

4155

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Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
State: <u>S.W. Alaska</u>
11-5813
DESCRIPTIVE REPORT.
4155
Topographic Sheet No. <u>5</u>
LOCALITY:
<u>Alaska Peninsula</u>
<u>Cape Kumlik + Vic.</u>
<u>19125</u>
CHIEF OF PARTY:
<u>Clem. L. Garner, H. &amp; G.E.</u>

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*  
Clem L. Garner.

Copy on sheet  
Copy with Season's Report.  
Copy on files.

## DESCRIPTIVE REPORT

to accompany  
TOPOGRAPHIC SHEET NO. 5, CAPE KUMLIK, SOUTHWEST ALASKA  
Instructions dated March 25, 1925

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### 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 KUJU 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, <sup>lies</sup> ~~lays~~ in Lat.  $56^{\circ} 35\frac{1}{2}'$  and Long.  $157^{\circ} 26\frac{1}{2}'$ . 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  $56^{\circ} 36\frac{1}{4}'$  and Long.  $157^{\circ} 25\frac{1}{2}'$

A group of islets are in Lat.  $56^{\circ} 36'$ , long.  $157^{\circ} 29'$ . 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.  $56^{\circ} 33\frac{1}{4}'$ , Long.  $157^{\circ} 33'$ . 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 lay in the vicinity of Lat.  $56^{\circ} 36\frac{1}{2}'$ , Long  $157^{\circ} 41\frac{1}{2}'$ . 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 Sitkum Bay.

A small rocky islet lays in Lat.  $56^{\circ} 39\frac{1}{2}'$ , Long.  $157^{\circ} 46\frac{1}{2}'$ . From the islet a series of reefs extend to the beach. Vessels should not pass inshore of this islet.

An islet lays in Lat.  $56^{\circ} 38\frac{1}{2}'$ , Long.  $157^{\circ} 49\frac{1}{2}'$ . From this islet to the beach at triangulation station KUJU is a series of reefs and small islets.

#### LANDMARKS

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Onnapproaching the coast the most prominent landmarks are;

(1) A dark cone peak, elevation 1970 feet, with a great white scar formed by a land slide. The top of this peak is triangulation station MID, in Lat.  $56^{\circ} 38\frac{1}{2}'$ , Long.  $157^{\circ} 36'$

(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 lay in Lat.  $56^{\circ} 33\frac{1}{2}'$ , Long.  $157^{\circ} 33'$  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  $\frac{3}{4}$  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 checked 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. As this shore line 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, JULE, and MID. 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. From these two reefs the shore line cut in in great detail. From signal NUT a traverse was carried to signal STUB, to connect with the previous work. The closing error on STUB was about 20 meters. This was distributed on both sides of the signal.

The island surrounding BRAM 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*  
T.T. Davey, Deck Officer,  
Topographer.

Approved,

*Clem. L. Garner*  
Clem. L. Garner, H. & G. E.  
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.

*E. P. Ellis*

# P L A N E T A B L E P O S I T I O N S

to accompany

TOPOGRAPHIC SHEET NO. 5, CAPE KUELİK, SOUTHWEST ALASKA

Instructions dated March 25, 1925

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Object Description	Lat. o ' "	D.M. meters	Long. o ' "	D.P. meters	Ht. feet	Remarks
MIKE, W.W.	56 39	1669	157 43	883	15	On rock pt.
HAT, rock pinnacle.	56 36	1340	157 38	732	12	Sharp pinnacle rock, top.
STUB, round grassy point	56 37	450	157 36	572	85	Grass covered dome, top.
AGUA, waterfall	56 37	486	157 33	675	0	Base of fall
CALSO, waterfall	56 37	421	157 32.	890	0	Base of fall
ISLE, rock islet	56 36	1492	157 31	582	20	Lone islet
TRI, rock bluff	56 37	32	157 31	108	25	Triangular out crop on cliff
ROK, rock off shore	56 37	715	157 28	711	4	Lone rock
PARA, rocky point	56 37	943	157 27	1020	30	High Point
SLOPE, pinnacle on beach	56 37	1291 <i>1271 from</i>	157 27	652	35	Top of grassy pinnacle
FIRE, pinnacle	56 36	500	157 29	186	28	Top of slender pinnacle

## STATISTICS FOR SHEET NO. 5

Miles of topography: 24.4 statute miles

Area 57 square statute miles

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON February 19, 1926.

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 formalines 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 Bram 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.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

4155

## 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 4155State . . . SW. South West Alaska . . . . .

General locality . . . Alaska Peninsula . . . . .

Locality . . . . Cape Kumalik and Vicinity . . . . .

Chief of party . . . . . Clem. L. Garner, H. &amp; G. E. . . . .

Surveyed by . . . T. T. Davey . . . . .

Date of survey . . . August - September, 1925 . . . . .

Scale . . 1 / 20,000 . . . . .

Heights in feet above . . . Mean ~~Sea Level~~ 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 Annie W.  
which was away from the Discoverer for  
from 1 to 10 days at the time. This sheet  
was thoroughly examined and inspected each  
of those times. The contours are not as accurate  
as they should be but in general are very representative.  
I recommend the approval of this sheet, Clem L. Garner