[redacted]

applied to drawing of chart 1214
11/22/34 HSM.
applied to new chart 363-12-22-48 EBH

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5065

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. 15

REGISTER NO. T5065 5065

State New York

General locality South Shore of Great Peconic Bay

Locality Great Peconic Bay between Goose Cr. and Cold Spring Pond (with Robbins Island)

Scale 1:10,000 Date of Photographs survey April 21, 1933
Date of Compilation Dec. 19, 1933

~~Vessel~~ 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 Air photographs (See data sheet enclosed in Descriptive Report for this sheet)

Inked by P. A. Kelly

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 15, 19 32

Remarks: Actual scale of celluloid sheet is 1:10,672. Compilation of five lens aerial photographs Nos. M61-M81 (8&1-14). Final sheet to be enlarged to 1:10,000 scale and printed by photolithographic process.

- NOTES ON COMPILATION -

SHEET NO. 15

PHOTOS, NO. M61 (881-14) TO NO. M81 (881-14)

DATE OF PHOTOGRAPHS April 21, 1933 TIME 11:10 A. M.

	BY	DATE
ROUGH RADIAL PLOT	James R. Reynolds	9/23 - 9/26/33
SCALE FACTOR (0.937)	James R. Reynolds	9/27/33
SCALE FACTOR CHECKED	Ronner C. Bostad	9/27/33
PROJECTION	E. L. Fitch	9/28 - 9/29/33
PROJECTION CHECKED	J. P. O'Donnell	9/28 - 9/29/33
CONTROL PLOTTED	James R. Reynolds	9/29 - 9/30/33
CONTROL CHECKED	P. A. Kelly	10/2/33
TOPOGRAPHY TRANSFERRED	J. P. Jones	10/3-10/5/33
TOPOGRAPHY CHECKED	P. A. Kelly	10/6/33
SMOOTH RADIAL LINE PLOT	J. P. Jones	10/18 - 10/25/33
RADIAL LINE PLOT CHECKED	W. H. Burwell	10/25/33
DETAIL INKED	P. A. Kelly	11/13-12/1 and 12/12 - 12/19/33

AREA OF DETAIL INKED 14.69 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED, Shoals in Water Area negligible

LENGTH OF SHORELINE (more than 200 m. from nearst opposite shore) 17.02 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide) 13.61 Statute Miles

GENERAL LOCATION South Shore of Great Peconic Bay

LOCATION Great Peconic Bay between Goose Creek and Cold Spring Pond (and Robbins Island)

DATUM North American 1927

STATION Shinnecock 2 1874 - 1932

Latitude 40°-53'- 02.401 (74.0 m.)

Longitude 72°-28'- 13.309 (311.6 m.)

COMPILER'S REPORT
for
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 15

GENERAL INFORMATION.

The AIR PHOTO FIELD INSPECTION REPORT, 1933 of Lieut. L. C. Wilder for Eastern Long Island, N. Y. furnished the necessary field data for the compilation of this sheet. Additional information was obtained from the field prints and, in questionable areas, from Lieut. (j.g.) R. C. Bolstad who is familiar with the topography of this area.

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

At the time that these photographs were taken (April 21, 1933 at 11:10 A. M.) the tide, at South Jamesport, was one and three quarters feet above mean Low Water as obtained from predicted tide tables.

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 M61 (881-14) to M81 (881-14), inclusive.

CONTROL.

(A) Sources.

The following sources of control were used in the compilation of the sheet:

(a) Triangulation by Lieut. A. P. Ratti in 1933, unadjusted.
(b) Triangulation by Lieut. L. C. Wilder in 1933, unadjusted.
(c) 1933 Aluminum Control Sheet, (Lieut. A. P. Ratti) Reg. No. 4765
(d) 1933 Aluminum Control Sheet, (Lieut. L.C. Wilder's field sheets "A" and "B") Reg. Nos. _____

The field party's geographic positions, unadjusted, were used; these are on the North American 1927 Datum.

Triangulation and topography (1:20,000 scale aluminum control sheet, showing high water line and control signals) executed by the party of Lieut. A. P. Ratti, in 1933, forms part of the basis of control for this area; the remainder was executed by the party of Lieut. L. C. Wilder, in 1933. It should be noted that the topography executed by Lieut. L. C. Wilder (1:20,000 and 1:5,000 aluminum control sheets) ~~does not~~ does not show the high water line. The insert on Lieut. L. C. Wilder's field sheet "B" was used to obtain the detail around Shinnecock Canal since it is to a much larger scale, 1:5,000.

In addition to the triangulation and what high water line could be obtained from the Aluminum Control Sheets, the following topographic signals (shown on the

REVIEW

Station "CAW" - Lat. 40° 52.8', Long. 72° 30.1'. There is no question as to the correct spotting of the station on the photographs and the radial plot is well controlled. The radial plot is on a larger scale. It checks with the plane-table sheets field letters A and B of L. C. Wilder as to location of stations just to the north in Shinnecock Canal and Great Peconic Bay.

The holes pricked for the station points of triangulation and topographic stations on T4765 are very large and the appearances of the sheet do not indicate careful planetable work.

The position given on the air photo sheet is considered the stronger location for this station.

Stations "ELK", Lat. 40°-52.9', Long. 72°-28.8'; and "LOG" Lat. 40°-52.9', Long. 72°-29.8'. Since the spotting of these stations on the photographs is questioned, the positions shown on A.C.S. T4765 should be accepted as correct unless verification of the hydrography shows some indication of error in those positions.

Changes shown in black ink to clarify the wording of the report on page 3 have been made-after correspondence with Lieut. Bolstad.

B.G. Jones

Aluminum Control Sheets) were spotted on the photos and were used in controlling this sheet:-

Ump	Elk
Let	Log
Jet	Flagpole
Yel	Windmill and Tank
Lone	Canoe Club Inn Flagpole (Big)
Caw	Ret (Robins Island)

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. Only recoverable stations will be shown 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 by scaling directly from the Aluminum Control Sheets of this area.

(B) Errors.

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

◎ Log - new position as determined by the radial plot lies 8 meters distant on azimuth 162°- 00' (from north) from the position as given on the aluminum control sheet. As this signal lies on a sandy beach and, under the stereoscope, was rather difficult to spot it is possible that it has been incorrectly spotted on the photographs. The intersection of the radial lines was fairly well defined and, for this reason, the photo location was used for controlling the transfer of detail from the photos.

◎ Elk - new position as determined by the radial plot lies 11 meters distant on azimuth 110°- 00' (from north) from the position as given on the aluminum control sheet. As this signal lies on a sandy beach and, under the stereoscope, was rather difficult to spot it is possible that is has been incorrectly spotted on the photographs. The intersection of the radial lines was, however, extremely well defined and, the photo location was used for controlling the transfer of detail from the photographs.

◎ Caw - new position as determined by the radial plot lies 10 meters distant on azimuth 199°- 00' (from north) from the position as given on the aluminum control sheet. This signal is the corner of a dock which is clearly visible under the stereoscope and well enough defined so that there is little doubt as to the accuracy of its spotting. The signal, as taken from the aluminum control sheet, appears to be out in the water.

See opposite page

The control, on this sheet, is in general strong and the radial plot gave very good intersections. The necessary adjustments are given under COMPILATION, (B) Adjustments of Plot. It is felt that all the above named signals are in error as listed. It is to be noted that the aluminum control sheets were executed on a scale of 1:20,000 and 1:5,000 whereas this sheet is on a scale of 1:10,672.

(C) Discrepancies.

The Long Island Railroad track traverse data, as listed by them, was found to be in error. The true azimuth is about 7°- 54' to the left (counter-clockwise) of the azimuth determined by them. The distances to cross roads, etc., in the traverse checked out correctly with the radial plot. It appears that the railroad traverse azimuth may have been based on a poor magnetic azimuth determined years ago.

No other scaleable discrepancies in the control positions were discovered.

COMPILATION.

(A) Method.

The usual radial line method of plotting was used in the compilation of this sheet.

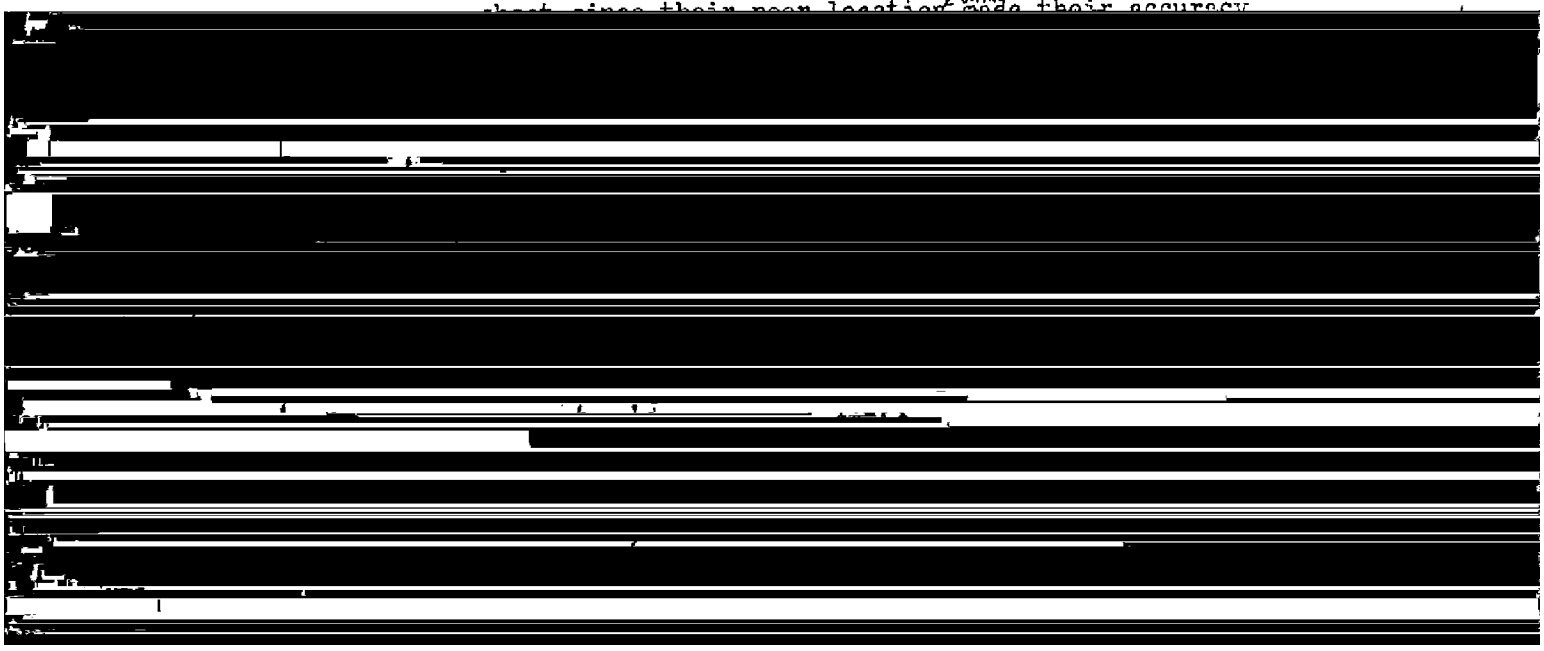
(B) Adjustments of Plot.

The photographs of this strip appear to be free from excessive tilt and scale fluctuation (scale factor nearly 1).

The Long Island Railroad track traverse data was used between Hampton Bays and Longitude 72°-28' and, after the azimuth was revised as explained above under CONTROL, paragraph (C) Discrepancies, it was found to agree very well with the radial plot.

Topo stations "Die" and "How" (both banners on a sandy beach) were not used in detailing this sheet since their mean location on the photos made their accuracy

"Die" - Lat. 40°-54.4' Long 72°-34.7'
"How" - Lat. 40°-54.5' Long 72°-35.0'



approved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail.

In the case of bluffs which occurr on this sheet, along the shore of Great Peconic Bay and Robins Island, the standard symbol has been used and also a printed label attached.

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 raod 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. The shoal water area on this sheet is small.

(D) Information from Other Sources.

A portion of the Long Island Railroad track traverse from Hampton Bays to Longitude 72°- 28' (edge of sheet) was used for control. This traverse was used only to assist the control for this section of the sheet.

The high water line and marsh line, except along the shore of Shinnecock Bay, was obtained directly from the photographs, there being no shore line given on the topo sheets. Along the shore of Shinnecock Bay the shore line, as taken from the aluminum control sheet executed under Lieut. A. P. Ratti in 1933, did not agree with that as shown on the photographs between Topo Sta. Elk and Longitude 72°- 28' by about 10 meters. No explaination could be given for this variation and the shore line was taken as shown on the photographs. See also page 6

A tie-in traverse was also used as supplementary control from Triang. Sta. Canoe to Topo Sta. Big, a flagpole at Canoe Place Inn, and from there to an underpass to the north where it was tied in with the Long Island Railroad Traverse. This traverse was run in by Lieut. (j.g.) R. C. Bolstad while on field inspection in the party of Lieut. L. C. Wilder.

Topo Sta. Roc at longitude 72°-32'-00'' (approx.) and longitude 40°-54'- 30" (approx.) is a rock above high water a little off shore and its geographic position was obtained directly from the aluminum control sheet by scaling.

At approximately longitude 72°- 29'- 30" and latitude 40°- 53'- 15" there are three rocks slightly off shore, one of which is one foot above high water, another three and one-half feet above high water and the third awash at high water. The data concerning these rocks was obtained from the field print[redacted] photographs and the notes thereon made by the field inspection party.

* The shore line differences mentioned on the opposite page are not large and shore line as shown on this sheet does not conflict with the soundings on sheet H 5323. The differences are probally due to differences in interpretation and to sketching between rod readings. The planetable sheet is on 1:20 000 scale

B.G. Gones

Between Triang. Sta. Squire Pond and Topo Sta. Let (E. gable white house) a small rock is shown approximately 179 meters off shore. One foot of this rock is bare at mean low water. For further information consult Lieut. L. C. Wilder's Hydrographic Sheet No. 1, Vol 4, pages 29 and 30.

At Shinnecock Canal there are two bridges of the fixed type, one a Railroad bridge and the other a Highway bridge, both at Canoe Place. The Railroad bridge clearance was 22.0 feet when the staff at the Highway bridge read 4.2¾ feet and the Highway bridge clearance was 19.6 feet when the same staff read 4.2¾ feet. This data is shown on the topographic sheet with a slight allowance for possible higher water. The data regarding these bridges was obtained by Lieut. (j.g.) R. C. Bolstad while on field inspection in the party of Lieut. L. C. Wilder.

For further detail of Shinnecock Canal reference should be made to the insert (scale 1:5,000) on Lieut. L. C. Wilder's Aluminum Control Sheet, 1933, Field Letter "B".

(E) Conflicting Names.

There are no names on this sheet conflicting with names shown on the U. S. C. & G. S. Charts of this area.

The name "Southport", shown on the U. S. Geological Chart, has been omitted on this sheet because of the fact that no buildings show on the photographs.

The names "Penny Pond", "Sears Pond", and "Bellows Pond", which are shown on the U. S. Geological Charts, are shown only as Ponds on this sheet since they were not given any name on the field photographs by the field inspection party.

COMPARISON WITH OTHER SURVEYS.

The junctions with all adjoining sheets are satisfactory.

Since the shore line was not given on the aluminum control sheets, with the exception of the shore of Shinnecock Bay, no comparison could be made with other surveys. Where a comparison could be made along the shore of Shinnecock Bay with the aluminum control sheet of this area executed under Lieut. A. P. Ratti in 1933, Reg. No. 4765, there was disagreement between Topo Sta. Elk and longitude 72°- 28'. There was a variation of about 10 meters for which no explaination could be given as has been stated under COMPILATION, (D) Information from Other Sources. * See opposite page

a's to location of shore line

With the exception of Topo Sta. Roc (rock above high water) which was given on the aluminum control sheet the other rocks, given under COMPILATION, (D) Information from Other Sources, were not shown on the aluminum control sheet.

Since there were no shoal areas shown on the aluminum control sheets they were shown on this sheet as stated under COMPILATION, (C) Interpretation. Where a marked contrast between deep and shoal water was not apparent on the photographs, the broken dashed line was ended. This gradual blending from the appearance of shoal to deep water is due to the gradual increase in depth of the water. This sheet shows only the shoal areas apparent on the photographs.

LANDMARKS.

The list of chartable landmarks for this sheet includes eight objects, all of which have been marked with a small black circle. Two of these were submitted by Lieut. A. P. Ratti, August 1, 1933, and by Lieut. L. C. Wilder, November 4, 1933 and are as follows:

✓ Hampton Bays Silver Water Tank
✓ Canoe Place Inn Flag Staff

The remaining landmarks were submitted by Lieut. L. C. Wilder, November 4, 1933 and are as follows:

✓ White Windmill (Windmill with Tank)
✓ Light, No. entrance Shinnecock Canal (Jet)
✓ Chimney on Lone House (E. Chim.)
Windmill with Tank (Ump)
✓ White flagpole near white windmill not used on ch 578
Lighted beacon (Red)

In addition to the above the enclosed list of Class (C) ~~landmarks~~ objects 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". "Let" and "Yel", listed as ~~landmarks~~ Class C objects, were scaled directly from the aluminum control sheet (Lieut. L. C. Wilder's Aluminum Control Sheet, Field Letter "B", 1933) and are marked with a small black circle. "Ret" was scaled from the air-photo topography and is also marked with a small black circle.

All of the enclosed ~~landmarks~~ objects were spotted on the photographs by the field inspection party and were also used for

RECOMMENDATIONS FOR FURTHER SURVEYS.

The compilation of this sheet is believed to have a probable error of 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 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.

P. A. Kelly

Submitted by P. A. Kelly
Draftsman

A. K. Spalding

Assisted by A. K. Spalding
Accountant

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS (C) OBJECTS

Description	Position						Datum	Method of determination
	Latitude			Longitude				
	o	'	D.M. Meters	o	'	D.P. Meters		
(Yel) Chimney (C)	40	53	(481.0) ---	72	29	(1255.0) 149.0	N.A. 1927	1933 A.C.S.
(Let) E. gable White House (C)	40	54	(790.0) 1065.0	72	32	(861.0) 543.0	"	"
(Ret) Roof apex, dock house (Robins Id.) (C)	40	58	(725.1) 1125.7	72	28	(1386.5) 16.3	"	A.P.T.

Note: A. C. S. stands for Alminum Control Sheet and A. P. T. for Air Photo Topography.

Name preceding 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. T 5065.

In addition to the above list the following recoverable objects are shown as topographic stations on this sheet:

Description	Approx. Latitude		Approx. Longitude		Method of determination
	o	'	o	'	
(Jet) Light on rock jetty	40	53.7	72	30.2	A.C.S. No._____
Red light on pile	40	52.8	72	30.1	A.P.T. No. 5065

[redacted]

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5065

✓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 submitted ~~with this sheet~~ ~~the compilable~~

✓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, shoal areas, sand bar ~~reefs, coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par.

[redacted]

✓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

[redacted]

REVIEW OF SHEET

ADDITIONAL NOTES.

(1) Robins Island.

Robins Island has been shown on this sheet as an insert. The compilation was made from the single lens photographs M20 (881I-8) to M25 (881I-8) inclusive taken at 10:30 A. M., September 19, 1933. At this time the stage of tide at South Jamesport (from 1933 Predicted Tide Tables) was practically high water.

(2) Rocks.

The three rocks mentioned in the Compiler's Report, paragraph (D) Information from Other Sources, are comparatively unimportant as far as navigation is concerned as they lie along the high water line. The have been shown, however, as spotted on the field prints and may be used as recoverable objects for future re-surveys.

(3) Bridges.

The following data was obtained from the 1st District U. S. Army Engineers:

	Clear width	Clear Height above H. W.	Kind
Shinnecock Canal Highway Bridge	105 feet	20.0 feet	fixed
L. I. R. R.-Shinnecock Canal Bridge	79 feet	21.0 feet	fixed

The minimum clearance, as explained in the Compiler's Report, was used. The actual navigable width clearance can be accurately obtained by scaling the channel width on Lieut. L. C. Wilder's 1933 Aluminum Control Sheet, Field Letter "B" (1:5,000 scale insert).

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