5055

ORIGINAL

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, *Director*

State: New York

DESCRIPTIVE REPORT

Photo
Topographic
~~*Hydrographic*~~ } *Sheet No.* T5055

LOCALITY

South Shore of Long Island

Patchogue ~~to Oakdale~~

1934

CHIEF OF PARTY

Roswell C. Bolstad, Jr. H. & G. E.

U. S. GOVERNMENT PRINTING OFFICE: 1931

5055

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. 5

REGISTER NO. T5055

State New York

General locality South Shore of Long Island

Locality Patchogue ~~No Quadle~~

Scale 1:10,000 Date of Photographs May 15, 1933
Date of Compilation March 8, 1934

~~Vessel~~ Air-photo Compilation Party No. 12

Reviewed and recommended for approval
Chief of party Roswell C. Bolstad, Jr. H. & G. E. Roswell C. Bolstad

Surveyed by (see data sheet enclosed in Descriptive Report for this sheet)
C. R. Weaver

Inked by C. R. Weaver

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

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

Instructions dated November 15, 1932

Remarks: Actual scale of celluloid sheet is 1:11,601. Compilation of five lens aerial photographs Nos. M271-M292 (876-14). Final sheet to be enlarged to 1:10,000 scale and printed by ~~photo-lithographic process.~~

- NOTES ON COMPILATION -

SHEET NO. 5

PHOTO, NO. M271 (876-14) TO NO. M292 (876-14)

DATE OF PHOTOGRAPHS May 15, 1933 TIME 11:18 A.M.

	BY	DATE
ROUGH RADIAL PLOT	J.R. Reynolds	9/7 - 9/8/33
SCALE FACTOR (0.862)	J.J. Lanigan	9/9/33
SCALE FACTOR CHECKED	S.E. Sperry, Jr.	9/12/33
PROJECTION	S.E. Sperry, Jr.	9/13/33
PROJECTION CHECKED	T.M. Price	9/13/33
CONTROL PLOTTED	S.E. Sperry, Jr.	9/14/33
CONTROL CHECKED	W.H. Burwell	9/14/33
TOPOGRAPHY TRANSFERRED	J.P. Jones	10/14/33
TOPOGRAPHY CHECKED	J.P. O'Donnell	10/14/33
SMOOTH RADIAL LINE PLOT	S.E. Sperry, Jr.	9/14 - 9/22/33
RADIAL LINE PLOT CHECKED	W.H. Burwell & J.P. Jones	9/23 & 25/33
DETAIL INKED	C.R. Weaver	10/25/33-3/8/34

LENGTH OF STREETS, ROADS, TRAILS, RAILROADS 197.0 Statute Miles

AREA OF DETAIL INKED 24.2 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)
11.0 Statute Miles

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

GENERAL LOCATION South Shore of Long Island

LOCATION Patchogue to Oakdale

DATUM North American 1927

Latitude 40°- 43' - 47.349" (1460.5 m.)

STATION BLUE POINT 2 1933 Longitude 73°- 02' - 07.555" (177.3 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 5

GENERAL INFORMATION.

No Field Report for the section of Long Island covered by this sheet was available. The necessary field data for the compilation of this sheet was obtained from the Descriptive Reports of Lieut. Comdr. R. P. Eyman for Field Sheets "D" and "E" and from the notes of the field inspection party.

The accompanying NOTES ON COMPILATION details all data in connection with the compilation of this sheet.

At the time the photographs for this sheet were taken, May 15, 1933 at 11:18 A.M., the tide at Patchogue, according to predicted tide tables, was practically at low water.

This sheet was compiled from photographs 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, photograph numbers M271 (876-14) to M292 (876-14) inclusive.

CONTROL.

(A) Sources.

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

(a) Triangulation by Lieut. Comdr. R. P. Eyman in 1933, unadjusted.

(b) 1933 Aluminum Control Sheet (Lieut. Comdr. R. P. Eyman's Field Sheet "D") Reg. No. 6013

(c) 1933 Aluminum Control Sheet (Lieut. Comdr. R. P. Eyman's Field Sheet "E") Reg. No. 6007

The field party's geographic positions, unadjusted, were used; these are on the North American 1927 Datum.

Triangulation and topography (1:20,000 scale aluminum control sheet, showing high water line and control signals) executed by the party of Lieut. Comdr. R. P. Eyman in 1933, forms the basis of control for this area.

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

And	Hold	Clam
What	Eye	Dog
Per	Mis	Cor
Po	Nat	Pine

They have been shown on the celluloid topographic sheet by a double blue circle (◎) together with the name (as shown on the aluminum control sheets) in blue. As the blue 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.

All aluminum control stations used for supplementary control on this sheet have been plotted from the positions obtained from Lieut. Comdr. R.P. Eyman's Descriptive Report, Field Letter "E", 1933.

In the compilation of this sheet all of the topo stations shown on the aluminum control sheet were not used since they had not been picked up or spotted by the field inspection party. However, most of these stations were spotted by the field inspection party and a few that were not were identified under the stereoscope so that they could be used for supplementary control. Only a very few could not be used at all.

The Long Island Railroad shown on this sheet was not used for supplementary control or plotted from any railroad data available but traced directly from the photographs and served only as an aid to orientation and to maintaining the azimuth of the photographs.

(B) Errors.

In making the radial plot for this sheet the following relocations of spotted aluminum control signals resulted:

✓ ◎ And - Lat. 40°- 44.1', long. 73°- 02.0'- new position as determined by the radial plot lies 9 meters distant on azimuth 55° (from north) from the position as given on the aluminum control sheet. This signal is a white banner on ~~a sandy beach~~ end of bulkhead and, since its spotting could not be verified under the stereoscope, it is possible that it has been spotted in error, although all signals in this area are in error.

✓ ◎ Clam - lat. 40°- 44.3', long. 73°- 01.9'- new position as determined by the radial plot lies 20 meters distant on azimuth 10° (from north) from the position as given on the aluminum control sheet. This signal is a white banner on a porch roof and, as it was picked up in the office under the stereoscope without the aid of notes by the field inspection party, it may possibly be in error by as much as five meters.

check ◎ What - lat. 40°- 44.5', long. 73°- 01.8'- new position as determined by the radial plot lies 26 meters distant on azimuth 50° (from north) from the position as given on the aluminum control sheet. This signal is a white banner on the corner of a bulkhead which is clearly defined on the photographs and is therefore

See remarks at back

believed to be in error as stated.

Luck ⊙ Eye - lat. 40°- 44.6', long. 73°- 01.6'- new position as determined by the radial plot lies 31 meters distant on azimuth 35° (from north) from the position as given on the aluminum control sheet. This signal is a white banner on the corner of a pier which is clearly defined on the photographs and is therefore believed to be in error as stated.

Luck ⊙ Mis - lat. 40°- 43.7', long. 73°- 03.8'- new position as determined by the radial plot lies 22 meters distant on azimuth 50° (from north) from the position as given on the aluminum control sheet. This signal is a banner and is spotted on the photographs by direct measurements made by the field inspection party from well defined points showing on the photos. This spotted position places it about 14 meters in from the high water line instead of directly on the high water line as shown on the aluminum control sheet. However, when this banner, as spotted by the field inspection party, was used as a radial point, the shore line drawn using this point agreed well with that shown on the aluminum control sheet indicating that the station may have been plotted in error on the aluminum control sheet.

✓ ⊙ Nat - lat. 40°- 43.3', long. 73°- 05.4'- new position as determined by the radial plot lies 12 meters distant on azimuth 300° (from north) from the position as given on the aluminum control sheet. This signal is a banner on a sandy beach and, since its spotting could not be verified under the stereoscope, it is possible that it has been spotted in error.

All the errors noted with the exception of the two banners, Mis and Nat, are in the same area, on the west side of Patchogue Bay between triangulation stations Blue Point 2 and Beacon (Patchogue Creek). They are at practically the same elevation and their radial positions have been checked by direct proportioning between the two triangulation stations as well as by the offset method from straight lines drawn between points on the photos and corresponding points on the celluloid (from page 3 of notes by T.P. Pendleton, Nov. 10, 1933).

The control, on this sheet, is strong and it is felt that all the above listed signals are in error on the aluminum control sheet as stated.

It is to be noted that the aluminum control sheet was executed on a scale of 1:20,000 whereas this sheet is on a scale of 1;11,601.

See memo of Luck.

(C) Discrepancies.

No other 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.

The photographs of this strip appear to have considerable tilt and in addition a scale fluctuation due to a variation in the altitude of the airplane, making it necessary for the detailer to do considerable proportioning between radial points because of the difference between the scale of the photographs and the average scale to which the projection was made.

The triangulation stations were well distributed over the sheet and by holding to all available control excessive adjustment, to the extent of causing any appreciable error, was not necessary.

(C) Interpretation.

Only the usual graphic symbols were used as approved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail. There is one exception to this statement in the way in which the greehhouses on this sheet have been shown. Instead of the usual cross-sectioning being used as for buildings a series of small rectangles joined together were used signifying the panes of glass in the roof of a greenhouse. Labels have been attached to this sheet in several places as an aid to interpreting the symbol.

The double full line was used to indicate first order roads and the double broken line for private driveways and roads of lesser importance. An exceedingly poor road or trail was shown as a single dashed line. In most cases (unless labeled on the field inspection prints) the classification had to be determined by the appearance under the stereoscope.

The dtail in the vicinity of the railroad stations, on this sheet, regarding the tracks, was obtained from the Long Island Railroad track data.

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

There are no shoal areas (shown) on this sheet.

On the upper reaches of Brown Creek, long. 73°- 04' approximately, the creek widens out and a number of dams have been shown as noted by the field inspection party. It is believed that these dams are actually fences separating adjoining duck farms but they have been shown as noted by the field inspection party.

The long narrow buildings shown on this sheet are buildings belonging to duck ranches.

(D) Information from Other Sources.

The high water line and marsh line were run in by the topographic party on the aluminum control sheet.*

(E) Conflicting Names.

There are no names on this sheet conflicting with names shown on the U. S. C. & G. S. Charts of this area.

There are no new names shown on this sheet.

* The HW line from T6007 and T6015, plantable control survey was transferred to the compilation and has been corrected in places

B.98.

COMPARISON WITH OTHER SURVEYS.

The junctions with all adjoining sheets are satisfactory.

The high water line obtained from the photographs agrees well with that as shown on the aluminum control sheets except in a few localities where there are slight variations.

Between Brown Point and Hawkins Point in the vicinity of topo station Mis the shore line detail~~s~~ as shown on the aluminum control sheet ~~are~~ is located too far westward, which discrepancy is consistent with the error found in signal Mis as stated under CONTROL (B) Errors, page 5.

The shore line along the west side of Patchogue Bay shows considerable variation from that shown on the aluminum control sheet but this is in the vicinity where several topo signals were found to be in error by the radial plot as noted under paragraph on CONTROL, (B) Errors, page 5.

All docks, piers, breakwaters and similar objects shown on the aluminum control sheets, particularly in the vicinity just west of Brown Point, have been shown on this sheet whether they occur on the photographs or not since the aluminum control sheet is of later date than the photographs.

There are also several docks along the west side of Patchogue Bay which are shown because they appear on the photographs although they do not appear on the aluminum control sheet.

LANDMARKS.

The list of landmarks for this area, including those to be expunged, has been previously submitted (November 9, 1933) by Lieut. Comdr. R.P. Eyman.

The following landmarks, shown on U. S. C. & G. S. Chart 578 are not on Lieut. Comdr. R.P. Eyman's list of landmarks to be expunged and consequently it is believed that they should be retained. The geographic positions given below were obtained by air photo topography.

Description	Latitude °	'	D.M. Meters	Longitude °	'	D.P. Meters
			(755)			(20)
E. Radio Tower	40	44	1096	73	05	1388
			(511)			(1117)
N. Radio Tower	40	44	1340	73	06	291
			(1003)			(1107)
S. Radio Tower	40	44	848	73	06	301
			(975)			(1347)
S.E. Radio Tower	40	44	876	73	06	61
			~~(406)~~ (394.7)			~~(364)~~ (364.3)
△ Cupola (R.K. Post House)	40	43	~~1445~~ 1456.1	73	02	~~1044~~ 1043.6

The four radio towers, listed above, are in the immediate vicinity of triangulation station Radio (West Sayville) 1933 and occur on the "B" prints where the radial plot locations are very strong.

The cupola shown above appears on the aluminum control sheet as a triangulation station (R.K. Post House, 1914). The radial position for this cupola does not check with that shown on the aluminum control sheet. However, if it is assumed that the position on the aluminum control sheet was not corrected

See review at back

for the difference between the old datum and North American 1927 datum, the radial position checks well with that plotted on the aluminum control sheet.

There are also many 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 below

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

C. R. Weaver

C. R. Weaver
Draftsman

Assisted by

A. K. Spalding
A. K. Spalding
Accountant

J. P. O'Donnell
J. P. O'Donnell
Draftsman

The accuracy of 2 to 4 meters given above is too high. a better estimate is an accuracy of location to 2 to 5 meters for intersected points and 2 to 8 meters for other detail.

B. G. Jones

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.)

Description	Approximate Latitude		Approximate Longitude		Height	Method of Determination
	°	'	°	'		
(Po) Flagpole	40	43.3	73	05.0		A.C.S., Reg. No. _____
(Hold) Cupola Five Mile Look	40	44.3	73	01.9	(1125.5) 725.3 (42.8) 1345.1	A.C.S., Reg. No. T-6007
(Dog) Flagpole	40	44.8	73	00.2		A.C.S., Reg. No. _____

Note: 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.

See reverse of back.

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5055

Title (Par. 56) (see enclosed Title Sheet)

Chief of Party Roswell C. Bolstad Compiled by (see enclosed data sheet)

Project New York Air-photo Compilation Instructions dated Nov. 15, 1932
Party No. 12

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.) Paragraph 8 not applicable to this party. (see paragraph CONTROL in COMPILER'S REPORT)

2. The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".

3. The control and adjustment of the radial plot were adequate. (Par. 12, 29.) (see COMPILER'S REPORT enclosed, paragraph, Adjustments of Plot under COMPILATION (B)).

4. There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 28.)

5. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

6. The representation of low water lines, ~~reefs, coral heads and rocks~~, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

7. Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front. Only such changes as noted in the enclosed COMPILER'S REPORT, CONTROL (B); COMPILATION (C); COMPARISON WITH OTHER SURVEYS and LANDMARKS have been made on this sheet.

8. ~~The span, clearance of bridges are shown~~. (Par. 16c.) There are no bridges of any importance on this sheet.

9. The data furnished by the Field Inspection is adequate.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

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10. The descriptive report covers all details listed in the Manual, so far as they apply to this survey. (Par. 64, 65 and 66.)

11. The descriptive report also contains all additional information required in photo topography as prescribed in the instructions and in the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".

12. The descriptions of recoverable stations and references to shore line were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.) (see Remarks below) (See also report of Control Party, Lieut. Comdr. R.P. Eyman, 1933.)

13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) (Previously submitted by 1933 Field Party under Lieut. Comdr. R.P. Eyman)

14. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.) (see paragraph CONTROL in COMPILER'S REPORT)

15. Junctions with contemporary surveys are adequate.

16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 66k.)

17. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.) fair

18. No additional surveying is recommended.

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

20. Examined and approved: Roswell C. Bolstad

Roswell C. Bolstad
Chief of Party

21. Remarks after review in office: See following pages

Reviewed in office by: B.G. Jones

Examined and approved:

E.K. Green
Chief, Section of Field Records

H.L. Borden
Chief, Section of Field Work

L.O. Colbert
Chief, Division of Charts

G. Rude
Chief, Division of
Hydrography and Topography.

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REVIEW OF AIR PHOTO COMPILATION T-5055 (1934)

Comparison with Other Surveys:

1. T-6007 (1933) 1:20,000, aluminum control survey. See pages 4, 5, and 7 for discussion of differences between this compilation and T-6007. These differences have been examined in the office:

(a) Stations AND, CLAM, WHAT, and EYE, and shore-line detail Long. 73° 01' to Long. 73° 02.1'; differences of 9 to 31 meters.

Both the compilation and plane table are well controlled.

The photo plot in this area has been checked in the office and is accepted as correct to within 5 meters for intersected points including the stations listed above and 5 to ~~10~~ 8 meters for other detail, including shore-line and adjacent ~~woods.~~ woods.

The differences are apparently due to error in 3 point fix positions used for plane table control. (See page 3 of report T-6007) The exact cause of the plane table error has not been determined but the compilation has been checked within limits stated above.

The stations in question are ends of wharfs and piers which can be identified without question. The photo plot was controlled by triangulation stations Blue Point 2, 1933 and Beacon, Patchegue Creek, 1933. The position of triangulation station Cupola, Five Mile Look, 1914, was not available but the cupola was located by the radial plot and shown as topographic station. The triangulation position when plotted in this office checks the photo location and furnishes an additional check on the accuracy of the photo plot. This triangulation station is only about 100 meters from ⊙ CLAM, the location of which differs with the plane table by 20 meters.

The photo plot locations of the stations listed above are as follows:

AND	40° 44'	(1602.1) 248.7 meters
	73° 02'	(1348.0) 59.9 meters
CLAM	40° 44'	(1221.1) 629.7 meters
	73° 01'	(127.3) 1280.6 meters
WHAT	40° 44'	(915.3) " 935.5
	73° 01'	(299.0) " 1108.6
EYE	40° 44'	(685) " 1165
	73° 01'	(527.5) " 880.2

Hydrographic Survey H-5367a using the plane table locations of stations listed above has been completed and applied to the charts subsequent to the review of this compilation. A general examination of the Hydrographic survey shows that the error in location of signals will not have any critical effect on the positions of soundings, as the bottom is quite regular in this area. A note has been inked on T-6007 referring to the compilation for correct location of topographic detail and a reference to this review made in the report for H-5367a.

(b) The cupola mentioned at the bottom of page 7 is triangulation R.K. Post House, 1914 and is correctly plotted on the plane table survey. The photo plot position was in error probably due to erroneous spotting on indistinct photographs. The position is now shown on the compilation as a triangulation station.

(c) Stations MIS and NAT. The plane table positions are

accepted as correct due to the probability of incorrect spotting on the photographs. The compiler on page 5 questions the spotting of Station NAT. In the case of Station MIS the point was marked on the photographs by field measurements, but the station is a banner which could quite possibly have been moved. Also in the case of Station MIS the difference in location of the signal is much larger than the difference in location of the shore-line in this vicinity.

1. Comparison with T-1374a (1874) and T-3483 (1914) shows changes in shore-line and addition of structural detail. The compilation is adequate to supersede the older plane table surveys for the area it covers.

B G Jones

B. G. Jones.

GEOGRAPHIC NAMES

Survey No. T-5055

Date. April 3, 1935

Chart No. 1214-578

Diagram No. 1214

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
	PATCHOGUE				
	PATCHOGUE CREEK				
	SAYVILLE				
	BAYPORT				
	BLUE POINT				
	PATCHOGUE BAY				
	NICOLL BAY				
	GREEN POINT				
	WEST SAYVILLE				
	BROWN POINT				
	BROWN CREEK				
	GREAT SOUTH BAY				
	HAWKINS POINT				
	BLUE POINT(town)				

APPROVED NAMES
UNDERLINED IN RED
H. L. Flemer

(M-136)