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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. T5056

LOCALITY

South Shore of Long Island

~~Calabash~~ Bay Shore

19 34

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1931

5056

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. 6

REGISTER NO. T5056

State New York

General locality South Shore of Long Island

Locality ~~Colliery~~ Bay Shore

Scale 1:10,000 Photographs May 15 & Sept. 19, 1933
Date of ~~survey~~ Date of Compilation March 12, 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 J. G. Albert

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 1:11,111. Compilation of five lens aerial photographs Nos. M292-M312 (876-14) and single lens photos Nos. M37-M43 (881B-8) to Final sheet to be enlarged to 1:10,000 scale and printed by photo-lithographic process.

...

- NOTES ON COMPILATION -

SHEET NO. 6

PHOTOS, NO. M2927 (876-14) TO NO. M312 (876-14) TIME 11:23 A.M.

PHOTOS, NO. M37 (881B-8) TO NO. M43 (881B-8) TIME 10:50 A.M.

DATE OF PHOTOGRAPHS Five lens (876-14) May 15, 1933

DATE OF PHOTOGRAPHS Single lens (881B-8) Sept. 19, 1933

	BY	DATE
ROUGH RADIAL PLOT	<u>W. H. Burwell</u>	<u>10/3 - 10/5/33</u>
SCALE FACTOR (0.900)	<u>W. H. Burwell</u>	<u>10/6/33</u>
SCALE FACTOR CHECKED	<u>A. K. Spalding</u>	<u>10/7/33</u>
PROJECTION	<u>W. H. Burwell</u>	<u>10/9/33</u>
PROJECTION CHECKED	<u>A. K. Spalding</u>	<u>10/9/33</u>
CONTROL PLOTTED	<u>W. H. Burwell</u>	<u>10/10/33</u>
CONTROL CHECKED	<u>J. P. O'Donnell</u>	<u>10/10/33</u>
TOPOGRAPHY TRANSFERRED	<u>W. H. Burwell</u>	<u>10/17/33</u>
TOPOGRAPHY CHECKED	<u>J. P. O'Donnell</u>	<u>10/18/33</u>
SMOOTH RADIAL LINE PLOT	<u>W. H. Burwell</u>	<u>11/6/33</u>
RADIAL LINE PLOT CHECKED	<u>J. P. O'Donnell</u>	<u>11/7/33</u>
DEATIL INKED	<u>J. G. Albert</u>	<u>11/15/33 - 3/12/34</u>

AREA OF DETAIL INKED 21.3 sq. Statute Miles (Land Area)

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

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

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

GENERAL LOCATION South Shore of Long Island

LOCATION ~~Oakdale to~~ Bay Shore

DATUM North American 1927

Latitude 40° - 42' - 23.676" (730.3 m.)

STATION BER 1933 Longitude 73° - 12' - 59.390" (1394.2 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 6

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 Report of Lieut. Comdr. R. P. Eyman for Field Sheet "D" 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.

The height of the tide at the time the five lens photographs for this sheet were taken was about 0.2 of a foot and at the time the single lens photographs were about 0.8 of a foot according to predicted tide tables. These values are the heights of the tide above low water but, in this area, the rise between low and high tide is small amounting to a maximum of about 1 foot.

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 M292 (876-14) to M312 (876-14) inclusive and from the single lens photographs taken by Captain Willis R. Taylor, numbers M37 (881B-8) to M43 (881B-8) 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")

*Yel	*Sly	*Bag
*Ed	*Yo	*Col
*Rat	*Bath	Pol
*Bun	*Kin	Cross
*Fa	*No name	*Cod
*Club	(Conic Cupola)	Hop

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 "D", 1933.✓

In the compilation of this sheet all of the topographic stations shown on the aluminum control sheet were not used since it was found that, by picking a few well defined points distributed over the sheet, accurate results could be obtained as well as if a large number of points had been chosen for supplementary control.

The large amount of shore line on this sheet aided in the supplementary control.

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:

- o Cod - Lat. 40°- 42.5', Long. 73°- 14.8' - new position as determined by the radial plot lies 23 meters distant on azimuth 35°- 00' (from north) from the position as given on the aluminum control sheet. This signal is the east gable of a house and could be easily seen and verified under the stereoscope. ✕
- ✓ o Col - Lat. 40°- 42.6', Long. 73°- 13.4' - new position as determined by the radial plot lies 8 meters distant on azimuth 320°- 00' (from north) from the position as given on the aluminum control sheet. This signal is a chimney and its position was verified under the stereoscope. It is believed to be in error as the shore line agrees well in this locality.
- o Bag - Lat. 40°- 42.3', Long. 73°- 11.6' - new position as determined by the radial plot lies 16 meters distant on azimuth 110°- 00' (from north) from the position as given on the

See review at the back.

aluminum control sheet. This signal is a Hydro signal on the beach and was rather difficult to pick up. It could not be verified under the stereoscope, but is believed to have been properly picked by the field party.

- ④ No name - Lat. $40^{\circ}-42.0'$, Long. $73^{\circ}-10.4'$ - new position as determined by the radial plot lies 14 meters distant on azimuth $165^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This signal is a cupola on a building on the bathing beach at Heckscher State Park. By holding to the radial plot it was possible to obtain an agreement with the shoreline as shown by

the river. It was not picked up by the field inspection party but was spotted on the photographs in the office. It has an error in the same direction as Fa and Yel.

- ⑥ Bun - Lat. $40^{\circ}-44.4'$, Long. $73^{\circ}-09.4'$ - new position as determined by the radial plot lies 15 meters distant on azimuth $35^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This signal is a white banner on the west bank of the Connetquot River.
- ⑦ Rat - Lat. $40^{\circ}-44.5'$, Long. $73^{\circ}-09.2'$ - new position as determined by the radial plot lies 19 meters distant on azimuth $15^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This signal is also a white banner on the west bank of the Connetquot River.

The above named signals from Sly to and including Rat falling in the Connetquot River section appear to be in error as stated. It is stated in Lieut. Comdr. R. P. Eyman's Descriptive Report for Field Sheet "D" that the traverse which was run up the Connetquot River to locate these stations was not closed and that the positions of the signals may be in error several meters.

It is to be noted that the aluminum control sheet was executed on a scale of 1:20,000 and 1:10,000 whereas this sheet is on a scale of 1:11,111.

See review of book.
(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.

A majority of the topographic party's signals picked up by the field inspection party were found to be in error when located by the radial plot. However, seven of the twelve stations shown in error are along the Connetquot River, as stated under CONTROL (B) Errors, and were located from the 1:20,000 scale traverse, by the topographic party, which was not closed as noted under (C) ERRORS IN TRAVERSES RUN in Lieut. Comdr. R. P. Eyman's Descriptive Report for Field Sheet "D". The topographer notes that errors of several meters are possible in these locations.

See review of book

Nearly all the radial positions along the Connetquot River were rechecked by measuring their offsets on the celluloid sheet from straight lines drawn between control points against their offsets on the photographs from corresponding lines between the same control points (See page 3 of Notes of T. P. Pendleton dated November 10, 1933).

(C) Interpretation.

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 except in the area near Nichols Point and westward on the five lens photographs. By the use of the single lens photographs, M37 to M43 (881B-8) inclusive, the detail for this area was obtained.

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.

It is to be noted that the shore line run in by the topographic party on a scale of 1:10,000 (from just east of Champlin Creek to and including Watchogue Creek) agrees very closely with the radial plot and is considerably more accurate than that located on a 1:20,000 scale.

On the north side of the railroad just east of triangulation station Tank (East Islip) an area has been labeled as an abandoned gravel pit. Although no notes were made as to its identity by the field inspection party examination under the stereoscope led to the above conclusion. There are also two similar small areas just to the southeast.

Where this sheet appears blank, it is labeled as having numerous houses. These houses were so far out on the wing prints as to make accurate location almost impossible.

The proposed Southern State Parkway, now under construction, as shown on this sheet by long double dashed lines, may have bridges under construction especially at intersections with main roads.

The double line shown across the middle of John Moby Creek is a small dam with a path on it. This fact was determined from a member of this party who lives in that vicinity. John Moby Creek is at the extreme west side of the sheet.

At the east side of the sheet on the north bank of Connetquot River where it makes a sharp turn to the north the symbol for drainage ditches has been shown over the symbol for marsh.

Highway No. 25 has been shown and adequately labeled on this sheet.

There are no shoal areas occurring on this sheet.

In the swamp area in the vicinity of Nicoll Point no ditches have been shown but labels have been put on this sheet to indicate that there are ditches in this area running north and south. The ditches are not shown as there are so many close together that they would make the detailing too complicated.

(D) Information from Other Sources.

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

(E) Conflicting Names.

The name "Timber Point" has been used on this sheet but is not shown on any other U. S. C. & G. S. Charts. Lieut. Comdr. R. P. Eyman states in his Descriptive Report for Field Sheet "D" that this name is in common usage and that it has been verified in that locality.

The name "Brightwaters" appears on old U. S. C. & G. S. Charts as two words but is now considered as one according to inhabitants in that locality.

There are no other names on this sheet conflicting with names shown on the U. S. C. & G. S. Charts of this area. *list of names has been submitted to Mr. Bacon.*

COMPARISON WITH OTHER SURVEYS.

The junctions with all adjoining sheets are satisfactory.

The shore line, for the most part of this sheet, agrees very well with that run in by the topographic party. The principal variations occur at Champlin Creek, at the mouths of two unnamed inlets to the east and at Connetquot River.

It is possible that the variation at Connetquot River is due to the error in the traverse run by the topographic party as mentioned under COMPILATION (B) Adjustments of Plot page 6 of this COMPILER'S REPORT.

The other errors in shore line mentioned above place it consistently westward by a small amount and occur along the shore of the inlets running approximately north and south. The main shore line of Long Island, running approximately east and west, agrees well with that run in by the topographic party. In Lieut. Comdr. R. P. Eyman's Descriptive Report for Field Sheet "D" he states that a traverse was run between triangulation stations Ber 1933 and Nichols 1909, which includes the shore lines in error on this sheet, and that the traverse checked correct for alignment but that the distance was 22 meters short, an allowable error for this length of traverse. Assuming that this error was made in crossing Champlin Creek it is possible that this is an explanation of the shifting to the westward of the shore line running north and south on the topographic sheet. The topographic party's shore line position is shown in blue on this sheet and may be compared with that obtained from the photographs.

A small pier has been shown on this sheet, which does not appear on the aluminum control sheet, just north of triangulation station North Range 1930-1933 at the east side of the sheet. This pier does not appear on the five lens photographs taken in May 1933 but does appear on the single lens photographs of the same area taken in September 1933 so it has been shown on this sheet.

No Long Island Railroad traverse data was used in connection with this sheet.

LANDMARKS.

The list of landmarks for this area was submitted by Lieut. Comdr. R. P. Eyman on November 9, 1933. Lieut. Comdr. R. P. Eyman did not submit the landmarks to be retained on this sheet and no information is available regarding these landmarks in this party.

The following landmark, shown on U. S. C. & G. S. Chart 578 is not listed on Lieut. Comdr. R. P. Eyman's expunge list, consequently it is believed that it should be retained.

✓ Standpipe

Chart 578

This landmark has apparently been listed, according to Lieut. Comdr. R. P. Eyman's 1933 triangulation, as follows:

shows on the photos and was used for control B.G.G.
Standpipe (Bayshore) 1909-1933

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 review at back.*

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. G. Albert

J. G. Albert
Draftsman

Assisted by

A. K. Spalding
A. K. Spalding
Accountant

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		
Most northerly cor. of mansion	40 44	(808) 1043	73 08	(102) 1306		1933 P. T.
S. E. corner of pavillion	40 43	(622) 1229	73 08	(819) 589		"
* (Kin) Cupola W. Bldg. Heckscher State Park	40 41	(70) 1781	73 10	(1015) 394		"
Center of pavillion dome	40 42	(1371) 480	73 14	(66) 1343		"
* (Col) House chimney	40 42	(772) 1079	73 13	(896) 512		"
(Bath) W. end of boathouse	40 42.8		73 08.6		10 ft.	A.C.S. Reg. No. _____
(Cross) Flag pole near end of dock	40 42.7		73 14.5			A.C.S. Reg. No. _____

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

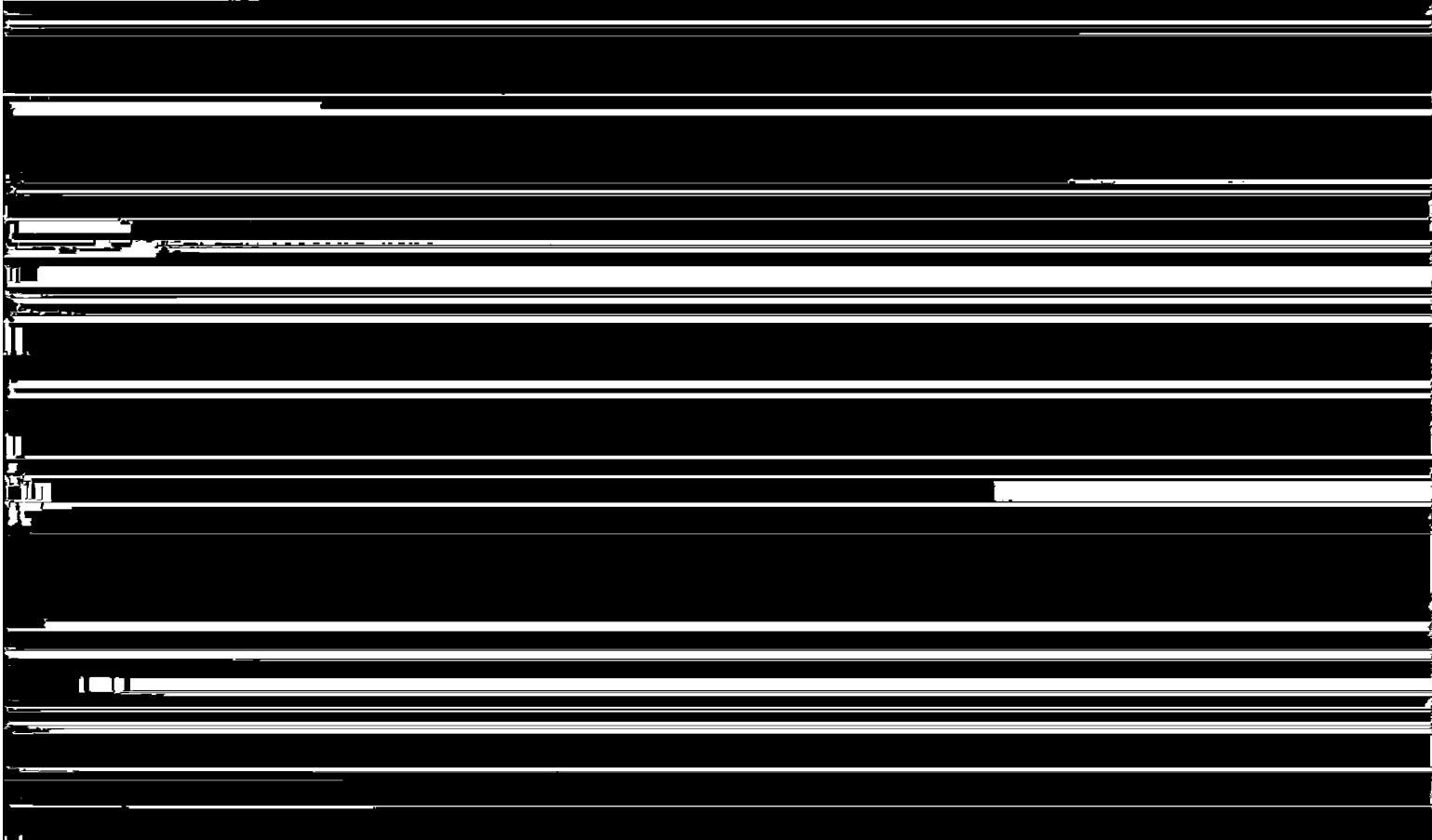
* Topographic station "Kin" has been relocated by the photo sheet. See page 5 of the Descriptive Report. Also topographic station "Col"; see page 4 of the Descriptive Report.

It should be noted that these recoverable objects would make good Class (C) landmarks. See Descriptive Report for Photo Topographic Sheet Reg. No. T5053, LANDMARKS for Classification (C).

REVIEW OF PHOTO COMPILATION T-5056 (1933)

Comparison with Other Surveys:

1. T-6013 (1933), plane table control survey on 1:10,000 and 1:20,000 scales showing location of shore-line and signals for Hydrography. The differences in location of objects between this compilation



differences have been examined in the office as discussed below.

a. Stations Sly, Club, Fa, Or, Ed, Bun, and Rot, differences in location of 12 to 20 meters in directions from 0° to 60° from North. None of these stations are shown as topographic stations on the printed compilation. Only two are recoverable, Ed, the end of a small dock, and, Or, a tower on the corner of a house. The house and the small dock are shown on the compilation. The photo locations of these stations can be scaled from the celluloid if needed.

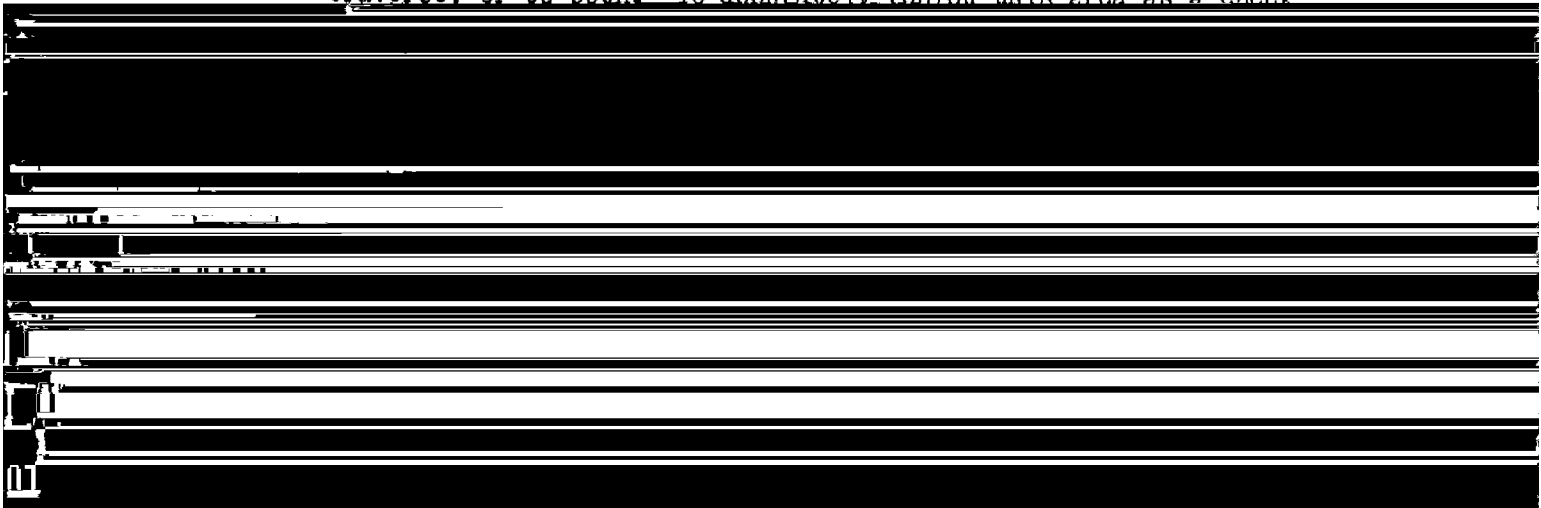
Part of the differences noted may be due to errors in locating the objects on the photographs. The banners and flags

H-5367b, seems necessary as the maximum difference is 20 meters. In compiling the charts of this area it is suggested that this shore-line be taken from the compilation and the hydrography swung slightly to fit as was done in compiling the new chart 578. A copy of this report is attached to descriptive report H-5367b and a note has been placed on the plane table sheet referring to the compilation for topographic detail in this area.

b. Stations No Name, Kin, and Bag listed on pages 4 and 5 of the preceding descriptive report. These stations are in the 1:20,000 scale area of T-6013 and were located by a three mile traverse which was adjusted 22 meters in distance (page 7 of the descriptive report T-6013).

The photo plot shows a good intersection for the location of station Bag, difference of 16 meters, but the preceding report, page 5, expresses some doubt as to the accuracy of spotting this point on the photographs and for that reason the plane table position is accepted. The station is not recoverable and does not appear on the printed compilation.

In regard to stations Kin and No Name, the photo plot is not well controlled and the photographs are not clear. The differences may be due to the photo plot, or error in the plane table traverse, or to both. To accurately replot this area as a check



detail has already been applied to chart 578. Due to the press of work at this time replotting of this area, Lat. $40^{\circ} 42'$, Long. $73^{\circ} 10'$ to $73^{\circ} 11.5'$, has been deferred to a later printing of the compilation. The stations are not shown on the printed copies of the compilation.

c. Stations Col, difference of 8 meters. The photo plot has been checked in the office and is accepted as correct. The chimney is shown as a topographic station on the printed compilation.

d. "Cod", difference of 23 meters. Described in the plane table survey report as East chimney stone house. Photo location is the east gable of the house. The house is shown on the compilation and can be seen clearly on the photographs but the chimney does not show on the photographs. The plane table position of the chimney when transferred to the compilation falls on the house but not on the east gable. The photo plot has been checked in this office, and the three intersecting cuts are shown on the plane table sheet. The difference here is more likely due to location of different objects. There seems to be no basis for the compiler's assumption that the east chimney is necessarily the east gable. There is also a good possibility that the plane table location is of a chimney near the center of the house and that the description is either incomplete or erroneous. ^{station is not} described on form 524.

2. Comparison with the older plane table surveys 1374a (1874) and 3483 (1914) shows changes in the marsh area at Timber Point and numerous changes throughout this area due to filling and construction. The compilation is adequate to supersede these old surveys.

Accuracy:

The estimate of accuracy of the plot of 2 to 4 meters given on page 19 is too high. A better estimate is an accuracy of location of 3 to 5 meters for intersected points and 3 to 10 meters for other detail. This value may be exceeded in the area mentioned on the preceding page.

B.G. Jones.

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5056

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 (B), (C), and (E); COMPARISON WITH OTHER SURVEYS and LANDMARKS have been made on this sheet.
8. ~~The representation of bridges was 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.

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.)
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. H. Green
Chief, Section of Field Records

L. O. Pollock
Chief, Division of Charts

T. S. Borden
Chief, Section of Field Work

G. W. Wade
Chief, Division of
Hydrography and Topography.

Date. April 3, 1935

GEOGRAPHIC NAMES

Survey No. T-5056

Chart No. 578

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

[illegible]