

8048

Diag. Cht. No. 1203

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric Shoreline

Field No. Office No. T-8048

LOCALITY

State Maine

General locality Penobscot Bay

Locality Eggemoggin Reach & Bagaduce River

1941-'45

CHIEF OF PARTY

F.L.Peacock, Chief of Party

T.B.Reed, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE March 1, 1950

B-1570-1 (1)

8048

DATA RECORD

T - 8048

Project No. (II):
CS-272-D

Quadrangle Name (IV):

Field Office (II):

Air Photographic Party No. 2
Photogrammetric Office (III):

Baltimore, Maryland

Instructions dated (II) (III):

11 April 1942, 20 April 1943

8 May 1945, 15 June 1945 and

15 September 1947

Chief of Party: Fred. L. Peacock

Officer-in-Charge:

Thos. B. Reed
Copy filed in Division of
Photogrammetry (IV)
Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 5-4-49

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): February 7, 1950

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): ~~M S L~~ M H W L

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

Reference Station (III): BILLINGS, 1862

Lat.: 44° 18' 54.318" (1676.6m) Long.: 68° 40' 12.766" (282.9m)

Adjusted

~~Unadjusted~~

Plane Coordinates (IV):

State: Maine Zone: East

Y=

X=

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

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

Shoreline
contours.

no

Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): Marvin C. Jenkins
Boynton Locke

Date: September 1945

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

Same as date of photographs supplemented by field data obtained during 1945.

Projection and Grids ruled by (IV): S.R.

Date: 4/24/46

Projection and Grids checked by (IV): S.R.

Date: 4/24/46

Control plotted by (III): Ruth E. Rudolph

Date: 6/4/46

Control checked by (III): Frank J. Tarcza

Date: 6/11/46

Radial Plot or Stereoscopic Frank J. Tarcza
Control extension by (III):

Date: 12/22/48

Stereoscopic Instrument compilation (III):
Planimetry
Contours

Date:

Date:

Manuscript delineated by (III):
Ruth E. Rudolph

Date:

3/24/49 to 4/6/49

Photogrammetric Office Review by (III): R. Glaser

Date: April 26 & 27, 1949

Elevations on Manuscript
checked by (II) (III):

None

Date:

Camera (kind or source) (III): U.S.C. & G.S. nine lens camera, $8\frac{1}{4}$ " focal length

PHOTOGRAPHS (III)					
Number	Date	Time	Scale	Stage of Tide	
06866 to 06869 incl.	10/19/41	1032	1:10,000	0.2' above MHW	
06882 to 06883 incl.	10/19/41	1032	1:10,000	9.9' above MLW	

Tide (III)

Reference Station: Portland, Maine
Subordinate Station: Castine
Subordinate Station: Sedgwick, Eggemoggin Reach

Ratio of Ranges	Mean Range	Spring Range
1.0	8.9	10.2
1.1	9.7	11.1
1.1	10.2	11.7

Washington Office Review by (IV): *L. M. Jajak*

Date: *May 20, 1949*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV): *C. A. Zupiec*

Date: *Nov. 31, 1949*

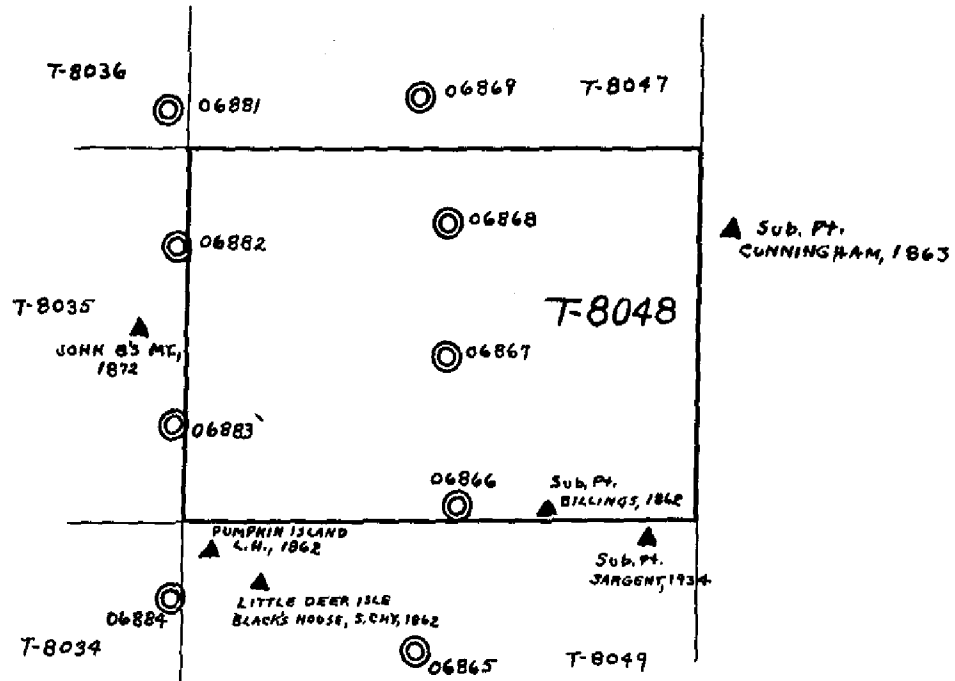
Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): $3\frac{1}{2}$
Shoreline (More than 200 meters to opposite shore) (III): $9\frac{1}{2}$ statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 1 statute mile (measured along approx. center-line)
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): Recovered: 1 Identified: 1
Number of BMs searched for (II): Recovered: 1 Identified: 1
Number of Recoverable Photo Stations established (III): 5
Number of Temporary Photo Hydro Stations established (III): none

Remarks:

LAYOUT SKETCH PROJECT CS-272D SURVEY T-8048



- OFFICE PHOTOGRAPHS
- FIELD PHOTOGRAPHS
- ▲ TRIANGULATION STATIONS
(IDENTIFIED AND HELD IN RADIAL PLOT)

781

FIELD REPORT

PROJECT CS-272-D
Survey No. T-8048

1. DESCRIPTION OF THE AREA:

Survey No. T-8048 is one of twenty-seven shoreline surveys in Project No. CS-272-D located in the area of Penobscot Bay, Maine. T-8048 includes the northern shore of Eggemoggin Reach from Condon Point to Herricks, Walker Pond, and the southern end of the Bagaduce River. T-8048 is to be compiled in accordance with the written instructions dated 1 April 1942, 20 April 1943, 8 May 1945, 15 June 1945, and 15 September 1947, by graphic photogrammetric methods.

The area is irregular rolling land with the elevation ranging from sea level to a maximum of 440 feet. The alongshore area is rock ledge interspersed by sand, gravel, and boulder beaches. There are several small communities in the area.

2. COMPLETENESS OF FIELD INSPECTION:

Field inspection of Eggemoggin Reach is complete with the exception of the mean low water line. Walker Pond and Bagaduce River have not been field inspected because they are not affected by tide.

3. INTERPRETATION OF THE PHOTOGRAPHS:

No comment.

4. HORIZONTAL CONTROL:

One U.S.C. & G.S. triangulation station was recovered and identified. It is BILLINGS, 1862 and has been identified on Photo. No. 06866 by a substitute station.

5. VERTICAL CONTROL:

One tidal bench mark, 2A, 1911 has been recovered and identified.

6. DRAINAGE:

Not identified.

7. MEAN HIGH-WATER LINE:

The mean high-water line was inspected from a dinghy kept close to shore and is indicated by a dashed red line.

8. MEAN LOW-WATER LINE

Not identified.

9. WHARVES AND SHORELINE STRUCTURES

No comment.

10. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

No comment.

11. LANDMARKS AND AIDS TO NAVIGATION

None

12. HYDROGRAPHIC CONTROL

None.

14. ROAD CLASSIFICATION

None classified

18. GEOGRAPHIC NAMES

No investigation.

(This field report was written in the compilation office from notes furnished by the field party of 1945.)

Ruth E. Rudolph
Ruth E. Rudolph
Engineering Draftsman

RADIAL PLOT REPORT

PROJECT CS - 272-D

SURVEY NO. T-8048

GENERAL DESCRIPTION

This radial plot is for an individual survey, No. T-8048, one of a series of shoreline surveys in Project CS-272-D, located along Penobscot Bay on the coast of Maine.

PHOTOGRAPHS

The photographs used in this radial plot are nine-lens photographs, scale approximately 1:10,000, taken with the U.S.C. & G.S. nine lens camera, focal length $8\frac{1}{4}$ inches. Ten photographs were used in this radial plot. They are as follows: 06865 to 06869 inclusive

06881 to 06884 inclusive

Symbols for pass points and control used on these photographs are in accordance with Photogrammetry Instructions No. 12, dated 17 March 1947.

CONTROL

Five horizontal control stations, recovered and identified by the field inspection party, were used in this radial plot. One control station near the eastern boundary of this survey was identified by the field party on a single lens photograph but falls outside the limits of nine-lens photographs used in this radial plot. Three of the stations were pricked direct and three were identified by substitute points.

A sketch showing distribution of control and photographs in the area of this radial plot is attached to this report.

PROJECTIONS

The map manuscript furnished the compilation office for this survey was ruled with polyconic projections and Maine East State grid, on acetate, at a scale of 1:10,000.

All control stations and substitute points were plotted and checked on the map manuscript using beam compass and meter bar.

TEMPLATES

No templates were necessary since this radial plot was completed on the map manuscript directly with the photographs.

RADIAL PLOT

The radial plot of this survey is the last to be completed in Project CS-272-D. Since the radial plot had been completed on all adjoining surveys, pass points and photograph centers near the junctions were first transferred

RADIAL PLOT (Continued)

to this map manuscript. Surveys on the west and north sides were at a scale of 1:9740 and points to be transferred were scaled from projection lines and plotted on manuscript for T-8048 using the necessary scale factor. Survey T-8050 on the south was at the scale of this survey. However, the ozalid copy available, contained considerable paper distortion. There was a difference in distortion between east-west and north-south directions so that points to be transferred were scaled and two scale factors had to be applied when replotting on T-8048. After all points were transferred from adjoining surveys, the radial plot was completed on the map manuscript by orienting photographs under transferred centers first. Radial lines were drawn on the manuscript through all pass points. Then remaining photographs were oriented holding pass point intersections. No difficulty was encountered in completing the plot.

Photograph 06883 had several bad matches along chamber junctions, as noted in radial plot report for T-8035, in which its center falls. But it was possible to hold all pass points established from other photographs by orienting under center and using chambers individually, rotating about the center as necessary or displacing slightly from the center. All photographs are old and do not have collimation marks in each chamber.


REMARKS

All horizontal control stations identified were held in the radial plot. However, the distribution of control is bad. All control is along the south and west borders of the survey and only one station falls on this survey. Survey T-8047 on the north, for which the radial plot was previously completed, had no control stations. Therefore, transferred points from that survey, except along the western side near control stations, are not as accurate as desirable for controlling this radial plot. CUNNINGHAM, 1863, just east of this survey is outside the limits of nine-lens photographs. The important shoreline, however, is on the western side of this survey where the radial plot is most accurate.

The distribution of photographs is adequate for all shoreline compilation. All these photographs were taken prior to 1944 and have no collimation marks in chambers so that a master templet could not be used to make the radial plot more accurate in uncontrolled areas. Additional control is desirable should any compilation be done in the northeastern area of this survey where no control is available on nine lens photographs. It would have been desirable to have the same scale in this survey as surveys to the west and north so that a combined plot could have been made to give more accuracy in the northern and central areas of this survey.

Respectfully submitted

Approved and forwarded
17 January 1949


Officer in Charge
Baltimore Photogrammetric Office


Frank J. Tarcza
Cartographic Engineer

COMPILATION REPORT

MAP MANUSCRIPT

PROJECT NO. CS-272-D
Survey No. T-8048

26. CONTROL

Refer to the radial plot report for layout of control in this area. Additional information relative to the control is listed on Form No. M-2388-12 included in this report.

27. RADIAL PLOT

An individual radial plot was made for this survey. No templets were used since the radial plot was completed directly on the manuscript with the photographs. Refer to the radial plot report submitted to the Washington Office 17 January 1949. *The radial plot report is now included in this descriptive report.*

28. DELINEATION

Delineation is in accordance with the instructions pertaining to Project CS-272-D and with Photogrammetry Instructions No. 17, dated 15 September 1947.

The vertical projector was used to aid in delineation because the photographs were of a larger scale than the manuscript.

Difficulty in delineating the eastern shore of Walker Pond was encountered because of heavy foliage shadows falling across the shoreline; also position of detail points could not be accurately established because the shoreline fell either on or very near the flight line. Since the area does not appear entirely within one chamber on any one photograph, it was not possible to delineate between two well-established detail points. A detail point on each side of the chamber junction was established by two weak cuts. Using the vertical projector, the shoreline in each chamber was delineated by holding the one weak point and the nearest well-established detail point.

A portion of the shoreline of Buck Harbor and Harbor Island has also been shown as indefinite shoreline. Because of the shadows in the area it was not possible to delineate the mean high water line accurately.

Harbor Ledge in Buck Harbor could not be delineated because of lack of field data and no indication of it could be found on the photographs.

29. SUPPLEMENTAL DATA

None.

30. MEAN HIGH WATER LINE:

Only the mean high water line along the northern shore of Egge-moggin Reach was field inspected. The remaining mean high water line was delineated after careful stereoscopic examination of the photographs.

31. MEAN LOW WATER LINE

None shown.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

No comment.

33. WHARVES AND SHORELINE STRUCTURES

No comment.

34. LANDMARKS AND AIDS TO NAVIGATION

None.

35. HYDROGRAPHIC CONTROL

None.

36. LANDING FIELDS AND AERONAUTICAL AIDS

None.

37. GEOGRAPHIC NAMES

No investigation of geographic names was made.

The geographic names appearing on the manuscript have been taken from Nautical Chart No. 309 and the United States Geological Survey, Blue Hill, Maine, quadrangle map. A list of names is attached to this report.

38. JUNCTIONS

Junctions with Surveys Nos. T-8049 to the south, T-8047 to the north, T-8058 to the east, and T-8035 to the west, have been made and are in agreement.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

T-8048 has been compared with the United States Geological Survey Blue Hill, Maine, quadrangle, scale 1:62,500 edition of 1944, and found to be in good agreement.

45. COMPARISON WITH NAUTICAL CHARTS

T-8048 has been compared with the United States Coast and Geodetic Survey, Nautical Chart No. 309, scale 1:40,000, published October 1947 and with Chart No. 1203, scale 1:80,000, published June 1936, and found to be in, in general, in good agreement with both charts.

The following topographic information shown on the manuscript is of sufficient importance to warrant immediate application to the chart:

None.

The following details above the plane of mean high water are not shown on this manuscript but are believed to still exist and should be carried forward on the chart:

None.

Low water features are shown in part and should be completed by the hydrographic party.

Respectfully submitted
7 April 1949

Ruth E. Rudolph
Engineering Draftsman
Compilation; Field and
Descriptive Report

Raymond Blain
Engineering Draftsman
Photogrammetric Office Reviewer

Approved and forwarded
13 May 1949

Harry R. Rudolph
Supervisor

Thomas B. ...
Officer in Charge
Baltimore Photogrammetric Office

NOTES FOR HYDROGRAPHIC PARTIES

MAP MANUSCRIPT

PROJECT NO. CS-272-D
Survey No. T-8048

The $2\frac{1}{2}$ millimeter circles, accompanied with a name, date and number are the positions of the recoverable photo (topographic) stations.

This manuscript has been compared with United States Coast and Geodetic Survey Nautical Chart No. 309, scale 1:40,000, published October 1947, and with Nautical Chart No. 1203, scale 1:80,000 published June 1936 and found to be, in general, in good agreement.

The following topographic information shown on the manuscript is of sufficient importance to warrant immediate application to the chart:

None.

The following topographic details above the plane of mean high water are not shown on the manuscript but are believed to still exist and should be carried forward on the chart:

None.

Low water features are shown in part and should be completed by the hydrographic party.

Respectfully submitted
7 April 1949

Ruth E. Russell
Engineering Draftsman

Approved and forwarded
13 May 1949

Thos. B. Smith
Officer in Charge
Baltimore Photogrammetric Office

GEOGRAPHIC NAMES

- • Bagaduce River
- • Billings Brook
- • Black Corner
- • Brooksville
- • Buck Harbor

(pending with U.S. B.G.N.)

- • Condon Point

- • Deadman Cove

- • Eggemoggin Reach

- • Grays Point
- • Gull Ledges

- • Harbor Island
- * Harbor Ledge

- • Herricks

- • Kench Mountain
- • Meadow Brook

- • Norumbega

- • Parker Pond

- • Snow Cove
- • South Brooksville
- • Spruce Head

- * The Triangles

- • Walker Pond
- • Winche Mountain

* This name does not appear on the manuscript because it has not been delineated.

• • State Nos. 175, 176

Names preceded by • are
approved. 5-18-49
L. Heck.

Division of Photogrammetry
Review Report T-8048

43. Comparison with Previous Surveys

T-1286A - 1:10,000 1872-4

The map manuscript supersedes the above survey for nautical charting purposes ~~for common detail in the same area~~ *common to both surveys.*

44. Comparison with Existing Topographic Quadrangles

Refer to the same item in the compilation report.

45. Comparison with Nautical Charts

Chart 309 - 1:40,000, 1947
Chart 1203- 1:80,000, 1948

46. Adequacy of Manuscript

This compilation complies with project instructions for accuracy and completeness.

L. Martin Gazik

L. Martin Gazik
5/20/49

Approved by :

L. V. Griffith
Chief Review Section *L. H. M.*
Division of Photogrammetry

H. R. Edmonson
Chief, Nautical Chart Branch
Division of Photogrammetry

O. S. Reading
Chief, Div. of Photogrammetry

B. G. G. *Acting* *H. G. Crosby*
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T8048

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.