

5332

ORIGINAL

Form 504  
Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

DEC 17 1935

State: New Jersey

Acc. No.

DESCRIPTIVE REPORT

Topographic

Sheet No. T 5332

~~Hydrographic~~

LOCALITY

Passaic River

Newark

1935

CHIEF OF PARTY

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

Partially applied to drawing of chart 287 - Apr. 3, 1937 - JFW

Applied to drawing of new chart 287 - June 1938 J. Ladd.

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. 61 N

REGISTER NO. T 5332

State New Jersey

General locality Passaic River

Locality Newark

Scale 1:10,000 Photographs May 18  
Date of ~~survey~~ July 3, 1932

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

Chief of party Roswell C. Bolstad

Surveyed by See statistics sheet inclosed in this report

Inked by D.B. Bogart

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

...

-STATISTICS\*

on

SHEET, FIELD NO. 61N, REG. NO. T5332.

SINGLE LENS PHOTOS NO'S. 66-21-(74 to 78) DATE: May 18, 1932  
66-21-(97 to 100) May 18, 1932  
66-47-(68 & 69) July 3, 1932

	BY	DATE	
		FROM	TO
SCALE FACTOR	= 1.00		
PROJECTION	<u>H.L. Hawkins</u>	<u>6/14/34</u>	<u>6/14/34</u>
PROJECTION CHECKED	<u>W. D. Ayers</u>	<u>6/14/34</u>	<u>6/14/34</u>
CONTROL PLOTTED	<u>D.B. Bogart &amp; D.B. Bennett</u>	<u>6/20/34</u>	<u>6/25/34</u>
CONTROL CHECKED	<u>W.D. Ayers</u>	<u>7/11/34</u>	<u>7/12/34</u>
NO TOPOGRAPHY TRANSFERRED			
SMOOTH RADIAL LINE PLOT	<u>W.D. Ayers</u>	<u>7/14/34</u>	<u>7/20/34</u>
RADIAL LINE PLOT CHECKED	<u>G.G. Albert</u>	<u>8/16/34</u>	<u>8/17/34</u>
DETAIL INKED	<u>D.B. Bogart</u>	<u>8/23/34 to 10/29/34</u>	<u>(Intermittently)</u>
PRELIMINARY REVIEW	<u>W.E. Hackett</u>	<u>3/7/34</u>	<u>3/12/34</u>

AREA OF DETAIL INKED 12.4 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 the nearest opposite shore)  
0.0 Statute Miles

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

LENGTH OF STREETS, ROADS, TRAILS, RAILROADS, ETC. 265.8 Statute Miles

GENERAL LOCATION Passaic River

LOCATION Newark

DATUM North American 1927

STATION Pros 1933 Latitude 40° 45' 52.584" (1622.1 m.)  
Longitude 74° 10' 14.249" ( 334.2 m.)

COMPILER'S REPORT

for

AIR PHOTO TOPOGRAPHIC SHEET, FIELD NO. 61N

GENERAL INFORMATION

The Air Photo Field Inspection Report for northern New Jersey, 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 in questionable areas was obtained from R.L. Fisher W.E. Hackett and D.B. Bennett, draftsman in this party who are familiar with the topography of the area.

The accompanying STATISTICS SHEET (page 2) lists all the data in connection with the compilation of this sheet.

The single lens photographs used for this compilation were taken by the AeroService Corporation, 1612 Chancellor Street, Philadelphia, Pennsylvania. The photographs are 1:10,000 scale enlargements from the original negatives which are on an approximate scale of 1:22,000. They were taken in two groups on group being taken May 18, 1932 and the other July 3, 1932. Since no record of the time was available, the tide could not be determined.

CONTROL

(A) Sources

The following source of control was used in the compilation of this sheet:-

- (a) Triangulation by Lieut. R.W. Woodworth, 1930 to 1933, field positions unadjusted.

All control was converted to the North American 1927 datum for this compilation. Small differences between these values and the final office adjusted positions would be unplotable on the scale of this compilation (1:10,000).

The geographic position of Station "Van 1913" did not fit the description of this station and was not used in making the radial plot. The building on which the station was located has been destroyed and has been recorded on Form #526.

(B) Errors

The control is, in general, strong and the radial line plot gave good intersections. No topographic sheets were used; the most recent, made in 1914, being considered obsolete.

It was discovered from a knowledge of the business area of Newark that the geographic positions of stations "Flagpole (Bank Bldg.) 1931" and Flagpole (Lefcourt) 1931" are incorrect as furnished by the field computations. — Letter 233 (1-2)  
Apparently they have been interchanged. As far as the relative positions and names of the stations are concerned, the following are correct:

Flagpole (Bank Bldg.) 1931	40° 44' 12.02" (370.8 m)
	74° 10' 16.37" (384.1 m)

It was also discovered while detailing that the geographic position of Station "Chy. (Maas & Waldstein) 1933 is incorrect as furnished by the field computations. The station was spotted on the photographs by a field man from its description. When placed over the oriented photograph, the plotted position fell just  $00^{\circ} 01'$  to the west of the point spotted on the photographs, making it seem quite reasonable that the geographic position is in error by one minute of longitude. The following is probably the correct position:

Chy. (Maas &amp; Waldstein) 1933

Latitude 40° 46' 43.07" (1328.5 m)

Longitude 74° 09' 10.28" (241.1 m)

The area at the geographic position given by the field computations is entirely residential in character. There are no buildings nearby that could support a chimney of any size.

**(C) Discrepancies**

As the topographic sheet of 1914 was not used in this compilation, no discrepancies will be noted.

No control established by any other organizations was used in the compilation of this sheet.

COMPILATION

### (A) Method

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

(B) Adjustments of Plot

The photographs in this area appear to have very little difference in scale due to variation in altitude or to tilting of the plane. Considerable proportioning was necessary in some areas due to difference in the elevation of the ground. This occurred principally in the areas adjacent to the Passaic River from station "Bell-Top Chy. (O.N.T.)" northward to the limit of the sheet.

(C) Interpretation

The usual topographic symbols, as approved by the Board of Surveys and Maps in 1932, were used, and no great difficulty was experienced in interpreting the topographic detail on the photographs.

The double full line was used to indicate first order roads, the double broken line to indicate private driveways and roads of lesser importance. Trails and paths are shown by a single broken line. In most cases, unless marked on the field prints, the classification of these roads had to be determined under the stereoscope.

The New Jersey State Highway, Route No. 21 just west of the Newark Station of the Pennsylvania Railroad does not appear on the photographs. A field inspection of this

Additional Note :-

Upon completion of the Newark Pennsylvania Station, the Hudson, Manhattan Tubes will be routed to the new station and the Park Place Terminal will be abandoned. The new routing will be begun at Manhattan Transfer.

ADDITIONAL NOTE:

The street railway running along Broadway has not been shown on the compilation. Broadway runs approximately northeast to southwest on the west end of the sheet and has been labeled on the cover sheet.

ADDITIONAL NOTE: Interpretation

In the northeast corner of this sheet, Lat.  $40^{\circ}-46.4'$  Long.  $74^{\circ}-09.4'$ , there are shown on this sheet some catwalks leading to floats, also marine slips for small craft these slips consist only of ramps and there are no marine tracks existing

area was made and the highway drawn in to represent the present conditions.

The Newark City Railroad at Latitude  $40^{\circ} 44'$  Longitude  $74^{\circ} 11'$  to Latitude  $40^{\circ} 45'$  Longitude  $74^{\circ} 11'$  is, as far as this compilation is concerned, complete as shown. A Photostatic copy of the trackage and turnout data was supplied by the City Engineer, Newark, N.J. and this information was transferred to the photographs.

The Pennsylvania Railroad at Latitude  $40^{\circ} 44'$ , Longitude  $74^{\circ} 10'$  has made considerable improvements in their layout. These improvements include a new station building with an allowance for eight tracks at the station, a new three track vertical lift bridge over the Passaic River realignment of the tracks to the northeast of the station, and extensive rearrangement of various streets in the vicinity. The detail of this area shows the new station, the outside tracks of the new arrangement at the station, the new bridge, the rearranged streets, and the old tracks in use at the present time. This data was plotted on the photographs from a plan furnished by the Chief Engineer of the Newark Improvement Co., Pennsylvania Station, Newark, N.J. Additional construction as proposed, calls for the removal of the present old swing bridge, replacing it with a vertical lift bridge, and finishing the track arrangement.

The buildings adjacent to the Passaic River have all been shown, and important or large buildings have shown wherever they occur. Areas with a definite street system and numerous buildings have been labeled and the buildings omitted. This has also been done in some industrial areas. Several steel skeleton structures, mainly for electric power purposes, are shown by closely spaced cross-section lines.

In many cases all tracks of a railroad have not been shown. At intervals, short lengths of track between the limiting tracks have been inserted to indicate the actual number of tracks.

The abandoned Morris Canal has now been decked over and is used as a street. The Newark City Railroad has used the abandoned canal bed for an underground section of their new railroad.

#### (D) Bridges

That section of the Passaic River shown on this sheet is crossed by eleven (11) bridges of various types. The clearance and span of these bridges are shown on the cover sheet and are essentially correct as given in the U.S. Coast Pilot, Atlantic Coast, Section B, Cape Cod to Sandy Hook.

The Pennsylvania Railroad Swing Bridge will probably be replaced as reported above in the paragraph on Interpretation, (C).



(E) Information from Other Sources

Railroad data covering sidings, yards, and general trackage were obtained from the following sources:-  
 Division offices of the Delaware, Lackawanna and Western R.R.  
 Division offices of the Pennsylvania Railroad.  
 Division offices of the Central Railroad of New Jersey.

(F) Conflicting Names

There are no names on this sheet that conflict with the names shown on the present U.S. Coast and Geodetic Charts of this area. There are no new names shown on this sheet.

COMPARISON WITH OTHER SURVEYS

The junction with adjoining sheets is satisfactory. This sheet is the western limit of the photographs now available.

LANDMARKS

The list of landmarks for this area including those to be removed from the charts has been previously submitted by Lieut. R.W. Woodworth in March 1933.

The following landmarks, ~~(topographic stations)~~ were located by radial line method <sup>on this compilation</sup> as no geographic positions were available for these points. The geographic positions were scaled to the nearest meter. These landmarks are shown on Chart ~~#286~~ <sup>present</sup> ~~287~~ <sup>288</sup>.

Object	Latitude	Longitude
Chy	40° 44' 115.2 <sup>2</sup> (1735.6) (491.2)	(1116.7) 74° 07' 291.2 (433.9)
Chy	40° 44' 1359.6 (363.2)	74° 08' 973.8 (1088.0)
Stack	40° 44' 1487.6 (1431.9)	74° 08' 319.7 (166.8)
Chy	40° 44' 418.9	74° 09' 1241.0

RECOMMENDATIONS FOR FURTHER 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 printing 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 additional surveys are not required.

Submitted by D.B. Bogart  
 D.B. Bogart  
 Draftsman.

Assisted by H.L. Hawkins  
 H.L. Hawkins, Draftsman.  
W.E. Hackett  
 W.E. Hackett, Surveyor.

REVIEW OF AIR PHOTO COMPILATION T 5332  
Scale 1:10,000

1. Comparison with Contemporary Surveys

There are no contemporary graphic control or hydrographic surveys in the area of this compilation.

2. Comparison with previous surveys

(a) T 3449, T 3450 and T 3451 (1914), 1:5,000

These are detailed plane table surveys of the Passaic River 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.

3. Comparison with Chart 287

~~Comparison~~  
~~An examination of the photographs shows that~~ There are many new buildings along the Passaic River which are not shown on chart No. 287; also many of the buildings shown have been either reconstructed or removed. A check with the photographs in this office shows the delineation of buildings on the compilation to be correct and adequate for complete revision of this detail on the chart.

4. Landmarks

Chart 287 at lat.  $40^{\circ} 44.5'$ , long.  $74^{\circ} 10.0'$  shows an unnamed topographic station. A careful examination of the photographs shows no landmark in this vicinity and none has been shown on the compilation. All other landmarks shown on chart 287 in this area are shown on the compilation.

5. Recoverable Stations *No stations described on form 524.*

6. Remarks

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

(b) The accuracy stated on page 6 of the previous report is high for work on this scale. A better estimate would be from 0.3 mm to 0.5 mm for intersected points and 0.3 mm to 1.0 mm for other detail.

(c) The bridge clearances are identical with those given in the Coast Pilot, Section B, Cape Cod to Sandy Hook.

*L. C. Landy*  
*B. G. Jones*  
*11/22/35*

Survey No. T-5332Date Oct 28, 1935 GEOGRAPHIC NAMESChart No. 369 + 287

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>Newark</u> ✓	Same on 369 + 287			
	<u>Harrison</u> ✓	" " "	"		
	<u>Kearny</u> ✓	" " "	"		
	<u>Arlington</u> ✓	" " "	"		
	<u>Belleville</u>	" " "	"	not on this map	
	<u>Second River</u> ✓	" " "	"		
	<u>Passaic River</u> ✓	" " "	"		
	<u>Morris Canal (abandoned)</u>	" " —	"		
	<u>East Newark</u>	" " —	"		
	<u>North Arlington</u>			(not on this sheet) KTA.	
	<u>Manhattan Transfer (P.R.R.)</u>	Same on 369 + 287			
	<u>Hudson + Manhattan R.R.</u>				
	<u>Erie R.R.</u>	Same on 369 + 287			
	<u>D. L. + W. R.R.</u>	" " " "	"		
	<u>Point No Point</u> ✓	" " —	"		
	<del>East Newark</del> 6/15/36				
	Names approved Dec. 13 1935				
	<i>E. E. Egan</i>				
	Names approved 1/23/35				
	KTA				
	* See Record, pg. 15				
					5277 (M-136)

## REVIEW OF AIR PHOTO COMPILATION NO. T 5332

Chief of Party: Roswell C. Bolstad

See page  
Compiled by: 2 of reportProject: 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.
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 ~~non-marshy~~ 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)
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)  
Bridge: Information on overlay tracing.
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. <sup>1927</sup> (adjusted)  
*reference station is 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.

W. E. Hackett

Surveyor

Roswell C. Bolstad

Chief of Party

19. Remarks after review in office:

Reviewed in office by:

L. E. Lande 11/13/35  
J. J. Jones 11/22/35

Examined and approved:

E. K. Green  
Chief, Section of Field Records

L. O. Collett  
Chief, Division of Charts

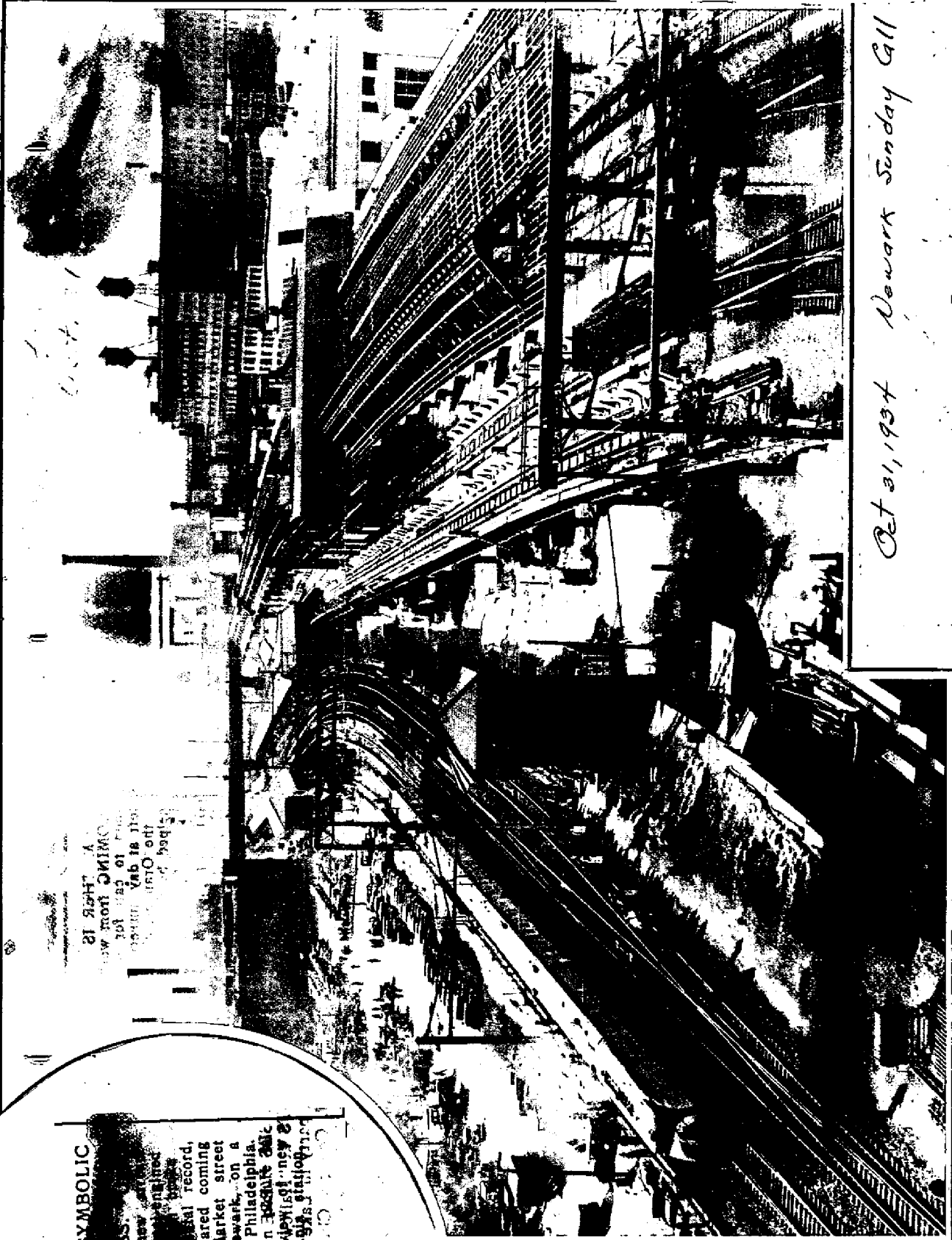
T. S. Borden  
Chief, Section of Field Work

Grande  
Chief, Division of Hydrography  
and Topography.

**PHILADELPHIA SYMBOLIC**

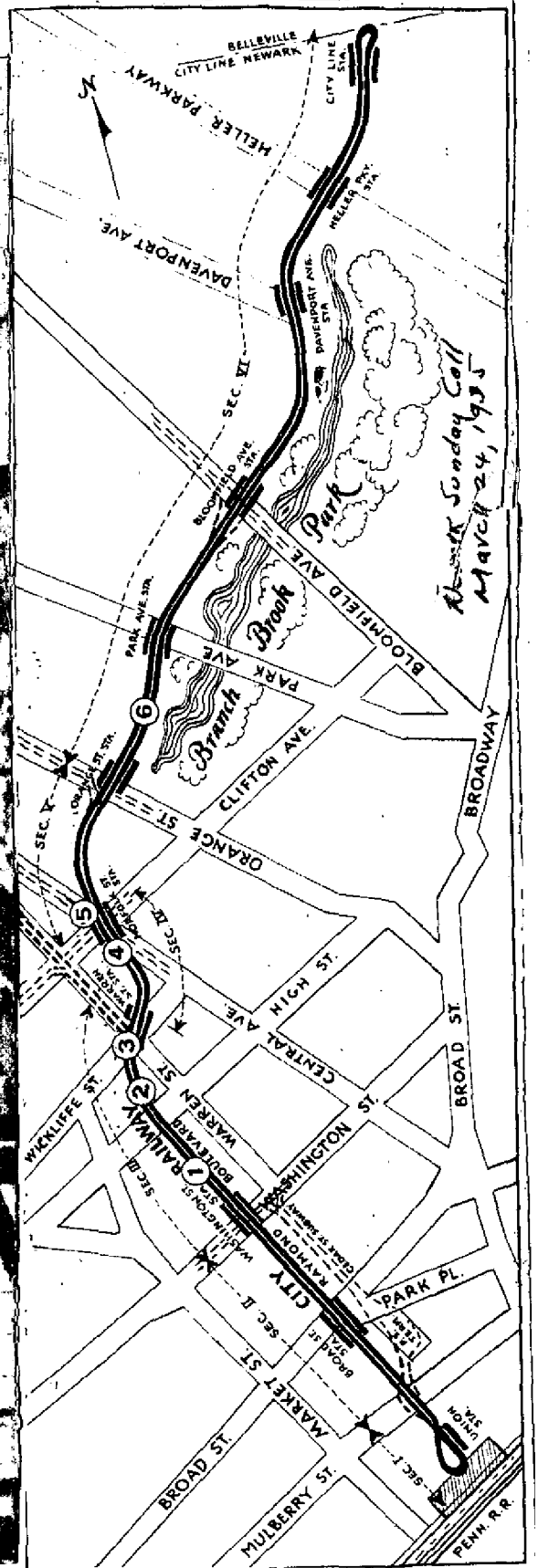
PHILADELPHIA, Pa. (AP) — A new record, as the market street train appeared coming from the city, on a new line from Philadelphia. At right in foreground, an excellent view of the new Pennsylvania station.

ST. PAUL, Minn. (AP) — A new record, as the market street train appeared coming from the city, on a new line from Philadelphia. At right in foreground, an excellent view of the new Pennsylvania station.



*Oct 31, 1934 Newark Sunday Call*

# Admission Sunday

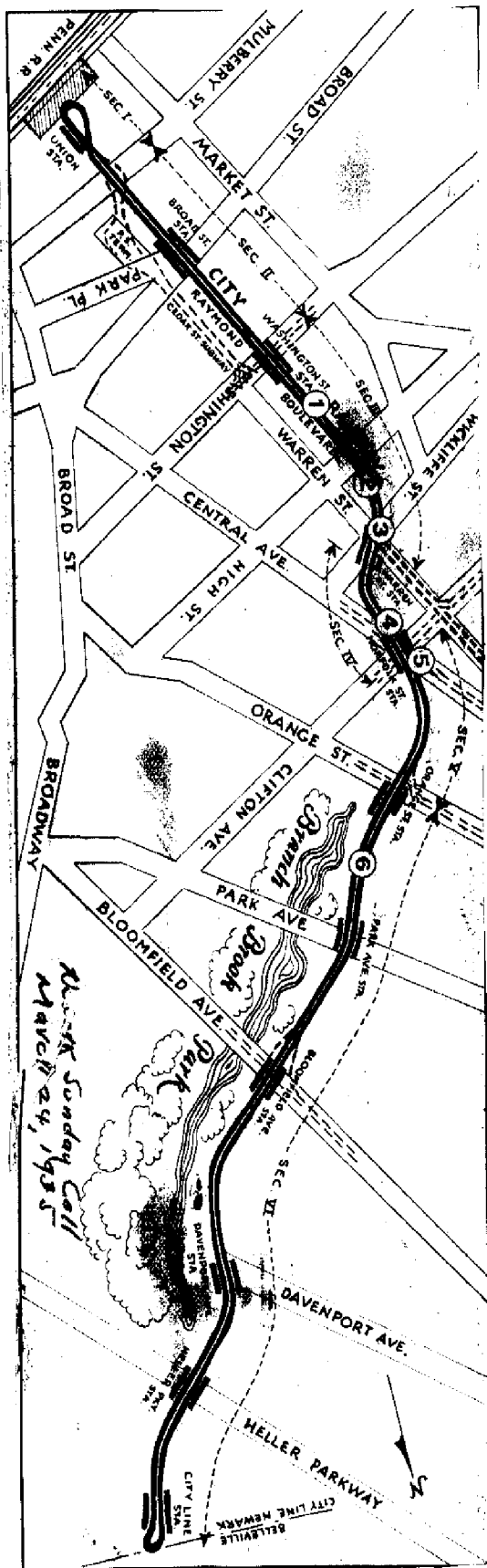


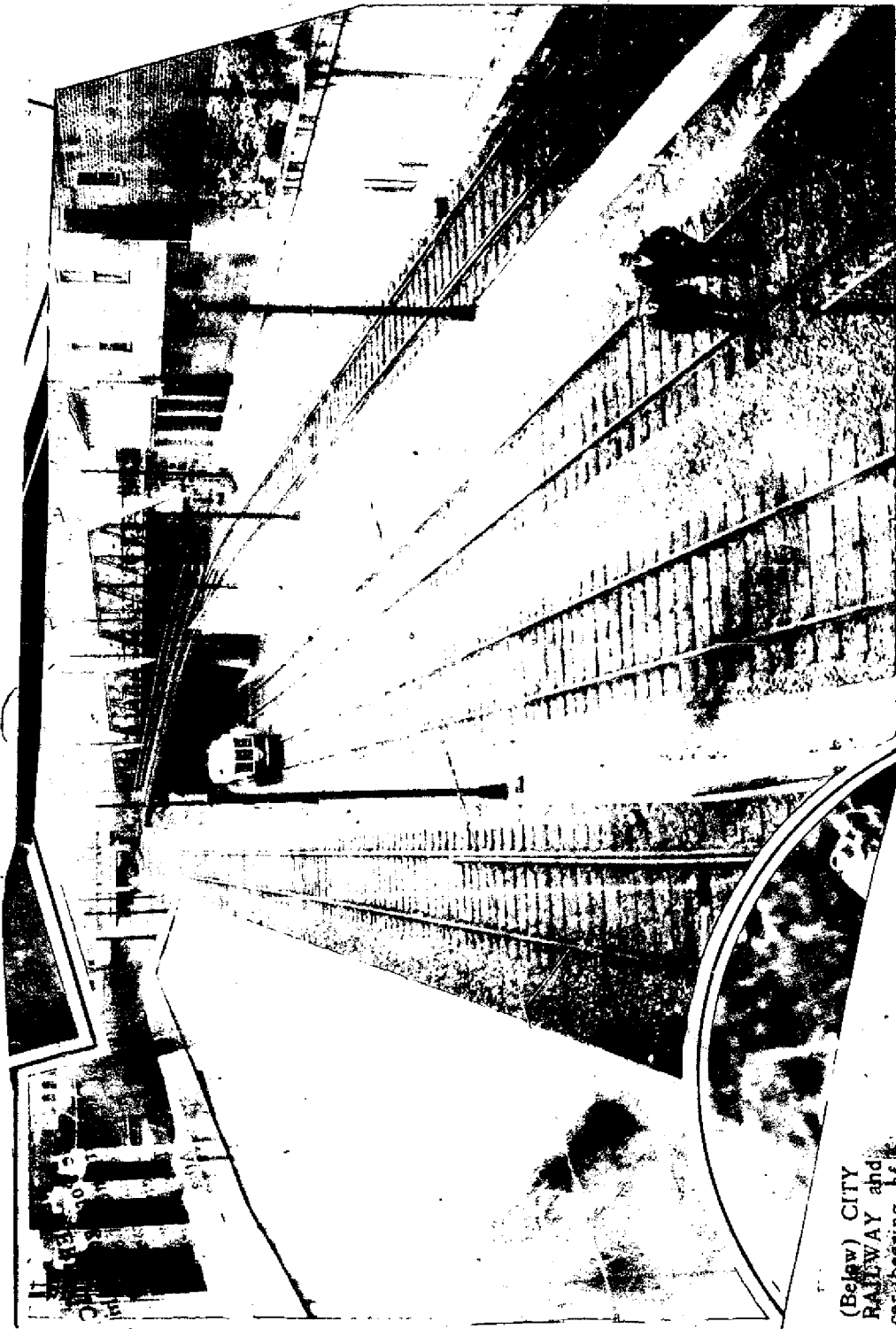


# Newark Sunday Call



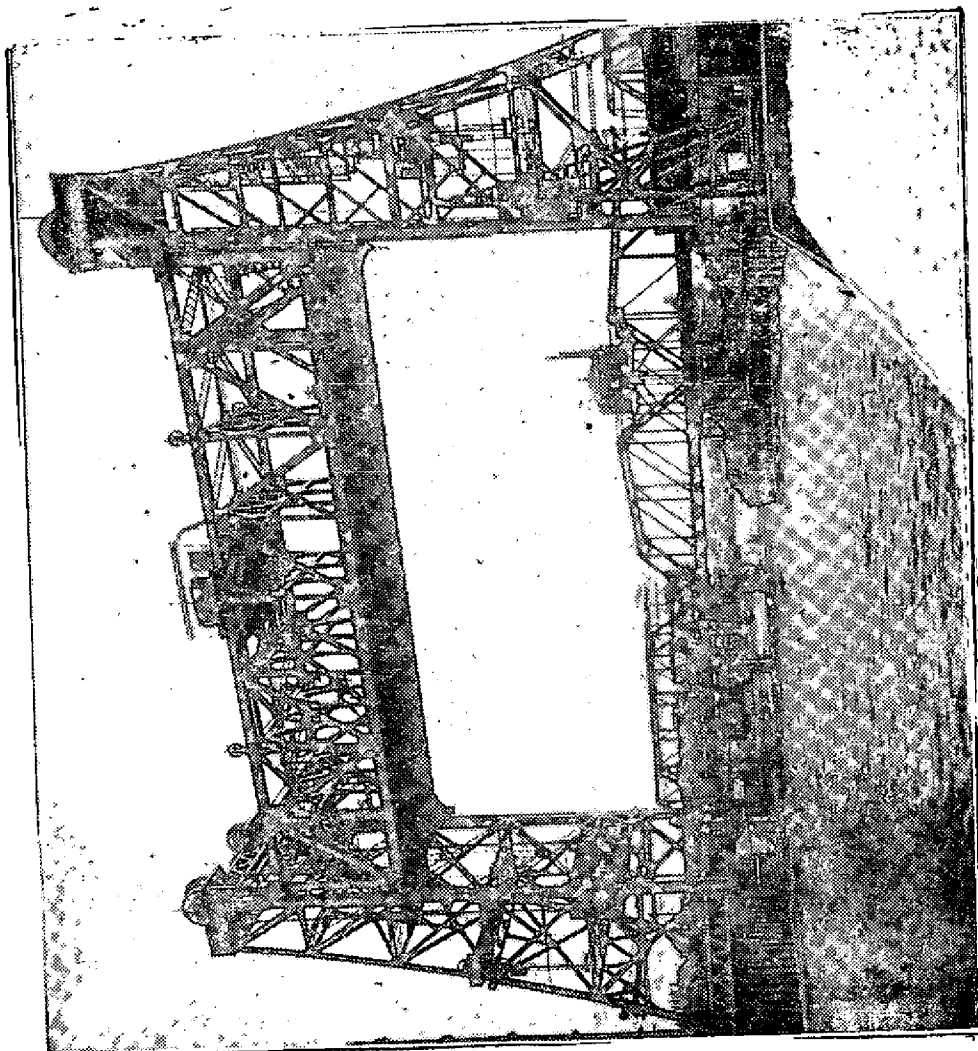
Completion of the new Pennsylvania Station and affiliated projects is a great stride in Newark's third century of progress. What changes will they bring in downtown Newark — and in the section east of the railroad? Perhaps you may guess after studying the air photographs of Newark and its new station.





(Below) CITY  
RAILWAY and  
city bearing of  
section in their  
last inspection  
has snapped  
from Norfolk  
street bridge.

*Newark Sunday Call*



Lift bridge over Passaic River, one of the largest of kind in world.

*Newark News Apr. 23, 1935*