

SUPPLEMENTAL

5334

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ORIGINAL

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(This report includes the Field Inspection Report for the South  
Shore of Long Island, Coney Island to Jones Beach.)

Form 504 Ed. June, 1923	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. Patton, Director	
State: New York	
DESCRIPTIVE REPORT	
Photo Topographic Hydrographic	Sheet No. T5334
LOCALITY	
Western Long Island Point Rockaway, Long Island	
1934	
CHIEF OF PARTY	
R. C. Bolstad, Jr. H. & G. Engr.	

U. S. GOVERNMENT PRINTING OFFICE: 1923

5334

SUPPLEMENTAL

Applied to chart 369 J.M. Albert May 15, 1935

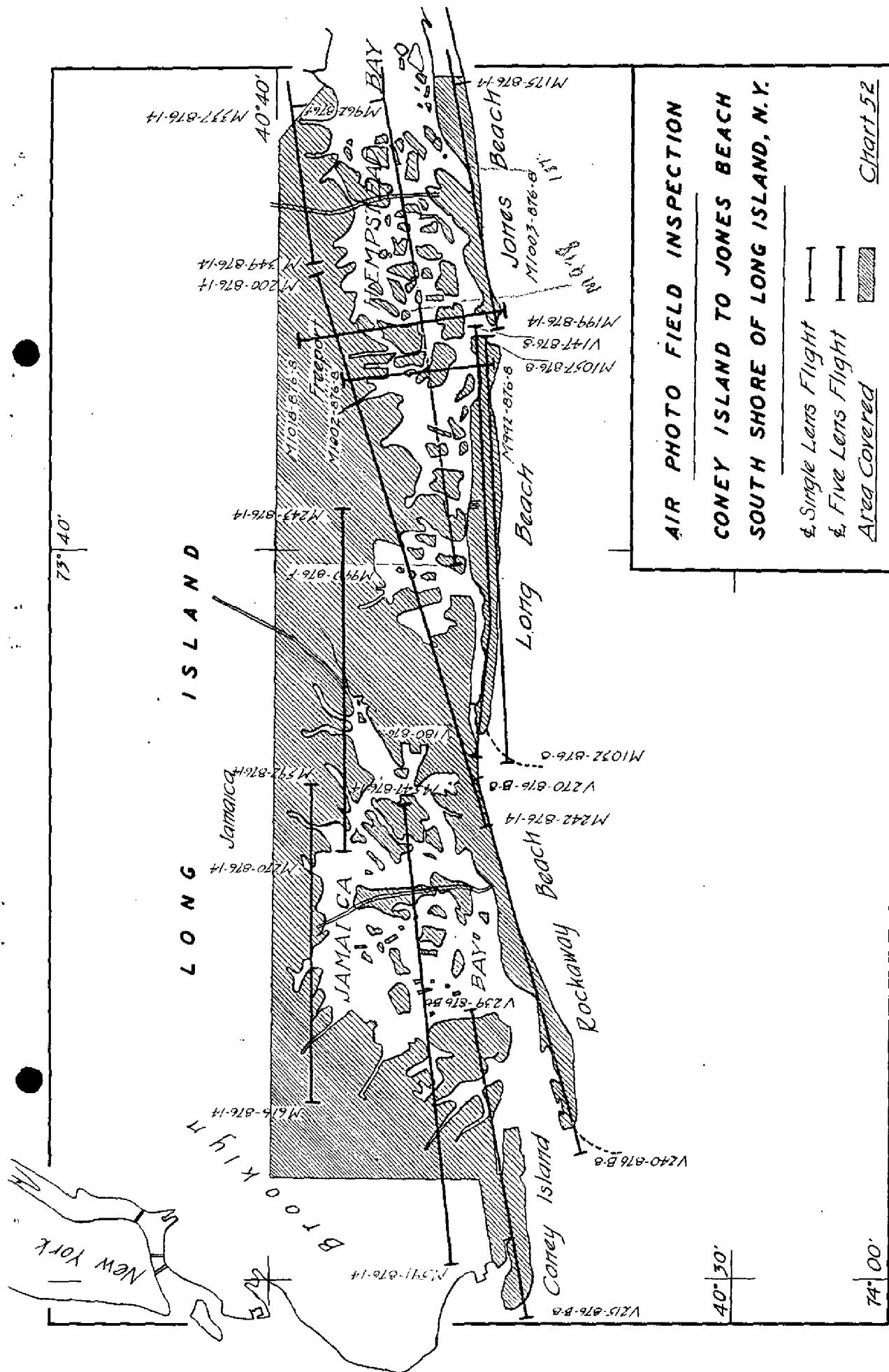
Applied to drawing of Chart 542 June 5, 1935

AIR PHOTO FIELD INSPECTION REPORT

for

SOUTH SHORE OF LONG ISLAND

CONEY ISLAND TO JONES BEACH



AIR PHOTO FIELD INSPECTION REPORT

for

CONY ISLAND TO JONES BEACH

The inspection was carried on intermittently (alternating with other field inspections and office work) during 1933 and 1934, additional information for the photographs being obtained during the operations of Capt. Eymann and Lieut. Witherbee over the same area, and as additional photographs were received.

The inspection was made by two members of party No. 12, New York City, with U.S.C. & G.S. trucks Nos. 202 and 397.

The area comprises approximately 105 square statute miles.

PHOTOGRAPHS

Flight lines of photographs involved are indicated on the preceeding index map.

The photographs to be used in compiling this inspected area are the following:

	<u>Number</u>	<u>Date</u>	<u>Time</u>
<u>Five Lens Photos</u>			
M 337(876 - 14) to 349(876 - 14)	5-15-33	11:44 to 11:49	
M 175(876 - 14) to 199(876 - 14)	3-18-33	10:19 to 10:25	
M 200(876 - 14) to 242(876 - 14)	3-18-33	10:30 to 10:45	
M 243(876 - 14) to 270(876 - 14)	3-18-33	10:50 to 11:00	
M 547(876 - 14) to 585(876 - 14)	10-14-33	10:45 to 10:56	
M 592(876 - 14) to 616(876 - 14)	4- 3-34	9:45 to 9:54	

	<u>Date</u>	<u>Time</u>
<u>Single Lens Photos</u>		
M 962(876F) to M 990(876F)	9-22-33	to 8:54
M 992(876 - 8) to M 1002(876 - 8)	3-16-34	9:40 to 9:45
M1003(876 - 8) to M1018(876 - 8)	3-16-34	9:55 to 10:05
V 147(876 - 8) to V 180(876 - 8)	2-22-33	12:30 to 12:45
M1032(876 - 8) to M1057(876 - 8)	3-19-34	10:45 to 10:55
V 215(876 - 8) to V 239(876B- 8)	1-11-34	11:10 to 11:32
V 240(876B- 8) to V 270(876B- 8)	1-11-34	11:10 to 11:32

The five lens photos were taken by the U.S. Army Air Corps, 2nd Lieut. James F. Olive, Jr., using their camera No. 31 - 78.

The single lens photos were taken by the U.S. Army Air Corps, Captl Willis R. Taylor, using their single lens camera.

AREA OF INSPECTION

The area covered by this field inspection embraces the following air photo topographic sheets:

<u>Field No.</u>	<u>Reg. No.</u>	<u>Field No.</u>	<u>Reg. No.</u>
11	T 5061	37E	T 5054
12	T 5062	37W	T 5336
13	T 5063	43E	T 5093
44E	T 5094	43W	T 5334
44W	T 5335	45	T 5095

## GENERAL DESCRIPTION OF TOPOGRAPHY

The entire area covered is extremely low, flat, sandy soil with a high percentage of salt water marsh lands. The shoreline is very irregular, and there are numerous small, marsh grass islands between the large islands of Jones Beach and Long Beach and Rockaway Beach. As a result, the length of shoreline in proportion to the area covered, is far greater than usual. Measurements were taken to highwater line along sandy beaches where high water was indistinguishable on the photos. The highwater line is constantly changing along the ocean shores, particularly at Long Beach and Rockaway Beach, the sand being eroded at certain sections and deposited at other sections.

As adequate notes were made on the photographs and since reports describing topography of this same area were submitted by Capt. Eyman and Lieut. Witherbee, no further description will be treated in this report.

### CONTROL

#### (1) Triangulation

Triangulation performed by the parties of C. D. Meaney (1926); Capt. R. P. Eyman (1933); Lieut. M. O. Witherbee (1934), and W. R. Woodworth (1930 - 1932) forms the basis of control for this area.

#### (2) Topographic Sheets

In addition to the above listed control the following topographic sheets may be used as an aid in the compilation of sheets in this area.

<u>Reg. No.</u>	<u>Date</u>		<u>Scale</u>
4225	June & July 1926	C.D. Meaney	1:10,000
4273	July - Sept. 1926	C.D. Meaney	1:10,000
6008	Eyman Sheet "G" 1933	Capt. Eyman	1:10,000
	Eyman Sheet "H" 1933	Capt. Eyman	1:10,000

All of Lieut. M. O. Witherbee's 1934 aluminum control sheets are in this area. Topo signals appearing on these sheets have been spotted on the photographs.

#### (3) Traverses

Blue prints secured from the Long Island State Park Commission together with the center line of new roads and causeways at Jones Beach as run in on the aluminum control sheets by Lieut. M.O. Witherbee, furnish the necessary information to correctly show all existing improvements in this area.

#### (4) Stations Spotted on Photos

The area covered by this inspection is approximately 105 square statute miles.

Number of triangulation stations spotted	164
Number of Topo. Stas., U.S.E. Stas., etc.	258 ?
	422 ?

On this project 422 triangulation stations, topographic stations, U.S.E. stations were spotted on the photographs. This gives a station intensity of 4.0 per square statute mile.

The above 422 stations include only those established by plane table and triangulation parties operating over this area in recent years. Innumerable other possible recoverable objects and prominent buildings were spotted but not listed or included in the above, since the density of control stations is sufficient for future surveys.

Since field parties were in operation over the inspected area, descriptions of recoverable objects were not written.

Recovery cards of triangulation stations lost were not written since triangulation parties were in operation over this same area. The only cards submitted are for Tank, and Chy (Bklyn. Union Gas Co.) since the chy was being removed after the completion of the triangulation.

When actual point of a triangulation, U.S.E., or topo. station could not be picked on a print, reference data for picking the point is given on sketches on field prints.

#### NAMES

Any new names in this area have been labeled on the field prints and were obtained from people in the locality as being those in common use.

#### BRIDGES

No notes were made of bridge clearances and heights since this information was adequately covered by the Coast Pilot Notes and the parties of Capt. Eyman and Lieut. Witherbee.

#### COAST PILOT NOTES

No discrepancies with the present edition of the Coast Pilot Notes have been noted by this party.

#### RECOVERABLE OBJECTS

The party of Lieut. M. O. Witherbee is operating in this locality and will submit descriptions of all recoverable objects in this vicinity.

#### LANDMARKS

The party of Lieut. M. O. Witherbee is operating in this locality and will submit descriptions of all recoverable objects in this vicinity.

#### CHANGES

Changes in the topographic detail since the date the photographs were taken have been clearly indicated on the field prints so that the compilations will be up to date.

Blue prints in the Jones Beach area were obtained to show

improvements which have been made since the photographs were taken.

Submitted by

*J. Rippstein*  
J. Rippstein

Draftsman

Nov. 7, 1934

*H.T. Steffensen*  
H.T. Steffensen *R.S.*

Draftsman



COMPILER'S REPORT

for

AIR PHOTO COMPILATION SHEET T 5334

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. 43W

REGISTER NO. T5334

State New York

General locality Western Long Island

Locality Rockaway, Long Island Point

Scale 1:10,000 Date of photographs Jan. 1, 1934

Date of Compilation Oct. 11 1934

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

Chief of party Roswell C. Bolstad

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

Inked by R. H. Peckworth

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

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

Instructions dated November 15, 1932

Remarks: Compiled on scale of 1:10,000 and printed by Photo

Lithography.

- STATISTICS -

on

SHEET, FIELD NO. 43W, REG. NO. T5334

PHOTOS, NO. V240 (876B-8) TO NO. V254 (876B-8)

DATE OF PHOTOGRAPHS Jan. 11, 1934 TIME 11:25 A.M.

	BY	DATE	
		From	To
The Scale Factor of this sheet is <u>1.000</u>			
PROJECTION	<u>R.H. Peckworth</u>	<u>8/6</u>	<u>- 8/6/34</u>
PROJECTION CHECKED	<u>W.D. Ayers</u>	<u>8/6</u>	<u>- 8/6/34</u>
CONTROL PLOTTED	<u>R.H. Peckworth</u>	<u>8/9</u>	<u>- 8/9/34</u>
CONTROL CHECKED	<u>W.F. von Buehren</u>	<u>8/9</u>	<u>- 8/9/34</u>
SMOOTH RADIAL LINE PLOT	<u>R.H. Peckworth</u>	<u>8/10</u>	<u>- 8/18/34</u>
RADIAL LINE PLOT CHECKED	<u>Roswell C. Bolstad</u>	<u>8/19/34</u>	
TOPOGRAPHY TRANSFERRED	<u>None (See report)</u>		
DETAIL INKED	<u>R.H. Peckworth</u>	<u>8/22</u>	<u>- 10/11/34</u> Actual times 15 days
PRELIMINARY REVIEW (& Final)	<u>Roswell C. Bolstad</u>	<u>10/26</u>	<u>- 10/27/34</u>

AREA OF DETAIL INKED 1.6 sq. Statute Miles (Land area)

AREA OF DETAIL INKED 0.1 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)  
0.6 Statute Miles

LENGTH OF ROADS, STREETS, TRAILS, RAILROADS 15.8 Statute Miles

GENERAL LOCATION Western Long Island

LOCATION Rockaway, <sup>Point</sup> Long Island

DATUM North American 1927

Latitude 40°- 33'- 30.40" (937.7 m.)

STATION Tall Tower 1930 Longitude 73°- 54'- 01.80" (42.3 m.)

(unadjusted)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 43W

GENERAL INFORMATION

The Field Report for the section of Long Island covered by this sheet is attached herewith and was used in furnishing the necessary information in this area. Additional information, for the compilation of this sheet, was obtained from the notes marked on the photographs by Messers R.H. Peckworth and H.T. Steffensen, while on the field inspection work of this area.

The accompanying STATISTICS SHEET details all data in connection with the compilation of this sheet.

At the time the photographs for this sheet were taken, Jan. 11, 1934, at 11:25 A.M., the tide at Barren Island, Rockaway Inlet, was about one foot above the low water for the day, as determined from the U.S. Coast and Geodetic Survey "Predicted Tide Tables".

This sheet was compiled from single lens photographs, Nos. V240-V254 (876B-8) inclusive, taken by Captain Willis R. Taylor of the U.S. Army Air Corps at the time stated above.

CONTROL

(A) Sources

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

- (a) Triangulation by Lieut. R.W. Woodworth, in 1930-1933.
- (b) Triangulation by Lieut. M.O. Witherbee, in 1934.
- (c) 1934 Aluminum Control Sheets (Lieut. M.O. Witherbee's Field Sheets "E" and "G").  
Reg. Nos. T-6200 A & T-6201 A
- (d) U.S. Engineers Station, "Rockaway Extreme".

All control was placed on the North American 1927 Datum before beginning the compilation. The adjustment was approximate, however, any final office adjustments would be unplotable at this scale (1:10,000).

In addition to the above triangulation the following topographic signals, scaled from the aluminum control sheets, were spotted and used in the control of this plot.

Mayer's Flag Staff  
Roxbury U.S.E.  
Tilden U.S.E.  
East Tower Jacob Riis Park  
West Tower Jacob Riis Park

These signals have been shown on the celluloid topographic sheet by a single black circle since they are suitable signals for minor class landmarks (See paragraph LANDMARKS in this report).

In the compilation of this sheet, all of the control stations shown on the aluminum control sheets were not used as control because the field inspection was made before the aluminum control sheets had been finished by the field party which, at that time, had not established all the control of the area.

Three 1934 triangulation stations, established by Lieut. M.O. Witherbee, were not used in this compilation since they were established after this sheet had been compiled. They are:- Administration Building; Radio Compass; and Old C.G. Tower. They have therefore, not been shown on this sheet; thereis, however, sufficient control in this area without using these stations.

The 1932 triangulation station, "Guard", of Lieut. C.D. Meaney was not picked up and spotted by the field inspection party on the photos. It has not, therefore, been shown on this compilation sheet.

(B) Errors

Both the triangulation and topographic signals mentioned above and used as control for this sheet could be held to satisfactorily and no errors were found.

(C) Discrepancies

No control stations established by other organizations were used in this compilation except U.S.E.D. station "Rockaway Extreme" (See paragraph COMPILATION (A) Method, below).

COMPILATION

(A) Method

The usual radial line method of plotting was used in the compilation of this sheet.

"U.S.E.D. Rockaway Extreme" was computed from the Engineer's coordinates (shown on this sheet by a broken triangle) and was used in controlling the end of the jetty. The U.S. E.D. station "Rockaway Curve" was similarly computed and a comparison with Lieut. M.O. Witherbee's triangulation position established proof that the computed positions were without plottable error (1.1 meters) at the scale of this compilation.

(B) Adjustments of Plot

The photographs covering the area of this compilation show only a slight amount of tilt and scale fluctuation, both of which are negligible.

The topographic signals, mentioned under CONTROL, page 3 of this report, were used as supplementary control although the triangulation stations were sufficient in number and spacing to adequately control the radial plot.

A small amount of adjustment was required at the extreme western end of the sheet (that covered by photo Nos. 240-243) because the large water areas and uniform terrain on these photos limited the number of points obtainable.

However, by holding to all available control, excessive adjustment to the extent of causing any appreciable error, was unnecessary.

(C) Interpretation

The usual graphic symbols were used as approved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail.

The double full line was used to indicate first order roads and the double broken line for private driveways and roads of lesser importance. Concrete walks, board walks and trails were represented by a single dashed line. In most cases, unless labeled on the field prints, the classification of the roads had to be determined under the stereoscope.

Sand areas along the shore line are shown in the prescribed manner. All other portions of the shore line were accentuated by a single row of dots parallel to the shore line except for portions that were bordered by tidal marshes or were confined by bulkheads.

A single solid line along the south shore joined by short solid lines at intervals denotes a bulkhead and connecting jetties which form a protection against beach erosion. A new bulkhead is under construction four feet north of and parallel to the present one within the limits of Fort Tilden Reservation.

Certain parts of the detail within the limits of Fort Tilden Reservation have not been shown in accordance with restrictions imposed by the Commandant, U.S. Army, in this area.

The roads and structures, Lat.  $40^{\circ}-34'$ , Long.  $73^{\circ}-53'$ , designated by dotted straight lines are the ruins of the Naval Air Station located at Rockaway during the World War. The buildings have been removed and only the concrete floors, runways and roads remain.

About 50 meters east of the ferry slip (location same as preceding paragraph) the shore line has worn away rapidly and some of the footings of the ruins are partly submerged. This has been shown by a group of dots along the shore line. The adjacent pier is in ruins, only the piles remaining, and is shown in a similar manner. The double broken line in the water just east of the ruins denotes the remains of a heavy concrete walkway which has collapsed and lies submerged at this point.

The single broken line extending from ocean to bay just east of Long.  $73^{\circ}-52'$  serves to divide the graded developed land to the east from the marsh and beach to the west of this line.

The docks north of triangulation station Rockaway #2 U.S.E., represented by dotted lines, are in a dilapidated condition.

The large building near the east end of the sheet and the grounds surrounding it comprise the Jacob Riis Park Properties.

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

At Lat.  $40^{\circ}-33'$ , Long.  $73^{\circ}-56'$ , there has been shown on this sheet, a submerged wreck. Photographs Nos. 240, 241 and 242 (876B-8) show a definite white object appearing on the wreck; this has been radial plotted in and is shown by a small broken circle. The correct outline of the wreck is shown on this sheet as it occurs on the above photographs.

The short dash at the north end of the wreck has been shown on this compilation sheet. This appears to be a mast and may be the mast picked up by the compiler at the time a field examination was made in the latter part of July 1934. *This dash line has been removed. The outline of the wreck is all that is shown.*

The wreck shown at Lat.  $40^{\circ} - 35'$ , Long.  $73^{\circ} - 52.3'$ , was taken from Lieut. M.O. Witherbee's aluminum control sheet, Field Letter "E", since the photos do not include this area. (T-6200a)

At Lat.  $40^{\circ} - 33.3'$ , Long.  $73^{\circ} - 54.2'$ , there is shown, on this sheet, what appears to be a wrecked barge in the photos. This has been shown as [ ] in order to show the exact outline of the wreck.

(D) Information from Other Sources

There was no high water line available from the aluminum control sheets at the time of this compilation since it had not yet been run in by the combined operations party under Lieut. M.O. Witherbee who is working in this area.

Since the photographs were taken, additional concrete walks and numerous houses have been constructed in conjunction with the real estate development located at Lat.  $40^{\circ} - 33.5'$ , Long.  $73^{\circ} - 55.4'$ , and are shown on this sheet. Data for the plotting of these additions was obtained from the Rockaway Operating Co. and is shown on photo No. 244 of the field prints.

(E) Conflicting Names

There are no new names or names conflicting with the U.S.C. & G.S. Charts on this sheet.

COMPARISON WITH OTHER SURVEYS

The junction with the adjoining sheet is satisfactory.

At the completion of this compilation Lieut. M.O. Witherbee's aluminum control sheets, Field Letters "G" and "E" were received at this office. A comparison between this compilation and A.C.S. "E" showed the highwater line to be in error between triangulation station Tall Tower and triangulation station Cupola C.G. Station 92. The Air Photo Field Inspection Party made frequent off-set measurements to locate the highwater line and the fact that the highwater line checks except in this locality where the plane table topographer was forced to run a traverse between control stations, indicates that the aluminum control sheet is most likely in error. *See Review*

Since both the celluloid compilation sheet and the aluminum control sheets are at the same scale (1:10,000) a direct comparison can easily be made by placing the celluloid sheet over the aluminum control sheet.

It is noted that the top of the mast (mentioned in paragraph (C) Interpretation) of the wreck at Lat.  $40^{\circ} - 33'$ , Long.  $73^{\circ} - 56'$ , checks the aluminum control sheet location. The actual position of the wreck, however, lies slightly to the westward, indicating the wreck to be tipped over somewhat on its side. The photographs clearly show this and the 1934 hydrography of Lieut. M.O. Witherbee should verify this.

## LANDMARKS

The list of landmarks for this area has been previously submitted by Lieut. R.W. Woodworth and any new existing landmarks will be submitted in 1934 by Lieut. M.O. Witherbee whose party is, at present, operating in this area.

Five signals suitable for minor class landmarks are indicated by a small black circle. These signals are listed as Class C landmarks and the geographic positions given on page 7 of this report. For classification of Class C landmarks see Descriptive Report for air photo topographic sheet Reg. No. T5059, paragraphs LANDMARKS and REPORT ON REVIEW OF SHEET.

Triangulation station "Mayers Flag Staff" U.S.E. utilized as a topographical signal by Lieut. Witherbee in 1934 is on property now known locally as Kennedy's Restaurant.

There are a few other objects (such as houses, ends of docks, etc.) which are located within the accuracy specified under the following heading: 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 not over 2 meters in well defined detail of importance for charting and of 4 meters for other data. It is understood that the widths of roads and similar objects may be slightly expanded in order to keep the detail clear and to keep it from photographing as a solid area in the photo-lithographic process.

A new wooden bulkhead is being constructed inside of the present one on the Fort Tilden Reservation (see field print photo No. V248 (876B-8). It has not been shown on this sheet.

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

*R. H. Peckworth*  
R. H. Peckworth  
Draftsman

Assisted by

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

*A. K. Spalding*  
A. K. Spalding  
Surveyor



LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

CLASS (C) LANDMARKS

(Includes all recoverable objects, sufficiently prominent for use as hydrographic "fixes", shown as topographic stations with small black circle on this sheet and not described on Form 524 by this party.)

<u>Description</u>	<u>Latitude</u>		<u>Longitude</u>		<u>Height</u>	<u>Method of Determination</u>
	°	' D.M. Meters	°	' D.P. Meters		
Mayers Flag Staff	40	37.7	73	55.3	40'	A.C.S., 1934 Reg. No. _____
E. Tower, Jacob Riis Park	40	34.0	73	52.2	50'	A.C.S., 1934 Reg. No. _____
W. Tower, Jacob Riis Park	40	34.0	73	52.5	50'	A.C.S., 1934 Reg. No. _____
X Observation Tower	40	33 (971) 880	73	53 (1365) 46	40'	A.P.T. 1934
Westerly Radio Tower (one of four)	40	34 (1767) 84	73	53 (1311) 100	50'	A.P.T. 1934

Note: A.C.S. denotes aluminum control sheet.  
A.P.T. denotes air photo topography.  
For classification of Class (C) landmarks  
see Descriptive Report for Topographic  
Sheet Reg. No. T5059, paragraphs LANDMARKS  
and REPORT ON REVIEW OF SHEET.

The following three U.S.E.D. stations have been shown on this sheet by a small black circle.

<u>Description</u>	<u>Latitude</u>		<u>Longitude</u>		<u>Height</u>	<u>Method of Determination</u>
	°	' D.M. Meters	°	' D.P. Meters		
Tilden	40	34.1	73	53.2		A.C.S., Field Let. "G" Reg. No. _____
Roxbury	40	34.1	73	53.6		A.C.S., Field Let. "G" Reg. No. _____
Reeds	40	33 (105) 1746	73	54 (346) 1066		A.P.T., 1934 Reg. No. T5334

REVIEW OF AIR PHOTO COMPILATION NO. T5334

Chief of Party: Roswell C. Bolstad

Compiled by: (See page 2,  
Des. Report)

Project: New York Air Photo Compilation Instructions dated: Nov. 15, 1932  
Party No. 12

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)  
See paragraph (C) Interpretation, page 4.
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)  
See paragraph CONTROL (A), page 3.
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)  
See paragraph CONTROL (A), page 3.
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.  
There are no differences on this sheet. *See Review*
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)  
See paragraph CONTROL (A), page 3 and paragraph COMPILATION (B), page 4, Adjustments of Plot.
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

8. The representation of low water lines, ~~reefs, coral reefs, and rocks~~, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
  
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)  
See report of Control Party, Lieut. M.O. Witherbee in 1934.  
*(None submitted)*  
*758*
  
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)  
To be submitted by 1934 Field Party under Lieut. M.O. Witherbee.  
*See Review*
  
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)  
There are no bridges of importance to navigation shown on this sheet.
  
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)
  
13. The geographic datum of the compilation is North American and the reference station is correctly noted.  
See page 2. *1927*  
*inadequate*
  
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
  
15. The drafting is satisfactory and particular attention has been given the following:
  1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
  2. The degrees and minutes of Latitude and Longitude are correctly marked.

ADDITIONAL REMARKS.

The three triangulation stations mentioned in the second paragraph on page four in the preceeding Compiler's Report were not established by Lieut. Witherbee. The assumption was made by the compiler that they were because the field inspection party could find only barren areas, where these stations were plotted on Lieut. Witherbee's aluminum control sheet. These stations are old stations and the Administration building and Radio Compass station no longer exist and therefore should not have been shown on the A.C.S.

3. All station points are exactly marked by fine black dots.
4. Closely spaced lines are drawn sharp and clear for printing.
5. Topographic symbols for similar features are of uniform weight.
6. All drawing has been retouched where partially rubbed off.
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.
17. Remarks: Any additional notes and requirements affecting this area are referred to Lieut. M.O. Witherbee's Reports covering the topography executed in 1934 under his charge.

18. Examined and approved;

Preliminary Review:

*Roswell C. Belatan*

*Roswell C. Belatan*  
Roswell C. Belatan  
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

*Frank V. Eustine*  
✓ *B. G. Jones*

*March 4, 1935*

Examined and approved:

*K. T. Adams*  
Asst. Chief, Section of Field Records  
Division of Charts  
*L. O. Polk*  
Chief, Division of Charts

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

## Review of Compilation T-5334

### Comparison with Other Surveys:

Chart 542. Too many changes have taken place in this vicinity for a detailed comparison. However, attention is called to the following items:

1. The Naval Air Station has been dismantled and the three docks shown on the chart just east of the ferry slip have either been destroyed or are in ruins.
2. Piling is all that remains of the western one of four docks at  $40^{\circ} 34'$ ,  $73^{\circ} 54\frac{3}{4}'$ .
3. The two docks at  $40^{\circ} 33\frac{3}{4}'$ ,  $73^{\circ} 55\frac{1}{2}'$  are now in ruins.
4. The bays and marshes have been filled in.
5. A few jetties have been added to the north side of the island in the vicinity of Fort Tilden Reservation.
6. The Point has built westward some 500 meters to the Rockaway Breakwater.
7. Numerous houses have been constructed.
8. There is a wreck on the south beach at longitude  $73^{\circ} 54\frac{1}{5}'$ .
9. There is a wreck at  $40^{\circ}$ ,  $34\frac{4}{5}'$ ,  $73^{\circ} 52\frac{1}{3}'$ .

T-6200 A (1934). This planetable aluminum sheet covers the extreme eastern part of the compilation and shows only  $\Delta$  Tank, the two towers Jacob Riis Park and the wreck mentioned on page 6 of the report. This detail is shown on the compilation.

T-6201 A (1934). Practically the entire area of the compilation is covered by this plane table aluminum sheet.

There is a general disagreement in the outer H. W. L. east of  $73^{\circ} 55\frac{1}{2}'$ , which is about the entire length of the sheet. In the vicinity of Fort Tilden Reservation the disagreement is as much as 20 meters. A bulkhead extends from  $73^{\circ} 55\frac{1}{2}'$  east and this bulkhead agrees fairly well on the two surveys. Both sheets may be considered as correct as the H. W. L. is constantly shifting. Neither sheet was changed. The bulkhead is the H. W. L. at spring tides. Over a two weeks' period while the Field Inspection was in this vicinity the beach at Fort Tilden Reservation shifted 20 meters. (This information was obtained from field photograph V-250-876B-8.)

The jetties extending from the bulkhead on the seaward side of the island disagree on the two sheets in three places,  $73^{\circ} 55\frac{1}{2}'$ ,  $73^{\circ} 54\frac{1}{2}'$ , and  $73^{\circ} 53\frac{1}{2}'$ . Some of the differences are as much as 10 meters. Each case of disagreement was investigated with the photographs and in each case the compilation (T-5334) was found to be correct.

On the north side of the island the bulkhead just west of the ferry slip at Fort Tilden Reservation was moved in shore  $\pm 5$  meters to agree with the plane table. The photographs confirmed the plane table's location.

The Engineers' Grid System is shown on the plane table sheet but is not shown on the compilation. The description of the coordinates is contained in a hydrographic survey which had not been received by the office at this time.

All detail south of latitude  $40^{\circ} 34\frac{1}{2}'$  on the plane table sheet (T-6201A) is shown on the compilation, except the Grid System as mentioned above. The detail north of this parallel is on Coney Island which is not covered by the compilation.

Landmarks:

Landmarks submitted by R. W. Woodworth in 1931 and 1932 (chart letter 858, 1932) falling within the limits of this compilation are shown. As yet no landmarks have been submitted by M. O. Witherbee.

Accuracy:

The control and photographs for this compilation are such that the plot should be very good; however, a better estimate of accuracy would be 4 and 8 meters rather than 2 and 4 meters. (See page 6a of report.)

*Frank G. Eiskine*

March 4, 1935.

*B. G. Jones*



Diagram No. \_\_\_\_\_

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]