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

State: New York

DESCRIPTIVE REPORT
Topographic Sheet No. 75082

LOCALITY
South Shore of Long Island
Outer Coast between Tiana Beach
and Quatuck Bay

1933

CHIEF OF PARTY
Roswell C. Bolsaid, Jr., M. & Ge. En.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. 5082

REG. NO. T 5082

State. New York

General locality. South Shore of Long Island

Locality. Outer Coast between Tiana Beach and Quantuck Bay

Photographs

Scale 1:10,000 Date of Feb. 22, 1933
Date of Compilation Oct. 30, 1933

Entered Air-photo Compilation Party No. 12

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

Surveyed by U. S. Army Air Corps (Captain Willie R. Taylor)

Inked by J. R. Reynolds Oct. 30, 1933

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval - feet

Instructions dated November 15, 1933

Remarks: Actual scale of celluloid sheet is 1:9,479. Final sheet to be reduced to 1:10,000 scale by photo-lithographic process.

Polyconic Projection by E. L. Fitch Sept. 21, 1933
Projection Verified by R. C. Bolstad Sept. 21, 1933
A. K. Spalding

Control Plotted by A. K. Spalding Sept. 22, 1933
Control Verified by R. C. Bolstad Sept. 22, 1933
E. L. Fitch
FIELD REPORT
for
AIR PHOTOS TOPOGRAPHIC SHEET FIELD NO. 31

No report has been submitted by the field inspection party for this area. Reference is made to the notes submitted in the field report as listed in the descriptive report for Air-photo Topographic Sheet, Reg. No. T5080.

CONTROL.

Triangulation and topography (1:10,000 and 1:20,000 scale aluminum control sheets, showing high water line and control signals) executed by the party of Lieut. A.P. Ratti in 1935 forms the basis of control for this area.

LIST OF NAMES.

No new names were submitted nor labeled on the field print photographs by the field inspection party.

MISCELLANEOUS.

Any additional notes and requirements affecting this area are referred to the reports of Lieut. A. P. Ratti covering the topography executed under his charge during 1933.

Submitted by Roswell S. Bolstad
Jr. H. & G. E.
- NOTES ON COMPILATION -

SHEET NO. 31
PHOTOS, NO. V-49 (881-8) TO NO. V-67 (881-8)

DATE OF PHOTOGRAPHS  Feb. 22, 1933     TIME  11:18 A.M.

BY

ROUGH RADIAL PLOT  A. F. Spalding  9/1/33

SCALE FACTOR (1.055)  A. F. Spalding  9/2/33

SCALE FACTOR CHECKED  E. L. Fitch  9/3/33

PROJECTION  E. L. Fitch  9/21/33

PROJECTION CHECKED  A. F. Spalding  9/21/33

CONTROL PLOTTED  A. F. Spalding  9/22/33

CONTROL CHECKED  E. L. Fitch  9/22/33

TOPOGRAPHY TRANSFERRED  A. F. Spalding  9/25/33

TOPOGRAPHY CHECKED  J. O. O'Donnell  9/28/33

SMOOTH RADIAL LINE PLOT  J. O. O'Donnell  9/29/33

RADIAL LINE PLOT CHECKED  J. O. O'Donnell  9/30/33

DETAIL INKED  J. O. O'Donnell  10/4 - 10/30/33

AREA OF DETAIL INKED  2.3 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED  1.7 sq. Statute Miles (Shoals in Water Area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)  11.0 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)  15.0 Statute Miles

GENERAL LOCATION  South Shore of Long Island

LOCATION  Outer Coast between Tiana Beach and Quonset Bay

DATUM  North American 1927

STATION Quogue C. G., 1933  
Latitude 40° 48' - 26.752" (825.2)
Longitude 72° 35' - 59.480" (1394.0)
COMPILER'S REPORT
for
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 31

GENERAL INFORMATION.

The only available aids in the compilation of this sheet have been secured from the notes on the field prints, the preceding report on field inspection, and additional information furnished by Lieut. (j.g.) R. C. Bolstad in questionable areas.

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

There is very little tide in Shinnecock Bay and its affect was neglected. Along the outer coast the tide was about 2 feet below mean high water (from predicted tide tables) at the time these photographs were taken but the interpretation of the high water line from the photographs was not affected by this as explained in the field report inclosed in the descriptive report for Air-photo Topographic Sheet Reg. No. T5080.

This sheet was compiled from the photographs taken by Captain Willis R. Taylor of the U. S. Army Air Corps with their single lens camera and covers the compilation of photograph Nos. V-49 (881-8) to V-67 (881-8) inclusive.

CONTROL.

(A) Sources.

The following sources of control were used in the compilation of this sheet.
(a) Triangulation by A. P. Ratti in 1933.
(b) 1933 Aluminum Control Sheet, Reg. No. 4764.
(c) 1933 Aluminum Control Sheet, Reg. No. 4765.

The field party's geographic positions were used; these are on the N. A. 1927 Datum. The difference between the unadjusted and the final adjusted positions would be unplottable at the scale of this compilation (1:9,479).

In addition to the triangulation, and the high water line 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:

<table>
<thead>
<tr>
<th>Rub</th>
<th>Peak of Roof</th>
<th>Bug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now</td>
<td>F. P.</td>
<td>Gun</td>
</tr>
<tr>
<td>Bal</td>
<td>No name (Chimney)</td>
<td>Ban</td>
</tr>
<tr>
<td>Der</td>
<td>Taxi</td>
<td>Chimney</td>
</tr>
<tr>
<td>Zev</td>
<td>Zal</td>
<td>Mil</td>
</tr>
<tr>
<td>Chimney</td>
<td>Hog</td>
<td>Goo</td>
</tr>
<tr>
<td>Bag</td>
<td>Ros</td>
<td>Sil</td>
</tr>
<tr>
<td>Zoo</td>
<td>Bed</td>
<td>Kip</td>
</tr>
<tr>
<td>Bur</td>
<td>Gas</td>
<td>Gen</td>
</tr>
<tr>
<td>Tit</td>
<td>Row</td>
<td>Out</td>
</tr>
<tr>
<td>Obo</td>
<td>Lue</td>
<td>Hot</td>
</tr>
</tbody>
</table>
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.

In the above list of topographic signals those shown as "no name" were not named on the Aluminum Control Sheets but were spotted on the field prints by inspection party and were described as shown in parenthesis.

(B) Errors.

In making the radial plot for this sheet the following relocations of spotted Aluminum Control Sheet signals resulted:

- Cut - new position as determined by the radial plot lies 11 meters distant on azimuth 160°- 00' from the position as given on the aluminum control sheet. As this signal is the peak of roof of a small shack which shows up well on the photographs, there can be no question as to its spotted location.

- Gun - new position as determined by the radial plot lies 12 meters distant on azimuth 140°- 00' from the position as given on the aluminum control sheet. As this signal lies very close to the road and other detail which shows up very clearly on the photographs in this locality, it is very unlikely that this signal may have been spotted wrong by the field party. A triangulation station lies a short distance to the westward and the radial plot is very strong for this region.

- Fly - new position as determined by the radial plot lies 8 meters distant on azimuth 240°- 00' from the position as given on the aluminum control sheet. This signal is the end of a dock and there could be no question as to its spotting on the photographs. There are two other topographic signals (Fry and Junk) in this vicinity which agree with the radial plot.

- No name (Chimney)* - (south of signal Taxi) - new position as determined by the radial plot lies 21 meters distant on azimuth 210°- 00' from the position as given on the aluminum control sheet. This signal is a chimney on a house and can be readily identified by the aid of the stereoscope so there could be no question as to its spotting. All other control stations in this locality agree with the radial plot.

The control is strong for this sheet and the radial plot gave good intersections. It is felt that all the above listed signals are in error as listed. 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 1:9,279.

*This is Signal "Bay" on Planetable control sheet T4164 and has been used as a Hydro. Signal on H 5024. See also the review report.
(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 in this strip appear to be free of excessive tilt and scale fluctuation and the radial plot required no unusual adjustments.

(C) Interpretation.
Only the usual graphic symbols were used as listed in the Coast Survey Topographic Manual and those approved by the Board of Surveys and Maps (1932); no great difficulty was experienced in interpreting the photographic detail.
The ridge of sand dunes running along the outer coast were clearly evident under the stereoscope although the exact boundaries, as shown, may be somewhat in error.
The double full line was used to indicate first order roads and the double broken line used 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.
All boundaries of shoal water areas (shown by single broken line) on this sheet were so indicated because of appearance on the photographs and they may be expected to have departure from actual conditions.

(D) Information from Other Sources.
The high water line and marsh line was run in by the topographic party on the aluminum control sheets.

(E) Conflicting Names.
There are no names on the sheet conflicting with names shown on the U. S. C. & G. S. Charts of this area. All new names shown were taken from the recent editions of U. S. Geological Survey Maps of that locality.

COMPARISON WITH OTHER SURVEYS.
The junctions with all adjoining sheets are satisfactory.
The high water line as shown on the aluminum control sheets
agrees with the high water line as shown on this Air-photo Topographic Sheet. The inner shore line and marsh line agree well in general with variations where a rugged shore line occurs.

The small island just to the northeast of a larger marsh island in latitude 40°- 49.7' and longitude 72°- 32.6' has been shown wrong on the aluminum control sheet which is evidently due to wrong sketching by the topographer.

Also in the locality latitude 40°- 49.5' and longitude 72°- 33.4' the marsh line appears to be in error. Although the exact high water line is not clear in this locality, under stereoscopic observation the topography appears to be the same as that just to the east, where a similar error in the marsh line location has apparently been made.

LANDMARKS.

There are no lists of landmarks available within this area which have been recommended either by the field inspection party or the combined operations party under Lt. A. P. Ratti operating in this vicinity.

With the assistance of Lieut. (j.g.) R. C. Bolstad who is familiar with this locality and by the aid of the stereoscope the objects listed under LANDMARKS (Form enclosed) are submitted. They are grouped according to the following classification:-

Classification (A) Extremely prominent - can be seen from a long distance - to be shown on both large and small scale charts.

Classification (B) Prominent - can be readily identified at close range but may lose prominence at a distance (about 3 miles) - to be shown on large scale charts only.

Classification (C) 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 no Class (A) Landmarks on this sheet.

There are still 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 page 7 of this report.

RECOMMENDATIONS FOR FURTHER SURVEYS.

The compilation of this sheet is believed to have a probable error of 2 meters in well defined detail of import-
 ance for charting and of 4 meters for other data. It is un-
derstood that the widths of roads and 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 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. P. O'Donnell

J. R. Reynolds

Assisted by Roswell C. Bolstad

Jr. H. & G. E.
In addition to the list of recoverable toplographic stations listed on page 5, the following station is unknown on this sheet:

<table>
<thead>
<tr>
<th>Description</th>
<th>Approx. Location</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Tank</td>
<td>40° 49.5', 72° 32.2'</td>
<td>Shown on A.C.S. Reg. No. T4765 as Station Tank</td>
</tr>
</tbody>
</table>

All recoverable objects unknown on this sheet were located on the aluminum planetable control sheets except for toplographic station "Center of Bridge Control House" listed on opposite page. 1398-4/1/54
# LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS (C)

<table>
<thead>
<tr>
<th>Description</th>
<th>Position Latitude</th>
<th>Longitude D.M.</th>
<th>Longitude D.P.</th>
<th>Datum</th>
<th>Method of determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Fry) N. E. Gable of Mansion</td>
<td>40 48</td>
<td>1289</td>
<td>72 34</td>
<td>1927</td>
<td>1933</td>
</tr>
<tr>
<td>Center of Bridge Control House</td>
<td>40 48</td>
<td>1360.1</td>
<td>72 35</td>
<td>681.5</td>
<td>1933</td>
</tr>
<tr>
<td>(Coo) N. Gable of House at waters edge</td>
<td>40 48</td>
<td>1253</td>
<td>72 35</td>
<td>773</td>
<td>1933</td>
</tr>
<tr>
<td>(Low) Chim. on E. Gable of Ho.</td>
<td>40 48</td>
<td>933</td>
<td>72 35</td>
<td>955</td>
<td>1933</td>
</tr>
<tr>
<td>(Low) So. Gable of bridge control house</td>
<td>40 48</td>
<td>856</td>
<td>72 36</td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>(Hog) Chim. on E. Gable of Ho.</td>
<td>40 48</td>
<td>616</td>
<td>72 36</td>
<td>1109</td>
<td></td>
</tr>
<tr>
<td>(Taxi) Chim. on S. W. corner of house</td>
<td>40 48</td>
<td>1348</td>
<td>72 36</td>
<td>1264</td>
<td></td>
</tr>
<tr>
<td>Chim. on E. center of Gable of house</td>
<td>40 48</td>
<td>293</td>
<td>72 36</td>
<td>1217</td>
<td></td>
</tr>
<tr>
<td>Center of peaked roof</td>
<td>40 48</td>
<td>41</td>
<td>72 37</td>
<td>535</td>
<td></td>
</tr>
<tr>
<td>(Gas) Chim. at pk. of Ho. roof</td>
<td>40 48</td>
<td>645</td>
<td>72 36</td>
<td>254</td>
<td></td>
</tr>
<tr>
<td>(Tur) Chim. on E. Gable of Ho.</td>
<td>40 48</td>
<td>506</td>
<td>72 37</td>
<td>974</td>
<td></td>
</tr>
</tbody>
</table>

Note: A. C. S. stands for Aluminum Control Sheet and A. P. T. for Air-photo Topography.

Name proceeding description in parenthesis indicates topographic name shown on Aluminum Control Sheet.

For classification (shown in parenthesis after description) see paragraph Landmarks in Descriptive Report for Air-photo Topographic Sheet, Reg. No. T5082.

* Corrected position by radial plot; see paragraph (B) Errors, in proceeding COMPLER'S REPORT.

See also reverse side of this page.
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 instruc-
   tions 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.)

/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 submitted

/5. High water line on marshy and mangrove coast is clear and ade-
   quate for chart compilation. (Par. 16a, 43, 44.)

/6. The representation of low water lines, sandbars, shoals, and
   rocks, and legends pertaining to them is satisfactory. (Par.
   36, 37, 38, 39, 40, 41.) See par. C, Page 5 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 or change in position of important detail such as rocks, lights,
   beacons, prominent objects, bridges, docks, and structures
   along the water front. No changes in such details have been
   noted on this sheet.

/8. The width, draw and clearance of bridges is shown. (Par. 16c.)
   For further information on bridges consult Lieut. A. P. Ratti's
   Aluminum Control Sheet, Reg. No. 47621.

/9. The data furnished by the Field Inspection is adequate.
   (See enclosed Field Report) Page 1

NOTE: Strike out paragraphs, words or phrases not applicable and
modify those requiring it. Paragraph numbers refer to those in the
12. All recoverable topographic stations shown on this sheet were located on aluminum plantable control sheets T-4764 and T-4765 except for station "Center Bridge Control House." No description on Form 524 was submitted for this station which is described briefly on page 8 of the disc. report.

15. On page 8 of the disc. report are listed four topographic stations shown on the A. E. C. sheets T-4764 and T-4765 which have been relocated on this sheet.

The worked plot was well controlled and there was no question of the accurate plotting of these objects on the photographs.

On sheets T-4764 and T-4765 the holes punched for the stations are very large and in many cases the directions for relocating stations do not intersect at a common point. The holes punched for the station are too large for accurate orientation of the plantables. The station point for station "A" is punched about 0.4 mm off the point of intersection of the directions. These sheets do not indicate careful plantable work.

The positions shown on this sheet are considered the correct plantable positions for these objects.

83.99
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 enclosed Field Report and Remarks below) See opposite page

13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60a.) Submitted for this area by A. P. Ratti, 1933. See also page 6 of the des. report and page 9 of des. report.

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. See opposite page

16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 68k.)

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. A. P. Ratti's reports covering the topography executed in 1933 under his charge.

20. Examined and approved: [Signature]
   Chief of Party

21. Remarks after review in office:

Reviewed in office by: [Signature]

Examined and approved:

Chief, Section of Field Records

Chief, Division of Charts

Chief, Section of Field Work

Chief, Division of Hydrography and Topography.
REPORT ON REVIEW OF SHEET

Air-photo Topographic Sheet, Reg. No. 75082, has been reviewed together with the Descriptive Report and all requirements are satisfied in accordance with requirements of the U. S. C. & G. S. Topographic Manual and pamphlet NOTES ON THE COMPIILATION OF PLANIMETRIC LINE MAPS, 1933.

No additional surveying is recommended.

ADDITIONAL NOTES.

(1) Landmarks.

The list of landmarks for this sheet was not received until after the completion of both the sheet and the Compiler's Report. All the necessary chartable landmarks were submitted by Lieut. A. P. Ratti, August 1, 1933 and includes only four objects:

- Tiana Coast Guard Flagstaff
- Queque Coast Guard Cupola
- Gair's Flagstaff
- Watertank

The position of Watertank was carefully scaled directly from the Aluminum Control Sheet and found to be slightly different from that submitted by Lieut. A. P. Ratti in his list of landmarks, August 1, 1933. The correct position is:

\[
\begin{align*}
\text{Latitude} & \quad 40° 49' \quad 505 \\
\text{Longitude} & \quad 72° 32' \quad 315
\end{align*}
\]

In addition to the above the enclosed list of Class (C) objects is submitted. These should not be charted but have been shown on this sheet (with a small black circle) as they are prominent enough on this scale (about 1:10,000) and may be used to obtain hydrographic "fixes". They were spotted on the photographs by the field inspection party and were also used for supplementary control (since many of them were located on the Aluminum Control Sheet).

(2) Control.

All aluminum control stations used for supplementary control on this sheet have been plotted from the scaled positions obtained directly from the A. C. Sheets.

In regard to the last paragraph under CONTROL, (A) Sources, in the preceding COMPILER'S REPORT, 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.
(3) Bridges.

All bridges on this sheet have been shown as drawbridges according to the notes on the Aluminum Control Sheet of this area (lt. A. P. Ratti, Reg. No. 4764). According to the data obtained from the U. S. Army Engineers and the field inspection party the bridge near Triang, Sta. "Quogue Coast Guard" is a swing bridge. The bridge near Triang, Sta. "Cair's Flag Staff" was described only as a bridge by the field inspection party but the U. S. Army Engineers termed it a swing bridge. The third bridge, at latitude 40° 45' plus, longitude 72° 35' plus, is correctly designated a drawbridge (bascule) on the above mentioned aluminum control sheet, which is in accordance with both the U. S. Army Engineers' and the field inspection party's data.

Roswell C. Belton
Chief of Party, C. & G. S.