Department of Commerce
U.S. Coast and Geodetic Survey

State: AK Alaska

Descriptive Report 4155
Topographic Sheet No. 5

Locality:
Alaska Peninsula
Cape Kumlik + Vic.

19125
Chief of Party:
Clem. L. Garner, H. & G.B.
Note:

It should be explained that there is apparently a discrepancy in the position of triangulation station BRAM. In carrying on hydrographic work in this vicinity positions which did not include station BRAM were slightly to the westward of those when BRAM was used as one of the objects. Mr. Davy reported that a three point location of BRAM on that topographic sheet differed from the computed station. However, one of his objects was not a computed position and its accuracy is itself doubted.

The position of this group of rocks are shown relative to the computed position of BRAM on all sheets since it has been impossible to determine any sufficient discrepancy in the computed position. The determination is from three stations and although the intersections are rather acute the positions check as well as could be expected from the topography of the rock.

However, it is recommended that this station be more accurately determined by the next party working in this vicinity and the topography made to fit the true position if there is found to be a change.

Clem L. Garner

Copy on sheet
Copy with Season's Report.
Copy on files.
GENERAL DESCRIPTION OF COAST

The coast of Cape Kumlik, as viewed from the sea is rugged and mountainous. The peaks do not vary greatly in height, and are for the most part low - the maximum elevation being about 2400 feet. The Southeast point of the cape terminates in a small, flat plateau 1100 feet in elevation. This plateau breaks abruptly down to the sea forming a sheer, massive precipice extending for several miles North and East of hydrographic signal ROK.

From hydrographic signal ROK to the end of the sheet at triangulation station KUUU the coast is a series of bold rocky bluffs of from 50 to 90 feet elevation, with an occasional stretch of sandy beach where a valley makes down from the hills. Numerous rocky islets lay a short distance off the beach.

OUTLYING DANGERS AND ISLANDS

A small rocky islet, 55 feet in height, lays in Lat. 56° 35½' and Long. 157° 26½'. The top of the island is flat and grass covered and is bounded by bold rocky bluffs.

A breaker, breaking at half tide in moderate swells lays in Lat. 56° 36½' and Long. 157° 25½'.

A group of islets are in Lat. 56° 36', Long. 157° 29'. These islets are connected at low water by a sandy beach. From this sandy beach sheer bluffs of weathered sandstone rise to heights varying from 50 to 80 feet. The tops of the islets are flat and grass covered. The second islet from the beach bears triangulation station CLAY.

A group of rocky islands, which from a distance appear as a single long narrow saw tooth island are in Lat. 56° 33½', Long. 157° 33'. The Northern islets are very low, but the height of the others gradually increases till the Southernmost islet reaches a height of 105 feet. A reef makes out for a quarter of a mile North of these islands.
Several groups of rocky islets of 50 to 60 feet elevation lie in the vicinity of Lat. 56° 35½', Long. 157° 41½'. From the most southerly group of islands a reef makes out in a south westerly direction for several miles to a point beyond the limits of this sheet. This forms a serious obstruction to the safe navigation of Sitka Bay.

A small rocky islet lies in Lat. 56° 39½', Long. 157° 46½'. From the islet a series of reefs extend to the beach. Vessels should not pass inshore of this islet.

An islet lies in Lat. 56° 38½', Long. 157° 43½'. From this islet to the beach at triangulation station KUJU is a series of reefs and small islets.

LANDMARKS

On approaching the coast the most prominent landmarks are:

1. A dark cone peak, elevation 170 feet, with a great white scar formed by a landside. The top of this peak is triangulation station KID, in Lat. 56° 33½', Long. 157° 36'.

2. A bare reddish colored range rising from the small flat plateau at the end of the cape. The maximum elevation of this range is 2400 feet.

3. The long jagged group of islands mentioned in a previous paragraph and which lie in Lat. 56° 33½', Long. 157° 33½' may be easily identified.

INSHORE DANGERS

Practically the entire coastline included on this sheet is foul and rocky and should be approached with caution. Isolated rocks and reefs make out from all the rocky points, and the small bights in the coastline are for the most part foul. The majority of these dangers are marked by kelp.

ANCHORAGES

There are no good anchorages along this shore. Shelter may be had in northwesterly weather in a small bight ¾ miles northeast of triangulation KUJU, in 7 fathoms, sandy bottom.

SURVEY METHODS

The control of this sheet was furnished by triangulation of the third order. Triangulation stations KUJU, LIK, and CLAY are marked, while numerous rocks and peaks were cut in by theodolite.

From triangulation station KUJU to triangulation station HOME a plane table traverse was run and cuts taken on easily identified objects along the beach from station HOME to triangulation station LIK. Station HOME is not visible from the beach from the direction of station KUJU. In passing HOME a side shot was taken on it. This checkled within 5 meters.

* See next page
From station HOME to station LIK a combination of traverse and resection was used. Numerous points had been established by projection from the plane table traverse previously mentioned. At this shoreline was chiefly determined by independent positions, there was no closing error on station LIK.

A plane table traverse was then run to topo. signal STUB. The traverse was ended here and work resumed at station CLAY.

Triangulation station CLAY was occupied and the surrounding islands traversed in. From this traverse cuts were taken of numerous points along the beach of the mainland, and their position determined. These points were then occupied and the shoreline between them traversed. A traverse point on the rocky point just west of signal ISLE was checked by cuts on stations CLAY, CAP, JULIE, and MIZ. From this point an azimuth line was drawn to a reef just south of signal CALSO. This reef was then occupied and resection made on the signals from which the previous position had been checked. The reef just south of signal AGUA was located in the same manner. For these two reefs the shore line cut-in in great detail. From signal MIZ a traverse was carried to signal STUB, to connect with the previous work. The closing error on STUB was about 80 meters. This was distributed on both sides of the signal.

The island surrounding EABIT were occupied and traversed in, as were the islands South west of signal CAP.

No new place names were given to any of the territory covered by this sheet.

Respectfully submitted,

T.T. Davey, Deck Officer,
Topographer.

Approved,

Clem. L. Garner, H.& G.B.:
Commanding.

This landslide was not shown on the sheet when received in the office. Its location was indicated by Capt. Garner on a photostat sent to him. On the photostat he noted that it is a "Conspicuous slide of gray rock."

His accompanying letter dated July 19, 1926 stated, "This is from memory and is therefore only approximate, yet I am reasonably certain that some part of the slide occupies the position shown and I do, not believe that any difference in position could be noted on a chart of reduced scale from the topographic sheet."

August 11, 1926.
# Plane Table Positions

To accompany

Topographic Sheet NO. 5, Cape Kilik, Southwest Alaska

Instructions dated March 25, 1925

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<table>
<thead>
<tr>
<th>Object Description</th>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Ht.</th>
<th>Remarks</th>
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<tr>
<td>HAT, rock pinnacle</td>
<td>56</td>
<td>35</td>
<td>1340</td>
<td>157</td>
<td>36</td>
<td>732</td>
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<td>STUB, round grassy point</td>
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<td>37</td>
<td>450</td>
<td>157</td>
<td>35</td>
<td>572</td>
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<td>AGUA, waterfall</td>
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<td>486</td>
<td>157</td>
<td>33</td>
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<td>GALS®, waterfall</td>
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<td>ISLE, rock islet</td>
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<td>36</td>
<td>1492</td>
<td>157</td>
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<td>582</td>
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<td>TRI, rock bluff</td>
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<td>37</td>
<td>32</td>
<td>157</td>
<td>31</td>
<td>108</td>
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<td>ROX, rock off shore</td>
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<td>715</td>
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<td>1291</td>
<td>157</td>
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<td>652</td>
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<tr>
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<td>36</td>
<td>500</td>
<td>157</td>
<td>29</td>
<td>166</td>
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</table>

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**Statistics for Sheet NO. 5**

- Miles of topography: 24.4 statute miles
- Area: 57 square statute miles
SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4155

Cape Kumlik and Vicinity, Alaska Peninsula

Surveyed in 1925

Instructions dated February 25, 1925.

Chief of Party, C. L. Garner.

Surveyed and inked by T. T. Davey.

1. The records, as well as the plan and character of the survey, conform to the requirements of the General Instructions.

2. The plan and extent of the survey satisfy the specific instructions.

3. The junctions with the adjoining surveys are adequate except for quite a few discrepancies in formlines with those overlapping T. 4154.

4. The usual field drafting was done by the field party. The drafting was good except for the representation of rocks, which was very carelessly done. Some were indistinct and in some cases it was difficult to distinguish between sunken and awash rocks.

5. As noted in the descriptive report the accuracy of triangulation point Brem is questionable, and the point should be relocated by triangulation. Otherwise no further surveying is required.

6. The character and scope of the surveying was good and the field drafting fair.

7. Reviewed by E. P. Ellis, January, 1926.
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. 5

State . . . South-East Alaska

General locality . . . Alaska Peninsula

Locality . . . Cape Kulik and Vicinity

Chief of party . . . Glen L. Garner, H.S.G.S.

Surveyed by . . . T.T. Davey

Date of survey . . . August - September, 1925

Scale . . . 1/20,000

Heights in feet above . . . Mean High Water

Form Line

Contour interval . . . 100 feet

Inked by T.T. Davey . . . Lettered by T.T. Davey

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations.

Data from other sources affecting sheet . . . None

Remarks: During the period of this work, Mr. Davey was attached to the Arctic II, which was away from the Bureau for from 1 to 10 days at a time. This sheet was thoroughly examined and imperfect at some times. The contours are not as accurate as they should be, but in general are very representative. I recommend the approval of this sheet.

Glen L. Garner