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Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

*Top.* Sheet No. *3310.*

LOCALITY:

*West Coast of Alaska - Bering  
Sea Security Cove*

1912

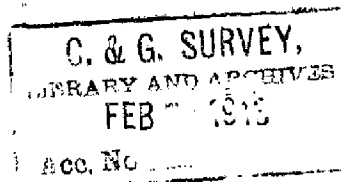
CHIEF OF PARTY:

*R. S. Patton*

11-4645

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Topographic Sheet of Security Cove

Alaska

by party on U. S. S. EXPLORER

R. S. Patton, Ass't.

Commanding

Scale ..... 1: 20 000

August 1912.

*Topography by T. J. Maher, Asst.*

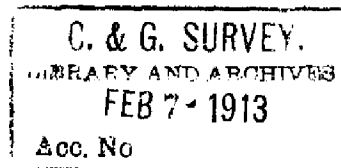
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*Projection to fit topography by R. S. Patton*

*Computed scale of sheet*

*1: 20078*

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*Topographic sheet # C*

*Security Cove,*

*Cape Wencubam, Alaska*

*Scale - 1-20000*

*S.S. Explorer,*

*R. S. Patton, Chief of Party.*

*1912.*

# 3310

## DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEET OF SECURITY COVE ALASKA.

This cove affords the best anchorage to be had between Goodnews Bay and Cape Newenham. It is fairly well protected from all winds except those from the N.W.ly quadrant. It is approximately 3 1/4 miles wide and two miles deep. At the E.N.E.ly point of the cove is Pin Rock (167 ft. high) cone shaped and covered with a light tundra. This is not a detached rock, but consists of a hard clay, almost shale, and is continually crumbling away. It is connected with the main-land by a saddle or neck about 30 feet lower than the highest part of the rock. The base of Pin Rock appears to be of rocky formation. Pin Rock forms an excellent land fall for the cove when cruising along the coast from either Goodnews Bay or Cape Newenham, but from off shore, while visible, is not so good, appearing against a back ground similar to itself.

Chagvan Mountain on the easterly side of the cove is the largest north of the Bay, until Red Mountain south of Goodnews Bay is reached. Chagvan Mt. is regular in shape, grayish in color, and terminates in two rounded knobs. The westerly knob is 1540 feet high. An accurate determination of the eastern one, as regards both height and locality, could not be obtained. There is no definite point on it, and due to the acuteness of the angles of the intersecting lines, an accurate location was not obtained. The mountain is covered with boulders and loose stones. Its slope is regular until

near its base where it terminates in a steep bluff varying in height from 400 feet, near Pin Rock, to 175 feet at the head of the Cove. The shore in this vicinity is covered with boulders, which, also extend about 1/8 mile off shore. Southerly from Pin Rock about 700 meters is another little knob, (which cannot be mistaken for Pin Rock) from which a rocky reef extends off shore about 200 meters.

The eastern part of the southern shore of the Cove is low, and is marked by a grass covered sand dune, varying from 15 to 30 feet in height; inshore from this low ridge is a lagoon, beyond which the ground gradually rises forming two low hills; the easterly one 735 feet high, and the west-erly one 490 feet high. The tops of these hills are bare and appear to be covered with boulders and broken stones. The rest of the area is covered with tundra. The valley between the hills and Chagvan Mountain extends to Chagvan Bay. A stream draining the aforementioned lagoon, empties into the Cove about the center of the southern shore. This stream varies from 50 to 75 meters in width, cannot be entered with a whaleboat except on the higher high tides, and is of no use for navigation. The water is fresh. On the highest highs it may become brackish. It is difficult to obtain water for boat or ship use from this stream. Water was obtained, for launch use, from the small stream flowing over the bluff, a short distance to the eastward of the mouth of the stream. Inshore from the mouth of the large stream is another hill consisting of a serie of knobs and large detached boulders.

The elevation of the highest part of this hill is 1100 feet. The valley to the eastward of this hill and to the westward of the two small hills mentioned before, apparently extends to the outer coast. Cuts were obtained to a headland on the Hagemeister Strait side, and the shore line dotted in as shown. West of the valley is a conical mountain about 950 feet high, known as Cap Mountain. Westward from the Mountain is a valley through which, in a southerly direction shows a sharp conical peak. The contours in the vicinity of this peak could not be obtained with sufficient accuracy to be shown on the sheet. The cuts to this peak form acute angles, but the intersection were good. This peak furnishes an excellent hydrographic signal from the Hagemeister Strait side of Cape Newenham.

The peak (1820 feet high) to the westward of Cap Mountain is part of a serie of jagged peaks which are considerably higher than the one shown. These peaks are generally invisible, being covered by overhanging clouds.

The south shore of the Cove, to the westward of the stream in the center of the cove, is low and is marked by a low red bluff. The beach is sandy, with a few scattered boulders of small size. These are not all shown, as any vessel, except a small launch, would ground before striking them. The westerly shore is low and terminate<sup>s</sup> in a headland connected with the mainland by a narrow neck 36 feet high. On this neck is a small Eskimo house, used during the spring when hunting walrus.

The headland is known as Castle Rock, so called from the serrated appearance of the top which to a vivid imagination might appear as a castle. It is 299 feet high.

Westward from Security Cove is a small bight which might be considered as a part of Security Cove. It furnishes a good anchorage, but is exposed to winds from the N.W.ly quadrant. The head of this bight resembles the head of Security Cove, while the west shore is steep and rocky.

The country is treeless. It is tundra covered to an elevation of 400 feet.

#### Survey Method

Topography was done without a projection. A stadia base of about 2000 meters was measured, and another adjoining of about 1100 meters. Signals were erected at the base station, and the bay was flagged. These were located by intersections and checked by traverse. All the points, on hill tops, marked on the sheet by red circles are accurately located and can be used, when the sheet is oriented (with the principal plane table sheet from Goodnews Bay to Newenham) for hydrographic purposes or for obtaining a location, by three point problem, for a continuation of the topography along the Hagemeister Strait side of Cape Newenham. Some of the hill tops shown, have several knobs or projections, but no confusion will result if the highest ones, or the ones, apparently highest, from Security Cove direction are used.

Scale 1 : 20,000. Shore line  $\sqrt{3}$  miles. All work

shown on sheet was done by plane table.

*J. Mahan*

Respectfully submitted,

*R. S. Patton,*  
*Chief of Party.*