FORM 301
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

State: Alaska

DESCRIPTIVE REPORT.

Locality:
Stephens Passage
Outer Point to Shelter Island, S.E. Alaska

191

Chief of Party:
L. O. Colbert
Descriptive Report
to accompany Topographic sheet,
Stephens Passage, Outer Point to Shelter Island,
S.E. Alaska.

Chief of Party — L.O. Colbert.

Surveyed by — Ernest E. Reese.

Scale: 1/20,000.
Descriptive Report to Accompany Topographic Sheet
Number 3681
Stephens Passage from Horse I. to Shelter I.

Extent

The area included on this sheet is at the north end of Stephens Passage. It comprises the shore line on Douglas I. from a point 1 1/2 miles WNW of the light house on the south shore of the island to Entrance Pt., that from the lower end of the peninsula opposite here up through Ankle Bay to 1/2 mile W of Pt. Louise, that on Mansonfield Peninsula from a point 1 mile west of Sylvania Pt. down to a point directly opposite the lower end of Horse I., and nine miles of the shore in the south or upper end of Barlow Cove. It also includes all the islands within these limits and the contours of the area surrounding same.

Control and Method of Survey

Of former triangulation in the locality the following stations were recovered; Oat, Cling Rock at the time of beginning the work and Cow and Bob later on. Triangulation Eagle also is apparently the same as the former triangulation within. From these stations a geodetic table triangulation was extended over the entire sheet.
for control of both topography and wire-drag work. After the work was completed the geographic positions of the, i.e., in Grounds and Clearing were obtained from the primary triangulation party and compared with topographic locations of same. The errors in their location were 15.79 and 0.2 meters respectively. These errors in Grounds and Clearing were caused by incorrect three point fixes obtained with the use of Lt. What little adjustment was found necessary was made on the sheet. Traverse were carried around Horse 1. and (Helter 1) and these checked out well. Most of the remainder of the work was done at intersection stations or at these point fixes. The work in Barkley Cove was controlled by a plane table triangulation.

General Appearance of Country.

All of the land in this locality is wooded except the tops of the mountains of over about 3,000 foot elevation. Portland 1, although not very high, is thickly wooded and shows well from the south. There are so many peaks on Douglas 1. back of Ritter Pt. That none of them show out very prominently. There is some flat land at the foot of the southwestern slope of
these mountains but the foot of the northwestern slope is very abrupt. The mountain range is shown from Pt. Louise is very steep on the southwest side and shows very prominently from the vicinity of Autin Pt. Only the southeast slope of this range comes on this sheet. Capelan Island is wooded and easily picked up in approaching Auke Bay cannery. Love Mt. stands out very prominently above the surrounding country and is an excellent land mark, especially from the northwest. Between Love Mt. and the two ranges back of Horse Island, is a prominent valley of 200 to 300 foot elevation. There are no definite points on the first range back of Horse Island but on the second range the 3450 foot peak is prominent on account of being high and snow capped except for a very short time in the fall. The 2640 foot peak shows prominently from the vicinity of Autin Pt. on account of its abrupt slope on the left and the very flat shoulder 300 feet below it on the right side. This peak is green during about 5 months of the warmer weather. Cold and Horse islands are both wooded and easily picked up by
a ship but not of great help in navigation or ships use the opposite side of Stephen Passage.

Shoals and Small Rocky Islands.
A rocky shoal 800 meters 156° true from S. Point, shows 7 feet at LW, and is about 60 meters in diam. This is not shown on the present chart. This shoal extends almost 100 meters outside of a line between adjacent points on Douglas Island and is dangerous for small launches.

A rock awash at LW, lies 180 meters 12° true from S. Point, Not shown on present chart.

The rock shown on the present chart on line between and 1/3 of the distance from Salmon 9 to Outer Pt. seems to plot about 10 to 20 meters off the reef as actually in existence. I was at Salmon 9 when the tide was -2 feet, and there was no sign of any rock outside of the reef and the rock was probably meant for the outer point of the reef. The topography in this bay is considerably in error on the present chart.

George Rock shows 3 feet at MHW, or is awash at HW. As to this fact chart 2235 is in error.
and chart Z302 is correct.

Sprung Rock was located by other members of the wire drag party. It was not visible or breaking at times when I was in the vicinity and thus is not on my sheet.

The rocky shoal on the NE side of the channel NE of Sprung, is bare 1 foot at MHW.

A rocky shoal 80 x 40 meters bare 4 feet at LW is 150 meters 254° true from A Railroad.

A rock awash at -1 foot tide lies 230 meters 242° true from the island 1/2 mile NW NW of A Railroad. This is not shown on present chart. Simken rocks extend 30 to 40 meters N NE of this rock.

Two rocks awash at -2 foot tide lies 380 meters 95° true from the same island. They are 40 meters apart in a line N 5° E separated by water 2 to 3 fath deep. These rocks not shown on present chart.

In the center of the shoal small cave 1.3 miles S E X 3 (mug) of Anac Bay conveys is a rock awash at (-2) ft tide.

One hundred forty meters 228° true from the small island on the NW side of this bay is a rock awash at -1 ft tide. This is not on present chart.

Thirteen hundred meters 92° true from A Loo are 2 rocks bare 4 feet at LW. Not shown on present chart.
Thirteen hundred meters 109° true from S Lm is a rock bare 7 ft. at L.W. Not shown on present chart.

Two rocks in the channel NW of Coghlan I and one SE of S Lm were located by other members of the party. These are all slightly below L.W.

The highest part of the rocky shoal 1420 meters 117° true from S Lm is bare 5 ft. at M.H.W.

The shoal is rocky except the NNW quarter which is sand and gravel. The shape of this shoal is different than that shown on the chart. 200 meters 13° from the highest part of the shoal in a rock awash at -3 feet tide.

The rocky shoal 1160 meters 157° true from S Lm is bare 8 ft. at M.H.W. Both present charts are incorrect in this respect.

A rocky shoal bare 8 ft. at L.W. lies 1130 meters 327° true from S Bib. The same elevation is given on present charts.

A rock awash at L.W. lies 5 M 292° from S Bib. This is not shown on present chart.

A rock bare 5 ft. at L.W. lies 1300 meters 305° from S Hora.

A rock awash at L.W. lies 280 meters 114° from S Hot.
This is not shown on present charts.

A group of 3 rocks bare 1 to 2 ft at LW, lie 1240 meters 80° from S Horse. The whole group is about 220 x 70 meters extending about N 45°.

A sandy and rocky shoal bare 8 ft at LW, lies 1580 meters 110° from S Horse. The elevation was given on chart No. 8302 is correct, but that on No. 8235 is not. The shoal is approximately 250 x 110 meters extending E and W.

Close to shore and about west from S Eagle, a rocky shoal with 8 ft of water at LW, and covered with kelp was found late in the season while passing in launch. It is shown on 1907 topographic sheet and a report on it was made by letter to the Superintendent and forwarded by Capt. L. C. Colvert about the first week in October.

Shore Line.

High and low water lines and the areas between them are shown by their characteristic symbols. At some places where the low water line did not appear to extend off shore, but where it appeared to be correct on the charts, it was not obtained on account of not being able to get there.
at L.W. The reef at Outer Point extends farther WNW than shown on the chart. Shane Pt and the reef surrounding it are incorrect on present chart. About half the cove shown on chart in basin at low water, the island being connected to the mainland by a gravel bar. There should be only one island where 2 are shown close to the mainland and 1 2 miles S E E S W S W of Anhe Bay connor. The L.W. south east of here is not correct on the chart. The reef at the point 0.6 mile S W W of here is much different than on the chart. At L.W. a bar, not shown on chart, extends from the first point E N E of Old Anhe Village to the near island S S E of the point. A rocky point in the bay at Symonds Pt. is not shown on the chart. The 2 small islands shown on the S W side of Portland do not exist... The reef is all covered at H.W. The reef around Colt I. is not correct on the chart and the reef extending west from the N W end of Horse I. is rocky instead of sandy or gravel. The reef off the SE point of the same island is rocky. The river west of S Cleaving is too far N W on the chart and the sand spit off of it does not extend shown out far enough.
Contours

The contour interval used is 100 ft. Elevations are to the actual surface visible to the eye, that is, to tree tops in wooded areas and to land in areas not wooded, at the points of mountains above tree line. All prominent points are located by 3 or more cuts, except the 3430 foot peak on Douglas Island. Only 2 cuts were obtainable here without costly delay as the peak was covered with clouds at most times. The two elevations checked well and the cuts were to a fairly definite point of the peak. The contours on Douglas Island are considerably different than those shown on present chart. The location of the highest point agrees quite well with mine but the general shape of the contours is very much different and the elevation of the most prominent knob which is 1670 ft. high is at least 400 ft. too high on the chart. Another peak which is only 160 feet high to tops of trees, is shown 200 ft. on chart. The location and elevation of one knot on the chart agrees well with mine. Broken-line contours are in areas that could not be seen.

Sailing Directions

Ships going from Juneau to Skagway or to the
westward pass up Stephens Passage favoring Douglas side. Then they leave Portland I on the starboard beam and if going to Stegevik take Favorite Channel but if going to the westward take Saginaw Channel. This area was dragged during the present season and no longer found. As previously stated Portland I is a very prominent land mark. The reef extending WNW from Portland I is dangerous as the end covers at half tide. A good range for small boats to use in rounding the end of the reef is to leave the cannery at Anke Bay on line with the right tangent of the 70-foot island of the group of 3 islands which are connected at low water. The cannery in line with the round top 30-foot islet near Coghlan I, puts you at the end of the reef.

George Rock can be easily seen except at tides of about 15 feet or over. At 15 ft tide the area bare is small. The water on all sides of the rock decreases rapidly. Sperm Rock is dangerous as it is not visible except at very extreme low water and the water very seldom breaks on it.

Ships entering Anke Bay from the south
should pass about \( \frac{1}{3} \) the distance from George Rock to Portland I., and then head for a short distance to the right of Coghlann I. Round Coghlann I. Close aboard on the port side and then head a little to the left of the 25 foot high, bright green, greasy point \( \frac{3}{4} \) of a mile to the left of the cannery so as to clear the rocks off the little island one mile NW of Sprat I. and one mile ENE of the north end of Coghlann I. Then head for the cannery which is plainly visible.

On the present chart No. 5235 this last mentioned small island is shown much like a reef instead of being of a buff color like the similar islands near it and is apt to lead a stranger to believe that there is a shoal NW of the last island visible.

Although the passage over the flats between Fritz Cove and Juneau does not come on this sheet, I might note that at the present time the shoalest place in the channel is at the bar just east of the only island in the passage. This bar is avoided at about 12 foot Juneau tide. At present a row of stakes marks the south edge of the channel.
### Hydrographic Stations & Recoverable Objects

<table>
<thead>
<tr>
<th>Object</th>
<th>Remarks</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
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<tbody>
<tr>
<td>Pole</td>
<td>Flag at highest point</td>
<td>58° 21' 12&quot;</td>
<td>134° 43' 34&quot;</td>
</tr>
<tr>
<td>Man</td>
<td>Hyd. station mark on boulder</td>
<td>&quot; 21 98&quot;</td>
<td>42 190</td>
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<tr>
<td>Cap</td>
<td>&quot;   &quot;</td>
<td>20 1412</td>
<td>41 406</td>
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<tr>
<td>Seal</td>
<td>Hyd. sig. not recoverable</td>
<td>21 4</td>
<td>39 798</td>
</tr>
<tr>
<td>Can</td>
<td>S. gable, main building, canopy</td>
<td>22 1320</td>
<td>38 700</td>
</tr>
<tr>
<td>Back</td>
<td>W. new house</td>
<td>21 1328</td>
<td>38 536</td>
</tr>
<tr>
<td>News</td>
<td>NW &quot; of house</td>
<td>21 630</td>
<td>38 558</td>
</tr>
<tr>
<td>Shook</td>
<td>NW &quot;   &quot;</td>
<td>19 990</td>
<td>35 973</td>
</tr>
<tr>
<td>Tall</td>
<td>Tree on rhyo island, clear &amp; flat</td>
<td>21 1864</td>
<td>41 730</td>
</tr>
<tr>
<td>Geo</td>
<td>George Rk., 3' at MHW</td>
<td>18 1524</td>
<td>41 947</td>
</tr>
<tr>
<td>Tent</td>
<td>E gable, tent, not recoverable, probably muck</td>
<td>17 1113</td>
<td>48 120</td>
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<tr>
<td>Slats</td>
<td>Slats on tree at NE point</td>
<td>20 768</td>
<td>50 146</td>
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<tr>
<td>Cat</td>
<td>W.W. rock on cliff on pt</td>
<td>19 1678</td>
<td>52 400</td>
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<tr>
<td>Yel</td>
<td>Natural yellow on cliff</td>
<td>19 430</td>
<td>53 210</td>
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<tr>
<td>Small</td>
<td>W.W. on small boulder</td>
<td>20 176</td>
<td>53 764</td>
</tr>
<tr>
<td>Stump</td>
<td>W.W. stump, not permanent</td>
<td>20 1508</td>
<td>54 00</td>
</tr>
<tr>
<td>Roof</td>
<td>W. gable of house</td>
<td>22 1800</td>
<td>39 310</td>
</tr>
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</table>

### Statistics

- Shore line surveyed (statute miles) = 
- Area covered by topography (sq. statute mi) =

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 3681.

State . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .