DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Alaska

DESCRIPTIVE REPORT

Topographic Sheet No. 4369

Locality

Kenai Peninsula

Day Harbor - South Part

1928

CHIEF OF PARTY

R. R. Lukens
DESCRIPTIVE REPORT
to accompany:

TOPOGRAPHIC SHEET "E". 4369

Day Harbor, Kenai Peninsula, S.W. Alaska.

Season 1928.

R. H. Lukens — Chief of Party.
DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET "E".
Day Harbor, Kenai Peninsula, S. W. Alaska.
R. R. Lukens, Chief of Party.

Accomplished in accordance with Director's Instructions, dated February 18, 1928.

LIMITS: This sheet includes a survey of the shoreline on the west side of Day Harbor, from Lat. 59° 59' N., Long. 149° 13' W. to Lat. 59° 52' N., Long. 149° 18' W.; and form lines for approximately one mile inland from the above mentioned shoreline.

GENERAL DESCRIPTION: Day Harbor, the first bay on the east side of Cape Resurrection, is a deep body of water about 2-1/2 miles wide and extends about twelve miles inland from Barwell Island. The shoreline on this sheet is rocky and rises abruptly from the water's edge. The heads of the small bays are boulder beaches. The headlands are covered with pine trees and the tree line extends up to approximately the 7000 foot contour. Above this elevation the hills are rocky and almost bare of vegetation; the higher peaks being snow-covered the greater part of the year.

Cape Resurrection is a series of peaks and the ridges run in a general north and south direction. The peaks present a rugged, broken skyline, which rises higher and higher toward the head of the bay. The peaks are composed of disintegrating rock, and many rock slides are in evidence.

Driftwood Bay, about three miles north of Barwell Island, is about 1/2 mile wide and indents the coast one mile. The shoreline is steep and rocky, except at the head of the bay where the beach is made up of small boulders and rocks. This is the only suitable anchorage shown on the sheet.
Killer Bay is about 1/4 mile wide and indents the coast 1/2 mile. The shoreline is steep and rocky with a boulder beach at its head.

Safety Cove is about 1/3 mile wide and indents the coast 1/2 mile. The shoreline is steep and rocky, with a boulder beach at its head.

ROCKS AND DANGERS TO NAVIGATION: The only danger is the rock shown in Lat. 59° 52', plus 280 meters; Long. 149° 37', plus 522 meters. This rock is awash at extreme low water and breaks in moderate weather.

SURVEY METHODS: The usual plane-table methods were used in the survey shown on this sheet. The triangulation stations shown were used for control and in addition the two whitewash signals KID and DUB were cut in by triangulation and plotted on the sheet.

The greater part of the survey was done by three point fix and resection, as the work proceeded along the shoreline. The only traverse run was from triangulation station LEDGE to triangulation station CAPE ISLAND; a distance of about three and one-half miles, which closed with an error of 15 meters, which was adjusted.

Elevations were obtained by vertical angles and cuts on the prominent peaks taken with the plane-table alidade from positions along the shore. The elevations on this sheet do not check with those shown on the chart. At least two separate determinations were made of all elevations shown and a mean of the result taken as the correct elevation. The maximum difference between elevations was not more than thirty feet; this probably being due to the fact that the exact point was not cut in on the two cuts.

The solid form lines were sketched as the survey proceeded along the shore. Dotted form lines were transferred from Chart No. 8538, Resurrection Bay, with a pantograph. In some places the form lines did not agree but the most probable junction of form lines was made and the result shown on this sheet.
Comparison of the elevations of plotted peaks is as follows:

<table>
<thead>
<tr>
<th>Barwell Island</th>
<th>1905 Survey</th>
<th>1928 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 26</td>
<td>1385 &quot;</td>
<td>1430 &quot;</td>
</tr>
<tr>
<td>&quot; 25</td>
<td>2050 &quot;</td>
<td>2100 &quot;</td>
</tr>
<tr>
<td>&quot; 20</td>
<td>1820 &quot;</td>
<td>1830 &quot;</td>
</tr>
<tr>
<td>&quot; 19</td>
<td>2835 &quot;</td>
<td>2860 &quot;</td>
</tr>
</tbody>
</table>

All elevations on this sheet are referred to average high water.

At Cape Resurrection the shoreline of the old survey and this survey does not agree by about forty meters. On this sheet the shoreline was located by rod readings from the north shore of Barwell Island and taken about every 200 meters at points where a rodman could land. The last point shown is a rod reading obtained in this manner and should not be in error more than fifteen meters.

The dotted shoreline of the south shore of Barwell Island was obtained by cuts taken from a launch and the shoreline sketched. The solid shoreline was obtained by rod readings taken from topographic station LIN.

**Names:** The names Cape Resurrection and Barwell Island are taken from chart No. 8538. The names Driftwood Bay and Safety Cove are taken from the U. S. Geological Survey map of this area. **Killer Bay** is a name suggested by the survey party, because during the time that the hydrography of this bay was accomplished a fight was witnessed between a whale and a killer whale.

**Landmarks:** The only prominent landmark is the topographic station SCAR; a tan-colored rockslide which shows up well from offshore.

Statute miles of shoreline - 17.2.

Respectfully submitted

Joe C. Partington
Topographer.

Approved

R. P. Lucas
Commanding
View showing western entrance to Day Harbor.
LANDMARKS FOR CHARTS

Seattle, W. N.

Jan. 27, 1929

Superintendent, U. S. Coast and Geodetic Survey:

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>Scar</td>
<td>59.59 278</td>
<td>49.12 140</td>
<td>Valdez, P. T.</td>
</tr>
<tr>
<td>A. verticle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White slide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show prominently from entrance to Day Harbor</td>
<td></td>
<td></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.
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. 4369
REGISTER NO. 4369

State... S. W. Alaska
General locality... Kenai Peninsula
Locality... Day Harbor - South Part
Scale... 1:20,000 Date of survey... June, 1920, 192

Vessel... U. S. C. & G. S. S. SURVEYOR
Chief of Party... R. R. Lukens
Surveyed by... Joe C. Partington
Inked by... Joe C. Partington

Heights in feet above high water to ground 100 feet
Contour... Approximate contour, Form line interval 100 feet

Instructions dated... February 19, 1928

Remarks:...