

9827

N&S

*

Diag. Cht. No. 1216-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-72(51) Office No. T-9827 N&S

LOCALITY

State New Jersey

General locality Ocean County

Locality Toms River

1945 51-53

CHIEF OF PARTY

H.F. Garber, Chief of Field Party

H.A. Paton, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE November 10, 1959

B-1870-1 (1)

9827

DATA RECORD

T - 9827N & S (two manuscripts)

Project No. (II): Ph-72(51) Quadrangle Name (IV): TOMS RIVER

Field Office (II): Edenton, North Carolina Chief of Party: Harry F. Garber

Photogrammetric Office (III): Stereoscopic Mapping Section, Washington, D.C. Officer-in-Charge: Louis J. Reed

Instructions dated (II) (III): 18 April 1951 Copy filed in Division of Photogrammetry (IV)

Method of Compilation (III): S ingle Lens: Control extended by Stereoplanigraph
Delineation by Kelsh Plotter

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): Manuscript : 10,000 :: Photos : 20,000 :: CF : 1/1,000

Date received in Washington Office (IV): OCT 21 1952 Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): 7/20/54

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): NA 1927 Vertical Datum (III):

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):

Lat.: Long.: Adjusted
~~X 11401000 X~~

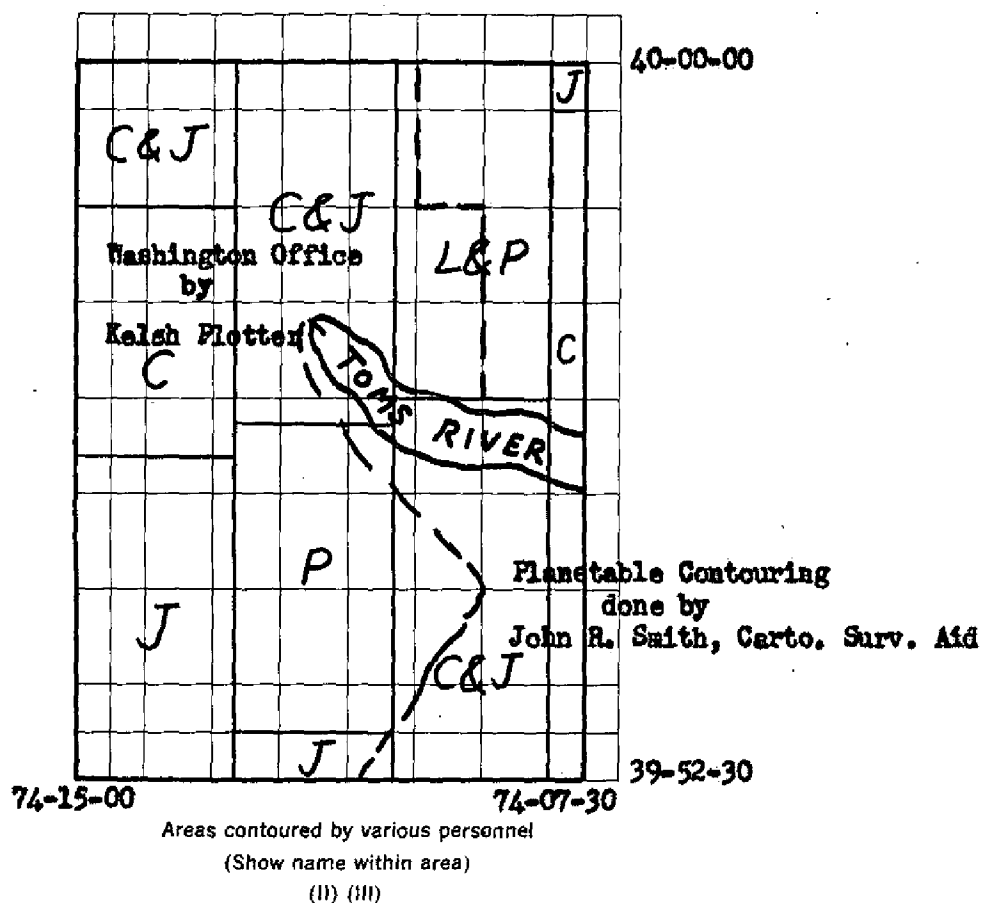
Plane Coordinates (IV): State: Zone:

Y= X=

New Jersey State Grid with interval of 5,000 ft.

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.



RED indicates field contouring on photographs
BLUE indicates office delineation, both culture and contours
where they were they were not run in the field.

J indicates area detailed by Ivan R. Jarretto n Kelsh Plotter "B"
C indicates area detailed by Bernard J. Colner on Kelsh Plotter "B"
P indicates area detailed by Lt Parkinson on the Kelsh Plotter "A"
C&J indicates area detailed by Jarrett and Colner by shifts on the
Kelsh Plotter "B"
L&P indicates area detailed by Frank J. Lesslie and Lt Parkinson
on the Kelsh Plotter "A"

Elevations on Manuscript checked by LO (III): Louis J. Reed Date: 21 Oct 52

Camera (kind or source) (III): USC&GS "0" Camera, 6 inch, wide-angle.

Number	Date	Time	Scale	Stage of Tide
1739			20,000	
thru 1745	23 Mar 51	09:51		MHW
1792				
thru 1799	"	10:40	"	"
1824				
thru 1834	"	10:45	"	"
1840				
thru 1850	"	11:06	"	"
1873				
thru 1882	"	11:18	"	"
		Tide (III)		

Reference Station: Sandy Hook
 Subordinate Station:
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV):

Date:

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 57

Shoreline (More than 200 meters to opposite shore) (III): about 28

Shoreline (Less than 200 meters to opposite shore) (III): variable

Control Leveling - Miles (II): 41

Number of Triangulation Stations searched for (II): 77

Recovered: 70

Identified: 12

Number of BMs searched for (II): 26

Recovered: 17

Identified: 17

Number of Recoverable Photo Stations established (III): 24

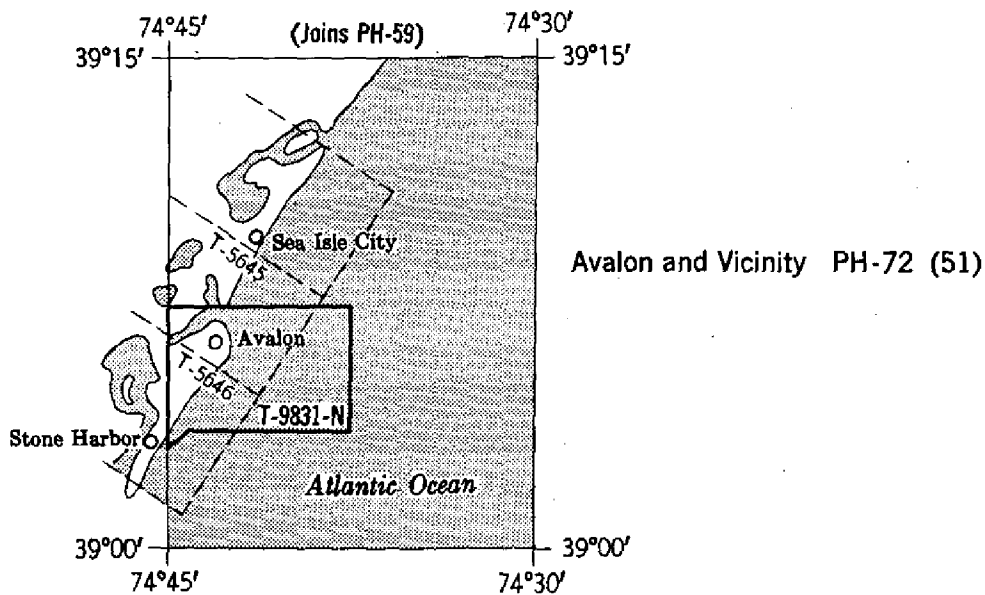
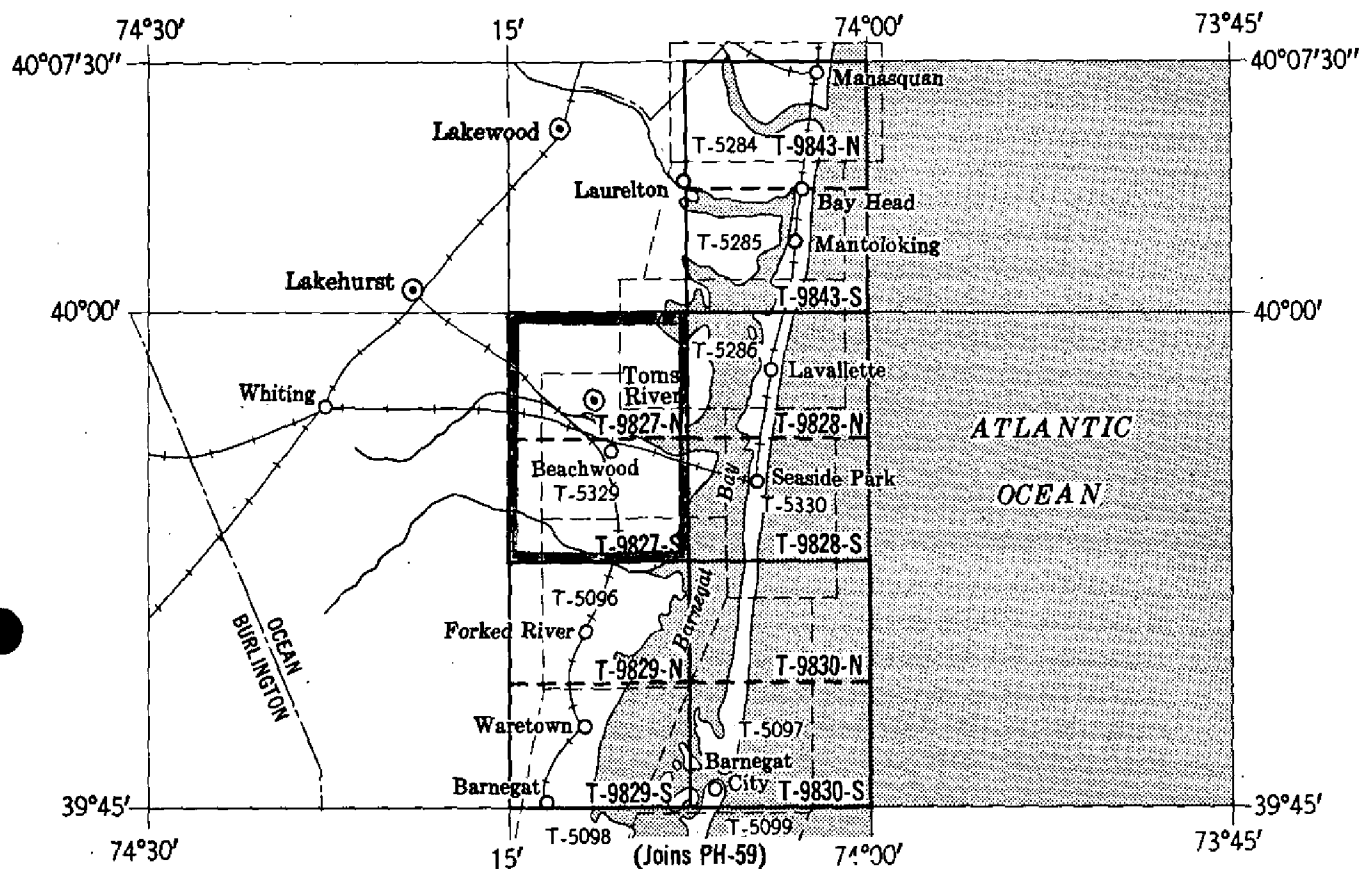
Number of Temporary Photo Hydro Stations established (III): none

Remarks:

TOPOGRAPHIC MAPPING PROJECT PH-72 (51)

NEW JERSEY, Barnegat Bay - Toms River and Vicinity

Compilation scale 1:10,000



1. Preface:

FIELD INSPECTION REPORT

Quadrangle T-9827

Project Ph-72(51)

Harry F. Garber, Chief of Party

The field work for this quadrangle was done in accordance with instructions, dated 18 April 1951, Project Ph-72(51), under the direction of Joseph K. Wilson, Supervisor. Field work in addition to those phases listed on page 3, was done by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Leo F. Beugnet Cartographic Survey Aid	Horizontal Control Recovery and Shoreline	July, 1951
John R. Smith Cartographic Survey Aid	Fly Levels	July, 1951

2. AREAL FIELD INSPECTION

The quadrangle comprises an area lying west of the upper end of Barnegat Bay and centrally located around the town of Toms River, which is the principal town. Toms River is unincorporated. It is a part of Dover Township and is governed by a township committee of three. It is also the county seat of Ocean County. The Boroughs of Beachwood, Island Heights, Pine Beach, South Toms River, and part of the Borough of Ocean Gate are within the quadrangle. All of these communities, including Toms River, are summer resorts. The chief occupation is poultry raising. The area is reputed to be the third highest in egg production within the United States. There is little cultivation other than gardening.

The Central Railroad of New Jersey is the only railroad within the quadrangle. The Pennsylvania Railroad, linking Toms River and Seaside Park, has been dismantled. The quadrangle is adequately served by a system of hard-surfaced roads. Attention is called to the new highway under construction, located just west of the town of Toms River. The highway should be checked during the field edit. The western portion of the quadrangle has considerable woodland. Throughout the wooded sections are numerous unimproved roads, which are used by the hunters, loggers and access to the cranberry bogs.

Toms River Airport, which is located north of the town, is used only by the local fliers with light planes. It has one sod runway.

The photography for the area was good and the detail clear.

3. HORIZONTAL CONTROL

(a) One non-monumented traverse was run to establish additional horizontal control. A three-mile line was run from Mon. 2647-A(NJGCS) near the town of Toms River and tied in by sun-azimuth. Two photo points were located. The computations of the traverse line are submitted with the quadrangle data.

(b) All stations are on the N.A. 1927 datum.

(c) Control established by the N.J.G.C.S. was used along with that established by the U.S.C.&G.S. Stations not established by the U.S.C.&G.S. are as follows:

<u>Station</u>	<u>Agency</u>	<u>Order</u>	<u>Datum</u>
R.M. 3 Indian, 1938	New Jersey Geod. Control Surv.	Third	N.A. 1927
Mon.-2225, 1934	"	"	"
" -2226, "	"	"	"
" -2227, 1940	"	"	"
" -2229, "	"	"	"
" -2230, 1934	"	"	"
" -2231, "	"	"	"
" -2233, 1940	"	"	"
" 2235, "	"	"	"
" -2236, 1935	"	"	"
" -2237, 1948	"	"	"
" -2238, "	"	"	"
" -2239, 1935	"	"	"
" -2608, 1938	"	"	"
" -2609, "	"	"	"
" -2610, "	"	"	"
" -2611, "	"	"	"
" -2612, "	"	"	"
" -2614, "	"	"	"
" -2615, "	"	"	"
" -2616, "	"	"	"
" -2617, "	"	"	"
" -2618, "	"	"	"
" -2619, "	"	"	"
" -2620, "	"	"	"
" -2640, 1939	"	"	"
" -2641, "	"	"	"
" -2642, "	"	"	"
" -2643, "	"	"	"
" -2645, "	"	"	"

<u>Station</u>	<u>Agency</u>	<u>Order</u>	<u>Datum</u>
Mon. 2646, 1939	New Jersey Geod. Control Surv.	Third	N.A. 1927
" 2647-A "	"	"	"
" 2677, 1935	"	"	"
" 5203, "	"	"	"
" 5256, 1936	"	"	"
" 5259, "	"	"	"
" 5260, "	"	"	"
" 5698, 1940	"	"	"
" 8293, 1938	"	"	"
" 8294, "	"	"	"
" 8295, "	"	"	"
" 8296, "	"	"	"
" 8298, "	"	"	"
" 8299, "	"	"	"
" 8633, 1941	"	"	"
" 8634, "	"	"	"
" 8635, "	"	"	"
" 8636, "	"	"	"
" 8637, "	"	"	"
" 8638, "	"	"	"
" 8639, "	"	"	"
" 8640, "	"	"	"
" 8642, 1948	"	"	"
" 8643, "	"	"	"
" 8644, "	"	"	"
" 8645, "	"	"	"
" 8646, "	"	"	"
" 8647, "	"	"	"
" 8649, "	"	"	"
" 8650, "	"	"	"
" 8651, "	"	"	"
" 8652, "	"	"	"

(e) A search was made for all known horizontal control points. Stations reported as "lost" or "not recovered" are as follows:

Gowdy's House Ecc., 1932
 Mon. 2613 (N.J.G.C.S.), 1938
 " 2644 " 1939
 " 5257 " 1936
 " 5667 " 1940
 " 8297 " 1938

8289

4. VERTICAL CONTROL

(a) A search was made for all known vertical control. The following bench marks fall within the limits of the quadrangle:

<u>Station</u>	<u>Agency</u>	<u>Order</u>
S — K-6	U.S. Coast & Geod. Surv.	First
N — L-6 ✓	"	"
S — P-6	"	"
N — R-20 ✓	"	Second
N — Beachwood, Toms River T.B.M. 1 ✓	"	Unknown
N — Beachwood, Toms River T.B.M. 2 ✓	"	"
N — Toms River, Toms River T.B.M. 1L ✓	"	"
N — Toms River, Toms River T.B.M. 2L ✓	"	"
N — Indian	N.J. Geod. Control Surv.	"
North off N-edge of 9829 N — edge RV. 2225	"	"
N — " 2230 ✓	"	"
S — " 2244	"	"
S — " 2245	"	"
N — " 5200 ✓	"	"
N — " 5201 ✓	"	"
N — " 5202 ✓	"	"
N — " 5203 ✓	"	"
" 5275	"	"
S — " 2246	"	"

(b) Forty-one miles of supplemental levels were run with a Wye level to establish elevations at photographic points for stereoscopic plotting, and to control the planetable contouring. Elevations for the stereoscopic instrument control were established and identified at points with a level plane of at least 25 feet in diameter. The largest error of closure was 0.66 foot. Adjustments were prorated according to the number of setups.

(c) The first and last fly-level point is 27-1 and 27-103.

(d) See Field Inspection Report of quadrangle T-9829.

5. CONTOURS AND DRAINAGE

The contouring of this quadrangle was done by both stereoscopic instruments and by planetable methods. (See line of division on page 2 and report by the Washington Office.)

The contouring, by planetable methods, was done directly on single-lens photographs (1:10,000 scale), at a contour interval of ten feet. The highest elevation is in the western portion of the quadrangle, in the area contoured by the Kelsh Plotter.

Attention is called to several "active" borrow pits. These have been labeled on the photographs and should be checked by the field editor.

The natural drainage is by numerous streams leading into Barnegat Bay and Toms River.

6. WOODLAND COVER

The cover was classified in accordance with the Topographic Manual. Sufficient swamp limits were delineated in purple on the photographs to establish a photographic tone. (See Field Inspection Report of quadrangle T-9829 for discussion of woodland area.)

7. SHORELINE AND ALONGSHORE FEATURES

(a) The small portion of shoreline along Barnegat Bay is all apparent. The M.H.W.L. along Toms River has been inspected and classified.

(b) No attempt was made to locate the low-water line.

(c) The foreshore was classified as necessary on the photographs.

(e) All docks, wharves and piers not clearly discernible on the photographs have been delineated thereon.

(f) There are no submarine cables within the quadrangle.

8. OFFSHORE FEATURES

None exist.

9. LANDMARKS AND AIDS

(a) Three landmarks, which have been previously charted, are recommended on Form 567.

(b) Beachwood Water Tank is recommended as an interior landmark on Form 524. The tank is unsuitable for a nautical landmark.

(c) There are no aeronautical aids to navigation within the quadrangle.

(d) Three fixed aids to navigation were located by directions observed from triangulation stations, or from photogrammetric points.

10. BOUNDARIES, MONUMENTS AND LINES

This is the subject of a "Special Report", which was submitted by Martin C. Moody, Cartographic Survey Aid, in August, 1951.

Five boundary markers, along the borough limits, were recovered and identified on photographs 51-0-1829, 1844, 1845 and 1846. (See item 11 below for listing of stations.)

11. OTHER CONTROL

Forty-eight previously established topographic stations were searched for and reported on Form 524. Recoverable topographic stations established in 1951 are:

- N — Boundary Monument No. 1
- S — Boundary Monument No. 2
- S — Boundary Monument No. 3
- S — Boundary Monument No. 4
- N — Boundary Monument No. 6
- S — Tank (Ocean Gate Water Tank)
- N — Tank (Beachwood Water Tank)

12. OTHER INTERIOR FEATURES

All roads and buildings have been classified in accordance with Paragraphs 5441 and 5446 of the Topographic Manual, Part II, dated 1949. (See new road, under construction near Toms River, under item 2 of this report.

There are no bridges over navigable waters within the quadrangle.

13. GEOGRAPHIC NAMES *on file 854-L.H.*

This is the subject of a "Special Report", which will be submitted by Martin C. Moody, Cartographic Survey Aid, at a later date.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Form 567 and 24a, together with a chart section, will be submitted at a later date for that portion of the project from Barnegat Inlet to Manasquan Inlet.

A Coast Pilot Report will be submitted at the completion of the project. There are no other reports or special data except as noted in Paragraphs 10 and 13.

24 September 1951
Approved by:

Harry F. Garber
Harry F. Garber
Commander, USC&GS
Chief of Party

14 September 1951

Submitted by:

John R. Smith
John R. Smith *H72*
Cartographic Survey Aid

RADIAL PLOT REPORT

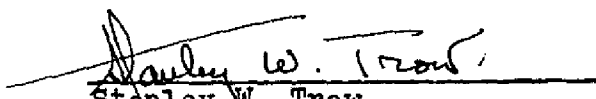
20-30:

No radial plot was constructed as a means of extending control into each stereoscopic model of this quadrangle for compilation purposes.

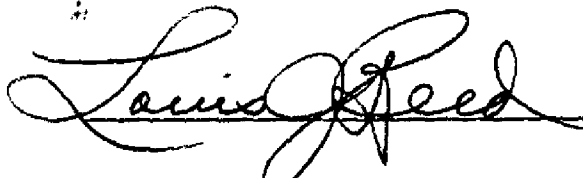
Instead, horizontal positions were located by means of a control extension using the Stereoplanigraph, model No 61639. No particular difficulty was encountered during this operation. Basic control and photos used are indexed on the next page.

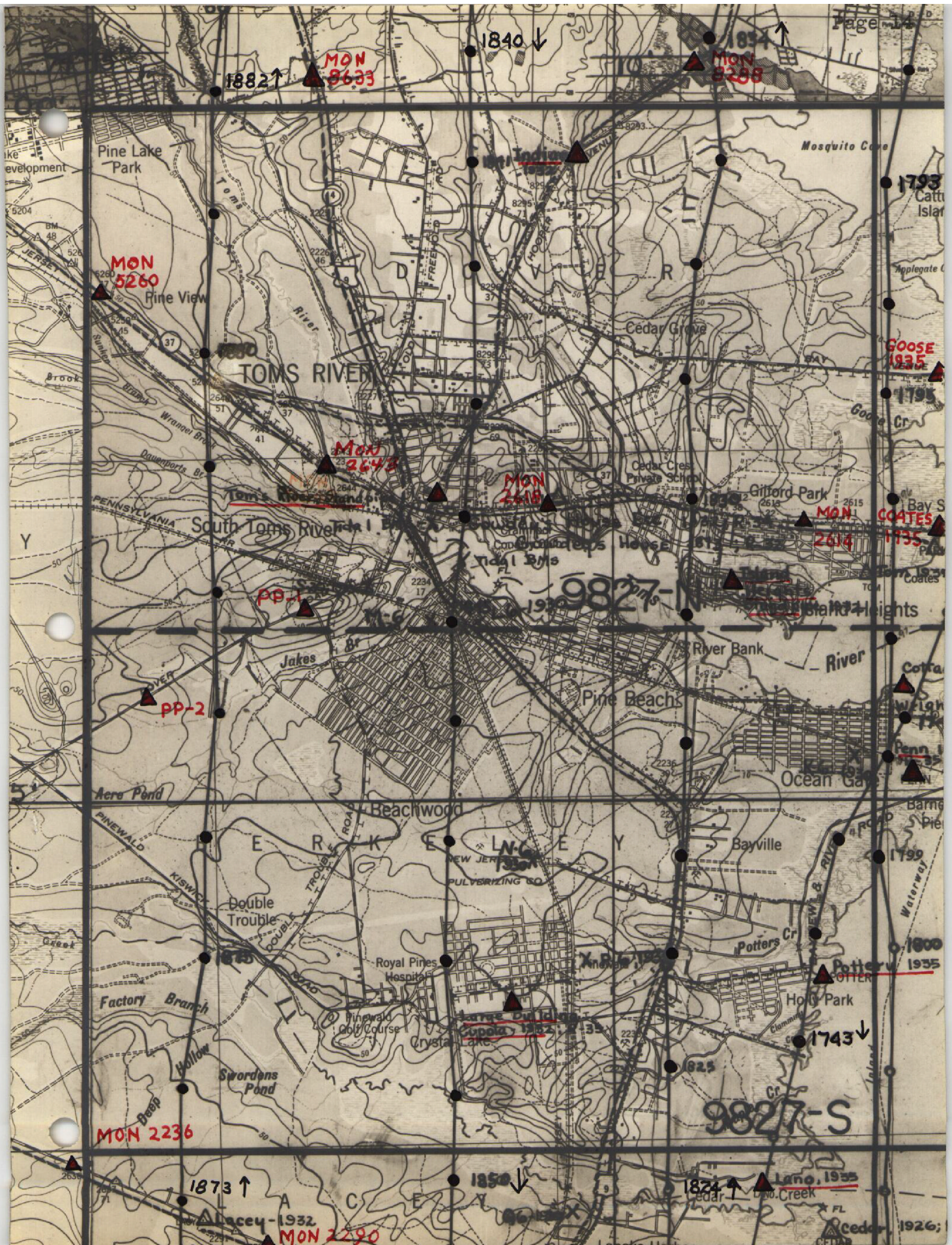
Vertical control was not extended; field operations established sufficient elevations to control each model for contouring purposes.

Submitted by:


Stanley W. Trow,
Cartographer-Photogrammetric

Approved by:


Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer



SKETCH - PHOTO AND CONTROL

- photos used in plot and
for detailing
 - ▲ control held in plot
-

MAP T-9827-N..... PROJECT NO. Ph-72(51)..... SCALE OF MAP 10,000..... SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR α -COORDINATE	N J State Grid Coords DISTANCE FROM GRID OR PROJECTION LINE IN METERS XXXXXXXXXXXX	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
GOWDYS HOUSE, 1873 a	page 426	NA 1927	39 57 11.307 74 10 35.015		348.7 1501.8 831.2 593.0	
INDIAN, 1932 dm	397	"	39 59 39.323 74 10 24.059		1212.8 637.7 570.8 852.6	
ISLAND HEIGHTS STANDPIPE, 1932nd	398	"	39 56 34.276 74 08 49.132		1057.1 793.4 1166.4 258.1	
TOMS RIVER STANDPIPE, 1932nd	398	"	39 57 14.13 74 11 44.60		435.8 1414.7 1058.7 365.5	
MON 2225 NJGCS				2,127,709.41 420 569.53		
MON 2609 NJGCS				2 139 634.14 409 473.64		
MON 2612 NJGCS				2 145 134.67 407 612.02		
MON 2614 NJGCS				2 148 746.02 407 334.07		
MON 2616 NJGCS				2 134 564.00 407 806.10		
MON 2618 NJGCS				2 137 286.75 408 042.36		
MON 2643 NJGCS				2 127 361.00 409 727.48		

Page 15

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

M. 2388-12

MAP T-2827-N PROJECT NO. Ph-72(51) SCALE OF MAP 10,000 SCALE FACTOR

Page 2

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR U-COORDINATE LONGITUDE OR X-COORDINATE	NJ State Grid Coords DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
MON 2646 NJGCS				2 130 725.58 410 844.03		FORWARD (BACK)	FORWARD (BACK)
MON 2647A NJGCS				2 131 093.09 409 850.06			
MON 5256 NJGCS				2 127 108.98 412 391.65			
MON 5203 NJGCS				2 121 380.94 414 190.49			
MON 8293 NJGCS				2 140 294.68 424 732.37			
MON 8295 NJGCS				2 136 836.70 420 768.32			
MON 8296 NJGCS				2 135 426.32 417 591.39			
MON 8299 NJGCS				2 135 151.31 413 432.05			
MON 8634 NJGCS				2 127 222.70 425 058.87			
MON 8638 NJGCS				2 129 789.35 413 709.88			

Page 16

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

M-2388-12

MAP T-9827-S PROJECT NO. Ph-72(51) SCALE OF MAP 10,000 SCALE FACTOR

SCALE OF MAP..... 10,000

PROJECT NO. Ph-72(51)

MAP T-.....T-9827-S

[illegible]

COMPILATION REPORT

31. Delineation:

This quadrangle has been delineated on stereoscopic plotting instruments as outlined on page 2, Data Records. Field Inspection has been used as a guide thruout delineation on the instruments, and during the compilation of the two manuscripts of this report. No areas of incomplete photo coverage exist, and field inspection was complete. The entire land area of this quad has been mapped.

32. Control:

Horizontal control was adequate for the control of this survey; no new stations were established. Most existing control was recovered and identified. For details, see side-heading 3, page 8, Field Inspection Report, and the Radial Plot Report, page 15, both included in this report.

Vertical control was adequate. Refer to side-headings 4 and 20-30, this report. Points of elevation for contouring purposes were photo-selected in the office and established in the field prior to compilation. Generally, these elevations were found to be in good agreement.

All control of both types that was used to control this survey has been shown on the manuscripts in proper name and symbol. In addition, many other permanent horizontal control stations were recovered and properly accounted for, but have been omitted from the map sheets to avoid congestion. Mapped horizontal control stations have been plotted and plot-checked by beam compass, and vertical stations have been compiled from field identification.

33. Supplemental Data:

- a. Special Boundaries Report dated July 1951
- b. Official Name Sheet - compiled by Mr Heck
- c. Instrument Photos and 9x9 Diapositives - see page 1⁴₅
- d. Field Inspection Photos: 51-0-1793 thru 1801, 1824 thru 1834, 1840 thru 1850, and 1873 thru 1882.

34. Contours and Drainage:

The photographic quality of the instrument photographs was satisfactory. Sidelap was acceptable but endlap was about 70%, which is excessive for maintaining the accuracy requirements. (This project was worked at a C-factor somewhat greater than the C-factor normally considered for efficient contouring). About 20% of the contours on these two manuscripts was contoured on photographs in the field, the balance were delineated on the Kelsh Plotters. No areas of questionable contours remain. Instrument contours have been shown on the manuscript in one small area where they did not agree with field contours at a junction of field and instrument work. The area is about two square inches at manuscript scale, and is located at $58^{\circ}20' \times 74^{\circ}08'45''$.

35. Shoreline and Alongshore Details:

The shoreline indicated on the field inspection photos was used as guide during instrument delineation and during compilation. It appeared to be adequate. No low-water lines or shoal lines were located, field or office.

36. Offshore Details: Not applicable.37. Landmarks and Aids:

Three landmarks were field identified and are shown on the manuscripts in proper name and symbol. They are:

- Δ TOMS RIVER STANDPIPE, 1932 on T-9827-N
- Δ ISLAND HIEGHTS STANDPIPE, 1932 on T-9827-N
- TANK (Ocean Gate Water Tank), 1951 on T-9827-S

Three fixed aids to navigation are shown on the manuscripts as positioned by field observations and plotted by use of precise protractor. They are Toms River Lights 2, 3, and 4, the later two being on T-9827-N.

No aeronautical aids exist.

*Lts 2A & 5 located
by Field Edit Party*

38. Control for Future Surveys:

No Hydro Stations were established, but the following Topo Stations have been recovered or established, identified, and plotted on the manuscripts:

Baptist Church Steeple, 1935	on T-9827-N
Beachwood Water Tank, 1951	"
COAL (Flagpole), 1935	"
Bog, 1934	"
Esso (Chimney), 1935	"
Gulf (Gasoline Pump), 1935	"
Lawn (NJ&N), 1935	"
Make (Flagpole), 1935	"
M E Church Steeple, 1935	"
1st Pres Ch Steeple, 1934	"
Pex (Appex of Pavement), 1935	"
Round, 1935	"
Ted (Pointed Green Cupola), 1935	"
West Gable Boat House, 1934	"
Wood, Cupola, 1935	"
Church Cross, 1935	on T-9827-S
Elagpole No 3 (NJ&N), 1935	"
Cupola (Bayville School), 1934	"
Gate, 1935	"
S.Gable Grey House, 1934	"
Tank(Ocean Gate Water Tank), 1951	"
Trinity M E Church Bell Tower, 1935	"
Vent Cupola, 1935	"
Yellow Cupola, (NJ&N), 1935	"

*Ciba States Limited, Water Tank, 1953 T 9827 N
(by Field Edit)*

*Listed on form 567
Filed with report T-9827-N*

38 Control for Future Surveys: Continued

Five Boundary Monuments were field located and identified, No.s 1, 2, 3, 4, and 6. No.6 was identified direct on the photo, but the others were identified by directions and distances from picture points which were photo-identified and located during compilation. Pricking cards were made for the later four monuments.

39 Junctions:

Junctions are in agreement with T-9828 to the east and with T-9829 to the south. No contemporary surveys exist on the other two sides.

40 Horizontal and Vertical Accuracy:

Both manuscripts of this survey are considered to meet map accuracy standards in both respects. The horizontal scale is 1:10,000 and the contours interval is 10ft.

46. Comparison with Existing Maps:

TOMS RIVER, NEW JERSEY, Ocean County, AMS V722, Sheet 6163I, 1:50,000, original map of 1941, revised 1946 and 1948.

47. Comparison with Nautical Charts:

MANASQUAN INLET TO LITTLE EGG HARBOR, No 825, 1:40,000, July 1946(4th edition), last correction date 31 Mar 52.

48. Geographic Name Lists:

, See pages 21, 22, 23, and 24.

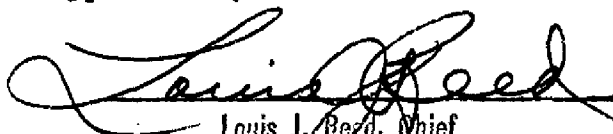
49. Notes for the Hydrographer: Not applicable.

50. Compilation Office Review: See T-2 form, page 25.

Submitted by:


Stanley W. Trow
Cartographer-Photogrammetric

Approved By:


Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

Page 21

Name on Survey

U. S. Light List

[illegible]

GEOGRAPHIC NAMES

Survey No.

T-9827-N

Name on Survey

Page 22

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
<u>PINE BEACH</u>	✓								1
<u>PINE BEACH BOROUGH</u>	✓								2
<u>PINE BEACH YACHT CLUB</u>	✓								3
<u>PINE LAKE PARK</u>	✓								4
<u>SILVER BAY</u>	✓								5
<u>SOUTH TOMS RIVER</u>	✓								6
<u>SOUTH TOMS RIVER BOROUGH</u>	✓								7
<u>SUNKEN BRANCH</u>	✓								8
<u>TOMS RIVER</u>	✓								9
<u>TOMS RIVER (City)</u>	✓								10
<u>TOMS RIVER AIRPORT</u>	Deleted by Field Edit								11
<u>TOMS RIVER GOLF & TENNIS CLUB</u>	✓								12
<u>WASHINGTON ROAD STREET</u>	✓								13
<u>WATER STREET</u>	✓								14
<u>WRANGLE^{er} BROOK</u>	✓								15
<u>Goose Creek</u>	✓								16
<u>Bayside Avenue</u>	✓								17
<u>Pine Beach Yacht Club</u>	✓								18
<u>Beachwood Community Club</u>	✓								19
<u>Riverside Cemetery</u>	✓								20
<u>H. S. 37</u>	✓								21
<u>Admiral Farragut Academy</u>	✓								22
<u>Island Heights Yacht Club</u>	✓								23
									24
									25
									26
									27

Names approved
5-8-55
L. Heck

GEOGRAPHIC NAMES

Survey No.

T-9827-S

Page 1
Name on Survey

Page 23

	A	B	C	D	E	F	G	H	K	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>BARNEGAT BAY</u> ✓										1
<u>BAYVILLE</u> ✓										2
<u>BEACHWOOD</u> ✓										3
<u>BEACHWOOD BOROUGH</u> ✓										4
<u>BERKELEY TOWNSHIP</u> ✓										5
<u>CEDAR CREEK</u> ✓										6
<u>CENTRAL RAILROAD OF NEW JERSEY</u> ✓										7
<u>CLAMMING CREEK</u> ✓										8
<u>CRYSTAL LAKE</u> ✓										9
<u>DEEP HOLLOW</u> ✓										10
<u>DOUBLE TROUBLE</u> ✓										11
<u>DOUBLE TROUBLE ROAD</u> ✓										12
<u>DOVER ROAD</u> ✓										13
<u>DOVER TOWNSHIP</u> ✓										14
<u>HOLLY PARK</u> ✓										15
<u>ISLAND HEIGHTS BOROUGH</u> ✓										16
<u>JAKES BRANCH</u> ✓										17
<u>LACEY TOWNSHIP</u> ✓										18
<u>MAPLE CREEK</u> ✓										19
<u>MILL CREEK</u> ✓										20
<u>NEW JERSEY PULVERIZING COMPANY</u> ✓										21
<u>OCEAN GATE</u> ✓										22
<u>OCEAN GATE BOROUGH</u> ✓										23
<u>PINE BEACH</u> ✓										24
										25
										26
										27

(locality)

GEOGRAPHIC NAMES

Survey No.

T-9827-5

Page 2
Name on Survey

Page 24

	A	B	C	D	E	F	G	H	K	
PINEHAVEN SANATARIUM AND NURSING HOME	✓									1
PINEWALD	✓									2
PINEWALD KESWICK ROAD	✓									3
POTTERS CREEK	✓									4
RIVER BANK	✓									5
SLOOP CREEK	✓									6
SOUTH TOMS RIVER BOROUGH	✓									7
TOMS RIVER	✓									8
Swordens Pond	✓									9
U.S. No. 9	✓									10
										11
										12
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										27

Names approved 5-8-53
Heck

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9827 N4 S

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒ 9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒ 40. ☒

41. Remarks (see attached sheet)

Supervisor, Review Section or Unit
Louis J. Reed, Chief

Stereoscopic Mapping Section
Photogrammetric Engineer

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

M-2623-12

FIELD EDIT REPORT
Project PH-72(51)
Quadrangle T-9827

51. METHODS:

The field edit of this area was accomplished by standard surveying methods in conjunction with visual inspection. Actual field work was completed 15 June 1953.

Field edit data appears on the field edit sheets, discrepancy prints, field photographs Nos. 51-O-1794, 1841, 1844, 1845, 1849, 1875, 1878, 1879, 1880, 1881 and in this report.

The reviewer's questions are answered on the discrepancy prints when feasible.

A legend appears on the field edit sheets which is self-explanatory.

52. ADEQUACY OF COMPILATION:

The map compilation, in general, is adequate and will be completed after field edit revisions have been applied.

53. MAP ACCURACY:

The horizontal accuracy of the map detail is relatively good.

The accuracy of the contouring, in general, is adequate.

The primary deficiencies in the contouring are lack of topographic expression and apparent inexperience of some of the operators of the Kelsh Plotter. For example, in the swamp area due west of Toms River, numerous contours have been shown that do not exist. One spot elevation is shown as 34 ft; actually, it is only 4 ft. at that point.

Contour corrections have been shown, on the field edit sheets, scattered throughout the entire area. These corrections that are shown are some that were immediately obvious. Note: It is suggested that the compiler re-examine all contours that appear to have been drawn in a jagged manner. See note on discrepancy prints.

Two vertical accuracy tests were made in this area and the results are as follows:

37 points on contours were tested.
38% were in error 1 ft. or less.
43% were in error 2 ft. to 5 ft.
19% were in error 6 ft. to 8 ft.

Individual reports have been written for these two tests and are included as a part of this report.

54. RECOMMENDATIONS: None.

55. EXAMINATION OF PROOF COPY:

It is believed that Mr. Lawrence F. Wagner, County Engineer for Ocean County, Toms River, N.J., is best qualified to examine a proof copy of this work.

56. WOODLAND COVER:

Refer to Item 6, Field Inspection Report.

Numerous corrections to limits of swamp have been made on the field edit sheets and field photographs. See notes on discrepancy prints for references to photographs regarding swamp limits.

57. LANDMARKS AND AIDS:

Refer to Item 9, Field Inspection Report.

One additional water tank, CIBA STATES LIMITED, DYE PLANT, has been located, and identified on photograph No. 51-0-1880, and recommended as an interior landmark. Form 524 is submitted.

Two additional fixed aids to navigation were located by directions observed from triangulation stations, or photogrammetric points. Forms 24A and 567 are submitted.

58. OTHER INTERIOR FEATURES:

Refer to Item 12, Field Inspection Report.

Numerous additional buildings, roads and city streets have been shown on the field edit sheets. Plans were submitted to the Washington Office 17 June, 1953 for roads under construction in the southern half of this area.

Sufficient notes have been shown on the field edit sheet (N/2) to enable the compiler to complete the drafting of the new highway which was under construction at the time of the original (1951) survey of this area.

59. JUNCTIONS:

Satisfactory junctions have been made with all adjacent contemporary surveys.

Submitted by:

James E. Hundley
26 June 1953

Vertical Accuracy Test No. 1
Project PH-72(51)
Quadrangle T-9827-S

This is a report of the results of the vertical accuracy of contours tested in the southwest portion of this area.

A total of 2.3 lineal miles was traversed by planetable to test 23 points on contours. This traverse originated and terminated at T.B.M. 27-95, El.=26.47 ft., a fly level point previously established by the field party in 1951.

The vertical error of closure was -0.6 foot; horizontal error of closure was negligible. No adjustments were made.

The results of the test are as follows:

48% were in error by 1 ft. or less.
43% were in error from 2 ft. to 5 ft.
9% were in error by 6 ft. to 7 ft.

Submitted by:

James E. Hundley
26 June 1953

Reviewer's Note:

See ~~attached~~ summary and abstract of this test prepared by Washington Office.

Vertical Accuracy Test No. 2
Project PH-72(51)
Quadrangle T-9827-N

This is a report of the results of the vertical accuracy of contours tested in the extreme southwestern portion of this area.

A total of 3.4 lineal miles was traversed by planetable to test 14 points on contours. This traverse originated and terminated at U.S.C.&G.S., B.M. R-20.

The vertical error of closure was +0.4 foot; horizontal error of closure was +30.0 feet. No adjustments were made in view of the fact that the traverse was quite extensive and numerous points were involved.

The results of the test are as follows:

21% were in error by 1 ft. or less.
43% were in error from 2 ft. to 5 ft.
36% were in error from 6 ft. to 8 ft.

Submitted by:

James E. Hundley
26 June 1953

Reviewer's Note:

See ~~attached~~ summary and abstract of this test prepared by Washington Office.

Re-evaluation by Wash. Office Review
indicates map meets ^{Nat} accuracy requirements

Summary to Accompany Descriptive Report

T-9827

Topographic Map T-9827 is one of 6 similar maps in project Ph-72(51). This project covers the New Jersey coast from latitude $39^{\circ} 45'$ near Barnegat Inlet, northerly to latitude $40^{\circ} 07' 30''$ near Manasquan Inlet, and also a small area in the vicinity of Avalon (latitude $39^{\circ} 06'$). This map was compiled by stereoplanigraph and Kelsh Plotter. The field operations prior to compilation included complete field inspection, supplemental leveling and planetable contouring. The compilation was at a scale of 1:10,000. The manuscript is in 2 sheets, each $3.75'$ in latitude and $7.5'$ in longitude. This map was field edited and is to be published by the Geological Survey at a scale of 1:24,000 as a standard 7.5 minute topographic quadrangle. The registered copies under T-9827 will include 2 one-half quadrangle cloth-mounted prints at scale 1:10,000 designated as T-9827-N and T-9827-S, and a complete 7.5 minute quadrangle cloth-mounted print in color at scale 1:24,000. Hydrographic data furnished by this Bureau, including depth curves and soundings, will be shown on the color print.

Review Report
T-9827

62. Comparison with Registered Topographic Surveys:

T-117	1:10,000	1839
159	1:20,000	1842
160	"	"
1371	"	1874
1407	"	1875
2458	"	1899-1915
5096	1:10,000	1932
5286	"	"
5329	"	"
6375a	"	1935
6396b	"	"
6397a	"	"

Comparison with planimetric maps dated 1935 and compiled from above surveys indicates few essential differences that are not the result of extensive cultural development of the area. Some natural changes in shoreline have occurred at (1) 39/56.8 - 74/12.3; (2) 39/56.3 - 74/10.6. The marsh islet at 39/53.0 - 74/08.2 and wrecked barge at 39/54.1 - 74/07.9, located by prior surveys, do not show on the 1951 photographs taken at MHW.

T-9827 supersedes all the above surveys in common areas for nautical charting purposes.

63. Comparison with Maps of Other Agencies:

Toms River, New Jersey, USED 7.5' quadrangle, 1:50,000, contour interval 10 feet, 1946.

Planimetry on this quadrangle is obsolete due to extensive cultural development of the area. Contours are in reasonable agreement with those on T-9827.

64. Comparison with Prior Hydrographic Surveys:

H-5870	1:10,000	1935)
5871	"	") Barnegat Bay
6140	"	1935-36)

No soundings of above surveys are in conflict with shoreline of T-9827.

65. Comparison with Nautical Charts:

825, 1:40,000, Intracoastal Waterway, Edition of 1953, last correction date 8/24/53. No significant differences between T-9827 and this chart.

66. Accuracy of Results and Future Surveys:

This map complies with all instructions and is adequate as a base for hydrographic surveys and the construction of nautical charts. This map complies with the National Map Accuracy Standards.

67. Junctions with Maps of Other Agencies:

To North: With USED (AMS), V 822, Lakewood, N.J. 7.5' quadrangle, second edition, 1947; 1:25,000, 20-foot contour interval.


To West; With USED (AMS), Keswick Grove, N.J., 7.5' quadrangle, 1951, 1/24,000, 10-foot contour interval, published for civil use by the Geological Survey.

Junction was made with Keswick Grove quadrangle except for one small area in the southwest corner of T-9827 where vertical accuracy tolerance would have been exceeded by holding to contours on the USGS quadrangle. Junction of contours to north was not made for reasons stated in Review Report of T-9843 (Item 67).

68. Boundaries:

Legal description of Borough of Beachwood did not agree with the Borough Plat (Exhibit "E" of Special Report on Boundaries dated July 1951). This discrepancy was investigated in May 1955 by this Reviewer and Mr. John C. Fellows, local land Surveyor, states in a letter dated May 19, 1955 that there has been no amendment to the original legal description (laws of 1917, State of New Jersey). T-9827, therefore, shows the Borough Boundaries to agree with the legal description.

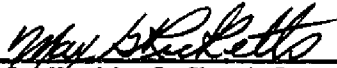
Reviewed by:


John M. Neal

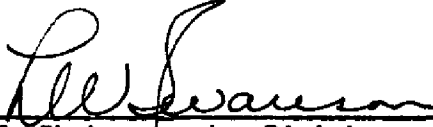
APPROVED:



Chief, Review Branch
Photogrammetry Division



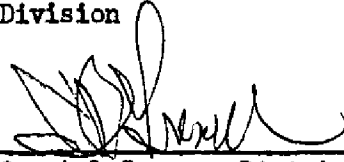
Chief, Nautical Chart Branch
Charts Division



Chief, Photogrammetry Division

5 Nov 59





Chief, Coastal Surveys Division

Ph-72
Application of Hydrography

*applied to
un. & geological
survey*

<u>Manuscript</u>	<u>Sources</u>	<u>Date Applied</u>	<u>Date Verified</u>
T-9843 N	Chart 795	Sept. '54	Dec. '54
	" 824		
	H-6190	1:40,000	1936
T-9843 S	Chart 825	" "	" "
	H-5615	1:10,000	1934
	6136	1:20,000	1936
	6188	1:40,000	1936
	6190	1:40,000	1936
T-9828 N	Chart 825	Sept. '54	Dec. '54
	H-6136	1:20,000	1936
	6188	1:40,000	1936
T-9828 S	Chart 825	" "	
	H-6188	1:40,000	1936
T-9830 N	Chart 825	Nov. '54	Dec. '54
	H-6136	1:20,000	1936
	6188	1:40,000	1936
T-9830 S	Chart 1216	" "	
	Chart 825		
	H-6136	1:20,000	1936
	6141	1:10,000	1935
	6188	1:40,000	1936
	6271	1:40,000	1937
T-9827 N	Chart 825	Dec. '54	Dec. '54
T-9827 S	Chart 825	" "	" "
T-9829 N	Chart 825	Sept. '54	Dec. '54
T-9829 S	Chart 825	" "	" "
T-9831 N	Chart 827	Dec. '54	Dec. '54
	Chart 1217		
	H-6227	1:20,000	1937
	H-6264	1:40,000	1937
T-9831 S	Chart 1217	" "	Jan. '55
	H-4821	1:20,000	1928
	H-6227	1:20,000	1937
	H-6264	1:40,000	1937

Hydrography for entire project was compiled by John M. Neal and verified by D. Svendsen. All soundings are in feet at mean low water. The 6, 12, 18, 30 and 60-foot depth curves are shown.

John M. Neal

Date _____

D. Svendsen

Date _____

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9827 N & S.

Record of Application to Charts

[illegible]

M-2158-1

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.