

5966

Diag'd. on diag. ch. No. 1204-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Air PhotographicField No. _____ Office No. T-5966

LOCALITY

State MaineGeneral locality Coast of MaineLocality Cathance River, Muddy River, Androscoggin River, and Merrymeeting Bay1943

CHIEF OF PARTY

Fred. L. Peacock

LIBRARY & ARCHIVES

DATE Mar 24 - 1948

DATA RECORD

T- 5966

Quadrangle (II):

Bath (15') Maine

Field Office:

U. S. C. & G. S.

Bath, Maine

Compilation Office:

Air Photographic Party No. 2

Baltimore, Maryland

Instructions dated (II III):

January 12, 1942 and

April 1, 1942

Project No. (II): CS-272

Part of Sub-Project No. CS-272-B

Chief of Party:

Lieut. Henry O. Fortin

Chief of Party:

Fred. L. Peacock

Copy filed in Descriptive

~~Report No. T-~~ (VI)

Div. Photogram Office Files

Completed survey received in office: 25 Sept. 1943

Reported to Nautical Chart Section: ✓

Reviewed: 24 Sept. 1945

Applied to chart No. 314

Date: 9 Sept. 1946

Redrafting Completed: 26 Nov. 1947

Registered: ^{July} ~~8 Jan~~ 1948

Published: Shoreline (vault copy)

Compilation Scale: 1:10,000

Published Scale: 1:10000

Scale Factor (III): None

Geographic Datum (III): North American 1927

Datum Plane (III): Mean Sea Level

Reference Station (III): SPRAGUE, 1855, r.1913, 1933, r.1942

Lat.: 43° 58' 31.314" 966.5m Long.: 69° 54' 04.678" 104.3m ^{Adjusted}
~~Unadjusted~~

State Plane Coordinates (VI):

X = 569,858,15

Y = 416,367.35

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
*6752	10/17/41	12:06p.m.	1:10,000	3.7' above M. L. W.
*6753	10/17/41	12:07p.m.	1:10,000	3.7' above M. L. W.
*6722	10/17/41	11:06a.m.	1:10,000	4.4' above M. L. W.
*6723	10/17/41	11:07a.m.	1:10,000	4.4' above M. L. W.
*6724	10/17/41	11:08a.m.	1:10,000	4.4' above M. L. W.
*6725	10/17/41	11:09a.m.	1:10,000	4.4' above M. L. W.
**6776	10/17/41	12:28p.m.	1:10,000	3.9' above M. L. W.
**6777	10/17/41	12:29p.m.	1:10,000	3.9' above M. L. W.
**6778	10/17/41	12:29p.m.	1:10,000	3.9' above M. L. W.
**6779	10/17/41	12:30p.m.	1:10,000	3.9' above M. L. W.
**6780	10/17/41	12:31p.m.	1:10,000	3.9' above M. L. W.

Tide from (III); Predicted tables, reference station Portland, Maine with time correction to *Pleasant Point, Androscoggin River, Me., and **Bowdoinham, Cathance River, Maine
Mean Range: *Pleasant Point - 4.7' Spring Range: *Pleasant Point-5.3' Maine
**Bowdoinham - 5.5' **Bowdoinham - 6.3'

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

Field Inspection by: Lieut. Henry O. Fortin date: Fall, 1942

Field Edit by: date:

Date of Mean High-Water Line Location (III);

October 17, 1941

Projection and Grids ruled by (III) John C. O'Neill date: February 18, 1943

" " " checked by: John C. O'Neill date: February 18, 1943

Control plotted by: I. Scott Poehlman date: February 23 to February 24, 1943

Control checked by: Donald M. Brant date: June 4, 1943

Radial Plot by: Donald M. Brant & Abraham L. Goncharsky date: June, 1943

Detailed by: Mary R. Moore (Shoreline-rough draft) date: June to Sept., 1943

Reviewed in compilation office by: Harry R. Rudolph date: Aug. to Sept., 1943

Elevations on Field Edit Sheet checked by: date:

STATISTICS (III)

Land Area (Sq. Statute Miles): None

Shoreline (More than 200 meters to opposite shore): $7\frac{3}{4}$ Statute Miles

Shoreline (Less than 200 meters to opposite shore): 14.0 Statute Miles measured
along centerline

Number of Recoverable Topographic Stations established: 7 by radial intersection

Number of Temporary Hydrographic Stations located by radial plot: 41

Leveling (to control contours) - miles: none

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:

26 CONTROL:

The control plotted and control transferred from adjoining Map Drawings consists of seventeen (17) U. S. Coast & Geodetic Survey triangulation stations, six (6) U. S. Engineers triangulation stations, and thirteen (13) U. S. Geological Survey traverse stations. The triangulation and traverse stations have been shown by the conventional triangulation symbol.

The following control stations are within the detail limits of Map Drawing, Survey No. T-5966:

Eight (8) U. S. Coast & Geodetic Survey Triangulation Stations

- ✓ **SEDGELY, 1871, no recovery in 1942
- ✓ **POPLAR, 1871, no recovery in 1942
- ✓ **SPRAGUE, 1855, r.1913, 1933, r.1942
- ✓ **CAMP, 1871, no recovery in 1942
- ✓ **ARARAT, 1933, r.1942
- ✓ **MT. ARARAT FIRE LOOKOUT TOWER, 1933, r.1942
- ✓ **TATE, 1854, (not covered by photography)
- ✓ **FRY, 1871, (no recovery in 1942)

Five (5) U. S. Geological Survey Traverse Stations:

- ✓ **2039+, 1940
- ✓ **2035+, 1940
- ✓ **2028 same as 1842, 1940
- ✓ **1852, 1940
- ✓ **1876, 1940, r.1942

The following control stations fall within the extended northern limits of Map Drawing, Survey No. T-5966:

Two (2) U.S.Coast & Geodetic Survey Triangulation Stations:

- ✓ ✓ ***BOWDINHAM, WHITE SPIRE, 1860, partial recovery in 1942
(Old foundation recovered)
- ✓ ✓ ***BOWDINHAM, BROWN SPIRE, 1860, r.1942

✓ One (1) U. S. Geological Survey Traverse Station:

- ✓ **TT61BT, 1940, same as 2086, 1941, r.1942

The following control stations fall just outside the detail limits of Map Drawing, Survey No. T-5966, in addition to those previously listed within the extended Northern limit:

Seven (7) U.S.Coast & Geodetic Survey Triangulation Stations:

- **SENER, 1871, no recovery in 1942
- ***HOUSE CHIMNEY IN CENTER, 1860, (Chimney destroyed) partial recovery in 1942. (Foundation of chimney found)
- **BRICK, 1871, recovery in 1942 believed to be incorrect.
- **BUCKNER, 1860, 1933, r.1942
- **HUNTER, 1860, r.1942
- **BLUFF, 1871, no recovery in 1942
- **ANT, 1871, no recovery in 1942

✓ = within limits of delineated area.

26 CONTROL: (cont'd)

Six (6) U. S. Engineers Triangulation Stations:

**KELLEY, r.1942
**CENTER, 1940, r.1942
**KENNEY, 1940, r.1942
**ANDROS, 1940, r.1942
**MAIN, 1940, r.1942
**ALDERS, r.1942

Seven (7) U. S. Geological Traverse Stations:

*1884, 1940, r.1942
**1887, 1940, r.1942
*TT59BT, 1940, same as 2043
*TT60BT, 1940, same as 2063-A, 1941, r.1942
*2073+, r.1942
*2075+, 1941, r.1942
*2090+, 1941, r.1942

*The positions of these control stations were plotted from geographic coordinates on the Map Drawing and have been shown with full line black acid ink triangles.

**The positions of these control stations were plotted on adjoining Map Drawings from geographic coordinates and transferred to Map Drawing, Survey No. T-5966. These stations were shown with full line red acid ink triangles.

***The position of this control station was plotted on Map Drawing, Survey No. T-5966 from geographic coordinates and has been shown with a dashed-line black acid ink triangle.

****The position of this control station was plotted on adjoining Map Drawing, Survey No. T-5975 and transferred to Map Drawing, Survey No. T-5966 and has been shown with a dashed-line red acid ink triangle.

The latter two notations apply to control stations which have been only partially recovered because the original objects which were the stations were destroyed and the approximate locations of old foundations were identified and recommended by the Field Inspection Party to be used with caution in the radial plot.

27 RADIAL PLOT:

N.B.: Refer to report on the combined radial plot for the areas of Surveys Nos. T-5966 and T-5967, which has been submitted as an appendix to the Descriptive Report for Map Drawing, Survey No. T-5967.

28 DETAILING:

The shoreline and immediate adjacent culture have been detailed on the Map Drawing in accordance with the Director's letters dated January 12, 1942, and April 1, 1942; pertaining to Project No. CS-272. The area of Survey No. T-5966 is a part of sub-Project No. CS-272-B.

The number of photographs was sufficient for detailing the shoreline and immediate adjacent culture, and such detail has been shown with the conventional topographic symbols, recommended by the Washington Office. Where it was necessary to deviate from the conventional symbols, descriptive notes were shown on the Map Drawing or Overlay Sheet.

The Field Inspection Party did not submit any data to assist the compiler in identifying bluffs along the shoreline. Therefore, they were detailed according to stereoscopic examination of the office photographs. Since their character, whether rock or soil, could not be determined satisfactorily by stereoscopy, the bluffs were shown with a dirt bluff symbol.

A few houses along the shoreline were not shown on the Map Drawing because they could not be clearly identified on any of the photographs, due to vegetation, and stereoscopic examination did not definitely reveal their location.

The shoreline and interior culture of Freyer Island was detailed directly from the Field Inspection photograph.

No classification of roads adjacent to the shoreline was submitted by the Field Inspection Party. Therefore, the roads shown on the Map Drawing have been classified by this compilation office and such classification may be incorrect. Future investigation is recommended. There were a few roads which could not be detailed and shown on the Map Drawing because their location on the photographs was generally obscured by vegetation.

The general character of the shoreline shown on the Map Drawing is marshy, except in the vicinity of the town of Bowdoinham in which the shoreline (Mean High-Water) consists mainly of firm ground. There are also large grass-in-water areas shown on the Map Drawing, which are off-shore from the Mean High-Water Line. There are also a few islets off-shore from the Mean High-Water Line.

The extent to which the islets bare at Mean High-Water has been shown by notes on the Overlay Sheet.

30 MEAN HIGH-WATER LINE:

The Mean High-Water Line (firm ground) has been shown by a full heavy-weight black acid ink line, the center of which should be taken as the true position. The limits of marsh areas, bordering the Mean

30 MEAN HIGH-WATER LINE: (cont'd)

High-Water Line, have been shown with a full light-weight black acid ink line, wherever such limits were clearly definable on the photographs. However, where these limits were not clearly definable, and where a gradual change from marsh to grass-in-water was apparent, the full light-weight black acid ink line was omitted and these areas were symbolized in accordance with field memorandum No. 1 (1938).

31 LOW-WATER AND SHOAL LINES:

The approximate limits of grass-in-water areas, bordering the Mean High-Water Line (firm ground) have been detailed on the Map Drawing in accordance with the Field Inspection data, and the approximate limits have been shown with the conventional symbol. These approximate limits which are for the use of hydrographic parties only, should not be accepted as the Low-Water Line.

32 DETAILS OFFSHORE FROM HIGH-WATER LINE:

Grass-in-water areas, a stone abutment, islets, etc., offshore from the Mean High-Water Line, have been shown in accordance with the Field Inspection data. The area known as Merrymeeting Bay shown on the Map Drawing, consists mainly of grass-in-water.

Other discussion of offshore detail appears in Paragraph No. 28.

33 WHARVES AND SHORELINE STRUCTURES:

A wharf, bridges, cat-walks, etc., have been shown on the Map Drawing in accordance with the Field Inspection data. Descriptive notes have been shown on the Overlay Sheet or the Map Drawing, calling attention to such structures.

34 LANDMARKS AND AIDS TO NAVIGATION:

There were neither landmarks nor aids to navigation recommended by the Field Inspection Party for the area of Survey No. T-5966.

35 HYDROGRAPHIC CONTROL:

The positions of seven (7) recoverable topographic stations (two of which are also bench marks) have been radial plotted on the Map Drawing. They have been shown with purple ink circles on the glossy side, and with $2\frac{1}{2}$ mm. full-line black acid ink circles on the dull side. The two bench marks have been shown with a black acid ink "X", inside $2\frac{1}{2}$ mm. black acid ink circles.

50. LOW-WATER LINE (cont'd)

High-water line, have been shown with a full 11 ft. weight black solid ink line, whereas other limits were clearly delineated on the process-
graph, however, where these limits were not clearly delineated, and
where a gradual change from marsh to grass-in-water was apparent, the
full 11 ft. weight black solid ink line was omitted and grass areas were
symbolized in accordance with Field Memorandum No. 1 (1935).

51. LOW-WATER AND HIGH-WATER LINES

*The positions & numbers of these 41 stations ^{were} have been placed on
the vault copy at time of registration. The descriptive
note for each station is on the map manuscript.*

The approximate limits
shown with the field inspection data, and the approximate limits
have been shown with the conventional symbol. These approximate limits
which are for the use of hydrographic parties only, should not be ac-
cepted as the low-water line.

52. DETAILS OBSERVED FROM HIGH-WATER LINE

Grass-in-water areas, a stone abutment, jetty, etc., observed
from the High-Water Line, have been shown in accordance with the
field inspection data. The area known as "Grass-in-water" shown on
the map drawing, consists mainly of grass-in-water.

Other discussion of offshore details appears in Memorandum No. 26.

53. WETLANDS AND SHALLOWS

A wharf, bridge, cut-walk, etc., have been shown on the map
drawing in accordance with the field inspection data. Descriptive
notes have been shown on the Overlay Sheet or the map drawing, call-
ing attention to such structures.

54. LANDMARKS AND AIDS TO NAVIGATION

There were neither landmarks nor aids to navigation recommended
by the field inspection party for the area of Survey No. T-300.

55. HYDROGRAPHIC CONTROL

The positions of seven (7) recoverable topographic stations (two
of which are also bench marks) have been radiolabeled on the map
drawing. They have been shown with purple ink circles on the glassy
side, and with 2 mm. white-line black solid ink circles on the dull side.
The two bench marks have been shown with a black solid ink "X" inside
Some black solid ink circles.

35 HYDROGRAPHIC CONTROL: (cont'd)

The numbers or names, and descriptions of the recoverable topographic stations have been shown on the Overlay Sheet. The note "Recoverable topographic station" has also been shown on the Overlay Sheet. The names and elevations above Mean Low-Water of the bench marks, if known, have been shown on the Map Drawing, in conjunction with the notation "Recoverable topographic station".

← The positions of forty-one (41) temporary hydrographic stations have been radial plotted and they have been shown with purple or green ink circles on the glossy side of the Map Drawing, indicating relatively strong and weak positions respectively. They have been shown on the dull side of the Map Drawing with 2 $\frac{1}{2}$ mm black acid ink circles. The descriptions of the temporary hydrographic stations have been shown on the Overlay Sheet.

The descriptions, sketches, and scaled geographic positions of the following seven (7) recoverable topographic stations have been submitted on Form No. 524:

Seven (7) Recoverable Topographic Stations:

- 1982, Unmarked station site, at juniper patch on the Southwest corner of old bridge head at east side of channel, near North end of Freyer Island.
- 2023, Northeast gable of large grey bark near square white house on hilltop, on West bank of river, and just East of State Highway No. 24.
- 2033, Unmarked station site, top of high part of grey rock ledge North of brush patch. Ledge is about 250 meters Northeast of Pleasant Point on the West side of the bay.
- 2041, Tall brick stack on North bank of river and just before crossing bridge on State Highway No. 24 going towards East Bowdoinham.
- 2056, Signal Tower No. 359, just North of head of small bight, and on the East side of the Maine Central Railroad line running into Bowdoinham.
- *Tidal Bench Mark, No.1, 1871, elevation 8.29' above mean-low-water. ~~Bench Mark (U.S.G.S.)~~
- Bench Mark (U.S.G.S.)

*Elevation is based on 41 Low-Waters August 16 to September 6, 1871.

36 GEOGRAPHIC NAMES: 814✓

A special report has been submitted to the Washington Office by Lieut. Comdr. Henry O. Fortin on the investigation of geographic names in the area between Latitudes 43° 27.8' and 43° 50', and Longitudes 69° 30' and 70° 22.4'. The report includes part of the area of Map Drawing, Survey No. T-5966.

A list of geographic names is submitted herein.

The numbers of names, and descriptions of the topographic features, have been shown on the Overlay sheet. The names and elevations shown on the Overlay sheet, if known, have been shown on the Overlay sheet. The names and elevations shown on the Overlay sheet, if known, have been shown on the Overlay sheet.

Review Report says: "This not done, as sheet T-5465 is now inactive."

"T5465 has not been compiled" The names and elevations shown on the Overlay sheet, if known, have been shown on the Overlay sheet. The names and elevations shown on the Overlay sheet, if known, have been shown on the Overlay sheet.

The descriptions, sketches, and noted geographic positions of the following seven (7) topographic stations have been submitted on form No. 524:

- Station (7) topographic stations:
- 1982, Unmarked station site, at timber patch on the southwest corner of old bridge near east side of channel, near north end of Meyer Island.
- 2022, Northwest angle of large gray belt near square white house on hilltop, on west bank of river, and just east of State Highway No. 24.
- 2033, Unmarked station site, top of high bank of gray rock ledge north of brush patch. Ledge is about 250 meters northeast of Pleasant Point on the west side of the bay.
- 2041, Tall brick stack on north bank of river, and just before crossing bridge on State Highway No. 24 going towards East Bowdoinham.
- 2050, Signal tower No. 353, just north of head of small brook and on the east side of the Maine Central Railroad line running into Bowdoinham.
- *Signal tower No. 1, 1071, elevation 6.29, above mean low water.
- Bench mark (U.S.G.S.)

Elevation is based on 11 low water August 16 to September 6, 1971.

36 GEOGRAPHIC NAMES:

A special report has been submitted to the Station Office by Lieut. Comdr. Henry G. Tustin on the investigation of geographic names in the area between latitudes 43° 27.8' and 43° 50', and longitudes 69° 30' and 70° 32.4'. The report included part of the area of map drawing Survey No. 1-5502.

A list of geographic names is submitted herein.

37 JUNCTIONS:

Junctions of shoreline and immediate adjacent culture were made with Map Drawings, Surveys Nos. T-5975 and T-5967, which are East and South, respectively, of Map Drawing, Survey No. T-5966. The junctions are in excellent agreement.

The detail of the planimetry on Map Drawing, Survey No. T-5965, which is to the North of Map Drawing, Survey No. T-5966, has not been started and no junction was possible at this time.

There is no contemporary survey to the West of Map Drawing, Survey No. T-5966.

39 RECOMMENDATIONS FOR FUTURE SURVEYS:

The planimetry shown on the Map Drawing is believed to be complete in all details of importance for charting, and no additional surveys are recommended.

It is believed that the probable error in the positions of radial points and well-defined objects along the shoreline is not greater than 1.0mm.

43 BRIDGES OVER NAVIGABLE WATERS:

Eight (8) bridges have been detailed and shown on the Map Drawing and all data, generally required by the Washington Office as to vertical clearances, horizontal clearances, types, and load limits, as submitted by the Field Inspection Party of 1942, have been shown by notes on the Map Drawing. *See remarks in Review Report.*

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Bath Quadrangle, (15') Maine, U.S.G.S. Scale 1:62,500; edition 1894; reprinted 1940.

Because of the difference in scale between the Map Drawing and the above mentioned quadrangle, planimetric detail could not be readily compared. In general, however, planimetry common to both, is in fair agreement, except for the following:

The shoreline of the Cathance River has changed considerably.

The "Muddy River" has widened.

At approximately Latitude 43° 56' 23" and Longitude 69° 53' 50", a bridge leading to Freyer Island from the mainland, as shown on the quadrangle, has not been shown on the Map Drawing. However, the remains of

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES: (cont'd)

one stone abutment, as detailed and shown on the Map Drawing, partially identifies the position of the bridge which formerly existed.

At approximately Latitude $43^{\circ} 56' 35''$, and Longitude $69^{\circ} 53' 00''$ an island has been shown on the Map Drawing which does not appear on the quadrangle.

45 COMPARISON WITH NAUTICAL CHARTS:

Chart No. 314; scale 1:40,000; published February, 1935; reissued July, 1938; corrected to March 23, 1943.

Planimetric detail could not be readily compared because of scale differences. However, the planimetry of two small areas whose positions are approximately Latitude $43^{\circ} 58' 20''$ and Longitude $69^{\circ} 52' 15''$, and Latitude $43^{\circ} 57' 05''$ and Longitude $69^{\circ} 52' 05''$ have been detailed and shown on the Map Drawing. These two small areas do not appear on Chart No. 314. Other planimetry common to both is in fair agreement.

Respectfully submitted,
September 23, 1943

Mary R. Moore
Mary R. Moore
Photogrammetric Aid

Compilation and Descriptive
Report Reviewed by:

Harry R. Rudolph
Harry R. Rudolph
Sr. Photogrammetric Aid

Supervised by:

Walter E. Schmidt
Walter E. Schmidt
Asst. Photogrammetric Eng.

Approved & Forwarded:
September 24, 1943

Fred. L. Peacock
Fred. L. Peacock, Chief
Air Photographic Party No. 2

REVIEW REPORT
Shoreline Map T-5966
Cathance River & Vic., Me.

Paragraph numbers not used are adequately covered in the Descriptive Report.

26. CONTROL Eight of the sixteen triangulation stations listed in the Descriptive Report fall within the delineated area of T-5966. They have been check-marked on that listing.

27. RADIAL PLOT The radial plot is within the limits of required accuracy, though the removal of the inked radial points on the map manuscript, and the scale difference between the photographs and the base map made it difficult to make a good test.

28. DETAILING Field inspection was scanty; and delineation was sometimes faulty.

35. HYDROGRAPHIC & TOPOGRAPHIC CONTROL (See also page 8 of the Descriptive Report) Thirty-six additional temporary signal sites were picked and located on the photographs and manuscript by personnel of the Washington Office at the request of the hydrographic survey party.

44. COMPARISON WITH PREVIOUS HYDROGRAPHIC & TOPOGRAPHIC SURVEYS

H-6960	1944	<i>T 1214 (6871) 1:10 000</i>	
H-6961	1944		
U.S.G.S. Bath	1941 (ed. 1945)	1:62,500	
U.S.G.S. Gardiner	1941 (ed. 1943)	1:62,500	

All the common features on the above surveys are superseded by this survey (T-5966) in their common areas. *Topographic and maps*

This map has not been applied to Nautical Charts as of the date of this report.

This report has been compiled from notes made by the reviewer. L.T.S.

Reviewed by:

Reviewed under direction of:

H. W. Thune
24 September 1945

R. M. Berry
R. M. Berry
Chief, Review Section

Approved by:

B. G. Jones 2/48
Technical Assistant to the
Chief, Div. of Photogrammetry

K. T. Adams
Chief, Div. of Photogrammetry

H. R. Rutenburg
Chief, Nautical Chart Br.
Division of Charts

C. K. Green
Chief, Division of Coastal
Surveys

LIST OF GEOGRAPHIC NAMES

Undisputed

- Androscoggin River
- Bowdoinham (town)
- Cathance River
- Freyer Island
- Muddy River
- Merrymeeting Bay
- Pleasant Point
- Maine Central
- State No. 24

Names preceded by • are
approved. L. Heck
9/24/47

GEOGRAPHIC NAMES

NAUTICAL CHARTS BRANCH

SURVEY NO. T 5966

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.