# U. S. Coast and Geodetic Survey

**Department of Commerce**

## Descriptive Report

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Air Photographic (Shoreline Survey)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Office No. T-8474</td>
</tr>
</tbody>
</table>

## Locality

<table>
<thead>
<tr>
<th>State</th>
<th>Alaska</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>Attu Island</td>
</tr>
<tr>
<td>Locality</td>
<td>Massacre Bay</td>
</tr>
</tbody>
</table>

## 1945

**Chief of Party**

R. W. Knox  
Chief of Branch

**Library & Archives**

**Date:** May 29, 1945
DATA RECORD
T-8474

Quadrangle (II); Project No. (II);

Field Office: Alaska Vessels Chief of Party:

Compilation Office: Washington Chief of Branch R. W. Knox

Instructions dated (II III); No formal instructions. See letter attached to this report

Copy filed in Descriptive Report No. T- (VI)

Completed survey received in office;

Reported to Nautical Chart Section;

Reviewed; Applied to chart No. Date;

Bedrafting Completed;

Registered;

Published;

Not to be published

Compilation Scale: 1:10,000 Published Scale;

Scale Factor (III): 1.0

Geographic Datum (III); 1934 Navy Datum Datum Plane (III); Sea Level

Reference Station (III): Dome, U.S.N., 1943

Lat.: 52°48' 1476.7 m. Long.: 173°18' 1024.0 m. Adjusted Unadjusted

State Plane Coordinates (VI); none

I = Y =

Military Grid Zone (VI) none
## PHOTOSHOPS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>455, 177, 179, 180</td>
<td>9-27-44</td>
<td>Not known</td>
<td>1:10,000</td>
<td>Not Known</td>
</tr>
<tr>
<td>157-159, 13-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-35, 41-48, 51-52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3626-V62 to V76</td>
<td>8-19-44</td>
<td>(V74 missing)</td>
<td>1:5,000</td>
<td></td>
</tr>
<tr>
<td>3119-IV49 to IV73</td>
<td>7-17-44</td>
<td>(IV64, 65, 67,</td>
<td>1:5,000</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>71 missing)</td>
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<td></td>
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<tr>
<td>2901-2V44 to 2V53</td>
<td>6-14-44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3199-IV26 to IV40</td>
<td>7-17-44</td>
<td>(IV39 missing)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These are Navy photographs.

### Tide from (III):
- Mean Range: 3.5 feet
- Spring Range: Not known

### Camera:
- (Kind or source) Navy photographs - single lens

### Field Inspection by:
- Alaska Vessels
- Date: 1944

### Field Edit by:
- None
- Date:

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

### Projection Location (III) Washington Off date: 4-2-45
- Checked by: 
  - Date: 4-2-45

### Control plotted by:
- K. N. Maki
- Date: 4-10-45

### Control checked by:
- L. C. Lande
- Date: 4-11-45

### Radial Plot by:
- K. N. Maki
- Date: 4-17-45

### Detailed by:
- K. N. Maki
- Date: 5-22-45

### Reviewed in compilation office by:
- L. C. Lande
- Date: 5-28-45

### Elevations on Field Edit Sheet:
- Checked by: None
- Date:
PRELIMINARY STATEMENT

The 1944 field surveys of the eastern end of Attu Island accomplished the following:

1. Planetable graphic control for hydrographic signals
2. Identified horizontal control on photographs
3. Limited field inspection of the shoreline

Generally, the graphic control surveys located only small sections of shoreline. In most of the area shoreline was added to the graphic control sheets in this office from the photographs; however, the attached letter of March 24, 1945 from the Seattle processing office indicated errors on planetable sheet, T-6960.

Because of the existing errors in T-6960, this survey, No. T-8474, of this area was compiled in this office.
DEPARTMENT OF COMMERCE
U. S. Coast & Geodetic Survey

24 March 1945

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

From: Officer in Charge,
Seattle Processing Office

Subject: Graphic control survey - Attu Island.

Reference: Letter to the Supervisor, Northwestern District,
(836-RGR) dated 19 March 1945.

No graphic control sheet covering the area mentioned in the reference letter was executed by any of the parties working in Alaska. Many triangulation stations, however, of 2nd, 3rd, and 4th order were located. A tracing is enclosed showing the locations of most of these stations. The shoreline on this tracing was taken by the field party from the photographs of the area.

Topographic sheet T-6960 should not be used for control of the aerial photographs. The locations of some triangulation stations on this sheet were found to have been plotted in error, and the locations of many of the hydrographic signals on the sheet were considerably in error.

The recorded cuts used by the field party in plotting T-6960 were carefully replotted on H-6939 and H-6940. The intersections of cuts to and three point locations of signals checked remarkably well. The signals shown on these sheets were located well within the allowable error for topographic work as stated on page 89, reference 232, of the Hydrographic Manual.

It is recommended that the locations of signals as shown on H-6939 and H-6940 be used to control the aerial photographs. The shoreline between signals shown on these sheets was transferred from T-6960 as modified in some cases by information contained in the hydrographic records.

The triangulation shown on the enclosed tracing and the locations of signals and shoreline shown on H-6939 and H-6940 furnish the best source of control for the area mentioned in the reference letter.

/s/ F. H. Hardy
Officer in Charge
Seattle Processing Office

cc: Supervisor, Northwestern District
26. **Control:** Triangulation stations used:

<table>
<thead>
<tr>
<th>Station</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little</td>
<td>1943</td>
</tr>
<tr>
<td>Dock</td>
<td></td>
</tr>
<tr>
<td>Tank</td>
<td></td>
</tr>
<tr>
<td>Mass</td>
<td></td>
</tr>
<tr>
<td>Cree</td>
<td>1943</td>
</tr>
<tr>
<td>Lex</td>
<td></td>
</tr>
<tr>
<td>Dome</td>
<td></td>
</tr>
</tbody>
</table>

Hydrographic stations used:

<table>
<thead>
<tr>
<th>Station</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ute</td>
<td>Vee</td>
</tr>
<tr>
<td>Tar</td>
<td>Big</td>
</tr>
<tr>
<td>Son</td>
<td>Mar</td>
</tr>
<tr>
<td>Gas</td>
<td>Mat</td>
</tr>
<tr>
<td>Pon</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>Nix</td>
</tr>
<tr>
<td></td>
<td>Par</td>
</tr>
<tr>
<td></td>
<td>Top</td>
</tr>
<tr>
<td></td>
<td>Sharp</td>
</tr>
</tbody>
</table>

The hydrographic station positions were scaled from the 1:20,000 hydrographic sheet H-6939. These positions were corrected for scale and plotted on the 1:10,000 acetate manuscript.

Triangulation stations were plotted from positions adjusted to the 1934 Navy datum.

27. **RADIAL PLOT:** A radial line plot was made with single lens photographs printed on double weight paper. The plot was laid down with templets made on transparent celluloid.

Control in the area is adequate but all of it could not be utilized in the plot due to lack of identification on the photographs. In some instances control fell near azimuth lines creating some difficulty in fixing the templets. However, the plot went down very well and all ray intersections were sharp and well defined.

28. **DETAILING:** Field inspection had been made on the 1:25,000 photographs. Due to the small scale and somewhat poor quality of the photographs, only the general conformation of shoreline, ledges, rocks, etc., was apparent. These were checked and outlined in detail on the 1:10,000 photographs with the aid of
a stereoscope. The photographs used in detailing were satisfactory.

Roads following along the immediate shoreline and for some distance inland are shown.

29. SUPPLEMENTAL DATA: Topographic sheet T-6960 was available, but due to known discrepancies in the plotted positions of control stations its use as a reference was limited only to visual inspection.

Note: Additional field inspection was available on Alema Point on 1:5,000 photographs. A large percentage of the sheet has 1:5,000 photographic coverage which was an additional aid in interpretation of the shoreline, etc.

33. WHARVES AND SHORELINE STRUCTURES: All wharves, piers, piling, etc., visible on the photographs are shown. No shoreline structures such as buildings are shown unless they extend into the water beyond the shoreline.

34. LANDMARKS AND AIDS TO NAVIGATION: Four radio towers and a tank were out in on Murder Point.

35. HYDROGRAPHIC CONTROL: No additional hydrographic stations were located other than those that were already previously established and used to control the radial plot.

36. LANDING FIELDS AND AERONAUTICAL AIDS: Two landing fields were shown. The one on Alema Point was detailed completely. The other, at the head of Casco Cove, was detailed only to the extent that photographic coverage was available.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES: T-8474 was compared with the U. S. E. quadrangle sheets No. 12 and No. 13 of Attu Island, 1:20,000, dated 1943. Shoreline is very similar except in areas having man-made improvements, such as in the vicinity of docking areas. Interpretation of ledge formations differs somewhat. Outlying rocks, shoals, buildings, and roads are not shown on the U. S. E. quadrangle map.
T-8474 agrees with planetable sheet T-6969-B, 1944. Comparison is limited to the shoreline on the western shore of the narrow neck of Alexai Point. Scale of planetable sheet is 1:5,000.

45. COMPARISON WITH NAUTICAL CHARTS: T-8474 was compared with hydrographic sheet H-6940, 1:10,000, dated 1943. General comparison is favorable in so far that the shoreline does not conflict with any of the soundings. There is considerable difference in certain areas on the outline and extent of ledge formations as, for example, the western tip of Alexai Point. Shoreline could not be compared as it was taken from T-6960. Comparison was limited to ledges, rocks, piers, and other offshore features. Additional piers have been constructed on the western shore of Massacre Bay.

Nautical Chart No. 9126 at 1:20,000, dated January, 1943 covers the area. Shoreline, ledges, and rocks are not in entire agreement as is evident on Alexai Point.

Respectfully submitted

May 10, 1945

K. N. Maki

Chief, Nautical Chart Branch

Chief, Division of Charts

Chief, Section of Topography

Chief, Division of Coastal Surveys
## NAUTICAL CHARTS BRANCH

**SURVEY NO. T 8474**

### Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-20-45</td>
<td>9186</td>
<td>J.M.A.</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td>7-3-45</td>
<td>9129</td>
<td>J.T.W.</td>
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<tr>
<td>9-26-45</td>
<td>9128</td>
<td>J.W.</td>
<td>Before &quot;After Verification and Review Ozalid applied</td>
</tr>
<tr>
<td>5-17-50</td>
<td>9127</td>
<td>Peter Hansen</td>
<td>Before After Verification and Review Ozalid applied</td>
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<td>8/15/50</td>
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<td>OK After New UNL 8/15/50 Ozalid applied</td>
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<td>4-30-54</td>
<td>Reconstr. 9129</td>
<td>Anna Aspa</td>
<td>Before After Verification and Review</td>
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<td>6-4-59</td>
<td>9128</td>
<td>J.W.</td>
<td>Before After Verification and Review</td>
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<tr>
<td>5-27-63</td>
<td>8625</td>
<td>Lewis</td>
<td>Before After Verification and Review Exam</td>
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<tr>
<td>9-3-62</td>
<td>16492</td>
<td>Ed Martin</td>
<td>Before After Verification and Review new Chart</td>
</tr>
</tbody>
</table>

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.