

07-30  
67-15

8796 Nds

Diag. Cht. No. 1201

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. \_\_\_\_\_ Office No. T-8796

LOCALITY

State Maine

General locality Washington County

Locality Machias Bay - Little Machias Bay

194 6-'49

CHIEF OF PARTY

R.A.Gilmore, Chief of Party

T.B.Reed, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE February 29, 1950

8-1870-1 (1)

8796

# DATA RECORD

T-8796

Project No. (II): PH-11(46)

Quadrangle Name (IV): Machias Bay

Field Office (II): Machias, Maine

Chief of Party: Ross A. Gilmore

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: Thos. B. Reed

Instructions dated (II) (III):  
9 May 1946 and 18 September 1946

Copy filed in Division of  
Photogrammetry (IV)  
Office Files

Method of Compilation (III): Air-photographic (multiplex)

Manuscript Scale (III): 1:8500

Stereoscopic Plotting Instrument Scale (III): 1:8500

Scale Factor (III): 1.00

Date received in Washington Office (IV): 4-28-49 Date reported to Nautical Chart Branch (IV): 5-10-49

Applied to Chart No.

Date:

Date registered (IV): 2-3-50

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

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): ACKLEY, 1882

Lat.: 44°41' 22.673

Long.: 67°18' 33.647

Adjusted  
~~Unadjusted~~

Plane Coordinates (IV):

State: Maine Zone: East

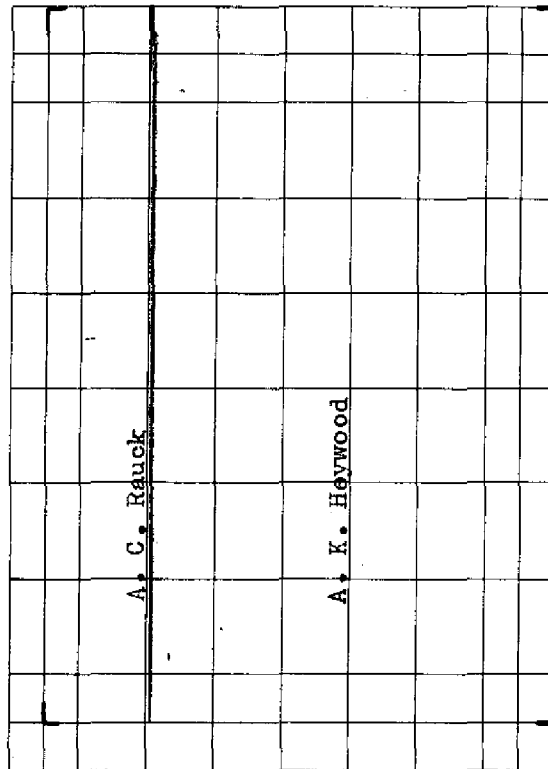
Y=

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.

423



44° 45' 00"

44° 37' 30"

67° 22' 30"

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

67° 15' 00"

424

# DATA RECORD

Field inspection by (II): Lewis V. Evans, III  
Boynton Loke, Jr.  
Edward H. Taylor

Date: 7/46

Planetable contouring by (II): None

Date:

Completion Surveys by (II): G. E. Varnadoe  
W. H. Shearouse  
J. R. Smith  
J. H. Gwaltney

Date: 6/49

Mean High Water Location (III) (State date and method of location):  
July 1946 - See item 30 of Descriptive Report

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

Date: 12/47

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

Date: 12/47

Control plotted by (III): M. M. Trautman

Date: 10/47

Control checked by (III): D. M. Brant

Date: 10/47

~~Control checked by (III):~~ Stereoscopic A. C. Rauck, Jr.  
Control extension by (III):

Date: 12/47

Stereoscopic Instrument compilation (III):  
Planimetry A. K. Heywood  
Contours A. C. Rauck  
A. K. Heywood  
A. C. Rauck

Date: Feb.-Mar. 1949

Date: Feb.-Mar. 1949

Manuscript delineated by (III): B. A. Dew

Date: April 1949

Photogrammetric Office Review by (III): Henry P. Eichert

Date: April 1949

Elevations on Manuscript  
checked by ~~III~~ (III): Henry P. Eichert

Date: April 1949

525

Camera (kind or source) (III): U.S.C. & G. S. Type "C", 6" metrogon lens.

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
4 thru 9	5/22/46	9:50-55	1:20,000	1.5' above MLW
10	5/22/46	9:55	"	No tidal waters
53 thru 59	5/23/46	9:30-35	"	1.3' above MLW
72-73	5/23/46	9:45-50	"	No tidal waters
74 thru 79	5/23/46	9:50-55	"	1.2' above MLW
82 thru 85	5/23/46	9:55	"	1.2' above MLW
86 thru 89	5/23/46	9:55-10:00	"	No tidal waters

Tide (III)

Reference Station: Eastport, Maine  
Subordinate Station: Starboard Island, Machias Bay  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	18.2	20.7
0.7	12.9	14.7

Washington Office Review by (IV): C. Theurer

Date: 10-28-49

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 33  
Shoreline (More than 200 meters to opposite shore) (III): 40 statute miles  
Shoreline (Less than 200 meters to opposite shore) (III): 2 " "  
Control Leveling - Miles (II): 21  
Number of Triangulation Stations searched for (II): 26 Recovered: 22 Identified: 16  
Number of BMs searched for (II): Recovered: Identified:  
Number of Recoverable Photo Stations established (III): 19  
Number of Temporary Photo Hydro Stations established (III): 63

Remarks:

MAP T-8796

PROJECT NO. Ph-11(46)

SCALE OF MAP 1:8500

SCALE FACTOR 1.176

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $y$ -COORDINATE LONGITUDE OR $x$ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
CAMP (MIT)	G.P. List	N.A. 1927	44 46	50.242	North of project			1550.9	(301.2)	1824.6	(354.3)
			67 21	17.452				383.7	(935.5)	451.4	(1100.6)
DOWLING (MIT)	"	"	44 46	23.552	"			727.0	(1125.1)	855.3	(1323.6)
			67 19	56.976				1252.8	(66.5)	1473.9	(78.2)
SPRUCE (MIT)	"	"	44 47	25.934	"			800.5	(1051.6)	941.8	(1237.1)
			67 20	46.174				1015.0	(303.9)	1194.1	(357.5)
HIGH HEAD (MIT)	"	"	44 46	34.482	"			1064.4	(787.7)	1252.2	(926.7)
			67 22	18.835				414.1	(905.2)	487.2	(1064.9)
CROSBY POINT (MIT)	"	"	44 46	50.947	"			1572.6	(279.5)	1850.1	(328.8)
			67 21	29.785				654.9	(664.3)	770.5	(781.5)
GADDIS POINT (MIT)	"	"	44 45	44.688	"			1379.4	(472.7)	1622.8	(556.1)
			67 20	29.780				655.0	(664.6)	770.6	(781.9)
GARDNER (MIT)	"	"	44 46	15.921	"			491.5	(1360.6)	578.2	(1600.7)
			67 20	01.705				37.5	(1281.9)	44.1	(1508.1)
McFAUL (MIT)	"	"	44 44	43.002				1327.4	(524.7)	1561.6	(617.3)
			67 17	02.697				59.3	(1260.7)	69.8	(1483.1)
ACKLEY (MIT)	"	"	44 41	22.673				699.9	(1152.2)	823.4	(1355.5)
			67 18	33.647				740.9	(580.4)	871.6	(682.9)
ROUND ID. 1882	"	"	44 40	09.243				285.3	(1566.8)	335.6	(1843.3)
			67 21	08.897				196.0	(1125.7)	230.6	(1324.3)
LONG POINT, 1882	"	"	44 41	28.200				870.5	(981.6)	1024.1	(1154.8)
			67 21	29.914				658.7	(662.3)	774.9	(779.5)
ELDER (MIT)	"	"	44 44	28.763				887.9	(964.2)	1044.6	(1134.3)
			67 20	39.516				869.4	(450.7)	1022.8	(530.3)

1 FT. = 3048006 METER

COMPUTED BY: H.P. Eichert

DATE Winter 1946-1947

CHECKED BY: Edwin L. Bauman

DATE

Winter 1946-1947

M-2388-12



MAP T. 8796

PROJECT NO. PH-11(46)

SCALE OF MAP 1:8500

SCALE FACTOR 1.176

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\mu$ -COORDINATE LONGITUDE OR $x$ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
HOLMES BAY CH. SP. 1913	G.P. List	N.A. 1927	44 42 16.115 67 19 41.980			497.4 (1354.7) 924.1 (396.7)	585.2 (1593.7) 1087.2 (466.7)
HARMON SPRUCE (MIT)	"	"	44 42 46.577 67 21 46.975			1437.7 (414.4) 1033.9 (286.7)	1691.4 (487.5) 1216.4 (337.3)
RAMSDELL'S HOUSE CHY., 1883	"	"	44 39 57.184 67 17 06.358	(Topographic Station)		1765.2 (86.9) 140.1 (1181.6)	2076.7 (102.2) 164.8 (1390.1)
AVERY ROCK LT. HO. 1882 1949	rebuild "	1947 "	44 39 15.110 67 20 40.903	14.712 Topo 40.798 CL 649/49	456 899	466.4 (1385.7) 901.2 (420.8)	548.7 (1630.2) 1060.2 (495.1)
HOLWAY, 1883	Spec. Pub. No. 46	N.A.	44 37 45.951 67 15 35.400	1418.4 (433.7) 780.3 (542.3).	-23.0 2.1	1395.4 (456.7) 778.2 (544.4)	1641.6 (537.3) 915.5 (640.5)
YELLOW HEAD, 1882	G.P. List	N.A. 1927	44 38 28.35 67 21 15.73			875.1 (977.0) 346.7 (975.6)	1029.5 (1149.4) 407.9 (1147.8)
CHANEY, 1882	"	"	44 39 00.80 67 19 51.96			24.7 (1827.4) 1144.9 (177.2)	29.1 (2149.8) 1346.9 (208.5)
LOWELL, 1862	"	"	44 42 27.775 67 20 22.970			857.4 (994.7) 505.6 (815.2)	1008.7 (1170.2) 594.8 (959.1)
MOUNTAIN HEAD 1882	"	"	44 38 52.019 67 22 12.264			1605.7 (246.4) 270.2 (1051.9)	1889.1 (289.8) 317.9 (1237.5)
SALT ID. 1882	"	"	44 40 00.090 67 21 34.710			2.8 (1849.3) 764.6 (557.1)	3.3 (2175.6) 899.5 (655.4)
HOSMER (MIT)	"	"	44 46 04.716 67 21 40.396	North of project		145.6 (1706.5) 888.4 (431.1)	171.3 (2007.6) 1045.2 (507.2)
HOWE (MIT) 528	"	"	44 45 19.688 67 21 32.452	" " "		607.7 (1244.4) 713.8 (606.0)	714.9 (1464.0) 839.8 (712.9)

1 FT. = 3048006 METER

COMPUTED BY: H.P. Eickert

DATE Winter 1946-47

CHECKED BY: Edwin L. Bauman

DATE Winter 1946-47

M. 2388-12



MAP T-8796

PROJECT NO PH-11(46)

SCALE OF MAP 1:8500

SCALE FACTOR 1.176

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\alpha$ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD (BACK)		FORWARD (BACK)		FORWARD (BACK)	
SUB. PT. GADDIS PT. (MIT)	Office Comp.	N.A. 1927	44 45		North of T-8796		1380.0	(472.1)	1623.5	(555.4)
SUB. PT. GARDNER (MIT)	"		67 20		"		663.0	(656.6)	780.0	(772.5)
SUB. PT. HARMON SPRUCE (MIT)	"		44 46				487.7	(1364.4)	573.8	(1605.2)
SUB. PT. ROUND 1D, 1882	"		67 20				35.1	(1284.3)	41.3	(1510.9)
SUB. PT. McFAUL (MIT)	"		44 42				1464.3	(387.8)	1722.7	(456.2)
SUB. PT. ACKLEY, (MIT)	"		67 21				1054.6	(266.0)	1240.7	(312.9)
Harmon Spruce 1882	"	"	44 40				306.0	(1546.1)	360.0	(1818.9)
Hog Island, 1882	"	"	67 21				202.2	(1119.5)	237.9	(1317.0)
Hogts Ridge, 1882	"	"	44 42	43.78			1368.6	(483.5)	1610.1	(568.8)
Sprague, 1882	"	"	67 21	56.02			55.1	(1264.9)	64.8	(1488.1)
	"	"	44 40	54.42			794.0	(1058.1)	934.1	(1244.8)
	"	"	67 19	57.63			484.0	(837.3)	569.4	(985.1)
	"	"	44 40	25.79						
	"	"	67 18	24.40						
	"	"	44 39	29.359						
	"	"	67 19	32.722						
429										

1 FT. = 3048006 METERS

COMPUTED BY: H. P. Eichel

DATE Winter 1946-1947

CHECKED BY: Edwin L. Bauman

DATE

Winter 1946-1947

M-2388-12



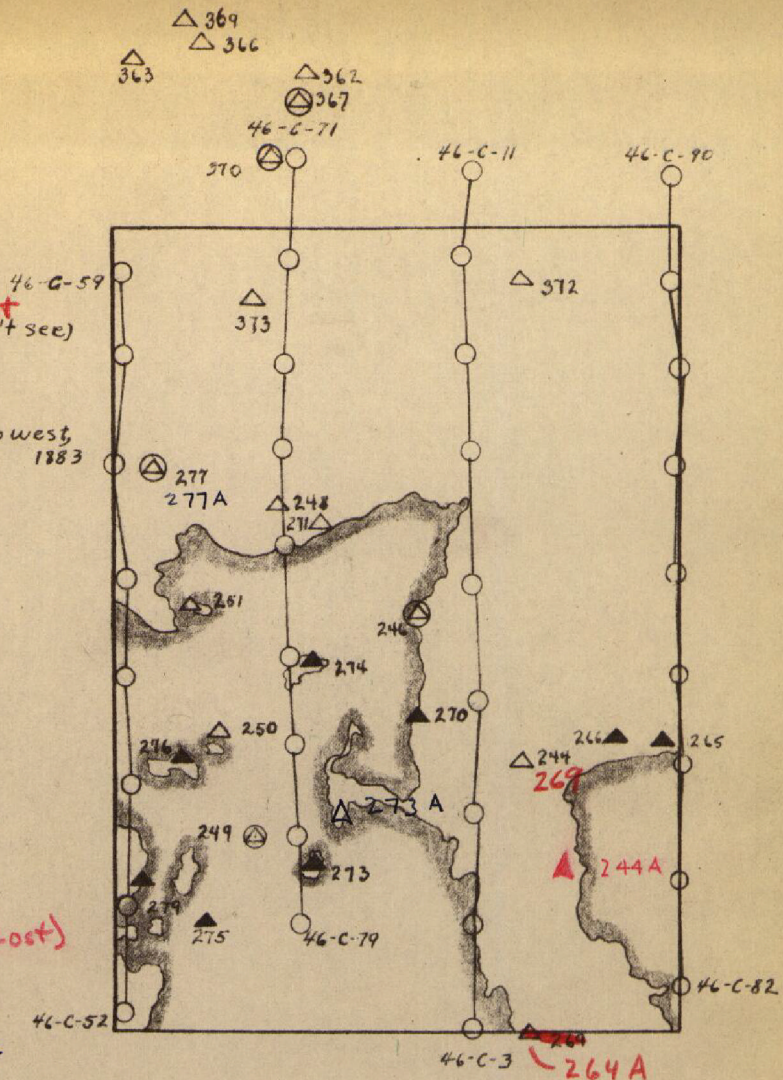
244 Remsdell, 1883  
 246 Ackley, 1882  
 248 Lowell, 1862  
 249 Avery Rock Lt. Ho., 1882 (can't see) **Lost**  
 250 Round Island, 1882  
 251 Long Point, 1882  
 265 Turners Ho. Chmy, 1883  
 266 Ho. Chmy with Frame of Barn to west,  
 269 Ramsdale Ho. Chmy, 1883 1883  
 270 Hoyts Ridge, 1882  
 271 Holmes Bay Ch. Sp., 1913  
 273 Chaney, 1882  
 274 Hoq Island, 1882  
 275 Yellow Head, 1882  
 276 Salt Island,  
 277 Harmon Spruce, (MIT)  
 279 Mountain Head, 1882  
 367 Gardner, (MIT)  
 362 Dowling, (MIT)  
 363 High Head, (MIT)  
 366 Camp, (MIT)  
 369 Crosby Pt. (MIT)  
 370 Gaddis. Pt. (MIT)  
 372 MS Faul, (MIT)  
 373 Elder, (MIT)

244A - Huntley, F, Ho Chy (Lost)

264A - Thornton Flag

273 A - Sprague

277 A - Harmon Spruce, 1882



△ Triangulation Sta - Identified + held in extension  
 ⊙ " " " Not held  
 ▲ " " " Not identified

Ph-11(46)  
 T-8796  
 SKETCH OF HORIZONTAL CONTROL

# FIELD INSPECTION REPORT

TO ACCOMPANY

QUADRANGLE NO. 8796

PROJECT Ph-11(46)

AUGUST 1946

## 1 - DESCRIPTION OF AREA:

This quadrangle extends from N. lat.  $44^{\circ}-37'-30''$  to  $44^{\circ}-45'-00''$  and from W. Long.  $67^{\circ}-15'-00''$  to  $67^{\circ}-22'-30''$ . The land area is approximately 30 square statute miles and the remainder consists of the waters of Machias Bay, Holmes Bay and Little Machias Bay.

Photogrammetric Field Inspection was accomplished in July 1946 under the direction of Lieut. Comdr. Ross A. Gilmore, in accordance with instructions dated 9 May 1946. The work consisted of recovery and identification of existing horizontal and vertical control, establishing additional temporary vertical control, shoreline and interior inspection.

The principal cultural features are the Maine State Highway No. 191, running in a generally southeast, northwest direction, and U. S. Highway No. 1 which traverses the quadrangle for about 4.5 miles near the northern limits. There are no towns and only 1 small settlement of Holmes Bay.

The vegetation is usual for this section, consisting of hard and soft-woods and several swampy areas. There are a number of peat bogs and several very large rock ledge hills. There is practically no cultivated land of mentionable size.

The shoreline varies from 30 foot clay banks and 50 foot rock bluffs to gravel beaches and rock ledges running into the water.

## 2 - COMPLETENESS OF FIELD INSPECTION:

The field inspection for the quadrangle is complete. The even numbered photographs of the area were used for this work. All important features such as buildings and bridges were identified, and vegetation and roads were classified.

The following 1:20,000 contact prints were used: 46 C 4, 6, 8, 9, 10, 56, 58, 72, 74, 87 and 90.

## 3 - INTERPRETATION OF PHOTOGRAPHS:

Reference is hereby made to the Field Inspection Report for quadrangle

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8795 which is also applicable to the photographs covering this quadrangle. Filed in ~~Div. of Photogrammetry General Files~~  
Bureau Archives

#### 4 - HORIZONTAL CONTROL:

Boynton Locke, Jr., Photogrammetric Aid, searched for 15 triangulation stations, all of which were established prior to 1900. Eleven of these stations were recovered, of which two supplementary stations were recommended to be classified as topographic stations. These were "RAMSDELL'S HOUSE CHIMNEY, 1883," and "HOUSE CHIMNEY, with frame of barn to east, 1863." In both these cases the chimneys have been rebuilt on the old base but the new chimneys are smaller and it could not be determined that they were built in the exact center of the old foundation. It is believed the chimneys as identified will be accurate enough for use in controlling the radial plot. The new topographic station names recommended are CHIMNEY, GREEN HOUSE and WEST CHIMNEY, WHITE HOUSE, respectively. Form 524, Description of Recoverable Topographic Station, has been executed in each instance. Although some of the stations were not identified on the photographs due to the dense growths surrounding the stations, there is at least one station identified within each red-encircled group as indicated on the horizontal control index.

Edward H. Taylor, Engineering Aid, searched for 4 triangulation stations of which 2 were not found. AVERY ROCK LIGHTHOUSE was recovered and pricked direct on 1:8500 scale ratio print No. 46 C 78. HOLWAY was recovered but not identified on the photographs.

Lieut. (jg) Lewis V. Evans, III also worked on recovery and his report follows: Two triangulation stations established by the M.I.T. Civil Engineering Summer Camp within the limits of the quadrangle were recovered and identified, namely, stations ELDER and McFAUL. Seven additional M.I.T. stations, CAMP, CROSBY POINT, DOWLING, GADDIS POINT, GARDNER, HIGH HEAD and SPRUCE, located north of this quadrangle were recovered and identified for photographic control. These stations are all on the North American 1927 datum, but no information regarding dates of establishment nor order of accuracy was available to this party.

The following photographs were used by the three sub-parties for horizontal control identification:

1:8500 scale ratio prints Nos. 46 C 6, 7, 56, 57, 74, 76, and 78.  
1:20,000 " contact " Nos. 46 C 10, 61, 69, 70, and 72.

#### 5 - VERTICAL CONTROL:

All known vertical control stations of the Coast and Geodetic and the Geological Survey were searched for and those stations recovered were identified on the photographs with an accuracy of 3m or less.

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All points whose elevation was required for control were determined by trigonometric level lines. Two required points were determined by a double-rodged line and three points on Sprague Neck and near Cape Wash were determined by a line started at a bench mark and closed on tidewater with the closure checked against predicted tides. All closures were well within the limits called for in the instructions and are indicated in the index of Trigonometric Levels, Quadrangle 8796, Vol. 1 (there is only 1 Vol. of notes for this quadrangle).

Level points were identified and circled on the face of the photographs, and the elevations entered on the backs, except for those points determined with a tidewater closure in which case no elevations were entered. All elevations entered were underscored, indicating they were determined from lines started and closed on existing bench marks or elevations determined during the course of the work. The letters NC prefix all spot elevations including the three required points north of the quadrangle limits.

Approximately 21 miles of 4th order levels were run and 33 temporary elevation points were determined. The following 1:20,000 scale single lens photographs were used: 46 C 5, 7, 9, 11, 57, 58, 59, and 91.

#### 6 - CONTOURS AND DRAINAGE:

Inapplicable.

#### 7 - MEAN HIGH-WATER LINE:

The mean high water line was identified on the 1:8500 scale enlargements furnished for that purpose. This was done by indicating its location with short dashes in red ink and is within the maximum error allowed. The work was done by boat, running the boat as close to shore as possible, or at times walking the shoreline. This was done at all phases of the tide.

The following 1:8500 scale ratio prints were used: 46 C 4, 5, 6, 7, 8, 52, 53, 54, 55, 56, 57, 58, 74, 76, 77, and 78.

#### 8 - LOW-WATER LINE:

The 1:8500 scale ratio prints were used to locate the low-water line. It was indicated by dots in all cases. Randall Flats, Holmes Bay and the northern portion of Little Machias Bay are flat and bare at low-water. These tide flats consist of mud strewn with boulders.

#### 9 - WHARVES AND SHORELINE STRUCTURES:

There are a few isolated wharves and buildings on the islands in this quadrangle. There is an explanatory note on the photograph in each case.

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10 - DETAILS OFFSHORE FROM HIGH-WATER LINE:

Exposed rocks, when above high-water line were dashed in red and dotted if bare only at low-water. Ledges awash or bare at low-water were so designated, with the height above the water, time and date noted.

11 - LANDMARKS AND AIDS TO NAVIGATION:

There are no new landmarks worthy of charting.

Avery Rock Lighthouse is the only aid to navigation in this area. Form 567, Nonfloating Aids, has been executed and submitted under separate cover.

*See Review Report TP 34*

12 - HYDROGRAPHIC CONTROL:

Objects suitable for hydrographic signals were identified and numbered on the photographs for future use by the hydrographer. These were numbered in accordance with instructions for the project and a short description recorded in field sketchbook Vol. 3. These consist of trees, boulders, gables of houses and chimneys.

In addition to the above, recoverable topographic stations were established at intervals not in excess of one mile. These are recoverable objects such as cupolas, gables and chimneys, or stamped topographic discs set in rock and appropriately named and stamped.

All topographic stations were identified on the photographs and Form 524, Description of Recoverable Topographic Station, submitted. There are 28 such stations in this quadrangle.

13 - LANDING FIELDS AND AERONAUTICAL AIDS:

None

14 - ROAD CLASSIFICATION:

Roads were classified in accordance with "General Instructions - Classification and Compilation of Roads" dated 30 June 1945.

15 - BRIDGES:

There are no bridges over navigable waters. Bridges over small streams were indicated on the photographs at the time of interior inspection.

16 - BUILDINGS AND STRUCTURES:

Buildings and structures to be shown on the compilation were identified by encircling them with small red ink circles. It is believed that all camps worth compiling are identified but it is possible there are a few on isolated trails which have not been circled.

17 - BOUNDARY MONUMENTS AND LINES:

This will be the subject of a special report submitted by Harold A. Duffy, Photogrammetrist. Filed in Div. of Photogrammetry, General Files Project Completion Report in Bureau Library

18 - GEOGRAPHIC NAMES:

Same as 17 above.

Note: Various phases of the work were done as follows:

Items 1, 2, 3, 4, 5, 14 and 16 by Boynton Locke, Jr. Photo. Aid;  
item 4 by Lt. (jg) Lewis V. Evans, III;  
items 4, 7, 8, 9, 10, 11, and 12 by Edward H. Taylor, Eng. Aid.

Respectfully Submitted:

Lewis V. Evans  
Lewis V. Evans, III, Lt. (jg)

Boynton Locke, Jr.  
Boynton Locke, Jr. Photo. Aid

Edward H. Taylor  
Edward H. Taylor, Eng. Aid

Approved and Forwarded:

Ross A. Gilmore  
Ross A. Gilmore, Chief of Party



COMPILATION REPORT

TOPOGRAPHIC MANUSCRIPT

SURVEY NO. T-8796

The general methods of compilation, horizontal control extension and radial plots, including recommendations for future projects are fully discussed in Compilation Report for Project Ph-11(46). Only items specifically applicable to this map and not included in the above are discussed in this report. Filed in ~~Div. of Photogrammetry General Files~~ *Project Completion Report in Bureau Library*

26. CONTROL

Attached to this report is a "Sketch of Horizontal Control" for this map.

Vertical control point NC-17(elev. 52.5) could not be held in model 46-C-4-5. Contours in this vicinity checked by Field Editor.

28. DETAILING

Photogrammetry instruction No. 17 and supplementary instructions issued by the Chief, Division of Photogrammetry were closely adhered to in the drafting of this map. All roads have been reclassified according to instructions as amended 24 October 1947.

Contours are shown dashed in model 46-C-4-5. Levelling was not satisfactory as this model is half water. It is recommended that the topography be verified in the field. Checked by Field Edit.

Contours are also shown dashed in the east portion of model 46-C-9-10. This area is heavily wooded and covered with cloud shadows. Checked by Field Edit.

A portion of model 46-C-8-9 has not been contoured as clouds obscure its details in that portion of photograph No. 8. The discrepancy overlay has been marked for the attention of the Field Edit Party. Contoured by Field Edit.

In the vicinity of Hog Island and Sprague Neck Bar, the map is considered weak. Multiplex model 46-C-75-76 which covers Hog Island contains extensive water area which made the parallax solution doubtful. The lack of sufficient land area made the setting of model 46-C-76-77 impracticable. Nevertheless, model 46-C-77-78 was set and the shoreline around Sprague Neck Bar detailed monoscopically using diapositive 46-C-77. See Field Edit and Review Reports concerning Accuracy Test.

It is recommended that the Field Edit Party verify the nonexistence of contours on Hog Island.

Contoured by Field Edit.

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29. SUPPLEMENTAL DATA

None.

30. MEAN HIGH-WATER LINE

Special attention is called to the manner of locating the MHWL around Sprague Neck Bar as discussed in item 28, paragraph 4.

31. LOW-WATER AND SHOAL LINES

Approximate low-water lines are shown on the map from data furnished on the field inspection photographs, supplemented by office interpretation. See Review Report.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE

Data are believed to be complete as all photographs were taken near low water. See Review Report.

33. WHARVES AND SHORELINE STRUCTURES.

Data believed to be complete.

35. HYDROGRAPHIC CONTROL

The list of photo-hydro points that could be established are attached as notes to the hydrographer.

The positions for fourteen (14) photo topo stations could not be established within the required limits of error. Forms 524 for these stations are being submitted, herewith, together with those stations whose positions were established. See Field Edit and Review Reports

37. GEOGRAPHIC NAMES Approved list filed in Geographic Names Section

An alphabetical list of geographic names appearing on this map accompanies this report. These are from the report of Harold A. Duffy.

38. JUNCTIONS

Junctions have been made as follows:

To the east with T-8797.  
To the south with T-8800.  
To the west with T-8795.

No attempt has been made to make junction with the U. S. Geological Survey to the north. See Field Edit Report concerning Vertical Accuracy Test along junction.

39. BOUNDARIES

The boundary between East Machias and Machiasport could not be completed by the compilation office and is therefore left for completion by the field edit party. See Special Report - Boundaries by Harold A. Duffy. See Review Report # 28

40. DISCREPANCY OVERLAY

Discrepancy overlays for both halves of this quadrangle contain notes for the field edit party. They have been prepared to accompany the map.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Upon visual comparison with Machias, Maine, 15 minute quadrangle (U.S.G.S.), edition of 1918, reprinted 1943, the following was noted:

Chance Island is shown in the U.S.G.S. Quadrangle to be in the township of Cutler, while our survey shows it to be in Machiasport.  
See Review Report # 28

There are numerous swamp areas shown on the quadrangle which we do not believe to be in existence. These areas checked by Field Editor

Topography is in fair agreement.

45. COMPARISON WITH NAUTICAL CHARTS

Upon visual comparison with U. S. Coast and Geodetic Survey chart No. 303 dated March 1945 (4th edition), agreement was found to be good. As in the U. S. G. S. quadrangle, there are numerous swamp areas which we do not believe exist.

~~After the field edit and hydrographic survey, this compilation should supersede all previously charted information. See Review Report.~~


Respectfully submitted

27 April 1949

  
Henry P. Eichert

Photogrammetrist

Descriptive Report and Review

  
Stanley W. Trow

Supervisor

Approved and forwarded

28 April 1949



Thos. B. Reed

Officer in Charge

Baltimore Photo. Office

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NOTES FOR HYDROGRAPHIC PARTIES  
EASTERN MAINE

TOPOGRAPHIC MANUSCRIPT

PROJECT PH-11(46)  
SURVEY NO. T-8796

The following are descriptions of photo-hydro stations to be used as hydrographic signal sites.

No.	Photo. No.	Description
0051	52	25' double spruce on NE side of gravel beach, near base of small ledge hill. 6' above MHWL.
95138	53	20' spruce on grassy slope, about 4 meters N of MHWL. Most southerly spruce. 3' above MHWL.
95147	54	25' spruce, about 1 meter W of MHWL. Most easterly spruce. 1' above MHWL.
95149	54	15' spruce on point of land, about 5 meters N of MHWL. Most southerly spruce. 5' above MHWL.
95150	54	20' pointed spruce on ledge. Most easterly and most prominent spruce. 0' above MHWL.
9601	52	20' spruce on W side of small gravel cove. 5 meters North. of another 20' spruce. 3' above MHWL.
9602	52	20' spruce on W side of small cove; surrounded by boulders and the farthest tree towards water line, in vicinity. 8' above MHWL.
9603	53	15' spruce on S side of small gravel cove on ledge bluff. Tallest tree on ledge. 15' above MHWL.
9604	53	N gable of 2 story white, T-shaped house at top of grassy hill. Building has 2 brick chimneys. 30' above MHWL. ←
9608	54	15' pointed spruce, about 5 meters N of MHWL, at head of small cove. 6' above MHWL.
9609	54	25' spruce about 3 meters N of MHWL. Most prominent spruce in vicinity. 2' above MHWL.
9610	54	20' spruce about 1 meter N of MHWL on end of tree line. Most northerly spruce. 1' above MHWL.
9627	56	15' spruce at edge of gravel beach & grass line. Southernmost of two trees. 17' above MHWL.

No.	Photo. No.	Description
9628	56	15' spruce with bushy top, standing singly at N edge of brush. 4 meters N of MHWL. 18' above MHWL.
9629	56	15' spruce growing in group on rock ledge. Largest tree in group. 18' above MHWL.
9630	55	15' straggly spruce. Most western tree of large group. Tree has deformed trunk. 20' above MHWL.
9631	4	20' spruce in center of small clearing on edge of gravel beach and tree line. About 7 meters back from sandy beach. 20' above MHWL.
9636	56	10' spruce on rock ledge protruding out into water. Separated from mainland at high tide. 12' above MHWL.
9637	74	20' spruce at base of small ridge, paralleling shoreline. 5 meters N of MHWL. 23' above MHWL.
9646	7	15' spruce, standing singly, about 7 meters east of MHWL. 7 meters N of gravel ledge. 18' above MHWL.
9649	6	Taller of two spruce at edge of grass line on top of round rock ledge. 20' above MHWL.
9653	77	15' spruce, taller of two trees on extreme point at edge of tree line. 18' above MHWL.
9655	84 Center of	taller of two pine trees, 15 meters N of MHWL. 23' above MHWL.
9657	84	Bushy evergreen, highest part of several trees in cluster. 15' above MHWL.
9658	84	10' evergreen 7 meters N of MHWL. Only tree in area. 14' above MHWL.
9659	84	20' evergreen, 7 meters N of MHWL. Tallest of trees in clearing. 23' above MHWL.
9660	84	Top of center of highest part of rounded boulder. 40 meters east of MHWL. Rock is isolated from shore by water at high tide. 3' above MHWL.
9662	5	18' spruce, NE of point and 8 meters W of grass line in small clump of alders. 24' above MHWL.
9664	5	Lone 15' spruce, 10' from grass line. 21' above MHWL.
9665	5	12' spruce, just south of apex of tree line. 15 meters N of grass line. 21' above MHWL.

No.	Photo. No.	Description
9667	5	12' lone bushy spruce on northern side of small point. 15' above MHWL.
9668	5	Lone 20' spruce, near grass line on N side of small point. 23' above MHWL.
9670	78	15' evergreen, growing up at a sharp angle, and over- hanging water at edge of shore. 17' above MHWL.
9671	78	15' spruce at point. Most northern tree on island. 18' above MHWL.
9672	77	Very tall evergreen, extending 15' above the other trees. Most northern of the tallest evergreens. 40' above MHWL.
9673	77	30' spruce on corner, south of small cut tree, nearest shore. 33' above MHWL.
9675	5	8' bushy, cone spruce on top of bank, about 30 meters N of trees. 23' above MHWL.
9676	5	Lone 10' spruce, SE of clump of trees. 17' above MHWL.
9677	5	Bushy evergreen, tallest of three. Tips on edge of grass and sand shore. 15' above MHWL.
9679	5	15' spruce on point overhanging rocky beach. Tree has curved trunk. 16' above MHWL.
9680	50	Top of center of white, round, boulder, lying on shore. Largest of boulders. 1' above MHWL.
9681	5	Top of center of tan boulder, lying on MHWL. 2' above MHWL.
9682	4	15' spruce, overhanging rocky beach. Taller of two trees. 18' above MHWL.
9683	4	8' spruce on top of 4' bank. There is a small spruce on each side of tree. 12' above MHWL.
9684	4	13' spruce overhanging water and beach. Tree is very full-branched.
9685	4	Southernmost of two spruces growing together on top of small ledge. 17' above MHWL.
9686	4	Lone tree, south of a pair of trees. 10' above MHWL.



No.	Photo. No.	Description
9687	4	Tallest of small cluster of spruces. Very full at base of clump. 20' above MHWL.
9691	4	Highest part of rock ledge on point. The ledge is out in the water. 5' above MHWL.
9692	5	10' spruce at edge of grass line & rock ledge. Most easterly tree in vicinity. 15' above MHWL.
9696	82	Center of highest part of rock ledge. The highest ledge on NW side. 6' above MHWL.
9697	82	15' spruce on top of high cliff. Tree has crooked stem. 45' above MHWL.
9699	53	Tallest of three small spruces on W side of island. Tree stands on ledge. 20' above MHWL.
96100	53	18' spruce at extreme point of wooded area. 25' above MHWL.
96101	53	20' spruce with clay bank behind and to the right of it. 30' above MHWL.
96102	53	Right, more inland, of two spruces in center of beach. 15' to grass line.
96103	53	15' spruce on right hand side of cove. 25' above MHWL.
96104	53	Highest point of separated mass of rock and SE corner of Yellow Island. 20' above MHWL.
96105	53	15' spruce on extreme point of trees. 20' above MHWL.
96108	55	15' spruce on extreme SE corner of Salt Island. 25' above MHWL.
96109	55	Top of center of highest part of 4 x 6 white faced outcrop. 12' above MHWL.
96110	55	12' spruce in clump of bushes on extreme SW corner of Salt Island. 20' above MHWL.
96126	76	12' spruce, 5' N of tree, leaning 60° SW. 18' above MHWL.

Respectfully submitted  
April 1949

*Bernadette A. Dew*  
Cartographic Draftsman

Approved and forwarded

*Thos. B. Reed*  
Thos. B. Reed  
Officer in Charge  
Baltimore Photogrammetric Office

# GEOGRAPHIC NAMES LIST

- Avery Rock \*
- Bar Island ✓
- Bare Island ✓
- ~~Bare Cove~~ • Little Holly Cove \*
- Bucks Harbor ✓
- Bucks Head \*

- Cape Wash ✓
- Cape Wash Island ✓
- Chance Island ✓
- Clamshell Cove ✓
- Colbeth Rock ✓
- Cottage Cove ✓
- Cross Island Narrows ✓
- Cutler (district) ✓
- Cutler Road (State No. 191) ✓

- Davis Beach ✓
- Deep Cove ✓
- Dogfish Rocks
- East Machias (district)
- Enoch Hill ✓

- Gardner Lake \*
- Grassy Point \*
- Great Pond ✓

- Hog Island ✓
- Holly Point ✓
- Holmes Bay ✓
- Holmes Bay Church ✓
- Holmes Point ✓
- Holmes Stream ✓
- Huntley Creek ✓
- Holmes Pond ✓
- Indian Cove ✓
- Indian Head ✓
- Indian Lake ✓

- Jasper Head ✓

- Larrabee Cove ✓
- Little Bay ✓
- ~~Little~~ Holly Cove ✓
- Little Machias Bay ✓
- Long Ledge ✓
- Long Point ✓
- ~~Lubec Road~~ (U.S. No. 1)

- Machias Bay ✓
- ~~Middle Ground~~
- Mountain Head ✓

- North Cutler ✓

- Pettegrove Mountain ✓
- Point Ruth ✓

- Quaker Head \* ✓

- ~~Randall Point Flats~~
- Red Point ✓
- Round Island ✓
- ~~Round Island Flats~~

- Salt Island ✓
- Sprague Neck ✓
- Sprague Neck Bar ✓

- Tech-Camp Road ✓
- Township Rock ✓

- Upper Ledge ✓

- Western Marsh Brook ✓
- Whaleback Cove ✓
- Whiting (district) -
- Widows Ledge ✓
- Woodruff Mountain ✓

- Yellow Head \* ✓

- State No. 191 (Cutler Road)

- Machiasport (district)

Names preceded by • are approved. Based on Duffy's report and subsequent decisions by U.S.B.G.N. Subject to final check by Field Edit. 5-10-49 L. Hear

\* = U.S.B.G.N. decision (recent)

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Field Edit Report, T-8796

51. Methods.--A launch was used to reach the several islands in Machias and Holmes Bays, as well as the shoreline areas not accessible by truck.

Delineation of the shoreline was visually compared with the photographs at low-water by walking the shoreline or riding close inshore in a skiff and outboard motor.

Numerous rocks and ledges were inspected and labeled as to height. These were inspected at or near low-water. A tide curve, based on predicted tide tables for Starboard Island, Machias Bay (reference station, Eastport, Maine), was plotted and used to reduce these heights to low-water or high-water, depending on the feature in question.

All passable roads were ridden out by truck or "Jeep" to check classification, planimetry and contours, or to answer questions on the Discrepancy Print.

Standard planetable methods were used to complete an area not contoured by the multiplex, to check dashed line contours, to contour Hog Island, Avery Rock (island), to recontour Yellow Head (island), and to run vertical accuracy test specified in the northeast corner of the quadrangle. Contouring of the aforesaid islands was accomplished by beginning and ending horizontally at identifiable topographic features and beginning and ending vertically on tide water. Elevations were reduced to mean sea level by using the plotted tide curve.

Additions and corrections have been made directly on the field edit sheets or on the photographs.

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Where work was done on a photograph, reference was made to its number on the field edit sheet.

Red ink was used for additions and corrections; green for deletions. No legend is shown.

Field edit information has been shown on one of the following sources: (1) Discrepancy Prints; (2) Field Edit Sheets Nos. 1, 2 and 2A; and (3) photographs 46 C 56, 57, 74 (1:20,000 scale), and 46 C 7, 8, 9, 55, 74, 76, 84 (1:8,500 scale).

52. Adequacy of compilation.--Compilation of the map manuscript is adequate. It will be complete after field edit data has been applied.

53. Map accuracy.\*--Six topographic stations which were established in Machias Bay by the field party at the time of field inspection, have been located by a scheme of triangulation and their identification on the photographs checked. One topographic station was established on the west side of Little Machias Bay, identified on the photograph and located by a theodolite fix using one triangulation and four topographic stations. A triangulation station located on Chance Island, that was not recovered during the field inspection has been identified on the photographs. When the detailing is completed the computed positions of these stations will serve as a horizontal accuracy test.

One vertical accuracy test was specified. It is located in the northeast corner of the quadrangle and was accomplished on Field Edit Sheet No. 1. This test originated and terminated on bench marks. The vertical closure was 0.9 ft. low. No adjustment was made. Horizontally the test originated and terminated at road intersections. There was no appreciable error of horizontal closure and no adjustment was made. The contours tested were proven to be within the required mapping accuracy.

Approximately two square miles of contours considered weak by the multiplex operator and shown with dashed lines, were checked and corrected where necessary.

\* The cuts obtained by the Field Editor for four of these stations have been rejected. The computation of their positions made it apparent that the triangulation station Chaney, 1882 was not occupied. See Review Report PP 37. Geodary notified that Chaney, 1882 was not recovered.

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About one half square mile was contoured in an area where it was impossible to contour with the multiplex due to clouded photographs. This area is located at Lat.  $44^{\circ}43'$ , Long.  $67^{\circ}18.5'$ .

The work, for contouring and checking dashed contours, originated and terminated on bench marks, trigonometric level points, or tide water, vertically and road intersections or photo-hydro stations, horizontally.

Yellow Head (island) at Lat.  $44^{\circ}38.6'$ , Long.  $67^{\circ}21.3'$ , was recontoured, since the contours there were found to be considerably in error.

Contours were visually checked at numerous places and found to be very good as to relief expression.

54. Recommendations.--The map manuscript appears accurately compiled and the field editor's copy is clear and legible, therefore no recommendations are offered.

55. Examination of proof copy.--Mr. Richard A. Mawhinney, P. O. Box 271, Machias, Maine, is a recognized local surveyor, and will examine a proof copy of the map.

Geographic names.--The name "Lubec Road" applied to a part of U. S. Highway No. 1, which traverses the northern part of the quadrangle, should not be retained. This highway does not go to Lubec, rather Maine State Road No. 189 leaves U. S. Highway No. 1 at Whiting and leads to Lubec. Although the road leading eastward from Machias was known in stage coach days as the Lubec Road, it is no longer referred to locally as such. The name has been deleted from the Field Edit Sheet. Deleted from map manuscript.

No other discrepancy was noted.

56. Township lines.--Chance Island was found to be correctly shown in Machiasport Township. Page 28 of Volume 1 of Official Copies of Land Surveys, County of Washington, prepared in 1892 and on file at the County Courthouse, Machias, Maine, confirms this. Further confirmation was obtained from the Registrar of Deeds.

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A tracing of the Lot Plan of Whiting Township, showing its western boundary line and the point at which the East Machias-Machiasport line intersects it, is submitted for use in completing the East Machias-Machiasport line. Mr. Richard A. Mawhinney, local surveyor, assisted this Party in searching the records on file at the Washington County Courthouse and no map of East Machias or Machiasport could be found. It is believed this plan (tracing) provides enough information to complete the line. See Review Report.

Respectfully submitted,  
July 15, 1949

*George E. Varnadoe*  
George E. Varnadoe,  
Cartographic Engineer

Approved and forwarded,

E. R. McCarthy,  
Chief of Party

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# HISTORY OF HYDROGRAPHIC INFORMATION

T-8796

## Machias Bay, Maine Quadrangle

Hydrography was applied to the manuscript in accordance with Division of Photogrammetry general specifications of May 18, 1949.

The soundings and depth curves are expressed in feet referred to mean low water and originate with the following surveys by this bureau; and chart 303 printed June 27, 1949, corrected to December 5, 1949.

H-1687	(1885)	1:10,000
H-1688	(1885)	1:10,000
H-1689	(1886)	1:10,000
H-1690	(1886)	1:10,000

The depth curves are drawn at intervals of twenty feet in order to be in harmony with other quadrangles of this project.

The hydrography was compiled by R. E. Elkins and checked by G. F. Jordan.

*R. E. Elkins*

R. E. Elkins  
Nautical Chart Branch  
December 21, 1949

Depth curves and soundings are not shown on the registered copy.

Review Report T-8796  
Topographic Map  
October 28, 1949

26. Control.-The following triangulation stations were added to the map manuscript:

Harmon Spruce,	1882
Hoyt Ridge,	1882
Hog Island,	1882
Sprague,	1882

Harmon Spruce, 1882 was recovered in 1946. The other three stations were not found, but are probably recoverable.

Eleven USC&GS and four USGS bench marks were recovered in the field and are plotted on the map manuscript.

28. Detailing.-All corrections made on the map manuscript during review are shown in red ink.

The boundary between Machiasport and Cutler was moved during review to conform with the description in "Maine, Sea and Shore Fisheries Laws," page 129. The bearings given are magnetic and evidently are based on the magnetic declination of  $14^{\circ}11'$  W in 1826, the year that Cutler was incorporated. Using this declination, the boundary runs approximately halfway between Sprague Neck and Chance Island. This further substantiates the information obtained by the Field Inspector, that Chance Island is in Machiasport and not in Cutler as shown on the USGS Quadrangle.

The position of the junction of the East Machias, Machiasport and Whiting boundaries was taken from a tracing of the "Lot Plan of Whiting Township." This position checks with the description of Machiasport in the Fisheries Laws pamphlet.

Several blueberry barrens that were compiled as trees were changed to cleared during review.

31. Mean Low Water Line.-The position of the MLW line was taken from the photographs supplemented by the hydrographic surveys. In northern Little Machias Bay, Holmes Bay and at Randall Point Flats the low water line was taken directly from the hydrographic surveys. The nature of the foreshore was symbolized on the map manuscript in accordance with the Field Inspector's notes.

32. Details Offshore from the MHW Line.-Several offshore rocks, not visible on the photographs, have been added to the map manuscript from the hydrographic surveys accompanied by a note to the hydrographer requesting a check of the features position and height. See attached letter "History of Hydrographic Information" for hydrographic survey sources. *Information from Hydro. Surveys is not shown on the registered copy.*

34. Landmarks and Aids to Navigation.-The landmark "Church Spire" has been recommended to be retained on the Charts. Ch. Let 69 (49) Avery Rock Lighthouse was dismantled in 1947 and replaced by a new light. Forms 567 have been forwarded to the Nautical Chart Branch by the Field Editor. Ch. Let 649 (49)

37. Photo-Topo Stations.-The positions of six, marked photo-topo stations were not determined. The Form 524 cards have been retained in the Division of Photogrammetry, General Files so that they might be located by a future survey.

The field Editor obtained positions for two stations established in 1946 and three new stations established in 1949 by theodolite.

The horizontal control on the map manuscript meets the project requirements.

44. Comparison with Existing Surveys.-

- a) U3GS Machias Quad. 1:62,500 1918 reprint. 1943  
U3E Machias Quad. 1:62,500 1942

The town boundaries are incorrectly shown on the Quads.

- b) T-1540 1:10,000 1882-84  
T-1543 1:10,000 "  
T-1665 1:10,000 1885

This map supersedes those surveys for nautical charting purposes.

45. Comparison with Nautical Charts.-

Chart No. 303 1:40,000 1945 Corr. 1948

More extensive ledge areas are shown on the map manuscript than on the chart.

Many marsh areas shown on the chart do not exist.

47. Adequacy of the Compilation.-This map, T-8796, is a complete topographic map and has been compared and reconciled with all hydrographic and topographic surveys of record in this Bureau and is, therefore, the most complete and accurate topographic map of record in the area covered.

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48. Accuracy Tests.-The vertical accuracy test along the NE. edge of this map meets the project requirements. The positions obtained by theodolite cuts in the Machias and Little Machias Bay areas proved that the horizontal position of details is within the required accuracy.

This map complies with the National Standards of Map Accuracy.

49. Overlays.-An overlay was prepared showing the border information, road classifications and route numbers, triangulation stations, bench marks and spot elevations that are to be shown by the draftsman.

Reviewed by:

Charles Theurer  
C. Theurer

Approved by:

S. V. Griffith  
Chief, Revised Section K.M.  
Division of Photogrammetry

H. C. Edmonson  
Chief, Nautical Chart Branch  
Division of Charts

O. S. Reading  
Chief, Div. of Photogrammetry

K. Q. Quady  
Chief, Div. of Coastal Surveys