

8042

Diag'd. ~~as~~ Diag. Ch. No. 311

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Air Photographic

Field No. CS-272-D Office No. T-8042

LOCALITY

State Maine

General locality Coast of Maine

Locality Penobscot and Kenduskeag Rivers
Cities of Bangor and Brewer

194 A.

CHIEF OF PARTY

F.L. Peacock

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DATE April 14, 1949

8042

DATA RECORD
MAP DRAWING
T-8042

Quadrangle (II): Bangor, Maine (15' series) Project No. (II): CS-272-D
(southeastern portion)

Orono, Maine (15' series) (southwestern portion)

Field Office:

Chief of Party:

Air Photographic Party No. 2

Fred. L. Peacock

Compilation Office:

Chief of Party:

Baltimore Photogrammetric Office

Fred. L. Peacock

Instructions dated (II III): April 1, 1942, & April 20, 1943: (March 18, 1944-28-^{Div. Photogram Office Files} Copy filed in ^{Descriptive} Report No. T-^(VI)

MRC 1990 and April 11, 1944-28-MRC 1990 (supplemental instructions)

May 22, 1944 - 826 RCR (sheet layouts)

Completed survey received in office: 1 Dec. 1944

Reported to Nautical Chart Section:

Reviewed: 12/6/46

Applied to chart No.

Date:

Redrafting Completed: 10 Mar. 1948

Registered: ~~10 May 1948~~ March 1949

Published: Mar. 1948

Compilation Scale: 1:9740

Published Scale: 1:10000

Scale Factor (III): 1.02669

Geographic Datum (III):

Datum Plane (III): ^{M.H.W.} ~~Mean Sea Level~~

North American 1927

Reference Station (III): BANGOR TANK FLAGPOLE, 1934, r. 1944

Lat.: 44° 48' 26.54" 819.2 m Long.: 68° 47' 00.23" 5.1 m.

~~Adjusted~~
Unadjusted Field

State Plane Coordinates (VI): East Zone

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)
(Unmounted)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
6932-6934, Incl.	10/19/41	11:57 a.m.	1:10,000	9.1' above M.L.W.
6936-6938, Incl.	10/19/41	12:11 p.m.	1:10,000	8.0' above M.L.W.
6940-6943, Incl.	10/19/41	12:11 p.m.	1:10,000	8.0' above M.L.W.

Tide from (III): Tide Tables, Atlantic Ocean, 1941. Reference Station, Portland, Maine, with corrections to Bangor, Penobscot River, Maine.
Mean Range: 13.1' Spring Range: 14.9'

Camera: (Kind or source) U. S. Coast and Geodetic Survey nine-lens camera (focal length $8\frac{1}{4}$ "). All negatives are on file in the Washington Office.

Field Inspection by: Lieutenant Dale E. Sturmer date: June & July 1944.
Season's Field Inspection Report will be submitted at a later date.

Field Edit by: — date:

Date of Mean High-Water Line Location (III): As of the photographs taken on October 19, 1941 supplemented by field inspection data obtained during June and July, 1944.

Projection and Grids ruled by (III) J.T. Washington Office date: 7/1/44

" " " checked by: M.U.P. & D.L. Washington Office date: 7/5/44

Control plotted by: M. Katherine Olthouse date: 7/20 & 21/44

Control checked by: Harry R. Rudolph date: 7/24/44

Radial Plot by: Walter E. Schmidt date: 8/44

Detailed by: Florence M. Hammond (shoreline and interior rough draft) date: 8/12 to 28/44 & 9/8/44 to 11/21/44.

Reviewed in compilation office by: Harry R. Rudolph date: 11/17 to 20/44

Manuscript

Elevations on Field Edit Sheet
checked by: *H.R. Rudolph*

date: 12/5/46

STATISTICS (III)

Land Area (Sq. Statute Miles): 23

Shoreline (More than 200 meters to opposite shore): 13 statute miles

Shoreline (Less than 200 meters to opposite shore): 4 statute miles

Number of Recoverable Topographic Stations established: *2

Number of Temporary Hydrographic Stations located by radial plot: 72. Number of Bench Marks located by the radial plot: 6.

Leveling (to control contours) - miles:

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

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

Remarks: *One of these is an aeronautical aid which is too far inland to be of use to the Hydrographic Party.

26 CONTROL:

The horizontal control appearing on the Map Drawing Projection for Survey No. T-8042 consists of 59 stations. Of these, 5 are U. S. Coast and Geodetic Survey triangulation stations; 5 are U. S. Coast and Geodetic Survey triangulation intersection stations; 42 are U. S. Engineers triangulation stations; 6 are U. S. Geological Survey marked traverse stations (including 4 U. S. C. & G. S. bench marks), and the remaining 1 is a U. S. Geological Survey unmarked station.

The triangulation stations, and marked traverse stations (including bench marks), have been shown with the conventional symbols. The unmarked traverse station has been shown with a small orange ink circle.

The following horizontal control stations fall within the limits of the Survey

5 U. S. Coast and Geodetic Survey triangulation stations:

- ✓ *HINK, 1864
- ✓ *SOUTH BREWER, 1864
- ✓ ***THOMAS HILL, 1857 p. 7
- ✓ *DOANE, 1864
- ✓ *STEWART, 1864

5 U. S. Coast and Geodetic Survey triangulation intersection stations:

- ✓ BANGOR UNITARIAN CHURCH SPIRE, 1864, r. 1944
- ✓ BANGOR BRICK CHURCH, 1857, 1934, r. 1944
- ✓ +THOMAS HILL, HOUSE, CUPOLA, 1864
- ✓ BANGOR TANK FLAGPOLE, 1934, r. 1944
- ✓ SOUTH BREWER CHURCH SPIRE, 1864, r. 1944

42 U. S. Engineers triangulation stations:

- **TYDOL, 1937, r. 1944
- **CITY OIL, 1937, r. 1944
- HIGH HEAD, 1934, 1937, r. 1944
- **BANK, 1937, r. 1944
- MAINE CENTRAL, 1934, 1937, r. 1944
- *CONNOR, 1937
- *CARTER, 1937

26 CONTROL: (Continued)

**EASTERN SOUTH, 1937, r. 1944
 **LEEMAN, 1937, r. 1944
 **WOODMAN, 1937, r. 1944
 **STATION, 1937, r. 1944
 ✓ **NEW NARROWS, 1937, r. 1944
 ✓ NEAR WHARF, 1937, r. 1944
 ✓ **OLD 3, 1890, 1937, r. 1944
 ✓ **NEW SAND, 1937, r. 1944
 ✓ **NEW 7 PINE, 1934, 1937, r. 1944
 ✓ **OLD E, 1890, 1937, r. 1944
 ✓ **NEW ARCTIC, 1934, 1937, r. 1944
 ✓ *NEW PIER, 1937
 ✓ NEW WALL, 1934, 1937, r. 1944
 ✓ **NEW COVE, 1934, 1937, r. 1944
 ✓ **HOLE, 1934, 1937, r. 1944
 ✓ PILE, 1937, r. 1944
 ✓ *FERRACE, 1937
 ✓ *BOLT, 1934, 1937
 **DRILL, 1934, 1937, r. 1944
 ✓ *SKI, 1937
 ✓ **RAIN, 1937, r. 1944
 ✓ LEDGE, 1937, r. 1944
 ✓ **SLOPE, 1937, r. 1944
 ✓ **MILL, 1934, 1937, r. 1944
 **PULP, 1937, r. 1944
 **SOUTH BASE, 1937, r. 1944
 ** NORTH BASE, 1937, r. 1944
 MURRAY, 1937, r. 1944
 +TOWER, 1937, r. 1944
 **BLUFF, 1937, r. 1944
 *PLAY, 1937
 SUNSHINE, 1937, r. 1944
 CRIB, 1937, r. 1944
 **GARAGE, 1937, r. 1944
 **RAY, 1937, r. 1944

4 U. S. Geological Survey marked traverse stations:

+1144 A, 1942, RADIO TOWER WABI, (in extended limits)

T8, 1927, ¹⁹⁴² 1944 (B.M. established by the U. S.

C. & G. S. - Top gone - in extended limits)

WS RESET, 1934, 1942, r. 1944 (U.S.C. & G.S. bench marks)

✓ 1157, 1942, r. 1944

26 CONTROL: (Continued)

The following horizontal control stations fall just outside the revised limits of the Survey:

2 U. S. Geological Survey marked traverse stations:

TP 24 WCE, 1942, r. 1944
1332, 1942, r. 1944 (also U.S.C. & G.S. Bench Mark:
"DUNN, 1933")

1 U. S. Geological Survey unmarked traverse station:

+1326, Center of highway in line with road S.W., 1942

A copy of the "Identification Report" of the horizontal control for the area of Survey No. T-8042, as furnished by the Field Inspection Unit, is attached to this report.

- * Stations were not recovered in 1944
- ** Stations recovered in 1944, but were not identified on any of the photographs for reasons recorded on the pricking cards.
- + Stations identified by the Baltimore Compilation Office from furnished descriptions.
- ++ The area in which this station is located was not adequately covered by the nine lens photographs (Scale 1:10,000)
- *** Station incorrectly identified in 1944. See Side heading No. 27.

27 RADIAL PLOT:

The Map Drawing Projection and the unmounted photographs were prepared in the usual manner.

Two individual plots were laid for the area of the Survey by the usual radial method. No celluloid templates were used in laying the first plot, the photographs being oriented directly under the Map Drawing Projection. The results obtained from the first plot were unsatisfactory.

The photographs were then examined for differential, chamber, and tilt distortion. A small amount of differential distortion was found to exist in all of the photographs. Chamber No. 5 of photograph No. 6937 was distorted. Photograph No. 6937 is also tilted, but it is believed that the angle of tilt does not exceed three degrees. because of this latter fact, and because there were a

27 RADIAL PLOT: (Continued)

sufficient number of other photographs which contained no appreciable tilt, and which satisfactorily covered the area of the Survey, computations to determine the positions of the iso-center and plumb point of photograph No. 6937 were unnecessary.

Copies of the Master Templet were made on celluloid acetate sheeting which in turn were used to make templates of the photographs, correction for differential distortion being made in accordance with instructions.

A second plot was then laid. The templates were oriented on top of the Map Drawing Projection. The identified control listed under Side Heading No. 26 was used to control the templates.

Results

The control density, identification of the control and the number of photographs, were adequate.

All of the identified control except Triangulation Station THOMAS HILL, 1857, was "held to" satisfactorily. The radially plotted position of the drill hole recovered, and identified on field photograph No. 6936 as the station, by the 1944 Field Inspection Unit, is 87.7 meters southwest of the plotted geographic position of the station. The radially plotted position of the drill hole has been shown on the matte side of the Map Drawing Projection with a small double red acid ink circle, accompanied by a pertinent note.

The U. S. Coast and Geodetic Survey Triangulation Intersection Station THOMAS HILL, HOUSE, CUPOLA, 1864, was identified by the Baltimore Compilation Office from a description furnished by the 1944 Field Inspection Unit (station was not identified on the photographs by the Field Inspection Unit). Since the station as identified was "held to" satisfactorily in the plot, and since the existence of a cupola believed to be the station was verified by the Field Inspection Unit, the station should be considered recovered.

The positions of the selected secondary points (well defined points of detail) which were determined by an individual radial plot laid for the area of Survey No. T-8041 to the South, and which were common to Survey No. T-8042, were satisfactorily resected. Since the radial plot for the area of Survey No. T-8043

27 RADIAL PLOT: (Continued)

to the East has not yet been laid as of the date of this report, and since there are no contemporary surveys either to the West or North, resection of common secondary points along the eastern, western, and northern limits of Survey No. T-8042 need not be considered.

The positions of the selected secondary points and photograph centers determined by the second radial plot laid for the area of Survey No. T-8042 are believed to be within the limits of satisfactory accuracy.

The relatively strong radially plotted positions of secondary points have been shown on the glossy side of the Map Drawing Projection with small double blue ink circles, while the relatively weak positions of such points have been shown with small double green ink circles. The positions of the photograph centers have been shown with large blue ink circles, accompanied by their respective numbers.

Remarks

Since it was necessary to take into account existing differential and chamber distortion in the photographs, individual orientation of each chamber of each photograph is recommended by holding the position of the photograph centers appearing on the Map Drawing Projection and resecting the available control contained in the area of the chamber under consideration.

Side Headings Nos. 26 and 27
Respectfully Submitted,
August 17, 1944

Walter E. Schmidt,
Asst. Photogrammetric Engineer

28 DETAILING:

The compiled area of Map Drawing, Survey No. T-8042, is in accordance with the written instructions pertaining to Project No. CS-272. The planimetry has been detailed from unmounted nine-lens photographs, which were supplemented by the field inspection data.

The navigable bodies of water shown within the compiled area of the Survey, are portions of the Penobscot and Kenduskeag Rivers. The interior consists of a portion of the City of Bangor (congested urban district), all of the City of Brewer, Villages of South Brewer and East Hampden, numerous large wooded and grass areas, numerous cultivated areas, and a few small ponds.

The photographic coverage within the compiled area was adequate.

The furnished field inspection data were adequate unless otherwise noted in subsequent paragraphs of this report.

The scales of the photographs and the Map Drawing were in fair agreement. In areas where there was too great a difference in scale, detailing was accomplished by means of the vertical projector.

The radially plotted positions of the Recoverable Topographic Stations, temporary hydrographic stations, and detail points determined by the very good intersections of three or more radials have been shown with small, single, blue ink circles, on the glossy side of the Map Drawing. The positions of such points determined by either the intersection of two radials or the intersection of three radials having a small triangle of error, have been shown with small, single, green ink circles.

The positions of six bench marks have been determined by the radial plot and shown on the Map Drawing with black acid ink crosses. Their names have been lettered on either the Map Drawing or the accompanying overlay sheet close to their detailed positions. In addition, the elevations of all the bench marks except U. S. C. & G. S. bench marks K-89, 1942; L-89, 1942; and M-89, 1942, have been shown on either the Map Drawing or the overlay sheet. The elevations of the three bench marks just mentioned were not available to the Baltimore Compilation Office.

U-8
V-8
W-8 = Δ
Y-8

Added:
W-37 (79')

The classification of the planimetric details shown by notes lettered either on the Map Drawing or on the accompanying overlay sheet are in accordance with the field inspection data.

All roads appearing within the compiled area of the Map

28 DETAILING: (Continued)

Drawing are to be considered 0.6 mm. in width unless otherwise noted. Classification of the roads has been shown by notes lettered on the Map Drawing and is in accordance with the field inspection data. The names of the roads and streets appearing on the Map Drawing have been taken from a copy of the "Proposed Zoning Plan, City of Bangor, Maine". Trails have been shown on the Map Drawing with single dash, black acid ink lines accompanied by the note "Trail" lettered on the Map Drawing.

All public buildings appearing within the compiled area of the Survey have been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbols, accompanied by pertinent notes lettered either on the Map Drawing or on the accompanying overlay sheet. All other buildings (including those immediately adjacent to the Mean High-Water Line) except small out-buildings and those within the congested urban district of the City of Bangor (in a few buildings with large spreads in addition to public buildings have been shown) have been detailed in accordance with office interpretation of the photographs and shown on the Map Drawing with the conventional symbols.

The field inspection data pertaining to the drainage within the compiled area of the Survey were for the most part adequate, it being necessary to determine the location of only a few streams by stereoscopy. Such detail has been shown on the Map Drawing with the conventional symbols, accompanied by pertinent notes.

The limits of the areas of two ammunition dumps have been detailed in accordance with the field inspection data and shown on the Map Drawing with a full light weight black acid ink line, accompanied by the notes "No. 1" and "No. 2" lettered within their respective areas. Since it was believed that such areas might be considered of military importance, it was not thought advisable by the Baltimore Compilation Office to letter the note "Ammunition Dump" (recorded in the field inspection data) on either the Map Drawing or the Overlay Sheet.

The U. S. Government Property Line surrounding Dow Field (Bangor Airport) has been transferred from the U. S. Engineer's blue prints, File Nos. X100-30/244 and X100-30/65, by means of the vertical projector and has been shown on the glossy side of the Map Drawing with the conventional symbol drawn in red acid ink, accompanied by a pertinent note. The short dashed red acid ink line appearing on the glossy side of the Map Drawing has also been transferred from the above-mentioned blue prints and represents certain proposed construction, the character of which is unknown to the Baltimore Compilation Office. All other features pertaining to the airport have been detailed from the photographs.

29 SUPPLEMENTAL DATA:

The Field Inspection unit submitted two U. S. Engineer's blue prints (File No. X100-30/65 and File No. X100-30/244) and a copy of the "Proposed Zoning Plan, City of Bangor, Maine".

The U. S. Government Property Line which pertains to Dow Landing field and which has been shown on the Map Drawing, with the conventional symbol drawn in red acid ink, was transferred from the U. S. Engineer's blue prints by means of the vertical projector. The street and road names pertaining to the City of Bangor and which appear on the Map Drawing have been taken from the Zoning Ordinance Map.

30 MEAN HIGH-WATER LINE:

The Mean High-Water Line was detailed in accordance with the field inspection data and shown on the Map Drawing with a full heavy-weight black acid ink line. The outer limit of one small marsh area bordering the Mean High-Water Line, was detailed in accordance with office interpretation of the photographs and shown on the Map Drawing with a full light-weight black acid ink line. The included marsh area was shown with the conventional symbol. The light-weight line indicates that the edge of the bordering marsh area is visible at Mean High-Water.

A planetable survey was made by the Field Inspection unit to determine the correct position of the Mean High-Water Line along a portion of the southwest shore of the Kenduskeag River. For set-ups A and D and shots B, C, E, and F, and shots Nos. 1 to 15, inclusive, all of which have been shown on the Map Drawing with red acid ink circles accompanied by their respective letters or numbers and all of which pertain to the planetable survey, see Field Photograph No. 6936.

31 LOW-WATER AND SHOAL LINES:

The approximate position of the Mean Low-Water Line, as delineated by the field Inspection unit, has been detailed and shown on the Map Drawing with a dotted black acid ink line accompanied by the note "Approximate Position of Mean Low-Water". No definite position of the Mean Low-Water Line was identified by the Field Inspection unit.

No shoal areas have been shown along that portion of the Penobscot River and its tributaries contained within the compiled area of the Map Drawing, because none were distinguishable on any of the photographs, and because the Field Inspection unit did not furnish any data pertaining to such detail.

31-A FORESHORE DETAILS:

The foreshore details consist of grass-in-water areas, rocks, sand, and gravel. Such features have been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbols, accompanied by pertinent notes.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

In addition to the details discussed under the preceding Side heading, there are several cribbings and a log boom which are located just outside the Mean Low-Water Line. These features have been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbols, accompanied by pertinent notes. The extents to which they bare at Mean High-Water or Mean Low-Water have been shown by notes lettered on the Map Drawing in accordance with the field inspection data.

33 WHARVES AND SHORELINE STRUCTURES:

All shoreline structures located along both shores of the Penobscot River and its tributaries have been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbols, accompanied by pertinent notes. Such features as shown are piers, catwalks, bulkheads, retaining walls, marine railways, cribbings, and pipe lines.

34 LANDMARKS AND FIXED AIDS TO NAVIGATION:

Form No. 567 was previously submitted to the Washington Office on August 29, 1944, for the recommended new landmarks "STACK, BRICK (Tall, brick stack at the Eastern Manufacturing Company Plant in South Brewer)" which is also a Recoverable Topographic Station. *Am 624*

No new fixed aids to navigation were reported for charting by the Field Inspection unit for the compiled area of the Survey.

35 HYDROGRAPHIC CONTROL:

Seventy-three Hydrographic Control Stations were selected for the compiled area of the Survey by the Field Inspection unit. Of these, one is a Recoverable Topographic Station and the remaining seventy-two are temporary Hydrographic Stations. The positions of all the stations have been determined by the radial plot, and shown on the Map Drawing with $2\frac{1}{2}$ mm. black acid ink circles, accompanied

35 HYDROGRAPHIC CONTROL: (Continued)

by their numbers as assigned by the Field Inspection Unit. All of the stations have been numerically compiled in a descriptive list, two copies of which were submitted to the Washington Office on August 29, 1944. An additional copy is attached to this Report.

Form No. 524 was also submitted on August 29, 1944, for Recoverable Topographic Station No. 1003 - "Brick Stack, Eastern Manufacturing Company" (also a landmark).

36 LANDING FIELDS AND AERONAUTICAL AIDS:

A large landing field (Dow field - Bangor Airport) located just west of the City of Bangor, appears on the Map Drawing. For further discussion of the landing field, see Side Readings nos. 28 and 29.

A small private landing field (Doanes Field) just east of the village of South Brewer appears on the Map Drawing. The Field Inspection Unit reported that this landing field has been abandoned.

Forms nos. 524 and 567 are being submitted for the recommended new aeronautical aid, "Light on Tank", which is located in the immediate vicinity of Dow field.

37 JUNCTIONS:

A junction of the Mean High-Water Line, offshore details, and common interior planimetric details have been made with Map Drawing, Survey no. T-8041 to the south and is in excellent agreement. There are no contemporary surveys to the north, east, and west of the detail limits of the Map Drawing.

38 GEOGRAPHIC NAMES: 214✓

As instructed, no geographic names investigation for the area of the Survey was made by the Field Inspection Unit. The geographic names appearing on the Map Drawing are in accordance with the data obtained from Chart No. 311 and the United States Geological Survey, Maine - Bangor Quadrangle Map (15' series), and Maine - Orono Quadrangle Map (15' series). An alphabetical list of the geographic names appearing on the Map Drawing is attached to this Report.

39 TELEPHONE LINES AND POWER LINES:

A portion of a telephone line located just west of the City of Bangor has been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbol accompanied by a pertinent note.

Two power lines, one located approximately $1\frac{1}{2}$ miles east of the City of Brewer and the other located approximately 2 miles east of village of South Brewer have been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbol, accompanied by pertinent notes.

40 BRIDGES, RAILROAD UNDERPASSES AND OVERPASSES:

There are eleven bridges appearing on the Map Drawing which cross the navigable waters of the Penobscot and Kenduskeag Rivers. Data pertaining to these bridges have been lettered on either the Overlay Sheet or the Map Drawing and are in accordance with the recorded field inspection data. The data as published in the "List of Bridges over the Navigable Waters of the United States", revised to July 1, 1941, pertaining to the Maine State Highway bridge and the Maine Central Railroad bridge which cross the Kenduskeag River at Bangor and the Concrete Highway Bridge and the Maine Central Railroad bridge which cross the Penobscot River between the Cities of Bangor and Brewer, are in disagreement with the data as furnished by the Field Inspection Unit. Other published data furnished by the Field Inspection Unit pertaining to these bridges have been compiled in a list which is attached to this Report. No published data pertaining to the remaining seven bridges were available to the Baltimore Compilation Office.

Several other bridges over small streams have been detailed in accordance with the field inspection data and shown on the Map Drawing with the conventional symbol, accompanied by pertinent notes.

There are five railroad overpasses and one railroad underpass appearing on the Map Drawing. Of these, two were detailed in accordance with the field inspection data and the remaining four were detailed in accordance with office interpretation of the photographs.

41 POSITION ACCURACY OF DETAILS:

The detailed positions of the Mean High-Water Line, Recoverable Topographic Station, temporary Hydrographic Stations, Bench Marks, and all other planimetric details, appearing on the Map Drawing, are believed to be within the limits of satisfactory accuracy.

42 RECOMMENDATIONS FOR FUTURE SURVEYS:

The compiled area of the Survey is believed to be complete with respect to all details necessary for charting and the preparation of a planimetric map.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

U. S. Geological Survey, Maine, Bangor Quadrangle (15' series), Scale 1:62,500, edition of October 1902, reprinted 1942.

By visual comparison, the following differences were apparent.

More buildings, roads, trails, and drainage have been shown on the Map Drawing than appear on the quadrangle.

The Dow Landing Field (Bangor Airport) and the Bangor Air Base which has been shown on the Map Drawing does not appear on the quadrangle.

A road extending between approximately Latitude $44^{\circ} 47' 48''$ and Longitude $68^{\circ} 49' 15''$ to Latitude $44^{\circ} 48' 12''$ and Longitude $68^{\circ} 49' 22''$ appearing on the quadrangle is not fully shown on the Map Drawing because it crosses the western portion of the above-mentioned Dow Field.

The Air Base siding from the Maine Central Railroad, appearing on the Map Drawing, does not appear on the quadrangle.

The street system of the City of Bangor, as shown on the Map Drawing, is in disagreement with the quadrangle.

The shapes and number of piers and retaining walls along the Mean High-Water Line of the Penobscot and Kenduskeag Rivers, as appear on the Map Drawing, are in disagreement with those appearing on the quadrangle.

No fences or pipe lines appear on the quadrangle. Numerous fences and several pipe lines have been shown on the Map Drawing.

Two dams and the ruins of a third dam which have been shown on the Map Drawing do not appear on the quadrangle.

A small landing field (Doanes Field - now abandoned) which has been shown on the Map Drawing, just east of the village of South Brewer, does not appear on the quadrangle.

No gravel pits appear on the quadrangle. Several gravel pits have been shown on the Map Drawing, with the conventional symbol accompanied by pertinent notes.

44 COMPARISONS WITH EXISTING TOPOGRAPHIC QUADRANGLES: (Continued)

The concrete highway bridge which crosses the Kenduskeag River at the City of Bangor, just above the Maine Central Railroad bridge and which appears on the Map Drawing, does not appear on the quadrangle.

The Mean High-Water Line as shown on the Map Drawing is more irregular than it appears on the quadrangle.

No power lines appear on the quadrangle. A small portion of a power line appears on that part of the Map Drawing as covered by the above-mentioned quadrangle.

A telephone line in the vicinity of the village of West Bangor appearing on the Map Drawing does not appear on the quadrangle.

U. S. Geological Survey, Maine, Orono Quadrangle (15' series), Scale 1:62,500, edition of September 1902, reprinted 1942.

By visual comparison the following differences were apparent:

More buildings, roads, trails, and drainage appear on the Map Drawing than appear on the quadrangle.

The course of Felts Brook as shown on the Map Drawing is in disagreement with the course of the brook as it appears on the quadrangle.

The Mean High-Water Line as shown on the Map Drawing is more irregular than it appears on the quadrangle.

No power lines appear on the quadrangle. Two power lines have been shown on the Map Drawing with the conventional symbol.

A small pond at approximately Latitude $44^{\circ} 48' 24''$ and Longitude $68^{\circ} 44' 42''$ which has been shown on the Map Drawing does not appear on the quadrangle.

45 COMPARISON WITH NAUTICAL CHARTS:

Chart No. 311, Scale 1:40,000, published at Washington, D.C., June 1932, reissued June 1938, corrected to April 13, 1944.

A comparison of the charted details were made with those appearing on the Map Drawing by means of the vertical projector.

The charted position of the Mean High-Water Line was transferred from the above-mentioned chart and shown with a red translucent ink

45 COMPARISON WITH NAUTICAL CHARTS: (Continued)

line on the glossy side of the Map Drawing. Differences are apparent and no further discussion is necessary.

The number and position of the tracks in the Maine Central Railroad yards as shown on the Map Drawing are in disagreement with those appearing on the chart.

Only a portion of the streets and roads in the Cities of Bangor and Brewer and the Village of South Brewer appear on the chart. In so far as possible, all the roads and streets have been shown on the Map Drawing.

Three features (character unknown) appear on the chart at approximately Latitude $44^{\circ} 45' 18''$ and Longitude $68^{\circ} 48' 42''$. These features were not shown on the Map Drawing because there were no field inspection data furnished for them and their images were not visible on any of the photographs.

The log boom appearing on the chart extends further north than the detailed position of the same boom as shown on the Map Drawing.

Two floating aids to navigation, which appear on the chart, have not been shown on the Map Drawing.

More buildings, roads, trails, and drainage have been shown on the Map Drawing than appear on the chart.

A double full line road extending from approximately Latitude $44^{\circ} 45' 18''$ and Longitude $68^{\circ} 47' 42''$ to Latitude $44^{\circ} 45' 29''$ and Longitude $68^{\circ} 48' 06''$ which appears on the chart, is shown as a double dash line road on the Map Drawing.

Double full line roads appearing on the chart at approximately Latitude $44^{\circ} 45' 45''$ and Longitude $68^{\circ} 47' 12''$, Latitude $44^{\circ} 45' 39''$ and Longitude $68^{\circ} 47' 18''$, and Latitude $44^{\circ} 45' 25''$ and Longitude $68^{\circ} 47' 33''$, have not been shown on the Map Drawing because the images of the roads were not visible on any of the photographs and because no field inspection data were furnished for such detail.

Respectfully Submitted:
November 28, 1944

Florence M. Hammond
Florence M. Hammond
Asst. Photogrammetric Aid

Shoreline, Interior Planimetric
Details, and Compilation Report
Reviewed by:

Harry R. Rudolph
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Senior Photogrammetric Aid

Supervised by:

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Walter E. Schmidt
Asst. Photogrammetric Engineer

Approved and Forwarded:
December 1, 1944

Fred. L. Peacock
Fred. L. Peacock
Chief of Party, C. & G. Survey
Officer-in-Charge,
Baltimore Photogrammetric Office

GEOGRAPHIC NAMES

(Undisputed)

- ✓ • Bangor (City)
- ✓ • Brewer (City)
- ✓ • East Hampden (Village)
- ✓ • Felts Brook
- ✓ • Penobscot River
- ✓ • Sedgeunkedunk Stream
- ✓ • Souadabscook Stream
- ✓ • South Brewer (Village)
- ✓ • West Bangor (Village)
- ✓ • Kenduskeag River
- ✓ • Maine Central (several lines)
- U.S. No. 1 - U.S. 202 - State 9
- U.S. No. 2 - State No. 100.
- State No. 15
- ✓ • Seven Pine Point
- State No. 222
- U.S. No. 2 (NE of Bangor)
- State No. 9 178
- ✓ • Bangor Airport
Dow Field

Names preceded by • are
approved.

L. Heck
9/17/47

GEOGRAPHIC NAMES

GEOGRAPHIC NAMES

(Disputed)

• Kenduskeag River

Kenduskeag Stream

IDENTIFICATION REPORT
HORIZONTAL CONTROL
Survey No. T-3042

Name of Station	U.S.G.S. Quadrangle	Recovery Data	Pricking Data
Bangor Brick Church, 1857	Bangor	Recovered	Positive
Bangor Tank Flagpole, 1934	Bangor	Recovered	Positive
Bangor Unitarian Church Spire, 1864	Bangor	Recovered	Positive
Brewers Belfrey, 1864	Bangor	Lost	
Brewers Flagstaff, 1864	Bangor	Lost	
Chamberlin, 1864	Bangor	Lost	
Doane, 1864	Bangor	Not found	
Edmonds Steam Sawmill Chimney, 1864	Bangor	Lost	
High Head, 1864	Bangor	Lost	
Hink, 1864	Bangor	Not found	
Horseback, 1864	Bangor,	Lost	
Mayhews Steam Sawmill Chimney, 1864	Bangor	Lost	
South Brewer Church Spire, 1864	Bangor	Recovered	Positive
South Brewer, 1864	Bangor	Not found	
Stewart, 1864	Bangor	Not found	
Thomas Hill, 1857	Bangor	Not identified	Positive
Thomas Hill House Cupola, 1864	Bangor	Not identified	Not pricked
Thomas Hill Observatory, 1851	Bangor	Not found	
Pivot Bank (U.S.E.)	Bangor	Recovered	Not pricked**
Bluff (U.S.E.)	Bangor	Recovered	Not pricked**
Bolt (U.S.E.)	Bangor	Not found	
Breaker (U.S.E.)	Bangor	Not found	
Carter (U.S.E.)	Bangor	Not found	
City Oil (U.S.E.)	Bangor	Recovered	Not pricked**
Commer (U.S.E.)	Bangor	Not found	
Crib (U.S.E.)	Bangor	Recovered	Positive
Drill (U.S.E.)	Bangor	Recovered	Not pricked**
Eastern South (U.S.E.)	Bangor	Recovered	Not pricked**
Garage (U.S.E.)	Bangor	Recovered	Not pricked**

** No F.I.P.'s or Detail Points on these because of the great amount of control in area.

July 24, 1944

Lieutenant Dale E. Sturmer

IDENTIFICATION REPORT
HORIZONTAL CONTROL
Survey No. T-8042 (Continued)

Name of Station		U.S.G.S. Quadrangle	Recovery Data	Pricking Data
Goodwin	(U.S.E.)	Bangor	Lost	
High Head	"	Bangor	Recovered	Positive
Hole	"	Bangor	Recovered	Not pricked**
Ledge	"	Bangor	Recovered	Positive
Leeman	"	Bangor	Recovered	Not pricked**
Maine Central	"	Bangor	Recovered	Positive
Mill	"	Bangor	Recovered	Not pricked**
Murray	"	Bangor	Recovered	Positive
Near Wharf	"	Bangor	Recovered	Positive
New Arctic	"	Bangor	Recovered	Not pricked**
New Cove	"	Bangor	Recovered	Not pricked**
New Narrows	"	Bangor	Recovered	Not pricked**
New Pier	"	Bangor	Not found	
New Sand	"	Bangor	Recovered	Not pricked**
New Seven Pine	"	Bangor	Recovered	Not pricked**
New Wall	"	Bangor	Recovered	Positive
N. Base	"	Bangor	Recovered	Not pricked**
Old 3, 1890	"	Bangor	Recovered	Not pricked
Old E	"	Bangor	Recovered	Not pricked
Pile	"	Bangor	Recovered	Positive
Play	"	Bangor	Not found	
Pulp	"	Bangor	Recovered	Not pricked**
Railroad	"	Bangor	Lost	
Rain	"	Bangor	Recovered	Not pricked**
Ray	"	Bangor	Recovered	Not pricked
Ski	"	Bangor	Not found	
Slope	"	Bangor	Recovered	Not pricked**
S. Base	"	Bangor	Recovered	Not pricked
Standard	"	Bangor	Lost	
Station	"	Bangor	Recovered	Not pricked**
Stearns	"	Bangor	Lost	
Sunshine	"	Bangor	Recovered	Positive
Terrace	"	Bangor	Not Found	
Tower	"	Bangor	Recovered	Not pricked**
Tydol	"	Bangor	Recovered	Not pricked
Woodman	"	Bangor	Recovered	Not pricked
1157	"	Bangor	Recovered	Not pricked**
1303	"	Bangor	Recovered	Positive
1332	"	Bangor	Recovered	Positive

** No F.I.P.'s or detail points on these because of the great amount of control in area.

July 24, 1944

Lieut. Dale E. Sturmer

COAST OF MAINE
PROJECT NO. C.S. 272
SURVEY NO. T-8042

DESCRIPTIONS OF RECOVERABLE TOPOGRAPHIC STATIONS,
AND TEMPORARY HYDROGRAPHIC STATIONS WITHIN THE
AREA OF MAP DRAWING SURVEY NO. T-8042

NUMBER OF RECOVERABLE TOPOGRAPHIC STATIONS.....	2
NUMBER OF TEMPORARY HYDROGRAPHIC SIGNALS.....	<u>72</u>
TOTAL NUMBER OF STATIONS	74

Listed by: Florence M. Hammond
Florence M. Hammond

Checked by: Mary R. Moore
Mary R. Moore

- 922 North gable of white house with green trim. Has garage to north of house with green tar paper on roof and large lawn south of house with pine trees bordering edge of lawn.
- 923 South corner of log cribbing on west side of river.
- 924 East tip of ledge at High-Water Line on long gray ledge making out on west bank of river. Right above ledge there are camps and small shacks.
- 925 East tip of ledge on south side of crevice at High-Water Line.
- 940 Southwest corner of log cribbing. It has two 15' alder bushes growing on it with a lot more bushes that are smaller growing there, too.
- 941 Base of a 15' bush at foot of a large high ledge that is of a gray color. This bush is kind of set off by itself and leans out towards the South.
- 942 South gable of an old deserted home on south side of cove and is north of old sand pit. House has one chimney in center with barn attached to north end of house.
- 943 South corner of old log retaining wall at end of wall nearest conveyor.
- 944 Southwest corner of old log retaining wall that has heavy brush on it and a 30' poplar tree. A long stone wall is just south of retaining wall.
- 945 Southeast corner of old log retaining wall that is farthest offshore and directly offshore from Eastern Paper Company's smoke stack.
- 946 Southwest gable of a large white barn that is part of farm going with white house on hill on the west side of Main Street.
- 947 Northwest corner of log cribbing with a small 12' poplar tree on west side of cribbing. Two other cribbings lay between it and shoreline.

- 948 Southwest corner of cribbing with oil pipe extension outlet on end of it.
- 949 Southwest end of a sloping ledge that slopes down from the bank along shore.
- 950 Southwest gable of high 2-story white house back of main road. House has 2 chimneys and has a small garage and shed to the east of it.
- 951 Top of a dark colored rock in bight. This little cove is just south of large oil tanks across from M. C. R.R. round house.
- 952 West gable of large building at junk yard.
- 953 Top of octagon brick chimney on "Atlas Auto Parts" shop.
- 954 Top of the cupola on a slate-roofed gray church with a weather vane on top.
- 955 Top of a square brick stack that is the boiler stack of a lumber company.
- 956 Base of a silver 20' birch tree on side of hill. There is a sand pit north of tree a few hundred feet.
- 957 Tall 60' elm tree just on brush line and shoreline. This towers above other tree and is quite easy to distinguish.
- 958 Top of a large boulder that just lies west of an old tree stump. There are several others and this one is the larger of them.
- 959 Northwest gable of a stone house on hill directly across the river from Eastern Maine Hospital. House has 1 chimney and a tree growing up on the west side of house.
- 960 Base of a 40' pine tree that has another large trunk growing out from it about 4' from base of tree.
- 961 West gable of a little brown house on shoreline and it has a red roof on it. There is a flagpole just south of it.

- 962 Northwest gable of little gray shack at east end of dam.
- 963 Top of smoke stack on Water Department.
- 964 Top of smoke stack on Eastern Maine General Hospital.
- 965 Base of a 20' bush growing along beside the banking of the railroad track.
- 966 Center of a very small log cribbing that has a little brush growing on it.
- 967 Center of the inshore log cribbing that lies just offshore at bend in the railroad track, where there is a railroad block light system.
- 968 Southeast gable of a white house with a low shed attached on it. There is a hedge running around the house, also a large oak tree in front yard.
- 969 The control box on side of railroad track. Box is about 5' X 3' and is right beside a light system for "high head" curve.
- 970 South tip of grass on patch of grass making out from side of track to the east.
- 971 Northeast gable of switch control shack at side of railroad track.
- 972 North face of center tier on High-Water Line of railroad bridge between Bangor and Brewer.
- 973 South face of center tier on highway bridge between Bangor and Brewer.
- 974 South end of ice fender of railroad bridge by Union Station that is on the south side of bridge.
- 975 North end of ice fender of railroad bridge by Union Station.
- 976 South face of east pier at High-Water Line.
- 977 Southwest corner of Bijou Theater.

- 978 East gable of "Peoples Fish Market," the large building.
- 979 Base of 20' flagpole with weather vane on top of it. This is on the bank building.
- 980 West end of ice breaker at west end of cement bridge in canal at High-Water Line.
- 981 Top of a square brick stack.
- 982 Southwest gable of yellow house with small tree in back yard.
- 983 Northwest corner of log retaining wall.
- 984 Southwest gable of small shed at water's edge. Red bottom and black tar paper roof.
- 985 Top of round brick stack at mill. "Morris Lumber Company."
- 986 Northwest end of small island in channel. A cribbing.
- 987 Southwest corner of small cribbing just north of last one.
- 988 Southwest face of stone abutment in center of old covered bridge. The abutment has an iron ring about on High-Water Line.
- 989 Large boulder in channel just below the dam. Largest boulder in vicinity.
- 990 Center of switch shack with pyramidal roof.
- 991 Small round bush to the east of a larger bush at banking of railroad track.
- 1003 "Brick Stack, Eastern Manufacturing Company." Station is the tall, brick stack at the Eastern Manufacturing Company plant in South Brewer. Stack is the tallest one in the vicinity. (Recoverable Topographic Station and Landmark.) *fm. 524*
- 1004 Northeast corner of retaining wall at south side of entrance to Kenduskeag River.

- 1005 Southwest corner of retaining wall around earth pier.
- 1006 Southwest corner of cribbing at coal pier.
- 1007 Southwest corner of earth pier with cribbing just south of it.
- 1008 Southeast corner of retaining wall.
- 1009 Northeast gable of building on north side of inshore end of Tydol Oil Co. pier.
- 1010 Northeast corner of retaining wall.
- 1011 Northwest corner of large cribbing with small cribbing on east side.
- 1012 Northeast corner of southerly of two earth piers. Oil tanks directly west of pier.
- 1013 East gable of building with cylindrical storage tanks in a horizontal position on the south side of it.
- 1014 Southeast corner of ruins of earth pier.
- 1015 Northwest corner of cribbing (second down stream from Tydol Oil Co. wharf.)
- 1016 Flagpole in Eastern Steamship Wharf.
- 1017 Southwest corner of large building close to High-Water Line. Cribbing is west of south end of building.
- 1018 Corner at slight break in retaining wall.
- 1019 South corner of offshore cribbing.

"LIGHT ON TANK". The station is a light on top of a tall tank, approximately $\frac{1}{2}$ mile east of the Bangor Airport, Dow Field. Station is an aeronautical aid. *fm 524*

The following bridge, railroad overpass, and railroad underpass data were copied from blue prints (List of Maine State highway and railroad bridges) furnished by the Field Inspection Unit. The blue prints are on file in the Baltimore Photogrammetric Office. The original source of the following data is unknown.

Town	Location	Bridge	Stream	Built	Substructure Type Cond.	Superstructure Type Cond.
Bangor	1.4 mile S. of Washington St. Br.	Tin bridge underpass	Maine Central railroad			
Bangor	In City near MCHRR Station	Washington	Kenduskeag Stream	1930	Concrete Good	Steel I Beams Good
Bangor-Brewer	1/4 mi NE of out- let Kenduskeag St.	Bangor-Brewer	Penobscot River		Stone-Conc Good	Steel trusses I Beams Good
Bangor	0.1 mile E. of intersection of Main Street	State Street	Kenduskeag Stream	1890	Stone Good	Steel I beams Good

No.	Spans Length	Road ways	Pavement	Clearance vert. horiz.	underclearance above stream bed.	Approaches	H Rating	Remarks
3	2-30'-0" 1-32'-0" Bascule not operating	1	Concrete and Asphalt Flank	14' 2 lane 40'-0"	23 feet	Concrete Concrete	16	floor concrete & Wood F.F.abutments 100'
1 & 2 3 4 5 6 7	53'-3" 103'-0" 62'-5" 217'-0" 217'-7" 222'-10"	1	Wood block Asphalt Flank	18' 29' -2 1/2"	38 feet	Concrete	13	Wood floor F.-F.abutments 887' - 8"
2	Pier 50' wide betw. 37'-3"- F-F. abuts. 124' - 6"	1	bit. concrete	48' - 9"	23 feet	Bit. Concrete	15	

Division of Photogrammetry

Review Report of

Planimetric Survey, Manuscript No. T-8042

December 1946

Paragraph numbers not used in this review have been adequately covered in other parts of this report.

26. Control.-

One U. S. Geological Survey traverse station, No. 1148 (U.S.C. & G.S. B.M. T-8) which was plotted on the manuscript was removed by the reviewer because the field inspection recovery card reported that the monument had been broken and therefore should be considered lost.

It was impossible during review to check the U.S.E. horizontal control on this sheet as all horizontal control data for project 272-D had been sent to the field and had not been returned at the time of review.

29. Supplemental Data.-

None of the supplemental data for this sheet, mentioned in the compilation report, were available to the reviewer as it had been sent to the field and had not been returned to this office.

The field inspection report was not available to the reviewer for the same reason.

44. Comparison with Existing Topographic Quadrangles.-

A visual comparison was made between this sheet (T-8042) and sheet T-1434, 1876, scale 1:10,000, which it supersedes in all common respects.

A visual comparison was made between this sheet (T-8042) and U. S. Geological Survey, "Bangor, Me." quadrangle (15' series) scale 1:62,500, edition of 1902, reprinted 1942. Discrepancies between these sheets are adequately discussed in the compilation descriptive report.

45. Comparison with Nautical Charts.-

A visual comparison was made between this sheet (T-8042) and nautical chart No. 311, scale 1:40,000. The discrepancies between these sheets are adequately discussed in the compilation descriptive report.

This survey has not been applied to the nautical charts.

Reviewed by:

Reviewed under direction of:

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Photogrammetrist

S. V. Griffith
Chief, Review Section

APPROVED BY:

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