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 Letter .... B ........

REGISTER NO. 4565

State. .................... ALASKA

General locality. ....... BERM CANAL, S. E. ALASKA

Locality. ......... EAST SHORE, NORTHERN ENTRANCE, Survey Pt. to Escape Pt.

Scale 1:20,000 ....... Date of survey April - May, 1930

Vessel ............... EXPLORER

Chief of Party .......... E. M. Eickelberg

Surveyed by .............. Philip C. Doran

Inked by ................. Philip C. Doran

Heights in feet above H.M. to ground approx.

Surveying apparatus used Form line interval 100 feet

Instructions dated .......... March 7th, 1930

Remarks: .......................
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "B"

BEHM CANAL - S. E. ALASKA.

AUTHORITY: Work was done under Director's instructions, dated March 7th, 1930.

LIMITS: The shore line extends along the east side of Behm Canal from triangulation station SURVEY, 1930, Latitude 55° 28.1', Longitude 131° 49.3', northward along Revilla-gigedo Island to triangulation station CLOVER, 1930, Latitude 55° 31.5', Longitude 131° 42.5'. The islands which from the west side of Clover Passage - Betton, the Pup, Clover, Rump and Tatoosh and smaller unnamed islands in south end of Clover Passage, are included in the sheet.

At the south end, a junction is made with topographic sheet 33S6 at station SURVEY. A traverse for locating signals was run from station SURVEY to triangulation station CIN, Latitude 55° 26.9', Longitude 131° 49.8', and beyond for 3/4 mile.

A junction with topographic sheet "C" is made at CLOVER. Another junction with the same sheet is made at triangulation station LOR, 1930, Latitude 55° 36.4', Longitude 131° 39.9'. The shore line then extends northward to triangulation station NOSE, 1930, Latitude 55° 39.7', Longitude 131° 42.5'. The shore line shown on sheet in pencil is a reduction from 10,000 scale sheet "C".

GENERAL DESCRIPTION: The greater part of the shore line shown on this sheet is steep and rocky. The high point on the west side of Betton Island dominates that part of the territory. Light colored cliff on Tatoosh Island is noticeable from the west. A lumbered off patch shows up brown against the green background on the north end of Betton Island. The peaks along the east side of Clover Passage rise to heights up to 2800 feet. All the territory is covered with heavy evergreen timber.

LANDMARKS: A light yellowish cliff about 130 feet high located on the west side of Tatoosh Island is visible from the west, and could be of use as a landmark for ships approaching the canal. Cliff is in Latitude 55° 31', 91 meters, Longitude 131° 50', 799 meters.
CHARACTER OF CONTROL USED:

The control for this survey was based on the scheme of triangulation executed in 1929 by Lieutenant J. M. Snook, supplemented with additional triangulation stations to comply with the requirements for control as stated in the Manual.

The control in Clover Passage was by means of plane table triangulation between triangulation station PUP 1930, and SURVEY 1930 on the south, to triangulation station CLOVER 1930 on the north end.

All traverses run were within the limits prescribed in the Manual and were adjusted as described therein.

Standard practice was followed throughout the entire sheet.

LOCATION OF OFF-LYING FEATURES:

Reefs and rocks were located by direct rod readings, except the two rocks awash at 1 foot and 1-1/2 feet minus tide between Back and Betton Islands. These rocks were located by directional cuts.

FORM LINE VERIFICATION:

Form lines were not checked by off shore observations, but were checked against the Geological Survey Map of Revillagegio Island on the scale of 1:50,000. Considering that this topography was based on the present charts of this vicinity, the new form lines checked the older topography. All elevations are to the ground above high water. The heights of the trees were estimated between 40 and 80 feet, depending on the general elevation of the tree in question.

MAGNETIC OBSERVATIONS:

Magnetic observations were made at triangulation station PUP, TATOOSSH2, CLOVER and PUG2. Comparison with declinometer No. 12 was made at station TATOOSSH2 and corrections indicated on sheet. Declinatoire used was number 2457 (maker's number).

STATISTICS:

Statute miles of shore line - high water........ 35.3
Statute miles of shore line - low water........ 10.6

Area Form Lines - square miles............... 40
Number of elevations......................... 75
## Planetable Positions

<table>
<thead>
<tr>
<th>Object</th>
<th>Lat.</th>
<th>D.M.</th>
<th>Long.</th>
<th>D.P.</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Barrel Beacon</td>
<td>55°28'</td>
<td>1078</td>
<td>131°47'</td>
<td>915</td>
<td>16 ft.</td>
</tr>
<tr>
<td>Red Buoy No. 10, Pond Reef</td>
<td>55°26'</td>
<td>246</td>
<td>131°48'</td>
<td>735</td>
<td></td>
</tr>
</tbody>
</table>

Respectfully submitted,

[Signature]
Philip C. Doran,
Hydro. & Geod. Engineer.

Approved and Forwarded:

[Signature]
E. W. Eickelberg,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.
**STATISTICS.**

Sheet Field Letter "B"

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statute miles of shore line, high water</td>
<td>35.3</td>
</tr>
<tr>
<td>Statute miles of shore line, low water</td>
<td>10.6*</td>
</tr>
<tr>
<td>Area form lines - square statute miles</td>
<td>40</td>
</tr>
<tr>
<td>Number of elevations</td>
<td>75</td>
</tr>
<tr>
<td>Number of permanent land marks for charts located by Planetable</td>
<td>1</td>
</tr>
</tbody>
</table>

*Where no low water line is shown the difference between the high and low is too small to show on chart.*
APPROVAL SHEET,

Topographic Sheet "B"

This sheet has been examined by me and is approved.

The contouring for this sheet was made to include the area of Sheet "C" (1:10,000) because more area could be covered than on sheet "C" and better locations obtained.

The shore line in pencil was reduced and transferred from Sheet "C".

E. W. Eickelberg,
Commanding Officer,
U.S.C. & G.S.S. EXPLORER.
LANDMARKS FOR CHARTS

Seattle, Washington

December 20, 1930

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Yellow Cliff about 130 feet high.</td>
<td>55 31 91 131 50 799 N.A. Angle from sextant fix.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Barrel Beacon 15 feet high</td>
<td>55 26 1078 131 47 915 N.A. Plane-table</td>
<td>8102</td>
<td></td>
</tr>
<tr>
<td>Rod Buoy No. 10 Pond Reef</td>
<td>55 26 246 131 48 735 N.A. Plane-table</td>
<td>8102</td>
<td></td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.