9828

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 Office No. T-9828

LOCALITY

State New Jersey

General locality Ocean County

Locality Seaside Heights

19 51-53

CHIEF OF PARTY

H.F.Garber, Chief of Field Party

H.A.Paton, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE December 17, 1959

B-1870-1 (1)

9828

DATA RECORD

T - 9828

Project No. (II): Ph-72(51) Quadrangle Name (IV): SEASIDE HEIGHTS

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

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

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

Method of Compilation (III): Single Lens: Stereoplanigraph control extension and compilation by Kelsh Plotters

Manuscript Scale (III): 1:10,000 Stereoscopic Plotting Instrument Scale (III): 1:4,000(Kelsh)

Scale Factor (III): Photo 20,000 : Stereoplanigraph 12,5000 : Kelsh 4,000 : Manuscript 10,000

Date received in Washington Office (IV): OCT 6 1952 Date reported to Nautical Chart Branch (IV): OCT 2[illegible] 1952

Applied to Chart No. Date: Date registered (IV): 2-26-58

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 XXXXXXXXX

Plane Coordinates (IV): State: Zone:

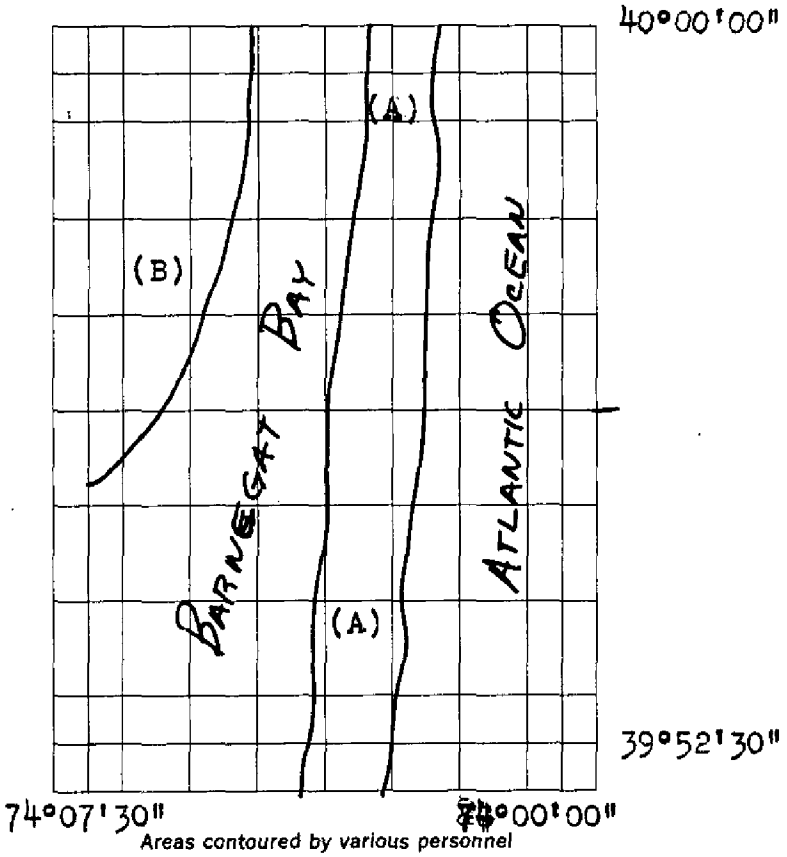
Y= X=

NEW JERSEY STATE GRID --- 5,000 ft interval

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.

M-2618-12(4)



Areas contoured by various personnel

(Show name within area)

(II) (III)

II = Contouring done 100% by John R. Smith on photographs in field by planetable.

III = ~~Detailing done~~ map compiled 100% on Kelsh Plotters by:

(A) -- Ivan R. Jarrett
(B) -- Bernard J. Colner

DATA RECORD

Field Inspection by (II): Leo F. Beugnet, Cartographic Survey Aid — Date: August, 1951

Planetable contouring by (II): John R. Smith, Cartographic Survey Aid — Date: August, 1951

Completion Surveys by (II): — Date:

Mean High Water Location (III) (State date and method of location):
Shoreline is dated 1951 since it was indicated on field photos by the field inspector during that summer, and this field location was used as a guide during instrument delineation on the Kelsh plotters, and during compilation.

Projection and Grids ruled by (IV): Jack Allen on the Reading Ruling Machine — Date: 13 Sep 51

Projection and Grids checked by (IV): Howard D. Wolfe — Date: 18 Sep 51

Control plotted by (III): Stanley W. Trow — Date: 23 Sep 51

Control checked by (III): Morton Keller — Date: 25 Sep 51

Stereoscopic Control extension by (III): Morton Keller — Date: 21 Feb 52

Stereoscopic Instrument delineation by (III): Planimetry Ivan R. Jarrett and Contours Bernard J. Colner — Date: 4 Jun 52

Manuscript compilation by (III): Henri Lucas — Date: 14 Aug 52

Photogrammetric Office Review by (III): Louis J. Reed — Date: 21 Aug 52

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

M-2618-12(4)

Camera (kind or source) (III): USC&GS Cartographic, wide-angle, f =6"
"O" Camera

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
1707 thru 1717	23 Mar 51	09:35	20,000	About 1 ft below MHW on outside of bank, and about MHW on the inside
1792 thru 1799	23 Mar 51	10:35	20,000	
1380-J and 1381-J	2 Jun 52	about 12:00	20,000	½ tide

Tide (III)

Ratio of Ranges	Mean Range	Spring Range
		4.2'

Reference Station: Sandy Hook
Subordinate Station:
Subordinate Station:

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): 8 sq mi
Shoreline (More than 200 meters to opposite shore) (III): about 47 miles
Shoreline (Less than 200 meters to opposite shore) (III): variable
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): 42 Recovered: 32 Identified: 12
Number of BMs searched for (II): 25 Recovered: 19 Identified: 19
Number of Recoverable Photo Stations established (III):
Number of Temporary Photo Hydro Stations established (III):

Remarks:

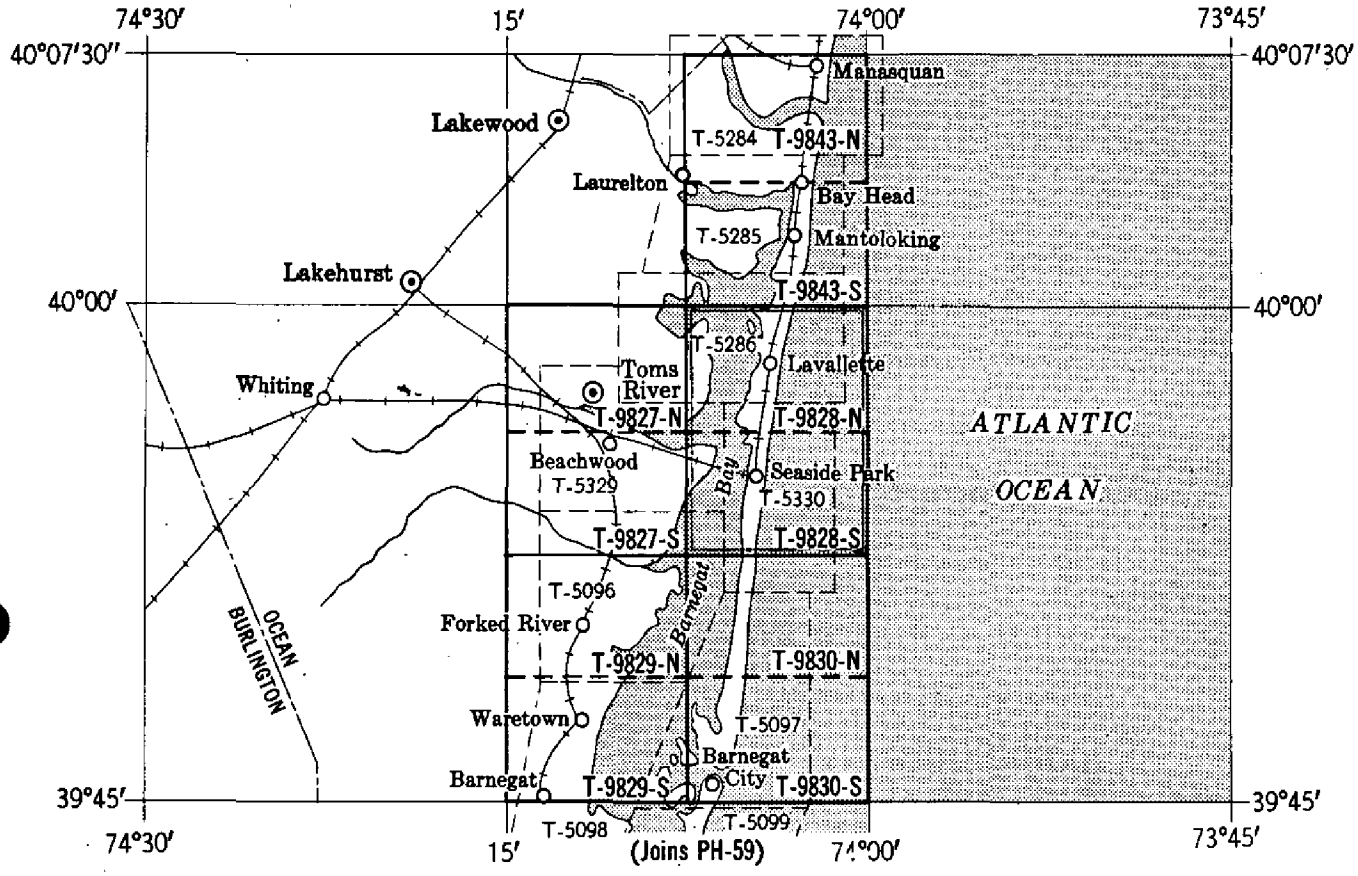
M-2618-12(4)

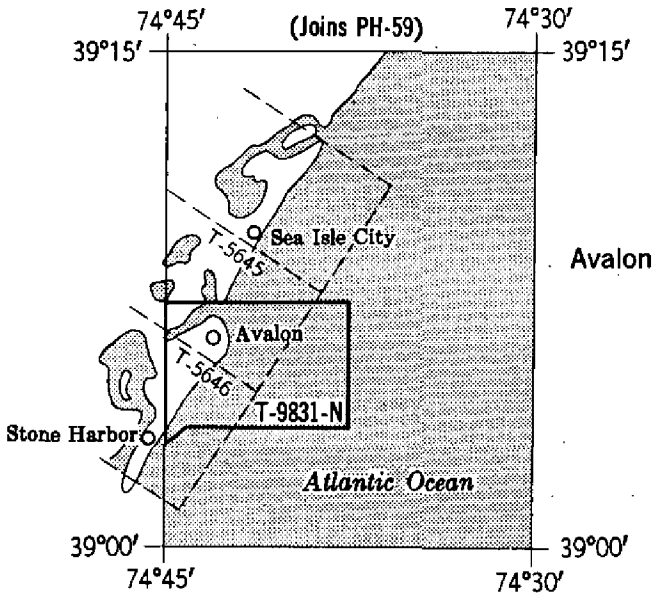
TOPOGRAPHIC MAPPING PROJECT PH-72 (51)

NEW JERSEY, Barnegat Bay - Toms River and Vicinity

Compilation scale 1:10,000

1216





Avalon and Vicinity PH-72 (51)

1. Preface:

FIELD INSPECTION REPORT
Quadrangle T-9828
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:

Name and Title	Phase	Date
Leo F. Beugnet Cartographic Survey Aid	Horizontal Control Recovery and Shoreline	July, 1951

This report is written in accordance with Paragraph 724 of the Topographic Manual, Part II, dated, 1949.

2. AREAL FIELD INSPECTION

The land area embraced by this quadrangle is comprised of barrier beach along the Atlantic Ocean and a small portion of the mainland adjacent to Barnegat Bay. The beach portion, for the greater part, is a well-developed summer resort. The area to the west of Barnegat Bay is chiefly marshland, with the exception of the areas near the mouth of Toms River.

The Boroughs of Lavallette, Seaside Heights, Seaside Park, Island Beach and part of the Borough of Ocean Gate are within the quadrangle. These communities are adequately served by a system of hard surface roads. (See Field Inspection Report, Quadrangle T-9830, in regard to the Borough of Island Beach.) There are no railroads within the quadrangle. The Pennsylvania Railroad, linking Toms River and points north of Seaside Park, has been dismantled.

As the photographs were of recent date, no difficulty was encountered in their interpretation. Only a moderate amount of construction has taken place since the date of photography.

The field inspection is believed to be adequate and complete. The compiler should have little or no difficulty in the delineation of buildings, roads or other features.

3. HORIZONTAL CONTROL

(a) No additional control was established.

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

(c) Control established by the N.J.G.C.S. and the U.S.E.D. 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:

Station	Agency	Order	Datum
PEL, 1946	USE	Third	N.A. 1927
WILKINS, 1946	"	"	"
MON. 5278, 1936	NJGCS	"	"
" 5280, 1936	"	"	"
" 5281, 1936	"	"	"
" 5282, 1936	"	"	"
" 5283, 1936	"	"	"
" 5284, 1936	"	"	"
" 5285, 1936	"	"	"
" 5286, 1936	"	"	"
" 5288, 1946	"	"	"
" 5289, 1937	"	"	"
" 5290, 1937	"	"	"
RV. 5256, 1949	"	"	"
R.M. NO. 1 CHADWICK, 1936	"	"	"
R.M. NO. 3 SEASIDE PARK, 1937	"	"	"

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

BEND, 1935
COTTAGE, 1935
LONE BUILDING CUPOLA, 1935
PARK, 1935
SEASIDE HEIGHTS WATER TANK, 1926
LIGHT STAND "B", 1935
LIGHT STAND "C", 1935
LIGHT STAND "D", 1935
LIGHT STAND "E", 1935
MON. 5288 (NJGCS), 1940

(f) See Field Inspection Report, Quadrangle T-9830, for methods of establishing control opposite the photograph centers.

4. VERTICAL CONTROL

A search was made for all known vertical control. The following bench marks, which fall within the limits of the quadrangle, were recovered:

Name	Agency	Order
N-E-6	USC&GS	First
N-F-6	"	"
G-6	"	"
J-6	"	"
Bench Mark Ocean View	"	Third
Bench Mark R.M. 1 Ocean View	"	"
Bench Mark R.M. 2 Ocean View	"	"
Bench Mark Seaside Park	"	"
Bench Mark RM 2 Seaside Park	"	"
Bench Mark RM 3 Seaside Park	"	"
N-RV. 5251	NJGCS	Unknown
N-RV. 5252	"	"
N-RV. 5253	"	"
RV. 5254	"	"
RV. 5255	"	"

(b) No supplemental level lines were necessary in this quadrangle.

(c) Inapplicable.

(d) Inapplicable.

5. CONTOURS AND DRAINAGE

The contouring was done by planetable methods directly on single-lens photographs (1:10,000 scale), at a contour interval of ten (10) feet. Along the barrier beach, in the undeveloped areas, sand dunes predominate. The highest of these is thirty-eight (38) feet. The remainder of the area is quite flat.

The natural drainage is by seepage or by drainage into the marsh on the west side of Barnegat Bay.

6. WOODLAND COVER

The cover has been classified in accordance with Paragraph 5433 of the Topographic Manual, Part II, dated, 1949.

7. SHORELINE AND ALONGSHORE FEATURES

The greater part of the shoreline is apparent, with the exception of that part along the Atlantic Ocean.

(a) No difficulty was encountered in the delineation of the mean high-water line. Along the marsh areas in Barnegat Bay, the shoreline is all apparent. The mean high-water line along the ocean shore was located by measured distances from topographic or cultural features.

(b) The low-water line along the ocean shore was located by the same methods used on the high-water line. No attempt was made to locate the low-water line in Barnegat Bay.

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

(d) Inapplicable.

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

(f) There are four submarine cables within the quadrangle. The shore ends of the cables have been located on Photographs Nos.: 51-0-1712, 51-0-1714, 51-0-1796, 51-0-1710 and 51-0-1798.

8. OFFSHORE FEATURES

Along the shore of the Atlantic Ocean, numerous fish traps extend offshore for approximately one mile. These have been noted on the photographs and would bear further investigation by the hydrographic party.

9. LANDMARKS AND AIDS

(a) Seven landmarks are recommended on form 567 for charting. Toms River Coast Guard Cupola, which has been shown on previous charts, has been recommended for deletion. A Coast Guard watch tower, which is located nearby, and which is considerably higher and more prominent, has been recommended for charting.

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

(c) Sixteen fixed aids to navigation fall within the quadrangle. These were located by directions observed from triangulation stations or from photogrammetric points.

10. BOUNDARY MONUMENTS AND LINES

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

11. OTHER CONTROL

Twenty-three (23) previously established topographic stations were searched for and reported on Form 524. Two new stations were established: Normandy Beach Water Tank, 1951, and Toms River Coast Guard Watch Tower, 1951.

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.

The New Jersey State Highway Department bridge at Island Heights is the only bridge of importance within the quadrangle. It was rebuilt in 1950, and clearances have been shown on photograph 51-0-1796. The Pennsylvania Railroad bridge at Seaside Park has been destroyed. The bridge discrepancies will be reported to the local District Engineer. A copy of the letter will be attached to the Field Inspection Report of Quadrangle T-9843.

13. GEOGRAPHIC NAMES

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

Forms 567 and 24a, together with a chart section showing the Aids to Navigation 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.

22 August 1951
Submitted by:

John R. Smith
John R. Smith
Cartographic Survey Aid

12 September 1951
Approved by:

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

FORMS SUBMITTED WITH QUADRANGLE T-9828

Form 526

LOST — BEND, 1935
CHADWICK, 1932
CHADWICK COAST GUARD WATCH TOWER, 1935
? — COATES, 1935
LOST — COTTAGE, 1935
GOOSE, 1935
ISLAND BEACH COAST GUARD CUPOLA, 1932
LAVALLETTE, 1932
LAVALLETTE STANDPIPE, 1926
S LAYMAN, 1926
LOST — LONE BUILDING CUPOLA, 1935
S LUCK, 1935
S OCEAN VIEW, 1932
LOST — PARK, 1935
PEL (USE), 1946
S PENN, 1926
SEASIDE HEIGHTS, 1932
SEASIDE HEIGHTS STANDPIPE, 1926
LOST — SEASIDE HEIGHTS WATER TANK, 1926
S SEASIDE PARK, 1932
S SEASIDE PARK WATER TANK, 1926 —
S TOMS RIVER COAST GUARD CUPOLA, 1935
S TOMS RIVER COAST GUARD FLAGTOWER, 1935
WILKINS (USE), 1946
S WRIGHT'S LIGHT CUPOLA, 1935
LOST — LIGHT STAND "B", 1935
— LIGHT STAND "C", 1935
— LIGHT STAND "D", 1935
— LIGHT STAND "E", 1935
MON. 5278 (NJGCS), 1936
" 5280 " "
" 5281 " "
" 5282 " "
" 5283 " "
" 5284 " "
" 5285 " "
" 5286 " "
LOST — " 5288 " 1940
S " 5289 " 1937
S " 5290 " "
S RV 5256 " 1949
RM NO. 1, CHADWICK, 1936
S RM NO. 3, SEASIDE PARK, 1937

Form 685A

E-6
EX-6 (last)
F-6
G-6
H-6 (last)
J-6
Bench Mark Ocean View
" " RM. 1 Ocean View
" " " 2 " "
" " Seaside Park
" " RM. 2 Seaside Park
" " " 3 " "
Island Heights, Toms River Entrance, Barnegat Bay T.B.M. 1 (last)
" " " " " " " " 2
" " " " " " " " 3K
" " " " " " " " 4 (last)
Barnegat Pier, Barnegat Bay, T.B.M. 1
" " " " " 2 (last)
" " " " " 3
" " " " " 4 (last)
RV. 5251 (NJGCS)
" 5252 "
" 5253 "
" 5254 "
" 5255 "

Form M-2226-12

CHADWICK COAST GUARD WATCH TOWER, 1935
~~FORKED RIVER COAST GUARD WATCH TOWER, 1935~~
SUB PT. GOOSE, 1935
ISLAND BEACH COAST GUARD CUPOLA, 1932
LAVALLETTE STANDPIPE, 1926
SUB PT. LUCK, 1935, RM. NO. 1
SUB PT. OCEAN VIEW, 1932
SUB PT. OCEAN VIEW, RM. NO. 3
OCEAN VIEW, RM. NO. 2 (AZ MK)
SEASIDE HEIGHTS STANDPIPE, 1926
SEASIDE PARK WATER TANK, 1926
TOMS RIVER COAST GUARD CUPOLA, 1935
WRIGHT'S LIGHT CUPOLA, 1935
PHOTO PT. NO. 4
" " " 5
" " " 7
" " " 14
" " " 19
SEASIDE HEIGHTS AZ. MK.
Mon 5284, ss

Form 524

Apple, 1934
LOST — Black, 1935
LOST — Cattus, 1934
Cupola, 1935
Cupola-Gatehouse, 1935
LOST — Dist, 1935
LOST — End, 1934
Exchange, 1935
LOST — Guyer, 1935
Hay (Chy. Green Roof House), 1935
Hot, 1935
LOST — Ker, 1935
LOST — Lone, 1935
LOST — Pel (Fl. P. Pelican Is.), 1935
LOST — Pier (N.J.C.&N.), 1935
LOST — Pola, 1935
South Gable, 1934
Tall (Fl. P. Lavallette), 1935
Tank (Normandy Beach W.T.), 1951
Toms River C.G. Flag Pole, 1935
Tower (Toms River C.G. Watch Tower), 1951
LOST — Tule (N.J.C.&N.), 1935
LOST — Way, 1935
Windmill, 1934
Yat (Fl. P. Cup. Seaside Park Y.C.), 1935

RADIAL PLOT REPORT

21. Area Covered: T-9828 located just north of Barnegat Inlet, N.J

22. Method:

A normal hand-templet radial plot was not laid for the extension of horizontal control; instead, it was done by Stereoplanigraph. Seven models were bridged along the outer barrier, and four were bridged along the west edge of the north half of the quad. Six other models required no bridge.

23. Adequacy of Control:

A combination of recovered benches, newly fixed points of elevation during field inspection, and available datum at the shoreline, provided a great sufficiency of vertical control for model-leveling purposes.

Horizontal control stations were well distributed and identified to permit accurate bridging for Kelsh Plotter use in detailing.

24. Supplemental Data: Refer to side-heading 33.

25. Photography:

Photography was adequate except that overlap was too much (70% to 75%) causing a reduction in normal C-factor accuracy advantage.

Submitted by:

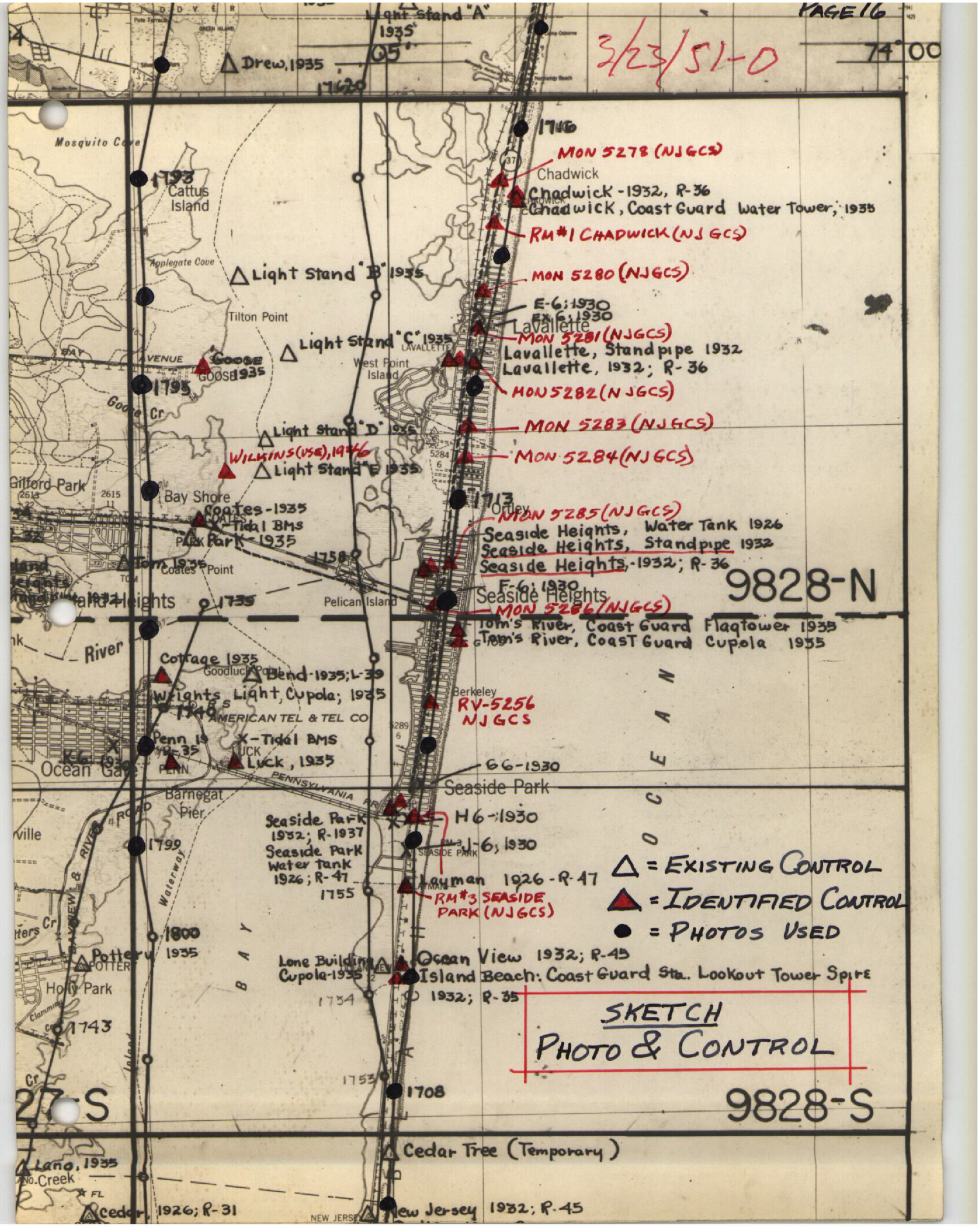
Stanley W. Trow

Stanley W. Trow
Cartographer-Photogrammetric

Approved and Forwarded by:

Louis J. Reed

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer


PAGE 16
3/23/51-O
74° 00
Light Stand "A" 1935
Drew, 1935
1716
MON 5278 (NJGCS)
Chadwick
Chadwick - 1932, R-36
Chadwick, Coast Guard Water Tower, 1935
RM #1 CHADWICK (NJGCS)
Mosquito Cove
1793
Cattus Island
Applegate Cove
Light Stand "B" 1935
MON 5280 (NJGCS)
E-6; 1930
Ex-6; 1930
Tilton Point
Lavallette
MON 5281 (NJGCS)
Light Stand "C" 1935
Lavallette, Standpipe 1932
Lavallette, 1932; R-36
West Point Island
Goose 1935
1795
MON 5282 (NJGCS)
Goose Cr
MON 5283 (NJGCS)
Light Stand "D" 1935
5284
MON 5284 (NJGCS)
WILKINS (USE), 1946
Light Stand "E" 1935
Gilford Park
Bay Shore
1713
Ortley
MON 5285 (NJGCS)
Coates - 1935
Tidal BMS
Park - 1935
Seaside Heights, Water Tank 1926
Seaside Heights, Standpipe 1932
Seaside Heights, 1932; R-36
1758
Coates Point
F-6; 1930
9828-N
Seaside Heights
1735
Pelican Island
MON 5286 (NJGCS)
Toms River, Coast Guard Flagtower 1935
Toms River, Coast Guard Cupola 1935
River
Cottage 1935
Bend - 1935; L-39
Goodluck Point
Weights Light, Cupola; 1935
Berkeley
RV-5256 NJGCS
AMERICAN TEL & TEL CO
Penn 19
X-Tidal BMS
Luck, 1935
Ocean Gate
66-1930
Seaside Park
Barnegat Pier
H6-1930
Seaside Park 1932; R-1937
Seaside Park Water Tank 1926; R-47
1755
J-6; 1930
Layman 1926 - R-47
RM #3 SEASIDE PARK (NJGCS)
1799
Waterway
1800
Pottery 1935
Lone Building Cupola-1935
Ocean View 1932; R-45
Island Beach: Coast Guard Sta. Lookout Tower Spire
Holly Park
1754
1932; R-35
1743
1753
1708
27-S
9828-S
Cedar Tree (Temporary)
Lano, 1935
No. Creek
Cedar 1926; R-31
New Jersey 1932; R-45
△ = EXISTING CONTROL
▲ = IDENTIFIED CONTROL
● = PHOTOS USED
SKETCH
PHOTO & CONTROL

Photogrammetry

MAP T- 9828-N PROJECT NO. Ph-72(52) SCALE OF MAP 10,000 SCALE FACTOR

STATION	GP SOURCE OF INFORMATION (INDEX), page No	DATUM	LATITUDE / LONGITUDE	DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD	(BACK)	DATUM CORRECTION	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)
LAVALLETTE, 1932 dm	397	NA 1927	39 58 07.768 74 04 26.379	239.6 626.0	1610.9 798.0					
SEASIDE HEIGHTS, 1932 dm	397	"	39 56 36.401 74 04 42.222	1122.7 1002.4	727.8 422.1					
CHADWICK, 1932 dm	397	"	39 59 15.433 74 03 47.155	476.0 1118.8	1374.5 304.7					
LAVALLETTE STANDPIPE, 1926 d	398	"	39 58 07.114 74 04 18.747	219.4 444.9	1631.1 979.1					
SEASIDE HEIGHTS STANDPIPE, 1926 d	398	"	39 56 36.314 74 04 40.792	1120.6 968.4	730.5 456.1					
CHADWICK COAST GUARD WATCH TOWER, 1935 d	413	"	39 59 15.75 74 03 47.09	485.8 1117.2	1364.7 306.3					
SEASIDE HEIGHTS WATERTANK, 1926 d	427	"	39 56 35.896 74 04 39.928	1107.1 947.9	743.4 476.6					
COATES, 1935 dm	414	"	39 56 57.708 74 06 53.341	1779.8 1266.2	70.7 158.1					
GOOSE, 1935 dm	412	"	39 58 05.377 74 06 48.706	165.8 1155.9	1684.7 268.1					

Page 14

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: DATE CHECKED BY: DATE

Photogrammetry

MAP T- 9828-N PROJECT NO. Ph-72(51) SCALE OF MAP 10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	N J Grid Coords 5,000 ft interval		DATUM CORRECTION	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)
MON 5278, NJGCS			420,727.85	2,168,382.30					
MON 5280 NJGCS			417,100.15	2,167,661.87					
MON 5281 NJGCS			415,458.47	2,167,472.37					
MON 5282 NJGCS			414,070.74	2,167,294.15					
MON 5283 NJGCS			411,072.41	2,166,950.57					
MON 5284 NJGCS			409,750.29	2,166,854.91					
MON 5285 NJGCS			405,045.11	2,166,237.64					
MON 5286 NJGCS			403,586.23	2,166,124.57					
RM 1, CHADWICK NJGCS			421,905.10	2,168,647.36					

Page 1 of

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: DATE CHECKED BY: DATE

Photogrammetry

MAP T-9828-S PROJECT NO. Ph-72(51) SCALE OF MAP 10,000 SCALE FACTOR

STATION	GP Page No SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR X COORDINATE LONGITUDE OR Y COORDINATE	N J Grid coords. DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	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)
SEASIDE PARK, 1932 dm	11	NA 1927	39 54 50.875 74 05 00.390			1569.1 9.3	281.4 1415.7		
SEASIDE PARK WATER TANK, 1926 d	426	"	39 54 51.714 74 04 59.400			1595.0 1410.8	255.5 14.2		
OCEANVIEW, 1932 dm	17	"	39 53 44.117 74 04 56.823			1360.7 1349.9	489.8 75.5		
OCEANVIEW, 1932, AZ MK, RM No 2				388,274.85 2,163,835.64					
TOMS RIVER, COAST GUARD, FLAGTOWER, 1935 d	414	"	39 56 06.354 74 04 23.574			196.0 559.7	1754.5 865.0		
TOMS RIVER, COAST GUARD CUPOLA, 1935 d	414	"	39 56 05.96 74 04 23.98			183.8 569.4	1666.1 855.3		
ISLAND BEACH, COAST GUARD, STATION, LOOKOUT TOWER, SPIRE, 1932 d	339	"	39 53 43.989 74 04 56.275			1356.7 1336.9	493.8 88.5		
LAYMAN, 1926 dm	426	"	39 54 18.463 74 04 51.995			569.4 1235.1	1281.1 190.1		
WRIGHTS LIGHT, CUPOLA, 1935 d	414	"	39 55 45.137 74 07 25.600			1392.1 607.9	458.4 817.2		
PENN, 1926 dm	399	"	39 55 14.779 74 07 07.326			455.8 174.0	1394.7 1250.9		
LUCK, 1935 dm	412	"	39 55 12.120 74 06 32.908			373.8 791.5	1476.7 643.4		

PAGE 19

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: DATE CHECKED BY: DATE

Photogrammetry

MAP T- 9828-S PROJECT NO. Ph-72(51) SCALE OF MAP 10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	N J Grid Coords. FEET.	DATUM CORRECTION	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)
RV 5256 NJGCS				396,148.38					
				2,164,727.60					
MON 5289 NJGCS				397,927.40					
				2,165,008.33					
MON 5290 NJGCS				392,899.26					
				2,164,378.31					
RM No 3, SeasidePark NJGCS				394,732.80					
				2,164,557.43					

Page 20

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

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 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 in this operation.

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 23, 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 permanent control in the quad has been shown on the manuscripts in proper name and symbol; horizontal stations have been plotted and plot-checked by beam compass, and vertical stations have been compiled from field identification.

33. Supplemental Data:

a. Official Name Sheets as compiled by Mr Heck
b. Special Boundaries Report; a brochure dated July 1951
c. Instrument photos and 9x9 diapositives; see page 16
d. Field inspection photos: 51-0-1708 thru 1717, and 1793 thru 1798.

34. Contours and Drainage:

The photographic quality of the instrument phtoographs was satisfactory. Sidelap was acceptable but end lap was about 70%, which is excessive and becomes a disadvantage to the instrument operator in maintaining the accuracy required. (This project was worked at a C-factor somewhat greater than the C-factor normally considered for efficient operation) No areas of questionable contours remain.

35. Shoreline and Alongshore Details:

The shoreline indicated on the field inspection photos was used as a guide during instrument delineation and during compilation. It seemed to be adequate. The low-water-line was treated like the shoreline, both field and office. A very few shoal lines have been instrument delineated. Refer to side-heading 7 for field comments.

36. Offshore Details: Not applicable.

37. Landmarks and Aids:

Eight landmarks were field identified and located on the manuscripts in proper name and symbol, including one landmark (*) recommended for removal by the field inspector in side-heading 9, this report. The eight landmarks are:

⊙	TANK, ~~1935~~X(Normandy Beach Water Tank),1951	on T-9828-N
Δ	CHADWICK COAST GUARD WATCHTOWER, 1935	"
Δ	LAVALLETTE STANDPIPE, 1932	"
⊙	TOWER (Toms River Coast Guard Watchtower), 1951	T-9828S
* Δ	TOMS RIVER COAST GUARD CUPOLA, 1935	"
Δ	SEASIDE PARK WATER TANK, 1926	"
Δ	ISLAND BEACH COAST GUARD STA LOOKOUT TOWER SPIRE	"
~~Δ~~	~~OCEANVIEW, 1932~~	"
Δ	SEASIDE HEIGHTS STANDPIPE, 1926	T-9828N

Form 567 filed with Desc Report Sheet 9843

Refer to side-heading 9(c) - the 16 fixed aids have been located by the observed directions using a precise three-arm protractor. Very good intersections were obtained. In addition, five separate pile were located in the same operation two no the north half and three on the south. The three on the south half, located just off Berkeley, should be checked during field edit; the field inspectors cuts from LAYMAN, 1926, were not reliable - this left only two cuts each to establish the position now shown on the manuscript. The name of a Light on the north half should be verified as No 1 or 2.

38. Control for Future Surveys:

The following Topo Stations have been recovered or established, and have been plotted from field identification. No Hydro Stations were established.

Cupola, 1935
Hot (Cup.Hamilton Hotel), 1935
Tank (Normandy Beach W.T.), 1951
South Gable, 1934
Apple, 1934
Windmill, 1934
Hay (Chy Green Roof House), 1935
*Tall (Fl.P.Lavallette), 1935

Tower(Toms River Coast Guard Watchtower), 1951
Yat (Fl.P.Cup.Seaside Park Yacht Club), 1935
Cupola - Gate House, 1935
Mon 5289 (NJGCS), 1951
Exchange (NJC&N), 1935

39. Junctions:

All junctions are in agreement; all were compiled simultaneously. T-9843 lies to the north, T-9827 to the west, T-9830 to the south, and the Atlantic ocean to the east.

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 contour 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 of 31 Mar 52.

48 Geographic Name List:

See pages 25 and 26.

49. Notes for the Hydrographer: Not applicable.

50. Compilation Office Review:

See T-2 form, following as page 27.

Submitted by:

Stanley W. Trow

Stanley W. Trow,
Cartographer-Photogrammetric

Approved by:

Louis J. Reed

GEOGRAPHIC NAMES

Survey No.

T-9828-S

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
AMERICAN TEL & TEL CO										1
ATLANTIC OCEAN										2
BARNEGAT BAY										3
BARNEGAT PIER										4
BERKELEY TOWNSHIP										5
DOVER TOWNSHIP										6
GOODLUCK POINT										7
INTRACOASTAL WATERWAY										8
ISLAND BEACH BOROUGH										9
OCEAN GATE BOROUGH SEASIDE HEIGHTS										10
SEASIDE HEIGHTS BOROUGH										11
SEASIDE PARK										12
SEASIDE PARK BOROUGH										13
SEASIDE PARK YACHT CLUB										14
TOMS RIVER										15
TOMS RIVER COAST GUARD No 109										16
										17
										18
			Names approved 5-14-53							19
			L. Heck							20
										21
										22
										23
										24
										25
										26
										27

GEOGRAPHIC NAMES

Survey No.

T-9828-N

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
APPLEGATE COVE										1
ATLANTIC OCEAN										2
BARNEGAT BAY										3
BAY AVENUE										4
BAY SHORE Park										5
BERKELEY TOWNSHIP										6
CATTUS ISLAND										7
CHADWICK										8
COATES POINT										9
DOVER TOWNSHIP										10
GILFORD PARK										11
GOOSE CREEK										12
INTRACOASTAL WATERWAY										13
LAVALLETTE										14
LAVALLETTE BOROUGH										15
ORTEY BEACH										16
PELICAN ISLAND										17
SEASIDE HEIGHTS										18
SEASIDE HEIGHTS BOROUGH										19
SHELTER COVE										20
SILVER BAY										21
THOMAS A MATHIS BRIDGE										22
TILTON POINT										23
TOMS RIVER										24
WEST POINT ISLAND										25
N. S. Nos. 35 and 37				Names approved S-19-63 L. Heck						26
										27

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED / TO BE DELETED — STRIKE OUT ONE

Washington, D. C., 7 Nov., 19 52

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated:

The positions given have been checked after listing by _____

Chief of Party.

STATE: NEW JERSEY

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE ° ′	LATITUDE D.M. METERS	LONGITUDE ° ′	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
△	CHADWICK COAST GUARD WATCH TOWER 1935 (Wood) ht. 30 (40)		39 59	485.8	74 03	1117.2	NA 1927	9828N					
✓ ⊙	TANK (Normandy Beach Water Tank), 1951 (Steel) ht. 100 (105)		39 59	1655.0	74 03	1112.9	"	"					
△	LAVALLETTE STANDPIPE, 1926 (Steel) ht. 130 (135)		39 58	219.4	74 04	444.9	"	"					
△	SEASIDE HEIGHTS STANDPIPE, 1926 (Steel) ht. 125 (130)		39 56	1120.0	74 04	968.4	"	"					
✓ ⊙	TOWER (Toms River C.G. Watch Tower) 1951 (Wood) ht. 67 (72)		39 56	182.4	74 04	479.0	"	9828S					
△	SEASIDE PARK WATER TANK, 1926 (Steel) ht. 110 (115)		39 54	1595.0	74 04	1410.8	"	"					
△	ISLAND BEACH COAST GUARD STA. LOOKOUT TOWER SPIRE, 1932 (Cupola) ht. 45 (56)		39 53	1356.7	74 04	1336.9	"	"					

✓ by JMM

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating*

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS (AERONAUTICAL)

TO BE CHARTED
TO BE DELETED
} STRIKE OUT ONE

Review Section - Washington, D. C. 7 July 19 55

I recommend that the following objects which have *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by John M. Neal

John M. Neal
Chief of Party.

STATE / CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE * ° ′	LATITUDE * ″ D.M. METERS	LONGITUDE * ° ′	LONGITUDE * ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
Radio Masts	A.T.&T. Ship to shore radio masts (2 highest of a group)												
	S. mast - ht. 144; MSL elev. 146		39 55	25 780	74 06	29 687	1927	Photo T9828-S	plot 1955				See
	N. mast - ht. 144; MSL elev. 146		39 55	29 907		29 686	"	"	"				"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Form T-2

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9828

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 N 8. Bench marks ✓

9. Plotting of sextant fixes ✓ 10. Photogrammetric plot report ✓ 11. Detail points N

✓ = checked
N = non-existant

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 alongshore cultural features ✓

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads ✓ 28. Buildings ✓ 29. Railroads N 30. Other cultural features N

BOUNDARIES

31. Boundary lines ✓ 32. Public land lines ✓

MISCELLANEOUS

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

40. _____ _____
Reviewer — Supervisor Review Section or Unit

Louis J. Reed, Chief
Stereoscopic Mapping Section
Photogrammetric Engineer

41. Remarks (see attached sheet)

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
Quadrangle T-9828
Project Ph-72(51)

51. Methods.-The field edit for this quadrangle was accomplished by traversing, via truck all roads, and walking to other areas in which the reviewer requested information, or for a general check on the adequacy of compilation. The shoreline was inspected from a skiff.

Corrections and additions were made by standard surveying methods in conjunction with visual inspection. All corrections and additions are referenced on the Discrepancy prints and the F. E. sheets. Work appears on the F.E. sheets and field photographs 51-0-1795, 1796, 1798, 52-J-1377, 1378, and 1380.

A legend appears on the F.E. sheet S/2 which is self-explanatory.

The actual field work was accomplished during the first week in June 1953.

52. Adequacy of Compilation.-The map compilation is adequate and will be complete after field edit data is applied.

53. Map Accuracy.-The horizontal accuracy of all map detail is good.

A considerable amount of additional field inspection is shown on the 1952 photography, to be applied to this map.

Other than visual inspection of sand ridges along the beach, no vertical accuracy checks were made.

54. Recommendations.- None

55. Examination of Proof Copy.- It is believed that Mr. Lawrence F. Wagner, Ocean County Engineer, Toms River, New Jersey, is best qualified to examine a proof copy of this sheet.

A spot check of Geographic Names was found to be in excellent agreement with the charted names.

The beach community name of BERKELEY in Berkeley township should be deleted. This community is called SOUTH SEASIDE PARK, and should be mapped as such. This was verified by the Mayor of Berkeley township, road signs, real estate advertisements, etc.

56. Aids to Navigation.- Information on fixed aids to navigation in this area was very difficult to obtain. No light list of these New Jersey waterways was available. As the result of this, two planetable cuts were taken to all fixed aids to verify their plotted position.

58" ± on manuscript

Reference is made to Lt. 31, (approx. position, Lat. 39° 53' 20", Long. 74° 07' 20" shown on chart No. 825 corrected to 9 February 1953. This light was located by the original field party in 1951, and shown on the F.E. sheet to be considerably north of the nautical chart position. The 1951 position of Lt. 31 was verified by planetable cuts. No light exists at about the position of Lt. 31 as shown on Chart 825.

Corrected on current edition 6/54 gmm

57. Shoreline and alongshore features.- The shoreline along the sea beach for the entire south half, and two thirds of the north half was found to be in error. Corrections were made on the F.E. sheet. Measurements were taken to MHW from all nearby horizontal control stations, plus some topographic features and supported by an occasional elevation.

Ref. Par. 37, Descriptive Report
Three piles, offshore from South Seaside Park, were checked by planetable cuts. The south pile was found to be in error. The correct position is shown on the F.E. sheet S/2.

58. Junctions.- Satisfactory junctions have been made with T-9830 N/2, Ph-59 on the south, T-9827 on the west, T-9843 on the north. The Atlantic Ocean is on the east.

Submitted 15 June 1953

Richard L. McGlinchey
Cartographic Survey Aid

Summary To Accompany Descriptive Report

T-9828

Topographic Map T-9828 is one of 6 similar maps in project Ph-72(51). This project covers the New Jersey coast from latitude 39° 45' near Barnegat Inlet, northerly to latitude 40° 07' 30" near Manasquan Inlet, and also a small area in the vicinity of Avalon (latitude 39° 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-9828 will include 2 one-half quadrangle cloth-mounted prints at scale 1:10,000 designated as T-9828 N and T-9828 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-9828
Topographic Map
28 June 1954

62. Comparison with Registered Topographic Surveys:

T- 117	1:10,000	1839
T- 120	1:20,000	1839
T-1371	1:20,000	1874
T-1407	1:20,000	1875
T-2458	1:20,000	1899 & 1915
T-2459	1:20,000	1899 & 1915
T-5286	1:10,000	1932
T-5329	1:10,000	1932
T-5330	1:10,000	1932
T-6375a	1:10,000	1935
T-6375b	1:10,000	1935
T-6396a	1:10,000	1935
T-6396b	1:10,000	1935

T-9828 is in general agreement with the more recent of the above surveys except where changes have been made by cultural developments. Very little movement of shoreline by erosion is indicated by comparison with above surveys of 1932 & 1935. T-9828 supersedes all the above surveys in common areas for nautical charting purposes.

63. Comparison with Maps of Other Agencies:

Toms River, New Jersey, USED 15' quadrangle, 1:62,500, contour interval 10 feet, 1941 & 1948

64. Comparison with Prior Hydrographic Surveys:

H-5870	1:10,000	1935 Barnegat Bay
H-5871	1:10,000	1935 Barnegat Bay
H-6140	1:10,000	1935 Barnegat Bay
H-6136	1:20,000	1936 Atlantic Ocean

No conflict between soundings on above surveys and the shoreline of T-9828 except in a few areas of cultural development.

65. Comparison with Nautical Charts:

825, 1:40,000, Intracoastal Waterway, ed., of 1953, last correction August 24, 1953

Minor changes in shoreline @ 39/57.3 - 74/05.0 and 39/52.7 74/05.3. Additional piling has been located @ 39/56.8 - 74/06.5 and @ 39/54.4 - 74/04.5. All published bridge clearances are in agreement. All fixed aids to navigation within the sheets limits except the light* @ 39/55.5 - 74/05.4 are located on T-9828. Charted positions of aids on Chart 825 agree with those mapped on T-9828.

* Not in existance 5/16/55

66. Accuracy of Results and Future Surveys:

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

Reviewed By: John M. Neal
John M. Neal

Approved:

R C Landy
Chief, Review Branch
Div. of Photogrammetry

Max B Ricketts
Chief, Nautical Chart Branch
Div. of Charts

L L Swanson
Chief, Div. of Photogrammetry
17 Nov 59

J. Bowie
Chief, Div. of Coastal Surveys

Application of Hydrography

Manuscript	Sources			Date Applied	Date Verified
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 O. Svendsen. All soundings are in feet at mean low water. The 6, 12, 18, 30 and 60-foot depth curves are shown.

_____ Date_____

John M. Neal

_____ Date_____

O. Svendsen

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9828 N&S

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

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.