

5103

~~5103a~~ ORIGINAL

(This Report Includes the Field Inspection Report of Baritan River district, New Jersey.)

5103a- is now 5103 - (5103 Confidential)
is destroyed, July 14, 1939)

U. S. COAST & GEODETIC SURVEY
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A-C. No. _____

Form 504
Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New Jersey

DESCRIPTIVE REPORT

Photo
Topographic } Sheet No. T 5103
Hydrographic }

LOCALITY

Baritan River

South River to South Amboy

1934

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1923

DECLASSIFICATION BY NOAA

PURSUANT TO DOC SYSTEMATIC REVIEW
GUIDELINES AS DESCRIBED IN SECTION
3.3 (a), EXECUTIVE ORDER 12356

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Applied to new compilation drawing of Chart 375 - July 9, 1936 - J.W.

Applied to Chart 286 Feb 17-1938 C.P.B./r

Applied to Chart 389 May 31, 1939 L.M.J.

AIR PHOTO FIELD INSPECTION REPORT

for

NEW BRUNSWICK TO RAHWAY RIVER

and

NEW BRUNSWICK TO SOUTH AMBOY

NEW JERSEY

AIR PHOTO FIELD INSPECTION REPORT

for

A PART OF NEW JERSEY

During the Fall of 1933, a field inspection was made of all photographs covering the Raritan River, New Brunswick to South Amboy, and Arthur Kill (west shore) from Perth Amboy to the Rahway River, (total area of 50 square statute miles) by two members of Party No. 12, New York City, 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:

Reg. No. T5103
T5104
T5105
T5280

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

66-37 - 23 to 29	May 30, 1932	66-44 - 10 to 15	June 23, 1932
37 - 53 to 57	"	39 - 43 to 45 ¹	June 8, 1932
37 - 60 to 64 ✓	"	44 - 16 to 19	June 23, 1932
39 - 79 to 83	July 25, 1932	52 - 38 to 43	July 30, 1932
37 - 91 to 95	May 30, 1932	* 53 - 11 to 18	July 31, 1932
39 - 75 to 78	"	* 53 - 24 to 27	July 31, 1932

* New Jersey part of flight

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

The following general characteristics are given to supplement the notations made on the field prints.

The greater part of both shores of the Raritan River from the City of New Brunswick to the Industrial City of Perth Amboy is composed of marshland. There are many industrial plants along the shores, the majority of them being tile and brick plants, with numerous clay pits, especially in the vicinity of South Amboy and Perth Amboy. The marshland is all salt water marsh having a gradual slope, in most cases, from the shoreline. They are clearly indicated on the field prints as well as the high water line along the marshes.

Inland there are small patches of cultivated land but in general the vegetation consists of scrub oak and deciduous trees with a few evergreens over a sand and clay soil.

The west shore of the Arthur Kill from Perth Amboy to the Rahway River, with the exception of a few salt water marshes, consists of small industrial towns with numerous industrial plants, railway yards, docks and piers along the shore.

CONTROL

(1) Triangulation

Triangulation performed by the parties of Lieut. R.F.A. Studds in 1926 and Lieut. R.W. Woodworth in 1932 forms the basis of control for this area. The unadjusted field positions, which are on North American Datum, are available. An approximate correction to reduce these positions to a North American 1927 Datum should be applied as follows: Lat. -12.0 m., Long. +3.5 m. These corrections will be within any plotable limits.

All triangulation stations were found as described with the exception of two stations which were not recovered because of their proximity to adjacent stations.

(2) Topography

In addition to the above listed control the following topographic sheets may be used as an aid in the compilation of sheets in this area.

<u>Reg. No.</u>	<u>Date</u>	<u>Scale</u>
T 3540	1915	1:10,000
T 3544	1915	1:10,000

(3) Stations Spotted on Photos

Number of triangulation stations spotted 137.

No recovery cards have been written for these triangulation stations since they have been previously described and the descriptions were found to be adequate and correct.

The station density for this area is in excess of 2.8 per square statute mile.

No source of control other than triangulation was used since, at the time of the field inspection, no bromide prints or list of previously located topographical stations were available.

When the actual point of the triangulation station was not picked on the print, reference data is given on sketches on the field print which will determine the location.

NAMES

No new names, differing from those given on existing U.S.C. & G.S. Charts, were obtained.

Bridges

It was unnecessary to measure any bridge clearances since the Coast Pilot Notes appear to be adequate and correct.

COAST PILOT NOTES

No discrepancies with the present edition of the Coast Pilot

Notes have been noted by this inspection party.

RECOVERABLE OBJECTS

Detailed descriptions were not made of recoverable objects, however, numerous prominent recoverable objects were spotted and indicated on the field photographs. (see paragraph on LANDMARKS)

Recoverable objects were not described on Form 524 by this party since Lieut. E.R. McCarthy, carrying on field operations in this vicinity, stated that all such objects would be described by him at the time of his field operations.

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.

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 compilations will be up to date.

GENERAL


Lieut. E.R. McCarthy is conducting a combined operations party in this vicinity at the present time and it may be necessary to supplement this inspection by additional trips to this area in order to use the control he establishes. If this is the case any changes will be noted on the field prints and a complete description of changes or additions given in the descriptive report for the air photo topographic sheet of the area in question.

Submitted by


E. W. Fickenscher

Draftsman

Oct. 17, 1934


J. Kippstein
Draftsman

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COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET

REGISTER NO. T 5103

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. 53

REGISTER NO. T 5103

State New Jersey

General locality Raritan River

Locality South River to South Amboy

Scale 1:10,000 Date of survey Photographs-May 30, 1932
June 8-23, 1932, 1932

Date of Compilation June 20, 1934
Vessel Air Photo Compilation Party No. 12, New York City

Chief of party Roswell C. Bolstead

Surveyed by See data sheet in the Descriptive Report

Inked by W.D. Ayers

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

~~2~~ X 6
-NOTES ON COMPILATION-

SHEET NO. 53

PHOTOS; NO. 66-37-(92-95)--Date, May 30, 1932 --PHOTOS NO. 66-39-(43-45)-June 8, 1932
 66-39-(77-79)--- 66-52-34 July 30 "
 66-44-(10-13)-- " June 23, 1932 66-39-(40-42)-June 8, "

BY

DATE

ROUGH RADIAL PLOT	(None required--scale factor 1.00)	
PROJECTION	R.A. Philleo R.A. Philleo	From 2/1/34 to--
PROJECTION CHECKED	<i>E.W. Fickenscher</i> E.W. Fickenscher	2/1/34
CONTROL PLOTTED	R.A. Philleo R.A. Philleo	2/2/34
CONTROL CHECKED	<i>E.W. Fickenscher</i> E.W. Fickenscher	2/7/34
TOPOGRAPHY TRANSFERRED	R.A. Philleo R.A. Philleo	2/6/34
TOPOGRAPHY CHECKED	<i>E.W. Fickenscher</i> E.W. Fickenscher	2/7/34
SMOOTH RADIAL LINE PLOT	<i>E.W. Fickenscher</i> E.W. Fickenscher	2/8/34 to 2/24/34
RADIAL LINE PLOT CHECKED	R.A. Philleo R.A. Philleo	2/26/34
DETAIL INKED	<i>E.W. Fickenscher</i> E.W. Fickenscher W.D. Ayers <i>W.D. Ayers</i>	2/27/34 to 3/3/34 3/19/34 to 6/20/34 less 3 weeks
PRELIMINARY REVIEW OF SHEET	<i>G. Crowther</i> G. Crowther	7/6/34 to 7/10/34

AREA OF DETAIL INKED 24.5 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED 0.5 sq. Statute Miles (Shoals in Water Area)

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

11.2 statute miles

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

53.8 statute miles

LENGTH OF Roads, Streets, Trails, Railroads 195 Statute miles

GENERAL LOCATION Raritan River

LOCATION South River to South Amboy

DATUM North American 1927

STATION CROSSMAN, 1932

Latitude 40°-29'-03.715" (114.6m)

Longitude 74°-19'-18.920 (445.6m)

unadjusted

~~8~~ 7
COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET FIELD NO. 53

GENERAL INFORMATION

The Air Photo Field Inspection REPORT, 1934, of Lieut. R.C. Bolstad for the Raritan River District of New Jersey furnished the necessary field data for the compilation of this sheet. Additional information was obtained from the U.S. Army Engineers single lens photo's Nos. M 1244-M 1254 (870-8), May 17, 1933---M 1269-M 1255 (870-8), May 17, 1933, M 1270-M 1278 (870-8), May 17, 1933, and M 1309-M 1310 (870-8), May 17, 1933. Also C.G.S. #1-28, (26 missing) photo's taken on May 17, 1933. Additional information was obtained from a final field inspection after the detail was practically complete.

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

As the hourly times for the Photo's were not obtainable the condition of the tides **could not** be determined.

This sheet was compiled from photographs taken by the Aero Service Corporation of 1612 Chancellor St., Phila. with a single lens camera of 8 " focal length equipped with an Orthomesser lens. The photo's were taken at approximately at a 1 to 22,000 scale, and enlarged to 1:10,000.

CONTROL

(A) Sources

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

(a) Triangulation by Lieut. R.W. ^{Woodworth} Woodward in 1932, North American datum. This Triangulation data was corrected to North American 1927 datum and used as such.

(b) A traverse run by Company B-29th Engineers-U.S.A., from Triangulation Station RN R 14 to Triangulation Station Spire Mt. Lor. was used as additional control.

(c) There were no topographic stations on this sheet. *see review at back.*

(B) Errors

There were no errors in the radial plot on this sheet.

The control on this sheet, *is*, in general strong, and the radial plot gave good intersections.

(C) Discrepancies

The traverse, run by Company B-29th Engineers, U.S.A., as mentioned under control (A) Sources-paragraph (b), was found to check with the radial plot as far as Station 3817, but from there to Station 3837, where it goes off the limit of the sheet, the two do not agree. Several of the traverse stations were obtained by the radial plot and showed the traverse to be in error. No attempt is made here to explain the discrepancy except to suggest that it might possibly be caused by short azimuths, taken in running the traverse.

COMPILATION

(A) Method

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

Highway Bridge at South River (South River to Sayreville):

- Coast Pilot - span 34.5 ft - no clearance given
- Eng. Bridge List - span 60 ft - H.W. Clearance 7.6 ft.
(1927 ed.)
- T-62186 - span 60 ft. - H.T. Clearance 10 ft.

It has not been customary for spans to be shown on Air-photo
Compilations but H.W. clearances when available are shown. In this case
the lower clearance of 7.6' above H.W. as given in the U.S. Engineers'
"List of Bridges over Navigable Waters of the U.S." is shown as there
is no statement to the effect that the list is in error.

R.H.B. 12/18/85

4 8

COMPILATION (Cont.)

(B) Adjustments of plot

The photographs of this area appear to have very little tilt or scale fluctuation due to a variation in the altitude of the plane. Considerable proportioning was necessary however in certain area's on the sheet, particularly in the neighborhood of, or around South Amboy, caused by the character of the relief. In several instances additional points were picked and plotted by the radial line method to eliminate too much proportioning, and to assist in the detailing.

(C) (Interpretation)

Only 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. Because of the large number of stickers placed on the sheet, symbols stickers were not used.

The double full line was used to indicate first order roads, and the double broken line for private driveways and roads of lesser importance. Trails are shown as a single dashed line. In most cases the classification was determined by the appearance under the stereoscope and largely checked by the field inspection. The section between Lat. $40^{\circ}-26'$, Longitude $74^{\circ}-18'$ and Lat. $40^{\circ}-27'-30''$, Longitude $74^{\circ}-17'$ consists of old abandoned gravel and clay pits, partly grown up with woods and brush. The trails shown in this area are old rail-road lines (small gauge), the tracks and ties having been removed. In some places these trails may be traveled under difficulty, but the great majority of them are narrow and cannot be used for travel. It will be noted that there are a large number of trails on this sheet. Many of these are located in patches of brush and woods, are merely sand paths and are indefinite. They are shown on the sheet because they show up clearly on the photographs. The whole area was covered in the final inspection in order to check up on the detail as closely as possible.

Large area's of buildings were not blocked in, except those along Raritan Bay, the Raritan River, the Raritan Arsenal, and those buildings around industrial plants. All other area's of buildings were indicated by means of stickers.

There are a considerable number of sandy patches or area's which show on various photo's. These are shown by the usual symbol for sand.

The only bridge of importance on the sheet is located at South River, and is a highway bridge connecting the main highway between South River and South Amboy. For information about this bridge see publication of U.S. Coast Pilot, Atlantic Coast, Section B, Cape Cod to Sandy Hook. *information transferred to compilation*

There is only a small amount of shoal area shown on the sheet. One section, at Lat. $40^{\circ}-28.9'$ and Long. $74^{\circ}-20.6'$ has been left out because the one (1) photo that showed this area had been blurred out by a cloud.

The old barge wreck shown at Lat. $40^{\circ}-28.9'$ and Long. $74^{\circ}-16.5'$ is the remains of a steel barge. The rusted hull varies from about 2' to 3' above high water.

(D) Information from other sources

The high water line was obtained from the photographs, having been sketched in on the prints by the Field Inspection Party.

Additional information for this sheet was obtained from a blueprint of the air photo compilation made by the U.S. Army Engineers.

ADDITIONAL NOTES ON LANDMARKS

The stack (as mentioned on the opposite page) was not picked up by the inspection party while in the field; also a study of the photographs under the stereoscope failed to reveal any evidence of a stack or building having ever existed in this site. The area is all marsh lands. It appears there exists an error in the original location.

(D) Information from other sources(Cont.)

The accuracy of this sheet, however, was such that it could be used only for clearing up questions of detail, etc. and no attempt was made to scale any information from it.

(E) CONFLICTING NAMES

The name South River, showing the area known as South River is shown as Washington on the U.S. Coast & Geodetic Survey chart NO. 375, Raritan River. However road maps, railroad time tables and the U.S. Army Engineers map, show the area as South River. Inquiry made at the Post Office brought forth the fact that it was formerly known as Washington, but that the name had been changed to South River some years ago.

The name New York & Long Branch Railroad agrees with the name as shown on the map made by the U.S. Army Engineers, sheet No. 1, Intra-coastal Canal, New York Bay-Delaware River Section, State of N.J. There is no name shown in that area on U.S. Coast & Geodetic Survey Chart No. 375. The name New York & Long Branch Railroad is also shown on map No. 870-S-11-W12, New Brunswick Quadrangle, Corp of Engineers, U.S. Army.

COMPARISON WITH OTHER SURVEYS

The junction of this sheet with all other sheets are satisfactory.

Blueprints of the U.S. Army surveys of this area were available but could not be used for direct comparison with this sheet because of the difference in scales.

The traverse run by Company B-29th Engineers, U.S.A. was found to differ in part from the radial plot as stated under the paragraph control, section (c), Discrepancies.

LANDMARKS

A list of landmarks for charts on form 567 for the area covered by this sheet has been submitted February 10, 1938 by Lieut. R.W. Woodworth. *Chart letter 172(1933)*

The stack shown on U.S. Coast & Geodetic Survey Chart # 375 the approximate location being Lat. 40°-29-540 meters, Long. 74°-21-405 meters does not appear on the air photo's, and should be left off the future charts. *See review*

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 of the house, as the size shown of this sheet may be expanded somewhat.

ADDITIONAL NOTES ON INTERPRETATION.

This paragraph is a supplemental note to paragraph (C) Interpretation under COMPILATION.

Mud flats are shown around the South River area by the usual symbol with an occasional sticker, and tufts of grass. There are also some mud flats around the islands in Raritan River, and these are shown in similar manner on the sheet.

GENERAL

The buildings shown in the Raritan Arsenal area consist of

Note The usual policy of Officers in charge of Army Posts is to request that all buildings, railroads, and detail of Military Importance be omitted from the compilations and from the charts and that the photographs be kept in a confidential file. It has become the policy of this office to omit such detail from all except the confidential file copy of the compilation and this policy will be followed in the case of the Maritime Arsenal on this compilation.

Bgg: 10/30/35

GENERAL(Cont.)

powder and ammunition magazines and large store houses. Permission to show these buildings, along with the R.R. tracks as shown on the sheet was obtained at the time of the final field inspection from Colonel W.P. Boatwright, Commanding Officer at the Raritan Arsenal. The Arsenal is shown complete on the sheet. *See opposite page.*

RECOMMENDATIONS FOR FURTHER SURVEYS.

The compilation of this sheet is believed to have a probable error of not over 2 meters in well defined area's of detail of importance for charting and of 4 meters for other data. It is understood that the width 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 additional surveys are required.

Submitted by,

Assisted by:

G. Crowther
G. Crowther
Surveyor

W.D. Ayers
W.D. Ayers
Surveyor

Review of Air Photo Compilation T 5103

Comparison with previous graphic control surveys

The graphic control surveys were made about the same time as this compilation, but a complete comparison was not made by the field party. The comparison in this office has included the transfer of a large number of planetable points to the compilation. In every case the two surveys have been in agreement which is a good illustration of the accuracy of both methods, given adequate control and care in operation.

(a) T 6218 a (1934), 1:10,000

All recoverable topographic stations have been transferred from T 6218 a to the compilation. Both surveys were well controlled and the positions as shown on the compilation are in agreement with T 6218 a.

Triangulation station No. Cupola (Sacred Heart Church), 1930 was plotted on the compilation in this office, as the geographic position was not available in the field office.

A wrecked sailboat was transferred from T 6218 a to the compilation at lat. $40^{\circ} 28.9'$, long. $74^{\circ} 16.4'$.

All detail on T 6218 a within the area covered by this compilation is now shown on the compilation except the magnetic declination.

See page 2, report T 6218 a, for discussion of U. S. Engineers grid shown in pencil on T 6218 a.

(b) T 6219 a (1934), 1:10,000

Triangulation station Rr R - 8 (U.S.E.) has been omitted from the compilation. The station was removed, by permission of the U. S. Engineers, to enable construction. It is understood that the station will be replated at a later date. The reviewer visited this station during the construction. See descriptive report T 5105 opposite page 3.

All recoverable topographic stations were transferred from T 6219 a to the compilation in this office.

All detail on T 6219 a within the area covered by the compilation is now shown on the compilation except as mentioned above and as follows:

1. Buoys
2. Magnetic declination
3. Topographic signal Ape (d), Loading Hoist, lat. $40^{\circ} 29.3'$, long. $74^{\circ} 19.4'$. This station is too close to topographic signal Crossman Center U.S.E. to show both points.

62196

Topo stns of recoverable nature transferred
except SW chimney South River-Brick Co. which
is too close to N.E. chimney.

(c) T 6219 b (1934), 1:10,000

Triangulation station P. T. - 3 (U.S.E.), 1928 was plotted on the compilation in this office, as the geographic position was not available in the field office.

All described recoverable topographic stations were transferred to the compilation and were checked by radial plot.

The compilation is in agreement with the area covered by T 6219 b except for the magnetic declination.

See page 2, report T 6219 a and T 6219 b, for discussion of U. S. Engineers grid shown in pencil on T 6219 a and T 6219 b.

(d) T 6221 b (1934), 1:10,000

All recoverable topographic stations on T 6221 b covering the same area as the compilation have been transferred.

The compilation is in agreement with T 6221 b, and has all detail except for the magnetic declination.

See page 1, report T 6221^b, for discussion of U. S. Engineers grid shown in pencil on T 6221 b.

(e) Topographic stations transferred to this compilation by

W. B. G. G. G. and checked by T. R. Sobieralski.

Comparison with previous topographic surveys

The previous topographic surveys of this area are either too old or cover too small an area to make a good comparison with the compilation. The compilation is complete and adequate to supersede that part of the following topographic surveys which it covers:

T 11	(1836)	}	Considerable change due to new construction.
T 542	(1856)		
T 1354 a	(1873)		
T 1354 b	(1873)		
T 1712	(1886)		
T 3544	(1915)	--	Shows a few contours

Comparison with new hydrographic surveys

(a) H 5647 (1934), 1:10,000

No discrepancies.

A log at lat. 40° 29.1', long. 74° 19.8' on H 5647 does not appear on this compilation.

Note added 8/26/36.

H.W. line along the S.E. shore of
Parson River from Lat. $40^{\circ}28.8'$ to Lat. $40^{\circ}30'$
has been revised 8/26/36 as shown
in blue on the original file copy which
is also to serve as a proof for the
first printing of this compilation.

This revision has been made prior
to the application of this compilation to
~~the~~ chart 375.

The ~~whoreline~~ H.W. line now shown
is that selected by the field inspection
party. This revision of H.W. line
was incorrectly shown by ~~the~~ ~~compa~~
on the original due to ambiguity
of the field inspection sketching.
The revision has been made after
careful examination of the photographs.
Due to the indefinite character of
the marsh H.W. line is subject
to differences in interpretation and is
approximate at best. B.G. Jones

Comparison with charts

Chart No. 375

All landmarks appearing on the chart appear on the compilation except as follows:

(1) "Stack", lat. $40^{\circ} 29.4'$, long. $74^{\circ} 21.3'$ no longer exists and should be removed from the chart. See preceding page 9 of the descriptive report.

All landmarks recommended by the recent graphic control surveys and by this compilation within this area are shown on the compilation. Changes have occurred in the following detail shown on the present chart:

(1) A landing located at lat. $40^{\circ} 30.0'$, long. $74^{\circ} 18.9'$ no longer exists and should be removed from the chart.

(2) The shoreline at lat. $40^{\circ} 29.5'$, long. $74^{\circ} 18.0'$ has changed. The pond and cove no longer exist and the chart should be corrected.

Light (F.R.) has been omitted from the compilation, as it does not show on the photographs and no position is given on the new planetable or hydrographic surveys.

General

The projection has been checked and found satisfactory.

A large building and several small buildings have been detailed on the compilation at lat. $40^{\circ} 30'$, long. $74^{\circ} 18.8'$. These buildings do not appear on the photographs but location and size were taken from the construction plans. One of two high chimneys under construction has been shown as a landmark. See descriptive report, T 5105, pages 4 and 5.

A better description of the accuracy as stated in the descriptive report, preceding page 10, is 2 to 5 meters for intersected points and 5 to 10 meters for other detail.

The drafting is poor and a considerable amount of touching up and negative work will be necessary.

See also opposite page.

Respectfully submitted,

W. E. Hackett
WILLIAM E. HACKETT

Inspected by
B. G. JONES

B. G. Jones 12/30/35

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)
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. There are no differences on this sheet.
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 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 report of Control Party, Lieut. R.W. Woodworth in 1932.
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 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)
13. The geographic datum of the compilation is North American and the reference station is correctly noted. 1927 *unadjusted*
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) *Sheets T-5104 and T-5109, only two completed.*
15. The drafting is ^{poor} ~~satisfactory~~ and particular attention has been given the following: ~~Sheet 16 be redrawn before publication~~
 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 are referred to Lieut. R.W. Woodworth's Reports covering the topography executed in 1932 under his charge.

18. Examined and approved;

Preliminary Review:

G. Crowther
G. Crowther

Surveyor

Roswell C. Boistad
Roswell C. Boistad
Chief of Party

19. Remarks after review in office:

Reviewed in office by: Hackett ✓ B.G. Jones 10/30/35

Examained and approved:

B. K. Green.
Chief, Section of Field Records
L. O. Robert.
Chief, Division of Charts

J. S. Borden
Chief, Section of Field Work
G. W. Rude
Chief, Division of Hydrography
and Topography.

Survey No. T- 5103Date August 5, 1935 **GEOGRAPHIC NAMES**Chart No. 375**NEW JERSEY**

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>Bonhamtown</u>				
✓	<u>Raritan Arsenal</u>				
✓	<u>Martins Creek</u>				
✓	<u>Red Rock Creek</u>				
✓	<u>Raritan River</u>				
✓	<u>Melrose</u>				
✓	<u>Mechanicsville</u>	<i>on Sanborn Map</i>			
✓	<u>South River (stream)</u>				
✓	<u>Northwest Beach</u>				
✓	<u>Crab Island</u>				
✓	<u>South Amboy</u>				
✓	<u>Raritan Bay</u>				
✓	<u>South River (City)</u>				
✓	<u>Washington Canal</u>				
✓	<u>Sayreville</u>				
✓	<u>Parlin</u>				
✓	<u>Cheesequake Creek</u>				
✓	<u>Rocky Reach</u>				
✓	<u>Long Reach</u>				
Names underlined in red are approved.					
W.J.Woods					
<i>W.J.Woods</i>					

MEMORANDUM

IMMEDIATE ATTENTION

~~SURVEY~~
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

No. ~~H~~
 No. T 5103

received
 registered
 verified
 reviewed
 approved

Jan. 4 - '36

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			
26			
30			
40			
62			
63			
82			
✓ 83			"Stack" no longer exists - Chart 375 see Review page 3
88			
90			

RETURN TO

82	<i>Jones</i>
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CKG Jan. 4 - '36

T5103a

DESCRIPTIVE REPORT, T-5103A

T-5103A is the same as the original T-5103 except for the following changes:

1. The sheet has been entirely redrawn on a blue line copy of T-5103.
2. The Raritan Arsenal has been deleted from T-5103A.
3. All items in red on the original T-5103 have been applied to T-5103A.

B. G. Jones
B. G. Jones
9/13/37

chart 375

addition to the review of T 5103

The original T 5103³ has been removed from the files and destroyed this date 7/14/39. The original copy contained certain military information which was unnecessary for charting.

The number of T 5103³a has been changed to T 5103 this date 7/14/39.

It is no longer necessary that T 5103 be considered as confidential.

Examination of chart 375 to which the original T 5103³ was applied July 9, 1936 showed that the differences between the original T 5103 and the present file copy, as listed on the preceding page, do not affect chart 375.

B.G. Jones 7/14/39