

5079

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New York

DESCRIPTIVE REPORT

Photo
Topographic
~~Hydrographic~~

Sheet No. T5079

LOCALITY

Eastern Long Island

Montauk Village to Montauk Point

1934

CHIEF OF PARTY

R. C. Bolstad, Jr. H. & G. Eng.

U. S. GOVERNMENT PRINTING OFFICE: 1928

5079

Applied to chart 1211 G.M.A. Feb 11, 1937

-1-
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. 29

REGISTER NO. T5079

State New York

General locality Eastern Long Island

Locality Montauk Village to Montauk Point

Scale 1:10,000 Date of ~~survey~~ Photographs May 5, 1933
Date of Compilation Aug. 3, 1934

~~Vessel~~ Air Photo Compilation Party No. 12, New York City

Chief of party Roswell C. Bolstad

Surveyed by See data sheet enclosed in Descriptive Report for this sheet.

Inked by J. K. Batchellor

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval --- feet

Instructions dated November 15, 1932

Remarks: Compiled on scale of 1:11,628 and enlarged and
printed on scale of 1:10,000 by Photo Lithography.

- STATISTICS -

on

SHEET, FIELD NO. 29, REG. NO. T5079

PHOTOS, NO. M116 (881-14) TO NO. M131 (881-14) TIME 11:20 A.M.

PHOTOS, NO. M143 (886D-8) TO NO. M154 (886D-8) TIME 9:42 A.M.

DATE OF PHOTOGRAPHS M116 - M131 Five lens May 5, 1933

DATE OF PHOTOGRAPHS M143 - M154 Single lens Sept. 19, 1933

	BY	DATE FROM TO
ROUGH RADIAL PLOT	<i>W.E. Hackett</i> W.E. Hackett	11/26 - 11/26/33
SCALE FACTOR (0.860)	<i>W.E. Hackett</i> W.E. Hackett	11/26 - 11/26/33
SCALE FACTOR CHECKED	<i>J.P. O'Donnell</i> J.P. O'Donnell	11/26 - 11/26/33
PROJECTION	<i>W.H. Burwell</i> W.H. Burwell	12/6 - 12/6/33
PROJECTION CHECKED	<i>J.P. O'Donnell</i> J.P. O'Donnell	12/6 - 12/6/33
CONTROL PLOTTED	<i>W.E. Hackett</i> W.E. Hackett	12/11 - 12/11/33
CONTROL CHECKED	<i>E.W. Fickenscher</i> E.W. Fickenscher	12/16 - 12/16/33
TOPOGRAPHY TRANSFERRED	<i>M.S. Abramson</i> M.S. Abramson	4/23 - 2/23/34
TOPOGRAPHY CHECKED	<i>A.K. Spalding</i> A.K. Spalding	5/31 - 6/2/34
SMOOTH RADIAL LINE PLOT	<i>M.S. Abramson</i> M.S. Abramson	4/27 - 5/10/34
RADIAL LINE PLOT CHECKED	<i>A.K. Spalding</i> A.K. Spalding	5/10 - 5/11/34
DETAIL INKED	<i>H.L. Hawkins</i> H.L. Hawkins <i>J.K. Batchellor</i> J.K. Batchellor	5/30 - 5/30/34 7/12 - 8/3/34
PRELIMINARY REVIEW	<i>A.K. Spalding</i> A.K. Spalding	8/14 - 8/16/34

AREA OF DETAIL INKED 12.0 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED 0.0 sq. Statute Miles (Shoals in Water Area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)
20.3 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)
7.5 Statute Miles

LENGTH OF ROADS, STREETS, TRAILS, RAILROADS 69.1 Statute Miles

GENERAL LOCATION Eastern Long Island

LOCATION Montauk Village to Montauk Point

DATUM North American 1927

Latitude 41° - 03' - 53.829" (1660.5 m.)

STATION Montauk 2 1932

Longitude 71° - 54' - 18.669" (435.9 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 29

GENERAL INFORMATION

The AIR PHOTO FIELD INSPECTION REPORT, 1933, of Lieut. L.C. Wilder for Eastern Long Island, N.Y. furnished the necessary field data for the compilation of this sheet. Additional information was obtained from the field prints and in questionable areas, from Lieut. (j.g.) R.C. Bolstad and Mr. H.L. Hawkins, Draftsman Party No. 12, who is familiar with the topography of this area.

The accompanying STATISTICS SHEET details all data in connection with the compilation of this sheet.

The five lens photographs for this area were taken May 5, 1933 at 11:20 A.M. when the tide at Montauk Point Light was practically at low water. The supplementary single lens photos were taken Sept. 19, 1933 at 9:42 A.M. when the tide was practically at high water at Montauk Point Light. Tides were determined from the Predicted Tide Tables of the U. S. Coast and Geodetic Survey.

This sheet was compiled from five lens photographs, Nos. M116-M131 (881-14) inclusive, taken by 2nd Lieut. James F. Olive, Jr. of the U. S. Army Air Corps with their five lens camera, Model T-3A, No. 31-78, and from single lens photographs, Nos. M143-M154 (886D-8) taken by Captain Willis R. Taylor of the U.S. Army Air Corps.

CONTROL

(A) Sources

The following sources of control were used in the compilation of this sheet.

- (a) Triangulation by Lieut. A.P. Ratti, in 1933, field positions unadjusted.
- (b) Triangulation by Lieut. C.D. Meaney, in 1932.
- (c) 1933 Aluminum Control Sheets (Lieut. A.P. Ratti, unadjusted, scale 1:20,000)
Reg. Nos. 4767 and 4768

All control is on the North American 1927 Datum. The difference between the unadjusted and the final adjusted positions would be unplotable at the scale of this compilation (1:11,628).

The above triangulation and topography (showing control signals and high water line) forms the basis for the control in this area.

In addition to the triangulation and high water line obtained from the aluminum control sheets the following topographic signals (shown on the aluminum control sheets) were spotted on the photographs and were used in controlling this sheet:

✓ Lov

Pop ✓
Tip ✓

Gun ✓

These signals have been shown on the celluloid topographic sheet by a double blue circle (⊙) together with the name, given on the aluminum control sheet, with the exception of station Gun which is also shown with a black circle since it was used as a Recoverable Topographic station. As the blue ink will not photograph during the photo-lithographic process, no record of these topographic control signals (banners and flags) will appear on the finished sheet.

If it is the desire of the Chart Section to have these shown, they may be indicated in red ink with the usual circle and topographic name; this may best be done by draftsmen in the Washington Office as they will have all the data at hand.

In the compilation of this sheet not all of the control stations shown on the aluminum control sheets were used as control since the field inspection took place before the aluminum control sheets had been finished by the field party and the field party had not established all of the control in this area. However, many natural objects used as control on the aluminum control sheets could be definitely spotted in the office with the aid of the stereoscope and these were used as supplementary control.

The aluminum control stations used for supplementary control of this sheet have been plotted from positions scaled from the aluminum control sheets.

(B) Errors

The control, on this sheet, is, in general, strong and the radial plot, which gave good intersections, did not indicate any errors or discrepancies between the positions obtained from the aluminum control sheets and those obtained from the radial plot. It should be noted that the aluminum control sheets were executed on a scale of 1:20,000 and 1:5,000 whereas the scale on this sheet is 1:11,628.

(C) Discrepancies

No control stations established by other organizations were used in this compilation.

COMPILATION

(A) Method

The usual radial line method of plotting was used in the compilation of this sheet.

(B) Adjustments of Plot

There is an appreciable scale fluctuation between this sheet and the five lens photographs, especially Nos. M117, M118 and M119, also slight tilt in these photographs, which made adjusting and proportioning necessary between radial points. The single lens photos, Nos. M143 to M154 inclusive, are considerably off scale from the sheet and were used primarily to identify topography in the wing prints of the five lens photographs.

However, by holding to all available control for this sheet excessive adjustment, to the extent of causing

any appreciable error, was not necessary.

(C) Interpretation

The usual graphic symbols were used as approved by the Board of Surveys and Maps, 1932.

There was little difficulty encountered in the interpretation of the prints except in the central and northern portions where the wing prints were considerably blurred and some difficulty was experienced in the interpretation of marshy areas and woodland. Some buildings may have been omitted in this section of the sheet, for instance the aluminum control sheet No. 4768 shows a row of three houses along the road on Star Island only two of which are discernable on the photograph.

The double full line was used to indicate first order roads and double broken line for private driveways and roads of lesser importance. An exceedingly poor road, abandoned road and trails were shown as a single dashed line. The classification, in most cases unless labeled on the field prints, was determined from the appearance under the stereoscope.

The fire lines, consisting of plowed furrows, along highway No. 27 have been symbolized by a short dash line.

There are no bridges of importance to navigation shown on this sheet.

The double broken line along the shore south of Montauk Village represents the board walk for which there is no standard symbol.

There is a considerable shoal area north of Montauk Point, however, the outline on the photographs is so indefinite that it was omitted from the celluloid sheet.

The pond appearing on U.S. Geological Survey maps as Little Reed Pond has practically disappeared leaving only a small remnant, consequently the name was not printed on the sheet. *Pond appears on compilation and name retained.*

(D) Information from Other Sources

The high water line and marsh line was run in by the topographic party on the aluminum control sheets.

(E) Conflicting Names

According to Mr. H.L. Hawkins, Draftsman on this party, a native of the locality, Lake Montauk is the official name for the body of water appearing on the U.S.C. & G.S. Chart No. 1211 as Great Pond. A request has been made by the Montauk Yacht Club that the body of water be named Montauk Yacht Harbor. All other names shown on this sheet correspond with those appearing on U.S.C. & G.S. Charts. *See P12, back pg. 9 also P Names in Review*

COMPARISON WITH OTHER SURVEYS

The junctions with all adjoining sheets are satisfactory.

The high water line and shoal areas directly west and north west of Montauk Yacht Club may be questioned. Preference was given to the topo sheet shore line which was held throughout the

The estimated accuracy given on the
opposite page is too high for work on
this scale. A better estimate is an
accuracy of location of 3 to 5 meters
for interconnected points and 3 to 8
meters for other details.

B.G. Jones

sheet (Sheet No. 4768), also see photos M151-M149 (886D-8).

The high water line of the inlet to Oyster Pond, lat. $41^{\circ} 04'$ to $41^{\circ} 05'$, long $71^{\circ} 53'$ to $71^{\circ} 54'$, cannot be positively interpreted as to position. The topo sheet, No. 4767, was followed as far as it went and from there on the best possible interpretation places the high water line as shown. The limits of the shoal area shown by a short dashed line are somewhat indefinite on the photographs but have been given the best interpretation possible to show the channel (see photo M143 (886D-8) and "C" print of M119 (881-14). No outlet for this channel is visible on the photographs but, according to the notes of the field inspection party, the water broke through in September, 1933 and has therefore been shown as such on this compilation sheet.

The topo sheet shows a considerable marsh area west of the highway in the vicinity of lat. $41^{\circ} 04.4'$, long. $71^{\circ} 56.6'$. However, a stereoscopic inspection of the photographs of this area indicates that the area is well above the water level of the vicinity with the exception of the small area so indicated. It is believed that the topographer may have sketched in this marsh, since the position on the photographs and on the aluminum control sheet do not agree, and therefore the area has been shown as it appears on the photographs. The photographs were also used to determine the channels in the lake as well as the shoal and marsh area in the south western part of Lake Montauk. Other shoal areas were taken from the topo sheets.

The dock near "House Chimney", 1911, which appears on the topo sheet but cannot be seen on the photographs was shown on the celluloid sheet since the topo sheet was made at a later date than the photographs.

LANDMARKS

The list of landmarks for this area has been previously submitted, November 3, 1933, by Lieut. A.P. Ratti.

In addition to the above list, Lieut. L.C. Wilder submitted, on November 4, 1933, a recommended list of stations for landmarks, namely, Rip, Pop and Montauk Golf Club Flagpole, the positions of which are given under the "List of Recoverable Topographic Stations" following. *Page 8*

The tower at Montauk, recommended by Lieut. L.C. Wilder, is shown on U.S.C. & G.S. Chart No. 1211. However, no data is available regarding this station and the photographs are not sufficiently distinct for the station to be located by Air Photo Topography. Since this station does not appear on either Lieut. A.P. Ratti's or Lieut. L.C. Wilder's expunged list it is believed that it should be retained as a landmark.

There are a few other objects (such as houses, ends of docks, etc.) which are located within the accuracy specified under the following heading RECOMMENDATIONS FOR FURTHER SURVEYS and may be used to obtain hydrographic "fixes". Care should be taken in using the houses to use the center as the size shown on this sheet may be expanded somewhat.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of not over 2 meters in well defined detail of importance for charting and of 4 meters for other data. It is understood that the widths of roads and similar objects may be slightly expanded in order to keep the detail clear and to keep it from photographing as a solid area in the photo-lithographic process.

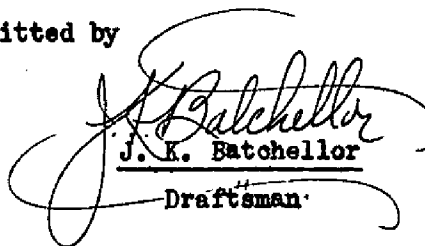
~~See opposite page~~ *See opposite page*

*See review
Station erased
from chart
during Jan. 13, 1936*

See Review

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Submitted by


J. K. Batchelor
Draftsman

Assisted by:


A. K. Spalding
Surveyor

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

(Includes all recoverable objects, sufficiently prominent for use as hydrographic "fixes", shown as topographic stations with small black circle on this sheet and not described on Form 524 by this party.)

<u>Description</u>	<u>Latitude</u>			<u>Longitude</u>			<u>Height</u>	<u>Method of Determination</u>
	°	'	D.M. Meters	°	'	D.P. Meters		
(Nut) - E. Gable W. House Blue	41	03.6		71	52.0			A.C.S., 1933 Reg. No. 4767
(Lov) - S.E. Corner Bldg.	41	03.7		71	56.1			A.C.S., 1933 Reg. No. 4768
(Gun) - Montauk Yacht Club	41	03.1	04.2	71	56.9	55.9		A.C.S., 1933 Reg. No. 4768
Tower	41	03	(1414.5) 436.4	71	57	(1088.8) 312.8		A.P.T. 1934

Note: A.P.T. denotes air photo topography.
A.C.S. denotes aluminum control sheet.
Name in parenthesis preceding the description is the topographic station name as given on the aluminum control sheet.

REVIEW OF AIR PHOTO COMPILATION NO. T5079

Chief of Party: Roswell C. Bolstad

Compiled by: (See page 2,
Des. Report)Project: New York Air Photo Compilation Instructions dated: Nov. 15, 1932
Party No. 12

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)
See paragraph (C) page 5, also COMPARISON WITH OTHER SURVEYS, page 5.
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
See paragraph CONTROL (A), page 3.
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)
See paragraph CONTROL (A) page 3.
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.
There are no differences on this sheet.
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)
See paragraph CONTROL (A), page 3 and paragraph COMPILATION (B) page 4.
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)
See paragraph (D) page 5.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

10. In the preceeding Compiler's Report, paragraph LANDMARKS, the tower at Montauk, mentioned as being indistinct on the photos, has been pricked by the field inspection party and marked on the field print, photo No. M131 (881-14) "C" print. Lieut. (j.g.) R.C. Bolstad, who made the field inspection of this area radial plotted in the tower and it is shown on this sheet (position, lat. 41°- 03'- 436.4 m., long. 71°- 57'- 312.8 m.) as a Class (C) landmark (see Descriptive Report T5059 for classification). As the tower is located in a slight depression with hills rising between it and the water-front, the upper portion only would be visible and its prominence would not be as marked as the Montauk Manor Hotel Cupola located south east a short distance.

The two jetty lights at the entrance to Lake Montauk have been recommended as Class (AB) landmarks in Lieut. L.C. Wilder's November 4, 1933 report. However, no mention has been made of them by Lieut. A.P. Ratti, who later carried on the field work in this area. The radial plot checked the position of the east jetty light as located on the aluminum control sheet by Lieut. A.P. Ratti. The west light was not yet constructed at the time (Aug. 1933) the field inspection of photos took place (see photo field print No. M125 (881-14) "C" print) therefore the position as shown on the aluminum control sheet has been accepted. Both lights are "B" Class landmarks and should be charted on large scale charts.

12. The name, Lake Montauk, was verified by the air photo field inspection party. (see 1933 report of Lieut. L.C. Wilder.)

See Review

8. The representation of low water lines, ~~xxxxx~~, ~~xxxxx~~ ~~xxxxx~~ and ~~xxxxx~~, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
See report of Control Party, Lieut. A.P. Ratti in 1933.
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
Previously submitted by 1933 Field Party under Lieut. A.P. Ratti.
See page opposite paragraph 10.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)
There are no bridges of importance to navigation shown on this sheet.
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)
See paragraph (E) page 5.
See page opposite paragraph 12.
13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927
See page 2.
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
15. The drafting is satisfactory and particular attention has been given the following:
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
 2. The degrees and minutes of Latitude and Longitude are correctly marked.

3. All station points are exactly marked by fine black dots.
4. Closely spaced lines are drawn sharp and clear for printing.
5. Topographic symbols for similar features are of uniform weight.
6. All drawing has been retouched where partially rubbed off.
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

17. Remarks: Any additional notes and requirements affecting this area are referred to Lieut. A.P. Ratti's Reports covering the topography executed in 1933 under his charge.

18. Examined and approved;
Preliminary Review:

A. K. Spalding
A. K. Spalding

Surveyor

Roswell C. Boistad
Roswell C. Boistad

Chief of Party

19. Remarks after review in office:

See following pages

^{J.A.³}
Reviewed in office by: *B. G. Jones*

Examined and approved:

E. H. Green

Chief, Section of Field Records

L. O. Polk

Chief, Division of Charts

F. S. Bordin

Chief, Section of Field Work

G. H. Wade

Chief, Division of Hydrography
and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5079 (1934)

Comparison with Other Surveys:

1. T-4767 (1933), 1:20,000; T-4768 (1933), 1:5,000; and T-6097 (1934), 1:20,000, plane table control surveys, show shore-line and location of signals in this area and agree with the compilation except as noted on page 6 of the preceding report.

2. Comparison with the last previous plane table survey T-2106 (1892) shows minor changes. The compilation is adequate to supersede T-2106.

Names:

The name Montauk Harbor has been approved by the Geographic Board for the body of water discussed on page 5 and opposite page 10.

B.G. Jones

Date. April 3, 1935

GEOGRAPHIC NAMES

Survey No. T-5079Chart No. 1211

Diagram No. _____

Approved by the Division of Geographic Names, Department of Interior. ✕

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>BLOCK ISLAND SOUND</u>	Same			
	<u>CULLODEN POINT</u>	"			
	<u>MONTAUK YACHT CLUB</u>				
	<u>SHAGWONG POINT</u>	"			
	<u>REED POND</u>				
	<u>PROSPECT HILL</u>				
	<u>OYSTER POND</u>	"			
	<u>FALSE POINT</u>	"			
	<u>MONTAUK POINT</u>	"			
	<u>MONTAUK HARBOR</u>				
	<u>MONTAUK</u>	"			
	<u>FORT POND</u>	"			
	<u>ATLANTIC OCEAN</u>	"			
	<u>PETERS RUN</u>				
	Montauk Village	<u>Montauk</u>			
	<u>Star T</u>				
		APPROVED BY DIVISION OF GEOGRAPHIC NAMES H. L. FLEMMING			