

5331

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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. T5331

5331

LOCALITY

Eastern Long Island

Plum Island

1934

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1923

5331

75-74 June 7.

applied to chart 298 2.M.A. 3/11/36

" " " 1212 2.M.A. Apr. 1936

" " " 1211 2.M.A. Jan. 1937

applied to newschart 363 - E.L.H. 8/10/1949

applied to chart 13212 (359) reconstruction R.H. 4-12-79

-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. 22E

REGISTER NO. T5331 5331

State New York 1211-2

General locality Eastern Long Island

Locality Plum Island

Scale 1:10,000 Date of ~~survey~~ photographs Apr. 21, 1933

Date of Compilation July 18, 1934

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

Chief of party Roswell C. Bolstad

Surveyed by See data sheet enclosed in Descriptive Report for this sheet.

Inked by G. Crowther

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 1:11,111 and enlarged and printed on scale of 1:10,000 by Photo Lithography.

- STATISTICS -

on

SHEET, FIELD NO. 22E, Reg. No. T5331

PHOTOS, NO. M79 (880-14) TO NO. M89 (880-14)

DATE OF PHOTOGRAPHS April 21, 1933 TIME 10:07 A.M.

	BY	DATE	
		From	To
ROUGH RADIAL PLOT	<u>J. Reynolds</u> J. Reynolds	11/10	11/10/33
SCALE FACTOR (0.900)	<u>J. Reynolds</u> J. Reynolds	11/10	11/10/33
SCALE FACTOR CHECKED	<u>J.P. O'Donnell</u> J.P. O'Donnell	11/10	11/10/33
PROJECTION	<u>W.E. Hackett</u> W.E. Hackett	11/22	11/22/33
PROJECTION CHECKED	<u>J.P. O'Donnell</u> J.P. O'Donnell	11/22	11/22/33
CONTROL PLOTTED	<u>J.G. Albert</u> J.G. Albert	4/12	4/12/34
CONTROL CHECKED	<u>W.E. Hackett</u> W.E. Hackett	4/13	4/13/34
TOPOGRAPHY TRANSFERRED	<u>J.G. Albert</u> J.G. Albert	4/16	4/16/34
TOPOGRAPHY CHECKED	<u>W.E. Hackett</u> W.E. Hackett	4/16	4/16/34
SMOOTH RADIAL LINE PLOT	<u>J.G. Albert</u> J.G. Albert	5/17	5/19/34
RADIAL LINE PLOT CHECKED	<u>J.P. O'Donnell</u> J.P. O'Donnell	5/25	5/28/34
DEATIL INKED	<u>J.G. Albert</u> J.G. Albert <u>G. Crowther</u> G. Crowther	5/29 7/11	5/30/34 7/18/34
PRELIMINARY REVIEW	<u>J.G. Albert</u> J.G. Albert	9/17	9/17/34

AREA OF DETAIL INKED 1.3 sq. Statute Miles (Land Area)

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

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

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

LENGTH OF STREETS, ROADS, TRAILS, RAILROADS, etc. 11.9 Statute Miles

GENERAL LOCATION Eastern Long Island

LOCATION Plum Island

DATUM North American 1927

Latitude 41° - 11' - 08.38" (258.4 m.)

STATION Plum 1932 Longitude 72 - 11' - 13.52" (315.0 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 22E

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.

At the time these photographs were taken, April 21, 1933 at 10:07 A.M., the tide at Plum Island was halfway between high water and low water according to the Predicted Tide Tables of the U.S. Coast and Geodetic Survey.

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 Nos. M79 to M89 (880-14), 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) 1883 Aluminum control sheet (Lieut. G. Hosmer, adjusted to North American 1927)
Reg. No. T-1574p~~

All control used on this sheet was either on North American 1927 Datum or adjusted to it before it was used. The difference between the unadjusted and the final adjusted positions would be unplotable at the scale of this compilation (1:11,111).

There were no topographic signals used on this sheet. *See Review*

(B) Errors

There are no apparent discrepancies in the control positions for this sheet. The control is, in general, strong and the radial plot gave good intersections.

(C) Discrepancies

No 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 of this area appear to have very little tilt, and little scale fluctuation due to variation in altitude of the airplane, making it necessary for the detailer to do but a small amount of proportioning between radial points.

(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, the double broken line for private driveways and roads of lesser importance. An exceedingly poor road or trail was shown by a single dashed line. In most cases, unless labeled on the field prints, the classification of the roads had to be determined under the stereoscope.

The high water line along the south shore of Plum Island was somewhat difficult to locate because of the wide sandy beach which is as much as 40 meters wide at the southerly end of the Island. This high water line was furnished Lieut. W.D. Patterson for his 1934 hydrographic work in this area and since no word has been received regarding errors in this shoreline it is believed to be correct as shown on this compilation sheet.

There are no bridges of importance to navigation shown on this sheet.

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

(D) Information from Other Sources

The high water line of Plum Island was run in by Lieut. Charles Hosmer in 1883. No other information was available except the Air Photo Field Inspection Report, 1933, of Lieut. L.C. Wilder.

(E) Conflicting Names

There are no names on this sheet conflicting with those on the U.S.C. & G.S. Charts of this area and no new names to be added. *No new names are shown*

COMPARISON WITH OTHER SURVEYS

There are no junctions in the detail of this sheet with that of the adjoining sheets.

The high water line as obtained from the ~~aluminum control~~ *plan table* sheet Reg. No. ~~F-1574~~ *1574* did not agree in all places with that obtained from the photographs. Since the photographs were made

at a later date than the ~~aluminum~~ control sheet it is believed that they are correct and the shoreline has been shown as obtained from them. The shoreline as obtained from the ~~aluminum~~ ^{T1574} control sheet is shown in blue.

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.

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 below.

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

G. Crowther
G. Crowther
Surveyor

Assisted by

J. G. Albert
J. G. Albert
Draftsman

A. K. Spalding
A. K. Spalding
Surveyor

The value of 2 to 4 meters given above is rather high. A better estimate is an accuracy of 2 to 4 meters for intersected points and 2 to 8 meters for other detail.

B. G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 75331

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), page 4.
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, add under Sources 1932 triangulation by Lieut. C.D. Meaney. Change under (A) Sources Item (b) 1883 Aluminum Control Sheet to 1883 Topographic Sheet.
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.
There are no differences on this sheet.
No information has been received by this party in regard to the 1934 Field Surveys of Lieut. W.D. Patterson; any discrepancies with this work will therefore have been taken care of by the Office.
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 4.
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)
See paragraph (C) Interpretation, page 4.

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~~, ~~rock reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
See paragraph (C), page 4.
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 reports of Lieut. W.D. Patterson, 1934.
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)
There are no conflicting names or new names on this sheet.
13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
There are no junctions with other sheets. Joins with F5076 to west
(Projection lines only)
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)
Confidential data including some buildings at Fort Terry have been omitted from this sheet.

16. No additional surveying is recommended at this time.

17. Remarks: Any additional notes and requirements affecting this area are referred to the 1933 reports of Lieut. L.C. Wilder and the 1934 reports of Lieut. W.D. Patterson who carried on field operations in this vicinity.

18. Examined and approved;

Preliminary Review:

J. G. Albert
J. G. Albert

Draftsman

Roswell C. Bolstad
Roswell C. Bolstad
Chief of Party

19. Remarks after review in office:

See following page

L.A. Joseph Andrews
Reviewed in office by: *B.G. Jones*

Examined and approved:

K.T. Adams
Asst Chief, Section of Field Records
R.O. Solbat
Chief, Division of Charts

F.S. Borden
Chief, Section of Field Work
W.H. de
Chief, Division of Hydrography and Topography.

REVIEW OF PHOTO COMPILATION T-5331 (1934)

Comparison with Charts and other Surveys:

Comparison with T-1574 b (1883), scale 1:10,000 planetable survey shows a marked difference in the H.W. line at the east end of the island, at several locations along the south coast and exceptionally so just west of Pine Point where the difference is as great as 100 meters. This latter area is a wide sandy beach (Des. Rept.PC. pg.4) and some difficulty was encountered in delineating the H.W. line. Due to the character of the beach and because of the lapse of time since the old survey (50 years) the compilation is accepted to supersede T-1574 b except for location of rocks. T-1574 b shows many rocks just off shore that are not shown on the compilation, this is particularly true at the east end of the island, lat. 41°-11.4', long. 72°-11.6' and lat.41°-10.8', long. 72°-11.3'. The report states on pg.4 that all rocks could not be seen on the photographs, it is therefore concluded that many of the additional rocks shown on T-1574 b probably exist.

Comparison with aluminum planetable control survey T-6098 (1934) scale 1:20,000 only showed signal locations and was executed subsequent to the compilation. Form 524 was returned for four described stations, SILAS, SIN, HUM, and SIT. The first three were transferred to the compilation. Station HUM (So Gable of Sentry House) checked the location of the landmark "SENTRY HO" shown on chart 298.

Comparison with H-5513 shows no conflict~~ion~~ with the compilation; and a combination of H-5513 and the compilation are in agreement with the old survey except for rocks in locations as mentioned in the first paragraph. *LT 1574 b*

Names:

Topographic Station HUM is described as a Sentry House, this name also appears on Chart 298. Due to its association with a military reference to Fort Terry it seems desirable to expunge the word "SENTRY", this reference is also true of Station SIT, described as "Center of Roof of Fire Control Building", This station was not transferred to the celluloid compilation because of its military significance, ~~and Station HUM was only transferred because it was shown on the chart.~~

B.G. Jones
Joseph Andrews

