water on this island but none was found. (e)

Caton Harbor. Between Sannak, Caton, and Saranna Islands is a large area of shoal water over sandy bottom where small vessels may anchor in from two to three fathoms and protected from all swell. This is known as Caton Harbor. The apparently wide opening to the northward between Caton Island and the small islands off Sannak, from which direction come the heaviest gales, is almost filled by reefs showing above water in many places and which completely break the swells. There is a narrow entrance close to the rocks projecting from the west end of Caton Island, through which I entered with the "McArthur" on account of stress of weather, and another still narrower and crooked, between Sannak and Saranna Islands of which I know nothing except that the approaches to it from the southward are full of rocks and reefs. I am informed that schooners of considerable size have wintered in Caton Harbor, which speaks well for its safety and good holding bottom.

To enter this harbor from the northward proceed as directed to enter Lida Island Anchorage from the westward. When well past the rock awash lying three-quarters of a mile

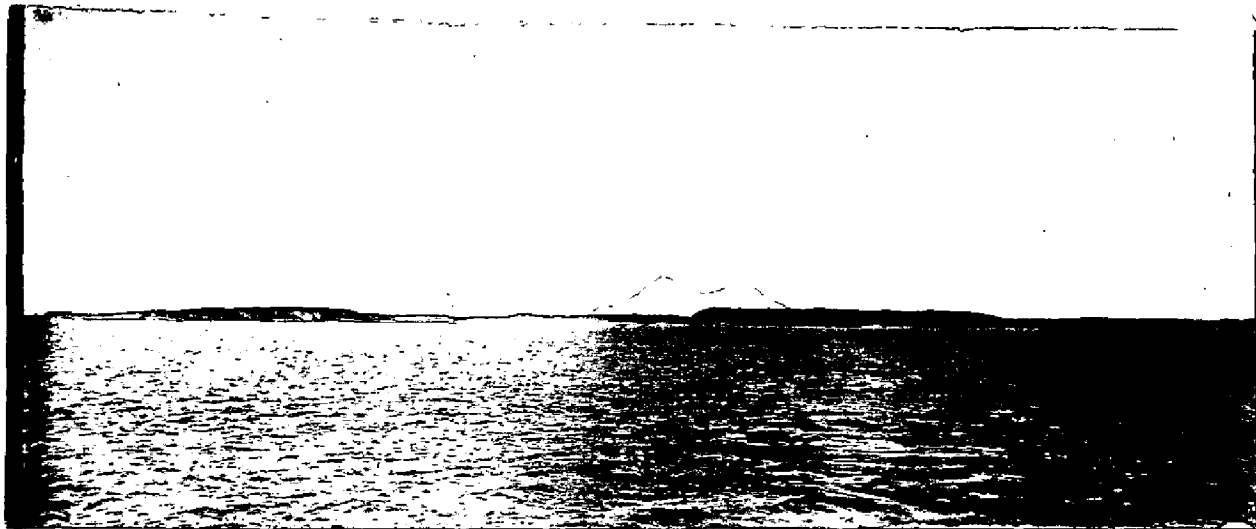
northeastward from Finney's Island, and the visible rocks between it and Wanda Island, being the extremity of Northeast Point to show tangent to the South, or inside, of this rock awash and ^{run} from and on that range until close to Caton Island: then keep the visible rocks and keep projecting from the west end of this island close aboard on your port hand. Do not approach the kelp on your starboard hand. When past the rocks on your port hand turn to the Southward for half a mile until Princess Rock is in range with Sannak Mountain and anchor in about three fathoms, about half a mile from the nearest flat reef to the westward. At high water this reef shows only a large, flat rock, but at low tide a large area is uncovered all around it. In the narrowest part of this passage I found nothing less than four and a half fathoms: I kept leads going (on both sides and entered at low water very slowly. Immediately inside, the water shoals to three and a half and three fathoms and the bottom is plainly firm everywhere. I am informed there is an equally good anchorage, and probably better sheltered in northeast gales, off the Sand Beach on Caton Island immediately inside the narrow entrance in about the same depth of water. I had no opportunity to sound out Caton Harbor.

Princess Rock, referred to above, is a high rock with some soil and grass on top and surrounded by an extensive area of flat, rocky reefs which are covered at high tide. It shows conspicuously because of its shape and height in the opening between

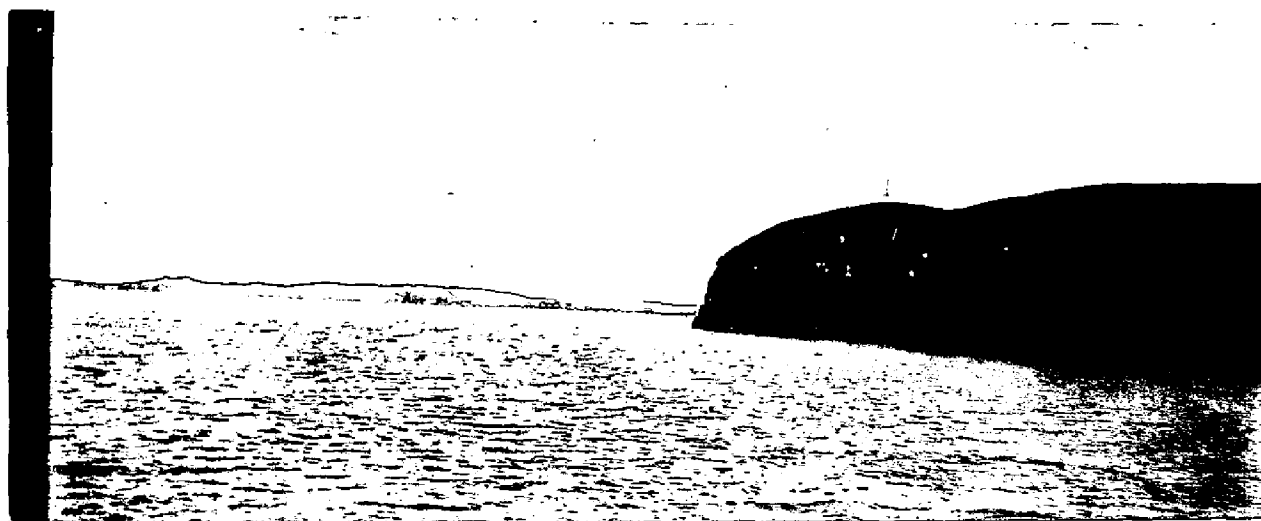
Sannak and Caton Island from the northward, and between Sannak and Saranna Islands from the southward. Its name is derived from a romantic story current among the natives that upon its summit is buried the body of a chief's favorite daughter who before her early death expressed to her father the fear that her body would be mutilated by the innumerable field-mice which infest these islands and the mainland. The old chief promised her immunity from this apprehension, and after her death, buried the body on the summit of this rock. It is also related that the natives used to resort to this grave as to a shrine to supplicate the intercession of her spirit for success in the chase; if their prayers were effective they would return and place some of the pelts as votive offerings on the grave. A story is current among the few remaining natives that a white man, upon being told this tale, secretly robbed the grave of this valuable deposit.

f -

Peterson Bay, on the south side of Sannak Island, is well protected from all winds, except southeast, especially for small vessels which may anchor well inside and abast the village. Vessels drawing twelve feet or more must anchor just inside the narrow entrance where they will ^{be} exposed to southeast gulls. The holding bottom is good, however, and the McArthur rode out a gale from that quarter with both anchors down and veered to forty-five and thirty fathoms of chain on each respectively. In southerly gulls the approaches do not look



View of range for running into Peterson Bay, north point of bay under saddle of Sannak Mountain, NW by W. $\frac{1}{2}$ W. (mag.)



Pete Δ

*Peterson Bay and Village
from the anchorage*

inviting but at such times all the reefs show breakers and
 may therefore be avoided. The course in is comparatively
 straight and, if the directions are closely followed, perfectly safe.
 The north point of the entrance is higher and bolder than the
 more projecting south point, and therefore can be more readily
 distinguished. To enter bring the left tangent of the north
 point under the slight saddle between the highest peak
 of Sannak Mountain and the eastern peak of the same
 and run in on this range, the magnetic course of which
 is $RW. by W. \frac{1}{2} W.$ When nearly up to the south point so
 that it is seen in line with the south shore of Sannak
 Island swing to the northward a little so as to bring the
 same left tangent of the north point on with the extreme
 left tangent of Sannak Mountain and run in on the latter
 range until the rocks on the north side of the entrance are
 close aboard, then steer for the middle of the entrance and
 select an anchorage according to draught. These directions
 closely followed will pass the reefs and breakers off Termitz
 Island on the starboard hand at a distance of three quarters
 of a mile, and the nearest breaker on the port hand, off
 Peterson Island, one mile. The north point of the bay is bold
 to, but the south point has sunken rocks and reefs off it
 both in the entrance and inside the bay. Peterson Bay has
 been sounded and the hydrography of it is shown on a sepa-
 rate sheet.

There is a small settlement of natives and some white men on the north shore of the bay well inside. The houses are not seen when running in according to above directions until just before the anchorage for deeper draught vessels is reached. They are situated on a plateau of grass and moss-covered shingle about twenty feet above the sea and near the beach. I am informed by the inhabitants here that during the prevalence of heavy North-east gales in winter a tremendous swell enters this harbor and almost reaches these houses. It seems well nigh impossible to believe this, owing to the situation of the bay to leeward of the islands in such gales, but it is vouched for by all the inhabitants the party talked with and partially confirmed by the wave erosions at the edge of this shingle plateau above the beach. I have been told many marvellous tales about the fierceness of the north-east winter gales in this region but this seems to cap them all.

On Applegate's sketch-map of Lannak Islands an anchorage is marked in the cove formed by Mary and Peterson Islands on the north side of them. I have been informed it is easy of access by following the directions for entering Peterson Bay until these islands are nearly abreast and then head up for the anchorage. On the north side of Caton Island, about two miles eastward from Lida Island, in a cove from the points of which reefs project nearly half a mile in north-north-west directions, the same authority also locates an anchorage.

I have had no opportunity to examine either of these anchorages. I have passed close to the reefs outside the latter and have seen nothing there to endanger a vessel in westerly and southerly winds. In view of the general accuracy of the information on Applegate's map I should not hesitate to anchor in either of these places and recommend that they be shown as anchorages on the published charts. I may add that I used Applegate's map for entering Peterson Bay, Lida Island Anchorage, and finally, Caton Harbor, the latter contrary to the advice of the pilot who urged me to await high water.

The line of rocky islets projecting to the southeastward from Long Island, and all the islets off the south side of Sannak Island, seem to be the remains of a low table-land, now washed out in its softer parts. When seen broad off they all appear of the same height, flat-topped and grass-covered, and with almost perpendicular sides, like a series of gigantic elongated blocks placed in a row with openings between them. With perhaps the exception of Peterson Bay the entire south side of Sannak Islands is dangerous for a stranger to approach. This is especially true of the southwest end where the Henning and the Onrida sunken rocks lie three and a half and five miles respectively from the nearest visible rocks, with many more sunken rocks within the thin kelp-field between them. On the east end also, off the entire round of Caton Island are reefs and breakers more than one mile off shore.

In the names used for this sheet I have been guided by those obtained by Messrs. Jarvis and Leland, while surveying and camping on shore, from the natives and white men living here, rather than from Applegate's sketch map. In the descriptive report to accompany the sheet on scale of $\frac{1}{140,000}$, which includes the entire seasons work, I intend to present some account and discussion of names used in general on all the sheets.

Respectfully Submitted
 Ferdinand Westdahl
 Assistant