DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
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MAR 23 1932

State: Alaska

DESCRIPTIVE REPORT
Topographic Sheet No. 4652
Hydrographic Field E

LOCALITY
Behm Canal
Candle L. to Shirt Pt.

1931

CHIEF OF PARTY
F. W. Eickelberg  F. L. Peacock
DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "E"

BEHM CANAL - S. E. ALASKA.

SEASON 1931.

E. W. Sickleberg
&
Fred. L. Peacock

CHIEF OF PARTY
DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "F"

BEHM CANAL - S. E. ALASKA.

AUTHORITY:

Authority for the survey was the Director's Instructions for Project No. 56 to the Commanding Officer, Ship EXPLORER, dated March 7th, 1930.

LIMITS:

The shore line extends, along the East side of Behm Canal from triangulation station "JEW 2", Latitude 55°36.7', Longitude 130°53.1', Southward to topographic station "HUN", Latitude 55°23.7', Longitude 130°52.6' and on the West side from triangulation station "MALE 2", Latitude 55°37.5', Southward to topographic station "SAL", Latitude 55°27.1', Longitude 130°58.2'.

A junction with topographic sheet "D", is made at triangulation station "MALE 2", and "JEW 2". Another junction is made with topographic sheet "F", at triangulation stations "DISH", Latitude 55°23.3', Longitude 130°49.0' and "ELSE", Latitude 55°32.9', Longitude 130°48.5'. The junction with topographic sheet "G" is at topographic stations "SAL" and "HUN".

CONTROL:

The control for this survey was furnished by triangulation established by Lieutenant J. M. Smook, in 1929, supplementary third order triangulation was established by the party during the season.

METHODS:

The shore line was surveyed by the usual planetable stadia methods, and no unusual difficulty was encountered. Traverse lines were run between triangulation stations. Trouble was encountered along the traverse line between triangulation stations "POP", Latitude 55°29.8', Longitude 130°52.6' and "LOUISE". A new rod was used on this traverse as the rods used previously were being repainted. When the traverse error did not come within the limits prescribed by the Topographic Manual, the traverse was re-run with the same result. The rod was then tested and a new F. + C. constant determined. When this constant was applied to the rod-readings, the traverse checked within three meters. All the remaining traverses were run within the limits.
approved in the Topographic Manual, and were adjusted as described therein.

The topographic station "SAL" was located by intersection cuts from triangulation stations and traverse points. The location was then checked by a random stadia traverse from triangulation station "BAY".

Off-shore rocks were located by intersection cuts from triangulation stations. Hydrographic stations on the off-shore islands were located by directional cuts from triangulation stations and the shore line was then located from these hydrographic stations by stadia rod readings.

Standard practice was followed throughout the entire sheet.

GENERAL DESCRIPTION:

The greater part of the shore-line is steep and rocky. The entire country is covered with a heavy growth of evergreen timber. Cliffs and rock outcrops show on the slopes.

All the islands on this sheet are heavily wooded.

Where low water is not shown the distance between high and low water is negligible. At the head of bays and bights there are small gravel and sand flats as shown on sheet.

INSERTS:

The inserts were surveyed by Lieutenant Roger C. Rowse on a 1:10,000 scale. The reason for using a larger scale is as follows: Manzanita Bay, because of the possibilities in the future that this section may be developed to utilize the natural water-power. The passage between Manzanita Island and the mainland because a larger scale was more desirable for the hydrographer in plotting his positions due to the narrowness of the passage.

Both inserts have been reduced to a 1:10,000 scale, and are shown by a black broken line in their respective positions on the sheet.

LANDMARKS:

New Eddyston Rock is a shaft 235 feet high rising from a sand and gravel shoal. This shoal was rod in at a two foot minus tide. (M.L.L.W.)
DISTORTION:

It is thought that the small amount of distortion in the sheet is due to the fact that most of the surveying was done under favorable weather conditions and also due to seasoning the sheet by having it laid out on the bridge of the ship. It was protected by the awning but subject to variation in the outside atmosphere. It was seasoned in this manner for two months before the projection was made.

MAGNETIC OBSERVATIONS:

Magnetic observations were made at triangulation stations "SAG", "LOUISE", "BEE 2", "JEW 2", "PALL" and "BIB".

Respectfully submitted,

Kenneth S. Ulm,
Aid, C. & G. Survey.

APPROVED:

F. H. Hardy,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.
LIST OF TOPOGRAPHIC STATIONS.

<table>
<thead>
<tr>
<th>Station</th>
<th>Latitude D.M.</th>
<th>Longitude D.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55 28 1811</td>
<td>130 53 351</td>
</tr>
<tr>
<td>TUT</td>
<td>55 27 636</td>
<td>130 53 647</td>
</tr>
<tr>
<td>TAT</td>
<td>55 25 635</td>
<td>130 53 1008</td>
</tr>
<tr>
<td>AGE</td>
<td>55 24 278</td>
<td>130 58 201</td>
</tr>
<tr>
<td>SAL</td>
<td>55 23 1255</td>
<td>130 52 967</td>
</tr>
</tbody>
</table>

The above stations are marked by standard bronze discs.
STATISTICS.

Number of statute miles of shore line 74.2
Number of statute miles of low water line 11.9
Number of permanently marked stations determined by plane table 5
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. "2"

REGISTER NO. 4652

State.  

Alaska

General locality.  

Behm Canal

Locality.  

Wusamut Bay to Candle Island to Shirt Pt.  

Scale.  

1:10,000  

1:20,000  

Date of survey.  

June, July, & Aug., 1931.

Vessel.  

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

Chief of Party.  

E. W. Dickelberg & Fred. L. Pocock

Surveyed by.  

Roger C. Rouse and Kenneth S. Ulm

Inked by.  

Roger C. Rouse and Kenneth S. Ulm

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated.  

March 7th, 1932.

Remarks:

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0.0