

5053

ORIGINAL

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| Form 504 Ed. June, 1928 | |
| DEPARTMENT OF COMMERCE | |
| U. S. COAST AND GEODETIC SURVEY | |
| R. S. Patton, Director | |
| <div style="border: 1px solid black; width: 100px; height: 80px; margin: 10px auto;"></div> | |
| State: <u>New York</u> | |
| DESCRIPTIVE REPORT | |
| Topographic Hydrographic | Sheet No. T5053 5053 |
| LOCALITY | |
| <u>South Shore of Long Island</u> | |
| <u>Eastport to South Haven</u> | |
| | |
| | |
| 1934 | |
| CHIEF OF PARTY | |
| <u>Roswell C. Bolstad, Jr. H. & G. E.</u> | |

U. S. GOVERNMENT PRINTING OFFICE: 1921

5053

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.
5053

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. 3

REGISTER NO. T5053 5053

State New York

General locality South Shore of Long Island

Locality Eastport to South Haven

Scale 1:10,000 Date of ^{Photographs} ~~Survey~~ May 15, 1933
Date of Compilation Jan. 25, 1934

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

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

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

Inked by S. E. Sperry, Jr.

Heights in feet above mean 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 1:11,274. Compilation of five lens aerial photographs Nos. 251 to 273 (881-14). Final sheet to be enlarged to 1:10,000 scale and printed by photolithographic process.

- NOTES ON COMPILATION -

SHEET NO. 3

PHOTOS, NO. M251 (881-14) TO NO. M273 (881-14) TIME 11:05 A.M.

PHOTOS, NO. M26 (881A-8) TO NO. M36 (881A-8) TIME 10:40 A.M.

DATE OF PHOTOGRAPHS Five lens (881-14) May 15, 1933

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

| | BY | DATE |
|--------------------------|---|--|
| ROUGH RADIAL PLOT | <u>J. R. Reynolds</u> J.R. Reynolds | <u>8/28 - 8/30/33</u> |
| SCALE FACTOR (0.887) | <u>A.K. Spalding</u> A.K. Spalding | <u>8/31/33</u> |
| SCALE FACTOR CHECKED | <u>W.H. Burwell</u> W.H. Burwell | <u>9/1/33</u> |
| PROJECTION | <u>S.E. Sperry, Jr.</u> S.E. Sperry, Jr. | <u>9/6/33</u> |
| PROJECTION CHECKED | <u>P.A. Kelly</u> P.A. Kelly | <u>9/6/33</u> |
| CONTROL PLOTTED | <u>A.W. Langen</u> A.W. Langen | <u>9/7/33</u> |
| CONTROL CHECKED | <u>W.H. Burwell</u> W.H. Burwell | <u>9/7/33</u> |
| TOPOGRAPHY TRANSFERRED | <u>W.H. Burwell</u> W.H. Burwell | <u>9/8/33</u> |
| TOPOGRAPHY CHECKED | <u>J.P. O'Donnell</u> J.P. O'Donnell | <u>9/8/33</u> |
| SMOOTH RADIAL LINE PLOT | <u>W.H. Burwell</u> W.H. Burwell | <u>9/8 - 9/12/33</u> |
| RADIAL LINE PLOT CHECKED | <u>J.P. O'Donnell</u> J.P. O'Donnell | <u>10/9/33</u> |
| DETAIL INKED | <u>S.E. Sperry, Jr.</u> S.E. Sperry, Jr. | <u>10/13/33-1/25/34 - 76 work-</u> <u>ing hours out</u> |

AREA OF DETAIL INKED 28.0 sq. Statute Miles (Land Area)

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

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

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

GENERAL LOCATION South Shore of Long Island

LOCATION Eastport to South Haven

DATUM North American 1927

Latitude 40°- 48'- 00.675" (20.9 m.)

STATION Mor 1933 Longitude 72°- 47'- 23.671" (554.8 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 3GENERAL 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 "F" and from the notes of the field inspection party. ⁷⁶⁰¹⁴

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

There is very little tide in Moriches Bay and its affect on interpretation of high water was neglected.

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 M251 (881-14) to M273 (881-14) inclusive and from the single lens photographs taken by Captain Willis R. Taylor, numbers M26 (881A-8) to M36 (881A-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 "F")
Reg. No. ~~6013~~ 6014
- (c) 1933 Aluminum Control Sheet (Lieut. A. P. Ratti)
Reg. No. 4763

The field party's geographic positions, unadjusted, were used; these are 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 and Lieut. A.P. Ratti, in 1933, forms the basis of control for this area.

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

| Topographic Signal | Approximate | | | |
|--------------------|-------------|------|-----------|------|
| | Latitude | | Longitude | |
| | 0 | ' | 0 | ' |
| Bee | 40 | 48.0 | 72 | 49.9 |
| See | 40 | 47.7 | 72 | 49.9 |

| Topographical Signal | Approximate | | | |
|-----------------------------------|-------------|------|-----------|------|
| | Latitude | | Longitude | |
| | ° | ' | ° | ' |
| But | 40 | 47.6 | 72 | 49.9 |
| Fly | 40 | 47.7 | 72 | 49.7 |
| Lut | 40 | 47.4 | 72 | 49.7 |
| Ale | 40 | 47.0 | 72 | 49.3 |
| Bar | 40 | 46.6 | 72 | 48.9 |
| Cro | 40 | 46.5 | 72 | 49.1 |
| Sen | 40 | 47.1 | 72 | 48.1 |
| No name (windmill) | 40 | 47.2 | 72 | 48.4 |
| Nix | 40 | 47.1 | 72 | 47.9 |
| No name (flag pole) | 40 | 47.2 | 72 | 47.8 |
| No name (Ho. chy.) | 40 | 47.2 | 72 | 47.8 |
| No name (So. gable stucco Ho.) | 40 | 47.0 | 72 | 47.3 |
| Spire | 40 | 48.2 | 72 | 45.9 |
| Bum | 40 | 47.0 | 72 | 45.2 |
| Doc | 40 | 47.2 | 72 | 45.5 |
| Cor | 40 | 47.5 | 72 | 45.9 |
| Red | 40 | 47.6 | 72 | 45.8 |
| Ho | 40 | 47.5 | 72 | 45.4 |
| Cat | 40 | 47.2 | 72 | 45.0 |
| Dog | 40 | 47.2 | 72 | 44.7 |
| War | 40 | 47.3 | 72 | 44.6 |
| Flu | 40 | 47.5 | 72 | 44.8 |
| Tar | 40 | 47.5 | 72 | 44.9 |
| Tap | 40 | 47.6 | 72 | 44.9 |
| Nob | 40 | 47.9 | 72 | 45.3 |
| Tax | 40 | 48.2 | 72 | 45.0 |
| Dic | 40 | 48.3 | 72 | 44.7 |
| | 40 | 47.7 | 72 | 45.0 |
| | 40 | 47.7 | 72 | 45.0 |

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 "F" and Lieut. A. P. Ratti's aluminum control sheet, Reg. No. 4763.

A few of the topo stations which were shown on the aluminum control sheets could not be used as supplementary control since the points were too indefinite on the photographs for the field inspection party to spot.

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 sheet signals resulted:

✓ Bee - new position as determined by the radial plot lies 20 meters distant on azimuth 35°- 00' (from north) from the position as given on the aluminum control sheet. This signal is a red banner.

✓ Fly - new position as determined by the radial plot lies 15 meters distant on azimuth 40°- 00' (from north) from the position as given on the aluminum control sheet. This signal is also a red banner.

✓ See - new position as determined by the radial plot lies 15 meters distant on azimuth 30°- 00' (from north) from the position as given on the aluminum control sheet. This signal is a white banner.

✓ But - new position as determined by the radial plot lies 15 meters distant on azimuth 00°- 00' (from north) from the position as given on the aluminum control sheet. This signal is a red banner.

✓ Lut - new position as determined by the radial plot lies 9 meters distant on azimuth 60°- 00' (from north) from the position as given on the aluminum control sheet. This signal is a red and white banner.

✓ Bar - new position as determined by the radial plot lies 13 meters distant on azimuth 70°- 00' (from north) from the position as given on the aluminum control sheet. This signal is a red banner.

Forge River
area on
T 60.4

See also The review at back of
This report
B.G.J.

✓ ⑥ Cro - new position as determined by the radial plot lies 16 meters distant on azimuth 70°-00' (from north) from the position as given on the aluminum control sheet. This signal is an old flag pole.

Forge River
area - on
T6014.

All of the above named signals fall along the Forge River and the aluminum control sheet positions are consistently in error to the westward; the radial positions, in this area, are well controlled by triangulation and in azimuth by the railroad, and have further been checked by the straight line method submitted by T. P. Pendleton in his "Notes on Photocompilation", November 10, 1933, page 3, namely "In low coastal or delta areas it is often possible to test the accuracy of the compilation by means of straight lines drawn in any direction between clearly defined points in the photographs. Corresponding lines on the map or chart should cut all intermediate features in an identical manner. Points adjacent to such straight lines should agree closely for distance therefrom, providing large tilts do not exist." It is believed, therefore, that these signals are in error as stated.

40°-47.2', 72°-48.3'
+ ⑦ W.M. - new position as determined by the radial plot lies 13 meters distant on azimuth 135°-00' (from north) from the position as given on the aluminum control sheet. This signal is a windmill, located near triangulation station Bulkhead.

✓ ⑧ Sen - new position as determined by the radial plot lies 61 meters distant on azimuth 70°-00' (from north) from the position as given on the aluminum control sheet. This signal is a summer house.

40°-47.2', 72°-47.8'
✓ ⑨ No name - new position as determined by the radial plot lies 20 meters distant on azimuth 105°-00' (from north) from the position as given on the aluminum control sheet. This signal is a flag pole.

✓ ⑩ No name - new position as determined by the radial plot lies 21 meters distant on azimuth 85°-00' (from north) from the position as given on the aluminum control sheet. This signal is a house chimney.

40°-47.2', 72°-47.8'
⑪ Nix - new position as determined by the radial plot lies 12 meters distant on azimuth 90°-00' (from north) from the position as given on the aluminum control sheet. This signal is a white banner.

40°-47', 72°-47.2'
⑫ No name - new position as determined by the radial plot lies 13 meters distant on azimuth 175°-00' (from north) from the position as given on the aluminum control sheet. This signal is the south gable of a stucco house.

Forge River
East on
T6014

The aluminum control sheet positions for the above named signals (W.M. through No name, So. gable of stucco house, inclusive) fall considerably in error as determined by the radial plot. These signals lie either very near or between triangulation stations Bulkhead and Davids, and, since the radial positions in this area have been checked by direct proportioning between these two triangulation stations, it is believed that the aluminum control sheet positions are in error as stated. As far

See also The review at the
back of this report.

as it is possible to ascertain from the radial plot and data available in the office there are no errors in the plotting of the triangulation stations mentioned.

⑥ Spire - new position as determined by the radial plot lies 16 meters distant on azimuth 90°- 00' (from north) from the position as given on the aluminum control sheet. This signal, shurch spire, is clearly defined under the stereoscope and described on the field print so it is believed that it has been correctly pricked on the photographs. It occurs on the "B" print of the photograph and is believed to be in error as stated.

⑦ Bum - new position as determined by the radial plot lies 27 meters distant on azimuth 55°- 00' (from north) from the position as given on the aluminum control sheet. This signal, a banner on a sandy beach, located at the entrance to Tuthill Cove, may possibly have been spotted in error by the field inspection party. The shore line in this locality agrees much more closely with the radial plot than does the position of the signal as given on the aluminum control sheet. but the signal is believed to be in error.

The control, on this sheet, is, in general, strong and the radial plot gave good intersections. It is felt that all the above named signals are in error as listed. It should be noted that the aluminum control sheets were executed on a scale of 1:10,000 and 1:20,000 whereas this sheet is on a scale of 1:11,274.

(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 used in the compilation of this sheet appear to be free of excessive tilt and scale fluctuation and the radial plot for both the five-lens and single lens photographs required no unusual adjustments.

(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.

Data obtained from the Long Island Railroad was used as an aid in interpreting the detail in the vicinity of the stations along this railroad.

An important highway, Highway 27, is shown on this sheet and has been adequately labeled.

There are a number of small bridges shown on this sheet all of which are of minor importance since they do not appear to cross any navigable bodies of water. The only one regarding which any data was available is located at Mastic Station. This bridge is a steel deck plate girder according to the notes of the field inspection party. No data was available regarding the other bridges which have been labeled on this sheet.

No shoal areas have been shown on this sheet since they all fall on the outer half of the wing prints and are too indefinite to locate accurately.

(D) Information from Other Sources.

Descriptions were obtained from the Long Island Railroad 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.

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

In Moriches Bay several beacons have been shown on this sheet, having been plotted from the positions as given in the Descriptive Report of Lieut. Comdr. R.P. Eyman for Field Sheet "F". However, in this same Report Lieut. Comdr. Eyman states that these beacons are only temporary as they are removed in the Fall and reset in the Spring.

(E) Conflicting Names.

✓ The name "Tuthill Cove" appears as such on Charts 578 and 1214, U. S. C. & G. S., but is shown as "West Cove" on the U. S. Geological Map of this area. Tuthill Cove has been used on this sheet.

✓ Mud Creek occurs on U. S. C. & G. S. Charts 578 and 1214 and is so shown on this sheet but appears as West Senix Creek on the U. S. Geological Map of this area.

Areskond Creek does not appear on any of the U. S. C. & G. S. Charts but is shown on the U. S. Geological Map so it has been shown on this sheet.

There are no other conflicting names on this sheet. *See review of book.*

COMPARISON WITH OTHER SURVEYS.

The junctions with all adjoining sheets are satisfactory.
The high water line as shown on the aluminum control sheets

agrees well with that obtained from the photographs for the eastern side of the sheet but for the western two-thirds of the sheet it varies in several places, particularly in the vicinity of Forge River, and appears to be in error consistently westward.

The shore line along Pattersquash Creek, as shown by the topo sheet, seems to be located too far to the westward. The radial plot in the area is well controlled by triangulation and by tying in common points with the five lens plot adjoining to the north.

shown on T 5.84

The shore line as run in on the aluminum control sheets is shown on the celluloid compilation sheet in blue and any variations from the air-photo shore line is readily apparent.

Due to the fact that there are so many discrepancies in the Forge River section of this sheet a checkup was made using the Long Island Railroad traverse data after the sheet had been completed. This traverse was plotted to the scale factor of the sheet on a separate sheet of celluloid showing road intersections, etc. and superimposed on the compilation sheet. The section of traverse used, from Center Moriches to the west end of the sheet, was tied in without any question and at Center Moriches is close to triangulation station Mor, 1933. The Long Island Railroad traverse has been used on several previous sheets and found to check out correctly in distance. When this traverse overlay was placed on the compilation sheet it checked all road crossings, center line of bridge at Forge River, and radial plot. It furnished sufficient proof that there exists an error on the aluminum control sheets and also shows that plots made by the radial line method are dependable if carefully plotted by experienced plotters. It should be noted that the check on the compilation of this sheet, using the Long Island Railroad traverse, was not made until after the celluloid sheet had been completed.

LANDMARKS.

The list of chartable landmarks for this sheet includes five objects, all of which have been marked with a small black circle except in the case of triangulation stations. These landmarks were submitted by either Lieut. Comdr. R. P. Eyman, November 9, 1933, ^{and} Lieut. A. P. Ratti, August 1, 1933, or both and are as follows:

- | | |
|------------------------------------|-----------------|
| ✓ E. Radio Tower, Tuthill Point | R.P.E. & A.P.R. |
| ✓ W. Radio Tower, Tuthill Point | R.P.E. & A.P.R. |
| ✓ Windmill, Masury Point | R.P.E. |
| ✓ Elevated Water Tank (Dic) | A.P.R.. |
| ✓ School Spire (Spire) E. Moriches | A.P.R. |

The position of the landmark Spire was found to be slightly in error by the radial plot. Its correct position is as follows:

- ✓ Latitude 40°- 48'- 309 m.
- Longitudo 72°- 45'- 1211 m.

*See also Page 6
and the review at
back of this report B.G.J.*

Triangulation station Boathouse (Halsey), 1933, was not picked up by the field inspection party but has been shown on this sheet. According to men on this party familiar with this locality this station is a concrete post near triangulation

station Nap but cannot be spotted on the photographs by this office compilation party. The geographic position of this station, as given in Lieut. Comdr. R.P. Eyman's triangulation data, is as follows:

Latitude 40°- 45'- 15.000" 462.7 m.
Longitude 72°- 50'- 10.122" 237.4 m.

~~Landmarks~~ ^{objects} In addition to the above the enclosed list of Class (C) ~~landmarks~~ is submitted. These should not be charted but have been shown on this sheet as they are prominent enough at this scale (about 1:10,000) and may be used to obtain hydrographic "fixes".

All of the enclosed landmarks were spotted on the photographs by the field inspection party and were also used for supplementary control since they were located on the aluminum control sheets.

Classification (C) ^{objects} ~~Landmarks~~ of minor prominence - these are recoverable objects which can be identified at close range (about 1 to 2 miles) and may be used by the Light House Service - these should not be charted except on exceptionally large scale charts or where the hydrography is to be done on the regular air-photo topographic sheet.

There are also many other objects (such as shacks and houses, etc.) which are located within the accuracy specified in the following chapter, 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. See also Descriptive Report for sheet, Reg. No. T5059, REPORT ON REVIEW OF SHEET, ADDITIONAL NOTES, (1) Landmarks.

The landmarks shown on this sheet and included in this report cover all landmarks (those previously submitted, those to be retained and any new landmarks) for the area covered by this sheet.

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, bridges 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.

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.

The value of 2 to 4 meters given above is rather high. A better estimate is 2 to 5 meters for intersected points and 2 to 10 meters for other detail.

B.G. Jones

Submitted by

S. E. Sperry, Jr.

Draftsman

Assisted by

A. K. Spalding
A. K. Spalding
Accountant

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS (C) ^{objects}
~~LANDMARKS~~

| Description | Position | | | | | | Datum | Method of deter- mination | |
|---------------------------------|----------|----|----------------|---------------|----|----------------|---------------|---------------------------------|-----------------|
| | Latitude | | | Longitude | | | | | |
| | ° | ' | D.M. Meters | ° | ' | D.P. Meters | | | |
| Tank | (C) | 40 | 47 | (1118) 733 | 72 | 48 | (132) 1275 | N.A. 1927 | 1934 A.P.T. |
| ✓ Windmill | (C) | 40 | 47 | (677) 1174 | 72 | 48 | (947) 460 | " | " |
| * No name windmill | (C) | 40 | 47 | (1526) 325 | 72 | 48 | (909) 498 | " | " |
| Windmill | (C) | 40 | 47 | (1106) 745 | 72 | 47 | (70) 1337 | " | " |
| * No name, So. gable house | (C) | 40 | 47 | (1835) 16 | 72 | 47 | (1013) 391 | " | " |
| Square Cupola | (C) | 40 | 48 | (1453) 398 | 72 | 45 | (1367) 40 | " | " |
| * (Cro) Flagpole | (C) | 40 | 46 | (948) 903 | 72 | 49 | (1302) 105 | " | " |
| * No name Flagpole | (C) | 40 | 47 | (1595) 256 | 72 | 47 | (263) 1144 | " | " |
| * No name Chimney | (C) | 40 | 47 | (1564) 287 | 72 | 47 | (317) 1090 | " | " |
| (Ho) Sun house on pier | (C) | 40 | 47 | (901) 950 | 72 | 45 | (875) 532 | " | 1933 A.C.S. |
| (Red) Gas pump | (C) | 40 | 47 | (747) 1104 | 72 | 45 | (309) 1098 | " | " |
| (Flue) Brick chimney | (C) | 40 | 47 | (988) 863 | 72 | 44 | (287) 1120 | " | " |
| (Tar) Windmill | (C) | 40 | 47 | (838) 1013 | 72 | 44 | (156) 1251 | " | " |
| (Nob) Flagpole | (C) | 40 | 47 | (250) 1601 | 72 | 45 | (1011) 396 | " | " |
| Tower W., Orna- mental tower | (C) | 40 | 45 | (1010) 841 | 72 | 50 | (1344) 64 | " | 1933 Triang. |
| Tower E., Orna- mental tower | (C) | 40 | 45 | (998) 853 | 72 | 50 | (1407) 1 | " | " |
| (Mor) Spire | (C) | 40 | 48 | (1830) 21 | 72 | 47 | (852) 555 | " | " |

See review
B.G.J.

Note: A. C. S. stands for aluminum control sheet
and A. P. T. for air-photo topography.

Name preceeding description in parenthesis
indicates topographic name shown on aluminum
control sheet.

For classification (shown in parenthesis after
description) see ~~paragraph 1.2 in Des-~~ *Page 9*
~~criptive Report for Air-photo Topographic~~
~~Sheet, Reg. No. T5053.~~

- * The position as obtained from the aluminum
control sheet did not check the radial plot
position so the new position is given.

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5053

✓ 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, ^{and sand bar} ~~reefs, rocks, wrecks and~~ ~~reefs~~, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) *See Par C Page 6 and 7 of desc. report.*
- ✓ 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 (D) and (E); COMPARISON WITH OTHER SURVEYS and LANDMARKS have been made on this sheet.
- ✓ 8. ~~The spans, draws and clearances of bridges are shown.~~ (Par. 16c.)
See Compiler's Report, COMPILATION (C) Interpretation.
- ✓ 9. The data furnished by the Field Inspection is adequate.
spotting of Stations Bum and So. Gable Ho. not adequate. B.G.J.

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. ^{No} 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 reports of Control Parties, Lieut. Comdr. R.P. Eyman and Lieut. A.P. Ratti, 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 Parties under Lieut. Comdr. R.P. Eyman, and Lieut. A.P. Ratti.
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 and Lieut. A. P. Ratti's Reports covering the topography executed in 1933 under their charge.

20. Examined and approved:

Roswell C. Bolstad
 Roswell C. Bolstad
 Chief of Party

21. Remarks after review in office:

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

Examined and approved:

K.T. Adams
 Chief, Section of Field Records
L.O. Lobnitz
 Chief, Division of Charts

Drafting on this sheet is not up to standard. Suggest plate be touched up as my copy Shoreline.
H. Borden
 Chief, Section of Field Work
W. H. White
 Chief, Division of Hydrography and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5053 (1933)

The differences in location of shoreline and signals between the photo compilation T-5053 and aluminum control sheets T-6014 (1933) and T-4763 (1933), as listed on pages 4,5 and 6 of the descriptive report, have been investigated in the office as follows:

Photo Compilation T-5053. The photographs for this compilation were forwarded to the office with the compilation.

There was sufficient triangulation on this sheet for an accurate plot and the descriptive report states on page 6 that the photographs were not badly tilted and that no difficult adjustments of the plot were required.

An additional check on the accuracy of the plot was obtained from the positions along the Long Island Railroad traverse as stated on page 8 of the descriptive report.

The accuracy of the spotting of these stations on the photographs has been investigated in the office and where there was indication that the difference in location may have been caused by erroneous identification of the points on the photos, that fact is mentioned in the following paragraphs.

The plotting of the triangulation stations on the photo compilation has been checked in the office.

The compilation is on a scale of 1:10,000 and the plane table work on 1:20,000.

Forge River Area

The descriptive report (page 2) for T-6014 does not state definitely where the work was done by traverse. However, the topography is such that the Forge River was evidently surveyed by a traverse either between triangulation stations "Forge" and "Masury Windmill" or "Bulkhead" or between three point fix positions near the entrance to the river. A few cuts visible on the plane table stations up the river were taken from a southeast direction.

Proceeding up the river along the west shore, the differences begin at station "Bar" and are in approximately the same direction in every case except that of stations "But" and "See". From station "Bar" up this side of the river, there is a difference in location of every station spotted on the photographs except for station "Ale". Stations "Cap", "Pen" and "Gee" were not spotted on the photographs. The shoreline differs generally in the same direction as the signals. Along the east shore of Forge River only station "Fly" was spotted on the photographs and this differs in the same general direction as the stations on the west shore.

The trouble along the Forge River may be due to starting the

plane table traverse from an erroneous three point fix position though there is no conclusive evidence to that effect as the descriptive report is not specific as to the method used.

Lieutenant Partington and Lieutenant Witherbee, both of whom worked in this vicinity in 1933, and who were recently in the office, state that this section of T-6014 from Forge River eastward along the north shore of Moriches Bay, was surveyed on T-6014 by Mr. Lea and that Mr. Lea had had no previous plane table experience and no engineering training prior to 1933 except on the triangulation party of Lieutenant Woodworth.

The shoreline difference in this area extends from the south limit of the photo sheet around Forge River and northeast nearly to Triangulation Station Bulkhead.

The air photo locations of both the shoreline and signals are considered the more accurate in this area and the differences affect the hydrography on H-5322. The Hydrographic Sheet H-5322 has already been plotted on the plane table shoreline and signals. See paragraph "Conclusion" below.

These stations with the exception of Station "Cro" are not recoverable and will not appear on the finished air photo sheet. The photo positions show on the celluloid sheet only.

Forge River Eastward

From Forge River eastward to Triangulation Station Davids there are large differences in location of both shoreline and signals.

This area is also shown on T-6014, scale 1:20,000, and the cause of the error in the plane table work has not been determined.

The photographs and the celluloid sheet have been inspected in the office and except in cases of questionable spotting of the objects on the photographs, the photo plot is evidently the more accurate. The positions of the signals between Triangulation Stations Bulkhead and Davids can be checked directly from one photograph as stated by Lieutenant Bolstad on page five of the descriptive report. This check has been applied in the office.

Windmill Latitude $40^{\circ}-47.2'$, Longitude $72^{\circ}-48.3'$. This windmill was spotted on the photos by the field inspection party. It does not show under the stereoscope and the field spotting cannot be checked. However, in view of the dubious plane table work in this vicinity the difference in location does not seem to be sufficient reason to reject the field spotting. The photo position is accepted as correct and shown on the compilation. This station is not used on the Hydrographic Sheet H-5322.

"Sen", $40^{\circ}-47.1'$, $72^{\circ}-48.5'$. There is no other house nearby

that could be confused with this summer house on the photographs. This large difference is either due to a blunder in a rod reading from Triangulation Station Bulkhead or the house shown on the photographs of May 12, 1933 was torn down and rebuilt in a different position prior to the plane table survey of July-August, 1933. This station is on H-5322. It does not appear on the printed compilation. See Paragraph "Conclusion" below.

"Nix", $40^{\circ}-47.1'-72^{\circ}-48'$. This banner cannot be seen under the stereoscope but it was spotted on the photos by the Field Inspection Party. The difference is consistent with the difference in location of stations "Flagpole and Chimney", and the shoreline. The photo location is therefore considered correct. This station is on H-5322. It is not shown on the printed compilation.

"Flagpole, ^{and} Chimney", $40^{\circ}-47.2', 72^{\circ}-47.8'$. The air photo location of these stations and the shoreline are considered correct. The differences are not due to faulty spotting on the photographs. These stations do not appear on H-5322.

"South Gable Stucco House", $40^{\circ}-47', 72^{\circ}-47.2'$. This house is indefinite on the photographs and the spotting of the south gable is liable to some error. The point spotted by the Field Inspection Party is noted as E. Gable. An error in spotting, however, would not likely be in the same direction as the difference with the plane table location. This station is not on H-5322 and since both the plane table location and air photo location are weak, it will not appear on the finished air photo sheet.

Vicinity of Tuthill Cove

"Spire" - Latitude $40^{\circ}-48.1'$, Longitude $72^{\circ}-45.9'$, shown on plane table sheet T-4763, scale 1:10,000. The cuts locating this station on the plane table sheet have been erased and the strength of that position cannot be determined. The air photo plot is well controlled and since there is no question as to the correctness of the spotting of the object on the photos, that position is considered correct. This station is not on the Hydrographic Sheet H-5322.

"Bum" - Latitude $40^{\circ}-47'$, Longitude $72^{\circ}-45.1'$ - T-4763. The spotting of this banner on the photos is questionable and the plane table position is accepted as correct. This station will not appear on the finished air photo sheet.

From Longitude $72^{\circ}-47'$ eastward, the shoreline agrees very well except for differences at Triangulation Station "Radio" and along the west side of Tuthill Cove.

Conclusion: The hydrographic smooth sheet H-5322, scale 1:20,000 has already been plotted and inked using the plane table control. When chart 578 was compiled the topography was taken from this compilation and the soundings as shown on H-5322 adjusted slightly where necessary to fit the shoreline. None of these adjustments made on the chart com-

pilation were large and it is not considered necessary that the Hydro-graphic Sheet be replotted according to the photo location of the shore-line and signals discussed above. The large difference in location of Signal "Sen", 60 meters, has no considerable effect on the hydrography. The records have been ^{searched} reached and "Sen" was used only on positions 5 to 8, FF day, a line of 1 to 2 ft. soundings along the shore, and the direction of the fix was such as to move this line only some 20 to 30 meters parallel to the shore.

It is recommended that a copy of this report be attached to the descriptive reports for H-5322 and T-6014.

A note has been drawn on T-6014 in green referring to this compilation for positions of the stations mentioned above.

Names: Names furnished by the compiler have been accepted pending Mr. Bacon's approval. These new names ^{see} Ely Creek, Areskond Creek, Poospatriek Creek, are not definitely reported as in local use but Bolstad in his reports for work in this area has been careful in his selection of names and it is recommended that these be accepted.

B. G. Jones

B. G. Jones.

Survey No. T 5053

Chart No. 578

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

(M 100)

Poospatuck Cr. ("Moriches") correct per reply P.M.
at Mastec to Phila., 2/23/40.

GEOGRAPHIC NAMES

Chart No. 578

Date. _____

Diagram No. _____

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

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

| Status | Name on Survey | Name on Chart | New Names in local use | Names assigned by Field | Location |
|--------|--|---------------|--------------------------------|----------------------------|----------|
| | New Names appearing on this survey are | | | | |
| | Mud Creek | ✓ | see Page 7 of the desc. report | | |
| | Ely Creek | | | ✓ | |
| | Maotic Station | } | | ✓ | |
| | Duck Ranch | | | ✓ | |
| | Poospatrick Creek | | | ✓ | |
| | Areskond Creek | | | ✓ | |
| | * new names chosen by the compiler but not discussed informally in the report see Page 7 of the descriptive report and the review. B.G. Jones. | | | | |