DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON
Director

State: S. W. ALASKA

LOCALITY
Aleutian Islands
ROOTOK ISLAND & TRIDENT RAVIN

Southern Part of Akun Island

19.34

CHIEF OF PARTY
A. M. SOBIERALSKI, H. & G. E.

Applied to compilation 1905 March 1943 3:30 AM. P.J. Golds.


25th June 1943.

80/8
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.  KA - 24  
REGISTER NO.  6241

State.  S. W. ALASKA

General locality.  ALEUTIAN ISLANDS

Locality.  ROOTOK ISLAND & TRIDENT BAY Southern Part of Akun Island

Scale.  1:20,000    Date of survey.  JUNE - JULY, 1934


Chief of Party.  A. M. SObIESKSI

Surveyed by.  G. A. NELSON

Inked by.  G. A. NELSON

Heights in feet above M. H. W. to ground.  100 feet

Instructions dated.  APRIL 13, 1934

Remarks:  

909
The topographic work in the vicinity of the Krenitzam group was started using the 1901 geographic positions, and the positions of supplemental stations were computed from the 1901 lines as a base. These preliminary positions were used to control the topography.

Later in the season, the whole scheme of triangulation was recomputed from a newly measured base resulting in changes which amounted to from 2 to 5 meters in the vicinity of Unalga Pass to a maximum of about 10 m. in the eastern limits of the work. As a result, the triangulation stations as plotted will not agree exactly with the 1934 field computations, as submitted to the office. That is, the recovered 1901 stations are plotted from the original geographic positions, but the 1934 stations are plotted from preliminary positions which are not in strict accordance with the positions resulting from the final field computations as submitted in the list of geographic positions. The difference will correspond approximately to the difference between the 1901 and 1934 positions of recovered stations in the vicinity.

To eliminate these discrepancies, a slight change in the projection is necessary, but it is difficult to show the small correction, so that it has been indicated only on the sheets where it exceeds 5 m. The correction to the projection brings the sheet to the Unalaska Datum as determined by the 1934 field computations.
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET No. KA-34  ROOTOK ISLAND & TRIDENT BAY


SEASON - 1934

AUTHORITY:

This survey was made under the Director’s instructions dated April 13, 1934.

EXTENT:

This sheet covers Rootok Island, the western end of Avatanak Island, and the southwest part of Akun Island, Aleutian Islands.

GENERAL DESCRIPTION:

These islands are typical of the region; mountainous and grass covered.

ROOTOK ISLAND is rectangular in shape with its highest peaks in the south central part. Its most prominent features are twin peaks, 1545 and 1532 feet respectively, 600 yards apart. They lie on an east and west line, the highest being to the westward. There are no other peaks on the island approaching these in elevation.

The south, north and west sides of Rootok Island are continuous cliffs. On the east side, two valleys form a break in the cliff line. A rock, awash at minus tides, lies 670 yards, 58° T from the shack plainly visible at the mouth of the southernmost valley.

The western extremity of Avatanak Island rises from low middle ground to a well defined single peak, elevation 1276 feet.

Two pinnacle rocks lie west of the western extremity of the island, the highest and most distant being 200 yards offshore. A reef, composed of separate rocks, bare at various stages of the tide, extends 225 yards in a southwest direction from the highest of these pinnacle rocks. This reef is heavily fringed with kelp.

TRIDENT BAY, near the southwestern end of Akun Island, is roughly a mile square. It affords the most secure anchorage in Avatanak Strait.
The southwest entrance point is marked by two flat
topped reefs, elevation 32 feet. The channel is to the east of these rocks.
West of rocks the channel is foul. The head of the bay is composed
of three coves. From the bold point separating the middle and
southern coves, a reef, awash at low water, projects for 200 yards.

There is a ragged group of rocks at the eastern ex-
tremity of the northernmost cove but the bay is otherwise clear.

EASY COVE is a small cove just west of Jackass Point.
It is used to the south. Its chief value is as a temporary anchorage for
small craft while waiting for a favorable tide through Akun Strait during
stormy weather.

METHOD OF SURVEY:

The plane table and stadia were used throughout. The
southern side of Pea Island was surveyed on this sheet and transferred
to RP to make the island complete on that sheet.

Traverses run:

Root, 1934 to Tok, 1934. Distance 5 miles, closing
error m., adjusted.

ELEVATIONS:

Elevations are expressed in feet above M. H. W. They
may be relied upon within 5 feet.

STATES:

Statute miles shoreline............32.5

Area in square statute miles..........16.

Respectfully submitted,

George A. Nelson,
Jr. H. & G. E.

Approved & forwarded:

A. Sobiersalski,
Com., Str. SURVEYOR.
LANDMARKS FOR CHARTS

U. S. COAST AND GEODETIC SURVEY

Seattle, Wash. December 3, 1934

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>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detached Peak (1276)</td>
<td>54°04'</td>
<td>165°26'</td>
<td>P.T.</td>
<td></td>
</tr>
<tr>
<td>W. end Avatanak I.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twin Peaks (1545 ft)</td>
<td>54°02'</td>
<td>165°31'</td>
<td>P.T.</td>
<td></td>
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<tr>
<td>Rootok I. (1552 ft.)</td>
<td>54°02'</td>
<td>165°31'</td>
<td>P.T.</td>
<td></td>
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<tr>
<td>Pinnacle Rock (145 ft)</td>
<td>54°06'</td>
<td>165°34'</td>
<td>Triang.</td>
<td>9025</td>
</tr>
<tr>
<td>Lone Hill (820 ft)</td>
<td>54°07'</td>
<td>165°35'</td>
<td>Triang.</td>
<td>9025</td>
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<tr>
<td>Pinnacle Rock (50 ft.) (Rootok Strait)</td>
<td>54°04'</td>
<td>165°29'</td>
<td>Triang.</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: These objects should be given prominence when the topographic survey affected is applied to the chart.

Copy forwarded under separate cover.

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.
Survey No. T6241
Chart No. 8860
Diagram No. 8860

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

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

Under investigation. Q

<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>
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<td>Akun Island</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Trident Bay</td>
<td>&quot;</td>
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<td>Poa Island</td>
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<td>Easy Cove</td>
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<tr>
<td></td>
<td>Jackass Point</td>
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<tr>
<td></td>
<td>---------------</td>
<td>Pinnacle Rock</td>
<td></td>
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<td>120</td>
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<td>Avatanak Strait</td>
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<td>140</td>
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<td>Rootok Strait</td>
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<td>Rootok Island</td>
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REVIEW OF TOPOGRAPHIC SURVEY No. 6241

Title: (Par. 56) Rootok Island & Southern Part of Alaska Island, S.W. Alaska.


Ship: Surveyor

Instructions dated April 12, 1834 Surveyed in June - July, 1834

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 -centuries-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of -centuries-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.)

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 shown

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

T2546 (1901)

In general the present survey is in good agreement with T2546. There is much more detail on the present survey. In some cases an island is shown on the present survey where it was a peninsula on T2546 and vice versa. The same is true of dry rocks and rocks awash as well as sunken rocks. The present survey is on 1:20,000 whereas T2546 is 1:40,000 which permitted much more detail on the present survey.

T6241 (1934) should supersede T2546 in part.

Chart 8860

It is apparent that this chart was taken from the present survey and so is in good agreement.
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.)

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 DNs and DPs, 68.) 10 cards 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.) Declination at N 1° 45' over 1° 42' that at a Foot. No note of having checked declination.

18. The geographic datum of the sheet is Utah 3, 3 (Adjusted) and the reference station is correctly noted. (Par. 34.) See note in Descriptive report concerning datum.

19. Junctions with contemporary surveys are adequate. Junc. T488 on the NPS 149 on the SE, T6242 on the NW. The form lines with T4839 are not continuous.

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:


Examined and approved:

[Signatures]

Chief, Section of Field Records

Chief, Division of Charts

Chief, Division of Hyd. and Top.