

Original

# 5282

## SUPPLEMENTAL T5282

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SUPPLEMENTAL T

Form 504  
Rev. Dec. 1933

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

### DESCRIPTIVE REPORT

Topographic }  
~~Hydrographic~~ } Sheet No. T. 5282

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State New Jersey

LOCALITY

Asbury Park

Date of photographs 1935 Apr to July 1932

CHIEF OF PARTY

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

Applied to chart 1215 J.M.A. Nov. 1939.

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. 68..... **T5282**

REGISTER NO. T 5282

State New Jersey

General locality .....

Locality Asbury Park

Scale 1:10,000 Date of ~~Survey~~ Compilation Oct. 30, 1935

Vessel Air Photo Compilation Party No. 12

Reviewed and recommended for approval Royster C. Bechtold  
Chief of party Roswell C. Bolstad, Jr. H. & G. E.

Surveyed by See Statistics sheet on following page.

Inked by C.R. Weaver & R.L. Fisher

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 1:10,000 and printed  
by photo lithography.

- STATISTICS -  
on  
SHEET, FIELD NO. 68, REG. NO. T 5282

PHOTOGRAPHS AS FOLLOWS:-

M64 to M79 (876-14) inclusive, taken Jan. 23, 1933.  
66-33-21 to 26 inclusive, taken }  
66-11-35 to 40 " , " } April to July 1932  
66-51-25 & 26 " , " }  
66-51-49 & 50 " , " }

	By	DATE	
		From	To
SCALE FACTOR = 1.000			
PROJECTION	Wm. E. vonBuehrens, F.V.B.	July 20, 1934	
PROJECTION CHECKED	Wm. Barasch u. J. Barasch	" "	" "
CONTROL PLOTTED	J.K. Batchellor, J.K. Batchellor	Sept. 7, 1934	
CONTROL CHECKED	J.G. Albert, J.G. Albert	" 9, 1934	
SMOOTH RADIAL LINE PLOT	W.D. Ayers, W.D. Ayers	Sept. 9	Sept 19, 1934
RADIAL PLOT CHECKED	R.L. Fisher, R.L. Fisher	" 19	" 21, "
DETAIL INKED	C.R. Weaver, C.R. Weaver	June 12	July 31, 1935
PRELIMINARY REVIEW OF SHEET	R.L. Fisher, R.L. Fisher	Sept. 3	Oct. 15, 1935
	R.L. Fisher & R.C. Bolstad	Oct. 16 & 17,	1935

AREA OF DETAIL INKED 21.0 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)  
5.5 Statute Miles.

LENGTH OF SHORELINE (Rivers and sloughs less than 200 m. wide)  
7.4 Statute Miles.

LENGTH OF STREETS, ROADS, TRAILS, RAILROADS, etc. 240.0 Stat. Miles.

General Location East Coast of New Jersey

Location Asbury Park

DATUM North American 1927

STATION Asbury Park High School Stack, 1934

42".716  
(533.1 m.)  
Latitude 40° - 13' - 1317.5 m.

(241.6 m.)  
Longitude 74° - 00' - 1177.0 m.

49".796 (adjusted).

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET; FIELD NO. 68

GENERAL INFORMATION

The AIR PHOTO FIELD INSPECTION REPORT, attached to the Descriptive report for compilation ~~sheet, register~~ number T 5279 furnished the necessary information for the compilation of this sheet. Mr. R.L.Fisher who made the field inspection of this area was stationed in the office at intervals during the compilation and furnished additional information where required.

The ~~compilation of this sheet~~ has been considerably retarded by a combined-operations field party operating in this area in 1934 and establishing additional triangulation, the positions of which were delayed in arriving for this party's use. Upon receipt of all control the compilation was resumed, only to be retarded again at the close of the 1935 fiscal year because of uncertain party conditions and closure due to shortage of funds. In September the work on this ~~sheet~~ <sup>Compilation</sup> was resumed by Mr. R.L.Fisher who was the only other member (in addition to Lt. Bolstad) attached to the field inspection party of the upper Hudson River section. As no funds for office space were available the ~~compilation of this sheet~~ <sup>work of this</sup> had been handicapped by having to work on it in a private dwelling unequipped for proper compilation drafting.

This sheet was compiled from the single lens photographs (listed on page 2) taken by the Aero Service Corporation, 1612 Chancellor St., Phil., Pa., with a camera using a special 8" focal length lens (Orthomessar). The original negatives are on a scale of about 1:21,800. Enlargements were made to a 1:10,000 scale by using the former topographic sheets on this scale and enlarging the image to coincide.

No information was available from the Aero Service Corporation listing the time of day at which the photographs were taken.

The preceding STATISTICS sheet lists all information in connection with the compilation of this sheet.

CONTROL

(A) Sources

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

- (a) Triangulation by P.C.Doran, 1933. (N.A.1927 Adj.)
- (b) " " E.R.McCarthy, 1934(N.A.1927 Field)

(B) Errors

An error in the position of triangulation station "Deal Br. Stone Tower (St. Marys R.C.Church) 1934 was discovered in making the radial plot. For details see the paragraph "Adjustments of Plot" following.

(C) Discrepancies

As no other control than the above listed triangulation was <sup>available</sup> used for this ~~sheet~~ <sup>Compilation</sup> no discrepancies in other control is noted.

COMPILATION

(A) Method

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

*This station is not listed in the published list of Triang. for New Jersey. This par. has been referred to Geodesy. JEG*

(B) Adjustments of Plot

Difficulty in making a satisfactory radial plot was encountered in the area, lat.  $40^{\circ}-14.5'$ , long.  $74^{\circ}-00.5'$ . It was discovered that the position of Lt. McCarthy's 1934 triangulation station "Deal Br. Stone Tower" (St. Marys R.C.Church) was in error. The correct position according to the photo plot is as follows:-

Latitude  $40^{\circ}-14'-1095$  meters.

Longitude  $74^{\circ}-00'-26$  meters.

This station has been shown on this <sup>Compilation</sup> sheet by a small black circle. It appears that Lt. McCarthy observed on a tower about 300 meters west of this church tower for the cut other than that taken from KAYSER 1934 which is correct.

Upon receipt of the missing Triangulation stations (in 1935) forwarded by Lt. McCarthy it was found that only very slight adjustments in the plot was necessary in order to hold to all control.

(C) Interpretation

The usual graphic symbols as approved by the Board of Surveys and Maps (1932) were used and no great difficulty was experienced in interpreting the photographic detail with the exception of the following. At lat.  $40^{\circ}-13.8'$ , long.  $74^{\circ}-01.1'$  the trees obscure the street system so that it was necessary to make the best interpretation possible after a study under the stereoscope.

Good motor roads are shown by a double full line, poor motor roads by a double broken line, and very poor roads and trails by a single broken line.

(D) Information from Other Sources

No information from other sources was used. The "M" photos were used for reference only as they are badly out of scale. Mr. R.L.Fisher who made the field inspection of this area incorporated any additional information into the compilation as was required.

(E) Names

All names shown on the overlay sheet for this compilation agree with those of the present U.S.C. & G.S. charts for this section. Any additional new names appearing thereon have been determined by the field inspection party and labeled on the photographs; verification of all such names was made by the inspecting party.

(F) Comparison with Other Surveys

All junctions with adjoining sheets are satisfactory.

No comparison has been made with any of the previous topographic surveys of this area as they are believed to be of such date as to render them unsatisfactory for comparison. Any topographic surveys which may have been done by the party of Lt. McCarthy were not received by this party and there is no knowledge concerning them. *T-6215 b covers the coastline of this area. See review at back*

LANDMARKS

Although no list of landmarks was received from Lt. McCarthy it is presumed that they were submitted to the office. It is believed that all such objects have been located by triangulation.

Recoverable Objects

The only object shown by a small black circle on this sheet is the Brown stone Tower Cross (St. Marys R.C. Church) which was a 1934 triangulation station found to be in error (See paragraph "Adjustments of plot"). Additional recoverable topo stations added in this office. See review at back. B.G.J.

RECOMMENDATIONS FOR FURTHER SURVEYS \* see below.

This compilation is believed to have a probable error of not more than two meters in position of well defined detail of importance for charting and of not more than four meters for other data. It is understood that the widths of roads and similar detail may be slightly expanded in order to keep it clear and from photographing as a solid mass in the photo lithographic process.

To the best of my knowledge and belief this sheet is complete in all detail of importance for charting, within the accuracy as stated above and no further surveys are required.

\* A better estimate of the probable accuracy of location, would be from 0.3 to ~~0.8~~<sup>0.5</sup> mm for intersected points and from ~~0.5~~<sup>0.3</sup> to ~~0.8~~<sup>0.5</sup> mm for points between intersections.

Sam. 7/30/36.

Submitted by,

R. L. Fisher  
R. L. Fisher,  
Draftsman.

High Water Line on the Outer Coast

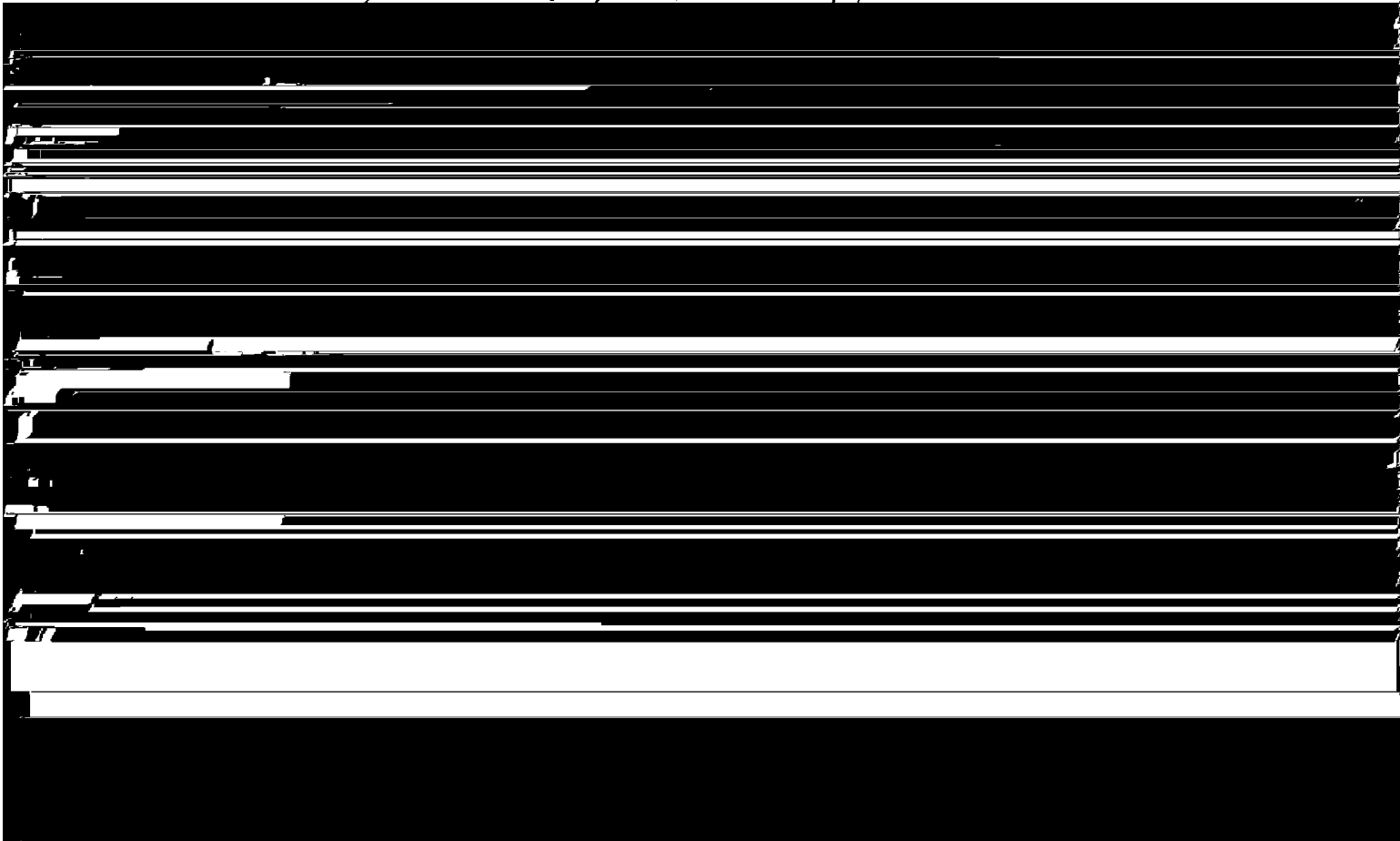
High water line on this compilation is of the date of the field inspection, July-October 1934. Field inspection report for the project is filed under T-5279.

See page / , first section of report, T 5279 regarding ground inspection on this project for changes during the interval between the date of the photographs, April-July 1932 and the field inspection, July-October 1934.

Changes in high water line were marked on the photographs by reference distances and sketching.

This method lends itself more readily to delineation of large changes than to small detail. In this area there is in general an abundance of permanent objects to which reference measurements can be made.

*on this compilation no large changes have been noted on the field photos and H.W. line as of the date of field inspection (1934) ~~is very~~ shows only small changes* B.G.J. July, 1936.





Remarks

Decisions

1

*Neptune not Neptune City.*

GEOGRAPHIC NAMES

Survey No. 5282

Name on Survey	5282									
	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<del>Neptune City</del>						✓	✓			1
Ocean Grove	1215		✓			✓				2
Bradley Beach	1215		✓			✓				3
Fletcher Lake	6/1/36			✓					*	4
Wesley Lake				✓					*	5
<del>Asbury Park</del>	1215		✓			✓				6
Deal Lake			✓							7
Allenhurst			✓			✓				8
Oakhurst			✓			✓	✓			9
Elberon	1215						✓			10
Deal						✓	✓			11
										12
Undersized										13
Names approved Mar. 3 1936										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

REVIEW OF AIR PHOTO COMPILATION T-5282 (1932)  
1:10,000 scale

Comparison with Graphic Control Surveys

T-6215b (1934), 1:10,000

Survey T-6215b was made for control of hydrography and was not available for control of or comparison with this compilation in the field. Survey T-6215b shows the location of numerous topographic stations but does not locate coastline.

Comparison between T-6215b and this compilation disclosed errors both in the compilation and in the survey T-6215b. The triangulation station Deal, Casino Cupola, 1934 had been erroneously pricked on the photographs of this area. Described stations DAP and GARFIELD had been transferred from T-6215b to this compilation and identified on the photos of this area <sup>Nos.</sup> 66-11-39 and 66-11-40. A replot along the coast between  $40^{\circ} 13.5'$  and  $40^{\circ} 16.5'$  has been made in this office using the correct position of triangulation station Deal, Casino Cupola 1934 and the stations DAP and GARFIELD.

The compilation is now in good agreement with T-6215b except in the following stations where the plane table survey T-6215b is believed to be in error:

Station DARLING (d),  $40^{\circ} 14.7'$ ,  $73^{\circ} 59.6'$ . This station's position as plotted from ties given on its description card (Form 524) does not agree with the position as plotted from T-6215b. Difference is about 80 meters. This station is not shown on compilation and the card description has been discarded.

Station JAX (d) (Cupola),  $40^{\circ} 14.1'$ ,  $73^{\circ} 59.8'$ . This station has been replotted from the photos and a corrected position is shown on the description card (Form 524) for it. It is out of position about 9 meters on T-6215b.

Station ELK (weather vane on house),  $40^{\circ} 15.6'$ ,  $73^{\circ} 59.4'$ . This is a recoverable station which is out about 4 meters. The house on which it is located is shown on the compilation but not the station.

Notes have been made in green on T-6215b regarding the errors in location noted above.

A large number of non-prominent, undescribed objects, such as house chimneys, flagpoles, and so on, located on T-6215b for control of hydrography have not been transferred to this compilation because of the density of recoverable stations already shown.

All described recoverable topographic stations have been transferred to this compilation in this office by L. A. McGann, checked *Jan* by F. G. Erskine, July 29, 1936, except stations JAX and DARLING. See preceding paragraphs for reasons.

⊙ His, lat.  $49^{\circ} 14.5'$ , long.  $73^{\circ} 59.5'$  on T-6215b is undescribed and plots 130 meters offshore. A note in sounding volume 1, page 62, pos. 22 c, H-5638, states that the line breaks at this position to avoid a pier. H-5638 was surveyed in Oct.-Nov. 1934. The field inspection of the photographs (66-11-39) July-Oct. 1934 has sketched a stone jetty in approximately this same position. In the absence of any further information to prove whether this is a jetty or pier the field inspection is accepted as more likely correct and a jetty is shown on this compilation. This has been called to the attention of the Verifying Unit.

The wreck of the MORRO CASTLE shown on T-6215b at  $40^{\circ} 13.5'$ ,  $73^{\circ} 59.8'$  has not been transferred since it has been removed.

All detail on T-6215b within this area is now shown on this compilation except non-recoverable plane table stations, recoverable described station DARLING (d), the MORRO CASTLE wreck, undescribed recoverable topographic stations such as cupolas, flagpoles, etc. mentioned above and triangulation station Asbury Park, Mayfair Theatre Turret, 1934. This latter station, located by E. R. McCarthy, will not be office adjusted to the N.A. 1927 datum for it is in error.

#### Comparison with Previous Topographic Surveys

T- 114 (1839),	1:10,000,	Nevesink and Shrewsbury Rivers
T- 115 (1839),	"	Shark River and vicinity
T-1022 (1866),	"	Long Branch and vicinity
T-1083 (1867),	"	Deal to Manasquan Inlet

A comparison with surveys T-114, T-115 shows that this compilation is detailed and adequate in order to supersede those portions of T-114 and T-115 which it covers. The areas of T-1022 and T-1083 which are covered by this compilation are also superseded by it except for the contours shown on T-1022 and T-1083.

#### T-2470 (1899), 1:10,000

Survey T-2470 covers the coast from Ocean Grove to Brielle. Coastline changes at Bradley Beach as large as 50 meters have occurred since the time T-2470 was made. The street layout of T-2470 does not agree with that of this compilation. The compilation does not show any buildings in this area except those adjacent to the coast. T-2470 shows many buildings in the congested areas of Ocean Grove. Except for these buildings T-2470 is superseded by this compilation over the common area.

T-2472 (1899), 1:10,000

Survey T-2472 covers the coast from Long Branch to Asbury Park. At Deal there has been a 50 meter recession of the coastline since the time of T-2472. There are many differences of street lines and railroad lines which can be accounted for only as inaccuracies in the plane table work of T-2472. The compilation has been verified for locations of streets and railroads.

See note on T-6215b

T-2472 shows many buildings in the towns of Elberon, Allenhurst, Deal, and Asbury Park which do not appear on this compilation. Except for these buildings T-2472 is superseded by this compilation over the common area.

Comparison with New Hydrographic Surveys

H-5638 (1934), 1:10,000

There are no conflicts between the soundings of H-5638 and the coastline of this compilation. Station JAX (d) which is in error on T-6215b is shown correctly on H-5638, agrees with the compilation's position. Station ELK also in error on T-6215b (about 4 meters out). This error is not large enough to materially affect the position of the soundings plotted from it. See also last paragraph of comparison with T-6215b above.

Comparison with the Chart

Chart 1215 - All current landmarks shown on chart 1215 in this area have been recovered and are shown on this compilation. The more important landmarks of this area are listed in the descriptive report for T-6215b.

Revisions

The stone jetties, one at 40° 14.5', 73° 59.6', the other at 40° 14.9', 73° 59.5', have been inked on the compilation from sketches of them made on the photos of this area by the field inspection party. These jetties were not in existence at the time the photos were taken and have been only approximately located on the photos.

Projection

The projection of this compilation is in error. The results of the test on the projection are shown by the following tabulation:

	74° 01'	74° 02'	74° 03'	74° 04'
40° 13' north of correct position	2 m.	2 m.	2 m.+	2 m.+
40° 16' " " " "	--	--	2 m.+	3 m.

The other parallels and meridians are not materially out of their correct positions.

Buildings

The buildings have not been consistently shown on this compilation. Some rural buildings have not been shown while others in urban areas have been. A number of the buildings shown have been somewhat exaggerated. No attempt has been made in this office to reduce those buildings shown too large to their correct size as the exaggerated sizes would register in the photo-lithographic process even after the reductions were made. - *because of stains left on celluloid by erasing.*

August 7, 1936.

Leonard A. McNamee  
V. B. Jones

REVIEW OF AIR PHOTO COMPILATION NO. T 5282

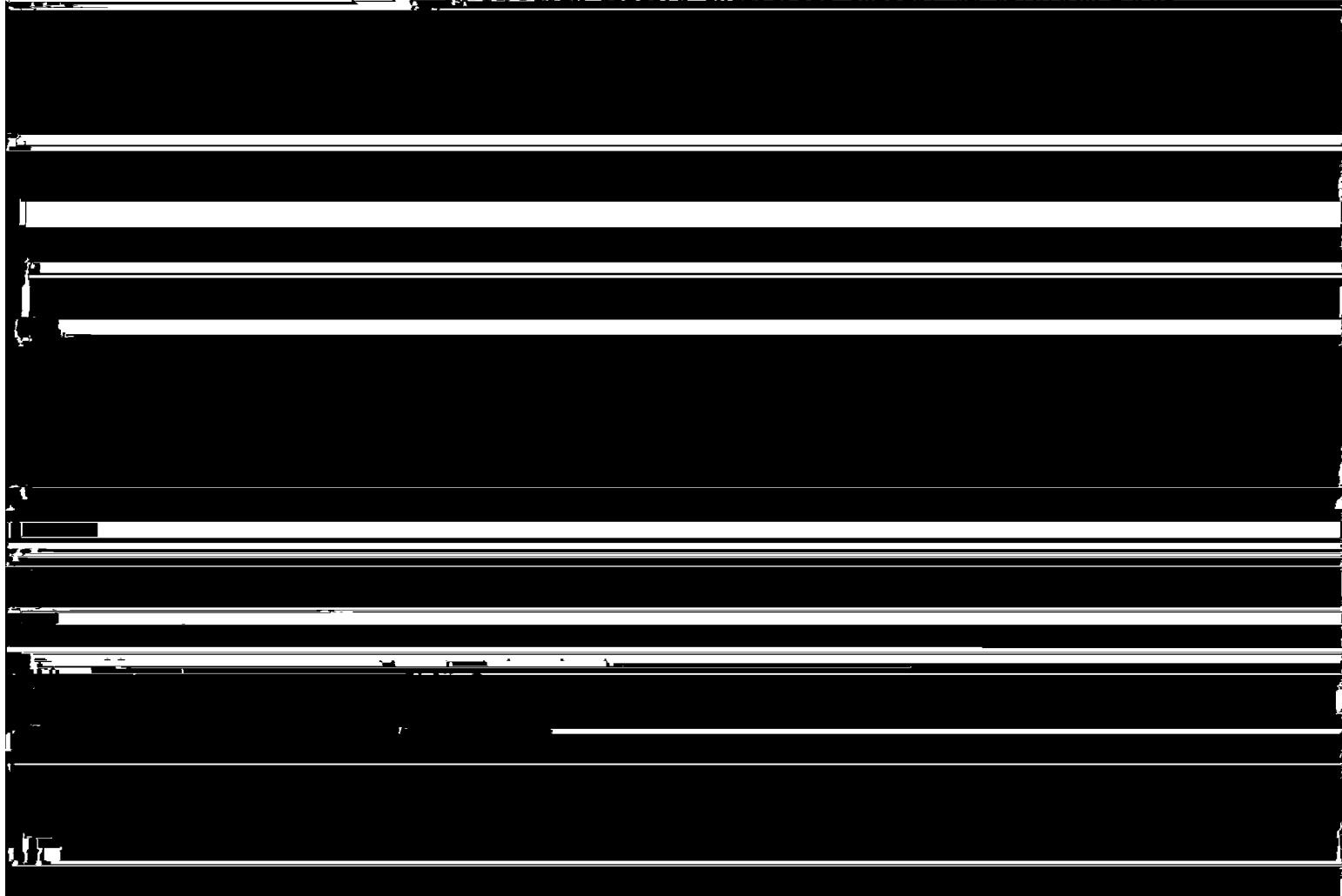
Chief of Party: Roswell C. Bolstad

Compiled by: (See STATISTICS Sheet).

Project: N.Y. Air Photo Compilation Party Instructions dated: Nov. 15, 1932.

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)  
*Graphic control survey T-6215 b (1934) covers the coastline of this compilation.*
  
4. Blue-prints and maps from other sources which were transmitted



8. The representation of low water lines, ~~and~~ 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)  
Sufficient triangulation stations to comply with distribution requirements for control stations. *Described stations filed under survey No T-6215b.*
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 18, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)  
Lieut. McCarthy ~~was~~ to furnish this list.  
*List furnished with descriptive report T-6215a, T-6215b.*
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 over navigable waters in this area*
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)
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.



- 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 requirements effecting this area are referred to the reports of Lieut. E. R. McCarthy who operated a combined-operations party in this locality in 1934.

The progress of this compilation has been retarded as explained in the first paragraph of the report and also due to the fact that no adequate drafting space was available after the forced closing of the N.Y. Compilation office. This compilation has been completed while engaged on field inspection work so that no void area in the compilations of the New Jersey coast would exist.

18. Examined and approved;

Preliminary review- R. L. Fisher, Draftsman.

Roswell C. Rolstad  
Chief of Party

19. Remarks after review in office:

*Drafting on this compilation is unusually poor. Considerable negative work was necessary to put it in present printed form 11/11/36*

Reviewed in office by: Leonard A. McNamee August 7, 1936.  
*V.B.G. Jones*

Examined and approved:

C. K. Green  
Chief, Section of Field Records

L. O. Robert  
Chief, Division of Charts

Frank L. Peacock  
Chief, Section of Field Work

Glenn  
Chief, Division of Hydrography and Topography.