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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. T5070

LOCALITY

Eastern Long Island

AND VICINITY  
Cutchogue to Peconic

1934

CHIEF OF PARTY

R. C. Bolstad, Jr. H. & G. Eng.

U. S. GOVERNMENT PRINTING OFFICE

-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. 20 W

REGISTER NO. T 5070

**5070**

State New York

General locality Eastern Long Island

Locality Cutchogue to Peconic And Vicinity

Scale 1:10,000 Photographs Date of ~~survey~~ April, 21, 1933  
Date of Compilation August, 3, 1934

~~Vertical~~ Air Photo Compilation Party No. 12, New York City

Chief of party Roswell C. Holstad

Surveyed by See data sheet in the Descriptive Report

Inked by W. E. Brown

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval ---- feet

Instructions dated November 15, 1932

Remarks: Compiled on scale of 1:10,776 and enlarged

printed on scale of 1:10,000 by Photo Lithography.

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-2-  
- STATISTICS -  
on

SHEET, FIELD NO. 20W, REG. NO. T 5070

PHOTOS, NO. M8 (881-I-8) TO NO. M14 (881-I-8) TIME 10:00 A.M.

PHOTOS, NO. M21 (880-14) TO NO. M31 (880-14) TIME 10:00 A.M.

DATE OF PHOTOGRAPHS M8 - M14, Single Lens, Sept. 19, 1933.

DATE OF PHOTOGRAPHS M21 - M31, Five Lens, April, 21, 1933.

This sheet was compiled integral with Sheet, Field No. 20E, Reg. No. T5337, (See paragraph GENERAL INFORMATION, page 3, Descriptive Report for Air Photo Topographic Sheet, Reg. No. T5337) and all names and dates therein given are applicable to this sheet except as noted below.

*William E. Brown*

DETAIL INKED	<u>W.E. Brown</u>	<u>4/15/34-8/3/34.</u>
	<i>A.K. Spalding</i>	<u>9/12 - 9/14/34</u>
PRELIMINARY REVIEW	<u>J.P. O'Donnell</u>	<u>9/24 - 9/27/34</u>

AREA OF DETAIL INKED 13.5 sq. Statute miles (Land Area)

AREA OF DETAIL INKED 0.5 sq. Statute Miles (Shoals in water area)

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

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

LENGTH OF ROADS, STREETS, TRAILS, RAILROADS 72.0 Statute Miles

GENERAL LOCATION Eastern Long Island

LOCATION Cutchogue to Peconic

DATUM North American 1927

STATION Holland 1913-33 Latitude 40° - 59' - 20.35" (627.8 m.)  
Longitude 72° - 26' - 09.20" (215.1 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 20W

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 STATISTICS SHEET details all data in connection with the compilation of this sheet. Sheets 20E and 20W, separated after the detail was completed, have the same compilation dates, page 2 from ROUGHT RADIAL PLOT to PRELIMINARY REVIEW, since it was impossible to allot the actual time to each half of the sheet.

The tide at Cutchogue Harbor was practically at high water, according to the Predicted Tide Tables of the U.S. Coast & Geodetic Survey, at the time these photographs were taken, April 21, 1933 at 10:30 A.M.

The five lens photographs M21 to M31, inclusive (880-14), taken by 2nd Lieut. James F. Oliver, Jr. of the U.S. Army Air Corps with their camera Model T-3A, No. 31-78, were used as the principal source of data for this compilation, but single lens photos M8 to M14, inclusive, (881I-8) taken Sept. 17, 1933 by Captain Willis R. Taylor, U.S. Army Air Corps, were used as supplementary photographs and were of great service in detailing the area, Nassau Point.

The scale factor of the single lens flight was different from that of the five lens and, although an accurate smooth plot was made without great difficulty, it was necessary to have photostats made of the photos M9 and M11 (881I-8) to the scale of the projection so as to accurately detail the water area in Nassau Point.

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 adjusted.
- (b) 1933 Aluminum Control Sheet (Lieut. L.C. Wilder's Field Sheet "C", Reg. No. T-6019)
- (c) 1933 Aluminum Control Sheet (Lieut. L.C. Wilder's Field Sheet "B", Reg. No. T-6020)

All control was placed on the North American 1927 Datum before beginning the compilation. The adjustment was approximate, however, any final office adjustments should be unplotable at this scale (1:10,776).

The above control forms the basis of control in this

area. In addition to this the following topographic signals (shown on the aluminum control sheets, Field Letters "C" and "B") were spotted on the photographs and used as control.

Bert ✓	Tap ✓	Not ✓
Yarn ✓	Gas ✓	Bol ✓
Bee ✓	Kit ✓	Sun ✓ A.C.S. "B"
Rocks ✓	Rat ✓	Nap ✓
Rock ✓	Fly ✓	Ant ✓
Day ✓	Dot ✓	Pan ✓
		Sun ✓ A.C.S. "C"

These signals have been indicated on the celluloid topographic sheet by a double blue circle, thus (⊙), and the name (as shown on aluminum control sheets) also in blue ink. Since blue ink will not photograph in the photo lithographic process, no record of these topographic signals (banners and flags) will appear on the finished sheet.

If it should be desired by the Chart Section to have these signals shown, the usual circles and names may be inked in red by draftsmen in the Washington Office, since they will have all of the data at hand.

In the compilation, all of the control stations shown on the aluminum control sheets were not used as control because the field inspection was done before the aluminum control sheets had been finished by the field party which, at that time, had not established all the control of the area. However, many natural objects used as control on the aluminum control sheets could be definitely spotted in the office with the aid of the stereoscope and these were used as supplementary control.

All control stations taken from the aluminum control sheets were plotted from the positions obtained by scaling directly from the control sheets.

The Long Island Railroad track traverse data was used for supplementary control but required slight adjustment as stated under paragraph (C) Discrepancies in report of Air Photo Topographic Sheet Reg. No. T5337.

#### (B) Errors

In making the radial plot for this sheet the following relocations of spotted aluminum control signals resulted:

- o Dot - Lat. 41°- 00.3', Long. 72°- 27.2' - new position as determined by radial plot lies 10 meters distant on azimuth 285° (from north) from the position as given on the aluminum control sheet. This signal is the west peak of a boat house and was spotted by the field inspection party and verified under the stereoscope, therefore, it is believed to be correctly spotted. *See Review T5337*
- o Bert - Lat. 41°- 01.6', Long. 72°- 26.7' - new position as determined by radial plot lies 9 meters distant on azimuth 30° (from north) from *See Review*

the position as given on the aluminum control sheet. This signal is a banner and, although it was spotted by the field inspection party, it was not possible to verify it under the stereoscope. It is, however, believed to be correctly spotted.

The control, on this sheet, is in general strong and the radial plot gave good intersections so it is believed that the stations are in error as stated. It is to be noted that the aluminum control sheets were executed on a scale of 1:20,000 whereas this sheet is on a scale of 1:10,776.

(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°-58' in a westerly direction (counterclockwise) from the azimuth determined by them. It appears that the railroad traverse azimuth may have been based on a poor magnetic azimuth determined some years ago.

No other control stations, established by other organizations and used in this compilation, were found to be in error.

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 area appear to have a great deal of tilt and scale fluctuation due to variation in altitude of the airplane, making it necessary for the detailer to do a considerable amount of proportioning between radial points.

Reference should be made to Air Photo Topographic Sheet Reg. No. T5337 Descriptive Report for an explanation regarding topo signal Bert which is in error as stated under (B) Errors, page 4 of this report. The reference to Sheet Reg. No. T5337 is COMPILATION (B) Adjustments of Plot, page 5.

However, adjustments were carefully made, except as stated in the reference above, and by holding to all the available control for this sheet excessive adjustment, to the extent of causing any appreciable error, was not necessary.

It was necessary to adjust the Long Island Railroad track traverse for the amount of the error stated under (C) Discrepancies, above. The distances, as obtained from the track traverse data, to road intersections with the railroad checked well with those obtained from the radial plot after the correction in azimuth was made. There was a variation in the distances which is believed to be due to the expansion of the railroad track traverse sheet.

(C) Interpretation

The usual graphic symbols were used as approved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail.

The double full line was used to indicate first order roads and the double broken line for private drive-ways 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 and the similarity with labeled roads.

There are numerous rocks scattered off shore. *See review* Some of these have been shown but because of difficulty in distinguishing them definitely on the photographs it is believed that some have been omitted. For more accurate data concerning these rocks reference should be made to the hydrographic sheets of this area.

There are no bridges of importance to navigation within the area of this sheet.

(D) Information from Other Sources

The Long Island Railroad track traverse data was used as supplementary control as stated under CONTROL (A) Sources, page 4 and (C) Discrepancies, page 5.

The transmission line traverse of the Long Island Lighting Company was used in locating the transmission line and interpreting the detail, on this sheet, in the vicinity of the transmission line.

(E) Conflicting Names

"New Suffolk" is used as the proper name for the village which, on U.S.C. & G.S. Chart No. 299, is called "Suffolk". The name appears correctly as "New Suffolk" on U.S.C. & G.S. Chart No. 1212.

The new name "Little Hog Neck" was obtained from *See Review* the U.S. Geological Maps of this area.

The new names Wickam Creek, East Creek, Mud Creek, Haywaters Cove, Broadwaters Cove and Wenneweta Pond were obtained by the field inspection party and verified by at least two of the local inhabitants.

No other changes of names have been made on this sheet.

COMPARISON WITH OTHER SURVEYS

The junctions with all adjoining sheets are satisfactory.

The Long Island Railroad track traverse data was found to be in error as stated under CONTROL (C) Discrepancies, page 5 of this report.

No errors were found in the transmission line data of the Long Island Lighting Company.

LANDMARKS

The list of landmarks for this area, including those to be expunged, has been previously submitted, November 4, 1933, by Lieut. L.C. Wilder.

"Pres. Ch. Spire" was submitted by Lieut. L.C. Wilder as a landmark but was not located by him. It has, therefore, been located by air photo topography and its position given under Class (C) landmarks page 8 of this report.

The two signals "Taller of two tanks" and "Flagpole", the positions of which are given under Class (C) landmarks page 8 of this report, were not submitted by Lieut. L.C. Wilder in his list of landmarks but were picked up by the air photo field inspection party as fairly prominent objects. The signal "Taller of two tanks" refers to one about 35 feet high approximately 3 meters distant from another about 27 feet high.

There are 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. *See Review*

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. E. Brown*  
W. E. Brown

Draftsman

Assisted by

*J. P. O'Donnell*  
J. P. O'Donnell  
Surveyor

*A. K. Spalding*  
A. K. Spalding  
Surveyor





Survey No. T-5070Chart No. 299

Diagram No. \_\_\_\_\_

Date. 1-23-35

## GEOGRAPHIC NAMES

\*, Approved by the Division of Geographic Names, Department of Interior.

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
	<u>Long Island Sound</u> ✓				
	<u>Goldsmith Inlet</u> ✓				
	<u>Duck Pond Point</u> ✓				
	<u>Cutchoque</u> ✓				
	<u>Broadwaters Cove</u> ✓				
	<u>Haywaters Cove</u> ✓				
	<u>Mud Creek</u> ✓				
	<u>East Creek</u> ✓				
	<u>Wickham Creek</u> ✓	See Pg. 6 of report where spelling is Wickham which was passed pending decision	<u>Wickham Cr.</u>	<u>Wickham</u> per L. 933 (1955)	
	<u>Marsh Point</u> ✓				
	<u>Cutchoque Harbor</u> *				
	<u>Downs Creek</u> ✓				
	<u>West Creek</u> ✓				
	<u>New Suffolk</u> ✓	New Suffolk on Chart 1212 Suffolk on " 299		used pending decision	
	<u>Nassau Point</u> *	Used pending decision			
	<u>(Little Hog Neck)</u> }	Shows on G.S. Sheet Sag Harbor			
	<u>Wunneweta Pond</u> ✓	Spelled Wunneweta on Pg. 6. used pending decision	<u>Wunneweta Pond</u>		
	<u>Richmond Creek</u> ✓				
	<u>Peconic</u> ✓				
		APPROVED NAMES UNDERLINED IN RED H. L. Flemer.			

REVIEW OF AIR PHOTO COMPILATION T-5070

Scale 1:10,000

Comparison with Graphic Control Surveys.

(a) T-6020 (1933) 1:20,000. There are only minor differences between T-6020 and this compilation.

(b) T-6019 (1933) 1:20,000. Stations  $\odot$ BERT and  $\odot$ LUM listed on pages 4 and 5 of the preceding report are on T-5337 and are discussed in the review of T-5337. (Photo. compilation)

Two rocks in the following positions on T-6019 were added to the compilation in this office: lat.  $40^{\circ}59.6'$ , long.  $72^{\circ}26.2'$ ; lat.  $40^{\circ}59.2'$ , long.  $72^{\circ}26.0'$ .

Two rocks at lat.  $40^{\circ}59.7'$ , long.  $72^{\circ}26.3'$  on T-6019 have not been transferred to this compilation. The position of these rocks as shown on H-5380 is accepted in preference to the position given on T-6019. The two rocks as shown on T-6019 actually represent a small rocky ledge which is more completely shown on H-5380.

The compilation position of station  $\odot$ DOT discussed on the page preceding page 4 is accepted after examination of the photographs and T-6019. T-6019 shows two prick points for this station, neither of which is definitely identified as a station location.

(c) All detail on T-6019 and T-6020 within the area of the compilation is now shown on the compilation except for the rocks noted above, temporary plane table stations, and the magnetic declination.

Comparison with Previous Topographic Surveys.

(a) T-1773 (1887) 1:10,000. Comparison shows small changes in shore line and some new construction in this area.

Two rocks shown on T-1773 in Cutchogue Harbor at lat.  $41^{\circ}00.4'$ , long.  $72^{\circ}27.3'$  do not show on the photographs and are not shown on the new hydrographic survey H-5380. These rocks have not been brought forward on the compilation but they are not disproved by the photographs as they may be submerged. See H-5380 for development in this vicinity.

Except for the rocks mentioned above this compilation is adequate to supersede that section of T-1773 which it covers.

(b) T-1730 (1885) 1:10,000. The following rocks shown on T-1730 do not show on the photographs and are not shown on the last hydrographic survey H-1591 (1883). These rocks have not been brought forward on this compilation. They are not definitely disproved by the photographs as they may be submerged. (See next page)

~~Many offlying rocks are shown in the following locations:~~

Lat. 41° 02.9'	Long. 72° 29.4'
41° 02.7'	72° 29.9'
41° 02.7'	72° 30.1'
41° 02.6'	72° 30.3'
41° 02.5'	72° 31.0'

With the exception of the rocks listed above, this compilation is adequate to supersede T-1730 for the area it covers.

Remarks.

A better estimate of the accuracy given on page 7 is 3 to 5 meters for intersected points and 3 to 10 meters for other detail.

*Revised by Jones from report by J. Andrews*

*B.G. Jones*  
*6/10/35*

## REVIEW OF AIR PHOTO COMPILATION NO. T5070

Chief of Party: Roswell C. Bolstad

Compiled by: (See page 2,  
Des. Report)Project: New York Air Photo Compilation Instructions dated: Nov. 15, 1932  
Party No. 12

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b, c, d, e, g and i; 26; and 64)
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g, n)  
See paragraph (C) Interpretation, page 6.
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d, e)  
See paragraph CONTROL (A), page 3.
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)  
See paragraph CONTROL (A), page 3.
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.  
See paragraph (B) Errors, page 4.
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c, h, i)  
See paragraph CONTROL (A), page 3 and paragraph COMPILATION (B), page 5.
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

8. The representation of low water lines, ~~reefs, coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)  
 ✓ See paragraph COMPILATION (C), Interpretation, page 6 regarding rocks.
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)  
 ✓ See report of Control Party, Lieut. L.C. Wilder in 1933.
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934; Landmarks for Charts, complied with. (Par. 16d, e; and 60)  
 ✓ Previously submitted by 1933 Field Party under Lieut. L.C. Wilder.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)  
 ✓ There are no bridges of importance to navigation shown on this sheet.
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)  
 ✓ See paragraph (E) page 6.
13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927  
 ✓ See page 2.
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
15. ✓ The drafting is satisfactory and particular attention has been given the following:
  - ✓ 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
  - ✓ 2. The degrees and minutes of Latitude and Longitude are correctly marked.

- ✓3. All station points are exactly marked by fine black dots.
- ✓4. Closely spaced lines are drawn sharp and clear for printing.
- ✓5. Topographic symbols for similar features are of uniform weight.
- ✓6. All drawing has been retouched where partially rubbed off.
- ✓7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. ✓ No additional surveying is recommended at this time.

17. ✓ 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.

18. Examined and approved;

✓ Preliminary Review:

*J. P. O'Donnell*  
J. P. O'Donnell and A. E. Spalding  
 Surveyor                      Surveyor  
*Roswell C. Bolstad*  
Roswell C. Bolstad  
 Chief of Party

19. Remarks after review in office:

*See following page*

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

Examined and approved:

*E. H. Green*  
E. H. Green  
 Chief, Section of Field Records  
*L. Q. Lobnitz*  
L. Q. Lobnitz  
 Chief, Division of Charts

*F. B. Borden*  
F. B. Borden  
 Chief, Section of Field Work  
*G. H. Wade*  
G. H. Wade  
 Chief, Division of Hydrography  
 and Topography.

Applied to chart 299 J.M.A. Mar. 10/1936

" " " 1212 J.M.A. Apr. 1936

Applied to new chart 363- E.B.H. Jan 1949