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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY R. S. Patton, Director

State: New York

DESCRIPTIVE REPORT

Topographic Ebudrographic

Sheet No. T5082

LOCALITY

South Shore of Long Island

Outer Coast between Tiana Beach

and Quantuck Bay

19.33

CHIEF OF PARTY

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

PHOTO TOPOGRAPHIC MAP CHART CENTERLINE OF FLIGHT STRIP 72 20 ALUMINUM CONTROL SHEET OZYJS T 5081 AREA COVERED SHIMMECOCK BAY SORMORANT AIR HAMPTON BAYS -Z 4 40 40 72 40

15 x took

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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.	31	5082	2
e de la competitación de l	REGISTE	R NO. T 508	2	
State New York		*		
General locality Sov	th Shore of	long Islan	<u>ą</u>	··
Locality Outer Coast				
Scale 1:10,000	Date of Cor	otographs coest mpilation	Feb. 22	, 19 33 1933
Vessei Air-photo Co Reviewed and recomme Chief of party Roswel	mpilation I	erty No. 12	Roswell C.	Bolsted
Surveyed by U. S. Az	my Air Cor	o., (Captain	Willis R.	Taylor)
Surveyed by U. S. Ar Inked by J. R. Reyno	lds	Oo	t. 30, 1933	5
Heights in feet above	e <i>.</i>	to ground	to tops o	f trees
Contour, Approximate	contour, F	orm line int	erval	efeet.
Instructions dated	Novembe	r 15		, 19 32
Remarks: Actual scale	of cellulo	id sheet is	1:9,479.	Final sheet
to be reduced to 1:1	0,000 scale	by photo-1:	lthographic	process.
Polyconic Projection Projection Verified 1	by R.C	. Bolstad	Sept.	21, 1933 21, 1933
Control Plotted by Control Verified by	A. K. R. C	Spalding Bolstad Fitch	Sept. Sept.	22, 1933 22, 1933

FIELD REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 31

No report has been submitted by the field inspection party for this area. Referencesis 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 1933 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

Jr. H. & G. E.

- NOTES ON COMPILATION -

SHEET NO. 31

PHOTOS,	NO.	V-4 9	(881-8)	TO	NO.	V-67	(881-8))

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DATE OF PHOTOGRAPHS Feb. 22, 1933 TIME 11:18 A.M. BY DATE ROUGH RADIAL PLOT 9/1/33 SCALE FACTOR (1.055) 9/2/33 SCALE FACTOR CHECKED 9/3/33 PROJECTION 9/21/33 9/21/33 PROJECTION CHECKED CONTROL PLOTTED 9/22/33 9/22/33 CONTROL CHECKED / TOPOGRAPHY TRANSFERRED 9/25/33 TOPOGRAPHY CHECKED 9/28/33 SMOOTH RADIAL LINE PLOT 9/29/33 RADIAL LINE PLOT CHECKED 9/30/33 DEATIL INKED 10/4 - 10/30/33, i . . . 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 Quantuck Bay DATUM North American 1927 Latitude 40°- 48'- 26.752" (825.2) STATION Quogue C. G., 1933 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:-

Rub	Peak of Roof	Hug
Now	F. P.	Gun
Bal	No name (Chimney)	Ban
Dor	Taxi	Chimney
Zev	Zel	Mil
Chimney	Hog	Goo
Bag	Ros	Sil
Zoo	Bed	Kip
Bur	Gas	Gen
Tit	Row	Out
Оро	Lue	Hot

Junk	Why	Cut
Fly	Wet	Ear
Hic	Pa n	Tank
Fry	Yon	Fob
Kay	Rob	Gun
Kin	Saw	Mop
Lop	No name (Banner)	_

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:

O Cut - new position as determined by the radial plot lies 11 meters distant on azimuth 1600-00' (from north) 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.

O Gun - new position as determined by the radial plot lies 12 meters distant on azimuth 1400-00' (from north) 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.

O Fly - new position as determined by the radial plot lies 8 meters distant on azimuth 240°-00¹ (from north) 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.

O No name (Chimney) - (south of signal Taxi) - new position as determined by the radial plot lies 21 meters distant on azimuth 2100-00' (from north). 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 1:9,479.

*This is signal "Bay" on Planetable control sheet T4764 and has been used as a Hydro. Signal on H 5024. See also the teriew 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 Lieut.

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 steresocope 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 loose prominence at a distance (about 3 miles) to be shown on large scale charts only.

 Objects
- Classification (C) Isadmarks 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 no Class (A) Landmarks on this sheet.
There are no Class (A) Landmarks on this sheet.
There are no Class (A) Landmarks on this sheet.

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 9 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 understood 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.

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

VJ. P. O'Donnell

J. R. Reynolds

Assisted by

Roswell C. Bolstad

Jr. H. & G. E.

In addition to the list of vecoverable topographic islations listed on page 8 the following islation is whown on this wheat

Description Approx. Location
Water Tank 40°-49.5', 72° 32.2'

Remarks
Shown on A.C.S.
Reg. No.T4765 as
Station Tank

all necoverable objects whom on this wheel were directed on the aluminum planetable control wheels except be topographic whation "center of Bridge Control House" bited on opposite page. 1399 4/4/34

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS Objects CLASS (C) 1 - RES

Description	T.a	Position Latitude Longitude			_ Datum	Method of deter-		
	0	1	D.M. Meters	0	,	D.P. Meters		mination
(Fry) N. E. Gable of Mansion (C)	40	48	(562) 1289	72	34	(45) 1362	N.A. 1927	1933 A.C.S.
Center of Bridge Control House (C)	40	48	1360.1	72	35	681.5	ti	1933 e A.F.T.
(Coo) N. Gable of House at yaters edge (C)	40	48	(598) 1253	72	35	(634) 77 3	***	1933 A.C.S.
\int (Low) Chim. on E. Gable of Ho. (C)	40	48	(913) 938	72 ^	35	(452) 95 <u>5</u>	11	tt
(Row) So. Gable of bridge control house (C)			(995) 856	72	36	(1203) 204	11	11
(Hog) Chim. on E. Gable of Ho. (C)	40	48	(123 <u>3</u>) 618	72	36	(298) 1109	Ħ	11
(Taxi) Chim. on S. W. corner of house (C)	40	48	(1348) 503	7 2	36	(143) 1264	11	11
Chim. on E. center of Gable of * house (C)	40	48	(1 55 8) 293	7 2	36	(190) 1217	11	1933´ A.P.T.
Center of peaked (C)	40	48	(1810) 41	7 2	37.	(872) 535	11	н У.,
(Gas) Chim. at pk. of Ho. roof (C)	40	48	645	72	36	254	tt	1933 A.C.S.
(Eur) Chim. on E. Gable of Ho. (C)	40	48	5 06	72	37	974	11	ţţ

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

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

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

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

opposite See also reverse side This page. Title (Par. 56) (See enclosed Title Sheet)

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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)
- 1. 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.)
- 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 adequate for chart compilation. (Par. 16a, 43, 44.)

sand bars and shoal areas

- /6. The representation of low water lines, reclayacoralareefs and recens, 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 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. No changes in such details have been noted on this sheet.
- /8. The span, draw and clearance of bridges and shown. (Par. 16c.)
 For further information on bridges consult Lieut. A. P. Ratti's
 Aluminum Control Sheet, Réglino. 4764.
- /9. The data furnished by the Field Inspection is adequate. (See enclosed Field Report) Page /

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.

- 12. all necoverable topographic intotions whom on this wheel were located on aluminum planetable control wheels +4764 and +4765 except for intotion "Center Bridge Control House". No discription on Join 524 was rulmitted for this intotion which is described hiefly on loge. 8 of the disc. report.
 - 15. On page 8 of the disc neport are listed four topographic which have been information on the a. B. C. Sheeto T4764 and T4765 which have been informated on this wheet.

The redial plot was well wonthalled and there was no question of the accurate reporting of there objects on the photographs.

on wheely T4764 and T4765 the holes priched for the intolions are very large and in many cases the directions for locating intolions do most intersect at a common point. The holes priched for the triang, intolions are too large for accurate orientation of the planetable. The intolion point for intersection of the print of intersection of the directions. There wheels do not inducate careful planetable work.

The positions ishown on this wheel are considered the correct positions to there objects.

13.gg.

- 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, 60.) Submitted for this area by A.P. Ratti, 1933. See also page 6 of the desc. reportand Page 9 of desc. 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, 66k.)
- 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:

Swell C. Bolstad
Chief of Party

21. Remarks after review in office:

Reviewed in office by: B.g. gones

Examined and approved:

Chief. Section of Field Records

khief 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 T5082, 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 COMPILATION 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
- ✓ Gairs 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:-

Latitude 40°- 49'- 906 (1091)
Longitude 72°- 32'- 315

In addition to the above the enclosed list of Class (C) largers 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 eluminum 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 CCNTROL, (A) Sources, in the preceeding 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.

all the date 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 (lieut. 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. "Gair'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°-48' 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. Bolston Chief of Party, C. & G. S.