DESCRIPTIVE REPORT
Topographic
Sheet No. 3-6710

J. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

AUG 15 1940

ACC. NO.

State ALASKA

LOCALITY

ALEUTIAN ISLANDS

SAMALGA ISLAND

1939

CHIEF OF PARTY

RAY L. SCHOPP

H. & G.B.

DECLASSIFICATION BY NOAA
PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3 (a), EXECUTIVE ORDER 12356
Applied to chf 8802 3 M.D. 10-31-40
" comp 8863 2 M.D. 2-4-41
" new chf 1030 3 H.S. 3-16-42
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. H-39

REGISTER NO. T-6710

Project HT-218

State Alaska

General locality Aleutian Islands

Locality Samalga Island

Scale 1:20,000 Date of survey May & June 1939

Vessel Ship SURVEYOR

Chief of party Ray L. Schoppe

Surveyed by J. C. Partington

Inked by H. J. Oliver

Heights in feet above MHW to ground XXXXXX

Contour, Approximate contour, Form line interval ____ feet

Instructions dated February 5, 1939

Remarks: ____________________________________________________

______________________________
DESCRIPTIVE REPORT

to accompany

Topographic Sheet - Field No. H-39; Register No. T-5710 (1933)

Samalga Island, Aleutian Islands, Alaska.

INSTRUCTIONS:

This work was accomplished in accordance with the Director's instructions dated February 3, 1938, Project ET-516.

GENERAL DESCRIPTION:

Samalga Island is a low flat grass covered island approximately four miles long extending in a northeast and southwest direction, and one-half mile wide at the widest part. The eastern end of the island is marked by two rocky islets 18 feet high. The western end is marked by three rocky islets ranging in height from 18 to 32 feet. The highest of these (topographic signal FIN) is the most prominent from seaward. The most prominent object along the northern shore of the island is triangulation station TAL, a column-like grass topped pinnacle 27 feet high.

The entire island is fringed with a rocky ledge which covers at high water. This ledge extends from 100 meters to one-half mile offshore. Landings can be made at various places along the shore in smooth weather, but should not be attempted in heavy weather because the island is almost entirely surrounded with breakers. The best place to land is in the small bight just north of a cabin (topographic station CHY).

Foul ground extends from the northeast end of the island to Cape Sagak, and the entire area appears to break in heavy weather. There is a heavy growth of kelp in this area during the late summer months which seriously impedes navigation by small boats.

An extensive reef extends offshore from the southwestern end of the island for a distance of a mile or more. In heavy weather this area breaks for a considerable distance offshore. The currents are treacherous in the vicinity of Samalga Island and attain moderately high velocities off the northeast and southwest ends of the island.

Samalga Island is entirely uninhabited except for one month during the winter when the trapper comes to get fox pelts. The only wild life on the island are fox and sea lions.

The high water line is strewn with rocks and small bowlders with occasional stretches of sand beach. Back from the shore the terrain rises rather abruptly to form the grassy slopes which are shown on the sheet by hachures. The interior of the island is entirely covered with grass.
CONTROL:

Three marked triangulation stations (SAMALGA, AMA and SAGAK) and one natural object (TAL) formed the control for this sheet. They are second and third order stations located in 1938 and 1939.

SURVEY METHODS:

The usual plane-table methods were used on this survey except for the traverses between triangulation stations AMA and SAMALGA, and between SAMALGA and TAL. On these two traverses the distances were measured with a 100 meter wire instead of using the usual stadia method. The traverse between TAL and AMA was done by stadia methods.

High and low water line, and positions of signals were obtained by stadia from plane-table set-ups along the shore. Rocks and reefs detached from the shore were located entirely by cuts since the survey party could not use a boat. Elevations were determined by stadia and vertical angles from set-ups along the shore.

The rocky ledge extending off the southwest end of the island was located at the time of low water, on the only day that the ledge was seen to bare. This ledge probably bares two or three hundred meters farther offshore than shown. At the time of location the limits shown are as far out on the ledge as was safe for the rodmen to go without danger of being marooned by the rising tide. This ledge is a sea lion rookery and hundreds of these animals were seen in the vicinity.

TRAVERSES:

Beginning at triangulation station AMA a traverse was run along the south and west shores of the island to triangulation station SAMALGA with a closing error of 2 meters. No adjustment was made. From triangulation station SAMALGA a traverse was run along the north shore to triangulation station TAL with a closing error of 2 meters which was not adjusted. From triangulation station TAL a traverse was run along the north, northeast and east shores of the island to triangulation station AMA with a closing error of 6 meters which was adjusted.

MARKED TOPOGRAPHIC STATIONS:

Topographic stations REX and ROW are standard hydrographic disks. Cards (form 524) are submitted with this report.

GEOGRAPHIC NAMES:

Names on this sheet are taken from chart 8802. These names are well established and are used locally. No new names are added and none is known to exist.

MAGNETIC OBSERVATIONS:

Compass declinometer observations were made at triangulation stations AMA and SAMALGA with declinometer No. H-16. These stations were also observed with declinatoire No. 232. No evidence of local attraction is apparent.
The magnetic declination as determined by the two methods is as follows:

<table>
<thead>
<tr>
<th>Station</th>
<th>Date</th>
<th>Declination by declinometer</th>
<th>Declination by declinatoire</th>
<th>Date</th>
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<tbody>
<tr>
<td>SAMALGA</td>
<td>May 24, 1939</td>
<td>13° - 40.9'</td>
<td>13° - 08'</td>
<td>June 6, 1939</td>
</tr>
<tr>
<td>AMA</td>
<td>May 20, 1939</td>
<td>13° - 24.8'</td>
<td>12° - 48'</td>
<td>May 29, 1939</td>
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None of the above results has been corrected for "Index Correction" or "Diurnal variation correction".

Declinatoire No. 232 was checked on April 11, 1940 at the magnetic station Seward Park, Seattle, Washington. Its index correction was found to be plus 0° - 41.5'.

**COMPARISON WITH CHARTS:**

On account of the difference in scale no detailed comparison was made between this sheet and Chart 8802.

**STATISTICS:**

- Statute miles of shoreline: 13.4
- Square statute miles of area: 3.2

Respectfully submitted,

\[Signature\]

J.C. Partington Jr., H.S.G.E.
Topographer

Examined and approved:

\[Signature\]

RAY L. SCHOPPE, H.S.G.E.
Chief of Party

\[Signature\]

A.M. Dobrinalski

Officer in Charge,
Seattle Processing Office
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<td>Bering Sea</td>
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<td>Samalga Island</td>
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<td>Cape Sagak</td>
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Names underlined in red approved by L. Weck on 9/5/40
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF
No. T  T6710

received Aug. 15, 1940
registered Aug. 16, 1940
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO
82  T. B. Reed
DIVISION OF CHARTS

Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 6710 (1939) FIELD NO. H-39

Alaska, Aleutian Islands, Samalga Island
Surveyed in May and June 1939, Scale 1:20,000
Instructions dated February 3, 1938 (SURVEYOR)

Plane Table Survey  Aluminum Mounted

Chief of Party - Ray L. Schoppe.
Surveyed by - J. C. Partington.
Inked by - H. J. Oliver.
Reviewed by - Harold W. Murray, August 21, 1940.
Inspected by - H. R. Edmonston.

1. Junctions with Contemporary Surveys.

The present survey is a survey of an island and no
junctions are, therefore, necessary. T-6711 (1939),
however, covers the southwest tip of Umnak Island
beginning about 2 miles northeast of the present survey
limits.

2. Comparison with Prior Surveys.

No prior surveys have been made in this area by this
Bureau.

3. Comparison with Chart 8802 (New Print dated Dec. 21, 1939)
   a. Topography.

   Topography shown on the chart originates with mis-
cellaneous sources and as charted is shown about 2
miles southwest of the present survey position.
The present survey covers the essential features
and supersedes this miscellaneous information.

   b. Magnetic Meridian.

   The magnetic meridian was determined at two tri-
angulation stations by both the declinometer and
the declinatoire and the values agree closely with
the interpolated chart value of 13-3/4 degrees.
The actual values are listed in the Descriptive
Report, page 3. The declinatoire (No. 232), was
checked at the beginning of the following season's
work and found to have an error of plus 0° 41.5′.

   a. The inking of the shoreline and other details
were very good.

b. The Descriptive Report is clear and comprehensive and satisfactorily covers all matters of importance.

5. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project.

6. Additional Field Work Recommended.

This is an excellent survey and no additional field work is required.

7. Superseded Surveys.

None.

Examined and approved:

T. B. Reed, Chief, Section of Field Records.  J. S. Borden, Chief, Division of Charts.

Raymond H. Spruyt, Chief, Section of Field Work.  G. A. Stocke, Chief, Division of H. & T.