### DESCRIPTIVE REPORT

**Type of Survey** | TOPOGRAPHIC
---|---
**Field No.** | PA-C-46
**Office No.** | T-7024

**LOCALITY**

<table>
<thead>
<tr>
<th>State</th>
<th>Southeast Alaska</th>
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</thead>
<tbody>
<tr>
<td>General locality</td>
<td>Davidson Inlet</td>
</tr>
<tr>
<td>Locality</td>
<td>Edna Bay</td>
</tr>
</tbody>
</table>

**1946**

**CHIEF OF PARTY**

K.G. Crosby

**LIBRARY & ARCHIVES**

**DATE**

Sept. 17, 1946
DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7024

FIELD NO. PA-C-46

Southeast Alaska, Davidson Inlet, Edna Bay
Surveyed in May 1946
Scale 1:2,500
Instructions dated March 27, 1946

Plane Table Survey

Aluminum Mounted

Chief of Party - K. G. Crosby
Surveyed by - H. F. Garber
Inked by - H. F. Garber
Reviewed by - I. M. Zeskind, March 3, 1949
Inspected by - R. H. Carstens

1. Adjoining Surveys

Adequate junctions were made with the adjoining sections of shoreline on graphic control sheet T-7023b (1946) on the southeast and T-7023a (1946) on the northeast.

2. Comparison with Prior Surveys

T-2691 (1904) 1:20,000

A comparison between the prior and present surveys shows discrepancies of as much as 40 meters in the position of portions of the high-water line of Edna Bay. The shoreline at the southern end of the small cove in lat. 55° 56' 50", long. 133° 39' 45" is about 200 meters northeast of its prior position. These discrepancies are probably caused by the great difference in the scales of the prior and present surveys and differences in the interpretation and sketching of the high-water line.

New Harbor improvements are shown on the present survey.
The present survey is adequate to supersede the prior survey within the common area, except for detail offshore which is shown on T-7023a (1946).

3. Comparison with Chart 8201 (Latest print date 8/30/48)
   a. Topography
      The charted topography originates with T-2691 (1904) and needs no further consideration.
   b. Aids to Navigation
      The present survey position of the fixed aid to navigation is in agreement with the charted position.
   c. The present survey value of the magnetic meridian is in good agreement with the charted value. The corrections to the declinatores used on this survey are not known.

4. Condition of Survey
   The present survey adequately complies with the requirements of the Topographic Manual.

5. Compliance with the Instructions for the Project
   The survey adequately complies with the Project Instructions.

6. Additional Field Work Recommended
   This survey shows the harbor improvements and adequately delineates the shoreline. No additional field work is recommended.

Examined and approved:

H. R. Edmonston  
Chief, Nautical Chart Branch

Casper M. Durgin  
Chief, Division of Charts

K. C. Crosby  
Chief, Section of Hydrography

C. K. Green  
Chief, Division of Coastal Surveys
SHORELINE:

As considerable commercial development is contemplated for this area, the high water line was delineated within the limits of the sheet with the exception of the unimportant bight at the extreme northern part which can be obtained from the air photographs. Because of the large difference in scales of the air photographs (1:20,000) and the topographic sheet (1:2500), the important portions of the shoreline were located by rod readings. The wharf was not built when the air photos were taken, and is consequently delineated on this sheet. The location of buildings adjacent to the water line were determined. A map on a scale 1" = 140' was obtained from the company developing this area which shows buildings back from the waterfront. This map has been revised to May 25, 1946 and indicates all changes in structures at that time.

The actual high water line rod readings are indicated by black dots and broken shoreline in accordance with Paragraph 3(e) of Field Memorandum No. 1 (1935) dated 12 February 1935.

The offlying rocks within the area are delineated on Sheet PA-A-46 of this vessel.

DECLINATOIRE OBSERVATION:

A declinatoire observation was made at Triangulation Station MINE, 196 on 13 May 1946 at 1530 (120th Meridian Time), with a scaled value of 28° - 54' E. The index correction of the instrument, No. 2466, is not known.

Declinometer observations were made at this station on 6 May 1946 at 1450 with an observed value of 29° - 06' with declinometer No. H-19, index correction not known.
JUNCTURES:

The survey joins Sheet PA-A-46 at Triangulation Station MINE and Sheet PA-B-46 at Topographic Station POT.

COMPARISON WITH PREVIOUS SURVEY:

The area is covered by Sheet T-2691, 1904 scale 1:20,000. The shoreline is in fair agreement as near as can be determined by the vast difference in scales.

GEOGRAPHIC NAMES:

EDNA BAY, the accepted and charted name of the body of water is the only geographic name on the sheet.

Approved and Forwarded:

Submitted by

Kenneth G. Crosby
Lt. Comdr., USCG
Cmdg., Ship PATTON

H. F. Garber
Lt. Comdr., USCG
STATISTICS

Statute miles of shoreline: 2.4
Area, square statute miles: 0.2
<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>Edna Bay</td>
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<td>Davidson Inlet</td>
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Names underlined in red are approved. 3/23/44
L.H.
# Nautical Charts Branch

**Survey No. T7024**

## Record of Application to Charts

<table>
<thead>
<tr>
<th>Date</th>
<th>Chart</th>
<th>Cartographer</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Aug 1947</td>
<td>8163</td>
<td>McAulinden</td>
<td>Before Verification and Review Completed</td>
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<td>8163-Cancelled 1/160,000 Islet added to 8171</td>
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<td>March 69</td>
<td>8171</td>
<td>Jeannette M. O'Connor</td>
<td>Before After Verification and Review Completed</td>
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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.
DESCRIPTIVE REPORT TO ACCOMPANY

TOPOGRAPHIC SHEET PA-C-46 (Field No.)

EDNA BAY, ALASKA

SCALE 1:2500

KENNETH G. CROSBY, CHIEF OF PARTY

# # # # # # #

AUTHORITY:

The survey was made in accordance with Instructions of 27 March 1946, Project CS-324.

PURPOSE:

The purpose of the survey is to provide control for the hydrographic work in the area.

CONTROL:

Triangulation Stations MINE 1946, ALCOA 1946, and EDNA BAY INNER LIGHT 1946, were used to control the survey. Topographic Station POT was transferred from Sheet PA-B-46, and a satisfactory juncture with Sheet PA-B-46 was made at that point.

SURVEY METHODS:

Standard planterable methods were used in locating topographic stations, and delineating shoreline and detail. Particular care was exercised in plumbing the point on the sheet over each set up.
TOPOGRAPHIC STATIONS:

In addition to the usual topographic stations for hydrographic control, points were marked by white crosses along the escarpment beginning at Triangulation Station ALCOA and extending southeastward, for control of a tagline survey. These points were established at twenty meter intervals along the shoreline and located by planetable methods. A point opposite Edna Bay Inner Light was selected as the origin, or zero station, and the stations numbered from 1 to 14 north and 1 to 22 south of the origin. The stations are shown by small red circles on the sheet.

The escarpment is extremely sheer, which made it impossible to locate the points by the usual theodolite and tape traverse method.

CONTROL OF TAGLINE SURVEY:

Due to the sheeress of the cliffs, it was impossible to establish ranges to control the direction of the sounding boat. An observer stationed on the end of line kept the boat on line by means of a sextant angle. In addition, the boat was located graphically by planetable and stadia at one hundred foot intervals along the tagline. The sea was particularly smooth during the time of survey, so that accurate stadia readings could be easily obtained. The lines running south southeastward from the small island on which Station WAD is located were controlled in the same manner.

In order to preserve these lines for future smooth plotting of the hydrographic sheet, these boat positions and sounding lines are left on the topographic sheet in pencil. The lines are numbered as they appear in the sounding record.
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. PA-C-46

REGISTER NO. T-7024

State ________________Southeastern Alaska__________________________

General Locality _______________Davidson Inlet________________________

Locality _______________Edna Bay (Western Part)________________________

Scale _______________1:2500_________________Date of survey _______________May, 1946

Vessel _______________Ship PATTON________________________

Chief of party _______________Kenneth G. Crosby________________________

Surveyed by _______________H. F. Garber________________________

Inked by _______________H. F. Garber________________________

Heights in feet above _______________MHW_________________to ground _______________to tops of trees

Contour, Approximate contour, Form line interval _______________feet

Instructions dated _______________27 March, 1946________________________

Remarks: Project CS-324________________________