Form 504
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey  TOPOGRAPHIC

Field No. "2" & "7"  Office No. T6967aeb

LOCALITY

State  ALASKA - Aleutian Islands
      Amchitka Island
      General locality  ALEUTIAN ISLANDS
      Locality  CONSTANTINE HARBOR & APPROACHES.

AMCHITKA ISLAND

1941

CHIEF OF PARTY

L. C. Wilder

LIBRARY & ARCHIVES
DEC 2 1941

DATE  November 18, 1941
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. "E" & "F"

REGISTER NO. T6967a b

State Alaska - Aleutian Islands
General Locality Amchitka Island
Locality Amchitka Island, Constantine Harbor
Scale 1:5,000 Date of survey August & Sept., 1944
Vessel Ship DERICKSON
Chief of party L. C. Wilder
Surveyed by Emerson E. Jones
Inked by Emerson E. Jones
Heights in feet above M. H. W. to ground to tops of trees
Contour, Approximate contour, Form line interval None feet
Instructions dated 30 May, revised 14 July, 1944
Remarks: Graphic Control Sheets with small portions of
Topography, supplemented with inspected photographs.
DESCRIPTIVE REPORT TO ACCOMPANY TOPOGRAPHIC SHEETS

FIELD NUMBERS "E" & "F"

CONSTANTINE HARBOR & APPROACHES

INSTRUCTIONS:

Project 11, Hydrographic and Topographic Survey of Constantine Harbor, dated 30 May 1944, revised 14 July 1944.

OUTLINE:

The topography accomplished for this project consists of two aluminum-mounted Graphic Control sheets and inspected Aerial Photographs of the area. For form lines, the breakwater as revised in 1944, and the culture above high water as existing in 1944, it is suggested that the large scale topographic maps prepared by the Resident Engineer, U. S. E. D., Amchitka, Alaska, be obtained. This topography was done at the same time as the work of this project and includes the location of most of the topographic signals located by these Graphic Control sheets.

The Graphic Control was accomplished by W. W. Cholston, Seaman Gunner, who was closely directed by the officer in charge of the party.

The photographs were inspected by the officer, a solid pencil line being used for mean high water and a dotted line for low water. They were later inked, an attempt being made to follow the Directors' letter 28-MRC 1990, dated March 18, 1944, "Supplemental Instructions - Shoreline Inspection."

GENERAL DESCRIPTION OF COAST:

From offshore, the coastline of the southeastern end of Amchitka Island looks very flat. Upon closer approach, there appears rolling terrain and rugged, rocky shoreline backed by dark bluffs broken by steep, grass-covered banks. The head of the harbor is a flat, sand beach with boulders and kelp offshore in the central part.

LANDMARKS:

There are no prominent landmarks to assist with an approach to Constantine Harbor. The first thing usually recognized is the breakwater.

CONTROL:

Control for this project consists of the preliminary triangulation existing July 30, 1944. The stations follow: BAY (U.S.E.D. 1943) and RAW2 (U.S.E.D. 1944), located by Lieutenant Applequist; and ISLE (1944), an intersection station, and topographic station REEF (U.S.E.D. 1943).
a single intersection station without a check, located by this party. A check on REEF may be obtained from U.S.E.D., triangulation. These stations are based on the datum established by Lieutenant Applequist’s astronomic observations, 1944, and his unchecked field computations. DOCK (U.S.E.D. Traverse Station, 1944) was also plotted on sheet "E" and checked by topo cuts, the station appearing to be about 1½ meters south south westward on range with BAY. The computed position was retained. All other signals were located by topographic cuts, occasionally using only two cuts and a stadia distance. No check was obtained on station Mix. It is the opinion of the writer that all stations are located within 2 meters of their true position with a possible exception or two within ½ meters.

DISCREPANCIES:

Where plane table topography and photo inspection overlap or match and a discrepancy exists, the plane table work is the more reliable, except the shoreline at the double point between and just north of the signals Sir and Bost, where the inspected photo is best.

Although the edges of the plane table sheet were damaged when blown from the table in a moderate gale, it is believed that no significant portion of the sheet was distorted.

DEVIATION FROM STANDARD PRACTICE:

Due to the lack of a boat and time, the complete limits of kelp are not shown, nor are the rocks awash between White and Barge Docks.

The foot of bluffs are shown in three short sections on the sheet to assist identification on the photographs. The toe of the bluff, a road fill, on sheet "E" may have been changed since the photographs were taken.

Rod shots were indicated by dots left "open" to assist in comparison with the photographs.

The rock awash about 700 meters north from signal Junk was located by cuts from REEF and Late and 5 meters outside of the range of the two outer rocks to the southwest. The position of the nearby sunken rock was closely estimated from the rock awash.

Where offlying rocks and points were obliterated on the photographs by heavy seas or where rocks awash did not show, topography of the vicinity was accomplished on the Graphic Control sheet.
MAGNETIC DECLINATION

A local magnetic disturbance was experienced within the area of the Graphic Control Sheets "E" & "F". Following are scaled values of declinatoire observations, uncorrected for diurnal variation or index error:

<table>
<thead>
<tr>
<th>Station</th>
<th>Date</th>
<th>150°W Mer. Time</th>
<th>Declination</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISLE (1944)</td>
<td>8/11/44</td>
<td>12:30</td>
<td>6° 48' E.</td>
</tr>
<tr>
<td>Low</td>
<td>8/15/44</td>
<td>12:00</td>
<td>7° 28' E.</td>
</tr>
<tr>
<td>High</td>
<td>8/15/44</td>
<td>15:05</td>
<td>6° 46' E.</td>
</tr>
<tr>
<td>Late</td>
<td>8/12/44</td>
<td>20:40</td>
<td>5° 52' E.</td>
</tr>
<tr>
<td>Nite</td>
<td>8/12/44</td>
<td>21:40</td>
<td>5° 43' E.</td>
</tr>
<tr>
<td>Off</td>
<td>8/16/44</td>
<td>10:30</td>
<td>5° 20' E.</td>
</tr>
<tr>
<td>Reef(U.S.E.D.) 1943</td>
<td>8/4/44</td>
<td>17:30</td>
<td>4° 22' E.</td>
</tr>
</tbody>
</table>

Scaled by E.E.J.  
Checked by E.B.R.

Observations with compass declinometer, also uncorrected, at Reef (U.S.E.D. 1943) on 10/3/44 resulted in the following:

<table>
<thead>
<tr>
<th>LOCAL MEAN TIME</th>
<th>DECLINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:29</td>
<td>06° 53.2' E.</td>
</tr>
<tr>
<td>11:52</td>
<td>06° 50.0' E.</td>
</tr>
<tr>
<td>12:32</td>
<td>06° 51.5' E.</td>
</tr>
<tr>
<td>13:15</td>
<td>06° 50.1' E.</td>
</tr>
</tbody>
</table>

Incomplete compass declinometer observations taken in lieu of a declinatoire observation, at Dock (U.S.E.D. Traverse Station, 1944) on 10/3/44, gave the following result, uncorrected:

<table>
<thead>
<tr>
<th>LOCAL MEAN TIME</th>
<th>DECLINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:05</td>
<td>05° 50' E.</td>
</tr>
</tbody>
</table>

The declinatoire used was the declinatoire with Alidade No. 175, the index correction for which was found to be plus one minute on April 8, 1944 by Howard S. Cole.
DESCRIPTION OF STATIONS:

Descriptions of sufficient stations were written to provide control for any photographs which may be taken later and be more adequate. A list of the descriptions follows:

- BAY (U.S.E.D. 1943)
- RAW (U.S.E.D. 1943)
- RREP (U.W.E.D. 1943)

**Recovery Note**

- Dia
- Mid
- Short
- White

**Topographic Description**

- Cross
- Arm
- Big
- Box
- High
- Bust
- Hap
- Zig
- late
- Nite
- Nix
- Sud

**Photo Control Card.**

- #
- #
- #
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Submitted November 18, 1944.

Emerson E. Jones
Lieutenant, U.S.C. & G. Survey

Approved and Forwarded:

L. C. Wilder

Detail in this graphic control survey has been incorporated in photo completion T-5777. Present survey should be used for chaining.

J. A. Cornew
10/11/45.
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
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<td>Aleutian Islands</td>
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<td>Amchitka Island</td>
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<td>Constantine Harbour</td>
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<td>510790E</td>
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<td>Kirillof Wharf</td>
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<tr>
<td>White Dock</td>
<td></td>
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<td></td>
<td>5</td>
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<td>Barge Dock</td>
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</table>

*Signature: Undersigned and read approved by L. Hedon 18/12/45.*
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

24 January 1946

To: The Director
U.S. Coast and Geodetic Survey

Subject: T-6967 and T-6988, Constantine Hbr., Amchitka I.

1. There is a difference of about 18 meters in longitude and 12 meters in latitude between the two topographic position determinations (1944 and 1945) of signal SUD on control sheets T-6967 and T-6988.

2. It is recommended that the two topographic sheets be returned to this office so that they may be available for field verification during the coming season.

3. Also please furnish copy of descriptive report for T-6967.

4. It is proposed that a triangulation station be established at or near signal SUD. Then if the triangulation position determination of SUD agrees with the 1945 topographic position determination, the 1944 topographic control at SUD and to the westward would have to be revised. If agreement with the 1944 location is indicated, the 1945 topographic control at SUD and to the eastward would have to be revised.

[Signature]

F.B.T. Siems
Officer in Charge,
Seattle Processing Office.