5955

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

*Type of Survey* Topographic Air Photographic

*Field No.* CS-272 *Office No.* T-5955

LOCALITY

*State* Maine

*General locality* Saco Bay

*Locality* Preuts Neck and Vicinity

194 3

CHIEF OF PARTY

F.L.Peacock

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DATE April 5 - 1949

8-1870-1 (1)

5955

Form T-1

# DATA RECORD

T- 5955

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

Project No. (II): CS 272
Sub-Project CS 272-B

Field Office:
U.S.C.&G.S. - Ship SS LYDONIA

Chief of Party:
G. D. Meaney

Compilation Office:
Air Photo. Party No. 2
Baltimore, Maryland

Chief of Party:
Fred. L. Peacock

Instructions dated (II III):
January 12, 1942
April 1, 1942

Copy filed in ~~Descriptive Report No. T-~~ (VI)
Div. of Photogram. Office Files

Completed survey received in office: 24 Aug. 1943

Reported to Nautical Chart Section:

Reviewed: 10/5/44 Applied to chart No. Date:

Redrafting Completed: 31 May, 1945

Registered: ~~31 May, 1945~~ March 1949 Published: May, 1946

Compilation Scale: 1:9,645 Published Scale: 1:10000

Scale Factor (III): 1:0,368

Geographic Datum (III): N.A. 1927 Datum Plane (III): ~~Mean Sea Level~~ M.H.W.

Reference Station (III): Grandy Hill 2, 1923, r 1942

| Lat.: | Long.: | ~~Adjusted~~ Unadjusted |
|---|---|---|
| 43° 33' 46.44" 1433.2 m. | 70° 15' 58.59" 1314.9 m. | Revision of field computation (third-order) |

State Plane Coordinates (VI): Maine West Zone

X = 473,597.21 ft. Y = 265,923.22 ft.

Military Grid Zone (VI) Not shown

PHOTOGRAPHS (III)

| Number | Date | Time | Scale | Stage of Tide |
|---|---|---|---|---|
| 6700 | 10/17/41 | 10:41 A.M. | 1:10,000 | 4.8' above M. L. W. |
| 6701 | 10/17/41 | 10:42 A.M. | 1:10,000 | 4.8' above M. L. W. |
| 6702 | 10/17/41 | 10:43 A.M. | 1:10,000 | 4.8' above M. L. W. |
| 6670 | 10/17/41 | 10:08 A.M. | 1:10,000 | 6.1' above M. L. W. |
| 6669 | 10/17/41 | 10:06 A.M. | 1:10,000 | 6.1' above M. L. W. |
| 6668 | 10/17/41 | 10:05 A.M. | 1:10,000 | 6.1' above M. L. W. |
| 6667 | 10/17/41 | 10:04 A.M. | 1:10,000 | 6.2' above M. L. W. |
| 6666 | 10/17/41 | 10:03 A.M. | 1:10,000 | 6.2' above M. L. W. |
| 6661 | 10/17/41 | 9:54 A.M. | 1:10,000 | 6.5' above M. L. W. |
| 6662 | 10/17/41 | 9:55 A.M. | 1:10,000 | 6.5' above M. L. W. |
| 6663 | 10/17/41 | 9:56 A.M. | 1:10,000 | 6.4' above M. L. W. |
| 6638 | 10/17/41 | 9:29 A.M. | 1:10,000 | 7.3' above M. L. W. |
| 6637 | 10/17/41 | 9:28 A.M. | 1:10,000 | 7.3' above M. L. W. |

**Tide from (III):** Predicted tables. Reference Station Portland, Me., with time correction to Old Orchard Beach, Me.
**Mean Range:** 8.8 ft. **Spring Range:** 10.1 ft.

**Camera:** (Kind or source) U. S. Coast & Geodetic Survey Nine Lens Camera, (Focal Length 8¼") All negatives are on file in the Washington Office.

**Field Inspection by:** Lieut. Henry O. Fortin **date:** Fall, 1942
Under supervision of Lieut. Comdr. C. D. Meaney;
Commanding officer of SS LYDONIA
**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 **date:** 10/9/42
" " " **checked by:** W.D.H. Washington Office **date:** 10/9/42

**Control plotted by:** Abraham L. Goncharsky **date:** 10/42

**Control checked by:** Natalie Hallock **date:** 10/42

**Radial Plot by:** Walter E. Schmidt **date:** 11/42 & 4/43

**Detailed by:** Carlyn Goldenberg (Shoreline & Interior) **date:** 5/3/43
(Rough Draft) 7/30/43
**Reviewed in compilation office by:** Michael G. Misulia **date:** 8/12-21/43

**Elevations on Field Edit Sheet** _____
**checked by:** **date:**

## STATISTICS (III)

**Land Area (Sq. Statute Miles):** 16

**Shoreline (More than 200 meters to opposite shore):** 11.8 statute miles

**Shoreline (Less than 200 meters to opposite shore):** 14.9 statute miles

**Number of Recoverable Topographic Stations established:** six (6)

**Number of Temporary Hydrographic Stations located by radial plot:**
Twenty-three (23)

**Leveling (to control contours) - miles:**
None

Roman numberals 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 KT Adams in the appendix.

The control plotted on the map drawing consists of twenty-three (23) U. S. Coast and Geodetic Survey triangulation stations and one (1) U. S. Engineers triangulation station. They have been shown with the conventional triangulation symbol.

The following triangulation stations fall within the detail limits of the map drawing:

Sixteen (16) U. S. Coast and Geodetic Survey triangulation stations

SPURWINK CHURCH, 1850, r 1942
SAND KNOLL, 1850
RAM ISLAND HOUSE, ("RAM"), 1923, r 1942
STONE CHIMNEY ("CHIM") 1923
GRANDY HILL YELLOW HOUSE CHIMNEY, 1850, r 1942
SMALL HOUSE CHIMNEY, 1923, r 1942
GRANDY HILL 2, 1923, r 1942
RED HOUSE CUPOLA, ("SHO"), 1923, r 1942
HUBBARD'S POINT HOUSE, 1850, r 1942
SQUARE BARN CUPOLA, ("SQUARE"), 1923, r 1942
EAST GABLE HOUSE, PROUT'S NECK ("GRE"), 1923, recovery in 1942 uncertain. Field inspection party pricked gables of two different houses and neither was correct. The triangulation station was not used to control the plot.
PROUTY, 1905 (Not used to control plot. See p.7, No 27, Pg 2)
PROUT'S NECK STANDPIPE, 1941, r 1942
PROUT'S NECK, LIBBY HOUSE CHIMNEY, 1850, r 1942
STRATTON ISLAND, 1850
JORDANS ISLAND 2, 1905, r 1942

+ See p.7, No. 27, Pg 4.)

The following triangulation stations fall just outside the detail limits of the map drawing:

Seven (7) U. S. Coast and Geodetic Survey triangulation stations

RED BARN CUPOLA ("BREAK"), 1923, r 1942 (shown on the map drawing with a dashed black acid ink triangle)
JORDAN'S BARN, EAST END, 1850
**DR. CUMMING'S HOUSE, SOUTH CHIMNEY, ("DOC"), 1923, r 1942
HENNIWELL'S HOUSE CHIMNEY, 1852 (Listed in index of Special Publication No. 46 as HENNEWELL'S HOUSE CHIMNEY. Listed on page 139 of Special Publication No. 46 as HENNIWELL'S HOUSE CHIMNEY and also noted as a supplementary point.)
WCSH NORTHEAST RADIO TOWER, 1941
WCSH SOUTHWEST RADIO TOWER, 1941
SCARBORO, GREEN STANDPIPE, 1928, r 1941

26 CONTROL: (Cont'd)

One (1) U. S. Engineers triangulation station

RICHMOND ISLAND 2, ("RICH"), 1923, r. 1942

**This triangulation station was recommended as a landmark by the field inspection party in 1942. Its position was previously submitted on Form 567 on March 20, 1943. The geographic coordinates for the position ~~was~~ were obtained by correcting the submitted geographic coordinates, North American Datum, to the North American Datum 1927. The datum differences were applied by this compilation office. On April 6, 1943, the Washington Office submitted revised (field computations) geographic coordinates of the position of the above mentioned triangulation station, and they were in disagreement with those submitted March 20, 1943, on Form 567 by this compilation office. Therefore, the revised geographic coordinates have been resubmitted on Form 567 (Landmarks for Charts).

For general information the positions of "DR. CUMMING'S HOUSE, SOUTH CHIMNEY, ("DOC")", 1923, r. 1942, from the field computation, Accession No. of Computation 81552, North American Datum, and "RICHMOND ISLAND, DR. CUMMING'S HOUSE, CHIMNEY," 1850, from Special Publication No. 46, North American Datum, are listed below in order to call attention to large differences of latitude and longitude with respect to the chimneys on the same house. Also listed below is the position of "DR. CUMMING'S HOUSE, SOUTH CHIMNEY, ("DOC")", 1923, r. 1942, North American Datum 1927, as revised (field computations) by the Washington Office and submitted to this office on April 6, 1943, on Form 28B, Accession No. of Computation, GTZ 81552.

*DR. CUMMING'S HOUSE, SOUTH CHIMNEY, 1923, r. 1942

43° 32' 36.012" 1111.4 m. (N.A.) 1092.2 m. (N.A. 1927)
70° 14' 21.803" 489.5 m. (N.A.) 488.5 m. (N.A. 1927)

The above position was corrected to the North American Datum 1927 by this compilation office.

RICHMOND ISLAND, DR. CUMMING'S HOUSE, CHIMNEY, 1850

43° 32' 39.540" 1220.3 m. (N.A.) 1201.1 m. (N.A. 1927)
70° 14' 24.119" 541.5 m. (N.A.) 540.5 m. (N.A. 1927)

The above position was corrected to the North American Datum 1927 by this compilation office.

DR. CUMMING'S HOUSE, SOUTH CHIMNEY, ("DOC"), 1923, r. 1942

43° 32' 35.51" 1095.9 m. (N.A. 1927)
70° 14' 21.67" 486.5 m. (N.A. 1927) Third order triangulation

Fall on T-59356, east of T-59355

2 BM's:
N 5, 1923
Mc 40, 1914 5, USGS

26 CONTROL: (Cont'd.)

*The position of "DR. CUMMING'S HOUSE, SOUTH CHIMNEY" as plotted on map drawing Survey No. T-5956 from the geographic coordinates, listed above, will be in disagreement with the revised position (field computation) as submitted to this office on April 16, 1943, because map drawing Survey No. T-5956 was submitted to the Washington Office before this compilation office was in receipt of the revised position. Other triangulation stations whose positions were determined in 1923 and which were plotted from geographic coordinates corrected from the N. A. Datum to the N. A. Datum 1927 by this compilation office, within or just outside the detail limits of map drawing Survey No. T-5956, will also be in disagreement with the submitted revised (field computations) geographic coordinates. It is recommended that the positions of all the 1923 triangulation stations plotted within or just outside the detail limits of map drawing Survey No. T-5956 be checked and corrected in accordance with such revised positions as are available.

The triangulation station "RED BARN CUPOLA," 1923, r. 1942, has been shown by a dashed black acid ink triangle on the map drawing, because the cupola has been removed from the roof of the barn and should therefore be considered lost. However, it was used to control the radial plot. Lieut. Comdr. Henry O. Fortin lists this station on recovery card Form 526 as "BREAK" RED BARN CUPOLA, 1923, r. 1942.

T-5956

The names of the triangulation stations as listed in Special Publication No. 46, on Forms 28B, 526, etc., in many instances were in disagreement. It is believed the names as shown on the map drawing have been taken from the best known available sources.

27 RADIAL PLOT:

In November 1942, a combined radial plot was at first laid for the area 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 Commander 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 submitted a list of revised positions (field computations) for all the triangulation

27 RADIAL PLOT: (Cont'd.)

stations established in 1905 and 1923 except for the triangulation stations "LONG BARN CUPOLA," 1923 and "PROUTY," 1905. The position of the triangulation station "LONG BARN CUPOLA," 1923, was radial plotted and has been submitted on Form 524. It has been shown on the map drawing with a 2½ mm. black acid ink circle.

The position of "PROUTY," 1905, was plotted from geographic coordinates after they had been corrected to the North American Datum 1927 by this compilation office, from the geographic coordinates, North American Datum, listed in Special Publication No. 46. This triangulation station was not recovered by the field inspection party of 1942. Therefore, it was not used to control the plot.

(N.B.) See paragraph No. 26 for a discussion of the positions of triangulation stations determined in 1923 which fall within or just outside the detail limits of map drawing Survey No. T-5956.

The positions of all the triangulation stations established in 1905 and 1923 ~~and~~ which had been plotted on map drawings, surveys Nos. T-5954 and T-5955 as of October, 1942, except those just mentioned in the above paragraphs, were replotted in accordance with the submitted revised (field computations) geographic coordinates.

An individual plot was then laid for the area of Survey No. T-5955.

The number of photographs, identification of the control, and the number of control stations ~~was~~ were adequate. The control was well distributed.

All of the triangulation stations recovered in 1942 were used to control the plot and their positions were "held to" within the desirable accuracy. The two triangulation stations Northeast and Southwest radio towers of radio station WCSH whose positions were determined in 1941, were identified on the office photographs by this office and were also "held to" in the plot within the desirable accuracy.

Satisfactory junctions were made with the positions of secondary points previously established on map drawings Surveys Nos. T-5956 and T-5957.

The radial intersections of the secondary and minor detail points were very good, and the positions of the secondary and minor detail points so determined are believed to be within the desirable accuracy.

Letter Reference

March 9, 1943; To Chief, Division of Coastal Surveys
April 5, 1943; From the Director

Respectfully submitted:

Walter E. Schmidt

Walter E. Schmidt
Asst. Photo. Engineer

28 DETAILING:

The shore line and interior culture have been detailed on the map drawing in accordance with the Director's letters dated January 12 and April 1, 1942, pertaining to Project No. CS 272. The area of Survey No. T-5955 is a part of Sub-Project No. CS 272-B.
Filed in Div. of Photogrammetry - Office Files

The standard symbols as recommended by the Washington Office were used to show the detail on the map drawing, and notes fully describing any deviation therefrom were shown on the overlay sheet, in order that the planimetry may be clearly interpreted by those concerned.

Purple and green ink circles shown on the glossy side of the celluloid map drawing indicates positions of secondary and minor detail points considered relatively strong and weak respectively.

All roads have been classified in accordance with the submitted field inspection data. Roads shown with center line only and not noted as to width on the map drawing are to be considered 6 meters in width.

The scales of the photographs and the map drawing were in good agreement. However, it was necessary to use the projector in detailing Bluff and Stratten Islands.

The field inspection of drainage areas was not complete. The majority of the drainage shown on the map drawing was detailed from stereoscopic examination of the photographs.

Notes have been shown on the overlay sheet calling attention to all areas of questionable interpretation.

30 MEAN HIGH-WATER LINE:

The mean high-water line (firm ground) has been detailed in accordance with the submitted field inspection data and has been shown on the map drawing by a solid heavy-weight black acid ink line, the center of which should be taken as the true position. The outer limits of marsh areas visible at Mean High-Water as identified on the photographs have been shown with a solid light weight black acid ink line in conjunction with the conventional marsh symbol.

31 LOW-WATER AND SHOAL LINES:

The approximate outer limits of rock ledges have been detailed in accordance with the submitted field inspection data (sketched on field photographs) and have been shown with dashed light-weight black acid ink lines.* These limits could not be identified on the office photographs. The note "Rock Ledge" has been shown on the overlay sheet.

* The limits indicated by field inspection party seem to extend too far offshore to be the rock ledge limit which can be detailed, and the character of the shore behind the limits daggests that rock ledges do not extend along the entire shoreline.

The approximate outer limits of sand or shell areas and mud

The rock ledges to be shown on the published sheet have been detailed in red by the reviewer.

31 LOW-WATER AND SHOAL LINES: (Cont'd.)

flats as identified on the office photographs have been shown with a dotted black acid ink line.

The character of the areas which these limits enclose has been shown by notes on the overlay sheet.

The above mentioned limits as detailed and shown on the map drawing are not recommended as a determination of the correct position of the Mean Low-Water line. They have been shown in order that they may be used as additional information by hydrographic parties.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

The approximate limits of several offshore reefs were detailed on the map drawing in accordance with the submitted field inspection data, and are shown with dashed light-weight black acid ink lines. The note "Reef" has been shown on the overlay sheet. Rocks have been detailed on the map drawing in accordance with the submitted field inspection data and have been shown with the conventional symbols. The extent to which rocks bare at Mean High-Water or Mean Low-Water has been shown by notes on the overlay sheet. Applied.

33 WHARVES AND SHORE LINE STRUCTURES:

It is believed that all piers, bridges, etc., have been detailed on the map drawing in accordance with the submitted field inspection data, and they have been shown with the conventional symbols. All necessary notes pertaining to the type, vertical clearance, above M.H.W. and horizontal clearance of bridges have been shown on the map drawing.

34 LANDMARKS AND AIDS TO NAVIGATION:

The following recommended landmarks and aid to navigation have been shown on the map drawing with 2½ mm. black acid ink circles, and their scaled geographic positions, as radial plotted, have been submitted on Form No. 567: Chart letter 575, 1943

Three (3) recommended landmarks

Gable, highest easterly, on house (recoverable topographic station)
Tower, Army observation post (recoverable topographic station)
Cupola, square, on hotel (recoverable topographic station)

One (1) aid to navigation

Beacon, red marker (recoverable topographic station) 10/17/41
Ferry Rock Beacon

The notes "land mark" and "aid to navigation" have been shown on the map drawing in conjunction with their descriptions.

35 HYDROGRAPHIC CONTROL:

The positions of six (6) recoverable topographic stations and twenty-three (23) temporary hydrographic stations, have been determined by radial intersection and they have been shown with 2½ mm. black acid ink circles on the dull side of the celluloid map drawing.

The descriptions of the recoverable topographic and temporary hydrographic stations have been shown on the map drawing and the overlay sheet respectively.

The descriptions and scaled geographic positions as radial plotted, of the following six (6) recoverable topographic stations have been submitted on Form 524:

Long Barn Cupola
Beacon, Red Marker (Aid to Navigation) Ferry Rock Bcn
Tower, Army Observation Post (Landmark)
S. Chimney of Red Roof Grey House
Gable, Highest Easterly, On House (Landmark)
Cupola, Square, On Hotel (Landmark)

36 GEOGRAPHIC NAMES:

An investigation of geographic names pertaining to the area within the limits of latitudes 43° 27.8' and 43° 50' and longitudes 69° 30' and 70° 22.4' was made by Lieut. Comdr. Henry O. Fortin in 1942. He has submitted a special report on the investigation to the Washington Office.

The area of Survey No. T-5955 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.

37 JUNCTIONS:

Junctions were made and are in agreement with map drawings Surveys Nos. T-5957, T-5956 and T-5954, to the North, East and West, respectively. There is no contemporary survey to the South.

39 RECOMMENDATION FOR FUTURE SURVEYS:

This map drawing is believed to be complete in all details of importance except for the area outlined on the glossy side of the map drawing in washable green ink. The detailed positions of Bluff and Stratten Islands, within the area outlined in green ink should be considered approximate, because the number of photographs was insufficient to establish them within the desirable accuracy. Additional survey may be desirable for the above mentioned area.

S.W. corner of map.

39 RECOMMENDATION FOR FUTURE SURVEYS: (Cont'd.)

It is believed that the probable error of the positions of radial points and well-defined objects along the shore line is not greater than 0.5 mm. and of inland radial points and details of importance not greater than 1.0 mm. except the positions of radial points and details of importance in the area of Bluff and Stratten Islands. It is believed that a reasonable determination of the probable error in the positions of radial points and details of importance within the area of these two islands would not be greater than 1.5 mm.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Portland, Maine (15') Quadrangle, U.S.G.S., Edition of 1916, reprinted 1939. Scale 1:62,500.

Because of difference in scale between the map drawing and the above mentioned quadrangle, planimetric detail could not be readily compared. However, planimetry common to both is in fair agreement except the following:

A large gravel pit at approximately Latitude 43° 35' 40" and Longitude 70° 17' 50" as detailed on the map drawing in accordance with the submitted field inspection data does not appear on the quadrangle.

Numerous roads, houses, and small gravel pits as detailed on the map drawing in accordance with the submitted field inspectionedata do not appear on the quadrangle.

The shore line at approximately Latitude 43° 32' 35" and Longitude 70° 19' 45" as detailed on the map drawing in accordance with the submitted field inspection data has changed considerably, possibly the result of storms.

A cable line running parallel to the Eastern Division of the Boston and Maine Railroad as detailed on the map drawing in accordance with the submitted field inspection data does not appear on the quadrangle.

The Portland and Saco Electric Railroad as shown on the above mentioned quadrangle could not be identified on any of the photographs covering the area within the detailed limits of the map drawing and therefore has not been shown.

45 COMPARISON WITH NAUTICAL CHARTS:

Chart No. 315; Published July 1941; Scale 1:40,000
Chart No. 231; Published June 1929; Scale 1:20,000
Chart No. 50; Published September 1934, Reissued August 1938; Scale Unknown.
Chart No. 1204;Published March 1942, Scale 1:80,000

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

Because of difference in scale between the map drawing and the above mentioned charts, planimetric detail could not be readily compared. However, planimetry common to both is in fair agreement except the following on chart No. 231:

Numerous roads and houses as detailed on the map drawing in accordance with the submitted field inspection data do not appear on the chart.

The shore line at approximately Latitude 43° 32' 35" and Longitude 70° 19' 45" as detailed on the map drawing in accordance with the submitted field inspection data, has changed considerably, possibly the result of storms.

Respectfully submitted,

Michael G. Misulia
Jr. Topographic Engineer
and
Walter E. Schmidt
Asst. Photogrammetric Engineer

Compilation Reviewed by

Michael G. Misulia
Jr. Topographic Engineer

Supervised by

Walter E. Schmidt
Asst. Photogrammetric Engineer

Approved & Forwarded
August 24, 1943

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

GEOGRAPHIC NAMES

Undisputed

Atlantic Ocean

Black Point School (?: not on "Prouts Neck" quad)

Black Rock

Bluff Island

Cape Elizabeth

*Chimney Rock (Not Shown)

*Cool Rock (Not Shown)

*Dan Strouts Ledge (Not Shown)

Ferry Rock

Higgins Beach

Massacre Pond

Nonesuch River

*Old Proprietor (Not Shown)

Pine Point

Pleasant Hill

Pleasant Hill School

Prouts Neck

Prouts Neck (Village)

Prouts Neck Country Club Golf Course

Ram Island

Saco Bay

Scarboro Beach

Scarboro River

Shooting Rock

Sprague Hall (?)

Spurwink Church

GEOGRAPHIC NAMES (Continued)

Undisputed

Spurwink Hill

Spurwink River

The Brothers

The Cod Rocks

The Graveyard (?)

*Three Tree Ledge (Not Shown)

*The areas within the detail limits of the map drawing to which these geographic names pertain could not be identified on the photographs. No field inspection data were submitted. Therefore, such areas could not be detailed on the map drawing.

GEOGRAPHIC NAMES

Disputed

Boston and Maine. Eastern Division - Portsmouth Line

Boston and Maine. Western Division - Boston and Maine
Dover Line

Libby River - Libbys River

Prouts Neck - Prout Neck - Prout's Neck

Stratten Island - Stratton Island

Scarboro - Scarborough (Village)

GEOGRAPHIC NAMES

Survey No. T-5955

| 1 Name on Survey | A On Chart No. | B On previous survey No. | C On U. S. quadrangle Maps | D From local information | E On local Maps | F P. O. Guide or Map | G Rand McNally Atlas | H U. S. Light List | K | |
|---|---|---|---|---|---|---|---|---|---|---|
| Atlantic Ocean | ✓ | | | | | | | | | 1 |
| Maine | ✓ | | (See "Prouts Neck" quad, T-8518) | | | | | | | 2 |
| Cape Elizabeth | ✓ | | | and nautical chart 231 | | | | | | 3 |
| Saco Bay | ✓ | | | | | | | | | 4 |
| Boston and Maine R R | ✓ | | | | | | | | | 5 |
| State Nos. 77, 207 | | | | | | | | | | 6 |
| U.S. No. 1, State No. 9 | | | | | | | | | | 7 |
| | | | | | | | | | | 8 |
| Stratten Island | ✓ | | (names listed on section sheets | | | | | | | 9 |
| Bluff Island | ✓ | | | 435702-703) | | | | | | 10 |
| Pine Point | ✓ | | | | | | | | | 11 |
| Ferry Rock | ✓ | | | | | | | | | 12 |
| Scarboro River | ✓ | | | | | | | | | 13 |
| Black Rock | ✓ | | | | | | | | | 14 |
| Nonesuch River | ✓ | | | | | | | | | 15 |
| Libby River | ✓ | | | | | | | | | 16 |
| Prouts Neck | ✓ (peninsula) | | | | | | | | | 17 |
| Prouts Neck | ✓ (village) | | | | | | | | | 18 |
| Prouts Neck Country Club Golf Course | ✓ | | | | | | | | | 19 |
| Scarboro Beach | ✓ | | | | | | | | | 20 |
| Shooting Rock | ✓ | | | | | | | | | 21 |
| Massacre Pond | ✓ | | | | | | | | | 22 |
| Black Point School | ✓ (not named on "Prouts Neck" quad) | | | | | | | | | 23 |
| Higgins Beach | ✓ | | | | | | | | | 24 |
| Spurwink River | ✓ | | | | | | | | | 25 |
| Spurwink Hill | ✓ | | | | | | | | | 26 |
| Cod Rocks | ✓ | | | | | | | | | 27 |

M 234

# GEOGRAPHIC NAMES

Survey No. T-5955

| 2 Name on Survey | A On Chart No. | B On previous survey No. | C On U. S. quadrangle Maps | D From local information | E On local Maps | F P. O. Guide or Map | G Rand McNally Atlas | H U. S. Light List | K | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ram Island | ✓ | | | | | | | | | 1 |
| The Brothers | ✓ | | | | | | | | | 2 |
| Spurwink Church | ✓ | | | | | | | | | 3 |
| Pleasant Hill | ✓ | | | | | | | | | 4 |
| Pleasant Hill School | ✓ | | | | | | | | | 5 |
| Scarboro | ✓ | | | | | | | | | 6 |
| | | | | | | | | | | 7 |
| Sprague Hall | (?: | listed in report | | near Spurwink Ch. | but not found) | | Upper | R. Hand Cor. | C.M. | 8 |
| The Graveyard | (?: | " | | " | | " | ) | | | 9 |
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Names underlined in red approved by L. Heck on 10/11/45

M 234

REVIEW REPORT FOR
Planimetric Map Manuscript
T-5955
October 1944

28. DETAILING

Additions and alterations during review were made in red on the map manuscript. These include extensive delineation of the ledge symbol, rock elevations, and some interior detail. The rocks Old Proprietor and The Brothers were transferred from quadrangle T-8518.

42. COMPARISON WITH PREVIOUS SURVEYS

| | | | | | |
|---|---|---|---|---|---|
| T--312 | 1/10000 | 1850 | T- 878 | 1/10000 | 1862 |
| 414 | " | 1852 | 1224 | " | 1871 |
| 759 | " | 1859 | | | |

T-5955 supersedes the old surveys in ~~their comparable~~ common detail of the common areas.

43. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

There are no contemporary Hydrographic surveys.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

T8518 ~~USE~~ Prouts Neck, Me. 1/25000 1944

Two rocks awash and three rock ledges were transferred by means of the vertical projector from the 1/20000 ozalid print of the quadrangle manuscript T8518 to the manuscript of T-5955. The rocks are Old Proprietor and The Brothers, which had been cut in radially on the quadrangle map manuscript.

45. COMPARISON WITH NAUTICAL CHARTS 231 1/20000 May 1943

Two marsh islands at the mouth of Libby River on the chart are mapped as two ledges on T-5955.

Shoreline at Pine Point changed. (A sandy shore)

Shooting Rock shown as two islands on T-5955, in accordance with field inspection data.

Stratten Island is made up of two islands on T-5955 rather than one, as on the chart.

The three islands "The Brothers" on the chart was noted as a reef bare at M.L.W. by the field inspection party, and further investigation showed that these rocks are at least five feet below M.H.W.

T-5955 supersedes the chart, except for the contours, in the area common to the two maps.

T-5955 has not been applied to chart 231 as of the date of this review.

Reviewed by:

J. H. Stewart e.T.
J. H. Stewart 9 Oct. 1944

Under the direction of:

D. H. Benson e.T.
Chief, Review Section

Approved by:

B.G. Jones 3/49
Tech. Asst. to the Chief,
Division of Photogrammetry

H. Johnston
Chief, Nautical Chart Branch
Division of Charts

K.T. Adams
Chief, Div. of Photogrammetry

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

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

K. T. Adams
Chief, Division of Photogrammetry