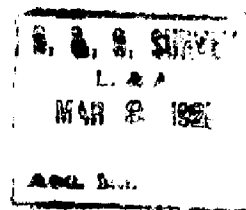


3825



Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: *Alaska*

11-5013

DESCRIPTIVE REPORT.

*Topo* Sheet No. *3825*

LOCALITY:

*Shelikhof Strait*  
*Cape Kekurnoi*

*1920*

CHIEF OF PARTY:

*F. H. Hardy*

3825

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DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO.     

CAPE KEKURNOI

•SHELIKOF STRAIT.

ALASKA

U. S. C. & G. S. STR. SURVEYOR

F. H. HARDY, COMDG.

Scale 1 - 20,000.

1920

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DESCRIPTIVE REPORT  
To Accompany  
TOPOGRAPHIC SHEET NO. 3825  
Cape Kekurnoi  
SHELIKOF STRAIT  
ALASKA

On days not suitable for triangulation, the triangulation party at Cape Kekurnoi made a topographic survey of the vicinity of Cape Kekurnoi.

LOCALITY--

The sheet embraces about 4-1/2 miles of shore line in the vicinity of Cape Kekurnoi, the first mountains behind the shore, and some of the rocks and islets off the eastern entrance of Cold Bay.

CONTROL & METHODS---

The sheet was started at Triangulation Station Kekurnoi as an initial position, with an orientation by a direction line to Triangulation Station Reef. A base line of 1100 meters was measured, with a 30 meter steel tape, between Station Kekurnoi and Station Base. As the geodetic positions of Triangulation Stations Hike and Reef had not been determined, these stations were located for the use of the topographic sheet by planetable cuts from both ends of the base line. The topographic locations were found to coincide very closely with the true locations. Further control

was obtained by locating Topographic Stations, Cliff, Nub, and Point. These signals and the ones mentioned before gave sufficient control for the shoreline west of Station Kekurnoi. The short stretch of shoreline north of Station Kekurnoi was done by traverse entirely, with no check other than orientation on Station Kekurnoi.

The rocks and islets near shore were located with the planetable, most of them by three or more intersections, and those in the large group off the eastern entrance of Cold Bay were located by triangulation cuts from Stations Kekurnoi, Hike, and Base, and by sextant cuts from Station Reef.

The two small islets in this group shown by dotted lines were located by weak cuts, and their position should not be considered as very accurate. Those shown by full lines were located by reasonably strong cuts.

The island off Station Hike was sketched in approximately with no other control than tangents from Stations Hike and Kekurnoi.

The outer end of the reef extending in an east by south direction from the island off Station Hike was located by a tangent from Station Hike and a planetable cut. The other end was sketched approximately.

The geodetic position of Peak 2 was computed. The four other peaks shown were located by planetable cuts.

GENERAL.

With one exception, a rocky bluff, with an average height of about sixty feet, runs along the shore. This bluff is very steep and irregular, and overhangs at places. The exception referred to is a break in the bluff about 150 meters long, and about 150 meters northeast of Station Kekurnoi. This break is fronted by a good sand beach about 300 meters long. With the exception of this sand beach, the shore is very rocky. The cove in front of this beach can be used as an anchorage for small boats in northwesterly weather.

A rocky ledge along most of the shore bares at low water. There are numerous off-lying rocks along the shore, some of which bare only at extreme low water. Off the eastern entrance of Cold Bay there is a large group of rocks and islets. Only a few of these were located, as time to make a thorough survey of the group was not available. Small boats going to Cold Bay sometimes go between this group and the shore.

The country behind the beach is slightly rolling, with small streams, marshes, solid ground, grass, and alder thickets scattered over it. It rises gradually to the foot of the hills, which begin at from about one-half to one and one half miles from the shore.

#### DISCREPANCIES BETWEEN SHEETS OF 1919 AND 1920.

As a general rule, the low water line on the 1920 sheet extends farther out from the bluffs than that on the 1919 sheet. The 1920 party probably had an opportunity to see the shore at lower tides than did the 1919 party.

The two large rocks about 1600 meters 238° true from Station Kekurnoi were probably missed by the 1919 party for the same reason, as they bare only at extreme low water. Other rocks missed by the 1919 party were also probably due to the state of the tide. The 1919 sheet shows a long island about 700 meters, 38° true, from Station Kekurnoi, which should be shown as rounded.

About 350 meters 130° true from Station Kekurnoi the 1919 sheet shows a single islet. At high tide a narrow strip of water separates this into two islets.

About 700 meters west of Station Kekurnoi the 1919 sheet shows a wide arm projecting from the general line of the bluff running along shore. This arm is narrow, with a big detached rock at its end equal in height to the bluff.

About 400 meters 19° true from Signal Point the 1919 sheet shows a group of rocks, which should be shown as an arm of the bluff which runs along the shore.

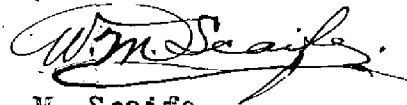
The arm on which ~~the~~ Station Point is located is detached from the shore at high tide by a very narrow strip of water.

Station Hike is located on the knob indicated on the Southwest Point on the 1919 sheet. The distance from Station Kekurnoi

to Station Hike is shown too great by about 200 meters on the 1919 sheet, which error is due to the fact that the 1919 party had to depend entirely upon traverse. This comparison was made with a photostat copy of the 1919 sheet.

As to other minor discrepancies, I will say that I did the work carefully, and consider my work accurate. However, such other discrepancies are probably not great enough to make very much difference.

Respectfully submitted,

A handwritten signature in cursive script, reading "W. M. Scaife". The signature is written in dark ink and is positioned above the printed name.

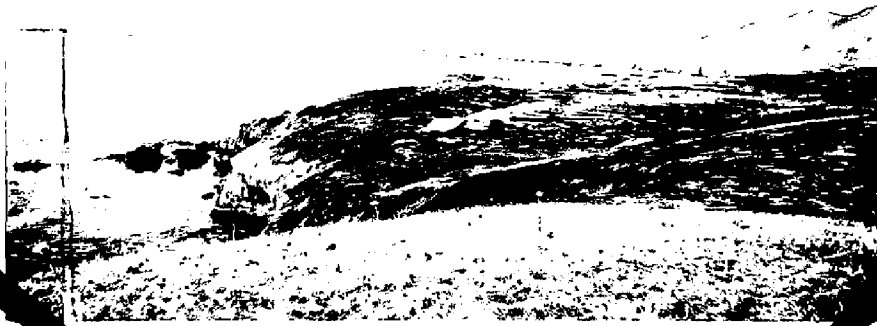
W. M. Scaife

Jr. H. & G. Engr. C. & G. Survey.

To the Director,  
C. & G. Survey,  
Washington, D.C.



Cape Kekurnoi.



Looking S.W. from  $\Delta$  Kekurnoi.



Typical Shoreline near Cape Kekurnoi.



AND REFER TO NO. **4-MEM**

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

SECTION OF FIELD RECORDS.

Report on Topographic Sheet 3825.

Surveyed in 1920.

Chief of Party, F. H. Hardy.

Surveyed by W. M. Scaife.

Inked by W. M. Scaife.

1. The plan and character of the survey conform to the General Instructions.
2. This survey is the second one that covers the group of islets and rocks at the eastern entrance to Cold Bay. It appears that still further surveying is needed to show the group completely.
3. Topographic sheet 3782 should be consulted regarding the character of the terrain.
4. The representation of sketched high water line by short dashes is objectionable unless it is accompanied by an explanatory legend as the feature is likely to be interpreted as a low water line.
5. The quality of surveying and field drafting are good.
6. Reviewed by E. P. Ellis, March, 1921.
7. Two copies of this report to be sent to Hydrography and Topography Division.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3825

State . . . . . Alaska . . . . .

General locality . . Shelikof Strait. . . . . .

Locality . . . . . Cape Kekurnoi . . . . .

Chief of party . . . F. H. Hardy. . . . . .

Surveyed by . . . . W. M. Scaife. . . . . .

Date of survey . . . August - September, 1920. . . . .

Scale . . . . . 1 - 20,000 . . . . .

Heights in feet above Mean Sea Level. . . . . .

Contour interval 100 feet.

Inked by W. M. S. . . . Lettered by W. M. S. . . . . .

Records accompanying sheet (check those forwarded): Photographs, ✓

Descriptive report, ✓ Horizontal angle books, Field computations,

Data from other sources affecting sheet . . . . .

Remarks: