

5085

ORIGINAL

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R.S. Patton, Director

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAR 15 1934

State: New York

Acc. No.

DESCRIPTIVE REPORT

Topographic } Sheet No. T5085 5085
Hydrographic } 1214-2

LOCALITY

South Shore of Long Island

Outer Coast between Ridge Island
and Blue Point C. G. Station

1933

CHIEF OF PARTY

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5085

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. 34

REGISTER NO. T5085

State New York

General locality South Shore of Long Island

Locality Outer Coast between Ridge Island and Blue Pt. C. G. Sta.

Scale 1:10,000 Date of ~~Survey~~ ^{Photographs} Feb. 22, 1933
Date of Compilation Nov. 27, 1933

~~Survey~~ 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 U. S. Army Air Corp.

Inked by J. J. Lanigan

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

Contour, Approximate contour, Form line interval 5 feet

Instructions dated November 15, 1933

Remarks: Actual scale of celluloid sheet is 1:9,479. Comp-
pilation of single lens aerial photographs Nos. V-103 to V-119.
Final sheet to be reduced to 1:10,000 scale and printed by photo-
lithographic process.

Polyconic Projection by
Projection Verified by
Control Plotted by
Control Verified by

W. H. Burwell
A. K. Spalding
W. H. Burwell
J. P. Jones

Oct. 11, 1933
Oct. 11, 1933
Oct. 11, 1933
Oct. 13, 1933

FIELD REPORT
for
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 34

No report has been submitted by the field inspection party for this area. Reference is 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. Comdr. R. P. Eymen 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.

LIST OF RECOVERABLE OBJECTS.

The list of recoverable objects for this sheet is included in the descriptive reports of Topographic Sheet "E" and "F" of Lieut. Comdr. R. P. Eymen, 1933.

LANDMARKS.

The necessary landmarks were submitted by Lieut. Comdr. R. P. Eymen November 9, 1933 for the area included in this sheet.

MISCELLANEOUS.

Any additional notes and requirements affecting this area are included in the above mentioned reports of Lieut. Comdr. R. P. Eymen.

Submitted by


Roswell C. Bolstad

Jr. H. & G. E.

- NOTES ON COMPILATION -

SHEET NO. 34

PHOTOS, NO. V-103 (881-81) TO NO. V-119 (881-81)

DATE OF PHOTOGRAPHS Feb. 22, 1933 TIME 11:25 A. M.

	BY	DATE
ROUGH RADIAL PLOT	<u>A. K. Spalding</u>	<u>9/28/33</u>
SCALE FACTOR (1.055)	<u>A. K. Spalding</u>	<u>9/28/33</u>
SCALE FACTOR CHECKED	<u>J. J. Langan</u>	<u>9/29/33</u>
PROJECTION	<u>W. H. Burwell</u>	<u>10/11/33</u>
PROJECTION CHECKED	<u>A. K. Spalding</u>	<u>10/11/33</u>
CONTROL PLOTTED	<u>W. H. Burwell</u>	<u>10/11/33</u>
CONTROL CHECKED	<u>J. P. Jones</u>	<u>10/13/33</u>
TOPOGRAPHY TRANSFERRED	<u>W. H. Burwell 33%</u> <u>J. P. Jones 67%</u>	<u>10/13/33</u> <u>10/28/33</u>
TOPOGRAPHY CHECKED	<u>J. P. McDowell</u>	<u>10/29/33</u>
SMOOTH RADIAL LINE PLOT	<u>J. P. Jones</u>	<u>10/30/33</u>
RADIAL LINE PLOT CHECKED	<u>J. P. McDowell</u>	<u>10/31/33</u>
DEATIL INKED	<u>J. J. Langan</u>	<u>11/6 - 11/27/33 less</u> <u>two days on other work</u>
AREA OF DETAIL INKED <u>2.0</u> sq. Statute Miles (Land Area)		
AREA OF DETAIL INKED <u>3.1</u> sq. Statute Miles (Shoals in Water Area)		
LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore) <u>14.7</u> Statute Miles		
LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide) <u>8.2</u> Statute Miles		
GENERAL LOCATION <u>South Shore of Long Island</u>		
LOCATION <u>Outer Coast between Ridge Island and Blue Pt. C. G. Sta.</u>		
DATUM <u>North American 1927</u>		
Latitude <u>40° - 42' - 43.397" (1338.6 m.)</u>		
STATION <u>FLAT - 1932</u> Longitude <u>72° - 56' - 51.336" (1205.0 m.)</u>		

COMPILER'S REPORT
FOR
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 34

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 detail all data in connection with compilation of this sheet.

There is very little tide in Shinnecock Bay (about $\frac{1}{2}$ foot range at Bellport, from predicted tide tables) 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 Feb. 22, 1933 at 11:25 A. M. by Captain Willis R. Taylor of the U. S. Army Air Corps with their single lens camera and cover the compilation of photograph numbers V-103 (881-18) to V-119 (881-8) inclusive.

CONTROL.

(A) Sources.

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

- (a) Triangulation by R. P. Eyman in 1933.
- (b) 1933 Aluminum Control Sheet, (Eyman's field sheet "E") Reg. No. 6007
- (c) 1933 Aluminum Control Sheet (Eyman's field sheet "F") Reg. No. 6014

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 unplotable 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:-

Pole	Shak	Red Chy (on yel. ho.)
White Banner	Pip	White Banner
HI	Fire	Center of Grey Ho.
In	Hel	C. G. Tel. Call Sta.
Dun	Brick Chy.	Lookout Tower

Office Review

Station "White Banner". The radial plot is strong here and a good intersection was obtained for the location of this point. However, the spotting of the point on the photographs is questioned. As stated on the opposite page, the banner does not show on the photographs and the Field Inspection Party may have made an error in pricking the exact point.

Inspection of the aluminum planetable control sheet T6014 and the descriptive report does not show any indication of an error in the position as shown on that sheet.

The position shown on T6014 should be accepted as correct unless verification of the hydrography shows some further indication of an error in that position.

Station "Hi". The radial plot is strong and a good intersection was obtained for the location of this point. However, the spotting of the point on the photographed is questioned. The pole could not be seen on the photos, and the field inspection party may not have pricked the exact point. The pole is on a sand beach where the photographs would show very little distinctive detail.

The descriptive report (page 3) for aluminum planetable control sheet T6007 states that the 4.5 mile traverse from which station "Hi" was evidently located had a closing error of ~~6.5~~ meters due to shrinkage of the cord used as a tape. This closure was adjusted. The size of the closing error of the traverse indicates a probable error in all locations along this traverse. However, the air photo compilation agrees with other topographic stations located along this traverse and the difference between the air photo and planetable locations is in a direction approximately normal to the line of traverse. _(for sta. "Hi")

Conclusion. The planetable position of station Hi should be accepted unless verification of the Hydrography shows some further evidence of error in that position.

B.G. Jones

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.

(B) Errors.

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

⊙ H.I. ← new position as determined by radial plot lies 23 meters distant on azimuth 352° (from north) from the position as given on the Aluminum Control Sheet. The spotting of this signal on the photograph cannot be verified as the pole cannot be picked up with the aid of the stereoscope. Lat. 40°-41.4'
Long. 72°-59.3'
Sheet T6007

However, the position as given on the Aluminum Control Sheet would place the signal on the beach in front of the sand dune and it is very unlikely that a signal would be located in this position. It is apparently an error on the Aluminum Control Sheet position.

⊙ White Banner ← new position as determined by radial plot lies 21 meters distant on azimuth 470° (from north) from the position as given on the Aluminum Control Sheet. The spotting of this signal on the photographs could not be verified as it is not distinguishable under the stereoscope, however, it appears that this signal is in error on the Aluminum Control Sheet as their position would place the signal in front of the sand dune. * No name on
T6014
Lat. 40°-43.2'
Long. 72°-54.3'

The control is strong for this sheet and the radial plot gave good intersections. It is felt that both of the above listed signals are in error on the aluminum control sheet; there is the possibility that the field party may have spotted the positions of these two signals erroneously on the field prints.

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.

See opposite page

(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

Office Review

The differences between the air photo plot and planetable sheets in the location of H.W. line along the inside shore amount to from five to twenty meters.

These differences are for short sections of the shore line and do not indicate a swing in azimuth or considerable error in the radial plot.

The differences are caused partly by differences in interpretation of the H.W. line by the rodman and by the compiler of the air photo sheet, and by sketching between rod readings on the planetable sheets.

The differences east of Long. $72^{\circ}57'$ may also be caused by the large traverse adjustment mentioned on page 3 of the descriptive report for planetable sheet T6007.

The photo location on T5083 is considered the more accurate as the radial plot is strong; the compilation is on approximately 1:10,000 scale, whereas the planetable sheets are on 1:20,000; the compiler had the advantage of tracing directly from the photographs; and the compilation was made with knowledge of the differences which would tend towards increased care in plotting and tracing.

B.G. Jones

A comparison with the Hydrographic sheet H 5367a shows that the shore line as located on this air photo sheet does not conflict with the Hydrography.

OK

B.G. Jones

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.

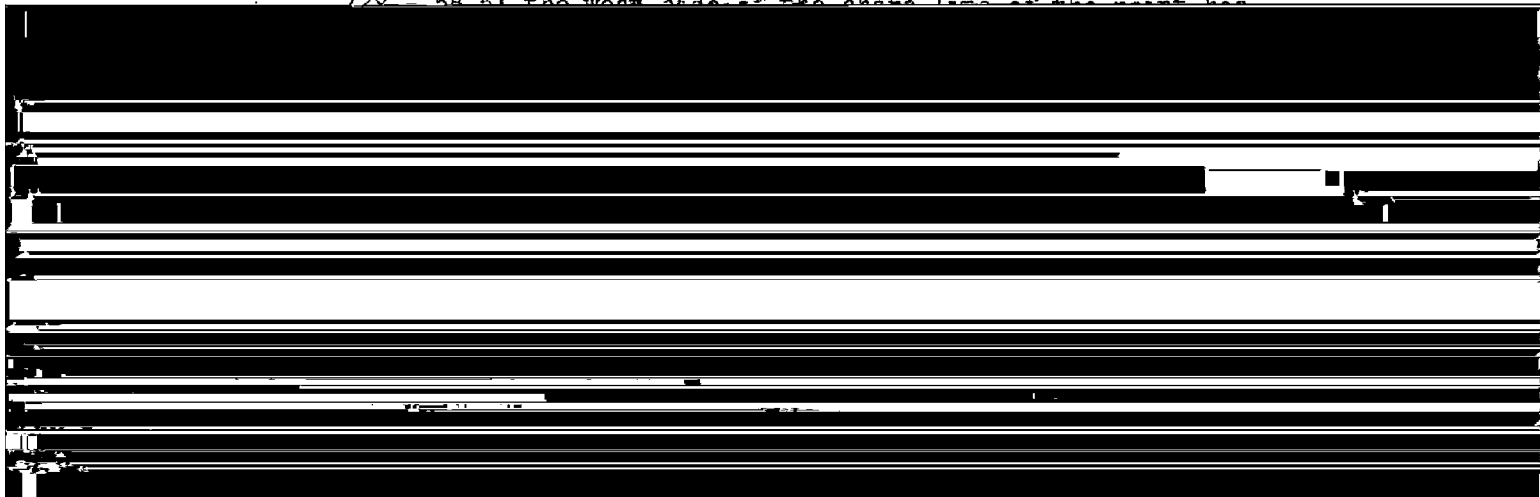
(E) Conflicting Names.

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 high water line as shown on the Aluminum Control Sheets agrees well with the high water line (in general) as shown on this Air-photo Topographic Sheet. At the junction of the two Aluminum Control Sheets (Field Sheets "E" and "F") in the vicinity of longitude $72^{\circ} - 56.3'$ the high water line along the outer coast fails to agree. In the vicinity of latitude $40^{\circ} - 43.3'$, longitude $72^{\circ} - 54.6'$ the small bight has evidently been sketched in by the topographer on the 1933 Aluminum Control Sheet and is in error.

In the vicinity of latitude $40^{\circ} - 42'$, longitude $72^{\circ} - 58.5'$ the west side of the shore line of the point has



of this sheet. As this list, however, only includes new landmarks and landmarks to be expunged and makes no mention of landmarks to be retained on the charts, these landmarks were checked by their stereoscopic prominence.

The following classification of landmarks was used:-

- 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 lose prominence at a distance (about 3 miles) - to be shown on large scale charts only.
- Classification (C) ~~Landmarks~~ ^{Objects} 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.

The landmarks herewith submitted cover all the landmarks for this sheet (including those previously submitted by Lieut. Comdr. R.P. Eyman in 1933, those to be retained and any new landmarks appearing stereoscopically prominent or designated as prominent by the field inspecting party on the field prints).

✓ The chimney shown on Chart 578 was located by the topographer on Lieut. Comdr. R.P. Eyman's Aluminum Control Sheet Field letter "E" and appears under the stereoscope to be a Class B landmark.

There are many other objects (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 last page 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 importance 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.

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.

Assisted by

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

Submitted by

J. J. Lanigan
J. J. Lanigan

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS (C) ~~LANDMARKS~~ ^{objects}

Description	Position						Datum	Method of determination
	Latitude			Longitude				
	O	'	D.M. Meters	O	'	D. P. Meters		
(In) N.W. Gable of Shack shed (C)	40	41	(668) 1183	72	59	(1345) 64	N.A. 1927	A.C.S. 1933 T6007
(Dum) W. Gable of Shack shed (C)	40	41	(736) 1115	72	58	(422) 987	"	" T6007
Brick Chy. (with weathervane) on S.W. Gable (C)	40	42	(180) 1671	72	55	(584) 824	"	" T6014
(Chy) Center of House (C)	40	42	(101) 1750	72	55	(627) 781	"	" T6014
(Flat) Center of tank on top of hill (C)	40	42	1338.6	72	56	1205.0	"	1932 Triang. T6044
Bellport C. G. Lookout Tower (C)	40	42	(557) 1294	72	55	(324) 1084	"	1933 A. C. S. T6014
Center of Grey Shack Shack shed (C)	40	43	(1158) 693	72	54	(1251) 157	"	" T6044
(Shak) Large Chim. on House (C)	40	41	1623.0	72	58	15.0	"	" T6007

Note: A. C. S. stands for Aluminum Control Sheet.

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. T5085.

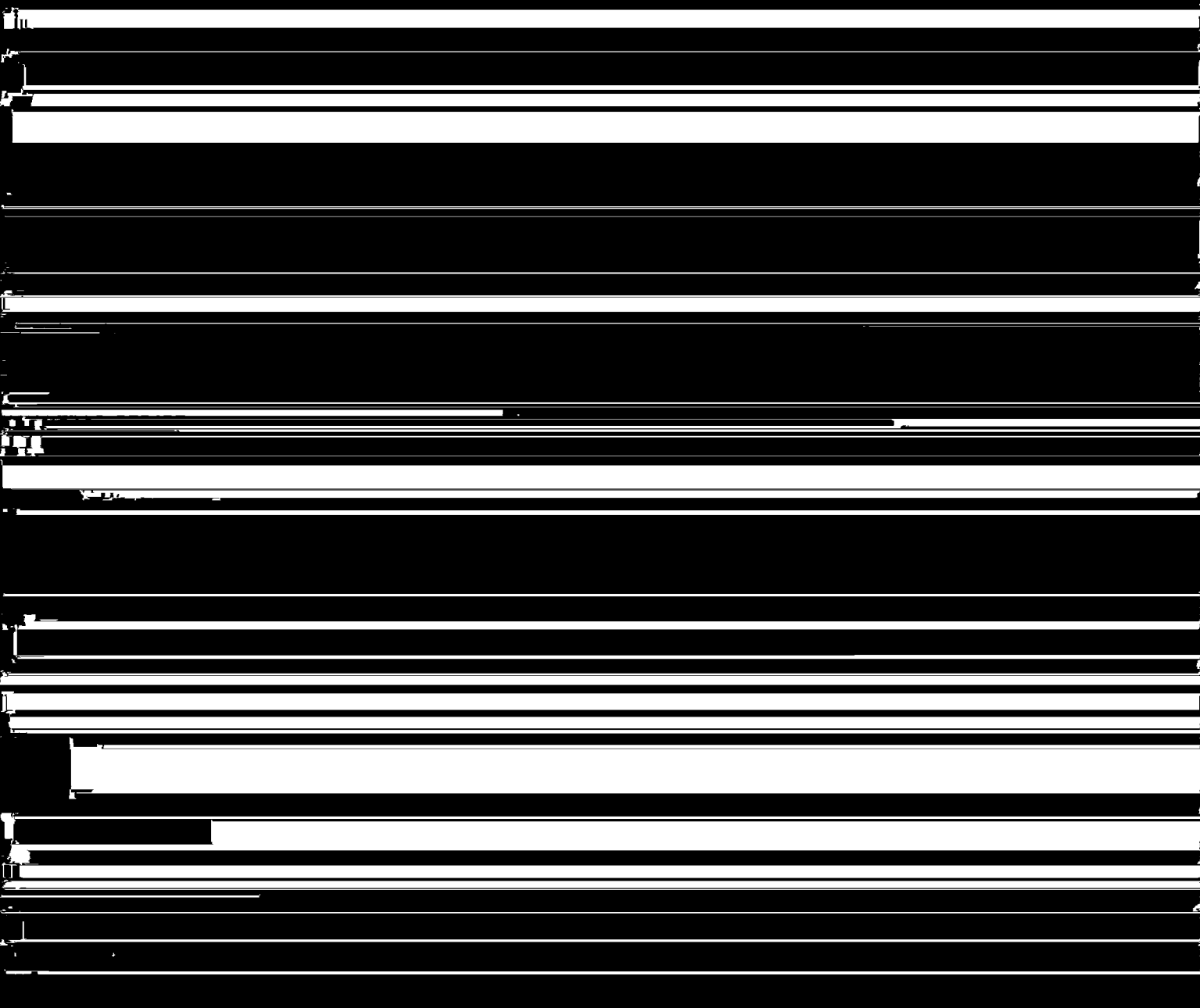
The only objects included on this list are those qualifying as Class C landmarks ~~objects~~.

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5085

Title (Par. 56) (See enclosed Title Sheet)


Chief of Party Roswell C. Bolstad Compiled by (See enclosed data sheet)



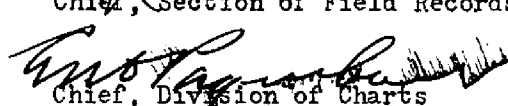
Project New York Air-Photo Compilation Instructions dated Nove. 15, 1932
Party No. 12

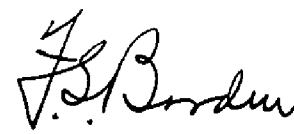

- /1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, and f.) Paragraph 8 not applicable to this party.
- 

- /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.)

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) *No desc. on Form 524 submitted as all recoverable topographic stations on this sheet were located on aluminum control sheets T6007 T6014*
13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) Submitted by R.P. Eyman 1933 for this area. See also Page 5 of the 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.
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. Comdr. R. P. Eyman's reports covering the topography executed in 1933 under his charge. *See also next page*
20. Examined and approved: 
Roswell C. Bolstad
Chief of Party
21. Remarks after review in office:

Reviewed in office by: 
Examined and approved: 
Chief, Section of Field Records

Chief, Division of Charts


Chief, Section of Field Work

Chief, Division of
Hydrography and Topography.

8

REPORT ON REVIEW OF SHEET

Air-photo Topographic Sheet, Re. No. T5085, 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. Comdr. R. P. Eyman, November 9, 1933 and includes only one object:-

✓ Flag Tower, Bellport Coast Guard

In addition to the above the enclosed list of Class (C) ~~objects~~ 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 aluminum control stations used for supplementary control on this sheet have been plotted from the positions given in the Descriptive Reports of Lieut. Comdr. R. P. Eyman's Topographic Sheets "E" and "F", 1933.

In regard to the last paragraph under CONTROL, (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.

(3) General.

The shore line on the northern section of Ridge Island was traced from the photostat of the aluminum control sheet, R. P. Eyman's Field Sheet "F", as the photographs did not cover this portion of the Island.


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