



2844

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

W. Fittmann
Superintendent.

State: *Alaska*

DESCRIPTIVE REPORT.

Topo Sheet No. *2844*

LOCALITY:

Drier Bay,
Knights Island

1907

CHIEF OF PARTY:

R. B. Derickson

2844

U.S. COAST AND GEODETIC SURVEY
PLANE TABLE SHEET
OF
DRIER BAY, KNIGHT ISLAND,
ALASKA

Scale 1:20000

July - August, 1907

R.B. Derickson,

Asst. C. & G. Survey,

Chief of Party.

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Note:-

Mate @ Lat. $60^{\circ} 17' 46.04$
Long. $148^{\circ} 55' 07.38$

First @ Lat. $60^{\circ} 18' 36.37$
Long. $147^{\circ} 55' 24.18$

Dead @ Lat. $60^{\circ} 17' 07.45$
Long. $147^{\circ} 56' 42.29$

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TOPOGRAPHIC REPORT

of the

SHORE-LINE

of

DRIER BAY, KNIGHT ISLAND

ALASKA.

R.B.Derickson,
Asst. C. & G. Survey,
Comdg. U.S.C. & G.S.S. TAKU.

To Accompany
Topographic Sheet.

DESCRIPTIVE REPORT OF TOPOGRAPHIC SHEET OF DRIER BAY, KNIGHT
ISLAND, ALASKA.

Construction:

Having erected signal poles on all the prominent points, the control of the work is based upon a system of plane table triangulation, the signals being so placed that they control the accurate location of the various details along the shoreline. There being no known geographical positions in the vicinity of Drier Bay, and in order to economize time and to facilitate the work, the distances "Stub" to "Bay", and "Bay" to "Hill", were carefully determined with the telemeter. The stations were then plotted on the sheet to Scale of 1:20000, and from these all other stations in the bay were determined, the plane table triangulation extending to the entrance of the bay, and ending on the stations, "First" and "Mate". The distances separating these two stations, and between these and "Dead", were afterward verified by the triangulation, when their geographical positions were determined.

No projection was placed on this sheet while in the field, the sheet being forwarded to the Office for inking and projection. While in the field, it was constantly exposed to the rain, it being impossible to protect it entirely by the plane table shade and rubber covering, and after a few hour's use, it usually became too soft to receive the pencil lines. This did not seem to distort it however, enough to disturb the positions of the stations, and the only danger liable to arise from the exposure, would be to its value as a permanent record of the survey, its surface becoming hard and brittle

— after the constant wetting.

The contours shown on this sheet are sketched in from points determined at various elevations on the slopes of the mountains, and are given for each 100 feet of elevation above the high water line. The elevation of each mountain summit adjacent to the shoreline, was determined, and in places where no heights were obtained on the slopes, the contours were sketched between the summit and the shoreline, estimating by the eye the elevation of each 100 foot contour.

Description:

Beginning with the large island on the south side at the entrance to Drier Bay, and extending on around the shoreline of the bay to the islands on the north side, the descriptions are as follows:

This island is approximately 1-1/4 miles long, and 1/2 mile wide. It has an elevation of about 400 feet. The shoreline is very irregular and rocky. The islets to the westward of it are about 50 to 75 feet high, with irregular, rocky, shores. The large island and the islets are covered with trees. On the south half of the island, the trees are scattering, and are interspersed with grass patches, and bushes extending down to the waterline.

The shoreline of Drier Bay is irregular and rocky, the mountain sides arising directly from the water's edge, ^{are} covered with trees and bushes to about the 1000 foot contour. In places where the contours show a precipitous face, grass, moss, bushes, and stunted spruce, are scattered. Above the 1000 foot contour, grass and moss cover the mountain-sides to the summit, with large patches entirely barren, and the country rock exposed.

The three peaks locally known as the Three Kings, have elevations from 2600 to 2800 feet. Small glaciers lie in the saddles between these peaks. The peaks themselves are barren, rocky, points.

The highest peak on the south end of Knight Island is shown on this sheet. Its elevation is 3186 feet. It is barren and rocky, as are the other peaks in its vicinity. The round, dome-like mountain on the north side, at the entrance to the bay, has an elevation of about 1600 feet. It is very conspicuous, the dome being entirely barren above the 1000 foot contour. The peaks around the head of the bay are barren and sharp.

The islands on the north side of the entrance have the irregular rocky coastline. The largest of these has a fox ranch on it, with several buildings, and is locally known as Solbrick's Island. These islands are all heavily wooded, and range in elevation from 50 to 200 feet. The small island near mid-channel, near the head of the bay, is low and wooded. It has irregular, rocky, shores.

The shoreline at the head of the N.W. lagoon at the head of Drier Bay, is low. A small stream enters here, draining a basin of considerable area. The sides of the lagoon are precipitous, and the walls of the narrow entrance are steep and rocky. The S.E. lagoon has a few short beaches, and several small streams enter near the head. The shoreline of the two large bays on the south side of Drier Bay, are rocky, and each has a small stream entering at the head.

There are three mining camps located in Drier Bay. The most important one at the N.W. lagoon, has a dock and several buildings, and an aerial tramway running from the wharf to the tunnel on the mountainside, about 1400 feet above the waterline. Several build-

ings are projected for the camp in the S.E. lagoon, and the camp on the south side of the bay, where "Tent"Θ is located, has a wharf and several buildings projected. Considerable development work has been done at these camps, but no copper ore has been shipped out other than in small sample lots.

Drier Bay was formerly used by the Indians as a summer fishing camp, and derived its name from the drying camps in the N.W. and S.E. lagoons, where long drying racks were constructed. It was not then inhabited by white men, and since their advent the Indians have moved to other uninhabited parts of the Sound.

The timber which lines the shore above the rocky bluffs of the bay, is mostly spruce, hemlock and cedar, with intermingling of alder. A saw-mill was erected in the N.W. lagoon, and a small amount of sawed lumber turned out during the summer.

Drier Bay was considered the most important point on Knight Island at the beginning of the summer, but as the mining prospects did not develop as was originally expected, its value from a commercial standpoint depreciated considerably by the close of the season.

Respectfully submitted,

R. B. Benson

Asst. C. & G. Survey,

Comdg. U.S.C. & G.S.S. TAKU.

Distance
Frisco to Molle = 1578.7 Meters.

