

8037

Diag'd. on Diag. Ch. No. 1203 & 311

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Air Photo.

Field No. CS-272-D Office No. T-8037

LOCALITY

State Maine

General locality Coast of Maine

Locality Penobscot Bay-River -
Stockton Harbor-Fort Point Cove

1941-'44

CHIEF OF PARTY

F.L. Peacock

LIBRARY & ARCHIVES

DATE June 2, 1949

B-1870-1 (1)

8037

DATA RECORD
Map Drawing, Survey
No. T- 8037

Quadrangle (II): Castine, Maine, (15' Series)
Northwestern Portion

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

Field Office:
Air Photographic Party No. 2

Chief of Party: *Dale E. Sturmer*
~~Fred. L. Peacock~~

Compilation Office:
Baltimore Photogrammetric Office

Chief of Party: Fred. L. Peacock

Instructions dated (II III):

April 1, 1942, and April 20, 1943

March 18, 1944-28 MRC 1990 (Supplemental Instructions)

April 11, 1944-28 MRC 1990 (Supplemental Instructions)

Completed survey received in office: *29 Sept. 1944*

Copy filed in Descriptive
Report No. ~~T~~ (VI)

Div. of Photogram. Office Files

Reported to Nautical Chart Section:

Reviewed: *17 Dec. 1945*

Applied to chart No.

Date:

~~Redrafting Completed:~~

Registered: *29 March 1948*

Published: *Shoreline (vault copy only)*

Compilation Scale: 1:9,740

~~Published Scale: 1:10000~~

Scale Factor (III): 1:02669

Geographic Datum (III): N. A. 1927

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

Reference Station (III): CAPE JELLISON, 1861, 1934, r. 1944

Lat.: 44° 27' 08.141" 251.3m Long.: 68° 51' 12.948" 286.3m ~~Adjusted~~
~~Unadjusted~~

State Plane Coordinates (VI): *East Zone*

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
6877-6878	10-19-41	10:33 A.M.	1:10,000	10.5' above M.L.W.
6915-6916	10-19-41	11:38 A.M.	1:10,000	7.7' above M.L.W.
6954	10-19-41	12:31 P.M.	1:10,000	5.0' above M.L.W.
6975-6977	10-20-41	1:22 P.M.	1:10,000	4.8' above M.L.W.
6983-6984	10-20-41	1:38 P.M.	1:10,000	4.0' above M.L.W.
7240-7241	10-21-41	10:44 A.M.	1:10,000	12.3' above M.L.W.

Tide from (III): Tide Tables, Atlantic Ocean, 1941. Reference Station, Portland, Maine, with corrections to Fort Point, Maine.

Mean Range: 10.3'

Spring Range: 11.8'

Camera: (Kind or source) U. S. Coast and Geodetic Survey nine lens camera (focal length $8\frac{1}{2}$ "). All negatives are on file in the Washington Office.

Field Inspection by: Lieutenant Dale E. Sturmer date: Spring, 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 photographs taken on October 19, 20, and 21, 1941, supplemented by field inspection data.

Projection and Grids ruled by (III) J.T. - B.R.C. date: 6-28-44

" " " checked by: M.U.P. - D.L. date: 7-5-44

Control plotted by: Florence M. Hammond date: 7-7-44

Control checked by: J. E. Sunderland date: 7-8-44

Radial Plot by: Walter E. Schmidt date: 7-14-44

Michael M. Misulia -(Shoreline - Rough Draft) 7-18-44, -44
Detailed by: Ruth M. Whitson - (Adjacent Detail) date: 8-22-44 to 9-16-44

Reviewed in compilation office by: James E. Sunderland date: 7-44
Harry R. Rudolph 9-44

Elevations on Field Edit Sheet
checked by: date:

STATISTICS (III)

Land Area (Sq. Statute Miles): $3\frac{1}{4}$

Shoreline (More than 200 meters to opposite shore): 18 Statute Miles

Shoreline (Less than 200 meters to opposite shore): 1/2 Statute Mile
Measured along the center line.

Number of Recoverable Topographic Stations established: * 21 by Radial Plot.

Number of Temporary Hydrographic Stations located by radial plot: 106

Leveling (to control contours) - miles: None.

Number of Bench Marks located by the Radial Plot: **4

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: * Four of these are also Bench Marks.

** These are also Recoverable Topographic Stations.

26 CONTROL:

There are eleven horizontal control stations appearing on the Map Drawing for Survey No. T-8037. Of these, five are U. S. Coast and Geodetic Survey triangulation stations (three of which are identified by F.I.P.), four are U. S. Coast and Geodetic Survey triangulation intersection stations, and two are U. S. Geological Survey triangulation stations (one of which is also a U. S. Coast and Geodetic Survey Bench Mark).

The following horizontal control stations lie within the detail limits of the Survey:

Three (3) U. S. Coast and Geodetic Survey Triangulation Stations:

- WEBSTER, 1863 (No recovery in 1944)
- CAPE JELLISON, 1861, 1934, r. 1944 (F.I.P. "Jel")
- PENOBSCOT, 1872, 1934, r. 1944 (F.I.P. "Pen")

Four (4) U. S. Coast and Geodetic Survey Triangulation Intersection Stations:

- FORT POINT L. H. , 1862, 1934, r. 1944
- FORT POINT LEDGE BEACON, 1911, 1934, r. 1944
- SANDY POINT, HOUSE CHIMNEY, 1863, r. 1944
- STOCKTON SPRINGS, UNIVERSALIST CHURCH SPIRE, 1934, r. 1944
(Also Landmarks).

Two (2) U. S. Geological Survey Triangulation Stations:

- TT10 PBK, 1942, r. 1944 (Permanent Traverse Mark)
- 1955 - 1942, r. 1944 (Permanent Traverse Mark)
- Also "X 18, 1933, U.S.C. & G. Survey Bench Marks.

The following two (2) U. S. Coast and Geodetic Survey triangulation stations lie just outside the detail limits of the Survey:

- LITTLE BALL, 1861, 1934, r. 1944 (F.I.P. "Ball")
- SANDY POINT, 1863, 1934, r. 1944 (Not used)

The triangulation stations were shown on the Map Drawing with the conventional triangulation symbol, while the Field Inspection Points were shown with small black acid ink squares.

A copy of the Identification Report of the horizontal control within the area of the Survey, as furnished by the Field Inspection Unit, is attached to this report.

27 RADIAL PLOT:

For a discussion of the radial plot, see "Special Descriptive Report" on the Radial Plots for the areas of Surveys Nos. T-8014, T-8015, T-8018, T-8019, T-8036, and T-8037, submitted July 26, 1944, and is now included in Descriptive Report T-8014.

28 DETAILING:

The shoreline and immediate adjacent detail appearing on the Map Drawing have been shown in accordance with instructions, and the field inspection data.

The number and the distribution of the photographs were satisfactory for office detailing. The scales of the Map Drawing and photographs were in good agreement, however, it was necessary to use the vertical projector to complete the detail in a few places where the ground has considerable elevation.

The field inspection data were adequate for the compilation of the Mean High-Water Line, the approximate position of the Mean Low-Water Line, and the offshore areas, but were not fully complete for the adjacent interior detail. The majority of the roads were not classified by the Field Inspection Unit. These roads were shown with double full, double dash, or single dash lines, in accordance with the classification of such features, as determined by the Baltimore Compilation Office.

The drainage immediately adjacent to the shoreline, within the area of the Survey, was not fully investigated by the Field Inspection Unit, and has been shown on the Map Drawing as interpreted by the Baltimore Compilation Office.

The main bodies of water within the area of the Survey are portions of the Penobscot River, Penobscot Bay, Stockton Harbor, and all of Fort Point Cove. The shorelines of these waters are mainly backed by brushy earth bluffs five (5) to thirty (30) feet in height.

The original western limit of the Map Drawing for Survey No. T-8037 has been moved eastward from Longitude $68^{\circ} 52' 30''$ to Longitude $68^{\circ} 52' 00''$ between Latitude $44^{\circ} 26' 15''$ and Latitude $44^{\circ} 28' 00''$. This was done in order to include all the shoreline and immediate adjacent detail of Sears Island south of Latitude $44^{\circ} 28' 00''$ and north of Latitude $44^{\circ} 26' 15''$ on Map Drawing, Survey No. T-8018. The above limits have been shown on the glossy side of the Map Drawing for Survey No. T-8037 with a washable red ink line.

The radially plotted positions of recoverable topographic stations, temporary hydrographic stations and detail points, all of which are considered relatively strong, have been shown on the glossy side of the Map Drawing with small blue ink circles.

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 approximate outer limits of rocky foreshore bordering the Mean High-Water Line have been detailed in accordance with the field inspection data, examination of the nautical charts covering the area of the Survey, and office interpretation of the photographs. The Baltimore Compilation Office believes that the Field Inspection Unit failed to distinguish between foreshore consisting of large rocks and boulders, and foreshore consisting of rock ledge. Such features have been shown on the Map Drawing with the conventional symbols accompanied by appropriate notes. *Rocks?*

31 LOW-WATER AND SHOAL LINES:

The approximate position of the Mean Low-Water Line was detailed in accordance with the field inspection data and shown on the Map Drawing with a dotted black acid ink line accompanied by the note "Approximate position of Mean Low-Water Line".

The Field Inspection Unit did not submit any data concerning shoal areas and none were visible on any of the photographs within the area of the Survey, which could be detailed with any certainty.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

The details offshore from the Mean High-Water Line consist of rocks and boulders, stones, a fish trap, and a wreck. 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. The extent to which these features bare at Mean High-Water or Mean Low-Water, as indicated by the Field Inspection Unit, have been lettered on the Map Drawing. ✓

The position of one of the rocks has been determined by a sextant fix. This rock has been shown on the Map Drawing with the conventional symbol accompanied by pertinent notes. A copy of the list of sextant angles submitted by the Field Inspection Unit and which were used in determining the position of the rock, is attached to this report.

33 WHARVES AND SHORELINE STRUCTURES:

The existence of all piers, cribbing, docks, and all other shoreline structures appearing on the Map Drawing have been verified by the Field Inspection Unit.

34 LANDMARKS, FIXED AIDS TO NAVIGATION AND AERONAUTICAL AIDS:

One new Fixed Aid to Navigation "BELL TOWER AT FORT POINT" was recommended for charting by the Field Inspection Unit. The radially plotted position of this Fixed Aid to Navigation has been shown on the Map Drawing with a $2\frac{1}{2}$ mm. black acid ink circle, accompanied by the note "Fixed Aid to Navigation". Form No. 567 was submitted on July 28, 1944. *Filed under Ch. Letter 543-'44 in Mount. Ch. Sect.*

Two previously charted Fixed Aids to Navigation "FORT POINT LEDGE BEACON" (same as the triangulation station "FORT POINT LEDGE BEACON 1911, 1934, r. 1944") and "FORT POINT LIGHT" (same as the triangulation station "FORT POINT L.H. 1862, 1934, r. 1944") are shown on the Map Drawing with the conventional triangulation symbol, accompanied by the note "Fixed Aid to Navigation". Form No. 567 will not be submitted as the positions of these Fixed Aids to Navigation have been previously determined by triangulation by the Bureau.

One previously charted landmark "CHURCH SPIRE" (same as the triangulation station "STOCKTON SPRINGS, UNIVERSALIST CHURCH SPIRE, 1934, r. 1944") is shown on the Map Drawing with the conventional triangulation symbol, accompanied by the note "Landmark". Form No. 567 will not be submitted, as the position of the landmark has been previously determined by triangulation by the Bureau.

No new landmarks or Aeronautical Aids were recommended by the Field Inspection Unit for the area of the Survey.

35 HYDROGRAPHIC CONTROL:

The hydrographic control selected by the Field Inspection unit for the area of the Survey consists of twenty-one Recoverable Topographic Stations and one hundred and six temporary Hydrographic Stations. The positions of these stations have been determined by the radial plot and are shown on the Map Drawing with $2\frac{1}{2}$ mm. black acid ink circles, accompanied by their descriptions.

Form No. 524 was submitted on July 28, 1944, for each of the

35 HYDROGRAPHIC CONTROL: (Cont'd.)

following seventeen Recoverable Topographic Stations:

<u>Number</u>	
146	Center of South Headwall of Culvert
151	Southwest Gable Railroad Station
175	Largest Boulder, Cape Jellison
187	Top Center of Pyramidal Roof on House
198	Largest Boulder, Fort Point Cove
205	Brick Stack
206	Northeast Gable, Two-Story House
214	Northeast Gable, Red Cottage
221	East Gable One-Story Cottage
228	Center of Pavilion Roof
234	Southwest Corner of Bridge
252	Bell Tower at Fort Point
499	North End of Culvert
508	West Gable, House
516	North Gable White Cottage
523	North Gable unpainted Barn
525	Southwest Gable Fish House

Form No. 524 is being submitted for each of the following four Recoverable Topographic Stations:

*No Name (Monal Metal Rivet (CWA) 1935)
0.1 miles E. of Stockton Springs
(State of Maine, CWA, Bench Mark)

*No Name (Monal Metal Rivet (CWA) 1935)
0.4 miles E. of Stockton Springs
(State of Maine, CWA, Bench Mark)

*Monument No. 220 (CWA) 1935 (Maine State Traverse Station
and Bench Mark)

*Monument No. 221 (CWA) 1935 (Maine State Traverse Station
and Bench Mark)

* Station too far inland to be of much value for hydrographic control.

37 JUNCTIONS:

Satisfactory junctions of shoreline and immediate adjacent details were made with Map Drawing, Surveys Nos. T-8018 to the west, T-8038 to the north, and T-8036 to the south.

~~T-8046 on the east - inland detail (not submitted).~~

37 JUNCTIONS: (Cont'd.)

The area at the junction with Map Drawing, Survey No. T-8046 to the east has not been compiled as of the date of this report and consists entirely of interior land area. No junction need be considered.

38 GEOGRAPHIC NAMES: 84 ✓

As instructed, no geographic name investigation was submitted by the Field Inspection Unit for the area of the Survey. The geographic names shown on the Map Drawing were obtained from published data available to this Compilation Office.

An alphabetical list of the undisputed geographic names appearing on the Map Drawing is attached to this report. There are no disputed geographic names.

39 RECOMMENDATIONS FOR FUTURE SURVEYS:

The compilation of this Map Drawing is believed to be complete with respect to all detail necessary for charting. The position of the planimetric details is believed to be within the limits of satisfactory accuracy.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

U. S. Geological Survey Castine, Maine, (15' series), Scale 1:62,500, edition 1943.

Because of the large differences in scale between the Map Drawing and the Quadrangle, planimetric details could not be readily compared. The following differences, however, were apparent:

Fort Point Ledge as indicated on the Map Drawing at approximately Latitude $44^{\circ} 27' 38''$ and Longitude $68^{\circ} 48' 39''$ does not appear on the quadrangle.

Swamp areas along the eastern shoreline of Penobscot River north of Morse Cove appear on the quadrangle. They are not visible on any of the photographs and have not been detailed in the Map Drawing. The field inspection data did not indicate that swamp areas existed at these locations.

The quadrangle indicates a double dashed line road on Wilson Point. This road does not appear on the Map Drawing

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES: (Cont'd.)

as no field inspection data were submitted and its image was not visible on any of the photographs.

A double dashed line road east of Stockton Harbor on Cape Jellison, as shown on the quadrangle, appears on the Map Drawing as a single dashed line road. No field inspection data were submitted.

A quadrangle shows several double full line roads and a single dashed line road north of Stockton harbor which have been detailed as double dashed line roads on the Map Drawing. No field inspection data were submitted.

A double dashed line road shown on the quadrangle to the north of Fort Point Cove does not appear on the Map Drawing as no field inspection was submitted and its image was not visible on any of the photographs.

A double full line road, as shown on the quadrangle, on the southeastern section of Cape Jellison has been detailed on the Map Drawing as a double dashed line road. No field inspection data were submitted.

A double dashed line road at Fort Point, Cape Jellison, as shown on the quadrangle, has been detailed on the Map Drawing as a single dashed line road. No field inspection data were submitted.

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.

Because of the scale difference between the Map Drawing and the above-mentioned chart, comparison of small planimetric details could not be readily made. By visual comparison, however, the following differences were apparent:

Small islets appearing on the chart to the N.W. of Cape Jellison and S.W. of Cape Junction in Stockton Harbor are not shown on the Map Drawing. No field inspection data were submitted for them nor are they visible on the photographs.

Several wharves, piers, and shoreline structures shown on the chart are either detailed on the Map Drawing as ruins or their images were not visible on the photographs.

45 COMPARISON WITH NAUTICAL CHARTS: (Cont'd.)

A railroad yard which is shown on the Map Drawing at Cape Junction does not appear on the chart.

A railroad which is shown on the chart to continue across the bridge from Cape Junction to Cape Jellison, along the east shoreline of Stockton Harbor, does not appear on the Map Drawing. Instead, a single dashed line road is shown on the Map Drawing in the approximate location of the railroad.

The chart shows several double full line roads to the north of Stockton Harbor, to the north of Fort Point, and on Cape Jellison which are detailed on the Map Drawing as double dashed line or single dashed line roads. No field inspection data were submitted.

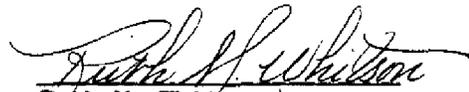
A double full line road, as shown on the chart to the north of Morse Cove, appears on the Map Drawing as a double dashed line road.

Respectfully Submitted:
September 19, 1944



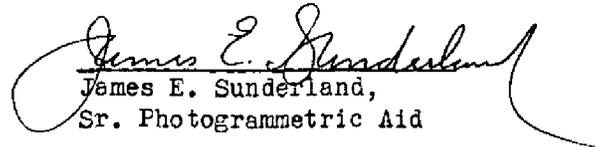
Michael M. Misulia,
Jr. Topographic Engineer

and



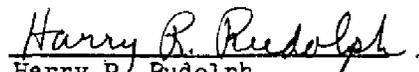
Ruth M. Whitson,
Sr. Engineering Draftsman

Compilation of Shoreline and
Offshore Detail, Reviewed By:



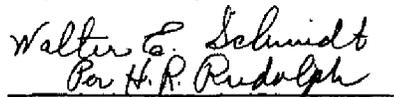
James E. Sunderland,
Sr. Photogrammetric Aid

Compilation of Adjacent Interior
Detail and Report Reviewed By:



Harry R. Rudolph,
Sr. Photogrammetric Aid

Supervised By:


Per H. R. Rudolph

Walter E. Schmidt,
Asst. Photogrammetric Engineer

Approved and Forwarded:
September 21, 1944



Fred. L. Peacock,
Chief of Party, C. & G. Survey

GEOGRAPHIC NAMES

(Undisputed)

- Cape Jellison .
- Cape Junction. (Locality)
- Clements Brook .
- Fort Point .
- Fort Point Cove .
- Fort Point Ledge .
- Morse Cove .
- Penobscot Bay .
- Penobscot River .
- Sandy Point .
- Stockton Harbor .
- Stockton Springs. (vg.)
- Squaw Head .
- Squaw Point .
- West Penobscot .
- Wilson Point .

Names preceded by • are
approved.

L. Heck

9/19/47

GEOGRAPHIC NAMES

SEXTANT FIX LOCATION OF A ROCK APPROXIMATELY ONE MILE
NORTH OF MORSE COVE, MAP DRAWING,
SURVEY No. T-8037

<u>Station Set Up on</u>	<u>Measured Angle Between Hydrographic Stations</u>	<u>Observed Angle</u>
Rock	499 and 510	91° 19'
	510 and 233	92° 14'
	223 and Fort Point Bell Tower	65° 00'

June 23, 1944

Lieutenant Dale E. Sturmer

IDENTIFICATION REPORT
HORIZONTAL CONTROL
Survey No. T-8037

<u>Name of Station</u>	<u>U.S.G.S. Quadrangle</u>	<u>Recovery Data</u>	<u>Pricking Data</u>
Bowden's Red House Chimney, 1863	Castine	Not Identified	
Cape Jellison, 1861	Castine	Recovered	Positive
Cape Jellison House Chimney, 1911	Castine	Lost	
Fort Point Beacon, 1863	Castine	Lost	
Fort Point Ledge Beacon, 1911	Castine	Recovered	Positive
Fort Point Lighthouse, 1862	Castine	Recovered	Positive
Little Ball, 1861	Bluehill	Recovered	Positive
Monument No. 220 (C.W.A.)	Castine	Recovered	Positive
Monument No. 221 (C.W.A.)	Castine	Recovered	Positive
Penobscot, 1872	Castine	Recovered	Positive
Sandy Point House Chimney, 1863	Castine	Not Identified	Positive
Sandy Point, 1863	Bucksport	Recovered	*Not pricked
*A church spire is in the immediate vicinity and would have to run traverse to F.I.P.			
Stockton Church Spire, 1862	Castine	Recovered	Positive
Stockton Springs Universalist Church Spire, 1934 (Same as Stockton Church Spire, 1862 listed directly above)			
Stockton Harbor, Eastside, Yellow Tank, 1911	Castine	Lost	
U.S.G.S., 1955	Castine	Recovered	Positive
U.S.G.S. TP-10 PBK 1942	Castine	Recovered	Positive
Webster, 1863	Castine	Not Found	

June 9, 1944

Lieutenant Dale E. Sturmer

62

DIVISION OF PHOTOGRAMMETRY
Review Report of
Shoreline Map Manuscript T-8037

Subject numbers not used in this review report have been adequately covered in other parts of the descriptive report or do not apply.

28. FIELD INSPECTION AND DELINEATION

Field inspection was inadequate for both inland and off-shore detail. Drainage, trails, roads, vegetation and forest cover were interpreted stereoscopically; and rocks, rocky areas, and rock ledges were delineated from available low tide photographs.

The image of what appears to be a fort at Fort Point (Photograph No. 6915) has been outlined in red ink on the map manuscript during review. This feature was not field inspected and does not appear on the nautical chart or quadrangle covering this area.

"Fort Point Ledge" is shown with the ledge symbol, because the area bares considerably at mean low water. This feature needs further investigation by the hydrographic party.

43. COMPARISON WITH PREVIOUS TOPOGRAPHIC SURVEYS

T-1329	1/10000	1872-3
T-1357b	1/10000	1874
T-1377	1/10000	1874

The present survey supersedes the older surveys for their areas common, except for contours, fences, and inland drainage.

46. APPLICATION TO CHARTS

This survey has not been applied to nautical charts as of the date of this review.

Reviewed by:

R. French
Ross French, Dec. 1945 *K.H.M.*

Under the direction of

A. V. Griffith
Chief, Review Section *K.H.M.*

APPROVED BY:

B. J. Jones
Technical Assistant to the
Chief, Div. of Photogrammetry

H. C. Edmonston
Chief, Nautical Charts Branch,
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Div. of Coastal Surveys