Form 304
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

State: Alaska

DESCRIPTIVE REPORT.

Topographic Sheet No. 4341

LOCALITY:

Kuiu I. and Kupreanof I.

Keku Strait - South of Beacon I. to Summit I.

1927

CHIEF OF PARTY:

H.A. Cotton
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO. 4341

(Field Letter "K")

BIG JOHN BAY
to
SUMMIT ISLAND

KEKU STRAIT, S. E. ALASKA.

U. S. S. EXPLORER

Season of 1927.

Scale 1:10,000.
AUTHORITY: The work on this sheet was executed under Instructions to the Commanding Officer, U.S.C. & G.S.S. EXPLORER, dated February 18, 1927.

LIMITS: The topography on this sheet covers the shoreline, offlying rocks and islands, on both sides of Keku Strait between Latitudes 56° 40' and 56° 46' 30" North.

CONTROL: Control for this sheet was furnished by 24 third order triangulation stations in the main channel. A closed traverse was run around the east side of HIGH ISLAND and checked within 10 meters. No adjustment was made as this is within the allowable error for any point on the shoreline less than 1000 meters from a triangulation station.

ELEVATIONS: The few elevations shown on this sheet are to the tops of the trees and are given in feet above mean high water level. Elevations on high water rocks and small hummocks are shown in red ink in parentheses. The trees average about 100 feet in height.

CONTOURS: The contours on this sheet were not completed on account of inclement weather at the close of the season. (See note on sheet.)

METHODS: The shoreline and rocks in the main channel were rodded in. Positions of rocks were checked by intersections. Planetable positions between triangulation stations were determined by intersections from triangulation stations and checked by stadia distance. The low water line was rodded in very carefully at zero tide at all points where boats must necessarily pass close inshore. In the large low water sand flats the low waterline was sketched in. All details in the main boat channel between Beacon 19 and triangulation station MOST were determined at zero tide. A special effort was made to do this.
A traverse was run around the eastern side of HIGH ISLAND:
signal "TER" to Beacon 12. Traverse closure 10 meters. No adjustment.
Both signal "TER" and Beacon 12 were located by solving a three point
problem.

CHARACTER OF SHORELINE:
The shoreline is flat with the exception of a
few stretches 100 to 200 meters in length. The beaches and low water
areas are composed mostly of sand and gravel. There are a series of
ledges between triangulation stations NOR and OVER, on the west side of
the strait. This area is covered also with gravel and sand.

PROMINENT OBJECTS AND RECOVERABLE POINTS: The prominent objects are,
Beacons 4, 6, 6A, 8, 10, 12, 14, 15, 17 and 19. Beacon 19 was located
by triangulation intersections, the others by planetable. HIGH ISLAND
is very prominent from either north or south at points within the
limits of this sheet. There are three groups of piles at HIGH ISLAND.

GEOGRAPHIC NAMES: The large irregular shaped island near the center of
the sheet is known locally, and by the Lighthouse Bureau in Ketchikan,
Alaska, as HIGH ISLAND. The large creek to the eastward of it is known
as IRISH CREEK. The large island at the south end of the sheet is also
known locally and by the Lighthouse Bureau as SUMMIT ISLAND.

The very narrow passage at the south end of the sheet between
Beacons 15 and 6 is known locally as THE SUMMIT.

CHANGES AND DISCREPANCIES BETWEEN THIS AND PREVIOUS SURVEYS: A bromide
of Sheet Register No. 2150 was taken into the field frequently by the
topographer and checked against the existing conditions. A rock shown on Register No. 2150 as being about 890 meters south of triangulation station PHI could not be found. There were no indications of a rock. Those rocks off the point at signal "LIS" are not shown on the bromide. The small hummock marked by signal "NER" is not shown on the bromide—neither are the rocks about 300 meters southward from it.

The small island marked by signals "ILI" and "WII" is shown, but the rock 180 meters southward from it is not. The island itself is not shown on Chart No. 3200.

The reef in the western cove of HIGH ISLAND is not shown on the bromide.

The rock 120 meters northeast of Beacon 19 is omitted.

The small tree covered island marked by signal "HUM" is entirely omitted.

The discrepancies south of Lat. 56° 42' to the end of the sheet are very numerous, especially among the small features. As the work on this sheet was done very carefully, with special efforts to see all of it at low water, it is thought unnecessary to name them.
STATISTICS:

Statute miles shoreline - high water 55
Statute miles shoreline - low water (roded in) 26
Number of creeks 8
Area - Square statute miles 18
Number of Elevations 25
Number of Elevations per square statute miles. (Contours not completed)
Number recoverable stations: 35
Triangulation 24
Planetable 11
Positions occupied 120

Examined, approved and forwarded. Respectfully submitted.

Harold A. Cotton,  Ira T. Sanders,
Commanding Officer,  Jr. H. & G. Engr.,
## LIST OF PLANE TABLE POSITIONS.

<table>
<thead>
<tr>
<th>OBJECT</th>
<th>DESCRIPTION</th>
<th>LAT.</th>
<th>SECONDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LONG.</td>
<td>in METERS.</td>
</tr>
<tr>
<td>Beacon 4</td>
<td>Center pole, tripod boarded 3 sides.</td>
<td>56-40</td>
<td>976</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-43</td>
<td>841</td>
</tr>
<tr>
<td>Beacon 6</td>
<td>Spindle</td>
<td>56-41</td>
<td>340</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-44</td>
<td>37</td>
</tr>
<tr>
<td>Beacon 6A</td>
<td>Spindle</td>
<td>56-41</td>
<td>733</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-44</td>
<td>103</td>
</tr>
<tr>
<td>Beacon 8</td>
<td>Center pole, tripod boarded 3 sides.</td>
<td>56-41</td>
<td>1018</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-43</td>
<td>962</td>
</tr>
<tr>
<td>Beacon 10</td>
<td></td>
<td>56-42</td>
<td>294</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-43</td>
<td>895</td>
</tr>
<tr>
<td>Beacon 12</td>
<td></td>
<td>56-43</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-44</td>
<td>475</td>
</tr>
<tr>
<td>Beacon 14</td>
<td></td>
<td>56-44</td>
<td>1374</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-43</td>
<td>496</td>
</tr>
<tr>
<td>Beacon 15</td>
<td></td>
<td>56-40</td>
<td>335</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-44</td>
<td>164</td>
</tr>
<tr>
<td>Beacon 17</td>
<td></td>
<td>56-40</td>
<td>1434</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-43</td>
<td>979</td>
</tr>
<tr>
<td>Beacon 19</td>
<td></td>
<td>56-42</td>
<td>1066</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-44</td>
<td>95</td>
</tr>
<tr>
<td>&quot;KER&quot;</td>
<td>Center, square flat-top granite boulder.</td>
<td>56-41</td>
<td>870</td>
</tr>
<tr>
<td></td>
<td></td>
<td>133-45</td>
<td>761</td>
</tr>
</tbody>
</table>
IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

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

July 10, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4341
Keku Strait, Alaska
Surveyed in 1927
Instructions dated February 16, 1927

Chief of Party, E. A. Cotton.

Surveyed and inked by I. T. Sanders.

1. The records as well as the plan and character of the survey conform to the requirements of the General Instructions, with the exception that form lines are shown on only a small portion of the survey.

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

3. The junctions with the adjoining sheets are satisfactory, except that the location of ø Dep differs from its location on T. 4331 by 10 meters. The shoreline between ø Dep and ø Dum also differs. The description of the rock awash 200 meters north of ø You differs from that on T. 4331.

4. When convenient the omitted form lines should be supplied. Otherwise no additional surveying is required.

5. The character and scope of the surveying and field drafting are good.

6. Reviewed by E. P. Ellis, June, 1928.

Approved:

[Signature]
Chief, Section of Field Records (Charts)

[Signature]
Chief, Section of Field Work (H. & T.)
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  

TOPOGRAPHIC TITLE SHEET  

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. "K"  

REGISTER NO. 4341  

State ALASKA  

Kuiu L. and Kupreanof L.  

General locality  

Locality KUKU STRAIT-Of Beacon L.to Summit 1.  

Scale 1:10,000 Date of survey Sept. - Oct., 1927.  

Vessel U. S. C. & G. S. Ship EXPLORER  

Chief of Party Harold A. Cotton  

Surveyed by Ira T. Sanders  

Inked by Ira T. Sanders  

Heights in feet above M. H. W. to tops of trees  

Contour-Approximate contours Form line interval 100 feet  

Instructions dated February 18, 1927.  

Remarks:  

----------------------------------------------------------------------------------

CRC