

5279

U. S. COAST & GEODETIC SURVEY
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(This report includes Field Inspection Report,
for south-eastern coast of N. J.)

Acc. No. _____

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New Jersey

DESCRIPTIVE REPORT

Photo
Topographic~~Hydrographic~~

Sheet No. T-5279

LOCALITY

Navesink River.

Seabright.~~Marmouth Beach to Highland Beach.~~

1935

CHIEF OF PARTY

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

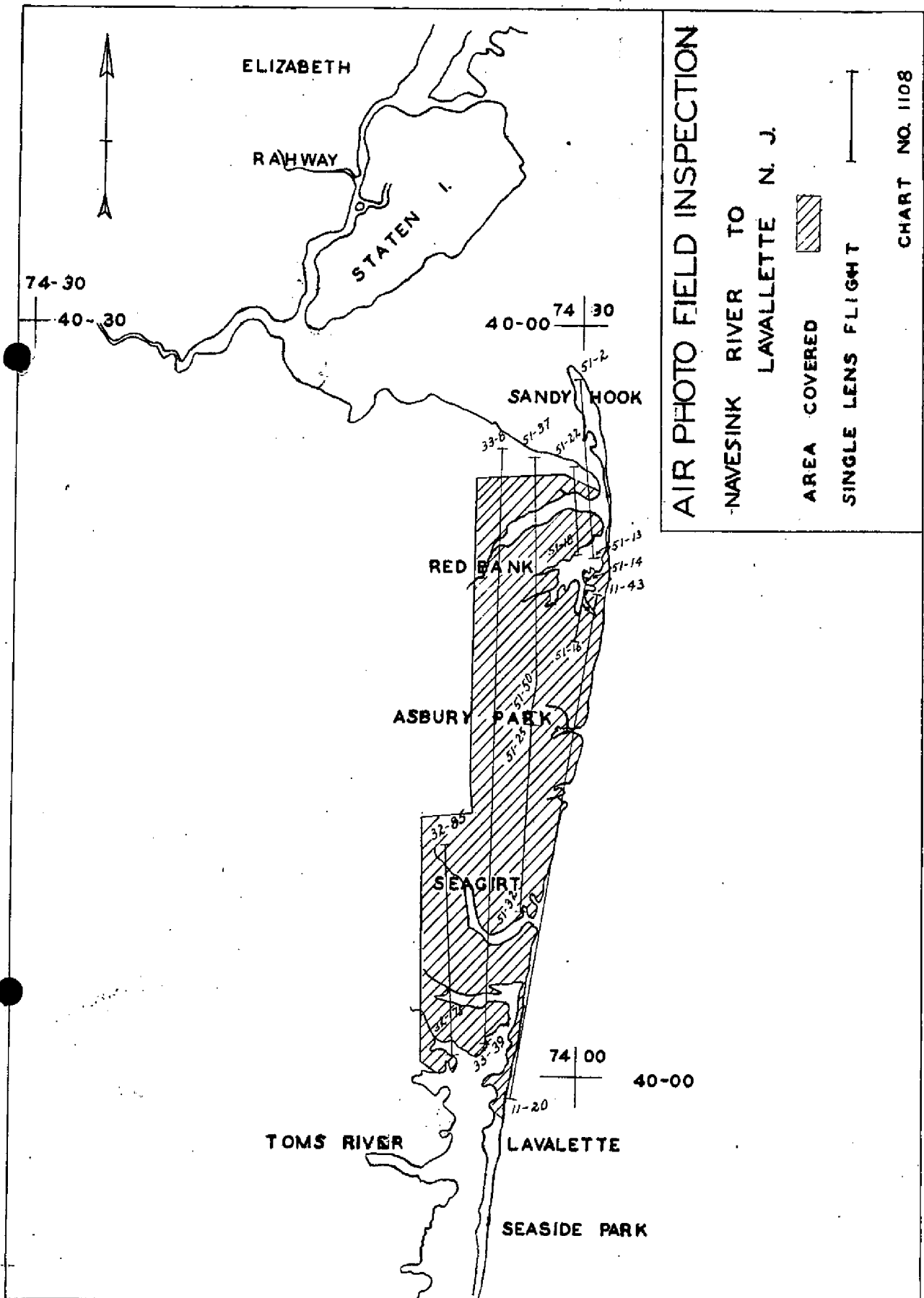
U. S. GOVERNMENT PRINTING OFFICE: 1923

5279

AIR PHOTO FIELD INSPECTION REPORT

for

SOUTH-EASTERN COAST OF NEW JERSEY



AIR PHOTO FIELD INSPECTION REPORT

for

NAVESINK RIVER TO LAVALLETTE.

NEW JERSEY

During the period from July to October 1934, a field inspection was made of all photographs covering the New Jersey Coast from the Navesink River to Lavallette, (total area of 125 square miles) by one member of Party No. 12, New York City, assisted by one member of Party No. 14, Red Bank, New Jersey, with U. S. C. & G. S. truck No. 202.

The compilation of the area covered by this field inspection is shown on air photo topographic sheets numbered as follows:

| | |
|--------------|----------------|
| Field No. 65 | Reg. No. T5279 |
| " " 67 | " " T5281 |
| " " 68 | " " T5282 |
| " " 69 | " " T5283 |
| " " 70 | " " T5284 |
| " " 71 | " " T5285 |

PHOTOGRAPHS

Flight lines of photographs involved are indicated on the preceding index map and the numbers and dates on which the photographs were taken are given below.

Single Lens Photos

| | |
|------------------|----------------|
| 66-11 - 20 to 43 | April 19, 1932 |
| 32 - 75 to 85 | May 20, 1932 |
| 33 - 13 to 39 | May 20, 1932 |
| 51 - 9 to 16 | April 19, 1932 |
| 51 - 18 to 21 | July 24, 1932 |
| 51 - 25 to 32 | July 24, 1932 |
| 51 - 40 to 48 | July 24, 1932 |
| 51 - 49 & 50 | July 25, 1932 |

The single lens photographs are enlargements to approximately 1:10,000 scale from 1:20,000 scale single lens photographs taken by the Aero Service Corporation, 1612 Chancellor St., Philadelphia, Pa. with their 8 inch focal length "Orthomessar" lens camera.

GENERAL DESCRIPTION OF TOPOGRAPHY

Sufficient and adequate notes relating to the topography were marked directly on the photographs.

The narrow outer strip of coast line in this area consists of sandy beaches and summer resorts, the inner coast line along the bays and rivers of marsh and very flat country. Further inland the country is more rolling and the vegetation mainly of scrub oak and pine, also many cultivated areas and residential districts. The bays and rivers are mostly all salt water, the soil mainly sand and

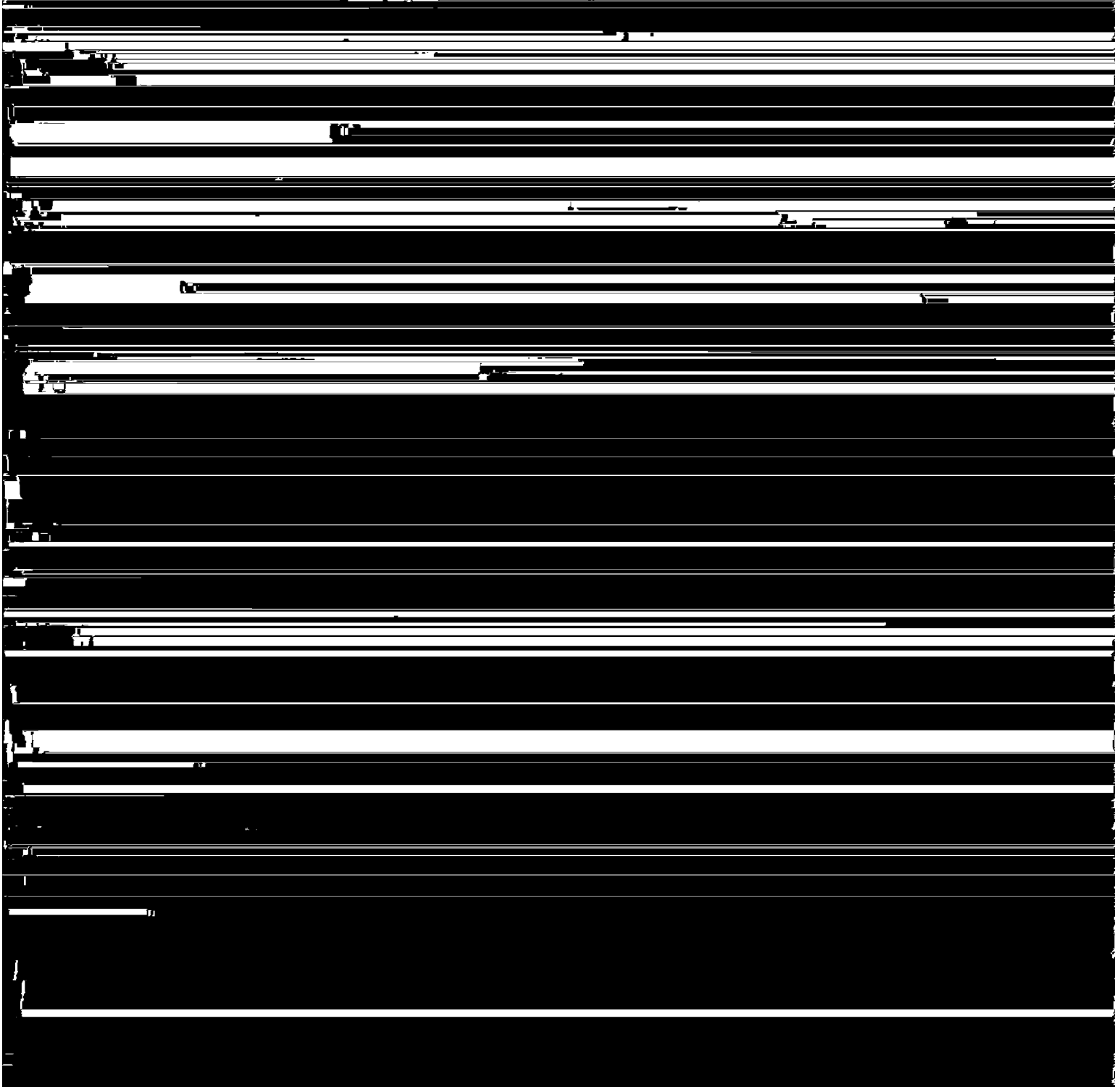
CONTROL

(1) Triangulation

Triangulation performed by the party of Lieut. E.R. McCarthy forms the basis of control for this area. The field positions which are on North American 1927 Datum were used with the exception of the South River area where the positions are on North American ~~1927~~.

(2) Topography

In addition to the above listed control, the following topographic sheets may be used as an aid in the comp-



The geographic positions of all recoverable objects, minor Class C landmarks, spotted on the photographs, will be found in the descriptive report for each air photo topographic sheet compiled of this area. See paragraph on LANDMARKS for classification of Class C landmarks.

LANDMARKS

The major (chartable) landmarks have been previously submitted and cut in as triangulation stations. A list was submitted by Lieut. R.W. Woodworth in 1931 and 1932 and Lieut. E.R. McCarthy will submit a list to cover all landmarks obtained from his field operations in 1934.

Additional possible landmarks were spotted on the field prints. These landmarks were spotted from land and could be chosen more accurately if viewed from the water. They do, however, exhibit a degree of prominence and will fall within the classification for Class C landmarks mentioned in the descriptive report for air photo topographic sheet Reg. No. T5059, paragraph LANDMARKS And REPORT ON REVIEW OF SHEET.

CHANGES

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

Submitted by

R. L. Fisher
R. L. Fisher
Draftsman

November 19, 1934

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET

FIELD NO. 65

REGISTER NO. T-5279

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. 65

REGISTER NO. T-5279

dia 1215-3 8369-4

State New Jersey

General locality Navesink River

Locality *Seabright*
~~Monmouth Beach to Highland Beach.~~

Scale 1:10,000 Date of Photographs May 20, 1932

Date of compilation July 24, 1932

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

Chief of party *Roswell C. Bolstad*
Roswell C. Bolstad.

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

Inked by E. W. Fickenscher. F. M. Overby.

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. 65, REG. NO. T-5279.

PHOTOS NOS. 66-33-10 to 66-33-15. Incl.

DATE May 20, 1932.

PHOTOS, NOS. 66-51-9 to 66-51-13. Incl.

DATE July 24, 1932.

PHOTOS, NOS. 66-51-18 to 66-51-20. Incl.

DATE July 24, 1932.

PHOTOS, NOS. 876-14-M45 to 876-14-M53. Incl.

DATE Jan 23, 1933.

TIME 11:33 A. M.

The scale factor of this sheet is 1.000

PROJECTION

R. L. Fisher
R. L. Fisher

5/24/34

PROJECTION CHECKED

E. W. Fickenscher
E. W. Fickenscher

5/24/34

CONTROL PLOTTED

W. D. Ayers W. D. Ayers

8/28/34

CONTROL CHECKED

D. B. Bogart D. B. Bogart

7/9/34

W. D. Ayers W. D. Ayers

8/28/34

J. G. Albert J. G. Albert

8/28/34

TOPOGRAPHY TRANSFERRED

(None)

TOPOGRAPHY CHECKED

(None)

SMOOTH RADIAL LINE PLOT

W. D. Ayers
W. D. Ayers

8/7/34 - 8/15/34 less

8/19 - 8/27/34 2 days.

RADIAL LINE PLOT CHECKED

J. G. Albert
J. G. Albert

8/28/34

DETAIL INKED

E. W. Fickenscher
E. M. Overby

11/4 - 11/9/34

11/14 - 2/15/35 less 2

PRELIMINARY REVIEWED

H. Mach
H. Mach

4/5 - 4/16/35

Wks.

ADDITIONAL CONTROL

(A) Sources

After completion of this report, the compiler made a field inspection trip and picked up the three missing triangulation stations: Kipp, 1934; Eppin, 1934; and Payne, 1934. They were located by measurements to near-by objects and then pricked on the photos. All three checked accurately with the plot. It was found that the detail adjacent to triangulation station Eppin, 1934, was in error and the correction was made. The bulkhead was moved 4 ~~meters~~ meters west and all adjacent detail adjusted.

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 65

GENERAL INFORMATION

The Air Photo Field Inspection Report herewith attached for south-eastern New Jersey, 1934-35, by Lieut. R. C. Bolstad, furnished the necessary field data for the compilation of this sheet. Additional information was obtained from notes on the field prints.

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

Since the time at which the photographs covering this sheet were taken was not recorded, the stage of tide could not be determined.

This sheet was compiled from four sets of photographs taken by the Aero Service Corporation, 1612 Chancellor St., Philadelphia, Pa. The photographic prints are 1:10,000 scale enlargements from the original negatives which are on an approximate scale of 1:22,000.

COMPILATION

(A) Method

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

(B) Adjustments of Plot

The photographs of this area appear to have little scale fluctuation or tilt. No unusual adjustments were found necessary.

The two eastern flights, however, were so widely separated from each other that the topography common to both of them which was clear and free from any great distortion was quite narrow. Therefore, the number of points common to both flights were decreased along the adjacent sides making it correspondingly difficult to form an accurate junction. This junction is at approximately $74^{\circ}-0.7'$ (Long.) and the worst condition occurs at approximately Lat. $40^{\circ}-22.2'$ and northward from there. However, the adjustments were carefully made and by holding to all the available control for this sheet, excessive adjustment, to the extent of causing any appreciable error, was not necessary. It should be well within the limits for allowable error.

(C) Interpretation

The usual graphic symbols were used as approved by The Board Of Surveys & Maps, 1932, and no great difficulty was experienced in interpreting the photographic detail except as described in the following paragraphs.

The public roads and private roads shown north of Lat. $40^{\circ}-23.2'$ and between Long. $73^{\circ}-59'$ and Long. $74^{\circ}-01.1'$ are almost entirely obscured by large trees as this is a heavily wooded area. The area in question was studied carefully under the stereoscope and is believed to be shown correctly. The U.S.C. & G. S. chart number 543 was used as an aid in checking the general route of the main road.

A double full line was used to indicate first order roads, a double broken line for private driveways and roads of lesser importance, etc. A single broken line was used to indicate exceedingly poor roads, trails and paths. In most cases, unless noted on the field prints, the classification had to be determined by the appearance under the stereoscope.

There is a shoal area just west and a little north of Upper Rocky Pt. (~~noted on cover sheet~~). Shown within this area are weeds which are covered at high water. ~~A few other cases of very small shoals are noted on the cover sheet.~~

Between Lats. $40^{\circ}-22.4'$ and $40^{\circ}-23.1'$ and Longs. $73^{\circ}-58.6'$ and $73^{\circ}-59.5'$ there are marshy lands in the water areas shown as islands and weeds. It appears, by examination under the stereoscope, that practically all of this may be covered at high water. However, the area just below and between Upper Rocky Pt. and Lower Rocky Pt. (~~both noted on cover sheet~~) may be visible near the center at high water and this area may be partially a mud flat. *Small clumps of weeds with a high water line around them are shown on this area.*

Not clear: This is a mainly area and is shown on the compilation as mud island and grass clumps.

*L.A.M.
8/1/35.*

ADDITIONAL COMPILATION

(C) Interpretation

On the compiler's field inspection trip (after the completion of this report) it was found that the row of piles at Lat. $40^{\circ}-23.0'$ which swing northward to form a point at the beginning of Reeves Channel were not visible. In-as-much ~~that~~^{as} it appears on the photos and is also shown on the U.S.C. & G.S. chart number 543, it has been left on the compilation sheet as originally drawn.

There was some doubt as to the nature of the composition of Gunning Island during the time at which this sheet was being compiled. Inquiry was made by mail to the officer in charge at Seabright Station and since the writing of this report, the information arrived. It has been shown accordingly on the compilation sheet.

Also, there was some question as to whether the channel had been indicated correctly at the south end of the Oceanic Bridge. This has been checked and found to agree as originally shown on the compilation sheet.

At Lat. $40^{\circ}-20.9'$, Long. $73^{\circ}-58.4'$ there are two houses shown on this compilation sheet which do not appear on any of the photographs. The photographs M 50 and M 51 show a single house which has since been replaced by two houses as shown by the newspaper clipping included in the back of this report. These houses may be somewhat incorrect in shape and location as they were sketched on this compilation sheet by the aid of the newspaper clipping.

The banks of the Swimming River have been shown as marsh and no attempt was made to show the numerous shallow drainage ditches which were apparent on the photographs as it would have caused confusion with the marsh symbol because in most cases the ditches ran in the same general direction. This was especially true on the west bank. In all other cases ditches are shown as a single full line. ~~and noted on the cover sheet.~~

The towers, one on each bank of the Navesink River are shown on the compilation. These were transferred from T-6214. The other towers of the line could not be identified on the photographs.

A transmission line was noted, during the field inspection, on photo number 66-33-14 but was not continued on the adjacent photos. In-as-much ^{as} that the information was not complete it was not shown on the compilation; ~~but as shown in the approximate correct position on the cover sheet. Furthermore its indication would have caused undue congestion at that particular point on the compilation sheet.~~

Sam 8/1/35

The dashed line with the railroad symbol imposed thereon extending almost due north from the north bank of the Navesink River (about Long. 74°-4.5') is an abandoned single track branch of The Central Railroad of New Jersey. ~~and has been so labeled on the cover sheet.~~

On photo number 66-51-41 the field party noted the bridge information on the bridge near the mouth of McCleese Creek, but it was not shown on the compilation sheet due to the creek being unnavigable. It is a steel truss bridge (nine spans @ 12.44 meters) with wood floor and has a clearance of 1.5 meters at high water. There is also an overhead pipe crossing at this point with a clearance of 2.0 meters at high water. *(No clearance is shown for this bridge for none is necessary.)*

+ Clearances on these bridges was obtained from the notes on G.C.S. T-6214

The two bridges and the New York & Long Branch Railroad trestle over the Navesink River at Red Bank appear to be fixed. The Atlantic Coast Pilot gives no information on these bridges, but states that Red Bank is at the head of navigation on the Navesink River.

Clearances for the Oceanic bridge was also obtained from the notes on G.C.S. T-6214.

~~Information regarding the Oceanic Bridge and the Seabright Bridge is noted on the cover sheet. All other bridges are over unnavigable waters and appear to be fixed.~~

as well as clearances for the Seabright Bridge also obtained from T-6214.

Sam 8/1/35

Reeves Channel has not been shown on this sheet as its boundaries were not clearly defined on the photos. The U.S.C. & G.S. chart number 543 shows it beginning at the Navesink River just above Normandie and going due south to Lat. 40°-21.3' where it swings southwestward between Gunning Island and Sedge Island, then up the Shrewsbury River and into Pleasure Bay. In figuring the length of shoreline for the STATISTICS SHEET (page 2), Reeves Channel was assumed to be over 200 meters from shore to shore although, in reality, it is less. The reason for that was because Reeves Channel is kept navigable and is the means of entering the Shrewsbury River. Therefore, both channel shores are included in the figure of 35.7 statute miles as noted on the STATISTICS SHEET.

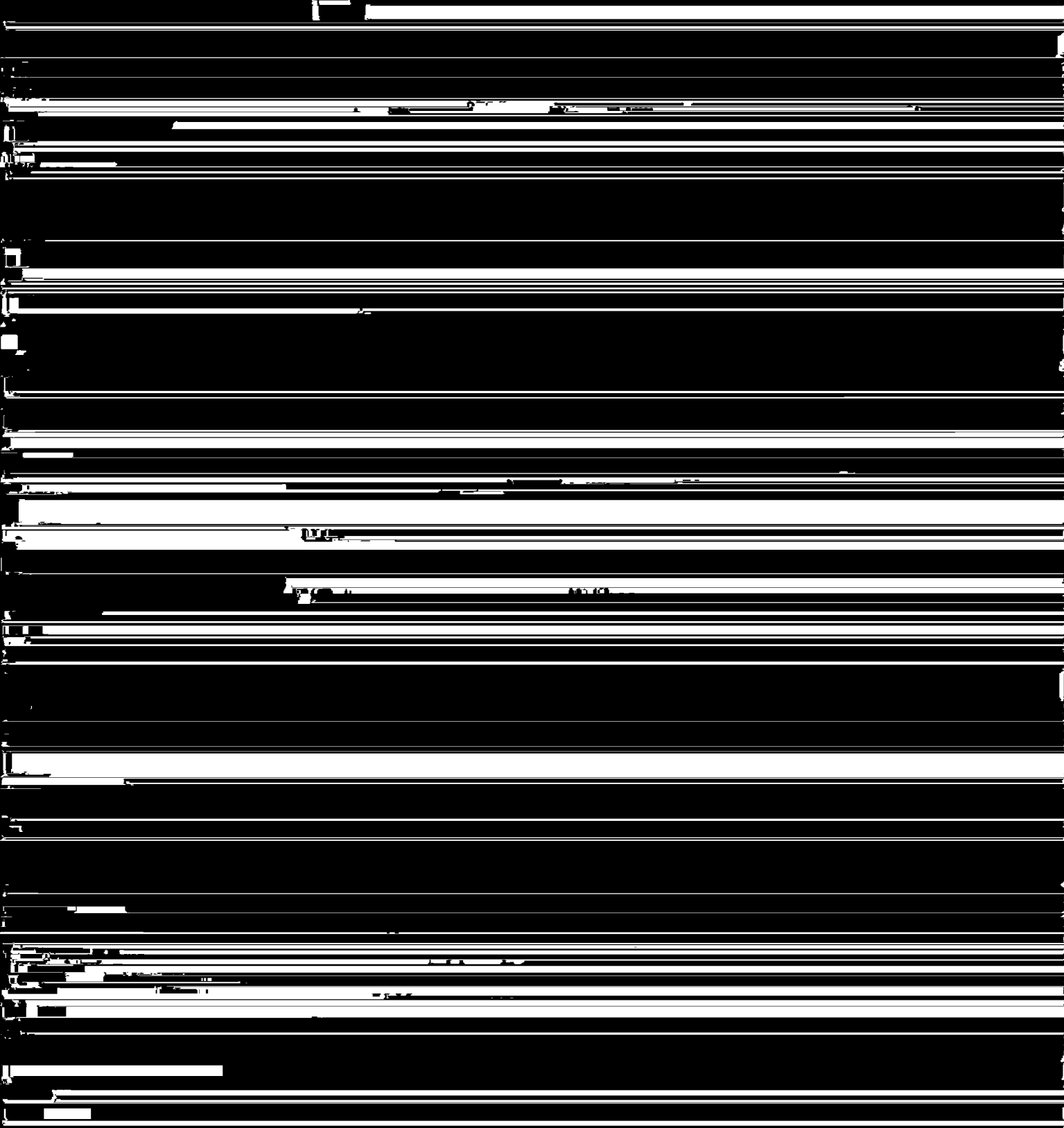
ADDITIONAL COMPILATION

(C) Interpretation

Highlands Bridge. For source of information regarding approach to the Highlands Bridge, which is not shown on the photos for this compilation sheet, see descriptive report for sheet register number T-5100. This bridge approach occurs in the upper right hand corner of this sheet at Highlands. Reference will be found under COMPILATION (C) Interpretation, on back of page 5 of the compiler's report of sheet register number T-5100. Also, the Air Photo Field Inspection Report which accompanies it, has reference to this bridge on page 3 under paragraph BRIDGES.

All buildings on this sheet have been shown in accordance with the new rules for "Location and Drafting of Buildings on Air Photo Compilations" dated April 1, 1935. Due to numerous trees in certain areas of this compilation it is quite possible that a few buildings were obscured and therefore not shown on this compilation.

In Red Bank there are, at one point, eight pairs of tracks running parallel with each other on the Central Railroad of New Jersey. On the compilation sheet only five tracks have been shown so that the switches would be shown correctly. If all eight were indicated and kept apart the required distance there would be too great a distortion in width. The outside tracks were shown. Where this condition occurs is noted on the cover sheet.



ADDITIONAL LANDMARKS

Since "Brown Shingle Water Tank" was noted on photo number 66-51-21 by the field party, it is suggested that it be checked with this compilation sheet in the Washington office. It is possible that the wrong point may have been picked in this office from the photos which were unmarked by the field party.

This tank could not be identified on the photographs with sufficient accuracy to warrant it being plotted and recommended as a landmark. The card description has been destroyed.

*Lam
Aug 3, 1935*

The probable error of this sheet is about 2 to 4 meters for intersected points and about 2 to 9 meters for unintersected detail. The values given on opposite page are somewhat low for work on this scale.

*Lam
Aug 3, 1935*

LANDMARKS

A list of landmarks for this area may have been previously submitted by Lieut. E. R. McCarthy, but no list has been submitted to this party.

Station "Brown Shingle Water Tank" is given on the "List of Recoverable Topographic Stations" as a class C landmark since it shows a fair degree of prominence under the stereoscope and may be used to obtain hydrographic "fixes". This station has been marked by the field party on photo number 66-51-21 which has already been forwarded to the Washington office with the other photos accompanying sheet No. T-5100. In-as-much ^{as} ~~that~~ this landmark was quite prominent under the stereoscope it was picked in this office on the photos for this compilation. (*See note in red on opposite page.*)

There are also many 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 the compilation sheet may be expanded somewhat. *same*

RECOMMENDATIONS FOR FURTHER SURVEYS x *See note on opposite page.*

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 avoid the closing up of the lines and 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.

Submitted by

J. M. Overby
F. M. Overby
Draftsman

Assisted by

H. Mach
H. Mach
Draftsman

LIST OF RECOVERABLE TOPOGRAPHIC STATIONS

Includes all recoverable topographic stations sufficiently prominent for use as hydrographic "fixes" and shown by small black circle on this compilation sheet. These are described on Form 524 by this party.

| Description | Latitude | | Longitude | | Height | Method of determination |
|---------------------------------------|--------------------|-------------------|--------------------|-----------------|--------|----------------------------|
| | ° | D.M. Meters | ° | D.P. Meters | | |
| Red Brick | 40 23.1 | 179.8 | 73 58.99 | 1392.3 | | A.P.T. |
| Chimney (on house) (H) | | | | | | 1934 |
| Brown Shingle ^x | 40 23.2 | 1494.2 | 73 59.1 | 92.5 | | A.P.T. |
| Water Tank | | | | | | 1934 |

*x. Station not shown and description card destroyed
as it is impossible to accurately identify this object
on the photos under the stereoscope.*

Lamm.

Note: A.P.T. denotes air photo topography.

Date July 29, 1935 GEOGRAPHIC NAMES

Survey No. T-5279

Chart No. 543

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

| Status | Name on Survey | Name on Chart | New Names in local use | Names assigned by Field | Location |
|--------|------------------------------|------------------------------------|---------------------------|----------------------------|----------|
| | <u>Navesink River</u> | same | | ✓ | |
| | <u>Shrewsbury River</u> | same | | ✓ | |
| | <u>Red Bank</u> | REDBANK (Inverness) same | | RED BANK. ✓ | |
| | <u>Fairhaven</u> | same | | ✓ | |
| | <u>Oceanic</u> | same | | ✓ | |
| | <u>Highlands of Navesink</u> | same | | ✓ | |
| | <u>Clayport Creek</u> | same | | ✓ | |
| | <u>Locust</u> | LOCUST none | | ✓ U.S.G.S. | |
| | <u>Rumson</u> | same | | ✓ | |
| | <u>Highland Beach</u> | same | | ✓ | |
| | <u>Navesink Beach</u> | WATERBURY BEACH none | NAVESINK BEACH | ✓ U.S.G.S. | |
| | <u>Normandie</u> | same | | ✓ | |
| | <u>Seabright</u> | same | | ✓ | |
| | <u>Low Moor</u> | same | | ✓ | |
| | <u>Monimouth Beach</u> | same | | ✓ | |
| | <u>Sedge Island</u> ✓ | same | | ✓ | |
| | <u>Raccoon Island</u> | same none | RACCOON I. | ✓ | |
| | <u>Waterloo</u> | same | | ✓ | |
| | <u>Gunning Island</u> ✓ | same | | ✓ | |
| | <u>Little Silver</u> | same | | ✓ | |
| | <u>Little Silver Creek</u> | same | | ✓ | |
| | <u>Little Silver Point</u> | none | LITTLE SILVER PT. | ✓ | |

Date. July 29, 1935 GEOGRAPHIC NAMES

Survey No. 7-5279

Chart No. 543

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

| Status | Name on Survey | Name on Chart | New Names in local use | Names assigned by Field | Location |
|--------|------------------------|----------------------|------------------------|-------------------------|----------|
| ✓ | <u>Town Neck Creek</u> | same | | ✓ | |
| ✓ | <u>Silvermere Park</u> | none | Silvermere Park | ✓ | |
| ✓ | <u>Elscimere Park</u> | do not chart. | | ✓ USGS. | |
| ✓ | <u>Shadow Lake</u> | Falls off chart 543. | | ✓ | |
| ✓ | <u>Swimming River</u> | same | | ✓ | |
| ✓ | <u>Newman Springs</u> | none | Newman Springs | ✓ USGS | |
| ✓ | <u>Poricy Brook</u> | Falls off chart 543. | | ✓ USGS. | |
| ✓ | <u>Fairview</u> | none | | ✓ ✓ USGS. | |
| ✓ | <u>Jones Point</u> | same | | ✓ | |
| ✓ | <u>Mc Cleese Creek</u> | none | | ✓ USGS. | |
| ✓ | <u>Guyon Point</u> | same | | ✓ | |
| ✓ | <u>Locust Point</u> | same | | ✓ | |
| ✓ | <u>Upper Rocky Pt.</u> | same | | ✓ | |
| ✓ | <u>Lower Rocky Pt.</u> | same | | ✓ | |
| ✓ | <u>Barley Pt.</u> | same | | ✓ | |
| ✓ | <u>Browns Dock</u> | Browns Dock. | | ✓ | |
| ✓ | <u>North Hill</u> | same | | ✓ | |
| ✓ | <u>South Hill</u> | same | | ✓ | |
| ✓ | <u>Galilee</u> | same | | ✓ | |
| ✓ | <u>Highlands</u> | same. | | ✓ | |
| ✓ | <u>Reeves Channel</u> | same | | ✓ | |

Survey No. 5279

Chart No. 543

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

✗, Not Approved by the Division of Geographic Names, Department of Interior.

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

(Mid)

REVIEW OF AIR PHOTO COMPILATION T 5279

Scale 1:10,000

Comparison with Graphic Control Surveys

The graphic control surveys in this area, Nos. T 6214a and b and T 6215a, scale 1:10,000, 1934, were executed for control of hydrography and were not available for use in making this compilation. No comparison was made in the field.

These control surveys show locations of numerous recoverable topographic stations but no shoreline. Comparison in this office showed excellent agreement between the planetable location of cupolas, ends of docks, etc. and the detail on this compilation. There were only a few differences of minor importance and these have been rectified where necessary by replotting the compilation from the photographs.

All described recoverable topographic stations have been transferred from the control surveys to the compilation in this office and descriptions are filed under Nos. T 6214a, T 6214b and T 6215a.

Of the numerous undescribed but recoverable topographic stations, cupolas, flagpoles, ends of docks, etc., shown on the graphic control surveys, only part have been transferred to this compilation, those transferred being selected so as to give a fairly even distribution along the shoreline.

All stations transferred by Lam. and checked by Bgg.

All detail shown on T 6214a, T 6214b and T 6215a within this area is now shown on this compilation except buoys, temporary topographic stations, magnetic declination, and the undescribed recoverable topographic stations such as cupolas, flagpoles, etc. as mentioned above.

The following undescribed stations on T 6214a plot slightly offshore and probably are on stakes or piling, but since no evidence of such appears on the photos they have not been transferred to the compilation:

| | | |
|--------------|-----------------|-----------------|
| Station RAM, | Lat. 40° 22.6', | Long. 74° 01.4' |
| " OIL, | 40 22.7 | 74 00.6 |
| " HIS, | 40 22.7 | 74 00.2 |

Comparison with Previous Topographic Surveys

T 114 (1839), scale 1:10,000

T 114 covers the Navesink and Shrewsbury Rivers and the area as far south as Long Branch. There are many changes as this area was undeveloped at the time T 114 was made. T 114 is superseded by this compilation over the common area.

T 486 (1855), scale 1:10,000

T 486 covers Sandy Hook and vicinity. Contours are shown on that portion which covers the Highlands of Navesink. There are numerous large changes in the common area. Except for the contours, T 486 is superseded by this compilation over the common area.

T 1005 (1865), scale 1:10,000

T 1005 covers the Navesink and Shrewsbury Rivers. Contours are shown over the whole area. There are numerous small changes of topographic detail, changes in position of the high water line along the Navesink and Shrewsbury Rivers. Large changes of high water line occur on the outer coast where the beach has eroded between 80 and 130 meters since the time of T 1005. T 1005 is superseded by this compilation over the area in common, except for contours.

T 2471 (1899), scale 1:10,000

T 2471 covers the coast from Highland Beach to North Long Branch. There are numerous changes of high water line as well as changes of topographic detail in the interior. T 2471 is superseded by this compilation over the common area.

Comparison with New Hydrographic Surveys

H 5616 (1934), scale 1:10,000

There are no discrepancies between H 5616 and this compilation.

Comparison with the charts

Chart No. 543 - The submerged wreck in the Navesink River just off Barley Point cannot be identified on the photographs and has not been recovered by the field party. It is not shown on the compilation. It cannot be disproved by the photographs.

The C.R.R. of N.J. railroad bridge across the Navesink River at Red Bank has been removed and the railroad north of Red Bank has been abandoned.

All current landmarks shown on the charts have been recovered and are shown on the compilation. Landmarks recommended in this area are listed in the descriptive reports, T 6214a, T 6214b, and T 6215a.

Other changes to be made to this chart as a result of this compilation are discussed under "Comparison with Previous Topographic Surveys."

Chart No. 1215 - Changes to be made to this chart as a result of this survey are discussed under "Comparison with Previous Topographic Surveys."

Projection

There are small errors up to 3 meters in several projection lines due to slight bends caused by not inking exactly over the penciled projection. This applies to meridians $73^{\circ} 58'$ and $74^{\circ} 05'$ and to parallels $40^{\circ} 22'$ and $40^{\circ} 23'$. There is also an excess of 3 meters in the curvature of the parallels.

Leonard A. McGann
LEONARD A. MCGANN
Aug. 29, 1935.

B. G. 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)
See paragraph (C) Interpretation, beginning on page 4 of compiler's report. Also, see LANDMARKS, page 7.
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. Compiler's report.
G.S. T-6214a, T-6214b, T-6215a.
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.
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 COMPILATION (B) Adjustment of Plot, Compiler's report.
7. High water line on marshy ~~hydrographic~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)
Much of the high water line sketched in by the field inspection party. See paragraph COMPILATION (C) Interpretation, page 4.

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, shoals, and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)~~

No low water lines are shown on this compilation.
Lam

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)

To be submitted by Lieut. E. R. McCarthy.
Landmark Lists furnished with descriptive reports for graphic control sheets T-6214 and T-6215.
Lam

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)
See paragraph COMPILATION (C) Interpretation, page 5.

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)
See paragraph COMPILATION (E) Conflicting Names, page 6.

13. The geographic datum of the compilation is N. American, 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 notes and requirements affecting this area may be found upon referring to the report of Lieut. E. R. McCarthy who was conducting field operations in this vicinity during the time at which this sheet was being compiled.

18. Examined and approved;
Preliminary review ---

H. Mach

H. Mach

Draftsman

Roswell C. Bolstad
Roswell C. Bolstad

Chief of Party

19. Remarks after review in office:

Reviewed in office by: *Leonard A. McKean* August 29, 1935.
B. G. Jones

Examined and approved:

C. K. Green

Chief, Section of Field Records

L. O. Bolstad

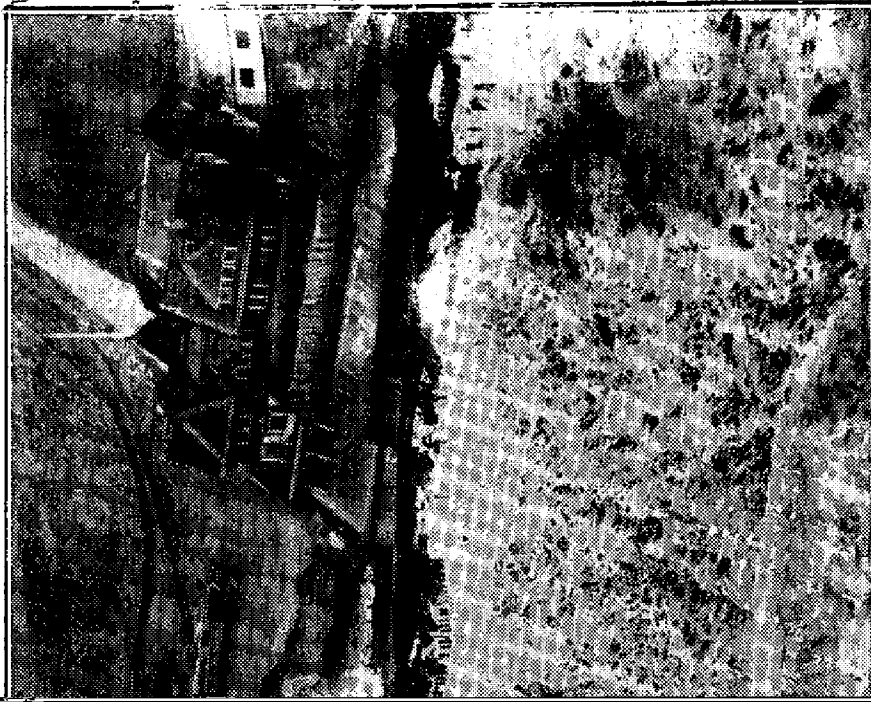
Chief, Division of Charts

J. B. Borden

Chief, Section of Field Work

G. H. Hulse

Chief, Division of Hydrography
and Topography.



NEWS AIRPHOTO BY ARNOLD: KRAUTZ, PILOT
Tail of Atlantic's worse Northeast yesterday was
view taken over Seabright, N. J., shows giant waves bat-
enter) waves have smashed through and menace house.

Applied to Chart 543 Aug 7, 1936 H. E. MacEwen