**DEPARTMENT OF COMMERCE**  
U. S. COAST AND GEODETIC SURVEY  
R. E. F. PATERN, Director

| State: | Alaska  
|        | Aleutian Islands |

**DESCRIPTIVE REPORT**

**Topographic** | **Sheet No.** "B"  
**Hydrographic** |

**LOCALITY**

- Unalaska  
- Amaknak Islands  
- Dutch Harbor  
- Ilulissat and Vicinity

---

**1934**

**CHIEF OF PARTY**

H. R. Campbell
dated May 5, 1936

Applied to drawing of Chart No. 9008  April 1936  S.B.M.
No. 9007

Applied to new compilation of Chart No. 9007  July 1936  S.B.M.

Applied to drawing of Chart No. 8860  Dec 1936  S.B.Marg.

Applied to drawing of Chart No. 8802  S. B. Marge  June 1937
(extended)

Applied to new compilation of Chart No. 9007  S. Piegari  Aug. 1938
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. ....... "B" 1889

REG-no.

State...... Alaska, Aleutian Islands

General locality...... Unalaska

Locality...... Dutch Harbor and Unalaska & Vicinity

Scale...... 1:5,000...... Date of survey...... July and August., 1934

Vessel...... U.S.S. DISCOVERER

Chief of party...... H.B. Campbell

Surveyed by...... Henry O. Fortin

Inked by ...... Henry O. Fortin

Heights in feet above...... M.H.W. ...... to ground...... approximate

Contour interval...... Form line interval...... 50 feet

Instructions dated...... April 19, 1934

Remarks:..............................................................

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

U.S.C. & G.S.S. DISCOVERER
H.B. Campbell, Commanding.

Season of 1934  Project H.T. No. 177
DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET "B"

U.S.C. & G.S.S. DISCOVERER
H.E. Campbell, Commanding.

Season of 1934 Project H.T. No. 177

This survey was made in compliance with the Director's instructions dated April 19, 1934.

PURPOSE

The purpose of this topographic survey was a revision of the old work on sheet number T - 2236, 1896, and to furnish adequate control for hydrography done within the limits of the sheet.

LIMITS

This sheet takes in all the topographic features of the southern end of Amaknak Island, connecting with topographic sheet "A" at hydrographic signals Ism and Bis.

On Unalaska Island this sheet connects properly with hydrographic signal Ham, and terminates at hydrographic signal Nit at the north entrance to Captain's Bay.

CONTROL

The topography was controlled by second and third order triangulation of the 1896 - 1901, and 1934 seasons. Sufficient triangulation stations were established to permit a quick and accurate location on the planetable.

The so-called Dutch-Harbor-or-existing datum was used in determining locations of stations.

SURVEY METHODS

The usual plane table survey methods were used. In general the
topographic signals were located by three or more cuts from triangulation stations and verified by stadia when the shoreline was rod
din.

A combination transverse and skip set up method was used in locating all shore line, how water line, and other topographic details.

All closures were within the limits as allowed by the required standard of accuracy, and all rocks and reefs were located either by stadia, three or more intersection cuts, or by two good sets of sextant angles.

FORM LINES

One hundred and two elevations were determined on this sheet; forty-one on Amaknak Island, and sixty-one on Unalaska Island. Proper connections were made with topographic sheet number "A" and as accurately as possible with the old survey (bromide number T - 2236).

Although that section of the sheet just south and east of the large lake back of Unalaska was sketched in, not sufficient elevations were obtained to permit the continuation of solid form lines.

GENERAL DESCRIPTION

The shoreline and slopes back of the shoreline on both Amaknak and Unalaska Islands are heavily covered with grass, reindeer moss, and low shrubbery to about an elevation of 1600 feet where the mountains commence to get bare. Hatchures on the sheet designate the cliffs.

The lake back of the Naval Radio Station is used as a water reservoir and supplies water for both Dutch Harbor and the Radio Station. The lake just west of the U.S.G.L.O. No. 1945 is used as a water reservoir for the town of Unalaska.

There are two groves of evergreen trees on this sheet; one on
Expedition Island, and one just east of the old Amaknak Indian Village Site. These trees, which are known as Sitka Spruce, were brought over from Sitka in 1805 by a Russian Orthodox Priest. At the present time they are only about twenty-five feet high, and there aren't any signs of their seedlings propagating.

ANCHORAGEs

All anchorages on this sheet are properly covered in the Alaska Coast Pilot, Part II, and in the Coast Pilot Notes as remitted to the office by the U.S.S. DISCOVERER of the 1934 season.

DISCREPANCIES AND COMPARISONS WITH PREVIOUS SURVEYS

The discrepancies in elevations and their position has been taken up in the descriptive report of sheet "A".

The discrepancies in shoreline as compared with bromide T - 2236 range from a few to 35 meters, the greatest error being at the rounding point just south of Agnes Beach, and at the rock between the two high water south Amaknak Rocks. This rock appears to be about thirty-five meters closer to hydrographic signal Key.

The Flagstaff as shown on Chart No. 9008 at Dutch Harbor no longer exists and should be expunged from the chart.

The Post Office name of Iliuliuk is known as Unalaska to all mariners and inhabitants of this locality. I believe that the name of Iliuliuk leads to some confusion on the charts and should be changed to Unalaska.

WELL ESTABLISHED LOCAL NAMES

Mt. Newhall, elevation 1651, was the name given to the mountain just west of longitude 166° 30' 00".

Dr. Newhall was a deceased physician who practiced at Unalaska years ago.

Margaret Bay is a well established local name, and was given to
the little bay at the northwest side of Iliuliuk Harbor.

Xatacyan Lagoon was the name given to the salt lagoon connecting onto Margaret Bay. The old Xatacyan Indian Village is located at the head of this lagoon.

Agnes Beach, being a well established local name, was given to the little beach at hydrographic signal Go, at the south entrance to Iliuliuk Harbor.

DISTORTION AND REMARKS

The distortion on this sheet amounted to about 10 meters per nautical mile. The remarks regarding this sheet are the same as discussed in the report for "A".

MAGNETIC OBSERVATIONS

A magnetic observation was made with the declinatoire at triangulation station Grave 2, 1934.

LANDMARKS

A list of landmarks on form 567 is appended. No additional description is necessary.

RECOVERABLE PLANE TABLE POSITIONS

A list of recoverable plane table positions is appended; also description of same on form 524.

Respectfully submitted,

Henry O. Fortin,
Jr. H. & G. Engineer.

Approved and forwarded:

H.K. Campbell,
H. & G. Engineer,
Chief of Party.
REMARKS

The two high water rocks as shown on Chart No. 9008, Latitude 53° 52' (1150 meters) North, and Longitude 166° 32' (866 meters) West do not exist and should be expunged from the chart. There are some low water rocks in this vicinity, the description of which is taken up in the descriptive report for the hydrographic sheet covering this locality.

LIST OF STATISTICS

Statute miles of high water line - - - - - - - - - - - - - - - - 12.6
Statute miles of low water line - - - - - - - - - - - - - - - - 2.3
Statute miles of lakes and rivers - - - - - - - - - - - - - - - - 5.8
Statute miles of railroads, roads, fences, telephone lines, etc. 4.6
Area, square statute miles - - - - - - - - - - - - - - - - - 8.6
<table>
<thead>
<tr>
<th>Name and Description</th>
<th>Latitude</th>
<th>D.M.</th>
<th>Longitude</th>
<th>D.P.</th>
<th>Elev.</th>
<th>Topo Sh. Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnetic Sta. 1934</td>
<td>53 53</td>
<td>804</td>
<td>166 32</td>
<td>105</td>
<td>100</td>
<td>&quot;B&quot; 1934</td>
</tr>
<tr>
<td>MIX E Gable Warehouse</td>
<td>53 53</td>
<td>168</td>
<td>166 32</td>
<td>28</td>
<td>12</td>
<td>&quot;</td>
</tr>
<tr>
<td>POT High Pt. of Rock</td>
<td>53 52</td>
<td>1742</td>
<td>166 32</td>
<td>128</td>
<td>8</td>
<td>&quot;</td>
</tr>
<tr>
<td>SKY E Gable Cuthouse</td>
<td>53 52</td>
<td>1679</td>
<td>166 32</td>
<td>318</td>
<td>8</td>
<td>&quot;</td>
</tr>
<tr>
<td>MIS Flagpole on brown house</td>
<td>53 52</td>
<td>890</td>
<td>166 31</td>
<td>772</td>
<td>12</td>
<td>&quot;</td>
</tr>
<tr>
<td>JAY Highest chimney on Mission</td>
<td>53 52</td>
<td>982</td>
<td>166 31</td>
<td>986</td>
<td>15</td>
<td>&quot;</td>
</tr>
<tr>
<td>MAR Flagpole corner of US Marshall's house</td>
<td>53 52</td>
<td>1070</td>
<td>166 32</td>
<td>29</td>
<td>20</td>
<td>&quot;</td>
</tr>
<tr>
<td>HOS Flagpole on Hospital</td>
<td>53 52</td>
<td>1379</td>
<td>166 32</td>
<td>450</td>
<td>25</td>
<td>&quot;</td>
</tr>
<tr>
<td>MA Slatted range signal on Wharf</td>
<td>53 52</td>
<td>1562</td>
<td>166 32</td>
<td>536</td>
<td>10</td>
<td>&quot;</td>
</tr>
<tr>
<td>OR S Gable Warehouse, near Sheep Camp Dock</td>
<td>53 52</td>
<td>1762</td>
<td>166 32</td>
<td>413</td>
<td>8</td>
<td>&quot;</td>
</tr>
<tr>
<td>LEG Flagpole on Expedition I</td>
<td>53 52</td>
<td>1397</td>
<td>166 33</td>
<td>150</td>
<td>20</td>
<td>&quot;</td>
</tr>
<tr>
<td>GEM N Gable of shack back of fishing dock</td>
<td>53 52</td>
<td>1123</td>
<td>166 33</td>
<td>24</td>
<td>10</td>
<td>&quot;</td>
</tr>
<tr>
<td>Name and Description</td>
<td>Latitude °</td>
<td>D.M. Meters</td>
<td>Longitude °</td>
<td>D.P. Meters</td>
<td>Elev.</td>
<td>Topo Sh. Letter</td>
</tr>
<tr>
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</tr>
<tr>
<td>CC0</td>
<td>53 52</td>
<td>1212</td>
<td>166 32</td>
<td>801</td>
<td>5</td>
<td>&quot;A&quot; 1934</td>
</tr>
<tr>
<td>Center Blue window on W side of shack.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GO</td>
<td>53 52</td>
<td>774</td>
<td>166 32</td>
<td>693</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>W Gable of warehouse on fishing dock.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAN</td>
<td>53 52</td>
<td>364</td>
<td>166 33</td>
<td>446</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>E Gable of shack on fishing dock.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEY</td>
<td>53 51</td>
<td>1724</td>
<td>166 33</td>
<td>412</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Highest pt. of most easterly one of S Amaknak rocks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GAP</td>
<td>53 53</td>
<td>398</td>
<td>166 33</td>
<td>404</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Highest pt. of Cave Rock.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>53 52</td>
<td>1356</td>
<td>166 34</td>
<td>11</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Highest pt. of rock, just S of Arch Rock.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOM</td>
<td>53 52</td>
<td>1527</td>
<td>166 32</td>
<td>213</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Most westerly and highest pt. of Iliuliuk Reef.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S.G.L.O. No. 1945</td>
<td>53 52</td>
<td>850</td>
<td>166 32</td>
<td>236</td>
<td>2</td>
<td></td>
</tr>
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</table>
LANDMARKS FOR CHARTS

Seattle, Washington

March 4, 1935

Director, 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.

H. B. Campbell
Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>* <strong>N. Radio Tower</strong></td>
<td>53 53 555.9 166 32 158.5</td>
<td>Dutch Harbor Triangulation</td>
<td>8860 9007 9008</td>
</tr>
<tr>
<td>* <strong>S. Radio Tower</strong></td>
<td>53 53 427.3 166 32 222.3</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>Highest Cross of Unalaska Creek: Church</td>
<td>53 52 1187.9 166 32 239.8</td>
<td>&quot; &quot;</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>Blue Light on Unalaska</td>
<td>53 52 1109.0 166 32 138.0</td>
<td>&quot; Topo.</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

* Described on Form 524.

** See description of triangulation stations.

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.
GEOGRAPHIC NAMES

Date: March 12, 1935  ALASKA

Survey No. T4809
Chart No. 8802. 18860
Diagram No. 8802-2

Approved by the Division of Geographic Names, Department of Interior. ∗

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q  Names underlined in red approved Mar 25, 1935

Harlow Bacon

<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dutch Harbor</td>
<td>same</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dutch Harbor</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cave Rock</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Xatacyan Lagoon</td>
<td>Xatacyan Lagoon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Margaret Bay</td>
<td>Margaret Bay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Naval Radio Sta. Reservoir</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rocky Pt.</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iliuliuk Bay</td>
<td>same</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iliuliuk Reef</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tuscarora Rock</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iliuliuk</td>
<td>&quot;</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Unalaska</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iliuliuk Harbor</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expedition I (2)</td>
<td>Expedition I (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arch Rk.</td>
<td>&quot;</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Agnes Beach</td>
<td>&quot;</td>
<td>Agnes Beach</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unalaska Lake</td>
<td>&quot;</td>
<td>Unalaska Lake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S. Amaknak Rka.</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amaknak Island</td>
<td>same</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unalaska Island</td>
<td>&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mt. Newhall</td>
<td>&quot;</td>
<td></td>
<td>Mt. Newhall</td>
<td></td>
</tr>
</tbody>
</table>
REVIEW OF TOPOGRAPHIC SURVEY No. 4886

Title (Par. 56) Dutch Harbor & Vicinity, Alaska

Chief of Party: N.E. Campbell  Surveyed by: M.O. Fortin  Inked by: M.O. Fortin

Ship: Discoverer  Instructions dated: April 12, 1934  Surveyed in: July-August 1934

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. The amount of vertical control that the Manual specifies for contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of contours-formlines- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None submitted

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

See reverse side

10. The span, draw and clearance of bridges are shown. (Par. 16c.)

11. Locations and elevations of summits are given. (Par. 19, 51.)

12. The tree line was shown on mountains. (Par. 16g.) No trees of any consequence in this area.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
Paragraph 9

T1950 (1867)

This is a reconnaissance survey and is superseded by T4889.

T2135 (1871-2)

Comparison of the present survey with T2135 showed two rocks awash East of Expedition Island which were not shown on this sheet but were picked up by the hydrographic party and are correctly shown on H5684 (1934).

T2236

The present survey checks the survey T2236 very nicely except as noted in the Descriptive Report. Inshore rocks are included in the reef symbol on T4889. The form lines on T4888 do not check the work of T2236 exactly. (For a discussion of these see Descriptive Report of T4888). T4889 supersedes T2236 in part.

Chart 9008

The wrecks on the beach West of Expedition Island have evidently rotted away as they are not shown on the present survey (T4889).

The rocks shown at Lat. 53°52'.9 Long. 166°30'.75 are shown on H5684 but not on T4888.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

No points for checking distortion shown.

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation, and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) 22 cards submitted.

16. A list of landmarks for charts was furnished on Form 587 and plotting checked. (Par. 16d, e, 60.)

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) No note of declinatore having been checked. Declination East somewhat of that shown on Chart 1904.

18. The geographic datum of the sheet is Unalaska (Unadjusted) and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.
          Joins T 4088 on the North.

20. Geographic names are shown on the sheet and are covered by the descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by

24. Remarks:

Reviewed in office by  
Chas. R. Pendleton May 23, 1936
Examiner and approved:

E. T. Green  
Chief, Section of Field Records

Fred. L. Peacock  
Chief, Section of Field Work

L. M. Dall  
Chief, Division of Charts

Fred. L. Peacock  
Chief, Division of Hyd. and Top.