Form 504

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: E. W. Alaska

Topographical Sheet No. 4154

LOCALITY:

Alaska Peninsula

Cape Kumlik & Kumlik Id.

1925

CHIEF OF PARTY:

Glen L. Garney, H. & G. E.
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO. 7, CAPE KUMLIK, SOUTHWEST ALASKA
Instructions dated March 25, 1925.

GENERAL DESCRIPTION OF COAST

The coast of Kumlik Island on the seaward side is very bold. Massive rock cliffs rise from a narrow boulder strewn beach. Numerous rocks and reefs, for the most part marked by kelp, surround the island, extending as far as a quarter of a mile off shore.

The coast of Cape Kumlik is likewise precipitous at this point. As the entrance of Amalgaak Bay is approached these rocky cliffs gradually round off into rolling grass covered slopes, till at triangulation station BLUFF the shore line is low and grassy with a sandy beach.

OUTLIERING DANGERS AND ISLANDS

In Lat. 56° 40', Long. 157° 25', there is a triangulation signal PAV. From PAV a dense kelp patch makes out westward for a half of a mile. To the South and Southeast of PAV, and about a quarter of a mile distant are two reefs, both of which are marked by kelp.

Numerous reefs and kelp patches surround Kumlik Island, making it unsafe to approach nearer than a third of a mile.

LANDMARKS

The first landfall made is Kumlik Island. This island is roughly a mile long and half a mile wide. It rises abruptly from the sea to a height of over a thousand feet. From the eastward it appears a part of the mainland, but from other directions the channel between it and Cape Kumlik is easily seen. On the mainland a red range, 2300 feet in elevation, is easily identified at the end of the cape.

INSHORE DANGERS

The shore of Kumlik Island, as before mentioned is foul and should be avoided.

The shore of the mainland shown on this sheet is, for the most part boulder strewn, but there is no obstruction to navigation except for a reef making out a short distance from triangulation station BLUFF. This reef is marked by kelp.
CHANNELS

A channel with a least depth of 7 fathoms exists between Kumlik Island and the mainland. This channel is used by fishing vessels entering Aniakchak Bay from the southward. The channel is a half mile wide at the narrowest point. Fishing vessels favor the shore of the mainland, passing between the mainland and the dense kelp patch making out from triangulation station BLUFF. All dangers are well marked by kelp. Vessels should not attempt to pass between PAV and the shore of Kumlik Island.

ANCHORAGES

An unsatisfactory anchorage can be found under the lee of Kumlik Island in easterly weather. The bottom is rocky and the shelter is poor. It is however the only available anchorage found on this sheet. No shelter from heavy winds.

SURVEY METHODS

The control for this sheet was furnished by triangulation stations KUMLIK and BLUFF, and intersection stations PAV.

A traverse was run from signal SLOPE, whose position was determined on sheet No. 5, to station BLUFF, using stadia and resection. From this traverse a number of points on Kumlik Island were established by intersection.

The shores of Kumlik Island were surveyed by occupying the surrounding reefs. The reefs off the southwest point of the island was located from the mainland. From this reef the other reefs were located by stadia shots and resection. The shoreline of the island was located by intersection from these reefs. The northern shore of the island was traversed from signal HOUSE and from this traverse the reef off the most easterly point of the island was located. From this reef and the reefs previously located the southeast shore of the island was cut in.

This sheet was a continuation of Topo. Sheet No. 5. It was ended at triangulation station BLUFF as time was lacking to carry the survey into Aniakchak Bay.

Respectfully submitted,

[Signature]
T. T. Davey, Deck Officer, Topographer.

Approved and forwarded.

[Signature]
Commanding Officer.
# Plane Table Positions

To accompany

Topographic Sheet No. 7, Cape Kumlik, Southwest Alaska

<table>
<thead>
<tr>
<th>Station Description</th>
<th>Lat. (°)</th>
<th>D.M.</th>
<th>Long. (°)</th>
<th>D.P.</th>
<th>Height (feet)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLOPE, pinnacle rock</td>
<td>56° 37'</td>
<td>1291</td>
<td>157° 27'</td>
<td>652</td>
<td>35</td>
<td>Sharp grass toppin. on Beach</td>
</tr>
<tr>
<td>HOUSE, chimney</td>
<td>56° 38'</td>
<td>1653</td>
<td>157° 25'</td>
<td>622</td>
<td>15</td>
<td>Fox farmers cabin</td>
</tr>
</tbody>
</table>

## Statistics

- Miles of Shoreline: 7.1 statute miles
- Area Covered: 4.2 Square statute miles,
SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4154

Cape Kumlik and Kumlik Island, 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 junction with the adjoining survey (T.4155) is adequate, except that there are quite a few discrepancies in the transference of overlapping form lines.

4. The usual field drafting was done by the field party. The shoreline was too faint and had to be retouched.

5. No further surveying is needed within the area of the sheet.

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

7. Reviewed by E. F. Ellis, February, 1925.
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 (7) 4154

State: SW. Alaska

General locality: Alaska Peninsula

Locality: Cape Kigaliak

Chief of party: C. E. S. (L. Germain, H. E. G.)

Surveyed by: T. C. (L.)

Date of survey: September 1925

Scale: 1/28,000

Heights in feet above High Water

Form Line

Contour interval: 100 feet

Inked by T. C. (L.)

Lettered by J. C. (L.)

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet No. 4154.

Remarks: