

# 5106

ORIGINAL

U. S. COAST & GEODETIC SURVEY  
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Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New Jersey

## DESCRIPTIVE<sup>®</sup> REPORT

Photo  
Topographic } Sheet No. T5106  
~~Hydrographic~~

### LOCALITY

Arthur Kill

Rahway River to Elizabeth

1935-34

### CHIEF OF PARTY

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

-1-  
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. 56

REGISTER NO. T 5106

State New Jersey

General locality Arthur Kill

Locality Rahway River to Elizabeth

Scale 1:10,000 Date of <sup>photographs</sup> ~~survey~~ May 18, 1932  
July 30 & 31, 1932

Date of Compilation Nov. 23, 1934

~~Water~~ 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 J.G. Albert

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

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

Instructions dated November 15, 1932

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

Lithography.

- STATISTICS -

on

SHEET, FIELD NO. 56, REG. NO. T-5106

|  |                           |
|--|---------------------------|
| PHOTOS, NOS. <u>66-53-29 to 66-53-33</u> | DATE <u>July 31, 1932</u> |
| PHOTOS, NOS. <u>66-21-66 to 66-21-71</u> | DATE <u>May 18, 1932</u>  |
| PHOTOS, NOS. <u>66-53-17 to 66-53-25</u> | DATE <u>July 31, 1932</u> |
| PHOTOS, NOS. <u>66-52-44 to 66-52-45</u> | DATE <u>July 30, 1932</u> |

By

DATE

From To

The scale factor of this sheet is 1.000

|                          |   |  |
|--------------------------|---|--|
| PROJECTION               | <u>E.W. Fickenscher</u><br>E.W. Fickenscher | <u>4-11-34</u>                                       |
| PROJECTION CHECKED       | <u>R.A. Philleo</u><br>R.A. Philleo         | <u>4-11-34</u>                                       |
| CONTROL PLOTTED          | <u>R.A. Philleo</u><br>R.A. Philleo         | <u>4-19-34</u>                                       |
| CONTROL CHECKED          | <u>J.G. Albert</u><br>J.G. Albert           | <u>6-19-34</u>                                       |
| TOPOGRAPHY TRANSFERRED   | <u>R.A. Philleo</u><br>R.A. Philleo         | <u>4-19-34</u>                                       |
| TOPOGRAPHY CHECKED       | <u>J.G. Albert</u><br>J.G. Albert           | <u>5-2-34</u>  |
| SMOOTH RADIAL LINE PLOT  | <u>J.G. Albert</u><br>J.G. Albert           | <u>7-5-34</u> <u>7-13-34</u> (intermit-<br>tently)   |
| RADIAL LINE PLOT CHECKED | <u>W.D. Ayers</u><br>W.D. Ayers             | <u>8-16-34</u> <u>8-17-34</u>                        |
| DETAIL INKED             | <u>J.G. Albert</u><br>J.G. Albert           | <u>8-17-34</u> <u>11-23-34</u> (intermit-<br>tently) |
| PRELIMINARY REVIEW       | <u>J.P. O'Donnell</u><br>J.P. O'Donnell     | <u>4-8-35</u> <u>4-22-35</u>                         |

AREA OF DETAIL INKED 25 Sq. Statute Miles (land area)

AREA OF DETAIL INKED none Sq. Statute Miles (shoals in water area)

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

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

LENGTH OF ROADS, STREETS, TRAILS, RAILROADS 300 Statute Miles

GENERAL LOCATION Arthur Kill

LOCATION Rahway River to Elizabeth

STATION Aniline 1931 r.'32 Latitude 40° 36' 44.106" (1360.5 m.)  
Longitude 74° 12' 41.622" (978.4 m.)

DATUM North American 1927

Adjusted Position

*adjusted*

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET, FIELD NO. 56

GENERAL INFORMATION

The AIR PHOTO FIELD INSPECTION REPORT, dated Nov. 22nd 1934, attached to the Descriptive Report for Air Photo Topographic Sheet, Reg. No. T5112, furnished the necessary field data for the compilation of this sheet. Additional information was obtained by Mr. J.G. Albert, Draftsman in Party No. 12, in a final one day field inspection.

The accompanying Statistics Sheet details all data used in the compilation of this sheet.

Photographs used in the compilation of this sheet were taken by the Aero Service Corporation, Philadelphia, Pa., using a single lens camera with a focal length of eight inches and equipped with an orthomessar lens. These photographs were taken as approximately 1:22,000 scale and enlarged to 1:10,000 scale by photographic methods. The time of day at which the photographs were taken was not available; consequently, tidal conditions could not be determined.

CONTROL

(A) Sources

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

- (a) Triangulation by Lieut. R.W. Woodworth, in 1933 - field computations unadjusted.
- (b) Topographic Sheets Reg. Nos. T3540 (1915) and T3431 (1913) by S. Forney.
- (c) Aluminum Control Sheet, Reg. No. T6125 in 1934, by Lieut. I.E. Rittenberg.

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

No positions for topographic signals were available for this sheet, therefore, no such positions were used for control.

(B) Errors

On topographic sheet T3431, triangulation station New Dock appears to be plotted about 70 meters too far east, resulting in the corresponding displacement of the topography between station New Dock and triangulation station Singer. All topography south of triangulation station Singer, which has been traced in blue on the back of this compilation sheet was taken from topographic sheet T3540; sheet T3431 being used only for the topography north of triangulation station Singer.

During the course of this compilation, it was noted

that the triangulation station known as Tank (Bush Co.) is actually the tank on the property of Joseph Hilton & Sons. There is a tank on the property of Bush Co. which agrees with the description given on the recovery card, but whose location does not check with the geographic position given from the triangulation station. The tank on the Joseph Hilton & Sons property was spotted on the photographs by the Field Inspection Party as a landmark and its A.P.T. position was found to agree with the geographic position for Tank (Bush Co.). An error was evidently made in writing up the description for the triangulation station.

The control on this sheet is, in general, strong; except as noted under COMPILATION, paragraph B entitled Adjustment of Plot.

(C) Discrepancies

No control station established by other organizations were used in this compilation; however, railroad track data and yard information was obtained from the Pennsylvania Railroad Co. and the Central Railroad of New Jersey.

COMPILATION

(A) Method

The usual radial line method of plotting was used on this sheet.

(B) Adjustment of Plot

The photographs of this area appear to be free from excessive tilt and undue scale fluctuation. There are, however, several areas on this compilation where the overlap between photos is insufficient and as a result the plot is weak. Such difficulties occur in the area between Lat.  $40^{\circ} 40'$  and  $40^{\circ} 41'$ , Long.  $74^{\circ} 13'$  and  $74^{\circ} 14'$  where each radial point was located by only two cuts. In the area between Lat.  $40^{\circ} 40'$ , Long.  $74^{\circ} 14'$  and the western limit of the compilation no overlap was available and the detail was traced from the photos without the use of radial points; photo 66-53-19, which was used in detailing this area shows evidence of some tilt and some error may thereby be introduced. The detailer, however, used care in detailing this area and therefore it is believed that the accuracy is still within the allowable limits. The same general comment applies to the area between Lat.  $40^{\circ} 41'$ , Long.  $74^{\circ} 13'$  and the western limit of the compilation. If it is felt that these areas are not sufficiently accurate, the western limit of the sheet may be changed.

Interpretation (C)

With one exception 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

— c — c —

— c — c — c denotes cinder fill.

— c — c —

The double full line was used to indicate first order roads and double broken lines for private driveways and roads of lesser importance. Exceedingly poor

roads or trails were shown as single dashed lines. In many cases the classification has to be determined by the appearance under the stereoscope.

Because of the unusual features along the Kill, the topographic symbols, as outlined in the Standard Symbols, were not suitable and the areas have been left blank, with an explanatory note on the cover sheet.

Instruction contained in Field Memorandum No. 2 dated April 1st 1935 concerning the showing of houses etc. have been followed. Prominent industrial plants have been shown. Most of these sites have wire or board fences surrounding them and these have been indicated by the usual symbols. Where a dashed line is shown it has been used to represent what appears to be the limits of the company grounds. This was done in order to separate the buildings from the surrounding marsh symbol. Most of the land surrounding these buildings consists of marsh and cinder fill.

There are numerous tanks in this area and an attempt has been made to show most of them. In places where there are many large and small tanks some of the smaller ones have been omitted. Where marsh surrounds the tank areas, as is generally the case, the marsh symbol has not been shown between tanks, as it would confuse the detail. All tank areas have been labeled as such.

The dashed lines which appear off shore between the two triangulation stations New Dock and Singer are pile docks which are now in ruins.

All available railroad track information has been used. Only the outside tracks of yards have been shown; all yards being labeled. The detailer has used the standard symbols to show the difference between electrified and steam railroads. The bridge symbol for overhead crossings of the Pennsylvania Railroad has been used to distinguish these crossings from the streets which run up to the tracks and end there. The latter condition exists in the area between Lat.  $40^{\circ} 39'$  and  $40^{\circ} 39.5'$ , Long.  $74^{\circ} 11'$  and  $74^{\circ} 12'$  where the Central Railroad of New Jersey operates. There are no overhead crossings in this vicinity; the streets being at grade on either side of the tracks.

The footbridge shown over the creek Lat.  $40^{\circ} 37.9'$  is a combination foot bridge and oil boom. This creek is not navigable and is used mainly as an outlet for the refuse from the refinery. At the inlet of the creek are two bridges; the west one is a pile railroad bridge while the east one is a pile highway and railroad bridge combined.

Ursino Lake is now but a small stream, represented by a solid line on the sheet. What appears, from photo 66-53-19, to be the original shoreline has been shown by a dashed line.

The B&O Railroad is on a trestle from Long.  $74^{\circ} 13.7'$  to the westerly side of Arthur Kill. No special symbol has been used to designate this trestle.

The area between Lat.  $40^{\circ} 41'$  to  $40^{\circ} 42'$ , Long.  $74^{\circ} 13'$  to  $74^{\circ} 14'$  has been left blank as there is no photo

ADDITIONAL NOTE: COMPILATION, (F) Conflicting Names

Morse Creek on U.S.C. & G.S. Chart No. 285 should be Morse's Creek. The latter name appears on the map of the City of Elizabeth from the Office of the City Engineer and on the Railroad Terminal Map of New York Harbor - Port of New York Authority.

There is enclosed with this compilation a copy of "Map of the City of Elizabeth", from the City Engineer's Office, to be used for street names etc. A copy of the Railroad Terminal Map of New York Harbor", Port of New York Authority has been previously forwarded to the Washington Office for the same purpose.

ADDITIONAL NOTE: COMPILATION, (F) Conflicting Names

On Photo #66-53-26, the field party has noted Old Mill Creek as Noe's Creek. The name Old Mill Creek appears on Chart #285 and has been retained on the compilation; as the discrepancy was noted just before shipping the sheet to Washington and there was insufficient time to verify the field party's name. (The man who made the field inspection is no longer with this party so that the authority for the new name could not be investigated.)

covering this area.

Public Service Railroad, Perth Amboy Line which has noted by the field party has not been shown on the compilation as its exact location could not be determined. Regular operation on this line has been cut down to one car per day and it will probably be abandoned. (see photo 66-53-24.)

On photo 66-53-23 (Lat.  $40^{\circ} 37.5'$  Long.  $74^{\circ} 14'$ ) the highwaterline of the stream is difficult to interpret. By studying the appearance of this area under the stereoscope using high-water and low-water photographs it is believed that the area as represented on the compilation is correct.

Roads on the property of the Standard Oil Co. Lat.  $40^{\circ} 38'$  Long.  $74^{\circ} 13'$  to  $74^{\circ} 14'$  are shown in their approximate location, although their limits are not clear on the photos. This property is private surrounded by a wire fence.

A short section of trackage at Lat.  $40^{\circ} 35.5'$  Long.  $74^{\circ} 13.5'$  has been shown as three tracks although noted by the field inspection party as one track. The railroad track data showed three tracks and under the stereoscope there appeared to be freight cars covering a three track area. Field notes are evidently in error and the issue is not sufficiently important to warrant a special field inspection.

(D) Bridges

Arthur Kill

An error appears on page 308 of the U.S. Coast Pilot, 1933, Section B, where the Goethals Bridge is noted as a fixed arch whereas it is actually a cantilever structure

The clearance and span of all bridges of importance to navigation is shown on the cover sheet and is correct as given in the Coast Pilot Notes with the above exception.

(E) Information from Other Sources

No information was available from other sources.

(F) Conflicting Names

There are no names on this sheet conflicting with those on the U.S.C. & G.S. Charts of this area, except one.

In addition to the names appearing on the U.S.C. & G.S. Charts all the names in this area which appear on the Railroad Terminal Map of New York Harbor - Port of New York Authority have been shown on the cover sheet. Additional names of railroad stations not appearing within the limits of the Railroad Terminal Map have been verified by the field inspection party and shown on this compilation.

The following names were picked up and verified (by natives of the vicinity) by the field inspection party:

|                                    |                    |
|------------------------------------|--------------------|
| <del>Old Elizabeth Reservoir</del> | Evergreen Cemetery |
| Carteret Park                      | Warinanco Park     |
| Montana Park                       | Jackson Park       |
| Rosedale and Linden Cemetery       |                    |
| Rosehill Cemetery                  |                    |



ADDITIONAL NOTE: LANDMARKS

The two radio masts at WOR have been submitted on form 567 as prominent landmarks and should be shown on Chart 369. Their positions are as follows:

|                   |                       |           |
|-------------------|-----------------------|-----------|
| N.W. Tower (WOR): | Lat. 40° 35' 54.360"  | 1676.8 m. |
|                   | Long. 74° 14' 57.287" | 1346.9 m. |

|                  |                       |           |
|------------------|-----------------------|-----------|
| S.E. Tower (WOR) | Lat. 40° 35' 48.104"  | 1483.8 m. |
|                  | Long. 74° 14' 51.227" | 1204.4 m. |

### COMPARISON WITH OTHER SURVEYS

Junctions with adjoining Air Photo Topographic Sheets have been compared and found satisfactory.

There are numerous differences with U.S.C. & G.S. Chart No. 285 with the respect to docks now removed, relocation of industrial buildings, added bulkheads etc. In every case of a conflict, the existing conditions have been verified in the field and appears on the compilation.

There are several places on A.C.S. Reg. No. T6125, 1934 in the area just north of the Central Railroad of New Jersey bridge at Elizabeth where the highwater line appearing on the compilation differs by amounts up to about 10 meters. The differences are evidently due to sketching errors by the topographer as other detail in the vicinity agrees well with the compilation.

### LANDMARKS

A list of landmarks, including those to be expunged, has been previously submitted, Dec. 12, 1932, by Lieut. R.W. Woodworth.

An eighty foot yellow brick chimney, about 300 meters from triangulation station Tank (A.F. Brown Co.) has been noted by the field inspection party on photo 66-53-30. However, they did not prick its location and as it could not be picked up under the stereoscope, it has not been located. Although the chimney is fairly prominent, because of its proximity to the tank, it was not thought advisable to make a special field trip to locate it.

Two new prominent landmarks, the east and west radio masts of radio station WOR in Carteret, New Jersey have been cut in by members of Party No. 12 as triangulation stations and appear on the compilation. Computations and descriptions are included in this report.

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.

The following recoverable objects shown on the compilation by small black circles have been described on form 524 and submitted with this report:

Cupola Lat.  $40^{\circ} 39.7'$  Long.  $74^{\circ} 13.8'$   
Brick Chy. Lat.  $40^{\circ} 38.9'$  Long.  $74^{\circ} 13.6'$   
Brick Chy. Lat.  $40^{\circ} 39.8'$  Long.  $74^{\circ} 14.4'$   
Water Tank Lat.  $40^{\circ} 39.1'$  Long.  $74^{\circ} 13.7'$   
Cupola Lat.  $40^{\circ} 39.9'$  Long.  $74^{\circ} 13.7'$ .

### 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.

*See Review*

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.G. Albert*  
J.G. Albert  
Draftsman.

Assisted by

*J.P. O'Donnell*  
J.P. O'Donnell  
Surveyor.

*J.K. Batchelor*  
J.K. Batchelor  
Draftsman.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## LANDMARKS FOR CHARTS

Carteret, New Jersey

March \_\_\_\_\_, 1935

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Roswell C. Bolstad

Chief of Party.

[illegible]

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## LANDMARKS FOR CHARTS

~~Carteret, New Jersey~~

March, 1935

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Roswell C. Bolstad

Chief of Party.

[illegible]

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it: for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaves and like objects are not sufficiently permanent to chart.

## GEOGRAPHIC NAMES

Survey No. T-5106Date. 11/20/35Chart No. 369 + 285

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>CARTERET</u>         | on chart 285 + 369              |                        | Spelled wrong on blueprint   |                  |
|   | <u>RAHWAY RIVER</u>     | " " " "                         | "                      |  |                  |
|   | <u>TREMLEY POINT</u>    | " " " "                         | "                      |  |                  |
|   | <u>GRASSELLI</u>        | " " " "                         | "                      |  |                  |
|   | <u>MARTHUR KILL</u>     | " " " "                         | "                      |  |                  |
|   | <u>ELIZABETH RIVER</u>  | " " " "                         | "                      |  |                  |
|   | <u>ELIZABETH</u>        | " " " "                         | "                      |  |                  |
|   | <u>BUCKWHEAT I.</u>     | " " " "                         | "                      |  |                  |
|   | <u>C. R. R. of N.J.</u> | " " " "                         | "                      |  |                  |
|   | <u>B. &amp; O. R.R.</u> | " " " "                         | "                      |  |                  |
|   | <u>MORSE CREEK</u>      | " " " "                         |                        | (MORSE'S CREEK appears on map of City of Elizabeth from R.R. map of New York Harbor) |                  |
|   | <u>PILES CREEK</u>      | " " " "                         |                        |  |                  |
|   | <u>LINDEN ?</u>         | On U. S. S. Staten Island Quad  |                        |  | move name        |
|   | <u>RAHWAY</u>           |                                 |                        |  |                  |
|   | <u>OLD MILL CREEK</u>   |                                 |                        |  |                  |
|   | <u>ELIZABETHPORT</u>    | On U. S. S. Staten Island Quad  |                        |  | add to blueprint |
|   | Add                     |                                 |                        |  |                  |
|   | <u>Tremley</u>          | (Staten I. Quad & Rand McNally) |                        |  |                  |
|   | <u>Bayway</u>           | " " " "                         | "                      |  |                  |
| <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> Names underlined in red approved<br/>by <u>K.T.A</u> on <u>1/21/36</u> </div> |                         |                                 |                        |  |                  |

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]

REVIEW OF AIR PHOTO COMPILATION T 5106

1:10,000

1. Comparison with Contemporary Surveys

(a) T 6124 and T 6125 (1934), 1:10,000

There are small differences between the sections of shoreline shown on the above Graphic Control Surveys and this compilation. These differences seem to be due to sketching between rod readings and interpretation rather than any error in the Graphic Control Survey or the compilation.

(b) All information and detail shown on the above listed Graphic Control Surveys within the area of this compilation are now shown on the compilation except the temporary topographic signals and the magnetic meridians.

2. Comparison with Recent Hydrographic Surveys

(a) There are no recent hydrographic surveys within the area of this compilation.

3. Comparison with Previous Surveys

(a) T 3540 (1915), 1:10,000; T 3431 (1913), 1:10,000; T 1719 (1886), 1:10,000

T 1719 has the general outlines of Arthur Kill the same as the recent surveys but since that time much development has taken place in docks, bridges and industry. T 3541 and T 3431 are detailed planetable surveys of Arthur Kill showing the adjacent streets and buildings. The compilation is more detailed and is complete and adequate to supersede the portions of the above surveys which it covers.

4. Recoverable Stations

(a) The recoverable topographic stations that appear on graphic control survey T 6125 and are covered by the compilation have been added to the compilation.

Plotted by Lande; checked by B.G. Jones

Descriptions of recoverable topographic stations shown on this compilation are filed on Form 524 under T 6125 and T 5106.

5. Remarks

(a) Buildings and railroad tracks in the various railroad yards have been added to make the compilation complete. Other buildings have been corrected as to size and shape with the aid of the stereoscope.



(b) The accuracy of 2 and 4 meters as given on page 7 of the previous report is high for work on this scale. A better estimate of accuracy would be 0.3 to 0.5 mm. for intersected points and 0.3 to 1.0 mm for other detail.

(c) All the buildings are not shown on this compilation but the prominent buildings along the waterfront have been shown.

(d) The projection diagonals were checked in the office and found correct. No further check was made during this review.

#### 6. Comparison with Charts 285 and 369

The compilation shows many new buildings along Arthur Kill which are not shown on the above charts, also many of the buildings shown have been either reconstructed or removed. A careful check has been made in this office to verify the completeness of the compilation as regards wharfs, buildings on the waterfront, and all waterfront detail.

New landmarks recommended by this compilation party are listed on page 7 of the descriptive report.

#### 7. Bridge Data

(a) The C.R.R. of N.J. bridge at Lat.  $40^{\circ} 39.3'$ , Long.  $74^{\circ} 10.4'$  does not show the actual draw but the clearances have been added to this compilation as given on the overlay by the field compilation party. The adjoining compilation to the east is not in the office at the present time.

The overhead cable clearance at Lat.  $40^{\circ} 36'$ , Long.  $74^{\circ} 14'$  was shown on the overlay at the easternmost of the two railroad bridges and is ~~30~~ noted in the Coast Pilot but has been moved on this compilation to the position indicated by the triangulation positions of the towers. This has been referred to the Coast Pilot Section.

Lande  
✓ B.G. Jones  
1/6/36

## REVIEW OF AIR PHOTO COMPILATION NO.

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 COMPARISON WITH OTHER SURVEYS, 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, also see paragraph COMPARISON WITH OTHER SURVEYS, page 7.
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.  
See paragraph CONTROL (B) Errors, page 3.
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), page 4.
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 paragraph LANDMARKS, page 7;
  
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 by the 1932 Field Party under Lieut. R.W. Woodworth.
  
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)
  
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 (F), page 6.
  
13. The geographic datum of the compilation is North American 19 and the reference station is correctly noted. *Plotted <sup>1927</sup> to the adjusted position*
  
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:

18. Examined and approved;  
Preliminary Review: J.P. O'Donnell  
Surveyor

Roswell C. Bolstad  
Chief of Party

19. Remarks after review in office: *See pages preceding pages 1 and 2 for detailed report on verification*

Reviewed in office by: *R.C. Lande 12/3/35 B.G. Jones*

Examined and approved:

C. K. Green  
Chief, Section of Field Records  
L. O. Lobut  
Chief, Division of Charts

F. S. Borden  
Chief, Section of Field Work  
G. H. Hilde  
Chief, Division of Hydrography and Topography.

Room 1209

# MEMORANDUM

## IMMEDIATE ATTENTION

~~SURVEY~~  
~~DESCRIPTIVE REPORT~~  
~~PHOTOSTAT OF~~ } No. H  
 No. T 5106

received ✓  
 registered ✓  
 verified ✓  
 reviewed ✓  
 approved ✓

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

| ROUTE |              | Initial             | Attention called to                 |
|-------|--------------|---------------------|-------------------------------------|
| 20    |              |                     |                                     |
| 22    |              |                     |                                     |
| 24    |              |                     |                                     |
| ✓ 25  |              | <i>S.F. 1/21/11</i> | <i>D. H. page 6 - Review page 2</i> |
| 26    |              |                     |                                     |
| 30    |              |                     |                                     |
| 40    |              |                     |                                     |
| 62    |              |                     |                                     |
| ✓ 63  |              | <i>W.A.S.</i>       | <i>D. H. page 4</i>                 |
| 82    |              |                     |                                     |
| ✓ 83  | <i>Storm</i> |                     | <i>D. H. page 7 - 2</i>             |
| 88    |              |                     |                                     |
| 90    |              |                     |                                     |
|       |              |                     |                                     |
|       |              |                     |                                     |

RETURN TO

|    |                      |
|----|----------------------|
| 82 | <i>Jones Rm 1209</i> |
|----|----------------------|

25 Jan 15, 1936

C.M.B.

Applied to Chart 285 in area adjacent to shore line of  
Arthur Kill, Sept. 1936 - H.B.

Applied to Chart 285 Jan 13 - 1938 Chas R Bush J

Applied to Chart 286 Jan 19 - 1938 Chas R Bush J

Applied to Chart 369 - Jan 1939 C.M.B.