

5057

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

State: New York

DESRIPTIVE REPORT

Photo  
Topographic  
~~Hydrographic~~ } Sheet No. T5057

LOCALITY

South Shore of Long Island

~~Bay Shore to Amityville~~  
Babylon

1934

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1928

5057

-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. 7

REGISTER NO. T5057

State New York

General locality South Shore of Long Island

Locality Bay Shore to Amityville Babylon

Scale 1:10,000 Date of ~~survey~~ Photographs May 15, 1933  
Date of Compilation March 27, 1934

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

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

Surveyed by (see data sheet enclosed in Descriptive Report for this sheet)

Inked by R. L. Fisher and W. Barasch

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 1:11,765. Compilation of five lens aerial photographs Nos. 310 to M332 (876-14). Final sheet to be enlarged to 1:10,000 scale and printed by photo-lithographic process.

- NOTES ON COMPILATION -

SHEET NO. 7

PHOTOS, NO. M310 (876-14) TO NO. M332 (876-14)

DATE OF PHOTOGRAPHS May 15, 1933 TIME 11:28 A.M.

	BY	DATE
ROUGH RADIAL PLOT	<u>J.R. Reynolds</u> J.R. Reynolds	<u>9/23 - 9/26/33</u>
SCALE FACTOR (0.850)	<u>J.R. Reynolds</u> J.R. Reynolds	<u>9/27/33</u>
SCALE FACTOR CHECKED	<u>J.P. O'Donnell</u> J.P. O'Donnell	<u>9/29/33</u>
PROJECTION	<u>W.H. Burwell</u> W.H. Burwell	<u>12/2/33</u>
PROJECTION CHECKED	<u>J.P. O'Donnell</u> J.P. O'Donnell	<u>12/2/33</u>
CONTROL PLOTTED	<u>W.H. Burwell</u> W.H. Burwell	<u>12/4 &amp; 5/33</u>
CONTROL CHECKED	<u>P.A. Kelly</u> P.A. Kelly	<u>12/5/33</u>
TOPOGRAPHY TRANSFERRED	<u>J.J. Vanigan</u> J.J. Vanigan	<u>12/6/33</u>
TOPOGRAPHY CHECKED	<u>J.G. Albert</u> J.G. Albert	<u>12/6/33</u>
SMOOTH RADIAL LINE PLOT	<u>G. Crowther</u> G. Crowther	<u>2/9/34</u>
RADIAL LINE PLOT CHECKED	<u>J.G. Albert</u> J.G. Albert	<u>2/10 - 13/34</u>
DEATIL INKED	<u>R.L. Fisher and W. Barasch</u> R.L. Fisher and W. Barasch	<u>3/17/34 R.L.F., E. Half</u> <u>3/27/34 W.B., W. Half</u>
LENGTH OF STREETS, ROADS, TRAILS, RAILROADS	<u>211.0</u>	Statute Miles
AREA OF DETAIL INKED	<u>19.0</u>	sq. Statute Miles (Land Area)
AREA OF DETAIL INKED	<u>0.0</u>	sq. Statute Miles (Shoals in Water Area)
LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)	<u>9.2</u>	Statute Miles
LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)	<u>35.3</u>	Statute Miles
GENERAL LOCATION	<u>South Shore of Long Island</u>	
LOCATION	<u>Bay Shore to Amityville</u>	
DATUM	<u>North American 1927</u>	
	Latitude	<u>40°- 40'- 47.346" (1460.5 m.)</u>
STATION	<u>Sam 1933</u>	Longitude <u>73°- 18'- 58.781" (1380.5 m.)</u>

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 7

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 "B" and "D" and from the notes of the field inspection party.

B is 6011  
D is 6013

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 11:28 A.M., the tide at Babylon, according to predicted tide tables, was about one-half foot below high 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 M310 (876-14) to M332 (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 "B")  
Reg. No. 6011
- (c) 1933 Aluminum Control Sheet (Lieut. Comdr. R.P. Eyman's Field Sheet "D")  
Reg. No. 6013

All control is 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:-

Cup	Flagpole on Dock	Green House
Can	Garage Red Roof	Lookout Tower
See	Web	Cre
Wax	Boathouse Red Roof	

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. Eymann's Descriptive Reports, Field Letters "B" and "D", 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 track traverse data was used for supplementary control on this sheet. The traverse was tied in at intervals by means of the radial plot in localities where the control was strong and was found to agree well except at the west side of the sheet where slight adjustment was necessary as stated under (C) Discrepancies, page 5.

#### (B) Errors.

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

✓ ⊙ Cup - Lat.  $40^{\circ}-41.5'$ , Long.  $73^{\circ}-19.7'$  - new position as determined by the radial plot lies 13 X meters distant on azimuth  $45^{\circ}$  (from north) from the position as given on the aluminum control sheet. This signal is a cupola on a private boathouse and may be verified under the stereoscope so it is believed to be in error as stated. The position as obtained from the aluminum control sheet apparently places the house in the water.

✓ ⊙ Web - Lat.  $40^{\circ}-40.6'$ , Long.  $73^{\circ}-21.6'$  - new position as determined by the radial plot lies 7 X meters distant on azimuth due north from the position as given on the aluminum control sheet. This signal is a flagpole and was located by measured distances on the field print, photo 325 "B" print, so that it is believed to be correctly spotted. The control in this area is good as is also the scale.

⊙ Can - Lat.  $40^{\circ}-40.1'$ , Long.  $73^{\circ}-22.3'$  - new position as determined by the radial plot lies 30 X meters distant on azimuth  $310^{\circ}$  (from north) from

~~see opposite page~~ see review at back

the position as given on the aluminum control sheet. This signal is a red boathouse (middle) and its position could be verified under the stereoscope so it is believed to be correctly spotted. The radial plot position places the signal about 20 meters in from the shoreline which is according to the description. The position, as plotted from the aluminum control sheet, falls in the water.

@ Cre - Lat.  $40^{\circ}-39.8'$ , Long.  $73^{\circ}-23.7'$  - new position as determined by the radial plot lies 19 meters distant on azimuth  $173^{\circ}$  (from north) from the position as given on the aluminum control sheet. This signal is a concrete building (middle) the position of which was verified under the stereoscope therefore it is believed to be correctly spotted.

It is believed that the above mentioned stations are in error as stated since they could be definitely verified either by the aid of the stereoscope or by direct measurements made by the field inspection party.

It is to be noted that the aluminum control sheets were executed on a scale of 1:20,000 whereas this sheet is on a scale of 1:11,765. ~~See review of sheets~~

(C) Discrepancies. ~~page 4~~ *See review at back.*

It was found that slight adjustment was necessary in using the Long Island Railroad track traverse data since it did not agree exactly with the radial plot at the western side of the sheet. From a point on the Railroad opposite triangulation station Tank (Lindenhurst 1933) to the west side of the sheet it was necessary to add 5 meters to the distances as obtained from the track traverse data in order to make the road crossings agree with the corresponding crossings on the radial plot. Otherwise the plotted track traverse agreed well with the radial plot.

No other control established by other organizations was 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 only a small amount of tilt and scale fluctuation. The photographs for the eastern half of the sheet are freer from tilt and scale fluctuation than those for the western half and a good deal more proportioning was necessary between radial points because of the difference in the scale of the photographs and the average scale to which the projection was made. However, 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 ap-

proved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail. No shoal areas are shown.

The double full line was used to indicate first order roads and the double broken line for roads of lesser importance. Private roads to houses have been omitted on this sheet. 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 detail in the vicinity of the railroad stations, on this sheet, regarding the tracks, was obtained from the Long Island Railroad track data.

Three bridges are shown on this sheet over a canal south of Lindenhurst, lat. 40°-40.0', long. 73°-22.8' approximate. Two of these bridges are known to be concrete arch bridges, from information obtained by field inspection, and are so labeled on the compilation sheet. The clearance is only enough for a small power boat to pass and are of minor importance to navigation. The third bridge (most easterly) is believed to be a wooden bridge with little clearance. No other information is available to this party regarding these bridges.

At the mouth of Santapogue River there is a sunken barge which shows above high water and has been adequately labeled.

At the west side of Babylon Cove there is a barge aground which shows above high water and has been labeled on the compilation sheet. Near this barge the piling of an old dock projects out into the water and is shown on this sheet. The existence of these objects was verified by the field inspection party but no measurements were taken regarding the dock as no boat was available at the time of the inspection.

The houses north of the railroad are not clear on the photographs and a little difficulty was encountered in the detailing. The house shown at Lindenhurst, south east of triangulation station Cupola (Lindenhurst H.S.) 1933, without cross-sectioning, appears to be in ruins.

At triangulation station Sam the bathhouses extend to the west as well as to the east but were omitted because of the name of the triangulation station taking their place.

(D) Information from Other Sources.

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

\* The channel markers were taken from the aluminum control sheets and their geographic positions from the Descriptive Reports of Lieut. Comdr. R.P. Eyman, Field Sheets "B" and "D", since it was impossible to spot the channel markers from the photographs. B= 6011  
D= 6013

The Long Island Railroad track traverse data was used for control as stated under CONTROL (A) Sources, page 4 and (C) Discrepancies, page 5.

\* Bromide copies of the plane table sheets to the scale of the compilation were available for checking positions plotted from the desc. reports.

The variation in shoreline noted on page 7 opposite is due probably to an error in the rod reading according to Mr. W. D. Ayers, now on this party, who performed the topography in this area, while in the party of Lieut. Comdr. R.P. Eyman. (See 3<sup>rd</sup> paragraph, Comparisons with Other Surveys.)



Descriptions were obtained from the Long Island Railroad track data for the stations and vicinity along the route of the railroad. These descriptions were used in detailing the topography in the vicinity of the stations since the photographs did not show this data clearly.

(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, and there are no new names shown.

On the topo sheet Neguntatogue Creek has been shown as Neguntague River. This has been checked by field inspection, and the name, Neguntatogue Creek, as it appears on Chart 578, is correct.

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 two localities.

At lat.  $40^{\circ}-39.5'$ , long.  $73^{\circ}-23.2'$  the aluminum control sheet shows what appears to be a bulkhead. No trace of this object could be found on the photographs and it has therefore not been shown since no notes were made by the field inspection party. (See opposite page.)

Immediately north of topo station Can an indentation has been shown in the west shore line, lat.  $40^{\circ}-40.1'$ , long.  $73^{\circ}-22.0'$ , which is not shown on the aluminum control sheet. This indentation was recently verified by field inspection and is known to be correct.

The road crossings and other similar features along the Long Island Railroad agree well with the corresponding points as obtained from the Long Island Railroad track traverse data.

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.

There are two landmarks occurring on Chart 578 which have not been mentioned in the list of landmarks submitted by Lieut. Comdr. R.P. Eyman which, it is believed, should be retained. They are as follows:

✓ Spire (Pres. Ch., Babylon) 1875-1933  
Stack

Spire (Pres. Ch., Babylon) 1875-1933 is listed under Lieut. Comdr. R.P. Eyman's 1933 triangulation and therefore is believed to be of sufficient prominence to be retained as a landmark.

Stack, lat.  $40^{\circ}-41.2'$ , long.  $73^{\circ}-22.2'$ , approximately, is not shown on this compilation sheet as no data is available to this party and the signal was not spotted by the field inspection party. However, there appears, under the stereoscope, to be a stack in the position shown on Chart 578 of sufficient prominence to be retained as a landmark. Photographs M327 and M328, "C" prints, were used in the stereoscopic investigation.

*This stack is a Vulcanite Mfg. Co. Stack 1909 and has been plotted on the compilation after checking its existence on the photos.*  
B.G.G.

This landmark was not listed in Lieut. Comdr. R.P. Eyman's expunge list.

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 photolithographic 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

*R. L. Fisher*  
R. L. Fisher  
Draftsman

Assisted by

*W. Barasch*  
W. Barasch  
Draftsman

*A. K. Spalding*  
A. K. Spalding  
Accountant

*J. G. Albert*  
J. G. Albert  
Draftsman

*The value of 2 to 4 meters given above is too high an accuracy for work on this scale. A better estimate is an accuracy of elevation of 2 to 4 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.)

<u>Description</u>	<u>Latitude</u>			<u>Longitude</u>			<u>Height</u>	<u>Method of Determination</u>
	o	'	D.M. Meters	o	'	D.P. Meters		
S.E. end of house gable	40	41	(1285) 565	73	16	(292) 1117		A.P.T., 1933
S.W. end of house gable	40	40	(447) 1403	73	19	(215) 1194		A.P.T., 1933
Chy. on red roofed house	40	40	(1551) 300	73	21	(772) 638		A.P.T., 1933
Lookout tower	40	40.6	<i>off</i>	73	21.1	<i>off</i>		A.C.S., Reg. No. _____
(Wax) Chimney								
W. end of Ho.	40	39.5		73	23.4			A.C.S., Reg. No. _____
S.E. corner of Green House	40	39.6		73	23.5			A.C.S., Reg. No. _____

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

\* Positions listed only to tenths  
of minutes are approximate  
B.G.

## REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5057

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.) *None.*
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 reefs, and rocks~~, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ~~None~~
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) and (D); COMPARISON WITH OTHER SURVEYS and LANDMARKS have been made on this sheet.
8. ~~The survey shows no bridges of importance to navigation.~~ (Par. 16c.) There are no bridges of importance to navigation shown on this sheet. See COMPILATION (C) Interpretation, page 6.
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.

19. Additional Note.

In the vicinity, lat.  $40^{\circ}$ - $41.2'$ , long.  $73^{\circ}$ - $18.0'$ , there is shown a dashed boundary line in a marshy area. Within the boundary line the marsh symbol has been broken to represent an exceptionally wet area. The limits of the wet area are well defined on the photographs.

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. <sup>No</sup> 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) *Triang. positions were from Field Computations.*
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 <sup>Poor</sup> ~~good~~. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.)
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. See opposite page.

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. J. Green*  
Chief, Section of Field Records

*L. O. Solbert*  
Chief, Division of Charts

*F. S. Borden*  
Chief, Section of Field Work

*G. H. de*  
Chief, Division of  
Hydrography and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5057

Comparison with Other Surveys:

1. T-6011 and T-6013 (1933), aluminum control surveys show location of signals for hydrography and shore-line in this area. Differences between the compilation and these surveys are discussed on pages 3 to 5 and on page 7.

The photo locations of stations listed on pages 4 and 5 are accepted as correct after examination in this office. All of these stations are up the creeks along the northern shore of the bay, and their plane table positions were determined by random traverses from the main traverse along the northern shore.

The compilation is on a larger scale and is adequately controlled. The spotting of the stations on the photographs was checked under the stereoscope, except for Station WEB which was located on the photographs by ground measurements.

A note has been placed on the plane table survey referring to this compilation for correct locations. The hydrographic sheet has been plotted and inked, using the plane table positions. <sup>However,</sup> No replotting is considered necessary on H-5376 as only the sounding lines up the small creeks are ~~effective.~~ <sup>affected.</sup>

2. Comparison with T-3483 (1914) shows changes in shore-line and considerable additional construction. The compilation is detailed and adequate to supersede this survey.

*B. G. Jones*

Survey No. T-5057

Chart No. 1

Diagram No. 1213-1215

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

Under investigation. Q

M-436



## GEOGRAPHIC NAMES

Survey No. T-5057

Date. April 3, 1935

Chart No. \_\_\_\_\_

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

**SHEET TWO**

[illegible]