DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: New Jersey

LOCALITY
Arthur Kill
Carteret
Fort George to Perth Amboy

Photographs taken June 1932.

CHIEF OF PARTY
Roswell G. Bobstad, Jr., H. & G. E.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form,
filled in as completely as possible, when the sheet is for-
warded to the Office.

Field No. 55

REGISTER NO. T 5105

State. New Jersey

General locality. Arthur Kill
Carrie	
Locality. Fort Headling to Perth Amboy

Photographs. July 30 & 31, 1933

Date. June 23

Compilation.  August 31, 1934

Vessel. Air Photo Compilation Party No. 12

Reviewed and recommended for approval

Chief of party. Roswell C. Bolstad, Jr.

Surveyed by. See data sheet page 2 of this report

Inked by. S.W. Fickenscher and others

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 the scale of 1:10,000 and printed by

Photo Lithography.

* Blueprint on scale 1:10,000
# STATISTICS ON

**SHEET**: FIELD NO. 55, REG. NO. T 6105

<table>
<thead>
<tr>
<th>PHOTOS NO.</th>
<th>TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>66-44-(14-19)</td>
<td>June 23, 1932</td>
</tr>
<tr>
<td>66-52-(35-43)</td>
<td>July 30, 1932</td>
</tr>
<tr>
<td>66-53-(11-15)</td>
<td>July 31, 1932</td>
</tr>
<tr>
<td>66-53-(26-27)</td>
<td>July 31, 1932</td>
</tr>
</tbody>
</table>

**BY**<br>

<table>
<thead>
<tr>
<th>DATE From</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/16/34</td>
<td></td>
</tr>
<tr>
<td>2/17/34</td>
<td></td>
</tr>
<tr>
<td>3/1/34</td>
<td>3/2/34</td>
</tr>
<tr>
<td>3/5/34</td>
<td>3/5/34</td>
</tr>
<tr>
<td>3/6/34</td>
<td>3/7/34</td>
</tr>
<tr>
<td>3/7/34</td>
<td>3/7/34</td>
</tr>
<tr>
<td>3/8/34</td>
<td>3/15/34</td>
</tr>
<tr>
<td>3/16/34</td>
<td>3/17/34</td>
</tr>
<tr>
<td>Intermittently between 7/5/34 - 3/5/35</td>
<td></td>
</tr>
<tr>
<td>3/21/35</td>
<td>4/1/35</td>
</tr>
</tbody>
</table>

**ROUGH RADIAL PLOT** None required - Scale Factor 1.0 C. __R.A. Philo__

**PROJECTOR** __R.A. Philo__ 2/16/34

**PROJECT CHECKED** __E.W. Pickenscher__ 2/17/34

**CONTROL PLOTTED** __W.E. Hackett__ 3/1/34 - 3/2/34

**CONTROL CHECKED** __R.A. Philo__ 3/5/34 - 3/5/34

**TOPOGRAPHY TRANSFERRED** __W.E. Hackett__ 3/6/34 - 3/7/34

**TOPOGRAPHY CHECKED** __R.A. Philo__ 3/7/34 - 3/7/34

**SMOOTH RADIAL LINE PLOT** __W.E. Hackett__ 3/8/34 - 3/15/34

**RADIAL LINE PLOT CHECKED** __E.W. Pickenscher__ 3/16/34 - 3/17/34

**DETAIL INKED** __E.W. Pickenscher, W.D. Ayres__ Intermittently between 7/5/34 - 3/5/35

**PRELIMINARY REVIEW** __W.E. Hackett__ 3/21/35 - 4/1/35

**AREA OF DETAIL INKED** 24.2 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) 11.0 Statute Miles

**LENGTH OF SHORELINE** (rivers and sloughs less than 200 m. from nearest opposite shore) 24.2 Statute Miles

**LENGTH OF ROADS, STREETS, TRAILS, RAILROADS** 201 Statute Miles

**GENERAL LOCATION** __Arthur Kill__

**LOCATION** __Port Reading to Perth Amboy__

**DATUM** __North American 1927__

**STATION** __Chrome 1915-1921__

Latitude 40° 34' 01.831" (39.591°)
Longitude 74° 13' 02.514" (92.817°)
This data and detail have been transferred
No. 7-5707.

ADDITIONAL NOTE: CONTROL

Triangulation station "RHR 6" near the plant of the Titanium Pigment Co. at South Amboy has been lost since the first field inspection was made in this area. It was destroyed during the erection of the buildings of this plant. A new recovery card will be submitted.
COMPILERS REPORT for T-5105
AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 58

GENERAL INFORMATION
The AIR PHOTO FIELD INSPECTION REPORT, 1934 for the Harriton river District of New Jersey, attached to the Descriptive Report for Air Photo Topographic Sheet, Reg. No. T-5103 furnished the necessary field data for the compilation of this sheet. Additional information was obtained from the U.S.C.G.S. Charts of this area and from Draftsmen E.W. Pickens and J. Rippstein who are familiar with this area.

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

The photographs used in the compilation of this sheet were taken by the Aero Service Corporation of 1612 Chancellor Street, Phila., using a single lens camera of 8º focal length and equipped with an Orthomesser lens. These photos were taken at a scale of approximately 1:22,000 and enlarged to the scale of 1:10,000 by photographic methods.

The time of day at which these photographs were taken was not available consequently the 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 Littut. R.W. Woodworth in 1932, field positions unadjusted.

All control was placed on the North American 1927 Datum before beginning this compilation. While this adjustment is approximate, the difference between the final office adjustments and the North American 1927 Datum and the adjustments of the field positions would be unnoticeable on the scale of this compilation. There were no topographic signals used in the compilation of this sheet.

(B) Errors
In making the radial line plot of this sheet, no errors were found in any of the control positions.
The control is strong and the radial line plot gave good intersections.

(C) Discrepancies
There have been numerous changes in this area since it was surveyed by Mr. Forney in 1915 on Topographic Sheet Reg. No. 5544. These will be discussed under the heading "Comparisons with Other Surveys" further along in this report.

COMPILATION
(A) Method
The usual radial line method of plotting was used in the compilation of this sheet.

(B) Adjustments of Plot
No unusual adjustments were necessary in the making of this plot.
The photographs appear to have very little scale fluctuation due to varying altitudes of the plane photographing the area. No photographs were found to have excessive tilt. The photographs were very nearly to scale and no excessive adjustment, to the extent of causing any appreciable error in the compilation is believed to exist.
The symbol for hydraulic fill has been deleted and only wording shown because the symbol used as described in the opposite page is not standard.

Attention of Compiler

ADDITIONAL NOTE: Interpretation

The trolley lines shown on Chart #286 at Boynton Beach and Sewaren and continuing across Woodbridge Creek into Perth Amboy have been abandoned. The tracks are not in a usable condition, in some places having been covered by asphalt paving material. The tracks and rights of way have not been shown on this compilation since they have been abandoned.

The highway bridge shown over Woodbridge Creek as a center pier swing bridge on Chart #286 is actually a counterweight bascule bridge and has been shown as such on this compilation.
(c) Interpretation

The usual graphic symbols, as approved by the Board of Surveys and Maps, (1932) have been used in the compilation of this sheet with the one added symbol to designate recent hydraulic fill, this consists of two short parallel lines placed parallel to the parallels of latitude. If the fill has been in place long enough for grass to grow on it, the grass symbol has been shown above the two short parallel lines. This symbol was used as very often the areas so filled, while appearing firm sand, have so much mud underneath that the fill settles considerably and cannot be considered as solid sand. The double full line has been used to indicate first order roads, the double broken line for private driveways and roads of lesser importance. An exceedingly poor road or trail has been shown by a single broken line. In most cases, unless labeled on the field prints, the classification of these roads had to be determined under the stereoscope.

In rural areas all the buildings have been shown, however, where there is a regular street system and the area is well built up, the houses have been omitted. All prominent buildings have been shown, wherever located.

This area is industrial in general and a large portion of the industries are heavy users of clay. The area is therefore covered by large clay and gravel pits. The boundaries of these have been shown by long dashed lines, the pit itself has been shown by the sand symbol and labeled. There is a fifteen track railroad yard at 40° 31’, 74° 17’. No attempt to show all the tracks in this yard has been made. The limiting trackage has been shown and the connections with the main line.

The Philadelphia and Reading Railroad has a large coal terminal at Port Reading, Lat. 40° 33.6’ Long. 74° 14.8’. No attempt to show all trackage in this area has been made, only the limits of the yard have been shown. This is labeled.

An abandoned trolley line is shown in the northwest section of this sheet, and so labeled. The poles carrying the electrification have been removed but the tracks remain in good condition, except on the branch thru Sewaren to Perth Amboy. At Sewaren the tracks run in the highway and have been covered by the asphalt paving and are not shown on this sheet. The private sidings to the various industrial plants have been shown, and in most cases the trackage within the plant itself has been put on the sheet. Trackage near the waterfront was given special consideration. The narrow gauge industrial tracks in the various gravel pits have not generally been shown as the tracks are of a temporary nature and are moved where needed.

There is some new trackage at Lat. 40° 29.8’ Long. 74° 18.7’ at a new plant of the Titanium Pigment Co. This plant has been built in the past year and does not show on any of the pictures. Field measurements were taken to locate the buildings and railroad sidings, and the track was located by sextant angles which will be included in this report.

There are some new limits of the hydraulic fill which was in progress at the time of the field inspection as sketched on photograph No. 66-52-36 for the area near the south end of the "Victory Bridge" over the Raritan River at Perth Amboy are correct to the date of the field inspection. Mr. Hackett, who made an inspection in this area states that the limits as shown on this compilation are the probable final limits of the fill.

Wrecks on this sheet have been shown by a broken outline rather than by the conventional wreck symbol. These have all been labeled.
This information was obtained after the completion of 7-5103, and was added into the compilation. The detail of these buildings and troops was transmitted directly to 7-5103 in the office.
Conflicting information regarding bridges and the cable crossing on this compilation is listed below with the values selected and shown on the compilation.

Riverway Milton Ave. bridge shows clearly on the photos and is shown on this compilation as a fixed bridge. Listed under drawbridges on page 306 of Coast Pilot.


Span measures 20 meters on photos and is shown open to that width on compilation. Clearance of 1 1/2 ft. is shown on compilation as absence of decisive information.


Span not clear on photographs - bridge has been shown open to 50 ft. and H.W. clearance of 3 ft. given.

Woodbridge Creek transmission line crossing: Field inspection notes on photographs show clearance of 113 ft. which is shown on the compilation. Coast Pilot gives 125 ft., page 306.

Raritan River highway bridge at Perth Amboy: U. S. Engineers Bridge List, 1927 gives H.W. clearance 25 ft., Coast Pilot gives M.H.W. clearance 29 ft., page 305. This has been shown as H.W. clearance 28 ft. on this compilation.
Near the mouth of Smith Creek are many small boat landings. As these are of a very temporary nature and all private, only the largest and most prominent of these have been shown on this compilation. The sextant angles used to locate the stack of the Titanium Pigment Co. at South Amboy are as follows:—

At Stack, Titanium, the angles read clockwise are

- Chy. Haydon Co. 1932
- Chy. Carborundum, 1932
- Slim Stack, (Navicola) 1932
- Tallest Stack, 1915
- Chy. Seaboard Coal Co., 1926

A check angle was taken at HNR 4A from Stack, Titanium to Tallest Stack, 1915 to be 60°-28'-50". The stack was plotted on the sheet with a three arm protractor and the scaled position appears in the list of Class "C" Landmarks.

The buildings in this area were obtained in the field from the foundation plans of the architect. These were then plotted on the scale of 1:10,000 before placing on the sheet. The buildings were referenced in to HNR 8 and this station together with the position obtained for the stack was used to orient the buildings in the correct position.

The sextant angles were read on a sextant whose vernier read to ten seconds, two sets were read by two different observers and the average of the two readings taken. The largest difference in the readings was 00°-61'-20", the majority of the readings being within 00'-00'-30" of each other. Another stack and a water tower are to be built in the near future but the stack located will be the northerly structure.

When these photographs were taken, the plants in this area were in operation. As may be seen on the photographs, a great deal of the area around these plants is obscured by smoke from their respective chimneys. This rendered the interpretation of the photos in some areas very difficult. This is especially true in the vicinity of Slim Stack (Navicola) and along the west shore of the Arthur Kill.

Bridge: There are several bridges of importance to navigation on this sheet. There are also numerous small bridges of no importance. The following list details the important bridges by rivers.

<table>
<thead>
<tr>
<th>River</th>
<th>Type</th>
<th>Hor. Cl.</th>
<th>Vert. Cl.</th>
<th>M.H.W.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rahway River</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lawrence St. Bridge</td>
<td>swing</td>
<td>59.8'</td>
<td>6.5'</td>
<td></td>
</tr>
<tr>
<td>State Highway Bridge</td>
<td>fixed</td>
<td>57.0'</td>
<td>22.0'</td>
<td></td>
</tr>
<tr>
<td>Woodbridge Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highway Bridge</td>
<td>bascule</td>
<td>50.0'</td>
<td>4.5'</td>
<td></td>
</tr>
<tr>
<td>Railroad Bridge</td>
<td>bascule</td>
<td>57.0'</td>
<td>9.0'</td>
<td></td>
</tr>
<tr>
<td>Raritan River</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railroad Bridge,</td>
<td>swing</td>
<td>132.0'</td>
<td>8.6' H.W.</td>
<td></td>
</tr>
<tr>
<td>Highway (Victory) Bridge</td>
<td>swing</td>
<td>140.0'</td>
<td>28.0' H.W.</td>
<td></td>
</tr>
</tbody>
</table>

Two transmission towers govern the vertical clearance of Woodbridge Creek at 113.0'. These towers are located on the east side of the Highway bridge and are listed in the List of Class "C" Landmarks as recoverable topographic signals.
INFORMATION FROM OTHER SOURCES
The Map made by the Corps of Engineers, U.S. Army, for the Intracoastal Canal, New York Bay - Delaware River Section, State of New Jersey, Sheet No. 9, File No. 1 C-51 of this section was used for comparison. No control established by any other agencies was used in the compilation of this sheet.

(E) CONFLICTING NAMES
There are no names shown on this sheet that conflict with names shown on any of the U.S.C.& G.S. Charts of this area.

(F) COMPARISON WITH OTHER SURVEYS
The junctions with other sheets are satisfactory.
There are numerous differences between this compilation and Mr. S. Forney's topographic sheet (Reg. No. 5544) of this area, executed in 1915. Some of these differences have been corrected on the present charts of this area. The Raritan River area differs from Mr. Forney's sheet but agrees with the present charts except for several docks.

The chart No. 375 shows a dock approximately 300 m. east of the highway bridge at Lat. 40° 30.6', Long. 74° 17.3'. This dock no longer exists. A new dock has been built about 40 m. east of the bridge and another new dock has been built about 100 m. west of this bridge. The docks shown on Chart No. 375, 200 m., 340 m., 800 m., and 900 m. west of this bridge no longer exist. A new dock has been built at Lat. 40° 32.1' - Long. 74° 15.1' which is not shown on Chart No. 286.

The street system on this sheet differs considerably with Topographic Sheet 5544. This difference is mostly in the azimuth of the streets running east and west. There are also differences in the buildings on these sheets.

LANDMARKS
The list of landmarks for this area have been previously submitted by Lieut. R.W. Woodworth in 1932. There is exception.
The charted landmark CHY at Lat. 40° 30' 756.5 m. Long. 74° 16' 1573.7 m. appearing on Chart No. 286 but not on Chart No. 375 has not been mentioned by Lieut. Woodworth either in his list of landmarks to be retained or on the list of those to be removed from the charts. This chimney still exists and has prominence and should be retained on the charts. It is not as prominent however as the station "Tallest Chimney" on the Raritan Copper Works.

In addition to these landmarks, other prominent objects have been located by the radial line plot and are listed further along in this report under the heading, "Class C" landmarks.

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

The compilation of this sheet is believed to have a probable error of not over two (2) meters in well defined detail of importance for charting purposes and of not over four (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.

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

Submitted by
H.L. Hawkins
Draftsman

Assisted by
W.E. Hackett
Surveyor
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carteret</td>
<td>✔️ do</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avenel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Port Reading</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arthur Kill</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sewaren</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Smith Creek</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woodbridge Creek</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baytown Beach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perth Amboy</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raritan River</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sandy Point</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>South Amboy</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fords</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heasby</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marsh Point</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tott's Point</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chrome</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rahway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Woodbridge</td>
<td>✔️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maurer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>South Branch Rahway River</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**GEOGRAPHIC NAMES**

* 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.

<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>House Lot Creek</td>
<td>Sanborn Map (Woodbridge Township) 1929</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crows Mill</td>
<td>(see T11)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hopelawn (Town)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Genasco</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Old Mill Creek</td>
<td>Noes Creek</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heards Brook</td>
<td></td>
<td>(see Plainsfield Quad)</td>
<td></td>
<td>Branch of Woodbridge Cr.</td>
</tr>
</tbody>
</table>

Names underlined in red approved by K.T.A on 12/3/35
Comparison with T 6221a (1934), Graphic Control, Scale 1:5,000

With the exception of temporary plantable stations and magnetic declination, all information in the common area is shown on the compilation.

Comparison with T 6218b (1934), Graphic Control, Scale 1:10,000

There were 21 stations described on Form 524; these and 11 U.S.E. stations not described, all within the common area, were transferred to the compilation.

Plotted by: Andrews  Checked by: L. C. Lande

Three stations determined by the field party differed from T 6218b. A radial plot proved the compilation in error 1.2 mm. and it was revised to agree with T 6218b. The change required an adjustment of detail adjacent thereto.

Except for temporary plantable stations and magnetic declination, all information in the common area is shown on the compilation.

Comparison with T 3544 (1915), Topographic Survey, Scale 1:10,000

There have been so many changes that a detailed account of differences is not made. Except for form lines the compilation is adequate to supersede T 3544.

Comparison with T 3540 (1915), Topographic Survey, Scale 1:10,000

The same statement applies as above for T 3544.

Comparison with H 5647 (1934), Hydrographic Survey, Scale 1:10,000

All topographic detail in the common area is in agreement with the compilation. The ruins of a pier at Lat. 40° 30.5', Long. 74° 18.6' and two dolphins and part of another pier did not appear on H 5647. These were added in the office to H 5647.

Comparison with Chart 286, Scale 1:15,000, and Chart 375, Scale 1:20,000

See discussion on page 6 of the descriptive report. In addition to the piers mentioned, another pier at Lat. 40° 30.7', Long. 74° 17.5' should be removed and several revisions of shore front detail are necessary along the north bank of the Raritan River.

The auxiliary tracks of railroads such as spurs and sidings are not complete on the compilation, particularly where they run close to...
Two corrections have been made on the projection of the blue line front of this compilation. The meridian 74° 20' was found to be bent at its lower extremity to the east. Similarly, the meridian 74° 16' was found to bow slightly to the east between parallels 40° 30' and 40° 32'. These errors will be rectified on the blue line drawing.

The scale factor was found to be slightly greater along the parallels of latitude than along the meridians. (See opposite page.)

F.R.G.
or in between buildings as they are partially obscured on the photographs which were lacking in sharp definition.

All landmarks, lights and beacons shown on the present charts in this area, and the new landmarks recommended by this compilation and the graphic control surveys are shown on the compilation.

All large buildings have been checked against the photographs and corrected where necessary. All buildings shown on charts 286 and 375 in this area are on this compilation if they exist and the compilation is complete and adequate for revision of this detail on the charts.

General Remarks

1. Projection: The projection is on a skew and the compilation is made on a sheet of low grade celluloid (type no longer in use) and is considerably distorted. The scale was 0.7 mm. per minute longer in latitude than in longitude. The center meridian is bowed a maximum of 0.5 mm. westward from a straight line between parallels 40° 30' and 40° 35'. The spacing of meridians is satisfactory except between 74° 15' and 74° 16' where there is an excess of 0.4 mm. The center parallel east of the center meridian is perpendicular thereto but three minutes westward the parallel is 0.6 mm. above the perpendicular whereas the curvature only accounts for 0.1 mm.

The spacing of parallels as measured from the center is correct within 0.2 mm. except for 40° 29' which is a maximum of 0.4 mm. low best of long. 74° 15' and 40° 35' and 40° 36' are a maximum of 0.6 mm. high west of long. 74° 16'. The projection has not been altered as the control and detail has been plotted on the lines as drawn. The compilation has been considerably worked over in the field, the drafting is only fair and shows the result of much revision. Reference to the descriptive report, page 2, discloses that no less than six draftsmen had a hand in inking over a period of nine months, (see paragraph 17, page 10 of the descriptive report) and while generally requirements for the project have been met it will have to have a large amount of negative work or be completely redrawn on a blue line to make it acceptable for publication.

Due to the errors in projection the compilation will probably not be adequate for a resurvey if necessary to orient over any appreciable distance. The largest errors in spacing of projection lines are in the inshore area and will have no great importance regarding application to chart 286.

2. Accuracy: The accuracy of location of 2 to 4 meters given on page 15 is too high for work of this scale. A better estimate of the accuracy in location is 4 to 10 meters for intersected points and
4 to 15 meters for other detail. The control of the sheet is ade-
quate and a general examination of the plot indicates that it has
been made with reasonable care; however, the estimated accuracy is
given lower than usual because of errors in projection and poor
drafting.

Joseph Andrews III

Inspected by:

/J. A. Jones
L 1/18/36
REVIEW OF AIR PHOTO COMPILATION NO. T 5105

Chief of Party: Roswell C. Bolstad

Compiled by: See page 2 of this report.

Project: New York Air Photo Compilation Instructions dated: November 15, 1952

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. 28; and 66 g, n)

3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d, e)

4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)

5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.

6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c, h, i)

7. High water line on marshy and inadequate 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. 35, 37, 38, 39, 40, 41)

9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)

10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)

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)

13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927

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: very poor and compilation will have to be

   1. Standard symbols authorized by the Board of Survey 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. (?) No

5. Topographic symbols for similar features are of uniform weight. No

6. All drawing has been retouched where partially rubbed off. No

7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. No

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

Drawing very poor.

16. No additional surveying is recommended at this time.

17. Remarks: Due to the fact that numerous rapid changes in personnel have occurred in this party, several draftsmen and reviewers have worked on this sheet. A great deal of retouching has been done by the reviewers. Attempts have been made to remove as much of the yellow stain as possible. The sheet is being submitted in the best condition possible under these circumstances.

18. Examined and approved:

[Signature]
W.E. Haughton
Surveyor

[Signature]
Raswell C. Hulstee
Chief of Party

19. Remarks after review in office:

See pages immediately preceding for detailed report on office verification.

Reviewed in office by: Joseph P. Anderson, Jr. / M. L. Jones 1/6/86

Examined and approved:

[Signature]
C. W. Green
Chief, Section of Field Records

[Signature]
Fred. L. Peacock
Chief, Section of Field Work

[Signature]
Chief, Division of Charts

[Signature]
Chief, Division of Hydrography and Topography.
MEMORANDUM
IMMEDIATE ATTENTION

---SURVEY DESCRIPTIVE REPORT---
PHOTOSTAT OF

No. H 5105

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.

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>Initial</th>
<th>Attention called to</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RETURN TO

82  B.G. Jones  3/3/29
l. Details shown in red were applied to the Supplemental 10/19/40. These were plotted in the office without field inspection from 9 lens photographs taken 7/5/40.
# Record of Application to Charts

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 1955</td>
<td>286</td>
<td>MacEwen</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Before After Verification and Review</td>
</tr>
</tbody>
</table>

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.
Applied to new compilation drawing of chart 315 - Aug 1936 - STW

Applied to Chart 286 March 7, 1936 - C.L. Burt

Supplemental Applied to Chart 286 - Feb 1934 - C.L. Burt