State: Alaska
Aleutian Islands

DESCRIPTIVE REPORT

Topographic Sheet No. "A"
Hydrographica

LOCALITY
Unalaska Island
Amaknak Islands
Dutch Harbor and Vicinity

1934

CHIEF OF PARTY
H.E. Campbell
Applied to drawing of Chart No. 9008 April 1936 S.B.M.

Applied to new compilation of Chart 9007 July 1936 S.B.M.

Applied to drawing of Chart 8860 Dec. 1936 S.B. Mapa

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

Applied to new compilation of Chart 9007 S. Pizagari 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. 4888

REGISTER NO.

State  Alaska, Aleutian Islands

General locality  Unalaska

Locality  Dutch Harbor and Vicinity

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

Vessel  U.S.S. DISCOVERER

Chief of party  H.B. Campbell

Surveyed by  Henry G. Fortin

Inked by  Henry G. Fortin

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

Form line interval  50 feet

Instructions dated  April 19, 1934

Remarks:

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DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET "A".

U.S.C. & G.S.S. DISCOVERER

H.B. Campbell, Commanding.

Season of 1934  Project H.T. No. 177

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DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET "A".

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

Season of 1934 Project H.T. No. 177

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AUTHORITY

This survey was made in accordance 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 control
for hydrography done within the limits of the sheet.

LIMITS

This sheet extends from hydrographic signal Ism, on Amaknak Island
and extends around the north end of Amaknak Island around to
hydrographic signal Bis. At both signals a proper connection was
made with topographic sheet number "B" (T-4379).

On the East side of Iliuliuk Bay this sheet extends from tri-
angulation station Pinnacle Rock, 1934, to hydrographic signal Ham
where a proper connection was made with topographic sheet number "B".

CONTROL

The topography was controlled by second and third order triang-
ulation of the 1896 - 1901, and 1934 seasons. Sufficient triangul-
ation stations were established to permit a quick and accurate lo-
cation on the platetable.

The so called Dutch Harbor or existing datum was used in deter-
mring 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 rodded in.

A combination transverse and skip set up method was used in locating all shore line, low 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 or by three or more intersection cuts.

**FORM LINES**

Forty-six elevations were determined on this sheet; twenty-three on Amaknak Island, and twenty-three on Unalaska Island. Proper connections were made with topographic sheet number "B", and as accurately as possible with the old survey (bromide number T - 2236).

**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. Hatches on the sheet designate the cliffs.

**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 positions on different bromides and charts are quite noticeable. However, this can easily be accounted for as the pointings on round hills and mountains at close distances are quite erroneous due to the fact that there aren't any particular landmarks to point on, and although it appears that the
pointings are on the highest points, it might be on a ridge or small knoll obstructing the true top of the mountain or hill in question.

The discrepancies in shoreline as compared with bromide T - 2236 range from a few meters to 50 meters, the greatest error being at Ulakta Head, and at the mouth of the stream just north of hydrographic signal Elf, on the Unalaska shoreline.

NAMES ASSIGNED BY FIELD OFFICERS

Mt. Coxcomb was the name suggested for the mountain (1809 feet elevation) just south of triangulation station Pin₂, 1934.

WELL ESTABLISHED LOCAL NAMES

Mt. Ballyhoo, elevation 1589, being a well established local name, was given to the prominent point just southwest of triangulation station Amaknak₂, 1934.

DISTORTION AND REMARKS

Due to adverse weather conditions in this locality I don't believe that Whatman's paper is advisable to work on, especially on a scale of 1:5,000. Great care had to be taken in setting up the plan-table and in allowing for distortion which amounted to about 5 meters per nautical mile.

MAGNETIC OBSERVATION

A magnetic observation was made with the declinometer at triangulation station South Base₂, 1934.

LANDMARKS

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

Respectfully submitted,

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

Approved and forwarded:

H.B. Campbell,
H. & G. Engineer,
Chief of Party.
LIST OF STATISTICS

Number of statute miles of high water line - - - - - - - - 10.3
Number of statute miles of low water line - - - - - - - - 3.0
Number of elevations determined - - - - - - - - - - - - - - 46.
Area, in square statute miles - - - - - - - - - - - - - - - 6
LANDMARKS FOR CHARTS

Seattle, Washington

February 28, 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.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>LATITUDE</td>
<td>LONGITUDE</td>
<td>DATUM</td>
</tr>
<tr>
<td></td>
<td>°</td>
<td>D.M. METERS</td>
<td>°</td>
</tr>
<tr>
<td>Needle Rk. 1934</td>
<td>53.55</td>
<td>1041.0</td>
<td>166.31</td>
</tr>
<tr>
<td>Pinnacle Rk. 1934</td>
<td>53.54</td>
<td>529.0</td>
<td>166.28</td>
</tr>
<tr>
<td>**Beacon Lt. 1934</td>
<td>53.53</td>
<td>1756.1</td>
<td>166.30</td>
</tr>
<tr>
<td>Hlacta Head Lt. 1934</td>
<td>53.55</td>
<td>1086.0</td>
<td>166.30</td>
</tr>
<tr>
<td>Old Spit Head Lt.</td>
<td>53.53</td>
<td>1754.0</td>
<td>166.30</td>
</tr>
<tr>
<td>(Old Beacon Lt.)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>N. Baseg 1934</td>
<td>53.54</td>
<td>1639.2</td>
<td>166.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*This is a very prominent rounding knoll 18 ft. high. See description of triangulation Station N. Baseg 1934.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**This is the light that is now listed in the Light List - Pacific Coast.</td>
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<td></td>
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</table>

Yellow Cross (See Dec. Pt. T-6429 - Landmarks) #727

*Charted *Second Priest Rock* (See Geo. Nom. Stand)

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

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. 28, 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>
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<td>Mt. Coxcomb</td>
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<tr>
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<td>Spithead</td>
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</table>

*Charted: "Second Priest Rock" (Geog. Names Stand.)*
REVIEW OF TOPOGRAPHIC SURVEY No. 4888

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

Chief of Party H.B. Campbell Surveyed by H.O. Fortin Inked by H.O. Fortin

Ship Discover Instructions dated April 13, 1934 Surveyed in June-July 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 closure 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. 16e.)

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 size in this locality.

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 (1887)

Topographic survey T1950 is mostly a reconnaissano survey on a small scale.

T4888 supersedes T1950 in part.

H5684 (1934)

The correct position of one of the rocks awash off the Pinnacle is shown on H5684, the contemporary hydrographic survey.

T6429 (1935)

The two rocks awash off the Pinnacle are not in their correct position on the present survey. Their position should be taken from the adjoining contemporary survey. One of these rocks awash shown on T6429 is the same rock mentioned above under H5684 as being in its correct position.

T2236 (1896)

The present survey checks very nicely with T2236. Although it would appear that some of the rocks are not shown on T4888, the reef symbol included these rocks. The form lines on T4888 do not check the shape T2236 exactly. (For a discussion of these see Descriptive Report of T4888). T4888 supersedes T2236 in part.

Chart 8860

The sunken rocks N.W. of Pinnacle are shown as a rock awash and a very shoal sounding on H5978 but are not shown on T4888.

The wreck at Lat. 53°53'.2 Long. 166°30'.65 should be expunged from the chart. (See Descriptive Report for H5684).

Other rocks apparently separated from the shore line on the chart are within the reef line 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 distortion on sheet

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 IMs and DFs, 68.) None submitted

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) —

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) No note of having checked declinatio

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. —
   Joint T 4929 (1935) on the North
   Joint T 4889 (1934) on the South

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, 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:


Examined and approved:

Chas. P. Burch, Jr. Chief, Section of Field Records

Chas. P. Burch, Jr. Chief, Division of Charts

Chas. P. Burch, Jr. Chief, Division of Hyd. and Top.