

8533

Original

1206 + 229

8533

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey <u>Air Photographic Topographic</u>	
Field No. _____	Office No. <u>T-8533</u>
LOCALITY	
State <u>New Hampshire - Massachusetts</u>	
<u>Essex County, Massachusetts</u>	
General locality <u>Rockingham County, N. H.</u>	
Locality <u>Exeter, N. H.</u>	
<u>1944</u>	
CHIEF OF PARTY	
<u>Fred. L. Peacock</u>	
LIBRARY & ARCHIVES	
DATE <u>Sept 8 - 1948</u>	

DATA RECORD

T-8533

Quadrangle (II):

Exeter $7\frac{1}{2}$ minute

Field Office:

Sanford, Maine

Compilation Office:

Baltimore, Md.

Instructions dated (II III):

May 1, 1943

Project No. (II):

CS-303-C, South

Chief of Party:

F. L. Gallen

Chief of Party:

Fred. L. Peacock

Copy filed in Descriptive

~~Report No. T-~~ (VI)

Div. of Photogram. Office Files

Completed survey received in office: 17 Feb. 1944

Reported to Nautical Chart Section:

Reviewed: 3/3/44 Applied to chart No. Date:

Redrafting Completed: 22 April, 1944

Registered: 3 May 1944 Published: 1944

Compilation Scale: 1:20,000 Published Scale: 1:25,000

Scale Factor (III): None

Geographic Datum (III): N. A. 1927 Datum Plane (III): Mean Sea Level

Reference Station (III): ROLLINS, 1941

Lat.: $42^{\circ} 59' 17.662''$ 545.0m. Long. $70^{\circ} 53' 45.306$ 1026.4m. Adjusted
~~Unadjusted~~State Plane Coordinates (VI)
not computed at time of review

X =

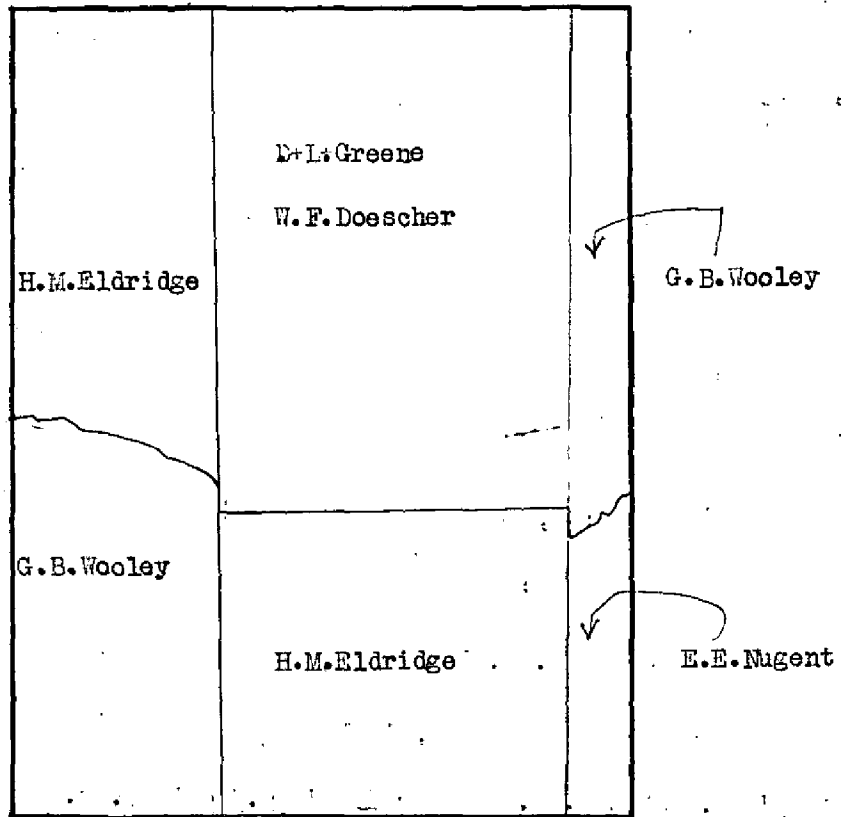
Y =

Military Grid Zone (VI) Zone "A"
and special Harbor Defense Grid, Portsmouth-Portland Area.

PROJECT No. CS 303-C South

June-October, 1943

Quadrangle No. E-8533



STATISTICS (III)

Land Area (Sq. Statute Miles): 55

Shoreline (More than 200 meters to opposite shore): None

Shoreline (Less than 200 meters to opposite shore): 8 Statute Miles
(Center line of streams only)

Number of Recoverable Topographic Stations established: 22 by radial plot (16 of which
are Bench Marks)

Number of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles: About 110 mi.

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:

General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C.S.343C, was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000.

Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, drive-ways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templates) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the Baltimore Tampa Photogrammetric Office.

FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.

Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

PROCESSING IN THE WASHINGTON OFFICE

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blue-line" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

FIELD INSPECTION REPORT
QUADRANGLE T-8533
PROJECT 303-C (SOUTH)
P. E. GALLEN, CHIEF OF PARTY

1. The area covered by this quadrangle in general is very rough, especially in the southwest section. The area along the eastern edge is comparatively flat. The ground varies in elevation from sea level to a height of about 328 feet, and has several high hills throughout the entire area.

Drainage for this area does not follow a well defined pattern. Pow Wow River enters the area in the southwestern section flowing in an easterly direction and turns to a southerly direction and leaves the area near the southwestern corner. Grassy Brook, which is more of a swamp than a brook, drains into the Pow Wow River. Great Brook, Exeter River and Bloody Brook which are tributaries of the Squamscott River flows in a northerly direction and drains the northern portion of the area. Ash Brook River flows in a southeasterly direction and leaves the area near the center of the eastern edge.

Many narrow intermittent swamp areas were found in this quadrangle, most of which are indicated by intermittent drainage. No definite channel could be found in most of these places and because of the small scale photographs used, the narrow swampy areas----- could not be shown.

The western portion of this area is heavily wooded, the central and eastern section are about half wooded and half cleared of which very little is farm land.

There are many roads in this area and in general they are well maintained. Some of the county roads are accessible only in the summer months.

2. The field inspection for this area is believed to be complete except for the classification of bridges and culverts. This will be done by the field edit party. A sheet is attached to this report showing the color scheme used for the buildings. There are some variations from this scheme in towns and along the shore line. The variation in color scheme is indicated on the back or edge of each photograph on which it was used.

3. The photographs are in general the same for this area. The dark tones usually indicate evergreen woods or dense underbrush in perennial swampy areas.

The grey tones vary from a dark gray to a light gray. The lighter tones are the cleared or cultivated land and the darker tones are deciduous wood and brush areas which vary according to the density of the woods and also the amount of scattered evergreen found in the woods. Most of the gray spots in the wooded area were found to be sage, deciduous brush or areas where the trees were recently cut. Most of the small spots in particularly light colored areas are juniper bushes.

There are various areas which show as irregular line of light gray and dark gray colors. These lines are caused by windrows of brush in cut-over areas. A sawdust pile sometimes shows as a light spot near the center of the area. The probable drainage indicated with white ink has been checked in the field and only that part inked in blue was found to be correct.

4. The horizontal control is the subject of a separate report.
5. Supplemental levels were run over most of the State and County Roads to furnish additional control for the plane table party. Elevations were left on identifiable points on the photographs. In areas where no identifiable points existed stakes were used to identify the elevation and these points were later located on the photo by the plane table party.

Sufficient ties were made to permanent bench marks to control these lines, and if the error of closure was less than 0.30 of a foot, no adjustment of the elevations was made. If the closure was greater than 0.30 of a foot, and less than 1.0 foot, a straight adjustment was applied to the elevations. If the error was greater than 1.0 foot, the lines were re-run.

6. All contouring was done directly on the photographs using the regular equipment. Elevations were taken on the tops of all hills and on the toe and top of the slopes and contours were placed by interpolation.

The stereoscope was used extensively in this area. Before work was started on a photograph the area was studied under the stereoscope and all drainage, tops of hills and any other cultural or topographic features were noted on the photographs. These were checked and clarified in the field. This method proved to be a good guide as to where to run traverse lines to the best advantage. In densely wooded areas a number of traverse lines were run at various intervals depending upon the topography of the area and the contours were drawn from one traverse line to another by the use of the stereoscope. The Hand Level was used extensively in wooded areas where practical, and elevations were paced or taped from the nearest identifiable point. Considerable scale factor was found on the photographs in this area, most of which was less than 1 : 20,000. The contouring was done from the nearest cultural features as much as possible.

7. The Mean High Water line has been indicated on the photograph where it could be determined by this party.
8. The Low Water line has been identified on the photographs where it could be determined by this party.
9. There are no wharves or shore line structures in the Quadrangle.
10. Does not apply to this Quadrangle.
11. There are no land marks or aides to navigation in this Quadrangle.
12. Does not apply to this Quadrangle

13. There are no landing fields or aeronautical aids in this Quadrangle.
14. All roads are classified according to instructions from the Army War College, dated November 11, 1942.
15. The dimensions and load limit on the bridges have been shown on the photographs, but they have not been classified.
16. All buildings and structures have been indicated in contrasting colors on the photographs.
17. Boundary monuments and lines are the subject of a separate report for this project.
18. Geographic names is the subject of a separate report for this project.
19. This Quadrangle joins a recent survey by the U.S.G.S. on the South. A small area in Massachusetts was contoured by this party and later a tracing of the U.S.G.S. work was received. The work in general is in agreement. All discrepancies in the junctions were checked on the photographs and were found to be correct. The junctions to the East with Quadrangle T-8534 and to the North with Quadrangle T-8530 are on overlapping photographs. The Junctions have been checked in the field and should be found correct. Discrepancies with the old survey by the U.S.G.S. were found on the West. The discrepancies were checked on the photographs and found to be correct.

Approved and forwarded

F. L. Gallen
F. L. Gallen
Chief of Party

Submitted by,

Henry M. Eldridge per F.L.G.
Henry M. Eldridge,
Senior Photo. Aid.

COLOR SCHEME FOR BUILDINGS

- Dwellings
- ▼ Barns
- ▼ Dwellings and Barns connected
- Business Buildings
- Public Buildings; identified as for example; ■ ①
 ① Jefferson City Library

BUILDINGS

b - barn
Bldg - Building
Bo Ho - Boat House
Ch - Church (give name)
Ct Ho - Court House (give name)
P.O. - Post Office (give name)
Sch - School (give name)
Hos - Hospital (give name)
RR Sta - Railroad Station
Sto - Country store or gas station
P Sta - Power Station

BOUNDARIES

BDY - Boundary
F B - Fire Break
HDG - Hedge
Park - Park
Cem - Cemetery
Co - County

LANDMARKS

FT - Fire Tower (give name)
TT - Transmission Tower
RT - Radio Tower or mast
Air Bn - Airway Beacon
Bn - Non-lighted aid to navigation
Lit - Lighted aid to navigation
Lk - Low tank
Tk elev - Tank elevated on structure
Stk - Stack

GENERAL

X - delete; except where it pertains to elevations. Use only the abbrev. listed on this page. Do not make up abbreviations.

SHORE LINE

MWL - Mean high water; fast land
LWL - Low water line
LL - Marsh shore line
M - Marsh
MG - Marsh grass in water
Dk - Dock
Pier - Pier
Ss W - Sea Wall
Blhd - Bulkhead
Jetty - Jetty
Dol - Dolphie
Pile - Pile
S - Sand
Mud - Mud

Rk - Rock or Rocky
Sty - Stoney
Conc - Concrete
Wo - Wood
Blf - Bluff
Dune - Dune

STREAMS AND PONDS

D - Largest ditches only
IX - Small ditch (delete)
IS - Intermittent stream
FD - Probable drainage
Cr - Creek
Ca - Canal
Cv - Culvert
Lve - Lavee
Dam - Dam
P - Pond
IP - Intermittent pond

VEGETATION

Gr - Grass
Sw - Swamp
Cy Sw - Cypress Swamp

ROAD CLASSIFICATION FOR MAPS OF ALL SCALES

CLASS	LABEL	STRUCTURE	LOADING
1	Dependable hard-surface heavy duty road.	Concrete, asphaltic concrete bituminous Macadam, H-15 type structures.	Will bear heaviest loads with little maintenance.
2	Secondary, hard-surface all-weather road.	Surface-treated, piled gravel, waterbound Macadam, structures generally lighter than H-15 but sturdy.	Will bear fairly heavy military loads in all weather if maintained.
3	Stone-surface graded, dry-weather road.	Gravel or stone surface stable material, selected sand-clay, etc. Drained and graded.	Will bear light military loads in good weather.
4	Unimproved road	Graded and leveled earth, with very light structure.	Generally unsuitable for military loads.
4K	Track road	Woods roads, farm roads, etc. over which a standard gage vehicle can be driven.	
5	Trail	(Horse trails, foot trails, etc.)	

Roads with more than two (2) lanes are indicated by note along road, e. g. 3 LANE. Change in lanes shown by tick at point of change. Main roads have two lanes unless otherwise stated.

Private roads are designated by the letter P after the road classification.

WOODS AND BRUSH

TREE

- P Fast-Lane
- I Evaporasi
- R Cypress

CONTOUR

- B Trees 10 feet or more in height, and thick enough when in foliage to conceal troops and vehicles.
- T Brush and undergrowth thick enough to impede foot troops and conceal troops lying down.
- X Scattered trees not thick enough to conceal troops.
- W Scattered brush not thick enough to conceal troops.

SPECIAL FEATURES

- HP Higher ground - usually appears in light tone on photograph; either wooded or cultivated area; may be scrub trees or brush. (usually not symbolized on photographs.)
- LG Low areas - generally appears dark on photograph; becomes swampy during rainy season; often covered with dense growth of brush.
- SW Swamp - ground covered with water or boggy most of the time; lower in elevation than LG; wooded and/or brush.
- M Salt marshes

NOTE: The above areas are not outlined but sufficient notes are made on each photograph so that the variation in tones can be correctly interpreted in the office.

BRIDGE AND TUNNEL CLASSIFICATION

<u>First Symbol</u>	<u>One Lane</u>	<u>Unlimited</u>
Capacity		
A	50 tons	25 tons
B	25 tons	18 tons
C	18 tons	13 tons
D	10 tons	7 tons
E	8 tons	4 tons
F	Light vehicles only	

Second Symbol

<u>Vertical Clearance</u>	
A	over 14 feet
B	over 13 feet
C	over 12 feet
D	over 11 feet, etc.

Third Symbol

<u>Horizontal Clearance</u>	
A	over 18 feet
B	over 17 feet
C	over 16 feet
D	over 15 feet, etc.

Fourth Symbol - Year of Classification

Bench Marks

Mass/NH Bdy. Mon.

U.S.G.S.	MR 4	fm.	524
	5		"
	6		"
	7		"
	8		"
	9		"
	10		"
	11		"
	R 34		"
	75.5		"
	78		"
	80		"
	108.7		"
	37.9		"
NHB	13		"
	14		"

No.	154	fm.	524
	156		"
	157		"
	158		"
	159 (BM75.5)		"
	160		"

Boundary Lines in Map Area

- Rockingham County, N.H.
- Essex County, Mass.
- Exeter Town N.H.
- Hampton "
- North Hampton Town
- Hampton Falls "
- Stratham "
- Kensington "
- South Hampton "
- Seabrook "
- East Kingston "
- Kingston "
- Amesbury Mass
- Salisbury "
- Exeter Academy Forest, N.H.

26 CONTROL:

Fourteen triangulation stations were recovered and used as horizontal control for establishing secondary and detail control points for this Map Manuscript. Of these stations, the following seven are within the limits of this $7\frac{1}{2}$ minute quadrangle:

- ✓ROLLINS, 1941
- ✓HAMPTON FALLS, 1851, 1912, r.1928, 1930
- ✓EXETER SEMINARY BALL SPIRE, 1908
- ✓EXETER FIRST CHURCH SPIRE, 1908
- ✓EXETER STANDPIPE, 1908
- ✓EXETER TALL CHIMNEY, 1908
- ✓EXETER COURT HOUSE, 1908

The remaining seven stations are just outside the limits of this quadrangle. They are:

- POWOW, (BORDEN), 1834, r.1941
- NEWFIELDS UNIVERSALIST CHURCH TALL SLENDER SPIRE, 1908
- STRATHAM SQUARE CHURCH SPIRE, 1908
- STRATHAM HILL FLAGPOLE, 1943
- STRATHAM HILL FIRE TOWER, 1941
- STRATHAM TALL CHURCH SPIRE, 1908
- GREAT HILL, 1931 (U.S.G.S.)

Shown just west of the limits of this quadrangle is one U. S. Geological Survey Triangulation Station which was not recovered by the Field Inspection Party responsible for the field inspection of horizontal control for Project CS-303, namely, MORSE HILL, 1931 (U.S.G.S.).

In order to assure more accurate picking of horizontal control stations on the office photographs, Field Inspection Points were established by the Field Inspection Party at well-defined points near four of the triangulation stations. These points are indicated by small circles in orange ink on the reverse side of the Map Manuscript. They are:

- F. I. P. ROLLINS, 1941
- F. I. P. HAMPTON FALLS, 1851, 1912, r.1928, 1930
- F. I. P. POWOW, (BORDEN), 1834, r.1941
- F. I. P. GREAT HILL, 1931 (U.S.G.S.)

27 RADIAL PLOT:

The radial plot for this Map Manuscript is described in Section 4 of the descriptive report of the radial plot for Project CS-303, which has been submitted to the Washington Office.

28 DETAILING:

The entire area of this Map Manuscript was detailed from the nine lens office photographs with the aid of the data furnished on the field inspection photographs. This inspection was, in general, satisfactory and complete.

Drainage, the limits of swamp and low ground areas, as shown on the field inspection photographs, were verified by stereoscopic examination of the office photographs. Most of these features were detailed direct from the field inspection photographs after detail control points had been picked on them. Wherever drainage itself could be seen on the nine lens office photographs, it was carefully inked in and detailed from these photographs.

Bridges and culverts were shown where indicated on the field inspection photographs or where they were definitely discernible on the office photographs. Contrary to Paragraph 15 of the Field Inspection Report, partial bridge data only was furnished by the Field Inspection Party on the field inspection photographs. It is assumed by this Compilation Office that all bridges will be classified during the time of the Field Edit.

All buildings shown on the field inspection photographs were first inked in on the nine lens office photographs and then transferred to the Map Manuscript.

29 SUPPLEMENTAL DATA:

The following supplemental data was used in the compilation of this Map Manuscript:

Blueprint, showing a profile of the Boston & Maine Railroad

Topographic tracing, showing the north edge of New Buryport West, Mass., scale 1:20,000 (U. S. Geological Survey)

Tercentenary map of Exeter, New Hampshire

One previous topographic survey made by the U. S. Coast & Geodetic Survey, No. T-2905, dated 1908, scale 1:10,000, covers a portion of this Map Manuscript. This survey is not available to the Compilation Office.

30 MEAN HIGH-WATER LINE:

The Mean High-Water Line was determined by stereoscopic examination of the office photographs, with the aid of data furnished on the field inspection photographs.

31 LOW-WATER AND SHOAL LINES:

Low-water and shoal lines were detailed in accordance with the data furnished on the field inspection photographs.

32 DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

The field inspection photographs did not show any details offshore from the high-water line. None were discernible from examination of the office photographs.

33 WHARVES AND SHORE LINE STRUCTURES:

One boathouse and small wharf shown by field inspection data has been detailed at the town of Exeter.

34 LANDMARKS AND AIDS TO NAVIGATION:

There are no landmarks or aids to navigation shown on this Map Manuscript.

35 HYDROGRAPHIC CONTROL:

None of the recoverable topographic stations are suitable for hydrographic control except bench mark NHB 14, which may be of limited usefulness.

36 LANDING FIELDS AND AERONAUTICAL AIDS:

According to the Field Inspection Party's report, there are no landing fields or aeronautical aids within the limits of this quadrangle.

37 DISCREPANCY OVERLAY:

Accompanying this Map Manuscript, is a discrepancy overlay. On it are notes calling attention to detail to be investigated and clarified during the Field Edit. A set of General Notes has been included to explain the symbols used on both the Map Manuscript and the discrepancy overlay. All bench marks have been circled and named.

38 GEOGRAPHIC NAMES:

The results of a geographic name investigation by A. J. Wraight, have been furnished this Compilation Office by the Washington Office on the Exeter, N. H.-Mass., 15 minute U. S. Geological Survey quadrangle. Only the undisputed names have been shown on this Map Manuscript. A list of undisputed, disputed and recommended names is attached to this report.

39 HORIZONTAL ACCURACY:

The horizontal accuracy of this Map Manuscript is believed to be within the limits set forth for well-defined and less well-defined points of detail, in the instructions for Project CS-303, paragraph 23, dated May 1, 1943.

40 RECOMMENDATIONS FOR FUTURE SURVEYS:

The planimetric detail, including data furnished on the field inspection photographs, is believed to be complete as presented on this Map Manuscript. It is subject to corrections, additions and deletions during the Field Edit.

41 JUNCTIONS:

The following complete junctions have been made:

To the north, with Map Manuscript for Survey No. T-8530.

To the East, with Map Manuscript for Survey No. T-8534.

To the south, a satisfactory junction was made with a tracing of a Survey made by the U. S. Geological Survey as per instructions contained in a letter dated July 15, 1943.

There is no contemporary survey to the west of this Map Manuscript.

42 REMARKS:

An adequate description of the area covered by this Map Manuscript is contained in the report of the Field Inspection Party.

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

A visual comparison with the Exeter Quadrangle of the U. S. Geological Survey shows common detail to be in fair agreement.

45 COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with U. S. Coast & Geodetic Survey Chart No. 229, dated November 1914, reissued April 1938. This Chart covers a very small area in the extreme north central section of this Map Manuscript. The following differences were noted:

The mean high-water line along the Exeter River, approximate Latitude $42^{\circ} 59'$, differs by about 150 meters. Chart No. 229 shows the mean high-water line at the edge of a grass and water area shown on this Map Manuscript.

On the Map Manuscript there is shown a highway along the west bank of the Exeter River, approximate Latitude $42^{\circ} 59'$, which does not appear on Chart No. 229. The contours in general show the same topographic picture.

Respectfully submitted,
January 21, 1944

Ambrose J. Gibson
Ambrose J. Gibson
Photogrammetric Aid

Map Manuscript, Discrepancy
Overlay and Descriptive Re-
port Reviewed by:

Henry P. Eichert
Henry P. Eichert
Jr. Photogrammetric Eng.

Compilation of Map Manu-
script Supervised by:

Joseph Steinberg
Joseph Steinberg
Asst. Photogrammetric Eng.

and

J. Edward Deal, Jr.
J. Edward Deal, Jr.
Asst. Photogrammetric Eng.

Approved & Forwarded:
January 28, 1944

Fred. L. Peacock
Fred. L. Peacock
Commander, C & G Survey
Officer-in-Charge
Baltimore Photogrammetric Office

FIELD EDIT REPORT
To accompany
QUADRANGLE T-8533
Project 303-C

46. The field edit of this quadrangle was accomplished mainly by a visual inspection of the various topographical features as they were plotted on the compilation with standard field instruments being used to check discrepancies noted on the overlay. Roads, drainage, buildings and other features have been inspected and classified where omitted. Bridges have been classified according to instructions. The various field edit notes have been added to the cloth backed copy of the compilation according to the following color scheme:

Additions Black
Deletions Green
Drainage Blue
Contours Brown

Notes on the discrepancy overlay have been checked with red ink.

47. The compilation is believed to be complete and accurate as corrected by the field edit. Several swamps have been added and the drainage from several swamps has been clarified. The drainage from Hog Hill Swamp and vicinity has been corrected and clarified according to the Director's letter of February 2, 1944. During the drainage investigation two large contour discrepancies were encountered. These were corrected and reformed with the aid of the stereoscope after being checked in the field.
48. Accuracy tests, both vertical and horizontal, are the subjects of special reports on Project 303-C.
49. Junctions have been checked to the north with T-8530, to the east with T-8534 and to the south with the U.S.G.S. Newburyport West, Massachusetts, quadrangle. There is no contemporary survey to the west. The tracing with the southern junctions of T-8533 and T-8534 with the U.S.G.S. quadrangles will accompany this report.

Submitted by:

Donald Flippo for F.L.G.

Donald Flippo
Sr. Photo. Aid

Approved and forwarded:

F.L. Gallen

F.L. Gallen
Chief of Party

VERTICAL ACCURACY TEST
QUADRANGLE T-3533
PROJECT CG-303-0
F.L. Gallen, Chief of Party

See Report on Vertical Accuracy Test for Quadrangle T-3531 for methods.

"A" Test Traverse

Position 10 (Lat. 42-53.05; Long. 70-57.95) shows an elevation of 158 feet on the 140 foot contour.

Position 80 (Lat. 42-53.25; Long. 70-58.4) shows an elevation of 149 feet 20 meters outside of an isolated 140 foot contour. This isolated contour appears to be slightly misplaced.

"B" Test Traverse

No contours are in error by more than $\frac{1}{2}$ contour interval in the area covered by this traverse.

It is recommended that the contours on this map manuscript be accepted as complying with the national standard map accuracy requirements.

Submitted by:

Gilbert R. Fish
Lieut. Comdr., U.S.C. & G.S.

Approved and forwarded:

F. L. Gallen
Chief of Party

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-8533

EXETER, N.H. - MASS. QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy Meets the National standard

Horizontal Accuracy Test No. 16 (western extension): The nine points falling within the area of map manuscript T-8533 are all displaced less than 0.5mm from their true position.

Vertical Accuracy Tests: This consisted of a large number of closely spaced spot elevations. No contours in error more than one-half contour.

Previous Surveys

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

T-2905 1/10000 1908

U.S.G.S. Exeter, 1/62500 1934 ed.

Comparison with Nautical Charts Nos. 1229 Apr. 1938

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

See paragraph 45 of Compilation Report

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

Numerous contour changes were made during review. These changes were taken from the field edit sheet, U.S.G.S. tracing of the quadrangle to the south, vertical accuracy test points, and from careful examination of the contoured photographs under the stereoscope.

Reviewed 3 March, 1944 By R. B. Collier
under direction of D. H. Benson R. B. Collier per *HS*

Inspected by B. G. Jones *BG Jones 8/48*

Examined and approved:

[Signature]
Chief, Survey Branch

K. T. Adams
Chief, Div. of Charts *Photogrammetry*

Asst. *[Signature]*
Chief, Topography Section
Nautical Chart Branch

[Signature]
Chief, Div. of Coastal
Surveys

RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

Registered and Filed in the Vault.

Cloth-mounted copy of the published quadrangle.

Black and white cloth-mounted copy of the published quadrangle at 1:20,000 scale. This copy is filed to preserve original survey detail shown on the manuscript at 1:20,000 scale which may not have been shown on the published sheet. For woodland, refer to the published quadrangle for the finally adopted outlines.

Descriptive Report.

Filed in the Photogrammetric Division.

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Review Section.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Copies of specifications and all instructions to field parties and field offices.

Filed in Reproduction Branch.

Glass negatives of the color separation drawings.

Filed in the Library.

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. L. Gallen, 1944.

Season's report on field work by Commander R. L. Schoppe, 1944.

Delivered to the Army Map Service in accordance with the contract.

Film negatives and film positives of the color separation drawings.

All color separation drawings.

A correction sheet consisting of a copy of the first edition of the quadrangle with notes in red indicating changes desirable at the next printing.

LIST OF GEOGRAPHIC NAMES

Undisputed

- | | |
|---------------------------|---------------------------|
| ✓Amesbury (Township) | ✓Giles Hill |
| ✓Amesbury Road | ✓Gove Brook + |
| ✓Apple Crest Orchard | ✓Gove Hill |
| ✓Ash Brook | ✓Gooch Corner |
| ✓Beech Hill | ✓Grape Hill |
| ✓Blake Road | ✓Grapevine Run |
| ✓Bloody Brook | ✓Grassy Brook |
| ✓Boston & Maine (R.R.) | ✓Great Bridge |
| ✓Brentwood Road | ✓Great Brook |
| ✓Brick School Corner | ✓Great Hill |
| ✓Brickyard Brook | ✓Guinea Road (two) |
| ✓Bruce Hill | ✓Hampton (Township) |
| ✓Bugsmouth Hill | ✓Hampton Falls (Township) |
| ✓Chair Hill | ✓Hampton Road |
| ✓Chase Hill | ✓Haverhill Road |
| ✓Clay Brook | ✓Haynes Hill |
| ✓Cock Hill | ✓Hobbs Brook |
| ✓Cock Hill Road | ✓Hog Hill |
| ✓Colend Pond | ✓Hog Hill Swamp |
| ✓Crank Road + | ✓Hoosac Hill |
| ✓Curtiss Road | ✓Horse Hill |
| ✓Dearborn Brook | ✓Indian Ground Hill |
| ✓Dodge Ponds + | ✓Kensington (Town) |
| ✓Dows Corner | ✓Kensington (Township) |
| ✓Drinkwater Road | ✓Kings Road |
| ✓Dudley Brook | ✓Kingston Swamp |
| ✓East Branch Powwow River | ✓Kinney Hill |
| ✓East Kingston (Township) | ✓Lamprey Corners |
| ✓Eastman Corners | ✓Little River |
| ✓Eaton Hill | ✓Loverine Road |
| ✓Elton Orchard | ✓Lucy Brook |
| ✓Epping Road | ✓Massachusetts |
| ✓Essex County | ✓Meetinghouse Hill |
| ✓Exeter (Town) | ✓Mill Brook |
| ✓Exeter (Township) | ✓Monahan Corner |
| ✓Exeter Academy Forest | ✓Moulton Brook |
| ✓Exeter Reservoir | ✓Moulton Ridge |
| ✓Exeter River | ✓Moulton Swamp |
| ✓Exeter Rose Farm | ✓Muddy Pond |
| ✓Fogg Corners | ✓Nason Corners |
| ✓Folly Mill Road | ✓Newfound Hill |
| ✓Fort Rock | ✓New Hampshire |
| ✓Frying Pan Corner | (Continued on next page) |

LIST OF GEOGRAPHIC NAMES

Undisputed (cont'd)

- ✓ New Road
- ✓ New Zealand Hill
- ✓ North Hampton (Township)
- ✓ North Hampton Road
- ✓ North School

- ✓ Old Pond
- ✓ Old River
- ✓ Osgood Road

- ✓ Palmer Hill
- ✓ Parkman Brook
- ✓ Parkman Corner
- ✓ Perkins Brook
- ✓ Perkins Mill
- ✓ Pevear Hill
- ✓ Phillips Exeter Academy
- ✓ Pickpocket Road
- ✓ Pine Hill
- ✓ Pine Hill Brook
- ✓ Powder Mill Road
- ✓ Powwow River
- ✓ Powwow River Tract
- ✓ Prescott Corner

- ✓ Queen's Bridge

- ✓ Roadhouse Hill
- ✓ Rockingham County
- ✓ Rollins Hill
- ✓ Round Hill

- ✓ Salisbury (Township)
- ✓ Sanborn Corner
- ✓ Sand Pit Hill
- ✓ Sand Pit Meadows
- ✓ Seaman Brook
- ✓ Seabrook (Township)
- ✓ Shaw Hill
- ✓ South Hampton (Township)
- ✓ South Hampton (Town)
- ✓ South Side State Road
- ✓ Spring Brook
- ✓ Stratham
- ✓ Stratham Heights
- ✓ Stratham Heights Park
- ✓ Stratham Heights Road
- ✓ Stumpfield Ridge

- ✓ Tales Corner
- ✓ Tappan Corners
- ✓ Taylor River
- ✓ The Cove
- ✓ The Plains School
- ✓ Titcomb Hill
- ✓ Titcomb Road
- ✓ Towle Hill
- ✓ Trundlebed Lane

- ✓ Wadleighs Brook
- ✓ Watson Brook
- ✓ Weare Corner
- ✓ Weare Mill
- ✓ Wheelwright Creek
- ✓ West School
- ✓ Wolf Hill

- ✓ York Brook
- ✓ York Hill

LIST OF GEOGRAPHIC NAMES

Disputed

Recommended

✓ Austin Corners
✓ Bordmans Brook
✓ Bride Hill
✓ Cains Brook
✓ Cottage Hill
✓ Cottage Road
✓ Frying Pan Lane
✓ Hampton Falls River
✓ Hampton Falls Road
✓ Horse Hill Road
✓ Lamprey Road
✓ Martin Hill
✓ Moulton Ridge Road
✓ Squamscott River
✓ Stumpfield Road
✓ Weymouth Hill
✓ Wild Pasture Road

Disputed

Queens Bridge Corner
Winkley Brook
Dows Hill
Canes Brook
Cranberry Hill
Palmer Road
Anne Sandman Road
Weare River
Exeter Road
South Road
South Road
Clifford Ridge
North Road
Exeter River
Middle Road
Muddy Pond Hill
New Road

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 28-RCC
1990

COPY

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON 25

July 15, 1943

Wattmann

Did you

Yes.

To: Lieut. Comdr. F. L. Gallen
U. S. Coast and Geodetic Survey
39 Main Street
Sanford, Maine

From: The Director
U. S. Coast and Geodetic Survey

Subject: Map junctions - Project CS-303

You are no doubt familiar with the fact that the U.S. Geological Survey in recent years has, in cooperation with the State of Massachusetts, mapped large parts of the State to be published on a scale of two inches to the mile. Among areas which have been mapped but not published is that adjoining Project CS-303 on the south. The U.S. Geological Survey has kindly furnished this Bureau with a tracing of those parts of two original sheets where your project will need to make a junction. The tracings as furnished were on a scale of 1:24,000 and they were enlarged by photography in this office to a scale of 1:20,000. Two copies are being forwarded to you this date under separate cover.

*Tracings filed in
Descriptive Report envelope -
Div. of Photogrammetry -
General Files.*

You will please note that in one place the State of Massachusetts extends north of latitude 42°52'30" into your quadrangle T-8533. The U.S. Geological Survey has mapped this area as an overhang on one of their quadrangles. You should field inspect this overhang area and test it for accuracy; if found adequate, it will be carried forward to quadrangle T-8533 and the area will not be remapped by this Bureau. On the published quadrangle the U.S. Geological Survey will be given credit as a source of this part of the topography.

(Signed) J.H. Hawley

Acting Director

CC: Commander Fred. L. Peacock



Remarks

Decisions

	Remarks	Decisions
1		
2		
3		
4		
5		
6		
7		
8		Railway Guide
9		N.H. Road Map
10		
11	Pending with USGB	428708
12		"
13		"
14		428709
15		"
16		"
17		"
18		"
19		"
20		"
21	Name of main stream pending with USGB	"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8533

EXETER quadrangle

1 Name on Survey

	A	B	C	D	E	F	G	H	K
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
✓ Rockingham County, N.H.			✓						1
✓ Essex County, Mass.									2
Towns (townships) in Rockingham County:									3
Seabrook, Hampton Falls, Hampton, North Hampton, Stratham, Exeter									4
East Kingston, Kensington, South Hampton									5
Towns in Essex County:									6
Amesbury, Salisbury									7
✓ Boston and Maine R.R.									8
State Roads: 108, 101, 111, 111A, 101C, 101D, 107, 109, 150, 107A									9
									10
✓ Cains Brook									11
✓ Folly Mill Road									12
✓ New Zealand Hill									13
✓ Weare Corner									14
✓ Grape Hill									15
✓ Titcomb Hill									16
✓ Titcomb Road									17
✓ Lucy Brook									18
✓ Beech Hill									19
✓ Amesbury Road									20
✓ East Branch Powwow River									21
✓ Tales Corner									22
✓ Kinney Hill									23
✓ Chair Hill									24
✓ Indian Ground Hill									25
✓ Grassy Brook									26
✓ South Hampton									27

	Remarks	Decisions
1	Pending with USGB	428709
2	" "	"
3		"
4		"
5		429709
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16	Pending with USGB	"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8533

2	Name on Survey	On Chart No.		On previous survey No.		On U. S. quadrangle Maps		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List	
		A	B	C	D	E	F	G	H	K							
✓	Powwow River ✓																1
✓	Powwow River Tract ✓																2
✓	Bugsmouth Hill ✓																3
✓	Eaton Hill ✓																4
✓	Bruce Hill ✓																5
✓	Hog Hill Swamp ✓																6
✓	Haverhill Road ✓																7
✓	Tappan Corners ✓																8
✓	Hog Hill ✓																9
✓	Roadhouse Hill ✓																10
✓	Horse Hill Road ✓																11
✓	Quemens Bridge ✓																12
✓	Austin Corners ✓																13
✓	Muddy Pond ✓																14
✓	Palmer Hill ✓																15
✓	Bordmans Brook ✓																16
✓	Horse Hill ✓																17
✓	Eastman Corners ✓																18
✓	Towle Hill ✓																19
✓	Newfound Hill ✓																20
✓	Lamprey Corners ✓																21
✓	Lamprey Road ✓																22
✓	Nason Corners ✓																23
✓	Cock Hill ✓																24
✓	Cock Hill Road ✓																25
✓	Wild Pasture Road ✓																26
✓	Kensington ✓																27

Remarks

Decisions

	Remarks	Decisions
1		429709
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8513

3

Name on Survey

On Chart
No.

A

On previous survey
No.

B

On U. S. quadrangle
Maps

C

From local
information

D

On local Maps

E

P. O. Guide or Map

F

Rand McNally Atlas

G

U. S. Light List

H

K

Name on Survey	A	B	C	D	E	F	G	H	K	
Trundlebed Lane										1
XXXX Pevear Hill										2
Weymouth Hill										3
Cottage Road										4
Cottage Hill										5
Blake Road										6
West School										7
Martin Hill										8
Monahan Corner										9
Kings ^{ton} Swamp										10
Stumpfield Road										11
Stumpfield Ridge										12
Moulton Brook										13
Moulton Swamp										14
Gove Hill										15
Old Pond										16
Meetinghouse Hill										17
Osgood Road										18
Mill Brook										19
Round Hill										20
Fryingpan Corner										21
Fryingpan Lane										22
Curtis ^s Road										23
Elton Orchard										24
Kings Road										25
The Cove									(swamp)	26
Prescott Corner										27

Remarks

Decisions

	Remarks	Decisions
1		429709
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8513

4	Name on Survey	On Chart No.		On previous survey No.		On U. S. quadrangle Maps		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List	
		A	B	C	D	E	F	G	H	K							
✓	Drinkwater Road //																1
✓	Wadleigh Brook //																2
✓	Brick School Corner //																3
✓	North School //																4
✓	Moulton Ridge Road //																5
✓	Moulton Road ?																6
✓	Hoosac Hill ✓ //																7
✓	Hobbs Brook //																8
✓	Shaw Hill //																9
✓	Spring Brook //																10
✓	York Hill //																11
✓	Great Brook //																12
✓	Giles Hill //																13
✓	York Brook //																14
✓	Brickyard Brook //																15
✓	Powder Mill Road //																16
✓	Perkins Brook //																17
✓	Perkins Mill //																18
✓	Gooch Corner //																19
✓	Pickpocket Road //																20
✓	Scamen Brook //																21
✓	Little River //																22
✓	Brentwood Road //																23
✓	Coleyd Pond //																24
✓	Dudley Brook //																25
✓	Bloody Brook //																26
✓	Exeter Rose Farm //																27

	Remarks	Decisions
1		429709
2		"
3		"
4	Pending with USGB, together with Squamscott River (line 8, this page)	"
5		"
6		"
7		"
8	See line 4, above.	430709
9		429709
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		429708
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8533

5	Name on Survey	Source									
		A	B	C	D	E	F	G	H	K	
		On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
✓	South Side State Road	(applied to places on Names Sheet)									1
	Erving Road	✓								2	
✓	Watson Brook	✓	✓							3	
✓	Exeter River	✓	✓							4	
✓	Exeter	✓	✓							5	
✓	Great Bridge	✓	✓							6	
✓	Phillips Exeter Academy	✓	✓							7	
✓	Squamscott River	✓	✓	(applies to stream northward from Exeter)						8	
✓	Powells Point	✓	✓	(from C. & G.S. chart 229)						9	
✓	Fort Rock	✓	✓							10	
✓	Wheelwright Creek	✓	✓							11	
✓	Exeter Reservoir	✓	✓							12	
✓	Exeter Academy Forest	✓	✓							13	
✓	Haynes Hill	✓	✓							14	
✓	Dearborn Brook	✓	✓							15	
✓	Hampton Road	✓	✓							16	
✓	Sandpit Hill	✓	✓							17	
✓	Guinea Road	✓	✓							18	
✓	Stratham Heights	✓	✓							19	
✓	Stratham Heights Park	✓	✓							20	
✓	Stratham Heights Road	✓	✓							21	
✓	Parkman Corner	✓	✓							22	
✓	Parkman Brook	✓	✓							23	
✓	Chase Hill	✓	✓							24	
✓	The Plains School	✓	✓							25	
✓	Rollins Hill	✓	✓							26	
✓	Loverine Road	✓	✓							27	

	Remarks	Decisions
1		429708
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12	Names Report has plural form	"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8533

6	Name on Survey	Sources												
		A	B	C	D	E	F	G	H	K				
	Pine Hill Brook													1
	Sandpit Meadows ✓	✓												2
	Pine Hill ✓	✓												3
	North Hampton Northampton Road -			2 words										4
	Bride Hill ✓	✓												5
	Dows Corner ✓	✓												6
	Ash Brook ✓	✓												7
	Wolf Hill ✓	✓												8
	Taylor River ✓	✓												9
	Clay Brook ✓	✓												10
	Old River ✓	✓												11
	Apple Chest Orchards ✓	✓												12
	Guinea Road ✓	✓												13
	Sanborn Corner ✓	✓												14
	New Road ✓	✓												15
	Hampton Falls Road ✓	✓												16
	Grapevine Run ✓	✓												17
	Crank Road ✓	✓												18
	Great Hill ✓	✓												19
	Dodge Ponds ✓	✓												20
	Hampton Falls River ✓	✓												21
	Weare Mill ✓	✓		Settlement										22
	Fogg Corners ✓	✓												23
	Gove Brook ✓	✓												24
	LAMPREY ROAD ✓	✓												25
														26
														27

Names underlined in red approved
by L. Heck on 3/27/14

