

# 5059

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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton *Director*

State: New York

## DESCRIPTIVE REPORT

*Topographic*  
*Hydrographic*

Sheet No. T5059

### LOCALITY

South Shore of Long Island

Fire Island Inlet

1933

### CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1921

# 5059

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. 9

REGISTER NO. T5059 5059

State New York

General locality South Shore of Long Island

Locality Fire Island Inlet

Scale 1:10,000 Date of ~~Survey~~ <sup>Photographs</sup> March 18, 1933  
Date of Compilation Nov. 14, 1933

Vessel 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 (See data sheet enclosed in Descriptive Report for this sheet)

Inked by J. G. Albert

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 1:10,941. Com-  
pilation of five lens aerial photographs Nos. 139 to 160 (576-14).  
Final sheet to be enlarged to 1:10,000 scale and printed by photo-  
lithographic process.

FIELD REPORT  
for  
AIR PHOTO TOPOGRAPHIC SHEET NO. T5059

No report has been submitted by the field inspection party for this area. Reference is made to the notes submitted in the Descriptive Reports of Lieut. Comdr. R. P. Eyman for Field Sheets "B" and "C", 1933.

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. Eyman in 1933 forms the basis of control for this area. Lieut. Comdr. R. P. Eyman's 1933 unadjusted field positions were used on this sheet. The discrepancy between these positions on the west end and those of Lieut. C. D. Meaney's 1926 positions was adjusted in Lieut. Meaney's arc in accordance with instructions in Director's letter dated Dec. 7, 1933 (Ref. 26 AHH-1990). *H and T \**

LIST OF NAMES.

No new names were submitted or 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 Sheets "B" and "C" of Lieut. Comdr. R. P. Eyman, 1933. *6012*

*6011*  
LANDMARKS.

The necessary landmarks were submitted by Lieut. Comdr. R. P. Eyman 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. Eyman.

Submitted by

*Roswell C. Bolstad*  
Roswell C. Bolstad

Jr. H. & G. E.

*\* This consisted of the adjustment of 2 1/2 meters difference in long. at the connection between Meaney's 1926 and Eyman's 1933 triangulation. Only the field computations were available when this sheet was plotted. B.G. Jones 4/13/34*

## - NOTES ON COMPILATION -

SHEET NO. 9

PHOTOS, NO. 139 (876-14) TO NO. 160 (876-14)

DATE OF PHOTOGRAPHS March 18, 1933 TIME 10:00 A. M.

	BY	DATE
ROUGH RADIAL PLOT	<u>J.B. Reynolds</u>	<u>8/24 - 8/28/33</u>
SCALE FACTOR (0.914)	<u>J.J. Langman</u>	<u>9/1, 2/33</u>
SCALE FACTOR CHECKED	<u>E.H. Spalding</u>	<u>9/2/33</u>
PROJECTION	<u>T.M. Price</u>	<u>9/5/33</u>
PROJECTION CHECKED	<u>E.L. Fitch</u>	<u>9/5/33</u>
CONTROL PLOTTED	<u>J.J. Langman</u>	<u>9/6/33</u>
CONTROL CHECKED	<u>W.H. Burwell</u>	<u>9/7/33</u>
TOPOGRAPHY TRANSFERRED	<u>J.G. Albert</u>	<u>9/13/33</u>
TOPOGRAPHY CHECKED	<u>E.L. Fitch</u>	<u>9/13/33</u>
SMOOTH RADIAL LINE PLOT	<u>J.G. Albert</u>	<u>9/9 - 9/13/33</u>
RADIAL LINE PLOT CHECKED	<u>E.L. Fitch</u>	<u>9/13/33</u>
DETAIL INKED	<u>J.G. Albert</u>	<u>9/13 - 11/14/33 less 11 days</u>

AREA OF DETAIL INKED 5.5 sq. Statute Miles (Land Area)AREA OF DETAIL INKED 6.4 sq. Statute Miles (Shoals in Water Area)LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)  
28.0 Statute MilesLENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)  
72.0 Statute MilesGENERAL LOCATION South Shore of Long IslandLOCATION Fire Island InletDATUM North American 1927

STATION Fire Island L.H., 1933 Latitude 40° - 37' - 56.416" (1740.2 m.)  
 Longitude 73° - 13' - 08.520" (200.2 m.)  
 (Eyres unadjusted)

3

3

COMPILER'S REPORT  
for  
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 9

GENERAL INFORMATION.

The only available aids in the compilation of this sheet have been secured from the notes on the field prints, the preceeding 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.

At the time that these photographs were taken (March 18, 1933 at 10:00 A. M.) the tide, at Fire Island Inlet, was only about one-half foot above mean low water and its effect would not be apparent in the interpretation of the photographs. The above data was obtained from predicted tide tables.

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 numbers 139 (876-14) to 160 (876-14), 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, unadjusted.
- (b) 1933 Aluminum Control Sheet, (Eyman's field sheet "B") Reg. No. 6012
- (c) 1933 Aluminum Control Sheet, (Eyman's field sheet "C") Reg. No. 6013

The field party's geographic positions, unadjusted, were used; these are on the N. A. 1927 Datum. See preceeding Field Report, paragraph on CONTROL.

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:-

Old Shack  
Halfway House  
Green  
Red

They have been shown on the delluloid topographic sheet by a double blue circle (⊙) together with the name (as shown on the Aluminum Control Sheets) in blue. 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.

All aluminum control stations used for supplementary control on this sheet have been plotted from the positions obtained from Lieut. Comdr. R.P. Eyman's Descriptive Reports, Field Letters "B" and "C".

6011 6012

(B) Errors.

No errors in the control stations were discovered in compiling this sheet.

The control on this sheet is strong since there are a number of triangulation stations in the vicinity covered by this sheet. The topo stations, however, are few in number due undoubtedly to the fact that most of the land area covered by this sheet is beach and marsh. Since the date that the aluminum control-sheets were made up is considerably later than the date that the photographs were taken, it is very probable that any banners or flags that might have been used for control stations were not up at the time the field inspection was made of this area, and therefore, were not spotted on the photographs.

It is to be noted that the Aluminum Control Sheets were executed on scales of 1:10,000 and 1:20,000 whereas this sheet is on a scale of 1:10,941.

(C) Discrepancies.

No other control stations established by other organizations were used in this compilation.

A discrepancy was discovered at the junction of Lieut. Comdr. R. P. Eyman's Field Sheets "C" and "D". At this point, Longitude 73°- 15' (approximately), the South Shore of Fire Island differs by about 10 meters on the above mentioned sheets.

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 have been affected by tilt and scale fluctuation. This was evident from the fact that when one wing print of a photograph was oriented the opposite wing print was off considerably. It was necessary to constantly adjust the photographs during the detailing in order that the work would be accurate.

(C) Interpretation.

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 near the south shore of Fire Island was not clearly evident from the photographs but is shown by a dot-dash line which was obtained from the topo sheet.

The single dashed line on the land area was used to indicate boardwalks connecting the houses. This information was obtained from notes on the field prints.

At Democrat Point (west end of Fire Island) <sup>T6012</sup>  
the shore line was taken from the topo sheet as  
that is of later date than the photographs for this  
area. The shore line as taken from the photographs  
is shown in blue as a dashed line. It is believed  
that the variation is due to a shifting sandy beach.

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.

The channel markers and buoys were taken from  
the aluminum control sheets and their geographic  
positions from the Descriptive Reports of Lieut.  
Comdr. R. P. Eyman, Field Sheets "B" and "C", since  
it was impossible to spot either the channel markers  
or the buoys from the photographs. *(Buoys have been removed from the compilation. Bgg)*

Triangulation station, "Shack N. Side Cedar  
Island", was spotted on the photographs by using  
the stereoscope and description given by the field  
inspection party.

(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 well with that obtained from the photographs  
except in a few localities where there are slight differences.

One of the principal variations in the shore line is  
stated under Interpretation above where there was some question  
as to whether the shore line given on the Aluminum Control Sheet  
or that shown on the photographs should be accepted.

The shore line between longitudes 73°- 20' and 73°- 22'  
differs from that shown on the topo sheet and the final position  
was taken as mid-way between that shown on the topo sheet and that  
on the photographs. It is believed that the variation is due  
to a shifting sand and mud flats.

The shore line along the south shore of Fire Island in  
the vicinity of longitude 73°- 17' varies slightly from that  
given on the topo sheet but it is believed that this is like-  
wise due to a shifting sandy beach.

The shoal area in the vicinity of triangulation station  
Cap was not shown as the boundaries were not well defined.  
Between Wawa Yanda Yacht Club and Sexton Island the shoal area  
is questionable, it being rather indistinct in the photographs.

*See also the review at back of this  
report. Bgg*

The detail on Fire Island was interpreted differently from that of the topo sheet. Where the topo sheet showed the entire island as sand dunes the photographs showed it to be largely marsh, grass and brush with only scattered sand dunes. The photographs were followed in drawing the detail topography.

In Fire Island Inlet a long dock extends out from the south shore of Long Island proper at approximately longitude 73°-16', latitude 40°-38'. This dock shows up clearly on the photographs and has been shown on the celluloid sheet. It is not, however, shown on the aluminum control sheet of this area and no mention is made of its being destroyed in Lieut. Comdr. R. P. Eymen's Descriptive Reports. Since the dock extends out into the water for approximately 276 meters and is surrounded by shoal areas it is undoubtedly of major importance to navigation.

*See also the  
review of  
back of this  
report  
B338*

There are numerous small docks in the vicinity of Oak Beach but they appear on the topo sheet and have, likewise, been shown on this sheet.

#### LANDMARKS.

The list of chartable landmarks for this sheet includes only two objects both of which were submitted by Lieut. Comdr. R. P. Eymen, November 9, 1933:-

- ✓ Watch Tower, Fire Island, C. G.
- ✓ Flag Tower, Oak Beach, C. G.

Triang. Sta. Windmill (near "Drake"), used as control on this sheet has, since the photographs were taken, been destroyed and therefore does not appear on the sheet (see Lieut. Comdr. R. P. Eymen's Descriptive Report "B").

Landmark "Cupola" also is not shown since it is no longer in existence, (see Lieut. Comdr. R. P. Eymen's Report of November 9, 1933).

Triang. Sta. "Marker" was not used for control on this sheet since it was impossible to spot it on any of the photographs, due apparently to a poor image.

~~objects~~ 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 as they are prominent enough on this scale (about 1:10,000) and may be used to obtain hydrographic "fixes". "Northerly of Twin Gables" is taken from the Air Photo Topography and is marked with a small black circle. The remainder of the enclosed Class (C) landmarks are triangulation stations and are marked with a small black triangle. All of the enclosed ~~landmarks~~ <sup>objects</sup> were spotted on the photographs by the field inspection party and were also used for supplementary control since they were located on the Aluminum Control Sheet.

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 also 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.

The landmarks shown on this sheet and included in this report cover all landmarks (those previously submitted, those to be retained and any new landmarks) for the area covered by this sheet.

#### 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 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 photolithographic 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.

*J. G. Albert.*

Submitted by J. G. Albert

*A. K. Spalding*

Assisted by A. K. Spalding

*The value of 2 to 4 meters given above is high for work on this scale - a better estimate ~~is~~ is an accuracy of location of 2 to 4 meters for interested points and 2 to 8 meters for other detail*

*B. G. Jones*

## LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS (C) ~~LANDMARKS~~ <sup>objects</sup>

Description	Position						Datum	Method of deter- mination
	Latitude			Longitude				
	°	'	D.M. Meters	°	'	D.P. Meters		
Chimney Sanitorium (C)	40	38	(959.9) 890.8	73	18	(336.1) 1073.9	N.A. 1927	1933 Triang.
E. Flagpole (Whig Inlet)(C)	40	39	(1731.7) 119.1	73	14	(533.3) 876.4	"	"
W. Flagpole (Whig Inlet)(C)	40	39	(1805.1) 45.7	73	14	(468.5) 941.2	"	"
(Tow) Tower Oak Island (C)	40	38	(744.9) 1105.9	73	17	(729.7) 680.0	"	"
Shack, N.side Cedar Id. (C)	40	38	(246.8) 1604.0	73	20	(551.9) 857.8	"	"
Northerly of Twin Gables (C)	40	38	(964.3) 443.2	73	17	(55.9) 1789.0	"	A.P.T.

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

Name preceeding 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. T5059.

## REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T5059

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.) (See Compiler's Report enclosed, paragraph, Adjustments of Plot)
- ✓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.)
- ✓6. The representation of low water lines, ~~reefs, coral reefs and~~ sand bars, mud flats and shoal areas, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) (*See par c page 5 of the 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. Only such changes as noted in the enclosed Compiler's Report, COMPILATION, (C) Interpretation; COMPARISON WITH OTHER SURVEYS; and LANDMARKS have been made on this sheet.
- ✓8. The span, draw and clearance of bridges are shown. (Par. 16c.) (There are no bridges on this sheet)
- ✓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~~ <sup>No</sup> 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)
- ✓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. See also page 6 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 Complier'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.

20. Examined and approved:

*Roswell C. Boistad*  
Roswell C. Boistad  
 Chief of Party

21. Remarks after review in office:

*See pages 4 and 5 following*

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

Examined and approved:

*E. H. Green*  
 Chief, Section of Field Records  
*L. O. Polbert*  
 Chief, Division of Charts

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

REPORT ON REVIEW OF SHEET

Air-photo topographic sheet, Reg. No. T5059, has been reviewed together with the Descriptive Report and all requirements are satisfied in accordance with requirements listed in the U. S. C. & G. S. pamphlet NOTES ON THE COMPILATION OF PLANIMETRIC LINE MAPS, 1933.

No additional surveying is recommended.


ADDITIONAL NOTES.(1) Landmarks.

Objects listed as Class (C) <sup>objects</sup> ~~landmarks~~ (see paragraph LANDMARKS in COMPILER'S REPORT and attached list) have been shown on this sheet and are of particular value because:-

- (a) They may be identified and used to obtain accurate hydrographic "fixes" (within scale limits mentioned in COMPILER'S REPORT).
- (b) They may be used for control in future topographic surveys. (position error of object is not expected to exceed 2 meters)
- (c) In some cases they may not be conspicuous enough from the water area to be of value for ship navigation but may be of value for aerial navigation.

(2) Shoal Areas.

Where a marked contrast between deep and shoal water was not apparent on the photographs, the broken dashed line was ended. This gradual blending from the appearance of shoal to deep water is due to the gradual increase in depth of the water. This sheet shows only the shoal areas apparent on the photographs.

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

## REVIEW

At Democrat Point the H.W. shown is from planetable sheet 6012, May 1933. The H.W. line from the photographs of ~~May~~<sup>March</sup> 18, 1933, is shown as a heavy broken line to indicate the change in this point.

West of Longitude  $73^{\circ}19.8'$  this sheet differs with planetable sheet 6011 (scale 1:20,000) in the interpretation and location of detail between the outside shoreline and the channel south of Cedar Island. In Latitude  $40^{\circ}38.3'$ , Longitude  $73^{\circ}19.8'$  the H.W. line and islands are entirely different from the planetable sheet. At this point and along the inside shore from Longitude  $73^{\circ}19.8'$  westward, this sheet is in more detail and shows the correct interpretation. The H.W. line along the inner edge of the sand was partly sketched in on the photographs by the Field Inspection Party and the islands show clearly on the photographs.

Along the outside shoreline west of Longitude  $73^{\circ}19.5'$ , the H.W. line has been changed in the office to agree with plane table sheet 6011. The descriptive report on page 5 states that the H.W. line adopted by the compilation party was halfway between that marked on the photographs by the Field Inspection Party and that shown on the plane table sheet. The compromise H.W. line would be neither the H.W. line at the date of the photographs nor at the date of the plane table survey and for that reason has been changed to agree with the plane table sheet.

## INFORMATION FROM OTHER SURVEYS

The highway along the outer beach and the boat channel across Captree Island between Long.  $73^{\circ}14.8'$  and Long.  $73^{\circ}17.3'$  had not been constructed when the photographs of March 18, 1933, were taken and this detail was not shown on the original compilation received in this office February 5, 1934.

Subsequent to the compilation of this sheet, photographs taken March 16, 1934, were received showing the partially completed boat channel on Captree Island. At this time the dredging was in progress from opposite ends of the channel and had been completed except for a short midsection between Long.  $73^{\circ}15.5'$  and  $73^{\circ}15.8'$ . These photographs were applied to the original celluloid before printing and a few copies of the sheet printed showing the partially completed channel. \*These new photos show also the wharves on the N. side of Fire I. Inlet which are discussed on page six of the descriptive report.

Printed copies of ~~this~~<sup>then</sup> sheet were forwarded to the field for use as plane table and boat sheets by Lieutenant Witherbee in May, 1934. Lieutenant Witherbee's plane table sheet shows the completed channel, the new highway along the Ocean Beach and signals for control of the soundings in the Captree Island Channel, H 5370 a. The descriptive report for this plane table work is attached in the following pages. The new detail shown on this planetable sheet has been applied to this sheet T 5059 before final printing and registering of the sheet.

The plane table sheet has been treated as a correction sheet to air photo sheet 5059 and has not been registered. It is filed in the Air Photo Section. (Cor. sheet #26). *The temporary signals located for control of Hyalography are shown on this correction sheet #26 but are not on the printed copies of the compilation.*

~~The temporary signals located by plane table for control of the hydrography on H 5370 a are shown in red circles on the registered copy of T 5059 but are not shown on the copies printed for sale.~~

Except for the Captree Island Channel between Lat.  $73^{\circ}14.8'$  and  $73^{\circ}17.5'$  the channel markers shown on this sheet were transferred from aluminum control sheets 6011 and 6012. The markers in the Captree Island Channel were located by the hydrographic party and have been transferred to the sheet from H 5370 a. These markers are indicated on the file copy of T 5059 in blue circles.

As mentioned on page two of the attached plane table report, the plane table location of the Captree Island cut in Long.  $73^{\circ}15.7'$  to Long.  $73^{\circ}16.2'$  is about 8 meters north of the photo location. On plotting up the smooth sheet it was found that the plane table location of the south side of this cut ran across the edge of the sounding and this shoreline has been shifted about five meters southward. The final location as plotted on 5059 in the office is between the plane table and photo locations and not over .3 to .4 millimeter from either.

*B. G. Jones*  
B. G. Jones,

Assistant Cartographic Engineer.

DESCRIPTIVE REPORT OF ADDITIONAL WORK  
DONE ON TOPOGRAPHIC SHEET T-5059  
May 25th, 1934

(Note: This work was done on a print of aerial photo-topographic sheet T-5059).

a. The primary purpose of this sheet was to locate a newly constructed highway, a newly dredged state boat channel, and hydrographic signals.

The newly constructed road is a continuation of the Jones Beach highway and runs easterly atop hydraulic fill from Jones Beach, Hemlock Beach, and Oak Beach and terminates on Captree Island near the site of the proposed bridge.

Said highway is from one hundred fifty to six hundred meters northerly of the highwater line of the Atlantic Ocean, and Fire Island Inlet, and is of reinforced concrete twenty feet in width.

At the termination of this highway is a circle of 230 feet radius, with roadway twenty feet in width.

Within the limits of this sheet and along aforementioned highway are three traffic islands as shown on sheet.

The section of state boat channel located on this sheet by topography is completed and connects the section of state channel from Babylon to Oak Island by dredging through Captree Island. This section of channel is approximately 100 meters in width.

b. The landmarks on this sheet were located on a previous topographic sheet. Station "Drake" has been covered by new highway, but two reference marks are intact. Chimney (Sanatorium) 1933 has been removed. The sand drift fence shown on sheet running from Oak Beach Coast Guard Station east, has been removed completely.

c. The control used on this sheet was of second order triangulation and also intersection stations.

d. A traverse was run from "Drake" westerly on a straight line along centerline of road for about 2000 meters, to locate road, the measuring was done with a steel tape.

A traverse was run from Drake easterly along the road and checked in at Oak Beach Coast Guard tower with an error of 7 meters for distance and 3 meters in azimuth, the measuring on this traverse was done with a steel tape, length of traverse about 3000 meters.

Ran a traverse from Station "Oak" northerly 400 meters to new highway and thence easterly to Oak Beach Coast Guard Station along highway and resected at each set up to check position, checked out o.k. Length of traverse about 2600 meters.



DESCRIPTIVE REPORT OF ADDITIONAL WORK DONE ON  
TOPOGRAPHIC SHEET T-5059 - Continued.

d. (Continued): Ran a traverse from a point on new highway approx. 400 meters northerly of "Oak", easterly, locating hydrographic signals, centerline of highway and shoreline of newly dredged section of state boat channel to where it joins Fire Island Inlet, this traverse was measured with a steel tape and at the east end it checked up with a resecting cut to West Flag Pole. Length of traverse about 2500 meters.

e. The hydrographic signals were located from points on traverse by cuts and also direct measurement.

The shoreline location was made by rod shots from traverse points.

The road location was made by either traversing along centerline of road or rod shots from traverse points.

f. No form lines.

g. This additional work is a revision of sheet T-5059 inasmuch as a newly dredged boat channel and a new highway have been completed since the last surveys.

h. The projection was checked and found correct except for a shortage of six meters between meridians  $73^{\circ} 16'$  and  $73^{\circ} 17'$ , due to this shortage, all work done to west of station "Oak", which station falls about halfway between  $73^{\circ} 16'$  and  $73^{\circ} 17'$ , Oak was used as laid off from  $73^{\circ} 17'$  and for work east of Oak, the station was used as plotted, which checks up from Meridian  $73^{\circ} 16'$ .

The projection was checked at the completion of the work and found to have shrunk slightly in places.

i. No deviation from standard procedure.

j. No junctions.

k. No new names.

Addenda to para. "h": The topographic location of the shoreline of newly dredged channel shows said channel to be ten meters more or less north of the location as shown on sheet from photography, this same condition was found by hydrographic party on their boat sheet.

l. Recoverable positions have been furnished from topographic sheet of Wm. Ayers, which was completed in 1933.

m. Aerial photos have been taken of this area.

n. No changes in Coast line.

Forwarded  
M.O. Witherbee, Chief of Party

Respectfully submitted,

Oscar Mulford  
Topographer.

POST-OFFICE ADDRESS: 1937 Cornaga Ave., Far Rockaway, Long Island, N.Y.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

July 2nd, 1934.

To: The Director,  
U. S. Coast and Geodetic Survey,  
Washington, D. C.

From: M. O. Witherbee, Chief of Party,  
U. S. Coast and Geodetic Survey,  
Far Rockaway, Long Island, N. Y.

Subject: Plane table sheet of Captree Island, New York.

Reference: Directors letter 26-AHH 1990 (2) dated June 27, 1934.

The dashed line referred to represents a submarine cable. It was determined by locating the cable crossing signs at either end.

The topographer thought it might be of value in showing cable areas on chart. Upon inking the sheet he neglected to label it.

Respectfully,

*M. O. Witherbee*  
M.O. Witherbee,  
Chief of Party.

*This cable crossing is shown  
on T 5059.*

*B. G. Jones*

*Mr 22  
2/80*

*20  
1934 JUL - 3 - PM 3:14*

## Survey No.

Chart No

T-5059

Diagram No. 12153  
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