5988

Diagram on Diagram Chart No. 1204-2

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-5999

LOCALITY

State Maine

General locality Coast of Maine
East Shore of Pemaquid Neck, Mus-Locality congus Sound - Muscongus Bay

1943

CHIEF OF PARTY

Fred L. Peacock

LIBRARY & ARCHIVES

DATE april 1 - 1949



DATA RECORD

7- 5999

Quadrangle (II):

Project No. (II): CS-272

Monhegan Quadrangle (15!), Maine

Sub-Project CS-272-C

Field Office:

Chief of Party:

Air Photographic Party No. 2 Baltimore, Maryland

Fred. L. Peacock

Compilation Office:

Chief of Party:

Air Photographic Party No. 2

Fred. L. Peacock

Baltimore, Maryland Instructions dated (II III);

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

January 12, 1942 April 1, 1942

Completed survey received in office: 2 Nov. 1943

Reported to Nautical Chart Section:

Reviewed: 18 April, 1945

Applied to chart No. 3/3 Research. Date: 24 Oct. 1944

Redrafting Completed: 10 Sept. 1945

Registered: 1949

Published: April, 1947

Compilation Scale: 1:9,700

Published Scale: /:/0 000

1.031 Scale Factor (III):

Geographic Datum (III): N. A. 1927

Datum Plane (III): Mean Sea Level

Reference Station (III): *BROWNS HEAD 2, 1934, r.1943

Long : 69° 271 36.23" Sos.5m Adjunted Field Computation Lato :43° 54' 11.90" 367.3m Reference station: Davis, 1859, P. 1943 Hnadjustedx unadjusted Lat.: 43°54' 32.207" 994.0m. Long.: 69° 23' 01.936" 43.2 m. Adjusted

State Plane Coordinates (VI): Yest & East Zones

X = 267 076.19

Y = 28806.43

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	<u>Time</u>	<u> Scale</u>	Stage of Tide
7062 to 7064	10/20/41	_9:50 a.m.	1:10,000	10.6' above M. L. W.
7101 to 7103	10/20/41	-10:50 a.m.	1:10,000	10,2' above M. L. W.
7113 to 7114	10/20/41	11:07 a.m.	1:10,000	9.8' above M. L. W.
7115 to 7116	10/20/41	-11:09 a.m.	1:10,000	9.7' above M. L. W.
7132	10/20/41	11:40 a.m.	1:10,000	8.6' above M. L. W.
7133	10/20/41	11:41 a.m.	1:10,000	8.5' above M. L. W.
· 7134	10/20/41	-11:42 a.m.	1:10,000	8.4' above M. L. W.
7135	10/20/41	11:43 a.m.	1:10,000	8.3' above M. L. W.
7136	10/20/41	11:44 a.m.	1:10,000	8.2' above M. L. W.
7156	10/20/41	12:07 p.m.	1:10,000	7.2' above M. L. W.
7157	10/20/41	_12:08 p.m.	1:10,000	7.2' above M. L. W.

Tide from (III): Predicted tide tables, Reference Station Portland, Maine, with corrections to New Harbor, Muscongus Bay

Mean Range: 8.9

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, Comdr. Henry O. Fortin

date:

Summer, 1943

Field Edit by:

date:

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

October 20, 1941

Projection and Grids ruled by (III) J. O'Neill

date: 7/19 &: 7/21/43

checked by: B. R. C.

date: 7/19 & 7/21/43

Ada May Hobine Control plotted by:

date: 7/24 & 7/26/43

Control checked by: Donald M. Brant date: 7/26/43

Radial Plot by: Walter E. Schmidt date: 8/43

Detailed by: Carlyn Goldenberg (Shoreline & Interior Rough Draft)

date: 8/13 - 8/29/43 9/21 - 10/20/43

Reviewed in compilation office by: Michael G. Misulia Sept., -Oct., 1943

Elevations on Field Edit Sheet checked by:

date:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 11

Shoreline (More than 200 meters to opposite shore): 24.1 Statute Miles

Shoreline (Less than 200 meters to opposite shore): 3.0 Statute Miles

Shoreline of Interior Ponds

1.8 Statute Miles

Number of Recoverable Topographic Stations established: 11 established by radial intersection

Number of Temporary Hydrographic Stations located by radial plot: 128 within the detail limits and 3 just outside the southern limits

Leveling (to control contours) - miles:

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:

The control plotted and the control transferred from adjoining Map Drawings; consists of twenty-two (22) U. S. Coast & Geodetic Survey Triangulation Stations which have been shown on the Map Drawing with the conventional symbol. A "Field Inspection Point" (F.I.P.) has been substituted for one of these stations.

The position of the "Field Inspection Point", as plotted from geographic coordinates, has been shown with a small black acid ink square, and the radially plotted position has been shown by a red ink circle on the glossy side of the Map Drawing. The "Field Inspection Point" will be discussed in paragraph No. twenty-seven (27).

The following eleven(11) U. S. Coast & Geodetic Survey Triangulation Stations fall within the detail limits of the Map Drawing:

LONG COVE EAST ENTRANCE, 1866, No recovery in 1943 Lost in 1934
BROWNS HEAD 2, 1934, r.1943 ("F.I.P." "BRO")
BROWNS HEAD, 1866 Lost
WHITE HOUSE WITH RED ROOF CHIMNEY, 1859, r.1943
+HOUSE WITH RED CHIMNEY, 1859 Lost
BAR ISLAND, CHIMNEY ON STONE HOUSE, 1934, r.1943
+MUSCONGUS ISLAND WHITE CHIMNEY, 1859 Lost
MARSH, 1859, No recovery in 1943 Lost
DAVIS, 1859, 1934, r.1943
FRANKLIN ISLAND LIGHT, 1859, 1934, r.1943
GULL, 1859, 1934, r.1943

The following eleven (11) U. S. Coast & Geodetic Survey Triangulation Stations fall just outside the original detail limits of the Map Drawing:

ROUND POND WHITE CHURCH SPIRE, 1859, r.1943
ROUND POND BROWN CHURCH SPIRE, 1859, r.1943
CRANBERRY ISLAND HOUSE CHIMNEY, 1859, £.1943
++OTTER ISLAND HOUSE CHIMNEY, 1859 Lost
SQUARE HOUSE, 1859, r1943 pestroyed
NEW HARBOR CROSS ON M.E. CHURCH STEEPLE, 1934, r.1942
LOOKOUT HILL, 1866, r.1942
CHILD'S CAPT. HOUSE CUPOLA, 1859, r.1942
MCFARLAND'S, THOMAS, HOUSE CHIMNEY, 1866, r.1943
+DAVIS'S, LUTHER, HOUSE, 1859 Lost
CROW, 1859 (within the Eastern Extended limits of the Map Lost
Drawing)

+The Field Inspection Parties of 1942 & 1943 identified these stations by old chimney sites. The stations have been shown with the dashed triangulation symbol on the Map Drawing. They should be considered lost. These stations have been deleted from manuscript

++The Field Inspection Party identified this station by the center of the ridge pole. The house is in ruins. The station has been shown with a dashed triangulation symbol on the Map Drawing. It should be considered lost. This Station has been deleted From Manuscript.

The triangulation symbol drawn in black acid ink indicates that the position of the station has been plotted directly on the Map Drawing from geographic coordinates. The symbol drawn in red acid ink indicates that the position has been transferred from an adjoining Map Drawing by the method of matching common projection lines and pricking through. The symbol drawn in green acid ink indicates that the position of the station has also been transferred from an adjoining Map Drawing but that it is possible it may be in error approximately 2.0 meters (0.2 mm).

27 RADIAL PLOT:

An individual plot was laid for the area of Survey No. T-5999 by the usual radial method without the use of celluloid templets.

The number of photographs and control stations was sufficient to lay and control the plot. The control was both well distributed and adequately identified.

All of the control recovered in 1943 was held to satisfactorily except the "Field Inspection Point" "BRO" (at triangulation station BROWNS HEAD 2, 1934, r.1943). The geographic position of the "Field Inspection Point" (F.I.P. "BRO") was computed by this Compilation Office from a measured distance and direction angle furnished by the Field Inspection Party, and the geographic coordinates of the triangulation station "BROWNS HEAD 2". Because the F.I.P. could not be held to in the plot, its position was redetermined by radial intersection as identified and pricked by the Field Inspection Party. The difference between the position as plotted from geographic coordinates and the position as determined by radial intersection is 0.4mm. The latter position has been shown on the glossy side of the Map Drawing with a red ink circle.

Tilt was present in a few photographs, but the angle of tilt was apparently not more than three degrees in any of the photographs, and therefore, no computations were deemed necessary to determine the isocenters. The principal points (photograph centers) were used as the chief ray centers for all radials.

Flight lines were used advantageously in the plot, and, in general, were held to 100 per cent, or within 0.2 or 0.3mm.

Satisfactory junction was made with common secondary points previously established by a radial plot for the area of Survey No. T-5992 which joins Survey No. T-5999 on the east along the meridian at Longitude 69° 30'. Plot without this station

27 RADIAL PLOT: (cont'd)

No appreciable differential distortion was present in the photographs.

The error of closure was negligible and no difficulties were encountered in adjustment.

The positions of the photograph centers (principal points) and secondary points established by this plot are believed to be within the limits of satisfactory accuracy, and the compiler should have no difficulty in establishing positions of temporary hydrographic signals, recoverable topographic stations, landmarks, aids to navigation, and minor detail points by radial intersection.

Respectfully submitted, October 29, 1943

Walter E. Schmidt

Asst. Photogrammetric Eng.

fkm

This Map Drawing has been compiled in accordance with instructions set forth in the Director's letters dated January 12, and April 1, 1942, for Project No. CS-272.

The area was well covered by photography, and the number of photographs was sufficient to detail the planimetry satisfactorily in conjunction with the furnished Field Inspection data, which were adequate.

The general character of the shore line in the area of Survey No. T-5999 is rocky. The interior consists mainly of wooded areas grown with either coniferous and deciduous trees or brush.

Planimetric detail has been shown with the conventional topographic symbols, and descriptive notes calling attention to any deviation therefrom have been shown either on the Map Drawing or on the accompanying Overlay Sheet.

The classification of all reads has been shown by notes on the Map Drawing, and is in accordance with the data furnished by the Field Inspection Party.

N.B.-Refer to "Road Classification for maps of all scales". Issued January 12, 1942 by the Engineer Reproduction Plant, The Army War College, Washington, D. C.

All roads, unless otherwise labeled by notes on the Map Drawing, are to be considered 6.0 meters wide.

Numerous houses, fences, and roads, the images of which were not clearly visible on any of the office photographs because of dense vegetation, were detailed directly from the Field Inspection photographs upon which their approximate locations had been sketched by the Field Inspection Party. Notes have been made on the Overlay Sheet calling attention to such detail.

It was necessary in some areas to determine the location of drainage by stereoscopy.

The shore line and adjacent culture of the Pemaquid River between Boyd Pond and Pemaquid Falls although falling just outside the original western limit of Survey No. T-5999, have been detailed on this Map Drawing. This part of the Pemaquid River is of no navigational importance, and is within the detail limits of Map Drawing, Survey No. T-5992 on which only the detail of shore line and adjacent culture of tidal waters was necessary. No Field Inspection data were furnished for the above mentioned portion of Pemaquid River and therefore, the shore line and adjacent culture detailed on the Map Drawing are in accordance with the interpretation of the area by this Compilation Office.

There on nop 75992

28 DETAILING: (cont'd)

It is believed that this additional information might be of some value to the Washington Office.

The original eastern detail limit of Map Drawing, Survey No.
T-5999 was extended to include the full detail of Hall, Franklin, Black Islands, and also a few rocky islets in the immediate vicinity. The extended limit has been outlined in green ink on the glossy side of the Map Drawing.

The scales of the Map Drawing and of the photographs were in good agreement, so that it was not necessary to use the vertical projector for detailing, except in the areas of WESTERN EGG ISLAND AND HARBOR ISLAND.

A note enumerating the abbreviations used, has been shown in the lower right hand corner of the Map Drawing.

30 MEAN HIGH-WATER LINE:

The Mean High-Water Line has been detailed in accordance with the data furnished by the Field Inspection Party, and has been shown with a full heavy-weight black acid ink line, the center of which is believed to be the true position. There were no marsh areas bordering the Mean High-Water Line.

31 LOW-WATER AND SHOAL LINE:

The outer approximate limits of shoal and rock ledge areas have been shown with a dashed light-weight black acid ink line, and a full light-weight black acid ink line respectively. The descriptive notes "approximate limits of shoal" and "approximate limits of rock ledge" have been shown on the Overlay Sheet. The approximate limits of shoal areas shown on the Map Drawing are in accordance with the Field Inspection data, whereas, the approximate limits of rock ledge areas are in accordance with interpretation by this Compilation Office.

accordance with interpretation by this Compilation Office.

The shall ine has been deleted where there were recent hydrosurveys

The light weight Black ine for ledges has been changed to the ledge symbol.

The above mentioned approximate limits are for the use of hydro
graphic parties only, and should not be considered as the position of

the Mean Low-Water Line. See note by reviewer on Office.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

Offshore features such as rocks and reef areas were detailed in accordance with the furnished Field Inspection data. They have been shown on the Map Drawing with the conventional symbols.

The extent to which the rocks and reefs bare at Mean High-Water or Mean Low-Water has been shown by notes on the Overlay Sheet.

See note on offshore details by reviewer.

33 WHARVES AND SHORELINE STRUCTURES:

It is believed that all piers within the area of Survey No. I-5999 have been shown on the Map Drawing, and descriptive notes calling attention to such shore line structures have been made on the Overlay Sheet.

34 LANDMARKS AND AIDS TO NAVIGATION:

No additional landmarks or aids to navigation were recommended by the Field Inspection Party for the area of Survey No. T-5999.

35 HYDROGRAPHIC CONTROL:

The positions of eleven (11) recoverable topographic stations and one hundred twenty-eight (128) temporary hydrographic stations all of which fall within the Original and Eastern Extended detail limits of this Map Drawing, have been determined by radial intersection. In addition to these, the positions of three other temporary hydrographic stations (Nos. 39, 40, 41) which have been radially plotted, have been shown on the Map Drawing just outside the southern detail limits. The latter stations should have been shown within the Eastern extended limits of Map Drawing, Survey No. T-5991 or within the original detail limits of Map Drawing, Survey No. T-5438. However, this was impossible because the required field inspection data were not furnished this Compilation Office at the time that either Map Drawing, Survey No. T-5991 or Map Drawing, Survey No. T-5438 was being compiled.

The names, descriptions and numbers of the recoverable topographic stations, and the numbers and descriptions of the temporary hydrographic stations have been lettered on the Overlay Sheet.

Form No. 524 has been submitted for the following ten (10) Recoverable topographic stations:

Nos. 24, 128, 156

Bank

Land

Coal

Grass

Kill

Fish

"G" U.S.E., 1935 (U. S. Engineers triangulation station)

The position of a U.S. Engineers Bench Mark, shown within the original detail limits of the Map Drawing has been previously submitted on Form No. 524 with Map Drawing, Survey No. T-5991.

* No 2 of numbered control stations on pub. map.

37 GEOGRAPHIC NAMES:

An investigation of geographic names made by Lieut. Comdr. Henry O. Fortin in 1942 - 1943 covered part of the area of Survey No. T-5999. A special report on the investigation made in 1942 has been previously submitted to the Washington Office. The remainder of the geographic names for the area of this survey were taken from the best available sources on hand.

The geographic names shown on the Map Drawing have been compiled in two lists (disputed and undisputed) and are submitted herein.

38 JUNCTIONS:

On the north, the junction of shore line and interior planimetry with Survey No. T-5998 is in excellent agreement.

The original junction with Map Drawing, Survey No. T-5621 to the east, is along the meridian at Longitude 69° 22' 30". The only land areas that a part of the meridian passes through between the northern and southern detail limits of both Map Drawings are the Franklin, Hall and Black Islands. The remaining part passes through water area. Since the full detail of the three islands and a few islets have been shown in the eastern extended limits of Map Drawing, Survey No. T-5999, there is no junction of shore line or planimetric details to be considered.

On the south, the junction of shore line and interior planimetry with Map Drawing, Survey No. T-5991, the original eastern detail limit of which was extended, is in good agreement. Map Drawing, Survey No. T-5438 is also to the south. However, the arc of parallel at Latitude 43° 52' 30", which is the junction of the two Surveys, passes through all water area excluding that part which pertains to the Eastern Extended limits of Map Drawing, Survey No. T-5991. Therefore, no junction of shore line or planimetry is to be considered.

The junction of Map Drawing, Survey No. T-5999 and T-5992 is along the meridian at Longitude 69° 30' 00" which passes through all land area. Since only the shore line and immediate adjacent culture of tidal waters were detailed upon Map Drawing, Survey No. T-5992, no junction of interior planimetric detail was considered. However, the shore line and immediate adjacent culture of that part of Pemaquid River which is just outside the original western limits of Survey No. T-5999 and which is between Boyd Pond and Pemaquid Falls has been detailed on this Map Drawing. Satisfactory junction of planimetry was made at Pemaquid Falls which was previously detailed on Map Drawing, Survey No. T-5992.

39 RECOMMENDATIONS FOR FUTURE SURVEYS:

The planimetry shown on the Map Drawing is believed to be complete in all details of importance, 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 the positions of inland radial points and details of importance, does not exceed 1.0mm.

LL COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Monhegan Quadrangle (15'), Maine, printed May 1906, reprinted 1921, scale 1:62,500. 7-1001 1865

T-1002 1866 6925 8 "

Because of the Targe difference in scale between the Map Drawing, and the above mentioned quadrangle, comparison of planimetric detail could not be readily made. However, planimetry common to both is in fair agreement. Hydrographic surveys

fair agreement. Hydrographic Surveys
6853 1943
6854 1943-44
L5 COMPARISON WITH NAUTICAL CHARTS:

Chart No. 313, published July 1933, reissued August 1938, scale 1:40,000.

Chart No. 1203, published June 1936, Scale 1:80,000.

Chart No. 1204, published March 1942, scale 1:80,000.

Because of large differences in scale between the Map Drawing and the above mentioned charts, comparison of planimetric detail could not be readily made. However, planimetry common to both is in fair agreement, with the exception that numerous offshore features which appear on the charts have not been shown on the Map Drawing because their images were not visible on any of the photographs, and also because no Field Inspection data were furnished for them. The geographic names of the undetailed features are submitted herein.

Respectfully submitted, October 29, 1943

Carlyn Goldenberg
Photogrammetric Aid

Compilation and Descriptive

Report Reviewed by;

Michael G. Misulia
Jr. Topographic Engineer

Supervised by:

Walter E. Schmidt

Asst. Photogrammetric Eng.

Approved & Forwarded: November 1, 1943

Fred. L. Peacock

Chief, Air Photographic Party No. 2

Undisputed

Bar Island Bar Island Ledge Black Island -. Black Island Ledge V · Boyd Pond Browns Cove / . Browns Head · Browns Head Cove *Browns Head Ledge -? · Chamberlain / · Crane Island ~ , Devils Back (W. of S. end Crane I.) *Devils Elbow ? *Devils Limb ? . Franklin Island J *Garden Island Ledge ? - Haddock Island -*Haddock Island Ledge ? *Hough Ledge ? Harbor Island *Harbor Island Rock? Hastings Pond V Jones Garden Island . Killick Stone Island . Long Cove

Long Cove Point · Loudville V · Marsh Harbor · Marsh Island Muscongus Bay v . Muscongus Sound · New Harbor v . Pemaquid ? ? Pemaquid Falls (only as applying to . Pemaquid Neck whals in river - not . Pemaquid River · Pemaquid River 9 *Polins East Ledge ~ *Poland Ledges (v.s. 68) *Poland North Ledge ? *Poland South Ledge 7 · Rosses Pond ~ · Round Ledge *Salt Pond Ledge ? . Thief Island ~ · Thrumcap Island ~ *Webber North Ledge ? *Webber Sunken Ledge ? · Western Egg Rock / - Wreck Island ~ - Wreck Island Ledges -

*These geographic names pertain to features which are within the area of Survey No. T-5999, but which have not been shown on the Map Drawing because their images were not visible on the photographs, and because no Field Inspection data were furnished for them.

Moxie Cove (w. shore Muscongus Sound, lat. 43°56'
Webber Dry Ledge ("ledge" n. ot South end Ross I, ling
69° 27')

Names preceded by are approved ECK Little I.

LIST OF GEOGRAPHIC NAMES

Disputed

Muscongus Island Dentity with w. S. & B. 1945 Loud Is
Ross Island Candian with w. S. & B. 1945 Webbers
Hall Island Halls I
*Kelp Ledge * Haddock

Loud Island
Pond Island
Webbers Dry Ledges
Halls Island
Haddock Island Kelp Ledge

*These geographic names pertain to features which are within the area of Survey No. T-5999, but which have not been shown on the Map Drawing because their images were not visible on the photographs, and because no Field Inspection data were furnished for them.

by L. Heck on 3/13/46

DIVISION OF PHOTOGRAMMETRY Review Report for Planimetric Map Manuscript T-5999 April 1945

This manuscript absorbed a portion of T-5438, which rumber has been re-assigned to another area.

Descriptions of Hydrographic Signals, Signal Sites, etc., for this area are filed in the Descriptive Report for T-5991.

32. OFFSHORE DETAILS.

The area covered by this survey is also partially covered by surveys H-6853 and H-6854 (1943). The photographs used in detailing T-5999 were taken at high water, therefore many features were not in agreement between T-5999 and the hydrographic surveys.

All additions and corrections taken from photographs have been shown in red; while additions and corrections taken from the hydrographic surveys have been shown in green on the map manuscript.

OFFSHORE DETAILS (Supplemental corrections, by H.W. Thune)

H-6967 and H-6969 (1944), which cover the eastern portion of the map manuscript, were used to make additions and corrections to rock and ledge conditions.

43. COMPARISON WITH PREVIOUS SURVEYS

T-1001 1/10000 1865 T-1032 1/10000 1866 1002 " " 1033 2

Graphic Control 6925a, 6925b, 1/10000 1943

T-5999 supersedes the above surveys in their common areas for comperable details.

45. COMPARISON WITH NAUTICAL CHARTS

313 1/40000 Aug 1938 1203 1/80000 June 1936 1204 1/80000 Mar. 1942

T-5999 has not been applied to the charts as of the date of this review.

Reviewed by

Under the direction of:

Joseph K. Wilson.

Chief, Review Section Kily.

Approved by:

Tech. As to the Chief, Division of Photogrammetry

Chief, Nautical Chart Branch, Division of Charts

Chief, Division of Photogrammetry Chief, Division of