

# 5083

U. S. COAST & GEODETIC SURVEY  
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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. 32

REGISTER NO. T6083

State New York

General locality South Shore of Long Island

Locality Outer Coast between Potunk Point and Reeves Island

Scale 1:10,000 Date of ~~xxxxxx~~ <sup>Photographs</sup> Feb. 22, 1933  
Date of Compilation Nov. 16, 1933

~~xxxxxx~~ 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 William Barasch

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

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

Instructions dated November 15, 1932

Remarks: Actual scale of celluloid sheet is 1:9,479. Final

sheet to be reduced to 1:10,00 scale and printed by photogr  
lithographic process. Compilation of single lens aerial  
photographs Nos. V-67 to V-86.

Polyconic Projection by	J. P. O'Donnell	Sept. 30, 1933
Projection Verified by	R. C. Bolstad	Sept. 30, 1933
Control Plotted by	J. P. Jones	Oct. 2, 3, 1933
Control Verified by	J. C. Harmon	Oct. 3, 1933

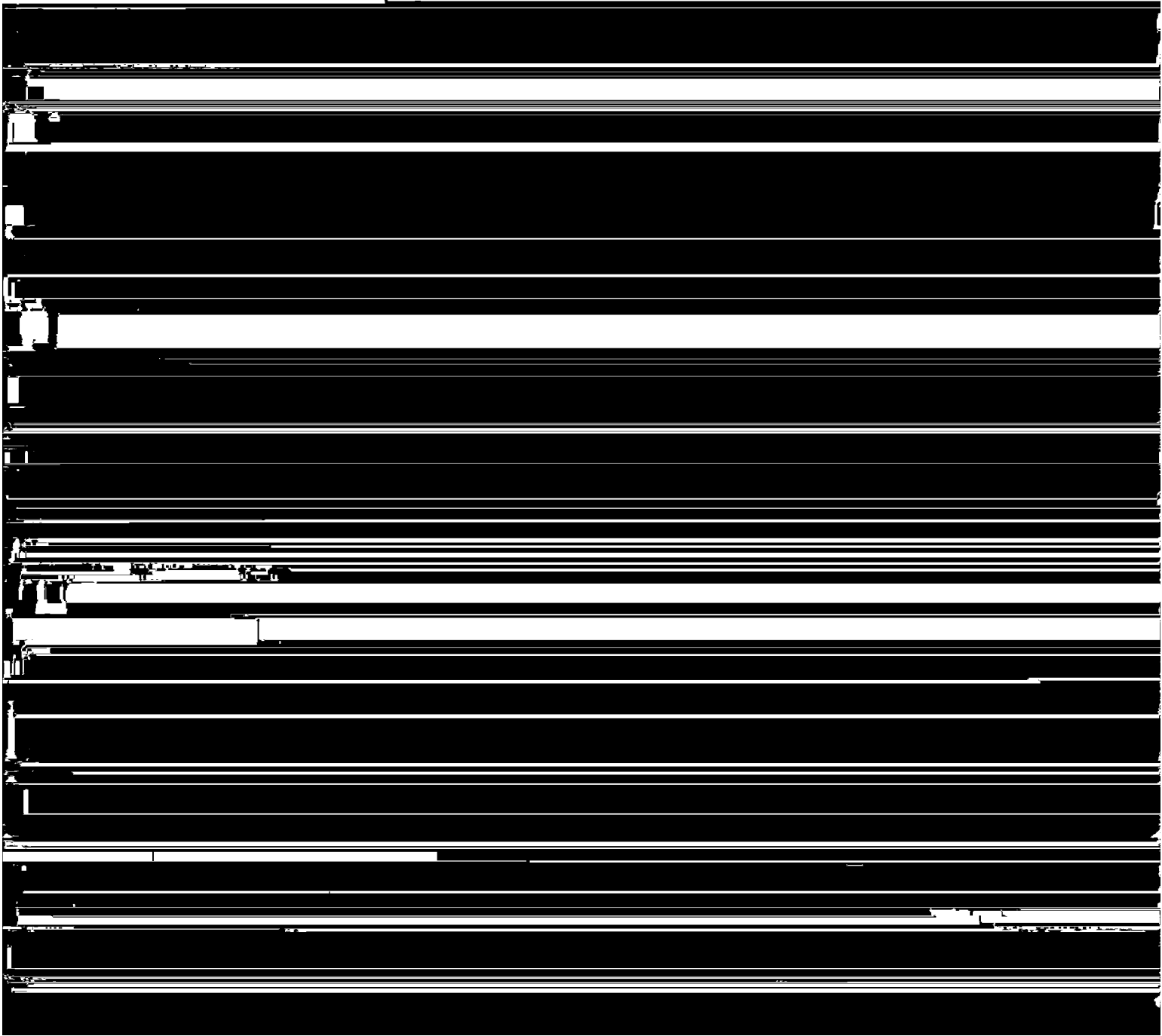
1

FIELD REPORT  
for  
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 32

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.

This sheet is controlled by the triangulation executed by the parties of Lieut. Comdr. R. P. Eyman (center and west portion of sheet) and Lieut. A. P. Ratti (east



## - NOTES ON COMPILATION -

SHEET NO. 32PHOTOS, NO. V-67 (881-8) TO NO. V-85 (881-8)DATE OF PHOTOGRAPHS Feb. 22, 1933 TIME 11:20 A. M.

	BY	DATE
ROUGH RADIAL PLOT	<u>A. K. Spalding</u>	<u>9/1/33</u>
SCALE FACTOR (1.055)	<u>A. K. Spalding</u>	<u>9/2/33</u>
SCALE FACTOR CHECKED	<u>R. C. Bolstad</u>	<u>9/3/33</u>
PROJECTION	<u>J. P. O'Donnell</u>	<u>9/30/33</u>
PROJECTION CHECKED	<u>R. C. Bolstad</u>	<u>9/30/33</u>
CONTROL PLOTTED	<u>J. P. Jones</u>	<u>10/2,3/33</u>
CONTROL CHECKED	<u>J. C. Harmon</u>	<u>10/3/33</u>
TOPOGRAPHY TRANSFERRED	<u>J. P. Jones</u>	<u>10/4/33</u>
TOPOGRAPHY CHECKED	<u>J. P. O'Donnell</u>	<u>10/4/33</u>
SMOOTH RADIAL LINE PLOT	<u>J. P. Jones</u>	<u>10/3 - 10/5/33</u>
RADIAL LINE PLOT CHECKED	<u>J. P. O'Donnell</u>	<u>10/5/33</u>
DETAIL INKED	<u>W. Barasch</u>	<u>10/9 - 11/16/33</u>

AREA OF DETAIL INKED 1.52 sq. Statute Miles (Land Area)AREA OF DETAIL INKED 3.9 sq. Statute Miles (Shoals in Water Area)LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)  
19.52 Statute MilesLENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)  
4.11 Statute MilesGENERAL LOCATION South Shore of Long IslandLOCATION Outer Coast between Patunk Point and Reeves IslandDATUM North American 1927

STATION	<u>Ich 1933 *</u>	Latitude <u>40° - 46' - 24.928" (769.0 m.)</u>
		Longitude <u>72° - 43' - 16.298" (382.2 m.)</u>

\* The position given for Ich, 1933 is Lieut. Comdr. R. P. Eyman's unadjusted position which does not agree exactly with that submitted by Lieut. A. P. Ratti but the difference is unplotable.

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 32GENERAL 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 (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 11:20 A. M. by Captain Willis R. Taylor of the U. S. Army Air Corps with their single lens camera and covers the compilation of photograph numbers V-67 (881-8) to V-85 (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) Triangulation by A. P. Ratti in 1933. *T4763*
- (c) 1933 Aluminum Control Sheet, Reg. No. *T4764*

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:-

SHAC	FEW	LUB	SOT
DUN	CAN	HAG	HOS
TIN	SAN	SUP	REM
SAD	TEL	VAN	ZIP
RAC	ROG	NUN	EON
RAN	FAT	SAM	YAP
POP	MOK	RAM	RUB
		MO	LIZ

## REVIEW

On page 10 of this report, is listed a difference of seven meters in the location of station Zip. The spotting of this object on the photographs is not questioned and the position as given by this sheet T5083 is considered correct. The difference of .35 M M is barely larger than the size of the hole pricked for the station point on T4764.

Stations Hag, Hos and Yap. The radial plot is strong for these locations and the spotting of the objects on the photographs is not questioned. The appearances of T4764 do not indicate careful planetable work. These stations are considered correct as shown on the air photo sheet.

Station Rac. Since the spotting of this object on the photographs is questioned, the position as shown on the aluminum planetable control sheet T4763 should be considered correct unless the verification of the hydrography indicates an error in that position.

Station Fat. This station is near the center line of the photo flight and the intersection locating it on the air photo sheet is weak, particularly in the East-West direction. However, the station cannot logically be moved down to agree with the position given on T4764. The air photo sheet agrees with T4765 for a number of other stations in this vicinity and the radial plot is well controlled. The difference of 13 meters is not large when plotted on the 1:20,000 scale on T4764 and could have been caused by a small error in orienting the planetable. The large holes pricked for triangulation and topographic station marks on T4764 do not indicate careful planetable work.

The air photo sheet is on a scale of 1:9479 and is considered to give the stronger position for this station.

*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 relocations of spotted Aluminum Control Sheet Signals resulted:

✓ ⑩ Rac - new position as determined by radial plot lies 12 meters distant on azimuth 137°- 24' (from north) from the position as given on the Aluminum Control Sheet. This signal was spotted on the field print by the field inspection party and the spotted position could not be verified by the office compilation party, therefore, the error may be due to wrong spotting rather than to an erroneous position on the Aluminum Control Sheet. However, the air-photo shore line at this point agrees well with the Aluminum Control Sheet shore line. T4763 ✓

✓ ⑪ Fat - new position as determined by radial plot lies 13 meters distant on azimuth 195°- 36' (from north) from the position as given on the Aluminum Control Sheet. This signal is a chimney on the north end of a house and is easily identified with the aid of the stereoscope so there could be no question as to the spotting on the photograph. Signal Rog and the shore line in this vicinity check the radial plot location so it appears that this signal has been erroneously located on the Aluminum Control Sheet. T4764 15°-36'

34°-36' ✓ ⑫ Hag - new position as determined by the radial plot lies 11 meters distant on azimuth 214°- 36' (from north) from the position as given on the Aluminum Control Sheet. As this signal is a small shack and is easily identified with the aid of the stereoscope the spotting on the photograph cannot be in error. T4764

✓ ⑬ Hos - new position as determined by the radial plot lies 6 meters distant on azimuth 206°- 44' (from north) from the position as given on the Aluminum Control Sheet. This signal is located on a point and the spotting is very unlikely to be in error. T4764

✓ ⑭ Yap - new position as determined by the radial plot lies 2 meters distant on azimuth T4766

There appears to be a conflicting name on this sheet, the name Potunk, near West Hampton Beach, being given on the U. S. Coast and Geodetic Survey Charts as Petunk. It should be Potunk as it is printed that way on the Coast Guard Building there and is given as Potunk on the Aluminum Control Sheet and the U. S. Geological Survey map of that area.

Potunk P+50 is U.S.G.B. decision  
2-1977




(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.

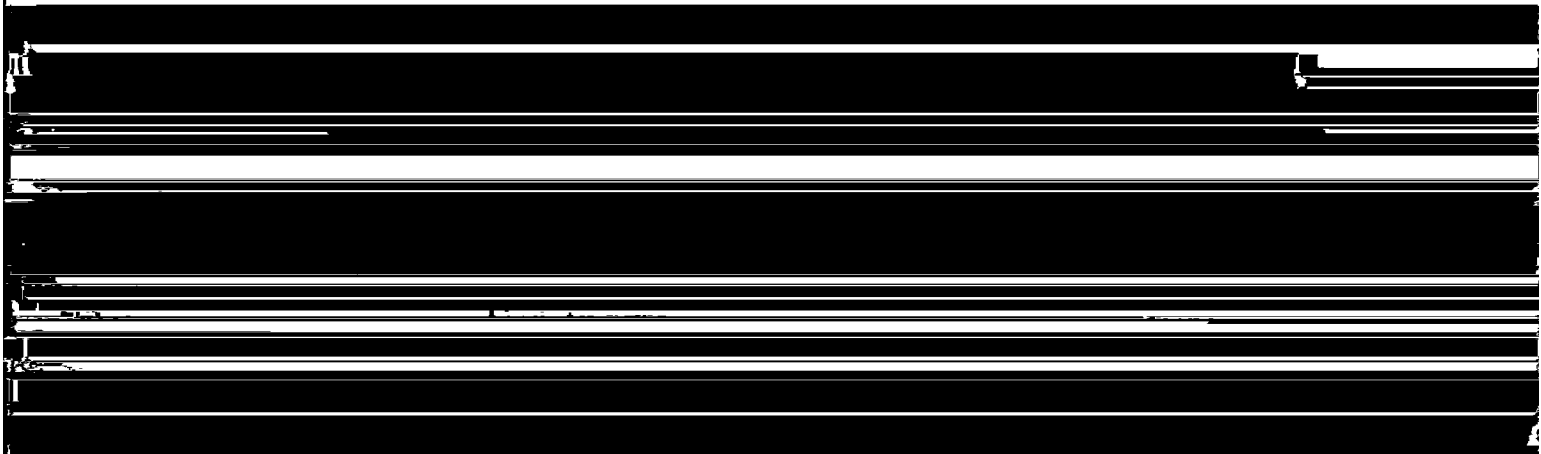
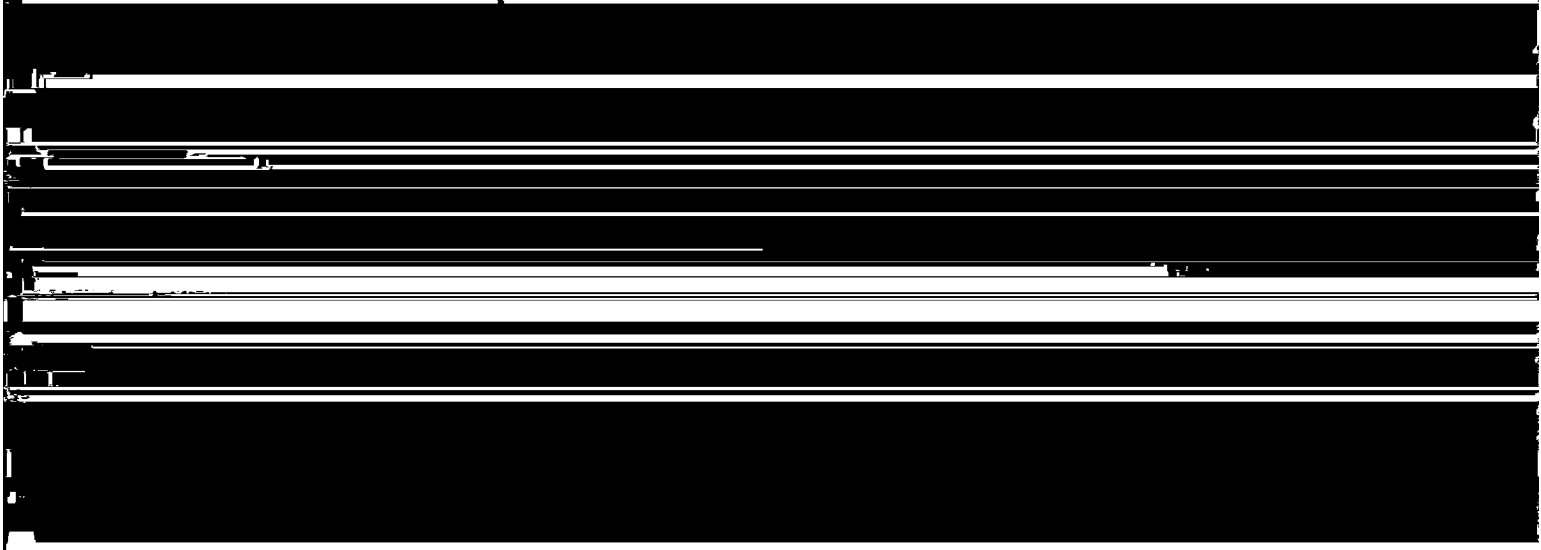


(B) Adjustments of Plot.

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.



## REVIEW

The point of land at the west side of Moriches Inlet as shown on this sheet T5083 extends out over a seven foot sounding shown on H5322 and extends about 70 meters farther northwest than the same point as shown on the aluminum control sheet T4763.

The photographs were taken February 22, 1933, and Lieutenant Bolstad's field inspection party made adequate measurements for defining the high water line on the photographs.

The difference in location of the shoreline on this point as shown on the two sheets represents the change between the date of the photographs and the date of the planetable survey which is given in the Descriptive Report for T4763 as from April to June, 1933.

The shoreline from the photos has been retained on the air photo sheet and the shoreline from the planetable sheet is also shown as a heavy broken line with an appropriate note.

*B. G. Jones*

two sheets it was very difficult to obtain a satisfactory junction; this had to be done by subdividing the sheet in this area into small squares and proportioning the detail within each square after which it was checked by the proportional dividers. Should a discrepancy between the junctions exist the detail on this sheet should be adhered to as the control and radial plot are stronger.

The high water line as shown on the aluminum control sheet agrees well 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 shore line as run in on the aluminum control sheets is shown on the celluloid compilation sheet in blue and any variations from the Air-photo shore line is readily apparent.

#### 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 stereoscope 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 lose prominence at a distance (about 3 miles)- to be shown on large scale charts only.

Classification (C) ~~Landmarks~~ <sup>objects</sup> 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 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.


#### 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.

Submitted by   
William Barasch

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

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

objects  
CLASS (C) LANDMARKS

Description	Position						Datum	Method of deter- mination
	Latitude			Longitude				
	°	'	D.M. Meters	°	'	D.P. Meters		
Center of Bridge			(339.3)			(363.0)	N.A.	
* Control House	(C)	40 47	1511.5	72 38		1043.9	1927	A.P.T.
Moriches C. G.								
Lookout			(1048.4)			(1002.8)		
* Cupola	(C)	40 46	802.4	72 43		404.4	"	"

Note: A. P. T. stands for Air-photo Topography.

For classification (shown in parenthesis after description) see paragraph Landmarks in Descriptive Report for Air-photo Topographic Sheet, Reg. No. T5083.

- \* These stations are very prominent under the stereoscope and could be listed as Class (B) landmarks to be charted on U. S. C. & G. S. Chart 578. However, since they were not submitted by Lieut. A. P. Ratti in his Report of August 1, 1933 they have been listed here as Class (C) landmarks.

objects

review -

None of the topographic notations listed on the opposite page are shown on this sheet as topographic notations. On this sheet the full shapes of the houses are shown without the point within a circle signifying a topographic notation.

B.G.G.

## LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

*objects*  
CLASS (C) LANDMARKS

Description	Position						Datum	Method of deter- mination	
	Latitude			Longitude					
	°	'	D.M. Meters	°	'	D.P. Meters			
(Eon) North peak of roof	(C)	40	47	(627) 1224	72	38	(400) 1007	N.A. 1927	1933 A.C.S.
(Yap) North chimney	(C)	40	47	(533.3) 1317.5	72	38	(710.6) 696.3	"	1933 A.P.T. *
(Rem) Chim. W. gable	(C)	40	47	(732) 1119	72	39	(1249) 158	"	1933 A.C.S.
(No name) Chim. S. Gable	(C)	40	47	(1116) 735	72	39	(506) 901	"	1933 A. P. T.
(Nun) Chimney on house	(C)	40	47	(1529) 322	72	40	(458) 949	"	1933 A.C.S.
(Van) Roof Pk. (C)	(C)	40	47	(1620) 231	72	40	(211) 1196	"	"
(Lub) Chimney on house	(C)	40	46	(50) 1801	72	41	(771) 636	"	"
(Mok) North gable east wing	(C)	40	46	(178) 1673	72	41	(750) 657	"	"
(Fat) Chim. on N. end of house	(C)	40	46	(157.4) 1693.4	72	41	(277.7) 1129.4	"	1933 A.P.T.
(Rog) Chim. S. side of house	(C)	40	46	(377) 1474	72	41	(253) 1154	"	1933 A.C.S.
(Can) Chim. S. side of house	(C)	40	46	(650) 1201	72	42	(888) 519	"	"
(Few) West Chimney	(C)	40	46	(635) 1216	72	42	(589) 818	"	"
(Sad) East gable of house	(C)	40	46	(986) 865	72	43	(67) 1340	"	"

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

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. T5083.

\* Corrected Aluminum Control Sheet position obtained from Air Photo Topography. *see also opposite page.*

## REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5083

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.)
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.)  
*See*
6. The representation of low water lines, ~~reefs, coral reefs and rocks~~ <sup>mud flat and shoal areas</sup>, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) *See Par. c Page 6 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 are shown. (Par. 16c.)  
Data as shown obtained from Aluminum Control Sheet, Lieut. A. P. Ratti's Field Sheet No. 4764.
9. The data furnished by the Field Inspection is adequate.  
(See enclosed Field Report)

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 enclosed Field Report and Remarks below) *The 2 stations described on Page 8 were located solely by this compilation and no descriptions on Form 524 were submitted for those stations.*
- ✓13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) *Furnished by A.P. Ratti, 1933. See also pages 8 and 10 of this 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. A. P. Ratti's reports covering the topography executed in 1933 under his charge.

20. Examined and approved:

*Roswell C. Bolstad*  
Roswell C. Bolstad  
 Chief of Party

21. Remarks after review in office:

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

Examined and approved:

*L.O. Colburn*  
 Chief, Section of Field Records

*Ernest Papenbaur*  
 Chief, Division of Charts

*J.H. Borden*  
 Chief, Section of Field Work

*Glenn*  
 Chief, Division of  
 Hydrography and Topography.

# REPORT ON REVIEW OF SHEET

Air-photo Topographic Sheet, Reg. No. T5083, 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 two objects:-

- ✓ Potunk Coast Guard Flagstaff
- ✓ Moriches Coast Guard Flagstaff

In addition to the above the enclosed list of Class (C) ~~landmarks~~ <sup>objects</sup> 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 scaled positions obtained directly from the A. C. Sheets.

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.

The supplementary control station, Zip, was found to be in error on the aluminum control sheet and was not listed in the preceeding COMPILER'S REPORT. The new position as determined by the radial plot lies 7 meters distant on azimuth 260° (from north) from the position as given on the aluminum control sheet. The spotting of this signal would very unlikely be in error

T4764

because of the well defined detail in this vicinity.

(3) Sheet Junctions.

The method of making sheet junctions where a large variation in scale between the two sheets exists (as explained in the preceeding COMPILER'S REPORT) was resorted to in order to eliminate the additional work of making a tracing of the junction detail and to save the time involved in forwarding to the Washington Office for photostating to the proper scale and returning (besides holding up both sheets involved, pending the return of the photostats).

(4) Wreck.

✓ A ship wreck has been shown on this sheet at latitude 40°- 45' plus, longitude 72°- 45' plus, (in the vicinity of Triang. Sta. Tut, 1933). This wreck was not shown on the aluminum control sheet of this area but does show on the photographs and was noted on the field photographs by the field inspection party. It appears from stereoscopic inspection that part of this wreck is above the water level.

(5) General.

It has been the endeavor in the compilation of