5964

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic / ~~*Hydrographic*~~ } *Sheet No.* T-5964

State Maine

LOCALITY

Casco Bay

Maquoit Bay & Northern Portion of Harraseeket River

DATE OF PHOTOGRAPHS, OCT 17, 1941

1942

CHIEF OF PARTY

Lieut. (J.G.) L. W. Swanson

U. S. GOVERNMENT PRINTING OFFICE 1022231

5964

Applied to Chart Comp. 201 ... March 28, 1942 W.E. MacEwen

Celluloid applied to Reconstruction Chart 3/5 (East of Long. 70°) J.T.W. 3/3/43

Applied to Ch. 201 (after review) Mar. 28, 1945 - J.T.W.

Applied to Reconst. Ch. 315 (after review) Mar. 28, 1945 - J.T.W.

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. T-5964

REGISTER NO.

State Maine

General Locality Casco Bay

Locality Maquoit Bay & Northern Portion of Harraseeket River

Scale 1:10,000 Date of ~~survey~~ Photographs, Oct. 17,1941

Vessel Air Photographic Survey Party No. 2

Chief of party Lieut. (J.G.) L. W. Swanson
Field Inspection - Lieut. (J.G.) E. B. Lewey
Surveyed by Radial Plot - J. E. Sunderland
Shoreline - J. E. Sunderland
Inked by Detail - J. E. Sunderland

Heights in feet above - to ground to tops of trees

Contour, Approximate contour, Form line interval - feet

Instructions dated Project N. 272, Dated January 12, 1942

Remarks:

GPO 286853

DATA RECORD T-5964

PHOTOGRAPHS

NUMBER	DATE	TIME	SCALE	ALT.	STAGE OF TIDES
6650 to 6652	Oct. 17, 1941	9:47-9:49a.m.	1:10,000		6.7ft.above M.L.W.
6680 to 6683	Oct. 17, 1941	10:14-10:18a.m.	1:10,000		5.7ft.above M.L.W.
6685 to 6687	Oct. 17, 1941	10:25-10:28a.m.	1:10,000		5.4ft.above M.L.W.
6772 to 6773	Oct. 17, 1941	12:24-12:27a.m.	1:10,000		2.3ft.above M.L.W.

Tide from predicted tables for Portland, Maine, with time correction to Little Flying point. Mean range, 9.0 Ft., spring range, 10.3 Ft.

Camera: U.S. Coast & Geodetic Survey Nine Lens (Focal Length, 8¼ inches. All negatives on file in Washington Office.

SUPPLEMENTAL SURVEYS

Graphic Control Sheets.....F. L. Peacock.....Season of 1941
Hydrographic Surveys.....F. L. Peacock.....Season of 1941
Field Inspection.....E. B. Lewey.....Nov.-Dec., 1941
Name Investigation.....None.....None

GENERAL INFORMATION

Chief of Party.....L. W. Swanson.....~~Date Unknown~~
Projection By.....Ruling Machine, Wash. Off....Date Unknown
Projection Checked By.....N. L. W.....Date Unknown
Control Plotted By.....W. E. Schmidt.....Dec. 29, 1941
Control Checked By.....W. A. Rasure.....Dec. 31, 1941
Radial Plot By.....J. E. Sunderland.....Jan., 1942
Radial Points Pricked By.....J. E. Sunderland.....Jan., 1942
Additional Radial Points By..J. E. Sunderland.....Jan., 1942
Shoreline Inked By.....J. E. Sunderland.....Jan., Feb., 1942
Detail Inked By.....J. E. Sunderland.....Jan., Feb., Mar., 1942
Scale.....1:10,000.....No Scale Factor

STATISTICS

Area (land) - only land adjacent to shoreline detailed
Shoreline (More than 200 M. from opposite shore.....12 Statute Miles
Shoreline (Less than 200 M. from opposite shore.....3.5 Statute Miles
Roads, Streams and Trails.....7.5 Statute Miles
Time Required for shoreline and detail.....20 Days

REFERENCE STATION

LITCHFIELDS, 1933

Latitude	43° 51' 54.460" (1680.8 Meters)	Datum: N.A. 1927
Longitude	70° 01' 04.317" (96.4 Meters)	

X: 539,244.33
Y: 376,106.69

[redacted] - ~~1927~~
MAINE WEST ZONE

DESCRIPTIVE REPORT
TO ACCOMPANY
AIR PHOTOGRAPHIC SURVEY SHEET NO. T-5964
STATE OF MAINE
CASCO BAY
MAQUOIT BAY
&
NORTHERN PORTION OF HARRASEEKET RIVER

Date of this Report March 25, 1942

INSTRUCTIONS:

This Rough Draft Map Drawing is a part of Project HT-272, instructions for which are dated January 12, 1942.

FIELD INSPECTION:

Field Inspection covering this survey sheet was made by Lieut. Ernest B. Lewey during November and December, 1941

PHOTOGRAPHS:

The Nine Lens Photographs were taken with the U. S. Coast and Geodetic Nine Lens Camera.

CONTROL:

The control used on this sheet consists of 8 U. S. Coast & Geodetic Survey and 8 U. S. Geological Survey.

The Triangulation Stations that are listed as follows are within the detailed limits of this Map Drawing.

U. S. Coast & Geodetic Survey

*True, 1933
*Litchfield, 1933
-Buganuc Landing, Barn Cupola, 1933
*Stearn, 1933
Mare Point, Stearn's Barn, North Gable, 1933
(See Note on Page 2)
*Sherman, 1854

U.S. Geological Survey

-1928 + (Bath Quadrangle)
-1982 (Freeport Quadrangle)
-1542 + (Freeport Quadrangle)
-1558A (Freeport Quadrangle)
-1558AA (Freeport Quadrangle)
-1565 + (Freeport Quadrangle)
-1578 (Freeport Quadrangle)

CONTROL: (Continued)

The Triangulation Stations that fall outside limits of this sheet are listed as follows:

U. S. Coast & Geodetic Survey
-Brunswick, Church, Black Spire, 1933
-Bartol Island, Flag Pole, 1941

U. S. Geological Survey

-1587 ↓ (Freeport Quadrangle)

All Triangulation marked with the asterisk symbol was pricked direct from the Graphic Control Sheets. Those not marked were plotted in the usual manner. Stations marked with bar were pricked on photographs and used.

Note:

U. S. C. & G. Station; Mare Point, Stearn's Barn, North Gable, 1933. This station could not be used as this barn evidently has been remodeled.

Recovery Card to Geodesy 7/16/46 JM

A number of natural objects used as Hydrographic Signals by the Hydrographic Party were pricked direct from the Graphic Control Sheets and are identified by Red Circles.

Those that were used as additional control for this Map Drawing are shown with 1½ M.M. Circles.

RADIAL PLOT:

The photographs on this sheet are fixed by existing Triangulation plotted from computed positions and Hydrographic Signals pricked direct from Graphic Control Sheets.

Each photograph was laid separately so that the Radial Lines through the control on the photographs resected as nearly as was possible the Triangulation and other control stations as plotted or pricked from the graphic control sheets on the Map Drawing. The center of the photograph was then pricked on the Map Drawing and is indicated by large double red circles.

Map Drawing T-5963 was joined to sheet T-5964, and by using all the control pricked on photograph 6772, not covered by Map Drawing T-5964, a strong fix of this photograph was obtained. Common Points were established between T-5964 and T-5963 on Mare Point Neck. These Common Points were then used as control in the S. E. corners of photographs 6773 and 6686.

RADIAL PLOT: (Continued)

Map Drawing T-5962 was joined to Sheet T-5964, and by using all the control pricked on photographs 6652 and 6680, not covered by Map Drawing T-5964, a strong fix of these photographs was obtained. A common point was established between T-5964 and T-5962. Then this Common Point was used as control in the S. E. Corner of Photograph 6682.

A dog ear was added so that the center of photograph 6687 could be pricked. This photograph could be used to obtain additional cuts.

Good resections on Triangulation and other control stations were found possible only on those stations which were natural objects and easily identifiable on the photographs. The flight lines at adjacent photo centers were found to hold 100% with most of the photographs.

DETAIL:

The shoreline and adjacent areas were detailed in accordance with the instructions for the planimetric surveys compiled from aerial photographs. The Radial Points used, were, in general, on, or near, the high water line because of the great amount of elevation and bluffs along the shoreline. The scale of the photographs was such that most of the shoreline was delineated with the use of the projector.

All Rocks Baring, identified by Field Inspection or identified with certainty on two or more photographs, which are shown with dotted circles, were radially plotted. Others are indicated without the dotted circle. The Amount of Baring is noted if Field Inspected.

Rocks awash or bare at high water were outlined and their condition at M. H. W. noted if called for in Field Inspection. No sunken rocks have been shown by the compiler.

Doubtful areas in the photographs indicating the presence of sunken rocks, sunken ledges, or shoals have been outlined and labeled Foul or Shoal.

Roads were detailed according to the Field Inspector's notes as shown on the Field Inspection Prints. All roads are indicated with the centerline only, and labeled as to type, all are to be shown 6 Meters wide. Noted on Map Drawing

The buildings along or close to the shoreline are shown. Sodded areas along the shoreline are shown. Cultivated areas along the shoreline are labeled.

RECOVERABLE HYDROGRAPHIC SIGNALS:

Recoverable Hydrographic Signals covering this Map Drawing have previously been submitted. There are no new recoverable Hydrographic Signals on this Map Drawing.

RECOVERABLE TOPOGRAPHIC STATIONS:

Recoverable Topographic Stations covering this Map Drawing have previously been submitted. There are no new recoverable Topographic Stations on this Map Drawing.

LANDMARKS FOR CHARTS:

A list of landmarks has been prepared on Form No. 567 covering Chart No. 201 for charting and deletion. These have been previously submitted to the Washington Office by Lieut. Commander Fred. L. Peacock.

Chart Letter 504 (1941)

GEOGRAPHIC NAMES:

Geographic names covering this Map Drawing are listed on Form M234 in the appendix.

COMPARISON WITH PREVIOUS SURVEYS:

Chart No. 201 and 315

Due to the difference in scale between this Map Drawing and the above mentioned charts, small differences could not be ascertained. However, the following differences were noted:

* At Lat. 43°51'32", Long. 70°00'32", the island shown on charts 201 and 315 is now joined with the mainland.

At Lat. 43°51'38", Long. (70°00'32" 43°51'38"), Charts 201 and 315 show a bridge or dam that does not now exist.

Photostat of compilation of previous surveys as compiled by the Chart Division:

This survey is in fair agreement with compilation sheet No.T-5964 except for the following noted differences.

The roads at Lat. 43°51'5" Long., 70°01'18" are in agreement only generally.

At Lat. 43°51'32" Long., 70°00'32", a hook makes out from the shore where there was ~~formally~~ formerly an island.

COMPARISON WITH PREVIOUS SURVEYS: (Continued)

A Rock at Lat. 43°50'5 3" Long., 70°02'02" is now shown as a reef.

There are two rocks instead of one at Lat. 43°51'18" Long., 70°01'26", also these rocks are surrounded by a little ledge.

There is a reef and rock awash at Lat. 43°50'58" Long. 70°01'56".

A reef makes out from shore at Lat. 43°51'5", Long. 70°01'47".

At Lat. 43°51'24", Long. 70°01'20", there is a rock and ledge instead of just a rock.

Sand and Shell Bars are at Lat. 43°51'9", Long. 70°02'9".

Buganuc Rock at Lat. 43°51'8", Long. 70°00'53" is somewhat larger than shown on previous surveys.

* There is a reef across the entrance of an inlet at Lat. 43°50'56", Long. 70°00'4"

At Lat. 43°50'37" long., 70°00'27", two rocks are now shown as a ledge.

A Rocky Point exists at Lat. 43°50'33", Long. 70°00'29".

* At Lat. 43°50'27", Long. 70°00'35", there is a ledge.

Around Porter Landing, Lat. 43°50'36", Long. 70°06'0", the shoreline and roads are in poor agreement with previous surveys.

Bartol Island is now connected to mainland with a causeway, Lat. 43°50'17", Long. 70°05'25".

The shoreline in the vicinity of Lat. 43°50'25", Long. 70°05'4" is only in agreement generally.

HYDROGRAPHIC SHEETS:

Slight Disagreements between the Hydrographic Survey and Map Drawing T-5964 are indicated by the use of purple ink applied on the reverse side of Sheet T-5964.

HYDROGRAPHIC SHEETS: (Continued)

The solid purple line is the zero curve from the Hydrographic Boat Sheet. Zero curve now in agreement.

JUNCTIONS:

Sheet T-5962, s. side. The shoreline and interior detail are in good agreement.

Sheet T-5963, S. Side. The shoreline and interior detail are in good agreement.

RECOMMENDATION FOR FUTURE SURVEYS:

This sheet is believed to be complete in all detail of importance for charting and no additional surveys are required.

The probable error of Radial Points and well defined objects along the shoreline is not greater than 0.5 MM. The error of Inland Radial Points and detail of importance is not greater than 1.0MM.

Respectfully submitted,

James E. Sunderland

James E. Sunderland
Photogrammetric Aid (Field)

Approved: March 27, 1942

L. W. Swanson

Lieut. L. W. Swanson (j.g.)
Chief of Party

	Remarks	Decisions
1 *1	U.S. Coast Pilot - Spelled Harraseeket River, also called Freeport River U.S. Light List - Called Freeport River	
2		
3	o P.O. Guide Map - Spelled Porte Landing	
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5	o P.O. Guide Map - Called Mere Point Bay	
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7	o P.O. Guide Map - Called Maquoit	
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M 234

GEOGRAPHIC NAMES

Survey No. T-5964

Name on Survey	A, On Chart No. 201 & 315	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, U.S. Coast Pilot	
Harraseeket River	✓		X			X		*	↓	1
Bartol Island	✓ X		X							2
Porter Landing	✓ X		X			o				3
Maquoit Bay	✓ X		X			X			X	4
Mare Point Bay	✓ X		X			o		X	X	5
Mare Point Neck	✓ X		X						X	6
Wharton Pt.	✓ X		X			o				7
Bunganuc Landing	✓ X		X							8
Bunganuc Rock	✓ S									9
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M 234

Review of Photogrammetric Shoreline Survey T-5964

Division of Photogrammetry

Graphic control surveys for the location of horizontal control and hydrography preceded field inspection and compilation of this shoreline survey. The graphic control surveys located only small sections of shoreline.

The graphic control surveys and copies of the hydrography were available and were used for control and for comparison in compiling this shoreline survey.

Field Inspection.

Field inspection was not made in as much detail as would generally be desirable, but was adequate in this case since the recent graphic control and hydrographic surveys were available to the compiler.

Graphic Control Surveys.

The following graphic control surveys have been used in the compilation of T-5964:

6843b	1:10,000	1941
6848b	1:10,000	1941
6850	1:10,000	1941

Contemporary Hydrographic Surveys.

H-6731, 1:10,000, 1941-43 has been compared with T-5964 and minor adjustments of shoreline details made after consultation with the hydrographic reviewer.

Previous Topographic Surveys.

T-5964 is adequate to supersede those sections of the following previous surveys which it covers:

918	1:10,000	1861 - 1862
923	1:10,000	1863

Comparison with Nautical Charts.

T-5964 has been applied to nautical charts 201 and 315 since this review was made.

Reviewed under the direction of R. M. Berry, January 1945.

Approved by:

B. G. Jones
B. G. Jones, Technical Asst.
Div. of Photogrammetry

Robert White
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

Raymond B. Eyman
Chief, Div. of Coastal Surveys