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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. T5058 5058
LOCALITY	
South Shore of Long Island	
Amityville to Bellmore	
1934	
CHIEF OF PARTY	
Roswell C. Bolstad, Jr. H. & G. E.	

U. S. GOVERNMENT PRINTING OFFICE: 1928

-1-
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5058

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. 8

REGISTER NO. T5058 5058

State New York

General locality South Shore of Long Island

Locality Amityville to Belmore

Scale 1:10,000 Date of ~~Survey~~ Photographs May 15
Date of Compilation March 18 1933
July 1, 1934

~~Wassak~~ Air Photo Compilation Party No. 12

Chief of party Roswell C. Bolstad

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

Inked by J. B. Moreland

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 1:11,601. Enlarged and printed
on scale of 1:10,000 by Photo Lithography.

- STATISTICS -

on

SHEET, FIELD NO. 8, REG. NO. T5058

PHOTOS, NO. M330 (876-14) TO NO. M349 (876-14)

DATE OF PHOTOGRAPHS May 15, 1933 TIME 11:44 A.M.

	BY	DATE FROM TO
ROUGH RADIAL PLOT	<i>M.S. Abramson</i> M.S. Abramson	1/31 - 2/1/34
SCALE FACTOR (0.862)	<i>M.S. Abramson</i> M.S. Abramson	2/1 - 2/1/34
SCALE FACTOR CHECKED	<i>J.P. O'Donnell</i> J.P. O'Donnell	2/2 - 2/2/34
PROJECTION	<i>J.J. Langan</i> J.J. Langan	2/3 - 2/3/34

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 8

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 "G"-6008(1933) and from the notes of the field inspection party. 6011(1933)

At the time the photographs for this sheet were taken, May 15, 1933 at 11:44 A.M., the tide at Biltmore Shores, South Oyster Bay, according to the U. S. C. & G. S. predicted tide tables, was about midway between high and 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 M330 (876-14) to M349 (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. ^{Field Computations on} NA 1927 datum
- (b) 1933 Aluminum Control Sheet (Lieut. Comdr. R.P. Eyman's Field Sheet "B")
Reg. No. 6011(1933)
- (c) 1933 Aluminum Control Sheet (Lieut. Comdr. R.P. Eyman's Field Sheet "G")
Reg. No. 6008(1933)
- (d) 1933 Aluminum Control Sheet (Lieut. Comdr. R.P. Eyman's Field Sheet "H")
Reg. No. 6009(1933)
- (e) 1926 ^{Topographic} ~~Aluminum Control Sheet~~ (Lieut. C. D. Meaney)
Reg. No. 4274

All control is on the North American 1927 Datum. Triangulation and topography (1:20,000 and 1:10,000 scale aluminum control sheets, showing high water line and control signals) executed by the parties of Lieut. Comdr. R.P. Eyman in 1933 and Lieut. C.D. Meaney in 1926, forms the basis of control for this sheet.

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 photos and were used in controlling this sheet:-

Bat	No name (S.E. edge Wh. Boat House)
Man	No name (E. peak yellow boathouse)
Pig	No name (South side boathouse)
Rub	No name (Peak green boathouse)

*The compiler also had photostats
of the topographic surveys mentioned,
6008, 6009, 6011, and 4274, which were
used to transfer the detail. ~~from~~ to
the compilation. *agg*

Gab
Mit
No name (Flagpole)
No name (Yellow Sign, cable crossing)
No name (Pipe on shack)
No name (Flagpole, Biltmore Shores
Bathing Pavilion)

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 ink. As the blue will not photograph during the photolithographic 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 Reports, Field Letters "B", "G" and "H", 1933. *

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 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 with the radial plot.

(B) Errors

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

- Man - Lat. 40°- 39.5', Long. 73°- 24.4' - new position as determined by the radial plot lies 10 meters distant on azimuth 170° (from north) from the position as given on the aluminum control sheet. This signal is the center of a boat house and was spotted by the field inspection party, also verified under the stereoscope.
- ~~Not~~ ^{Not} e No name (S. side of boat house) Lat. 40°- 40.3', Long. 73°- 25.4' - new position as determined by the radial plot lies 11 meters distant on azimuth 45° (from north) from the position as given on the aluminum control sheet. This signal was picked in the office under the stereoscope as an

* See the review report at
back of this descriptive report
B. G. Jones

additional control point. It was not picked up by the field inspection party and its picking under the stereoscope may possibly be in error by about 5 meters. However, the ^{difference} error noted is consistent with that occurring in the shore line in this vicinity and it is therefore believed to be picked correctly.

- ~~No name~~ (Peak of green boathouse) Lat. $40^{\circ}-39.9'$, Long. $73^{\circ}-25.5'$ - new position as determined by the radial plot lies 13 meters distant on azimuth 90° (from north) from the position as given on the aluminum control sheet. This signal was picked up in the office under the stereoscope as an additional control point. As it was not picked up by the field inspection party its spotting may be in error by possibly 5 meters. However, the error noted is consistent with that occurring in the shore line in this vicinity and the spotting is believed to be correct.
- Pig - Lat. $40^{\circ}-39.6'$, Long. $73^{\circ}-26.8'$ - new position as determined by the radial plot lies 20 meters distant on azimuth 355° (from north) from the position as given on the aluminum control sheet. This signal is the south chimney on a white house and was picked up in the office under the stereoscope as an additional control point. Having no description, the south chimney was assumed at the south end of the house so that its location may be spotted in error by a few meters. However, the error noted is consistent with that occurring in the shoreline in this vicinity and the spotting is believed to be correct.

All of the above mentioned errors occur on the 1:20,000 aluminum control sheet.

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 Review at back of this report.

(C) Discrepancies

There were no discrepancies found in the Long Island Railroad track traverse data as used for this sheet such as occurred on some of the other compilation sheets.

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 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.

36

* Note: Par. D on the opposite page ~~1~~ applies only to that portion of the compilation west of Longitude $73^{\circ} 28'$. East of $73^{\circ} 28'$ the High Water Line shown on the Compilation is from the photographs and there are numerous differences in location between this compilation and plane table survey 6011. These differences are discussed in the review at the back of this report.

B. G. Jones

However, by holding to all the available control, including the railroad traverse, excessive adjustment, to the extent of causing an 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.

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.

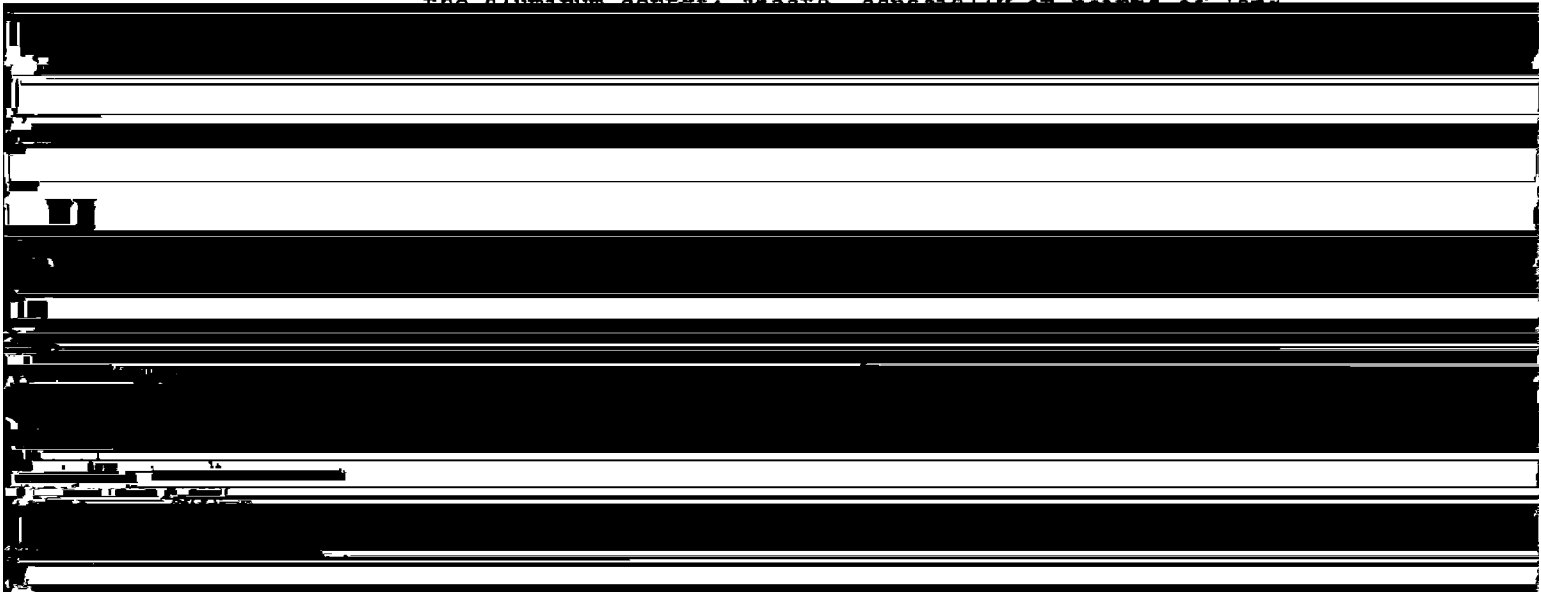
The detail in the vicinity of the railroad stations, on this sheet, regarding the tracks, was obtained from the Long Island Railroad track data.

At Long. 73°- 32' there is a small area shown as marsh off shore bounded by a dashed line. This area is shown on Lieut. C.D. Meaney's aluminum control sheet but does not show on Lieut. Comdr. R.P. Eyman's aluminum control sheet. It is clearly visible on the photographs and has been shown as low marshy ground on this sheet.

The only bridge of importance to navigation, shown on this sheet, is one over Island Creek at Lat. 39°- 38.4', Long. 73°- 30.5'. This bridge is on the Jones Beach Causeway and is of the fixed type concrete girder, span 27 feet, clearance at high water 12 feet. The data, concerning this bridge, is shown on the celluloid sheet but no data concerning other bridges, shown on this sheet, was available.

(D) Information from Other Sources

The high water line and marsh line were run in by the topographic party on the aluminum control sheet. It was necessary to accept the high water line of the topographic party as correct since it fell on the wing prints of the photographs and was too indistinct to be used for accurate work. The high water line, shown on the photographs, did, however, check very well with that shown on the aluminum control sheet, especially at points of land



~~Notes--The--wer--~~

Names A list of the new names and conflicting names has been submitted to Mr. Bacon. Pending his decision the new names have been chosen and name "Wantagh" has been used on the compilation in preference to "Wantough".

B. G. Jones

Massatayun Creek - This name was obtained from the U. S. Geological Maps but not verified by the field inspection party.

Fitzmaurice Airport - This name was obtained from the U. S. Airways Map, Lower K 18 - Dept. of Commerce.

Baldwin Creek, Jones Pond and Seamans Pond - These names were taken from the U.S. Geological Maps and do not appear on Chart 579 but have been shown on this sheet.

Flat Creek, Line Island Flatwater and Goose Island Drain - These names do not appear on Chart 579, U.S.C. & G.S., but are shown on Lieut. C.D. Meaney's 1926 aluminum control sheet and on the U.S. Geological Maps of this area so they have been shown on this compilation sheet.

The town of Wantagh is spelled Wantaugh on U.S.C. & G.S. Chart 579. According to the Long Island Railroad time table the correct spelling is Wantagh. *See opposite page.*

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 on Lieut. C.D. Meaney's ~~1926 aluminum control sheet~~ ^{1926 plan table survey 4274 (92)}. In this case the photographs were used since they are of a much later date and the high water line joined satisfactorily with Lieut. Comdr. R.P. Eymann's 1933 aluminum control sheets. ^{agrees approximately} Surveys.

The shoreline ~~agrees well with that shown on the aluminum~~

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.

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. B. Moreland

J. B. Moreland

Draftsman

Assisted by

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

Surveyor

A. K. Spalding
A. K. Spalding

Surveyor

* The accuracy of location of 2 to 4
small meters is rather high. a better
estimate is 3 to 5 meters for intersected
points and 5 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		
(Bat) Center of bath house	40	39.3	73	24.1		A.C.S. Reg. No. _____
Observation tower	40	39.8	73	24.0		1933 Triang.
(Man) Center of boat house	40	39 965 (886)	73	24 554 (856)		1933 A.P.T.
(No name) S.E. corner of boat house	40	39.8	73	24.8		A.C.S. Reg. No. _____
(No name) W. peak of Boat House	40	39 1659 (192)	73	25 718 (692)		1934 A.P.T.
(No name) S. peak of boat house	40	40 480 (1371)	73	25 588 (821)		1933 A.P.T.
(Rub) Flag pole	40	39.1	73	25.9		A.C.S. Reg. No. _____
(Gab) W. gable large Wh. Ho.	40	38.6	73	30.9		A.C.S. Reg. No. _____
Flag pole	40	38.8	73	30.9		A.C.S. Reg. No. _____
Yellow Sign cable crossing	40	38.4	73	30.5		A.C.S. Reg. No. _____
Pipe on Shack	40	38.1	73	30.6		A.C.S. Reg. No. _____
Flagpole, Biltmore Shores Bathing Pavilion	40	39.4	73	28.1		A.C.S. Reg. No. _____
Diving Tower	40	39 1747 (104)	73	28 160 (1249)		1934 A.P.T.

Note: A.C.S. denotes aluminum control ~~sheet~~ ^{survey}
A.P.T. denotes new position of signal shown on aluminum control ~~sheet~~ ^{survey} found to be in error by air photo topography with the exception of "Diving Tower" which is a new signal not shown on the aluminum control ~~sheet~~ ^{survey}
Name in parenthesis preceding the description is the topographic station name as given on the aluminum control ~~sheet~~ ^{survey}

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5058

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.) *low water line of previous maps only.*
- ✓ 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 (E); COMPARISON WITH OTHER SURVEYS and LANDMARKS have been made on this sheet.
- ✓ 8. The span, draw and clearance of bridges are shown. (Par. 16c.)
See also page 6 (C) Interpretation. - *Data for one bridge unknown gives clearance above H.W. instead of above M. H.W.*
- ✓ 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.

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. *none described on 524*
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) also reports of control parties, Lieut. Comdr. R.P. Eyman in 1933 and Lieut. C.D. Meaney in 1926)
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) - *unadjusted*
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.) *Examined by Harlow Bacon, Jan. 3, 1935.*
17. The quality of the drafting ~~is good~~. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.) *Poor -*
18. No additional surveying is recommended.
19. Remarks: Any additional noted 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: Preliminary Review by *J. P. O'Donnell*
Roswell C. Bolstad Surveyor
Chief of Party
21. Remarks after review in office: *see following pages.*

Reviewed in office by: *B.G. Jones*

Examined and approved:

K.T. Adams
Chief, Section of Field Records
R.O. Lobst
Chief, Division of Charts

B. Borden
Chief, Section of Field Work
G. H. Hulse
Chief, Division of
Hydrography and Topography.

Note: Canal 400 meters east of Woods Creek: The compilation and the plane table survey agree as to the location of Ø Bat at the entrance to this canal but disagree by thirty meters as to the location of the H. W. line just to the east of this signal. Inspection of the Photos which were made at half tide shows that the planetable location could not be correct.

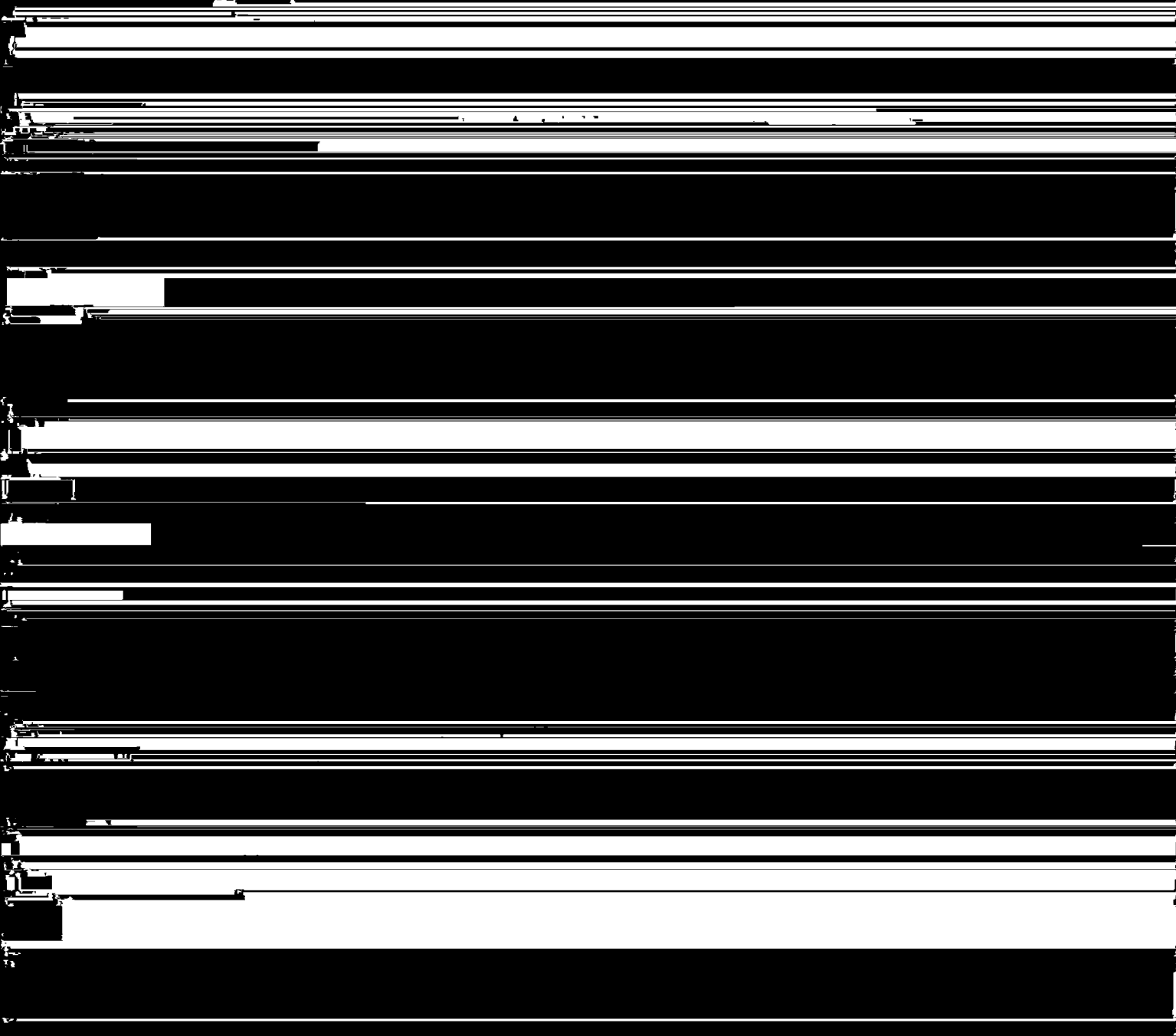
BAG

Review of Air Photo Compilation 5058 (1933)

There are numerous differences in location of H.W. line, and topographic stations (natural objects and temporary banners and marks used for the hydrographic surveys) between this compilation and the planetable surveys as mentioned on pages 4,5, and 7 of the descriptive report.

Most of the differences in location are with planetable survey 6011 (1933) scale 1:20,000, surveyed by W. D. Ayers. Mr. Ayers was later transferred to the party of R. C. Bolstad and was on that party when this compilation was being made.

The planetable surveys were made to locate shore line and signals for hydrography and in general show only a small part of the topographic



See pages 4 and 9 of the descriptive report. Most of the soundings are controlled by shore line references.

3. Amityville Creek.

Shore line on the planetable survey 6011 (1933) is not complete and shows the upper end of this creek 15 meters east of the photo location. The differences in location are not due to faulty identification on the photos and the compilation is well controlled.

These differences seem more likely to be due to error in the 1:20,000 scale planetable survey. Transfer shore line from 5058 (1933) and replot positions of signals above signal "Sap" accordingly. Replot soundings which are largely controlled by shore line references.

4. Longitude 73° 25' to Unqua Point including Carmen Creek and Creek East of Carmen Creek:

High water line from planetable surveys is incomplete and in general is 10 to 20 meters west of the location on the compilation T 5058 (1933). Most of the inshore soundings and those up the canals and creeks are controlled by shore line references. This difference in location is a shift of the whole area and is not due to faulty interpretation of the photographs. The compilation is well controlled by triangulation and the Long Island R.R. traverse. The difference is more probably due to an error in the planetable traverse. To complete the plotting of the soundings the entire High Water line ~~is~~ within the limits stated above should be transferred from T 5058. Signals Fur, Slo, Bul, Pin, Sam, Ho and Rig will need to be adjusted to the new shore line.* The records should be examined to determine whether the change in positions of these signals will affect the location of offshore soundings. A general examination of the records made during this review does not indicate that the offshore soundings will be affected by these changes.

5. Jones Creek and canals East of Jones Creek.

Replot shoreline from T 5058 and replot @ Pig from T 5058. See pages 5 and 9 of the descriptive report. The adjustment of the signals west of triangulation station "New" will affect some of the inshore positions between Unqua Point and Jones Creek. A number of these positions have been replotted as a check and in nearly every case the new position agreed with the shore line from the compilation (T 5058).

* Replot @ Peak as shown on T 5058, ^{position given} on pages 4 and 9 of the descriptive report.

B. G. Jones

Survey No. T 5058GEOGRAPHIC NAMES
NEW YORKDate. Jan 3, 1935Chart No. 578 & 579Diagram No. 1215-3*Names underlined in red approved Jan 3, 1935
Names on survey not listed are approved**Harlow Bacon*

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

¢, Not Approved by the Division of Geographic Names, Department of Interior.

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

*Q Discrepancy under investigation**Compared with previous
Top. Surveys and with U.S.
G.S. Quadrangles
Only new names or discrep-
ant names listed*

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Nassau Shores</u>	Same			
	<u>Copiague</u>	Same			
	<u>Massapequa</u> <u>Massatayun Creek</u>	O. G. N. 11/4/38			
	<u>Fitz Maurice Air Port</u>				40° 41.4 73° 27.0
	<u>Baldwin Creek</u> USGS	This creek is the one immediately east of Whale Neck Pt. Change location on T 5058			
	<u>Jones Pond</u>				
	<u>Seamans Pond</u>				
	<u>Flat Creek</u>				
	<u>Line Island Flatwater</u>	<u>Line Island Flat Water</u> USGS			
	<u>Goose Island Drain</u>	Same			
	<u>Wantagh</u> PO & RR Sta	Not Wantaugh, Chart 579			
	Bellmore Creek is shown as Jackson Cr on USGS and Bellmore Cr is not shown. This Q discrepancy is to be investigated				