

5064

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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. T5064

LOCALITY

Eastern Long Island

~~Flushing Bay to~~ Riverhead

19 34

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1922

5064

Applied to Chart Correction 1214 Jan 10, 1936 H. MacEwen

-1-
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. 14

REGISTER NO. T5064 **5064**

State New York

General locality Eastern Long Island

Locality ~~Flushing Bay~~ Riverhead

Scale 1:10,000 Photographs
Date of ~~survey~~ April 21, 1933
Date of Compilation March 7, 1934

~~Wassuk~~ 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 W. F. von Buehren

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 1:10,846. Com-
pilation of five lens aerial photographs Nos. M41-M62 (881-14).
Final sheet to be enlarged to 1:10,000 scale and printed by
photo-lithographic process.

- NOTES ON COMPILATION -

SHEET NO. 14

PHOTOS, NO. M41 (881-14) TO NO. M62 (881-14)

DATE OF PHOTOGRAPHS April 21, 1933 TIME 10:55 A.M.

	BY	DATE
ROUGH RADIAL PLOT	<u>H. Tubis</u>	<u>9/22-9/27/33</u>
SCALE FACTOR (0.922)	<u>H. Tubis</u>	<u>9/28/33</u>
SCALE FACTOR CHECKED	<u>J.P. O'Donnell</u>	<u>9/29/33</u>
PROJECTION	<u>J.P. O'Donnell</u>	<u>10/4/33</u>
PROJECTION CHECKED	<u>A.K. Spalding</u>	<u>10/4/33</u>
CONTROL PLOTTED	<u>S.E. Sperry, Jr.</u>	<u>10/6/33</u>
CONTROL CHECKED	<u>W.F. von Buehren</u>	<u>10/6/33</u>
TOPOGRAPHY TRANSFERRED	<u>J.P. Jones</u>	<u>10/18/33</u>
TOPOGRAPHY CHECKED	<u>J.P. O'Donnell</u>	<u>10/20/33</u>
SMOOTH RADIAL LINE PLOT	<u>J.P. O'Donnell</u>	<u>11/1/33</u>
RADIAL LINE PLOT CHECKED	<u>Roswell C. Bolstad</u>	<u>11/2/33</u>
DETAIL INKED	<u>W.F. von Buehren</u>	<u>11/3/33-3/7/34</u>

AREA OF DETIAL INKED 29.6sq. Statute Miles (Land Area)

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

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

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 14

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

At the time the photographs for this sheet were taken the tide at South Jamesport, according to predicted tide tables, had just passed the high tide stage.

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 M41 (881-14) to M62 (881-14) inclusive.

CONTROL.

(A) Sources.

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

- (a) Triangulation by Lieut. L. C. Wilder, in 1933, field positions unadjusted.
- (b) 1933 Aluminum Control Sheet (Lieut. L. C. Wilder's Field Sheet "A")

Reg. No. T-6021

- (c) Triangulation by Lieut. C. D. Meaney, in 1932.
- (d) Triangulation by Lieut. A. P. Ratti in 1933, field positions unadjusted.

All the above triangulation is on North American 1927 Datum.

In addition to the triangulation stated above, the following topographic signals (shown on the aluminum control sheet) were spotted on the photographs by the field inspection party and were used in controlling this sheet:-

Sil ✓	Ire ✓	Can ✓ (N.Wly. Radio Tower)
Gat ✓	Del ✓	Tol ✓ (Next S.E. of Can)
Hot ✓	Fry ✓	Radio Tower
Mel ✓	Peg ✓	(2nd S.E. of Can)
Pen ✓		Radio Tower
		(3rd S.E. of Can)
		Rad ✓ (S.Ely. Radio Tower)

They have been shown on the celluloid topographic sheet by a double blue circle (⊙) together with the name (as shown on the aluminum control sheet) in blue. 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 signals resulted:

- ⊙ Tol - next radio tower S.E. of Can - Lat. $40^{\circ}-54.4'$, Long. $72^{\circ}-39.8'$ - new position as determined by the radial plot lies 6 meters distant on azimuth $48^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This signal is a radio tower and is readily apparent when viewed under the stereoscope. 3 meters
- ⊙ Radio Tower - 2nd S.E. of Can - Lat. $40^{\circ}-54.3'$, Long. $72^{\circ}-39.7'$ - new position as determined by the radial plot lies 6 meters distant on azimuth $41^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This signal also stands up well when viewed under the stereoscope. 7 meters
- ⊙ Radio Tower - 3rd S.E. of Can - Lat. $40^{\circ}-54.2'$, Long. $72^{\circ}-39.6'$ - new position as determined by the radial plot lies 11 meters distant on azimuth $55^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This signal also stands up well when viewed under the stereoscope. 11 meters
- ✓ ⊙ Rad - S.Ely. Radio Tower - Lat. $40^{\circ}-54.1'$, Long. $72^{\circ}-39.5'$ - new position as determined by the radial plot lies 19 meters distant on azimuth $56^{\circ}-00'$ (from north) from the position as given on the aluminum control sheet. This tower also stands up well when viewed under the stereoscope. 15 meters

The radial plot checks the position of the northerly radio tower (Can) of this group but it appears that the aluminum control sheet topographer evidently secured weak cuts for the location of the southerly tower as the direction of error lies approximately in the direction in which the topographer would have had to secure his cuts

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.

In using the Long Island Lighting Company High Tension Line Traverse (Revised to March 2, 1925) it was noticed that several of the cross roads, as shown on the blue print, did not check out. Since this print was evidently not intended for accuracy in detail other than the proposed tower layout, these discrepancies were ignored.

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 some tilt in the vicinity of Riverhead and there is also a scale fluctuation due to a variation in the altitude of the airplane.

(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.

Although a strong endeavor to show all the houses on this sheet has been made, the photographs are not clear on the wing prints and trees along the street, in some cases, obscure the buildings so that some of them may have been missed in compiling this sheet.

On the Peconic River at longitude 72°- 39.3' several tufts of marsh grass have been shown in the water. This is believed to approximate the actual condition as it appears on the photographs. This condition was verified by Lieut. (j.g.) R. C. Bolstad who is familiar with that area having been located there on hydrographic work. Also, at triangulation station Indiana, grass has been shown outside the high water line and is believed to approximate the actual condition.

Just south east and south west of Riverhead areas are shown labeled "marsh with drainage ditches" and are represented by combining the symbols for marsh and drainage ditches. These areas were formerly cranberry bogs with ditches but at present are only marsh overgrown with grass.

Due to the large areas of cultivated fields north of the Peconic River, on this sheet, the usual representative symbol has not been used. Instead, the areas have been indicated by printed labels.

At the east side of the sheet, along Sawmill Creek, and in various other areas, the long buildings shown indicate duck ranches.

At Riverhead, Lat. 40°- 55.4', Long. 72°- 39.8', a series of short dashed lines and a circle are shown which, under the stereoscope, appear to represent a cemetery. This area, however, has not been labeled as such since there was no inspection made by the field inspection party. (no notes on field prints). This feature may be checked up by consulting the Sanborn Insurance Maps of the village of Riverhead in the Washington Office.

See page 12
See page 12

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

An important highway, Highway No. 25, has been shown on this sheet and is adequately labeled.

There are no shoal areas occurring on this sheet.

At Riverhead, on the Peconic River just west of the main thoroughfare which crosses it, there are shown two foot-bridges over the river. The bridges are

separated by a small island and are in a dilapidated condition. In this same locality is shown a small basin which is formed by an earth dam; the dam symbol has not been shown due to the intricacy of detail and because it is formed by a raised portion of earthworks only along the upper edges of the fill. The small black circle in the basin and also just to the west of it are small artificial islands which comprise a park of this area.

(D) Information from Other Sources.

A portion of the Long Island Railroad track traverse from Aquabogue to Calverton was used for supplementary control on this sheet since there was only a small amount of topographic control available.

A short tape traverse, run in by the Field Inspection Party of Lieut. L. C. Wilder in 1933 was also used as stated under COMPILATION (B) Adjustments of Plot, page 5 of this report.

The Long Island Lighting Company high tension line traverse was used for supplementary control to the south and east of Riverhead.

The high water line and marsh line was obtained directly from the photographs there being no shore line given on the topo sheet.

The positions of the five beacons in the west end of Flanders Bay were plotted from the positions as given in the list of landmarks submitted by Lieut. L. C. Wilder in 1933.

(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 Wildwood Lake was noted on the field photos by the Field Inspection Party and is known to be in common use by the inhabitants of that locality (to the south of Riverhead).

No name has been shown on the pond to the north of Riverhead as it could not be verified although the Field Inspection Party noted it as Merritts Pond on the field prints after several inquiries.

The body of water next west of Meetinghouse Creek is called Trout Brook by some of the inhabitants of that area but, since no verification could be made, it was not labeled on this sheet.

The pond just south of Riverhead is called Swezey's Pond by some of the natives of that locality but it has not been labeled as no verification could be made. It is ~~so~~ named on the U. S. Geological Map of that area. and Chart 1212, Swezey.

*See Review
omit
2/13*

COMPARISON WITH OTHER SURVEYS.

The junctions with all adjoining sheets are satisfactory.

Since the shore line was not given on the aluminum control sheet no comparison could be made with other surveys.

A comparison with the Long Island Railroad track traverse and the Long Island Lighting Company high tension line traverse

showed that these traverses were slightly in error as has been stated under CONTROL (C) Discrepancies.

No other survey data was available with which a comparison could be made.

LANDMARKS.

The landmarks for this area have been submitted by Lieut. L. C. Wilder in his report of November 4, 1933. Four of the five radio towers submitted by Lieut. L. C. Wilder were found to be in error by the radial plot. The north radio tower (Can) agrees with the aluminum control sheet and the new positions of the other four are as follows:

<u>Description</u>	<u>Latitude</u>			<u>Longitude</u>		
	o	'	D.M. Meters	o	'	D.P. Meters
(Tol) 2nd radio tower from Can	40	54	(1139) 712	72	39	(312) 1092
Radio Tower 3rd from Can	40	54	(1297) 554	72	39	(429) 975
Radio Tower 4th from Can	40	54	(1458) 393	72	39	(549) 855
(Rad) 5th Radio Tower from Can	40	54	(1617) 234	72	39	(668) 736

There are also many other objects (such as houses, ends of docks, etc.) which are located within the accuracy specified under the following heading, RECOMMENDATIONS FOR FURTHER SURVEYS, and may be used to obtain hydrographic "fixes". Care should be taken in using the houses to use the center as the size shown on this sheet may be expanded somewhat.

RECOMMENDATIONS FOR FURTHER SURVEYS.

The compilation of this sheet is believed to have a probable error of not over 2 meters in well defined detail of importance for charting and of 4 meters for other data. It is understood that the widths of roads and similar objects may be slightly expanded in order to keep the detail clear and to keep it from photographing as a solid area in the photo-lithographic process.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Submitted by

W. F. von Buehren
W. F. von Buehren
Draftsman

Assisted by

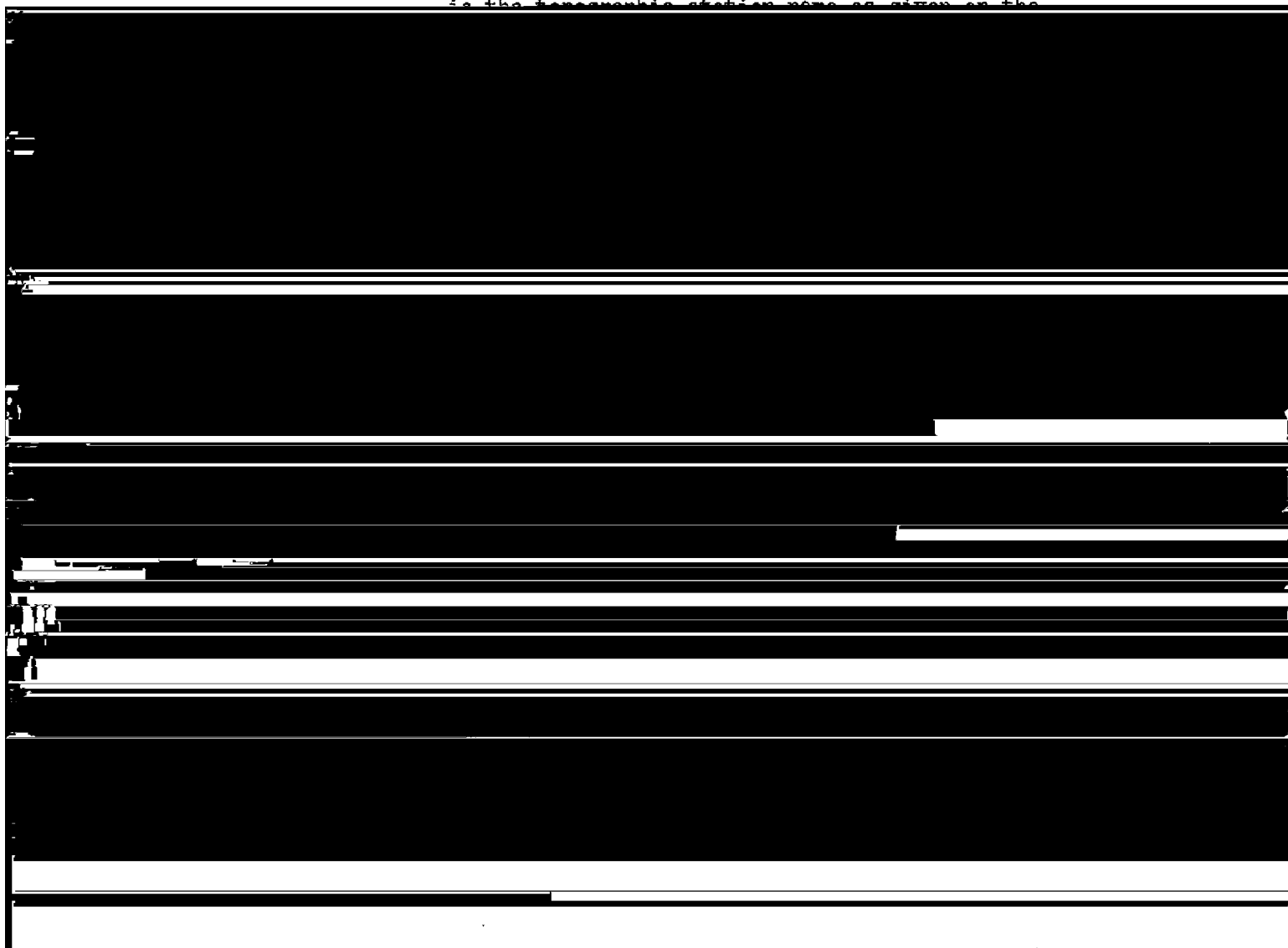
A. K. Spalding
A. K. Spalding
Accountant

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

(No list of recoverable objects, submitted by Lieut. L. C. Wilder in 1933, is available for this party, however, in addition to landmarks of minor prominence as listed by Lieut. L. C. Wilder, the following three objects are recoverable and have been shown on this sheet by a small black circle.)

<u>Description</u>	<u>Approx. Latitude</u>	<u>Approx. Longitude</u>	<u>Height</u>	<u>Method of Determination</u>
	° ' "	° ' "		
Water Tank unpainted	40 55.3	72 38.0		A.C.S., Reg. No. _____
Water Tank unpainted	40 55.4	72 38.1		A.C.S., Reg. No. _____
(Sil) iron stack on laundry	40 54.9	72 39.7		A.C.S., Reg. No. _____

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



REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5064

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 ~~Andromedus~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
- ✓ 6. The representation of low water lines, ~~rocks, coral reefs 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 (C) and (E); and LANDMARKS have been made on this sheet.
- ✓ 8. ~~The spans, draws and clearances of bridges are shown.~~ (Par. 16c.)
There are no bridges of 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 reports of control party, Lieut. L. C. Wilder, 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. L. C. Wilder)
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.) *not so good*
18. No additional surveying is recommended.
19. Remarks: Any additional notes and requirements affecting this area are referred to Lieut. L. C. Wilder's Reports covering the topography executed in 1933 under his charge. See 19a. on following page.
20. Examined and approved: *Roswell C. Boistad*
Roswell C. Boistad
Chief of Party
21. Remarks after review in office: *See following pages*

(143)

19a. ADDITIONAL NOTES.

The area mentioned under COMPILATION (C) Interpretation, of the preceeding COMPILER'S REPORT (Lat. 40°- 55.4', Long. 72°- 39.8') is a Catholic Cemetery. Verification of this fact was made by a native dweller of the locality of Riverhead.

At the mouth of Sawmill Creek there is a fenced enclosure which extends out into the water. Also extending back into the creek and on the west side there are numerous fenced enclosures which have not been shown on this sheet because of the complicated detail. The creek, however, is shallow and not important as a navigable waterway. The canals shown near triangulation station Soyars 1933, and in lat. 40°- 56.0', long. 72°- 37.3' are also shallow and are used only as watering ponds for the ducks on the numerous poultry farms in this locality.

The name "Wildwood Lake" as shown on this sheet is the name commonly in use to-day instead of Great Pond as shown on the present U. S. C. & G. S. Charts.

The name "Sweezy Pond" is probably correct as three local inhabitants of Riverhead certified that they hear it referred to as such.

On Chart 1212 on the Peconic River, Long. 72°- 41.9', is shown a road crossing the river; no such road exists.

The high tension line was discontinued on this sheet at lat. 40°- 54.5', long. 72°- 42.5' because to the westward there was an uncertainty as to its location and it was not clearly apparent when viewed under the stereoscope.

*Swezey's
on T-77
also Swezey's*

*Sweezy
H.B.*


Roswell C. Bolstad
Chief of Party

Review of Photo Compilation T-5064 (1933)

Comparison with other Surveys:

T-6021 (1933) 1:20,000 aluminum control survey shows only signals. No descriptions were submitted on Form 524.

The discussion on page 4, concerning the errors that developed in Stations "TOL", "RADIO TOWER" (2nd S.E.) "RADIO TOWER" (3rd S.E.) and "RAD" has been investigated. The position of the most northerly of these towers "CAN" checks that of the compilation exactly. The most southerly, "RAD" lies 15 meters southwesterly from the compilation position and the three towers in between lie on the same azimuth of the line connecting these two and the degree of error is proportional to their distance from station "CAN".

The stations on the aluminum sheet T-6021 have been located by two flat cuts, no positive evidence of a third cut exists nor does the descriptive report mention the method of their determination although there is a supposition they may have been tied into plane table traverse, this however lacks verification.

An absolute check on the photo compilation cannot be made without remounting all the photographs but as the center line of flight passes directly through the most northerly station "CAN" and all of these towers plainly appear on the "B" prints and station "CAN" exactly checks there is every reason to believe the positions of the other stations are accurately plotted and for this reason they are accepted as shown on the compilation. The compilation also checks the plane table location of stations east and west of these towers. This same difference of positions appears on the latest hydrographic sheet H-5378 (1933) 1:10,000 as it affects stations "TOL" and "RAD" shown thereon.

Comparison with Charts 299 ~~and 1212~~ show the position of the name "MEETING HOUSE CREEK" applied to a different stream than that shown on the compilation or T-6021, see discussion on page 7. The name "TROUT BROOK" referred to has been omitted pending decision of Mr. Bacon.

Comparison with T-77 (1837) shows some names of features not indicated on the compilation and have been referred to Mr. Bacon.

Comparison with T-1775 (1887) 1:10,000 shows a substantial agreement with so much of the compilation as it covers.

The projection is satisfactory and the compilation is adequate to supersede the older surveys.

A better description of the accuracy stated on page 8 would be 3 to 5 meters for intersected points and 4 to 8 meters for other detail.

The name "MEETING HOUSE CREEK" discussed on page 7 is shown in agreement with the chart (1212) pending Mr. Bacon's decision.

Joseph Andrews
3-1-16
B.G. Jones

Survey No. I-5064

Chart No. 299-1212

Diagram No. _____

Ø, 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
	<i>The original list has been lost. This is a replacement.</i>				
✓	<u>Flanders Bay</u>				
✓	<u>Indian Island</u>				
✓	<u>Reeves Bay</u>				
✓	<u>Flanders</u>				
✓	<u>Meetinghouse Creek</u>				
✓	<u>Peconic River</u>				
✓	<u>Riverhead</u>				
✓	<u>Huckleberry Pond</u>				
✓	<u>Wildwood Lake</u> *	USGB 4/3/41			
✓	<u>Sweezy Pond</u>	T-77 shows Swezey's Pond (Note just south of Riverhead is I. Swezey's Inn.)			
✓	<u>Bald Hill</u>				
✓	<u>Merritts Pond</u>				
	<u>Trout Brook</u>	Omitted - See Review			
✓	<u>Sawmill Cr.</u>				
	<u>Aquebogue RR Station</u>				
	<u>Goose Creek</u>				