Type of Survey: PHOTOGRAMMETRIC SHORELINE

Field No.: Office No.: T-8016

LOCALITY

State: ALASKA-ALEUTIAN ISLANDS
General locality: ALCHITKA ISLAND
Locality: SOUTH BIGHT

1945

CHIEF OF PARTY
C.D. Meany, Chief of Party, Division of Photogrammetry, Washington, D.C.
LIBRARY & ARCHIVES

DATE: March 18 - 1947
DATA RECORD

T- 3016

Quadrangle (II):

Field Office:

Compilation Office:
Washington, D.C.

Instructions dated (II III):
Informal Instructions

Completed survey received in office:

Reported to Nautical Chart Section: October 1946

Reviewed: 9-14-50 Applied to chart No. 8844 Date: 10/13/47

Redrafting Completed:

Registered: 10-15-51 Published:

Compilation Scale: 1: 20,000 Published Scale:

Scale Factor (III): 1.0

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.M.W.

Reference Station (III): Carrig Control Tower, 1944

Lat. Long.

Adjusted

State Plane Coordinates (VI):

X = None Y =

Military Grid Zone (VI)
PHOTOGRAPHS (III)

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<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<td>1934</td>
<td>1:29,000</td>
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<td>1934</td>
<td>Un-known</td>
<td>1:30,000</td>
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<td>8-26-44</td>
<td>1:24,000</td>
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<tr>
<td>1-V3-9 to 1-V3-15</td>
<td>8-26-44</td>
<td>1:24,000</td>
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<td>1-V5-22 to 1-V5-23</td>
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<td>1:24,000</td>
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<td>5-V5-30 &amp; 5-V5-31</td>
<td>10-4-44</td>
<td>1:12,000</td>
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* Five-lens photographs
* Single-lens photographs

Tide from (III):

Diurnal
Mean Range: 2.0'
Spring Range: 3.6'

Camera: (Kind or source) 5-lens - Navy
Single-lens - Army

Field Inspection by: Ship "SURVEYOR"
Lt. Comdr. C. D. Meany, Chief of Party
date: 1945

Field Edit by: None
date:

Date of Mean High-Water Line Location (III):

Projection and Grids ruled by (III) T.L.J.
date: 7/30/46

" " " checked by: T.L.J.
date: 7/30/46

Control plotted by: B. J. Colner
date: 7/31/46

Control checked by: K. N. Maki
date: 8/46

Radial Plot by: B. J. Colner
date: 8/22/46

Detailed by: B. J. Colner
date: 10/15/46

Verified in compilation office by: L.M. Gazik
date: 11/21/46

Elevations on Field Edit Sheet
checked by: date:
STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:
Summary to Accompany T-8016

Shoreline map T-8016 covers the southeast part of Amchitka Island from Ivakin Point on the north side to East Cape and from East Cape to St. Makarius Point on the south side:

Material relative to this map is filed as follows:

1. Division of Photogrammetry, General Files
   a. Map Manuscript

2. Bureau Archives
   a. Descriptive Report
   b. Cloth-backed lithographic print of T-8016 at manuscript scale.

The following 15 U. S. Coast and Geodetic Survey triangulation stations were held to during the radial plot:

Arms, 1945; 'Baker' Control Tower, 1944; 'Baker W. Base, 1945; Baw 2 (U.S.E.D.), 1943; Bay (U.S.E.), 1943; 'Charlie' Control Tower, 1944; Central Radio Tower, 1945; Flag No. 1, 1945; Flag No. 2, 1945; Jeep, 1945; Mall, 1945; Rad (U.S.E.), 1945; Radar Tank, 1945; Reef (U.S.E.), 1943; Silo, 1945; South Water Tank, Navy Wing Area, 1945.

All the triangulation stations were identified in the field on the photographs except North Water Tank, Navy Wing Area, 1945; Lake 2 (U.S.E.), 1943; Syl, 1944; and Isle, 1944, which were not used in the radial plot. Because of the close proximity of View (U.S.E.), 1943 to Silo, 1945 and Chuck, 1945 to topographic station Observation Post, View and Chuck were not used in the radial plot.

The following 4 U. S. Coast and Geodetic Survey triangulation stations were not held to during the radial plot:

Baker E. Base, 1945 falls about 0.5 mm north of the radial plot intersection.

Him 2 (U.S.E.), 1943 falls about 0.5 mm south of the radial plot intersection.

Bob, 1945 with two cuts falls about 1 mm southeast of the radial plot intersection. This station could not be held probably because of unequal shrinkage of paper of the photographs.

Mist, 1945 falls about 1 mm west of the radial plot intersection. This station could not be held probably because of the difficulty in transferring this station to a set of photographs of a smaller scale.

* civil stations must labelled "c.s." next to this
\( \Delta \) station is a substitute station for which will not be shown on the finally reduced copy
In addition, topographic stations, which were identified on photographs, were used to supplement the control. The positions of these topographic stations were taken from topographic sheets T-6967a, T-6967b, T-6967c, T-6968b, and T-6990.

The following topographic stations were held to during the radial plot:

Abe, Arms, Cut Doe, Gap, High, Hop, Jef, Koa, Lad, Lit, Mop, Nap, Nip, Observation Post (Chuck), Peak, Pop, Short, Vom, White, Wug, and Zig.

The topographic stations which could not be held in the radial plot were probably misidentified on the photographs in the field.

The control was sufficient to establish a strong radial plot.

27. Radial Plot.-

A radial line plot was laid in which 25 celluloid templates were used. The control was satisfactorily spaced and adequate. The radial line intersections of all pass points were good with a few exceptions in the S.E. section where five-lens photographs were utilized. These errors were probably caused because of shrinkage and movement from true alignment on cardboard of the photographs. The azimuths between photograph centers were held. The topographic stations are shown on the sheet with red circles. The pass points are shown with large blue circles except where there are points with only two intersecting cuts; these points are denoted by large green circles. Detail points are shown by small blue circles. The two concentric green circles represent the centers for the two five-lens photographs that were not used in the radial plot.

28. Detailing.-

For purposes of detailing the photographs may be considered fair. The photographs were of a smaller scale than the compilation scale. The single-lens photographs were about 1:24,000, whereas the five-lens photographs were about 1:29,000.

Field inspection of the shoreline, offshore rocks and foul areas was limited to the vicinity of South Bight.
The following topographic features were held to guarantee the tactical plot:

APE, AME, ART, DOG, HHP; HP; HP; LFA; TMA; MOD; NCP; MAB; OBS; VIO;
POSE (CRUX); PEER; POP; SHORT; VOA; WTR;

The topographic features which were not to appear in the tactical plot are:

The contact was maintained to establish a reader's plot.

22. Supplemental Data

All the detail on topographic sheets T-6490, 1946 (1:10,000); T-6832, 1945 (1:10,000), was transferred to the compilation. There are no discrepancies between the topographic sheets and compilation. A visual comparison with hydrographic sheet 7040 shows no discrepancies.

For purposes of geodetic the hydrographic may be considered first. The hydrographic may serve as a smaller scale

and for purposes of the detail of the large scale

and for purposes of the detail of the large scale
The single-lens photographs were comprised of the following flights:

1-V2-4 to 1-V2-8 incl., (1:24,000)
1-V3-9 to 1-V3-15 incl., (1:24,000)
1-V5-22 to 1-V5-23 incl., (1:24,000)
5-V5-30 to 5-V5-31 incl., (1:12,000)
5-V7-42 (1:12,000)

The five-lens photographs were comprised of the following flights:

1029 to 1034 incl. (1:29,000)
1046 & 1048 (1:30,000)

The shoreline, offshore rocks and kelp shown on topographic sheets T-6990, T-6933b, and hydrographic sheet H-7040 were transferred to the compilation sheet and shown in red acid ink. Most of the shoreline and offshore rocks were compiled by office interpretation. The stereoscope was used extensively for interpreting offshore, inshore and shoreline details. A sufficient number of detail points were located to facilitate the progress and accuracy of the work in detailing.

There was no field inspection of photographs or plane-table information available for this compilation from 179°13' East longitude to 179°18'.

29. Supplemental Data.-

Topographic sheets T-6990, T-6933b, and hydrographic sheet H-7040 were used to supplement the photographs. See next of item 28 with reference to the discrepancies found between these sheets and the compilation.

30. Mean-High Water Line.-

The mean-high water line was interpreted stereoscopically in the office by the compiler.

31. Low Water and Shoal Lines.-

The dashed lines indicate foul areas.

32. Details Offshore from the High Water Line.-

The offshore details as shown on the graphic control sheets were transferred to the compilation. Although the existing surveys did not cover but a portion of the area of the sheet, they were of benefit in interpreting the remaining area for offshore details such as kelp, rocks, ledges, etc. Details transferred from the graphic control sheets are shown on the manuscript in red ink.
36. Landing Fields and Aeronautical Aides.

There are two landing fields detailed in this compilation.

44. Comparison with Existing Topographic Quadrangles.

A visual comparison of this sheet was made with the Amchitka Island No. 7 and No. 8 quadrangles prepared under the direction of the Chief of Engineers, U. S. Army, 1943. It was noted that the drainage system was in fair agreement, and scattered instances of agreement in the indication of bluffs and ledges.

45. Comparison with Nautical Charts.

There is no nautical chart in the area of compilation. No adequate comparison can be made with Nautical Chart 8864 (1:301,800) because of great difference of scale.

Submitted by: B. J. Colmer
Photogrammetrist

Verified by: L. M. Gazik
Photogrammetric Aid

Approved by: L. C. Lande
Chief, Graphic Compilation Section.
<table>
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<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</table>

Names underlined in red are approved 9-12-50 by [Handwritten Signature]
Review Report T-8016
Shoreline Map
14 September 1950

62. Comparison with Registered Topographic Surveys.

T-6967 a & b, 1:5,000 1944
T-6988 a & b, 1:10,000 1945
T-6990 1:10,000 1945

T-8016 supersedes these surveys for nautical charting purposes. Refer to compilation report concerning application of these surveys to T-8016. T-5598, 5599, and 5600, topographic project Ph-34, surveyed in 1948 supersedes T-8016 and all other previous topographic surveys.

63. Comparison with Maps of other Agencies.

Amchitka Island, Corps of Engineers, 1:25,000, 1943 (Sheets 7 and 8 of 8). Resident Engineer Surveys, filed in the Nautical Chart Branch as blueprint 39228 and referred to in Chart letter 29 (1945).

64. Comparison with Contemporary Hydrographic Surveys.

H-7040, 1:10,000, 1945

T-8016 was used as a base for shoreline and topography for hydrographic survey H-7040.

65. Comparison with Nautical Charts.

8864 1:300,000 Corr. to 3-8-48
9102 1:1,763,303 March 1948

Differences noted in this survey cannot be applied to charts at this scale.

66. Adequacy of Results and Future Surveys.

T-8016 is considered adequate as a preliminary base for hydrographic surveys and for nautical chart construction.

Reviewed by:

K. N. Makri

REVIEWED BY:

I. V. Griffith
Chief, Review Section
Div. of Photogrammetry

K. B. Edmonson
Chief, Nautical Chart Branch
Division of Charts

H. A. Seifert
Chief, Div. of Photogrammetry

W. M. Seifert
Chief, Div. of Coastal Surveys
## Nautical Charts Branch

**Survey No. T8016**

### Record of Application to Charts

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<thead>
<tr>
<th>Date</th>
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<th>Cartographer</th>
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<td>10/13/47</td>
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<td>Stegman</td>
<td>Before After Verification and Review, Completely applied</td>
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<td>11/30/58</td>
<td>8863</td>
<td>J. Walker</td>
<td>Before After Verification and Review, Completely applied to reconstruction</td>
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<td>1993</td>
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### Notes

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.