

7024

Diag'd. on Diag. Ch. No. 8201-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. PA-C-46 Office No. T-7024

LOCALITY

State Southeast Alaska

General locality Davidson Inlet

Locality Edna Bay

194 6

CHIEF OF PARTY

K.G. Crosby

LIBRARY & ARCHIVES

DATE Sept. 17, 1946

7024

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 off-shore 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 declinatoires 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.

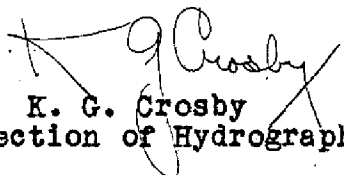
6. Additional Field Work Recommended

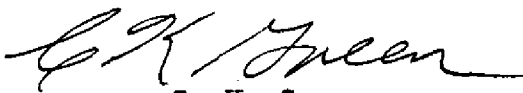
This survey shows the harbor improvements and adequately delineates the shoreline. No additional field work is recommended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


Casper M. Durgin
Chief, Division of Charts


K. G. 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" = 40' 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.

*No record of
receipt of this
Topo map in
Wash. Office.*

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
(T-7023a)
Sheet PA-A-46 of this vessel.

DECLINATOIRE OBSERVATION:

A declinatoire observation was made at Triangulation Station MINE, 1946 on 13 May 1946 at 1530 (120th Meridian Time), with a scaled value of $28^{\circ} - 54'$ E. The index correction of the instrument, No. 2486, is not known.

Declinometer observations were made at this station on 6 May 1946 at 1450 with an observed value of $29^{\circ} - 06'$ 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.
(T-7023a, 1946)
(T-7023b, 1946)

COMPARISON WITH PREVIOUS SURVEY:

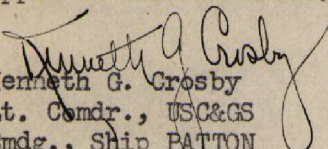
The area is covered by Sheet T-2691, 1904 scale 1:20,000. The shoreline is in fair agreement as near as can be determined by the vast difference in scales.

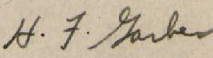
GEOGRAPHIC NAMES: 814A

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

Submitted by

Approved and Forwarded:


Kenneth G. Crosby
Lt. Comdr., USC&GS
Cmdg., Ship PATTON


H. F. Garber
Lt. Comdr., USC&GS

STATISTICS

Statute miles of shoreline:	2.4
Area, square statute miles:	0.2

GEOGRAPHIC NAMES

Survey No. T-7024

GEOGRAPHIC NAMES										
Survey No. T-7024										
Name on Survey										
	A	B	C	D	E	F	G	H	K	
Edna Bay										1
Davidson Inlet										2
										3
										4
										5
Names underlined in red are approved. 2/23/45 L.H.										6
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M 234

NAUTICAL CHARTS BRANCH

SURVEY NO. T 7024

Record of Application to Charts

[illegible]

M-2168-1

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

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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. Topo-
graphic Station POT was transferred from Sheet PA-B-46, and a sat-
isfactory juncture with Sheet PA-B-46 was made at that point.
(T-70236, 1946)
(T-70236, 1946)
T-7023

SURVEY METHODS:

Standard planetable methods were used in locating
topographic stations, and delineating shoreline and detail. Par-
ticular 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 sheerness 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.

*Boat positions
transferred
to H-7095 (1946)
and erased from
T-7024.*

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. 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 GS-324