

5108

ORIGINAL

U. S. COAST & GEODETIC SURVEY  
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R.S. Patton, Director

State: New York

DESCRIPTIVE REPORT

Photo  
Topographic  
~~Hydrographic~~

Sheet No. T-5108

LOCALITY

Staten Island

~~Great Kills to Stapleton~~

New Dorp Beach and Vicinity

1933

CHIEF OF PARTY

R.C. Bolstad, Jr. H. & G. Engr.

U. S. GOVERNMENT PRINTING OFFICE: 1925

5108

Applied to Chart 285 Jan 17-1938 Chan R Bush  
Applied " " 369 Aug 11, 1938 L.M.Z.

T-5108 (Supp) " " 369 - Mar 24-1941 P.B.C.

T-5108 (Supp) " " 540 July 31, 1945 W.A.B.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

OCT.

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. 58

REGISTER NO. T-5108

State New York

General locality Staten Island

Locality ~~Great Kills to Stapleton~~ New Dorp Beach and Vicinity

Scale <sup>\*</sup> 1:10,000 Date of ~~survey~~ photographs: 10/12/33 & 10/14/33

Date of Compilation: 8/20/35

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

Reviewed and recommended for approval: *Roswell C. Bolstad*  
Chief of party Roswell C. Bolstad

Surveyed by See STATISTICS SHEET, page 2 of this report.

Inked by W.E. Brown and H. Mach

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 a scale of 1:10,417 and enlarged and

printed on a scale of 1:10,000 by Photo-Lithography.

...

\* Blue Print on scale 1:10452

STATISTICS

on

SHEET FIELD NO. 58, Reg. NO. T-5108

PHOTOS AS FOLLOWS:-

	<u>DATES</u>	<u>TIME</u>
M2813 - M2828 (870-14)	10/14/33	11:00 A.M.
M2790 - M2799 (870-14)	10/12/33	9:55 A.M.
M2729 - M2735 (870-14)	10/12/33	9:40 A.M.

	<u>BY</u>	<u>DATE</u> From To
ROUGH RADIAL PLOT	R.A. Philleo R.A. Philleo	5/4/34
SCALE FACTOR (0.960)	R.A. Philleo R.A. Philleo	5/4/34
SCALE FACTOR CHECKED	J.P. O'Donnell J.P. O'Donnell	5/4/34
PROJECTION	R.A. Philleo R.A. Philleo	5/11/34
PROJECTION CHECKED	W.D. Ayers W.D. Ayers	5/11/34
CONTROL PLOTTED	R.L. Fisher R.L. Fisher	5/22/34
CONTROL CHECKED	R.A. Philleo R.A. Philleo	5/25/34
TOPOGRAPHY TRANSFERRED	None	- - - - -
TOPOGRAPHY CHECKED	None	- - - - -
SMOOTH RADIAL LINE PLOT	R.H. Peckworth R.H. Peckworth	6/22/34 - 7/14/34
RADIAL LINE PLOT CHECKED	J.P. O'Donnell J.P. O'Donnell	7/14/34 - 7/16/34
DETAIL INKED	W.E. Brown H. Mach	11/6/34 - 2/8/35 7/5/35 - 8/20/35
PRELIMINARY REVIEW	H. Mach	8/20/35 - 8/23/35

AREA OF DETAIL INKED 17.3 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED 0.0 sq. Statute Miles (Shoals in Water Area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)

4.5 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)

11.5 Statute Miles

LENGTH OF STREETS, ROADS, TRAILS, RAILROADS, etc. 181.0 Statute Miles.

GENERAL LOCATION Staten Island, New York

LOCATION Great Kills to Stapleton

DATUM North American 1927

STATIONS Saint Francis 1930

(Final Office Adjusted Position)

Latitude 40° 35' 57.582" (1776.2m.)

Longitude 74° 06' 53.362" (1254.6m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 58

GENERAL INFORMATION

The 1934 Air Photo Field Inspection Report, dated May 17, 1934, and attached to Descriptive Report for Sheet Reg. No. T-5107, furnished the necessary field data for the compilation of this sheet.

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

This sheet was compiled from three sets of five lens photographs, taken by the Army Air Corps. with their five lens camera Model T-3A, No. 31-78. The date and time at which each set of photographs was taken is given on the STATISTICS SHEET, page 2. ON Oct. 12, 1933, at 9:50 A.M., the time photographs M2729-M2735 and M2790-M2799 were taken, the average tide along the outer coast was about 0.7' above low water with a tide range of 2.8 feet. On Oct. 14, 1933 at 11:00 A.M., at which time photographs M2813-M2828 were taken, the tide on the outer coast was about 0.2' above low water, with a tide range of 3.2 feet. Both values of tide conditions were obtained from the Tide Prediction Tables of the U.S. Coast and Geodetic Survey.

CONTROL

(A) Sources

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

- (a) Triangulation by Lieut. R.W. Woodworth (1930-1933). Field Computations unadjusted.
- (b) Triangulation in 1917, Field Positions Unadjusted.
- (c) Topography in 1934 by Lieut. E.R. McCarthy.

All control was placed on the North American 1927 Datum before beginning the compilation. The adjustment was approximate; however, any final office adjustment should be unplotable at the scale of this compilation 1:10,417.

(B) Errors

There are no apparent errors for the control positions on this sheet. The control is, in general, strong and no difficulty was experienced in obtaining satisfactory cuts in the smooth radial line plot.

(C) Discrepancies

No other control stations, established by other organizations, were used in the compilation of this sheet.

COMPILATION

(A) Method

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

(B) Adjustment of Plot

The photographs covering this area appear to have but little scale fluctuation or tilt. There are some exceptions, but in almost all such cases other photographs, free of scale fluctuation and tilt, could be substituted for these bad photographs for detailing purposes. Similarly, in making the smooth plot, the good photographs gave sufficiently strong intersections to allow disregarding the ones with scale fluctuation and tilt. Because of this, no unusual adjustment, to the extent of causing any appreciable error, was found necessary.

(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.

Good motor roads were indicated by a double full line and poor motor roads and private driveways were indicated by a double, dashed line. A single dashed line was used to indicate exceedingly poor motor roads, trails or paths.

The track traverse information of the Staten Island Rapid Transit line, which falls within the area covered by this compilation, was not available. The track detail information, however, was available and was used as an aid in determining the number and location of tracks, switches, sidings etc.

All the houses that occur in the area of this compilation are shown, save for a few specially congested areas. These omissions have been noted by appropriate notes on the overlay sheet.

No names of streets are shown on this compilation. They can all be obtained from the Board of Estimate and Apportionment (New York City) Maps of this area, which have previously been forwarded to the Washington Office.

Only the larger and more important ditches have been shown in the marsh areas occurring on this sheet.

Considerable relief occurs within the area covered by this compilation, and because of this a considerable amount of proportioning was necessary in detailing. Great care was exercised on this account, and it is believed that, though difficult, this care resulted in an accuracy within the limits mentioned at the end of this report under RECOMMENDATIONS FOR FURTHER SURVEYS.

(D) Information From Other Sources

The track detail of the Staten Island Rapid Transit Co. was used as an aid in determining the number and location of tracks, switches, sidings etc.

No other information from any other sources was used in this compilation.

(E) Conflicting Names

There are no names shown on this compilation that conflict with those found on the present editions of of the U.S. Coast and Geodetic Charts.

COMPARISON WITH OTHER SURVEYS

This sheet joins with Sheet Reg. No. T-5466 on the north, with Sheet Reg. No. T-5465 on the east, with Sheet Reg. No. T-5107 on the south, and with Sheet Reg. No. T-5110 on the west.

Junctions with these sheets have been compared and found satisfactory, i.e. with those two of the above sheets which have already been finished, namely T-5110 and T-5107. Sheets Reg. Nos. T-5466 and T-5465 are still in the initial stages of compilation and therefore no junction between these sheets and T-5108 has been made.

LANDMARKS

The list of landmarks for this area has been previously submitted by Lieut. R.W. Woodworth in February, 1931. It is assumed that any necessary additions or changes to Lieut. Woodworth's report has already been made by Lieut. E.R. McCarthy who made a topographic survey of this area in 1934, but whose report was never sent in to this office.

There are many other objects, such as houses, ends of docks and the like, which are located within the accuracy specified under the following heading, RECOMMENDATION FOR FURTHER SURVEYS, and may be used to obtain hydrographic "fixes". Care should be taken in using the houses to use the center, as they may be expanded somewhat in size.

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 not over 4 meters for other data. It is understood that the widths of roads and similar objects may be slightly exaggerated in order to keep the detail clear and to avoid the closing up of the lines and 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 further surveys are required.

Submitted by:-

Assisted by :-

*H. Mach*  
H. Mach  
Draftsman

*W.E. Brown*  
W.E. Brown  
Draftsman

## Remarks

## Decisions

1		See T-5466
2		" "
3		OK for Planimetric Map
4		
5		
6		
7	This Lake not shown on Source E	
8		
9		
10	Source E shows 3 other small cemeteries adjacent "Marine, Woodland and Silver Lake Cemeteries"	OK for Planimetric Map
11		See T-5466
12		" "
13		OK for Planimetric Map
14	on name sheet	" " "
15		see T-5465
16		
17		
18		
19		see T-5465
20		
21	Not on any recent Map or Survey	
22	Pier not shown on Source E	
23		
24		
25		
26		
27		



# GEOGRAPHIC NAMES

Survey No. T- 5108

GEOGRAPHIC NAMES											
Survey No. T- 5108											
Name on Survey	<div>On Chart No. 369, 285</div> <div>On previous survey No. T-816</div> <div>On U. S. quadrangle Maps</div> <div>From local information</div> <div>Board of Estimate &amp; On local Maps App. Map - 1937</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>B.P. 25094-5 U.S. Light List</div> <div>R.R. Guide</div>										
	A	B	C	D	E	F	G	H	K		
<u>Tompkinsville</u>	✓									1	
<u>West New Brighton</u>	✓									2	
Clarence T. Barrett Park					✓					3	
<u>Clove Lakes Park</u>					✓					4	
<u>Richmond Lake</u>					✓					5	
<u>Clove Lake</u>			✓		✓					6	
<del>Valley Lake</del>										7	
<u>Silver Lake Park</u>					✓					8	
<u>Silver Lake Reservoir</u>	<i>Silver Lake</i>		<i>Silver Lake</i>		✓					9	
Silver Mount Cemetery					✓					10	
<u>Stapleton</u>	✓									11	
<u>Clifton</u>	✓									12	
Fairview Cemetery					✓					13	
Fox Hill Golf Course										14	
<u>Rose bank</u>	✓									15	
<u>Dongan Hills</u>	✓		✓				✓			16	
<del>Grasmere</del> <i>D.G.N 1/27/39</i>			✓							17	
<del>Grasmere</del>										17	
<u>Brady Pond</u>					<i>Brady's Pond</i>					18	
<u>Arrochar</u>	✓	✓	✓				✓			19	
<u>South Beach</u> <i>(village)</i>	✓		✓				✓		✓	20	
<del>Linden Park</del>	✓		✓							21	
<del>Graham Pier</del>										22	
<u>New Creek</u>	✓	✓								23	
<del>Graham Beach</del>					<i>Franklin Roosevelt Beach</i>					24	
<u>Midland Beach</u>	✓		✓				✓			25	
<u>Grant City</u>	✓		✓				✓		✓	26	
										27	

M 234

## Remarks

## Decisions

1		
2		
3	Part of Oakwood Heights	
4		
5	Part of Oakwood Heights	
6		OK for Planimetric Map
7		
8		OK for Planimetric Map
9		OK for Planimetric Map
10		
11		
12		see USCP pg. 282
13		USGB decision
14		" "
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		



# GEOGRAPHIC NAMES

Survey No. T- 5108

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H B.P. 25094-5 U.S. Light List	K R.R. Guide	
<u>U.S. Government Aviation Field</u>					✓					1
<u>New Dorp</u>	✓		✓			✓		✓		2
<del>Whittack</del>	✓									3
<u>Oakwood Heights</u>	✓		Oakwood			✓		✓		4
<del>Oakwood</del>	✓									5
Midland Beach Pier										6
<u>New Dorp Beach</u>	✓						✓			7
<del>Tyson</del> Tyson Manor Golf Course							Tyson Manor G.C.			8
Moravian Cemetery					✓					9
<u>Staten Island Marine Park</u>							✓			10
<u>Staten Island</u>	✓									11
<u>New York Lower Bay</u> <del>Lower Bay</del>										12
<u>Hoffman Island</u>										13
<u>Swinburne Island</u>										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names underlined in red approved  
by JHE on 3/23/38

## REVIEW OF AIR PHOTO COMPILATION T 5108

### Comparison with graphic control surveys

#### T 6220a (1934), 1:10,000

All recoverable topographic stations were transferred to the compilation, except described stations, which had been plotted in the field, and station Van, which conflicted with the compilation and which, after examination, was rejected. Stations transferred by R. M. Berry and checked by L. A. McGann.

*R. M. Berry*

*L. A. McGann*

All detail on T 6220a except the U.S.E. grid and the magnetic meridian appears on the compilation without conflict. Refer to Page 2 Desc. Rpt. T-6220a for discussion of location + projection at U.S.E. Grid.

### Comparison with previous topographic surveys

#### T 1413a (1875), 1:10,000

The shoreline has been subject to a small amount of building out since the date of T 1413a. T 1413a is devoid of inshore detail and is adequately superseded by the compilation throughout the area common to the two surveys.

#### T 1710 (1886), 1:10,000

This survey is a complete topographic survey of the shoreline at Staten Island from The Narrows to Great Kill. The shoreline and detail are in general agreement except for cultural changes due to the large amount of building that has been done since 1886. The shoreline has receded about 40 meters in the vicinity of the mouth of New Creek which has been jettied, thus stopping the deposition of alluvial material from the creek. The compilation is adequate to supersede T 1710 in all points of detail throughout the area common to the two surveys.

### Comparison with contemporary hydrographic surveys

#### H 5736 (1934), 1:10,000

The small island and the wreck shown<sup>on H 5736</sup> about 100 - 150 meters offshore at the mouth of New Creek cannot be discerned on the photographs, do not appear on the contemporary topographic surveys, and therefore are not shown on the compilation.

The shoreline and shoreline detail do not agree with the positions as given on the compilation. As these positions originated with the compilation, these differences must be due to inaccurate transferring and the compilation, then, is accepted as correct. These changes affect the positions of docks and shoreline but do not conflict with soundings.

Except for the above, there is no conflict between H 5736 and the compilation.

additional note to the review of T5108

T5108 has been entirely redrawn since it was reviewed in 1936 and since the original blueprint copy was registered <sup>2/28/36</sup>. In redrawing T5108 practically all buildings in the interior were removed and buildings along the water-front were corrected and revised.

T5108 was applied to chart 285 prior to the redrawing but none of the changes mentioned above affect chart 285 as only a small part of T5108 is within the area of the chart.

The new drawing of T5108 was applied to chart 369. B39 pres 11/15/38

Comparison with chart 369

Additions and minor corrections are discussed under comparison with previous topographic surveys.

The piers near Seaside Hospital ( $40^{\circ} 33'.6$ ,  $74^{\circ} 05'.8$ ) is now in ruins.

Landmarks

All landmarks charted in this area are shown on the compilation and no landmarks are recommended deleted.

A better statement of the accuracy of this compilation than the one given in the descriptive report would be 0.3 mm. to 0.5 mm. for intersected points and 0.3 mm to 1.0 mm for other detail.

Descriptions of topographic stations are filed on Form 524 under sheet T 6220a.

Feb. 28, 1936.

*Ralph M. Berry*

R. M. Berry.

The Ruins ( $40^{\circ} 35'.6$  -  $74^{\circ} 03'.8$ ) near station "Una" were added from the photographs which show the object distinctly although it is not mentioned in the field inspection.

R.M.B. 2/29/36

*Refer also to note on opposite page.*

*B. J. Jones*

## REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: Roswell C. Bolstad

Compiled by: (See page 2, of  
Compiler's 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)
- ✓ 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)
- ✓ 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)
- ✓ 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.
- ✓ 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)
- ✓ 7. High water line on marshy and ~~marshy~~ 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)

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)

Previously submitted, see paragraph on LANDMARKS, page 5.

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)

No bridges of importance to navigation occur 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 N.A. 1927 and the reference station is correctly noted.

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) Junctions with 1-5000 scale compilations, Field Nos. 97 & 98 (see progress sketch) have not been made as these sheets have not yet been compiled; revise to these sheets as necessary when they have been completed.

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.



Remarks

This compilation sheet has been compiled by several draftsmen which is unfortunate but unavoidable because of the large turn-over of personnel on this party. Furthermore because of lack of adequate time on account of forced party closing the amount of time for review before shipment to Washington has been hampered. Because of this and the fact the original compiler developed trouble with his eyes and was forced to resign it is beleived that a more thorough review than usual should be made by the Washington Office staff.

Because compilation sheets, field nos. 97 & 98, 1:5000 scale compilations adjoining on the north and east, have not as yet been compiled and there is no indication as to when they may be in the future, it was deemed advisable to forward this sheet in at this time. It is not known if this party will ever continue the compilations in this area, either in the near future or at all. The experience of this party indicates that a satisfactory junction can seldom be made from a 1:10000 scale compilation to a 1:5000 scale compilation; it is therefore recommended that the junction be made in the reverse order when the sheets 97 & 98 are completed. It is suggested that a photographic print be made of this sheet immediately to avoid any stain from the celluloid ink which may develop latter.

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 reports affecting this area may be found in the 1934 Air Photo Field Inspection Report attached to Air Photo Topographic Sheet Reg. No. T-5107. Reference may also ~~xxx~~ be made to the report of Lieut. E.R. McCarthy's 1934 survey of this area, which was never sent in to this party.

Preliminary review:-  
18. Examined and approved;

*H. Mach*  
H. Mach  
Draftsman

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

19. Remarks after review in office:

Reviewed in office by: *Ralph M. Berry*

*B.G. Jones*

Examined and approved:

*E. K. Green.*  
Chief, Section of Field Records  
*L.O. Lobbut.*  
Chief, Division of Charts

*Fred L. Peacock*  
Chief, Section of Field Work  
*G. H. Hude*  
Chief, Division of Hydrography  
and Topography.

DESCRIPTIVE REPORT FOR SUPPLEMENTAL T-5108

1. Corrections shown in red apply to supplemental September 28, 1940.  
These corrections were plotted from 9 lens photographs taken  
7 / 5 1940.

*B.G. Jones*

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-5108

## Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.