

5954

Diag'd. on Diag. Ch. No. 1205

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Air Photographic

Field No. CS-272 Office No. T-5954

LOCALITY

State Maine

General locality Coast of Maine

Locality Saco Bay - Nonesuch River - Old Orchard Beach

194 3

CHIEF OF PARTY

F.L. Peacock & C.D. Meaney

LIBRARY & ARCHIVES

DATE April 14 - 1949

B-1870-1 (1)

5954

DATA RECORD

T- 5954

Quadrangle (II): ~~Portland (15') Maine~~

Project No. (II): CS-272

Sub-project CS-272-B

Field Office:

Ship "SS. LYDONIA"

Chief of Party:

Lieut. Comdr. C. D. Meaney

Compilation Office:

Air Photographic Field Party No. 2

Baltimore, Maryland

Chief of Party:

Fred. L. Peacock

Instructions dated (II III);

1/12/42 & 4/1/42

Copy filed in Descriptive

Report No. T- (VI)

Div. Photogram. Office Files

Completed survey received in office: 10 Aug. 1943

Reported to Nautical Chart Section:

Reviewed: 11/26/43

Applied to chart No.

Date:

Redrafting Completed: 1 March, 1945

Registered: *March 1949*
7 May, 1948

Published: Aug. 1946

Compilation Scale: 1:9,645

Published Scale: 1:10000

Scale Factor (III): 1.0368

Geographic Datum (III): N.A. 1927

Datum Plane (III): *M H W*
~~Mean Sea Level~~Reference Station (III): OLD ORCHARD STANDPIPE, (~~also OLD ORCHARD TANK, "OR"~~)✓ 1923, ~~r. 1941, r. 1942~~ N.A. 1927 datumLat.: 43° 30' 48.392" 1493.5m Long.: 70° 23' 23.481" 527.4m *Adjusted*
~~Unadjusted~~State Plane Coordinates (VI): *Maine, West Zone*

X = 440,791.76 ft

Y = 247,959.69 ft.

Military Grid Zone (VI)

Not shown

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
6633	10/17/41	9:26a.m.	1:10,000	7.4' above M. L. W.
6634	10/17/41	9:26a.m.	1:10,000	7.4' above M. L. W.
6635	10/17/41	9:27a.m.	1:10,000	7.3' above M. L. W.
6636	10/17/41	9:27a.m.	1:10,000	7.3' above M. L. W.
6637	10/17/41	9:29 a.m.	1:10,000	7.2' above M. L. W.
6638	10/17/41	9:29a.m.	1:10,000	7.2' above M. L. W.
6663	10/17/41	9:56a.m.	1:10,000	6.4' above M. L. W.
6664	10/17/41	9:57a.m.	1:10,000	6.4' above M. L. W.
6665	10/17/41	9:58a.m.	1:10,000	6.3' above M. L. W.

Tide from (III): Predicted Tide Tables, Reference station Portland, Maine, with corrections to Old Orchard Beach

Mean Range: 8.8'

Spring Range: 10.1'

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
Under supervision of Lieut. Comdr. C. D. Meaney,
Commanding Officer of the ship "S.S. LYDONIA"

date: Fall, 1942

Field Edit by: None

date:

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

October 17, 1941

Projection and Grids ruled by (III) C.H.R.-Washington Office
" " " checked by: W.D.H.-Washington Office

date: October 9, 1942

date: October 9, 1942

Control plotted by: Walter E. Schmidt

date: May, 1943

Control checked by: Walter E. Schmidt

date: May, 1943

Radial Plot by: Walter E. Schmidt

date: May, 1943

Detailed by: Harriet H. Moritz (Shoreline & Interior-rough draft)

date: June 1, 1943 to August 30, 1943

Reviewed in compilation office by: James E. Sunderland

date: July, August, Sept., 1943

Elevations on Field Edit Sheet
checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 18 square Statute Miles

Shoreline (More than 200 meters to opposite shore): $8\frac{1}{2}$ Statute Miles

Shoreline (Less than 200 meters to opposite shore): 9 Statute Miles

Number of Recoverable Topographic Stations established: 13

Number of Temporary Hydrographic Stations located by radial plot: 17

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:

26 CONTROL:

See memorandum by K T Adams in the appendix.

The control plotted on the Map Drawing consists of twelve (12) U. S. Coast & Geodetic Survey triangulation stations. They have been shown with the conventional triangulation symbol.

The following control stations fall within the detail limits of the Map Drawing:

Six (6) U. S. Coast & Geodetic Survey Triangulation Stations:

- ✓ *SACO HILL, 1868, (Recovery in 1942 *Considered lost* believed to be incorrect)
- ✓ **BLUE POINT HILL, SOUTH CHIMNEY, 1860 (Chimney gone, partial *lost 1942* recovery in 1943)
- ✓ "HAR" OLD ORCHARD HOTEL FLAGPOLE, 1923, r.1942 *Destroyed, 1943* *Removed from ms.*
- ✓ OLD ORCHARD STANDPIPE, (also OLD ORCHARD TANK "OR") 1923, r.1941, r.1942
- ✓ SCARBORO GREEN STANDPIPE, 1928, r.1941, r.1942
- ✓ SCOTTOWAY, L. WATER HOUSE, 1852 (recovery in 1942 doubtful) *lost 1942*
- * *Hard, 1942 (plotted)* *Is not the same, but was lost 1912.*
*BLUE POINT HILL, 1850, is believed to be the same station as SACO HILL, 1868. The name of the triangulation station, BLUE POINT HILL, 1850, has not been shown on the Map Drawing.

**Shown with a dashed triangle on the Map Drawing.

The following control stations fall just outside the detail limits of the Map Drawing:

Six (6) U. S. Coast & Geodetic Survey Triangulation Stations:

PROUTS NECK STANDPIPE, 1941, r.1942
PROUTY, 1905, (No recovery in 1942)
PROUT NECK, LIBBY HOUSE CHIMNEY, 1850, r.1942
(Identification of station in doubt by Field Inspection party due to alterations.)
+HENNIWELL'S HOUSE CHIMNEY, 1852 (No recovery in 1942)
W C S H NORTHEAST RADIO TOWER, 1941 (No recovery by Field Inspection party of 1942--image of tower pricked by this Compilation Office on the office photographs.
W C S H SOUTHWEST RADIO TOWER, 1941 (No recovery by Field Inspection party of 1942--image of tower pricked by this Compilation Office on the office photographs.

+Spelled "HENNIWELL'S", Special Publication No. 46, page 139.
Spelled "HENNEWELL'S", Special Publication No. 46, index page 272.

** Established for the purpose of running a test traverse. An unadjusted station.*

27 RADIAL PLOT:

In November 1942, a combined radial plot was at first laid for the areas of Surveys Nos. T-5954 to T-5956, inclusive, by the radial celluloid template method. The section of the plot covering the area of Survey No. T-5956 laid well, but difficulty was encountered in the areas of Surveys Nos. T-5954 and T-5955.

The control in the areas of Surveys Nos. T-5954 and T-5955 was investigated, and it was obvious that horizontal discrepancies existed in the triangulation, established in 1905 and 1923. The difficulties were discussed with the Washington Office by Comdr. Fred. L. Peacock, Chief, Air Photographic Party No. 2; and permission was granted to defer acceptance of the plot for the areas of Surveys Nos. T-5954 and T-5955 until a later date.

On April 6, 1943, the Washington Office furnished a list of revised positions (field computations) for all the triangulation stations established in 1905, and 1923, except for the triangulation stations "LONG BARN CUPOLA, 1923", and "PROUTY, 1905".

The positions of all the triangulation stations established in 1905 and 1923, which had been plotted on Map Drawing, Survey No. T-5954 as of October, 1942; were replotted in accordance with the furnished revised (field computation) geographic coordinates. An individual radial plot was then laid for the area of Survey No. T-5954. No celluloid templates were used.

The number of photographs and identification of the control were adequate. However, the number of control stations was inadequate. At least one additional well-defined control station was necessary in the northwest corner of Map Drawing, Survey No. T-5954.

All of the triangulation stations recovered and definitely identified in 1942 were used to control the plot, and their positions were held to within a satisfactory degree of accuracy. The two triangulation stations "NORTHEAST AND SOUTHWEST RADIO TOWERS OF RADIO STATION W C S H", whose positions were determined in 1941, (No recovery in 1942) were clearly definable on the office photographs, and were held to in the plot.

The following stations were not definitely identified by the Field Inspection party:

BLUE POINT HILL, SOUTH CHIMNEY, 1860 (Chimney gone--recommended photograph position by the Field Inspection party was held to in the radial plot. The station which should be considered lost has been shown with a dashed black acid ink triangle on the Map Drawing.)


SACO HILL, 1868 (Recovery in 1942 believed to be incorrect. The station could not be held to within approximately 5.0mm in the radial plot.)

Removed
Removed

27 RADIAL PLOT: (cont'd)

"POLE", POLE ON EAGLE ISLAND (Recovery in 1942 doubtful.) Station could not be held to within approximately 5.0mm in the radial plot.

Not in detail limits

SCOTTOWAY, L. WATER HOUSE, 1852; Cupola on barn was thought to be the station by the Field Inspection party. However, it could not be held to in the plot. Two Chimneys on a house in the immediate vicinity held within approximately 2.0mm in the plot. No definite proof by photocompilation that the station still exists. It is recommended that the station which has been shown by a  Removed dashed black acid ink triangle on the Map Drawing be considered lost.

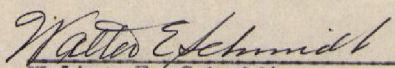
Satisfactory junctions were made with the positions of secondary points, previously established on Map Drawing, Survey No. T-5955 to the east of Map Drawing, Survey No. T-5954.

The radial intersections of the secondary and minor detail points in the areas well covered by photography were very good, and the positions of such points so determined are believed to be within a satisfactory degree of accuracy. However, in the area just north of Latitude $43^{\circ} 30'$ and west of Longitude $70^{\circ} 23'$, the radial intersections obtained were slim, and a reasonable estimate of the probable error in the positions of these points is not more than 1.0mm.

Letter Reference

March 9, 1943; To: Chief, Division of Coastal Surveys.
April 5, 1943; From: The Director.

Respectfully submitted,


Walter E. Schmidt
Asst. Photogrammetric Eng.

28 DETAILING:

The shore line and interior planimetry 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-5954 is part of Sub-project No. CS-272-B. Filed in Dir. of Photogrammetry - Office Files

Since the western section of the area of Survey No. T-5954 was inadequately covered by photography, full detail of the planimetry could not be completed to the original western detail limit of the Map Drawing.

The conventional topographic symbols recommended by the Washington Office were used to show the detail of the planimetry on the Map Drawing, and notes fully describing any deviation therefrom appear either on the Overlay Sheet or Map Drawing to assist interpretation.

Either purple or red ink circles indicate positions of points radial plotted which are considered relatively strong with respect to the control used in laying the plot. Green ink circles indicate positions of points radial plotted which are considered relatively weak. *Removed from back of sheet*

The entire shore line along the Saco Bay consists mainly of sand beaches, upon which have been built numerous houses, approximately 3.0 to 4.0mm inshore from the Mean High-Water Line. The shore line along Little River, Scarboro River, Mill Brook, Nonesuch River, and Jones Creek, is in general, marshy.

In some areas where duplicate Field Inspection was made, disagreements were obvious in the wooded or brush classifications. For example, on field photographs Nos. 6637 and 6638, a wooded area which appeared on both was classified as C-D 1 on photograph No. 6637, and as C-D 2 on photograph No. 6638. Where this difficulty was encountered, the classification was determined by stereoscopy.

The classifications (2) and (3), according to instructions dated April 1, 1942, pertain to brush areas. The Field Inspection classified some areas as C-2 or D-2 or C-D 2, and yet, according to examination of the photographs under the stereoscope, the areas seemed to be grown with trees and not brush. It was a difficult matter in such instances to determine which conventional topographic symbols should be used to outline these areas, that is, with either the brush symbol (C) or tree (either * or D) symbol. However, regardless of how such areas were outlined, the classification as recommended by the Field Inspection party was shown by notes on the Map Drawing. *Photos used in final determination of classification. Made consistent during review.*

28 DETAILING: (cont'd)

Two culverts have been detailed and shown at approximately Latitude $43^{\circ} 33' 30''$ and Longitude $70^{\circ} 22' 15''$ across Scarboro River on the Map Drawing. The vertical clearances above Mean Low-Water, Horizontal clearances and types of these culverts have been shown on the Map Drawing under "Note A". Small boat navigation under the most westerly of the two culverts at high tide would be difficult. Flood gates have been installed at the most easterly of the two culverts.

Since the town of Old Orchard was considered a congested area, only public buildings have been shown, except that in the area between the shore line and the first street inshore, all buildings were shown. The streets and roads in the town have been shown on the Map Drawing as of a smooth draft sheet. It is believed that all other roads, streets and buildings in the remaining area of Survey No. T-5954 have also been shown.

The roads and streets have been classified in accordance with the "Road Classification of Maps of all Scales" issued by the Engineers' production Plant of the Army War College, Washington, D. C. All roads which have been shown by centerline only and not noted as to width on the Map Drawing, are to be considered 0.6mm wide. *Planimetric Re-classification shown for all roads on sheet.*

The Field Inspection of the drainage areas was not complete and it was necessary to trace out some of the drainage by stereoscopy. *additional drainage added during review.*

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. A full light weight black acid ink line has been used to show the outer limits of marsh areas bordering the Mean High-Water Line. This light weight line should not be accepted as the Mean High-Water line, because it is only an indication of the outer limits of vegetation bordering the Mean High-Water Line. These limits are visible on the photographs, which were taken approximately at the time of Mean High-Water.

31 LOW-WATER AND SHOAL LINES:

The approximate outer limits of mud flats bordering the marsh line were shown with a dotted black acid ink line and the note "Mud Flats" has been shown on the Overlay Sheet. The approximate limits of shell and sand areas offshore from the marsh line have also been shown with a dotted black acid ink line and the note "Sand and Shell" has been shown on the Map Drawing. The above mentioned approximate limits are for the use of the Hydrographic Parties only and such limits should not be accepted as the Mean Low-Water Line.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

The approximate limits of reefs offshore from the Mean High-Water Line, have been detailed and shown in accordance with the Field Inspection data. No data was furnished by the Field Inspection party for determining the extent to which the reefs bare at Mean Low-Water.

33 WHARVES AND SHORE LINE STRUCTURES:

Piers, bridges, railroad trestles, bulkheads, etc., have been detailed and shown in accordance with the Field Inspection data. Descriptive notes have been shown on the Map Drawing calling attention to all shore line structures.

34 LANDMARKS AND AIDS TO NAVIGATION:

No additional landmarks and aids to navigation were recommended by the Field Inspection party. However, this Compilation Office has been advised that all landmarks and aids to navigation which now appear on charts covering the area of Map Drawing, Survey No. T-5954 are still intact.

See Review

35 HYDROGRAPHIC CONTROL:

The positions of thirteen (13) recoverable topographic stations and seventeen (17) ^{temporary} hydrographic stations have been radial plotted and shown on the dull side of the Map Drawing with 2½mm black acid ink circles. Five (5) of the recoverable topographic stations are bench marks, and the conventional bench mark symbol has been shown inside the 2½mm black acid ink circle. The names in quotation marks and descriptions of the recoverable topographic stations have been shown on the Map Drawing and the descriptions of the temporary hydrographic stations have been shown on the Overlay Sheet.

The scaled geographic positions, names, descriptions, sketches, etc., of the following thirteen (13) recoverable topographic stations have been submitted on Form No. 524.

Thirteen (13) Recoverable Topographic Stations: *To be filed under T-5954*

- PINE POINT RAILWAY STATION *Oct. 1941*
- TOP PYRAMIDAL ROOF DARK HOUSE *Oct 1941*
- SQUARE CUPOLA ON DARK HOUSE *Oct 1941*
- WEST GABLE, WHITE FRONT, LARGE HOUSE *Oct 1941*
- NORTH GABLE, SMALL WHITE HOUSE *Oct 1941*

35 HYDROGRAPHIC CONTROL: (cont'd)

- *SIGNAL BEACON *Oct. 1941*
- *TOWER, STEEL *Oct. 1941*
- * STANDPIPE *Oct. 1941*
- **U.S.G.S. BENCH MARK "35" *Oct. 1941*
- **U.S.C. & G.S. BENCH MARK "05" *Oct. 1941*
- **U.S.C. & G.S. BENCH MARK P5-1923 *Oct. 1941*
- **U.S.C. & G.S. BENCH MARK "B104" *Oct. 1941*
- **OLD ORCHARD TIDAL BENCH MARK NO. 1 *Oct. 1941*

*These stations were not recommended as recoverable topographic stations by the Field Inspection party. However, it is believed that they are of some importance and therefore their positions have been radial plotted and submitted on Form No. 524.

**Elevations of all bench marks were submitted on Form No. 524, and noted on the Map Drawing, except U. S. Geological Survey Bench Mark No. 35, for which no information could be found.

37 JUNCTIONS:

Satisfactory junction of shore line and interior planimetry was made with Map Drawing, Survey No. T-5955, which joins Map Drawing, Survey No. T-5954 on the east side.

There are no contemporary surveys to the north, south, or west of Map Drawing, Survey No. T-5954.

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 shore line and in the interior is not greater than 1.0mm.

40 BRIDGES OVER NAVIGABLE WATERS:

The only bridge of any navigational importance shown on the Map Drawing is a railroad trestle which crosses Scarborough River. The vertical clearance above Mean High-Water, horizontal clearance and type of this railroad trestle has been shown on the Map Drawing. The horizontal clearance as furnished by the Field Inspection party is 20.0' while the "List of Bridges Over Navigable Waters of the U. S." lists the horizontal clearance as 15.6'. ~~The horizontal clearance as shown on the Map Drawing is from data furnished by the Field Inspection party.~~

15.6' Hor Cl
4.4' Ver Cl
M.H.W.
shown on sheet.
See Review
Report

41 GEOGRAPHIC NAMES:

An investigation of geographic names pertaining to the area within the limits of Latitudes $43^{\circ} 27.8'$ and $43^{\circ} 50''$ and Longitudes $69^{\circ} 30'$ and $70^{\circ} 22.4'$ was made by Lieut. Henry O. Fortin in 1942. He has submitted a special report on the investigation to the Washington Office. The area of Survey No. T-5954 is a part of the area in which the geographic names were investigated.

A tabulated list of the undisputed and disputed geographic names as investigated, is submitted herein.

Approved list
filed in Geographic
Names Section

The name "West Scarborough Station" appears on the U. S. Geological Survey Portland, Maine (15') Quadrangle, but was not shown on the Map Drawing because no mention was made in the data furnished by the Field Inspection party.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Portland, Maine (15') Quadrangle, U. S. Geological Survey; scale 1:62,500; edition of 1916, reprinted 1939.

Due to difference in scale between the Map Drawing and the above mentioned quadrangle, comparison of the planimetric detail could not be readily made. However, the following disagreements were noted:

The Portland and Saco Electric Railway as shown on the quadrangle, has now been abandoned. This railway originally followed, approximately, the same route as U. S. Highway No. 1, which has been shown on the Map Drawing.

It is believed that the Portland and Old Orchard Beach Electric Railway, as shown on the quadrangle, has also been abandoned. This conclusion was reached because the Field Inspection party did not submit any data for the railway.

The name "West Scarborough Station" has been discussed in Paragraph No. 41.

45 COMPARISON WITH NAUTICAL CHARTS:

Chart No. 231, published June 1929, reissued March 1939, scale 1:20,000.

Due to difference in scale between the Map Drawing and the above mentioned chart, planimetric detail could not be readily compared. However, numerous buildings have been shown along the shore line, in the vicinity of Saco Bay, on the Map Drawing which do not appear on the above mentioned chart.

45 COMPARISON WITH NAUTICAL CHARTS: (cont'd)

A few reefs just offshore from the Mean High-Water Line, in the vicinity of Old Orchard Beach do not appear on Chart No. 231, but have been shown on the Map Drawing.

At approximately, Latitude $43^{\circ} 32' 30''$ and Longitude $70^{\circ} 20' 00''$ the eastern extremity of Pine Point is shown on Chart No. 231 as being just west of Longitude $70^{\circ} 20' 00''$. On the Map Drawing it has been shown just east of Longitude $70^{\circ} 20' 00''$.

Chart No. 1205, published December 1930; reissued June 1938; Scale 1:80,000.

Due to difference in scale between the Map Drawing and the above mentioned chart, planimetric detail could not be readily compared.

However, the obvious disagreements are the same as discussed in the preceeding sub-paragraph for Chart No. 231.

Respectfully submitted,
October 6, 1943

Harriet H. Moritz
Harriet H. Moritz
Jr. Photogrammetric Aid

Compilation & Descriptive
Report Reviewed by:

James E. Sunderland
James E. Sunderland
Sr. Photogrammetric Aid

Supervised by:

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

Approved & Forwarded:
October 7, 1943

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

LIST OF GEOGRAPHIC NAMES

Undisputed

- *Bar Ledge ?
- Beaver Brook ✓
- Campground ✓
- Cascade Brook ✓
- Dunstan River ✓
- Finnerd Brook ✓
- Googins Rocks ✓
- Grand Beach ✓
- Little River (as on quadrangle) ✓
- *Little River Rock
- Mill Brook (N. 7 mi. S. Scarborough) ✓
- Mill Brook (near Milliken Mills) ✓
- Milliken Mills ✓
- Nonesuch River ✓
- Oak Hill (village) ✓
- Ocean Park ✓
- Old Orchard Beach ✓
- Pine Point ✓
- Pine Point Railroad Station ✓
- Saco Bay ✓
- Scottow Hill ✓
- Stuart Brook ✓
- Scarboro River ✓
- Surfside ✓

*The features within the detail limits of the Map Drawing to which these geographic names pertain were not definable on the photographs. No Field Inspection data was furnished. Therefore, such features could not be shown and their geographic names do not appear on either the Map Drawing or the Overlay Sheet.

- Atlantic Ocean ✓
- U.S. 1
- State 9
- " 5
- " 6
- Boston and Maine ✓
(both lines)
- Ross Road ✓
- Two Rod Road ✓
- Payne Road ✓
- Willowdale Golf Course ✓
- Sawyer Road ✓

Names preceded by • are approved. See marked copies of T8517 and T8518 quads ("Old Orchard Beach" and "Prouts Neck") 1/23/46 L.H.

LIST OF GEOGRAPHIC NAMES

Disputed

Blue Point

✓ (village)
(iron quadrangle)

Jones Creek

Old Orchard

(Town) ✓

Philips Brook ✓

West Scarboro ✓

Blue Point Hill

✓ (hill - sequenced)

Little River (Upper reaches
of Jones Creek)

Old Orchard Beach

✓ (town and beach
requires only
one name)

Phillips Brook

Dunstan ✓

Names underlined in red approved
by L Heck on 1/13/46

U. S. GOVERNMENT PRINTING OFFICE

REVIEW REPORT FOR

T-5954

SACO BAY: OLD ORCHARD BEACH & VIC. ME.

COMPARISON WITH PREVIOUS SURVEYS:

T-759	1/10000	1859)	Superseded completely.
878	1/20000	1862)	
1224	1/10000	1871		Superseded except for contour lines.
1224a	1/10000	1913.		A difference of about 80m in the shoreline at the mouth of Scarboro River. Superseded completely.

CONTEMPORARY HYDROGRAPHIC SURVEYS:

None since 1923.

COMPARISON WITH NAUTICAL CHARTS:

231	1/20000	May 1943
1205	1/80000	Sept 1943

Landmark "Hotel Flagstaff" to be deleted. Recovery card No. 1560 lists this landmark as destroyed.

"Steel Tower" described on form 524 (filed under T-5954) is recommended as a substitute.

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

ACCURACY TEST:

along a railroad in the center of the map area
A test traverse (1942) of nine points was run. Six of these points were well-defined points, which agreed with the compilation within 0.8mm or better. The weakest areas on the map manuscript lie in the two northwest corners (farthest from photograph centers, and a small area at the southern edge.

DETAILING: (Additions and corrections made in red)

Incomplete field inspection made it necessary to complete drainage ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxx~~, roads, and woodland by means of the stereoscope. Buildings and streets have been added in and around the town of Old Orchard Beach

RR, RR
BRIDGE DATA (~~Fixed~~, steel-girder, Scarboro River)

F. I. Data

Horiz. - 20.0 ft.
Vert. - 4.4 " MEW.

Bridge List data (Jan 1935)

Horiz. - 15.6 ft.
Vert. 4.4 " HW

The lower of the measurements (15.6 & 4.4) are given on the map manuscript.

The limit of navigation on the Scarboro River is shown on the map manuscript to be at the point where the river flows thru three stone culverts with flood gates on the east side.

34
LANDMARKS

The field party made no recommendations for charting or deleting any landmark. Since then, one of the landmarks in this area has been destroyed. Form 567 has been filled out and sent to the Chart Section to recommend its deletion.

Reviewed by

Jack Rihn C.T.
Jack Rihn, 26 Nov. 1943.

Under the direction of

D. H. Benson C.T.
D. H. Benson

APPROVED BY:

B. G. Jones 3/49
Technical Assistant to Chief
Division of Photogrammetry

K. T. Adams
Chief Division of Photogrammetry

H. R. Edmonston
Chief Nautical Chart Branch

W. M. Scaife
Chief Division of Coastal Surveys

n.B.

This area is also covered by topographic quadrangles T-8517 and T-8518 at a smaller scale, but of a later date

K T A

Project CS-272B
Memorandum

Dated 31 May 1949

In 1942 the Officer-in-charge of the Baltimore Photogrammetric Office reported encountering difficulty with the control in the vicinity of Cape Elizabeth, Maine, when running the radial plot for planimetric maps T-5954, T-5955, and T-5956.

This memorandum, to be inserted in the Descriptive Reports of the above maps, is prepared at this late date partly from memory but mostly from correspondence filed in the Division of Geodesy.

The Baltimore Photogrammetric Office was instructed to defer further work on the three above mentioned maps pending investigation of the control. In addition to triangulation stations of various dates, the control in the vicinity consisted of a number of stations located in 1905 and another group in 1923. The principal difficulty encountered at the Baltimore Photogrammetric Office was in holding to both these groups of stations simultaneously; that is, it appeared possible to lay a correct plot using only the 1905 stations and ignoring the 1923 stations or it appeared possible to lay a plot holding to the 1923 stations and ignoring the 1905 stations.

An investigation in the Division of Geodesy disclosed an unaccountable error of about 40 feet in the position of JORDANS ISLAND 2. The adjustment of the 1905 triangulation disclosed this probable error, which seemed to be in the field observations. It was further disclosed that the 1923 positions were computed from the line JORDANS ISLAND 2 - CAPE ELIZABETH EAST LIGHTHOUSE. The 1923 positions were therefore all erroneous.

In 1941 Lt. P. L. Bernstein had determined a new position for OLD ORCHARD STANDPIPE, 1923. An examination of the 1923 observations disclosed another possible means of computing them. An inverse computation was made between stations OLD ORCHARD STANDPIPE and CAPE ELIZABETH EAST LIGHTHOUSE, and from that line the 1923 work was recomputed. There was still no check on the new positions of the 1923 stations and everything depended on the accuracy of location of the two above stations and the correctness of the inverse computation.

The newly computed positions for the 1923 triangulation were furnished to the Baltimore Photogrammetric Office on 5 April 1943, with instructions to make another attempt to lay the radial plot in this vicinity, and if this seemed to clear up the difficulty to proceed with the radial plot and the compilation of the three planimetric maps in question.

This did clear up the difficulty. It enabled the Baltimore Photogrammetric Office to hold to both the 1905 and 1923 triangulation stations.

Subsequently in the summer of 1943 Lt. P. L. Bernstein made additional observations in this area to tie the 1923 work into other triangulation in the vicinity so that it could be computed in a conventional manner and adjusted. This subsequent field work proved that the interim tentative computations were nearly correct -- at least, within the limits of graphic plotting.

K.T. Adams

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Chief, Division of Photogrammetry