

4386

Original

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: Alaska

11-5613

DESCRIPTIVE REPORT.

Topographic Sheet No. J. **4386**

LOCALITY:

Tenai Peninsula

Harris Bay

August
1928

CHIEF OF PARTY:

R. R. Lukens

4386

Topographic Sheet No. "J"

Note by Chief of Party:

GRANITE ISLAND The western shore of Granite Island is very bold and precipitous. In places it is a vertical cliff. It is impossible to run a traverse along here. Numerous white washes were computed by triangulation, and the shore line sketched in between these. In the vicinity of the landlocked basin, the shoreline was run in with the plane table.

The outside shoreline as determined by the previous survey was greatly in error- especially at the northern end of the island. It must have been sketched in without control of any sort. It is shown on the old sheet however in full lines.

NORTHWESTERN GLACIER shows up prominently from Harris Bay. Its face is an ice cliff probably 200 feet high. The upper part of Harris Bay is usually filled with floating ice which discharges from the glacier.

CONTROL is based on the triangulation of 1928. It was computed from the old line Aialik - Chiswell.

TOPOGRAPHIC SIGNALS It will be noticed that there is a super abundance of topographic signals on this sheet. This was due to the misjudgement of Mr. Hubbard who did not realize that he was getting them so close together. This caused considerable confusion in the inshore hydrography.

WEATHER Harris Bay is in a cold belt, probably due to the great ice fields in the vicinity. The snow remains on the ground until late in the summer and during last summer, a few drifts remained at sea level throughout the season. Due to the snow on the peaks, the mainscheme triangulation could not be executed until late in July.

The sheet was inked before the topographic manual came out and it will be noted that the magnetic meridian is in black instead of red. Some of the new names have been inked. This was done before it came to my attention. The balance of the new names were put on in pencil.

LANDMARKS There are no noticeable landmarks other than the regular topographic features which are shown on the sheet.

R. R. Lukens

There are no other pronounced currents around Harris Bay.

Water, Ice, Game.

Water may be secured from water falls at the head of either the north or the south in Crater Bay. Launches can be watered handily in a pocket in the South cove of Crater Bay. A submerged rock with four feet of water over it at low tide lies near the entrance to the pocket. Avoid this. There are several large cascades in Cascade Cove where water can be secured.

Ice may be secured in Harris Bay during any ebb tide.

There are a few black bear in Harris Bay. Martin and hair seal are found in Northwestern Lagoon. The fishing is very poor, due to the glacial water.

Weather.

There is much fog and drizzle in Harris Bay, even when the remainder of this coast is clear. This is due, no doubt, to the presence of Northwestern Glacier.

Snow lingers on the hills until the middle of July.

Survey Methods.

The usual plane table methods of survey were used from Δ Short to Δ Reef, and from Δ Strait to Δ Green. Due to the abundance of triangulation signals, very little real traverse was necessary. Altho the traverse method of survey was followed running along the shore, a check by resection or three-point fix was possible at nearly every plane-table set-up. An actual traverse was run around the shore of Northwestern Lagoon from Δ Ice to the western edge of the glacier. Several signals were cut in ahead of the traverse. Upon these the traverse was checked.

Parts of the western shore line of Granite Island and the form lines of Granite Island were surveyed by Mr. Partington. The positions of all the white washes on the western shore of Granite Island were computed from triangulation. Setting up over white washes, the north and middle coves were rodded in as noted on the sheet. The rest of this shore was sketched by the hydrographic party. The lower eastern shore line of Granite Island, shown in dotted lines, is an enlarged transfer from the photostat of a former survey.

The white washes in Granite Passage, south of Δ Short were all cut in by graphic triangulation, setting up first on the four triangulation stations in this vicinity. Three cuts to every white wash were obtained.

The shore line of Fire Cove as shown on the photostat of a previous survey was found to be in error by the hydrographic parties.

They sketched this shore line in on the boat sheets, using estimated distances when the launches were close ashore and fixes were being taken. The shore line of Fire Cove was transferred from these boats sheets and is shown in a dotted line.

The form lines on this sheet were drawn in the field as the work progressed. The form lines were carried to overlap on previously surveyed areas far enough to make connection with the old form lines possible. Connections will be found possible along the dotted form lines.

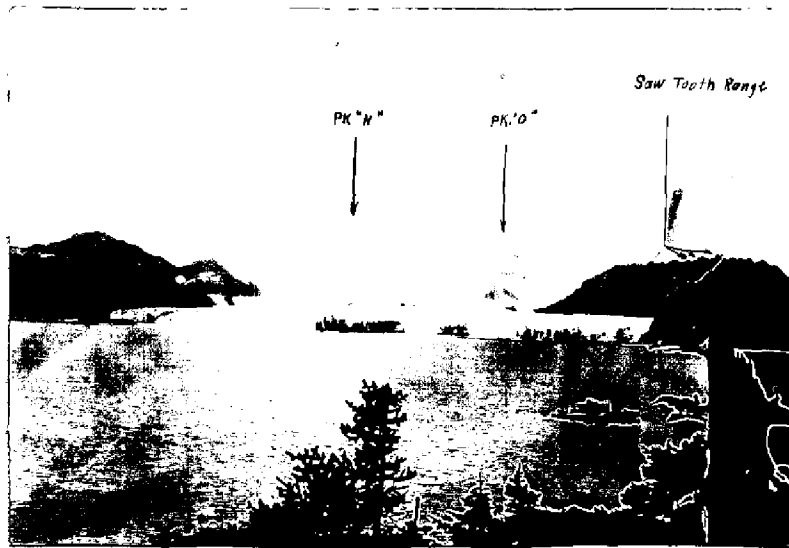
Place Names

The following place names are suggested by the survey party.

Name	Reason for Name
Granite Passage	Previously suggested.
Ripple Cove	The smoothness of its water.
Crater Bay	The formation of the surrounding ridges.
Cascade ^{Bay} Cove	The spectacular falls and cascades here.
Northwestern Lagoon	The nearness to Northwestern Glacier.
Harris Point	At entrance to Harris Bay.
Cup Cove	The shape of cove.

L. S. Hubbard.
L. S. Hubbard
Jr. H. & G. Engineer.

PHOTOGRAPHS TAKEN DURING FIELD OPERATIONS



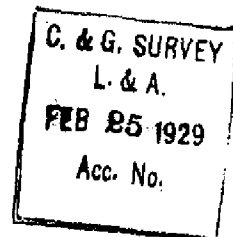
Northwestern Glacier in Harris Bay
 Taken from mainland back of Δ Glacier
 Photograph by S.B. Hastings, seaman, Sept. 1920.



Plane table set-up on \odot Skid, a hummock
 of solid ice 25 feet high. Loose pebbles
 deposited by the glacier strew the surface.
 Photograph by S.B. Hastings, seaman, Sept. 1920.

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U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET



REG. NO.

4386

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. "J"

REGISTER NO. 4386

State Alaska

General locality Kenai Peninsula

Locality Harris Bay

Scale 1:20,000 Date of survey August-September, 1928.

Vessel Steamer SURVEYOR

Chief of Party R. R. Lukens

Surveyed by L. S. Hubbard and J. C. Partington.

Inked by L. S. Hubbard

Heights in feet above High Water to ground ~~to tops of trees~~

~~Contours approximate contour~~ Form line interval 100 feet

Instructions dated February 18, 1928.

Remarks: