

9500

Nfs

Diag. Cht. Nos. 1216-2 & 1217-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photo-Topographic

Field No. Ph-59 (50) Office No. T-9500

LOCALITY

State New Jersey

General locality Atlantic-Burlington Counties

Locality New Gretna

1945

CHIEF OF PARTY

Harry F. Garber, Chief of Field Party
Hubert A. Paton, Baltimore Photogrammetric
Office.

LIBRARY & ARCHIVES

DATE September 28, 1955

B-1870-1 (11)

9500

DATA RECORD

T-9500

Project No. (II): **PH-59(50)**

Quadrangle Name (IV):

Field Office (II): **Pleasantville, N.J.**Chief of Party: **Harry F. Garber**Photogrammetric Office (III): **Baltimore, Md.**Officer-in-Charge: **H. A. Paton**Instructions dated (II) (III): **26 May, 1950****22 June, 1950 (Supplement 1)**Copy filed in Division of
Photogrammetry (IV)
Office FilesMethod of Compilation (III): **Graphic**Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): **1.000**

Date received in Washington Office (IV):

NOV 9 1951Date reported to Nautical Chart Branch (IV): **NOV 16 1951**

Applied to Chart No.

Date:

Date registered (IV): **SEP 6 1955**Publication Scale (IV): **1:24,000**

Publication date (IV):

Geographic Datum (III): **N.A. 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): **GRETNA, 1932**Lat.: **39° 35' 36.800" (1134.9)**Long.: **74° 26' 52.514" (1253.0m)**

Adjusted

~~XXXXXXXX~~

Plane Coordinates (IV):

State: **New Jersey**

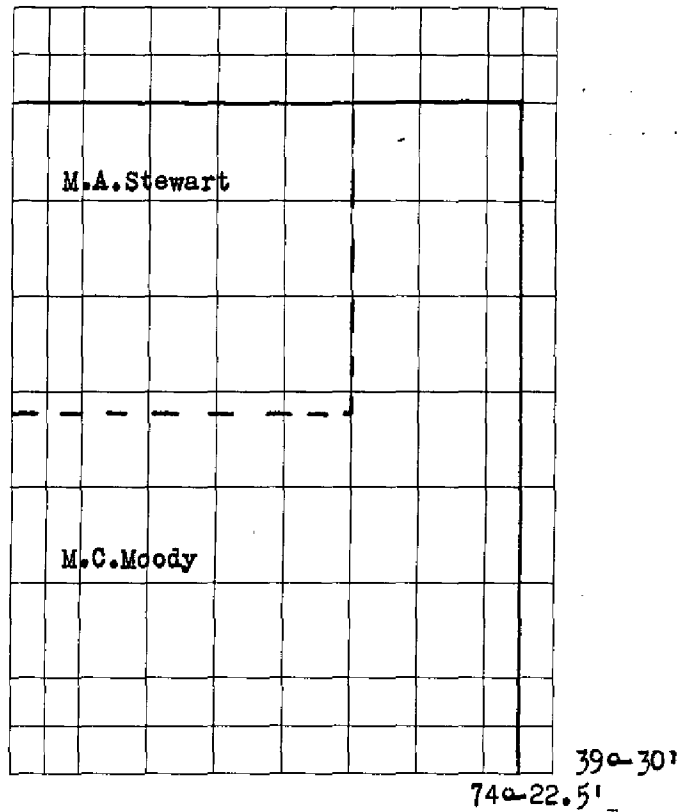
Zone:

Y=

X=

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.



Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): M.C.Moody
M.A.Stewart

Date: Sept.1950

Planetable contouring by (II): M.C.Moody
M.A.Stewart

Date: July, Sept.1950

Completion Surveys by (II): J.K.Wilson

Date: Dec.18, 1951

Mean High Water Location (III) (State date and method of location): 4/16/50 Photogrammetric

Projection and Grids ruled by (IV): T.L.Janson

Date: 1/5/51

Projection and Grids checked by (IV): H.D. Wolfe

Date: 1/16/51

Control plotted by (III): J.C.Richter

Date: 4/18/51

Control checked by (III): R. Hartley

Date: 5/7/51

Radial Plot ~~not stereoscopic~~ F.J.Tarcza
~~Contour checked~~ by (III):

Date: 5/29/51

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): J.Y.Council (S)
J.B.Phillips (N)

Date: 11/7/51
10/16/51

Photogrammetric Office Review by (III): R.Glaser

Date: 11/5/51

Elevations on Manuscript R.Glaser
checked by (II) (III):

Date: 11/5/51

Camera (kind or source) (III):

Number	Date	Time	Scale	Stage of Tide
50-0-863 to 869	4-16-50	11:52	1:10,000	1.8' above MLW
50-0-879 to 884	"	12:07	"	1.6' above MLW
50-0-903 to 909	"	12:27	"	0.6' above MLW
50-0-920 to 923	"	12:41	"	0.6' above MLW
50-0-924 to 925	"	12:42	"	0.4' above MLW
50-0-926	"	12:42	"	0.2' above MLW

Tide (III)

From predicted tide tables.

Reference Station: Sandy Hook, N.J.

Subordinate Station: Mullica River Highway Bridge

Subordinate Station: Graveling Point

(continued below)

Washington Office Review by (IV): *K. N. Maki*Final Drafting by (IV): *Ronald Hopkins* T 9600 N*Ronald Hopkins* T 9600 S

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Ratio of Ranges	Mean Range	Spring Range
	4.6	5.6
0.7	3.3	4.0
0.7	3.4	4.1

Date: 12/23/52

Date: 1/4/55

Date: 1/24/55

Date:

Date:

Land Area (Sq. Statute Miles) (III): 46 sq. mi.

Shoreline (More than 200 meters to opposite shore) (III): 32 statute miles

Shoreline (Less than 200 meters to opposite shore) (III): 101 statute miles

Control Leveling - Miles (II): 31.4

Number of Triangulation Stations searched for (II): 34 Recovered: 32 Identified: 8

Number of BMs searched for (II): 45 Recovered: 38 Identified: 7

Number of Recoverable Photo Stations established (III): 6*

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

Remarks:

Subordinate stations

Tuckerton Creek Entrance

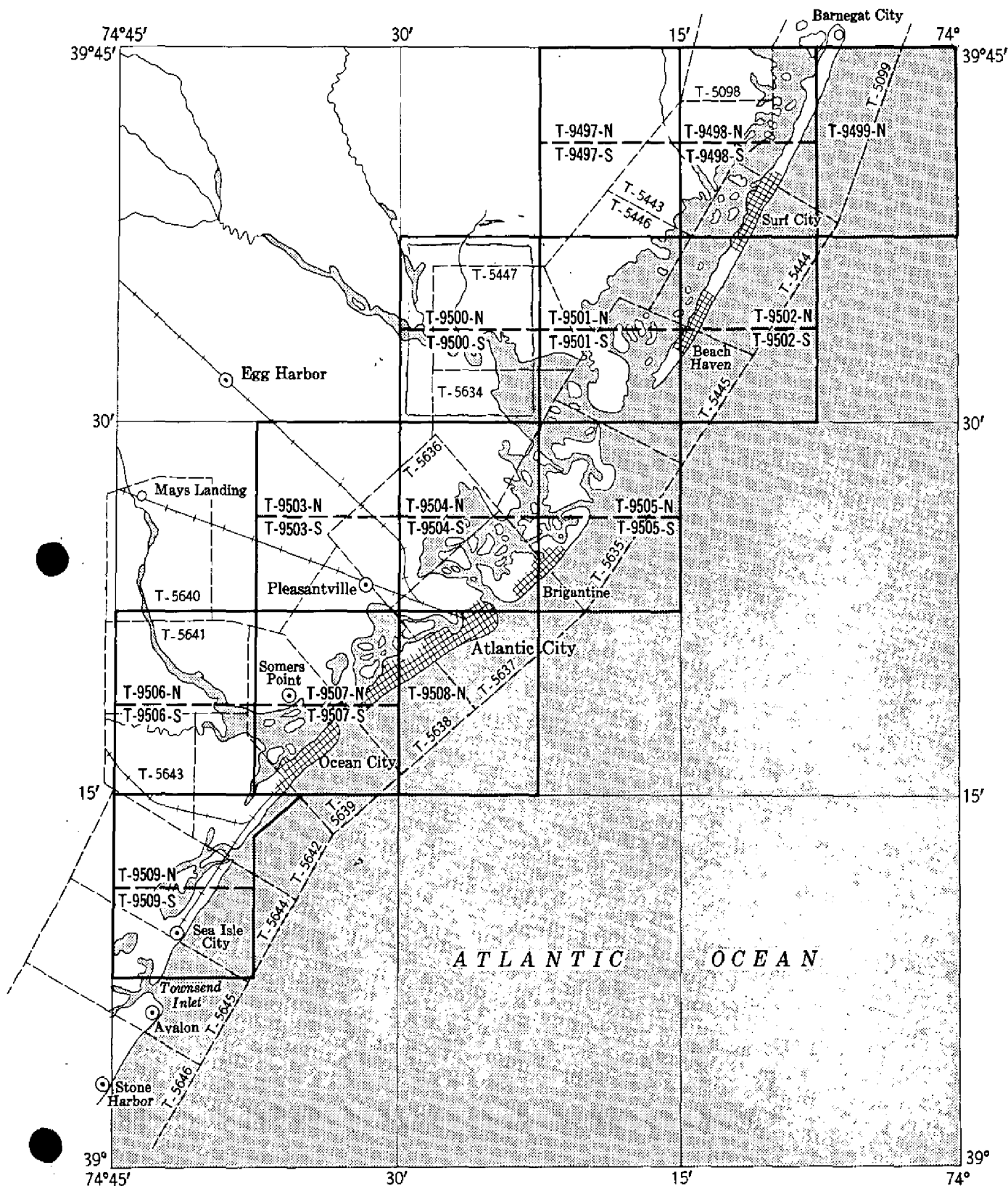
Seven Islands

Ratio of Ranges	Mean Range	Spring Range
0.5	2.4	2.9
0.8	3.5	4.2

* Two previously established stations were recovered and identified.

TOPOGRAPHIC MAPPING PROJECT PH-59 (50)

NEW JERSEY COAST, Townsend Inlet to Barnegat City



T-9497-N, T-9497-S to T-9509-N, T-9509-S are Topographic Maps
 Mapped by the U.S.C. and G.S. from aerial photographs to be taken in 1950
 Scale 1:10,000

Summary to Accompany Descriptive Report T-9500

Topographic map T-9500 is one of 13 similar maps in project Ph-59(50). This project covers the New Jersey coast from Townsend Inlet north to the borough of Barnegat Light. This map was compiled almost entirely by graphic methods. A small portion of the extreme northeast area of the map was compiled on the stereoplanigraph. The field operations preceding compilation included complete field inspection, the establishment of some additional horizontal control and the determination of numerous elevations for stereo instrument and planetable contouring. The compilation was at a scale of 1:10,000. The manuscript consists of 2 sheets each $3\frac{3}{4}$ ' in latitude by $7\frac{1}{2}$ ' in longitude. The entire map was field edited. The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard $7\frac{1}{2}$ ' topographic quadrangle. The registered copies under T-9500 will include 2 one-half quadrangle cloth mounted prints at scale 1:10,000 identified as T-9500 M/2 and T-9500 S/2 and a cloth-mounted color print at scale 1:24,000. Hydrographic information furnished by this Bureau, depth curves and soundings, will be included on the color print.

FIELD INSPECTION REPORT
QUADRANGLE T-9500
PROJECT Ph-59

Harry F. Garber, Chief of Party

The field work for this quadrangle was done under the direction of Mr. George E. Varnadoe, Cartographic Engineer. In addition to Page 3, the work was accomplished by the following personnel:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
E. T. Jenkins Cartographer	Horizontal Control Recovery and Identification - Shore- line Inspection	September, 1950
H. R. Moore Cart. Sur. Aid	Horizontal and Vertical Control Recovery and Identification	August, 1950
M. C. Moody Cart. Sur. Aid	Fly Levels, Contours	Aug.-Sept., 1950
M. A. Stewart Cart. Sur. Aid	Contours	August, 1950

2. AREAL FIELD INSPECTION

Three tide water rivers, several creeks, and a portion of Great Bay fall within the quadrangle. These waters along with the low marshy ground along their shores comprise about fifty per cent of the area. Two villages, namely, New Gretna and Port Republic, the latter of which is incorporated, are in the quadrangle. These villages, as well as most of the higher land, are adequately served by hard-surfaced and secondary roads. Fishing and cranberry culture are the chief enterprises. A historical monument, "Chestnut Neck Battle Monument" is located south of the Mullica River and just east of Highway U.S. 9 (N.J. 4).

The photographs were of good quality and no difficulty was encountered in their interpretation. It was noted they were taken at an extremely wet season, and that the cranberry bogs were flooded.

The field inspection is believed to be complete.

3. HORIZONTAL CONTROL

All known horizontal control stations were searched for and reported on Form 526. A sufficient number were identified to satisfy the project instructions.

(a) Two short, third order traverses (a total of 9.0 miles) were run to the western limit of the quadrangle to furnish supplemental control for the photogrammetric plot. One of the traverses originated at triangulation station Gretna and the other originated at N.J.G.C.S. monument 1852. Both are open end traverses, the azimuth being tied in to a sun azimuth, and were taped in both directions. No monumented stations were set. A total of 11 picture points were located and identified on the photographs.

Four directions were observed with a Wild T2 theodolite, using the standard traverse targets and tripods as manufactured by Wild. A 300-foot steel tape, which was checked against a standardized invar tape before and after the traverses, was used. A standard centigrade thermometer was used to determine the air temperature at the beginning of each section. The taping was done directly on a hard-surfaced road, with the tape supported throughout, and levels run to determine the difference in grade at each tape length and station.

(c) Control established by the N.J.G.C. Survey was used along with that established by the U.S.C.&G.S. throughout the quadrangle. No datum adjustment was made.

(e) Two stations were reported lost; they are: N.J.G.C.S. monuments Nos. 7834 and 10859.

4. VERTICAL CONTROL

All known vertical control was searched for and reported on Form 685A. However, due to the plethora of control along the highways, only a small portion of the bench marks were used or identified.

(a) Listed, are the bench marks used:

<u>Designation</u>	<u>Establishing Agency</u>	<u>Order</u>
B 8	U.S.C.&G.S.	First
F 8	"	"
Mon. 1850	N.J.G.C.S.	Unknown
" 1851	"	"
" 7872	"	"
" 10848	"	"
" 10858	"	"

(b) 31.4 Miles of differential levels were run with a semi-precise level along secondary roads to supplement elevations for contouring. The levels began and closed at bench marks; the greatest error of closure was 0.37 foot, and the adjustments were prorated according to the number of set-ups.

(c) The first and last level points are 00-1 to 00-35.

5. CONTOURING AND DRAINAGE

The contouring was done by plane-table methods directly on single lens 1:10,000 scale photographs at a contour interval of ten (10) feet.

The natural drainage is by Mullica, Wading and Bass Rivers, and their tributaries. The highest natural elevation is 84 feet and is in the northeast section.

6. WOODLAND COVER

Classified in accordance with current instructions.

7. SHORELINE AND ALONGSHORE FEATURES

The greater portion of the shoreline is marsh, and with the exception of four small areas, is apparent. All alongshore features were inspected and they were classified except where clearly discernible on the photographs.

(a) Along the marsh (apparent) shoreline, the mean high water line and low water line are synonymous. The mean high water line was delineated along the small portion of fast land.

(c) The small amount of foreshore is sand.

(d) There are no bluffs or cliffs near the shoreline.

(e) Docks, wharves, and piers have been delineated and classified on the photographs.

(f) Submarine cable ends have been located on the photographs.

8. OFFSHORE FEATURES

The only offshore features are four piles just east of the Mullica River Bridge - one, a 48-inch steel cased concrete pile is clearly discernible, and has been labeled on the photograph. Three wooden piles, just east of the bridge guard on the north side of the channel are awash at low water, and have been indicated on the photograph in their approximate position. These piles are the remains of the old bridge.

9. LANDMARKS AND AIDS

There are no landmarks in the quadrangle. However, a tall radio mast (Aero Beacon RCA) which is located near the central part and just east of the quadrangle, serves as a landmark for the entire quadrangle.

(d) Seven fixed aids to navigation, which are lights supported by single wooden piles, were located in accordance with the project instructions.

10. BOUNDARIES, MONUMENTS AND LINES

This will be the subject of a special report to be submitted by Mr. R. L. McGlinchey, Cartographic Survey Aid.

11. OTHER CONTROL

7 Recoverable topographic stations are:

(Mullica SW Gable, 1935)	(Boundary Mon. 9, P. Republic H. & F. Grounds)
(North Gable Red Shack, 1935)	(" " 18, " " " ")
(White, 1950) (" " 19, " " " ")
	(" " 21, " " " ")

12. OTHER INTERIOR FEATURES

Roads and buildings were classified in accordance with the current instructions. It is to be noted that the classification of highway U.S. 9 (N.J. 4) changes across the Mullica River marshes due to the lack of foundation.

Bridge and cable data for the five drawbridges in the quadrangle are recorded on the photographs. The horizontal clearances for the four bridges listed in the "List of Bridges Over Navigable Waters of the U.S." is in good agreement. The vertical clearances were determined by measurements to tide water. These measurements were made during normal weather conditions and the date and time of measurement noted on the photographs.

13. GEOGRAPHIC NAMES

This will be the subject of a special report to be submitted by Mr. H. R. Moore, Cartographic Survey Aid.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

In addition to the above-mentioned reports, the field data are listed in transmitting letter dated 13 October 1950.

11 October 1950
Submitted by:

George E. Varnados
Cartographic Engineer

11 October 1950
Approved by:

Harry F. Garber
Harry F. Garber
Chief of Party

MAP T-9500 PROJECT NO. Ph-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE		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	
								FORWARD	(BACK)	FORWARD	(BACK)
AKINBO, 1935	G-3126 343	N.A. 1927	39	33	12.441			383.7	(1466.7)		
			74	26	04.551			108.7	(1323.9)		
GREAT, 1935	G-3126 334	"	39	32	19.495			601.2	(1249.2)		
			74	23	26.818			640.4	(792.4)		
GRETNA, 1932	G-1249 13	"	39	35	36.800			1134.9	(715.5)		
			74	26	52.514			1253.0	(178.6)		
HOWELL, 1935	G-3126 335	"	39	34	32.545			1003.7	(846.7)		
			74	27	56.515			1348.8	(83.2)		
LONG, 1935	G-3126 334	"	39	34	30.597			943.6	(906.8)		
			74	26	20.943			499.8	(932.2)		
NACOTE, 1935	G-3126 335	"	39	31	55.019			1696.8	(153.6)		
			74	27	42.342			1011.2	(421.7)		
OYSTER, 1935	G-3126 334	"	39	30	22.526			694.7	(1155.7)		
			74	24	43.340			1035.4	(398.0)		
MON 1851 NJGCS, 1934	NJGCS	"	256,258.76					383.7	(1140.3)		
			2,056,623.54					494.9	(1029.1)		
MON 1852 NJGCS 1934	"	"	257,953.43					900.2	(623.8)		
			2,056,884.69					574.5	(949.5)		
MON 1853 NJGCS, 1937	"	"	276,058.03					322.5	(1201.5)		
			2,058,549.08					1081.8	(442.2)		
MON 1854 NJGCS, 1937	"	"	276,327.77					404.7	(1119.3)		
			2,059,906.24					1495.4	(28.6)		
MON 2263 NJGCS, 1935	"	"	277,555.49					778.9	(745.1)		
			2,073,632.86					1107.3	(416.7)		

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M-2388-12

1 FT. = 3048006 METER
COMPUTED BY J.C. Richter

DATE 11 Dec. 1950

CHECKED BY M.F. Kirk

DATE 16 Jan. 1951

MAP T 9500 PROJECT NO. PH-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	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
				FORWARD	(BACK)		FORWARD	(BACK)	
MON 2264 NJGCS, 1935	NJGCS	N.A. 1927	277,552.71 2,071,863.42				778.1 (745.9) 568.0 (956.0)		
MON 7832 NJGCS, 1940	"	"	276,539.31 2,060,759.82				469.2 (1054.8) 231.6 (1292.4)		
MON 7833 NJGCS, 1940	"	"	276,598.73 2,062,330.29				487.3 (1036.7) 710.3 (813.7)		
MON 7835 NJGCS, 1940	"	"	276,901.41 2,064,896.93				579.6 (944.4) 1492.6 (31.4)		
MON 7836 NJGCS, 1940	"	"	276,649.92 2,066,528.58				502.9 (1021.1) 465.9 (1058.1)		
MON 7837 NJGCS, 1940	"	"	276,340.48 2,068,052.39				408.6 (1115.4) 930.4 (593.6)		
MON 7870 NJGCS, 1940	"	"	276,622.63 2,069,078.21				494.6 (1029.4) 1243.1 (280.9)		
MON 7871 NJGCS, 1940	"	"	277,064.88 2,070,241.38				629.4 (894.6) 736.6 (1450.4)		
MON 7872 NJGCS, 1940	"	"	277,324.29 2,074,789.64				708.5 (815.5) 1459.9 (64.1)		
MON 7873 NJGCS, 1940	"	"	277,200.74 2,075,990.77				670.8 (853.2) 302.0 (1222.0)		
MON 10848 NJGCS, 1941	"	"	276,011.94 2,058,257.76				308.4 (1215.6) 993.0 (531.0)		
MON 10849 NJGCS, 1941	"	"	275,428.36 2,057,308.79				130.6 (1393.4) 703.7 (820.3)		

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1 FT. = 3048006 METER COMPUTED BY J.O. Richter CHECKED BY M.F. Kirk DATE 11 Dec. 1950 DATE 16 Jan. 1951 M-2388-12

MAP T-9500 PROJECT NO. Ph-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE	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)
MON 10850 NJGCS, 1941	NJGCS	N.A. 1927	274,264.51 2,057,182.70			1299.8 (224.2) 665.3 (858.7)	
MON 10851 NJGCS, 1941	"	"	273,132.79 2,057,431.79			954.9 (569.1) 741.2 (782.8)	
MON 10852 NJGCS, 1941	"	"	271,101.33 2,057,006.27			335.7 (1188.3) 611.5 (912.5)	
MON 10853 NJGCS, 1941	"	"	269,689.12 2,057,842.04			1429.3 (94.7) 866.3 (657.7)	
MON 1085E NJGCS, 1940	"	"	281,902.4 2,060,884.3			579.9 (944.1) 269.5 (1254.5)	
POINT 4807 NJGCS, 1940	"	"	277,950.42 2,077,734.09			899.3 (624.7) 833.4 (690.6)	
Sub Pt MON 2263 NJGCS, 1940		"		Plot graphically			
Sub Pt. MON 7873 NJGCS, 1940		"		Plot graphically			
Sub Pt MON 10851, NJGCS, 1941		"		Plot graphically			
Sub Pt AKIMBO, 1935		"	39° 33" 74 26			241.9 (1608.5) 257.8 (1174.8)	

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FACTOR DISTANCE
GRID OR PROJECTION LINE
IN METERS
RWARD (BACK)

Age Group	Percentage of Respondents
18-29	65%
30-49	75%
50-69	85%
70+	95%

100

1

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16 Jan. 1951

71-8857-12

MAP T. 9500

Ph-59(50)

SCALE OF MAP 1:10,000

SCALE FACTOR

PROJECT NO.

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE	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)
PP No. 1 (52SA)		N.A. 1927	257,693.22 2,056,206.45			820.9 (703.1) 367.7 (1156.3)	
PP No. 2 (52SA)		"	257,103.24 2,053,391.80			641.1 (882.9) 1033.8 (490.2)0	
PP No. 3 (52SA)		"	255,630.79 2,050,413.07			192.3 (1331.7) 125.9 (1398.1)	
PP No. 4 (52SA)		"	252,892.66 2,046,613.01			881.7 (642.3) 491.6 (1032.4)	
PP No. 1 (GSA)		"	281,502.52 2,060,791.53			458.0 (1066.0) 241.3 (1282.7)	
PP No. 2 (GSA)		"	283,611.34 2,061,023.80			1100.7 (423.3) 312.0 (1212.0)	
PP No. 3 (GSA)		"	288,229.98 2,056,093.48			984.5 (539.5) 333.3 (1190.7)	
PP No. 4 (GSA)		"	285,690.18 2,047,920.67			210.4 (1313.6) 890.2 (633.8)	
PP No. 5 (GSA)		"	284,812.45 2,045,630.17			1466.8 (57.2) 192.1 (1331.9)	
PP No. 6 (GSA)		"	282,345.15 2,045,104.35			714.8 (809.2) 31.8 (1492.2)	
PP No. 5 (52SA)		"	255,951.33 2,042,706.48			290.0 (1234.0) 824.9 (699.1)	

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1 FT. = 3048006 METER
COMPUTED BY M.F. Kirk

DATE 16 Jan. 1951

CHECKED BY J.C. Richter

DATE 16 Jan. 1951

COMPILATION REPORT

T-9500

The photogrammetric plot report for this survey is part of the descriptive report for Survey No. T-9508.

31. DELINEATION

This manuscript was compiled by graphic methods except for a small area in the NE corner of the survey which was done by stereoplanigraph in the Washington office and furnished on a work sheet.

32. CONTROL

The identification of the horizontal control was adequate. Refer to item 23 of the photogrammetric plot report for a discussion of the density and placement of the control.

33. SUPPLEMENTAL DATA

1. Oil Company Road Map, New Jersey, 1950 for road objectives
2. Army Map Service, Tuckerton, N.J. quadrangle, scale 1:50,000, dated 1948 for geographic names (name standard).
3. Special reports on Boundaries, New Jersey dated July 1950 and September 1950
4. Tax Map of City of Port Republic, N.J.
5. Map of Atlantic County, 1949
6. Map of Burlington County
7. Map of Port Republic Public Hunting and Fishing Grounds
8. Tax Map, Galloway Township
9. General Highway Map, Burlington County, Sheets 1, 2 and 3 of 10 sheets.

34. CONTOURS AND DRAINAGE

A small area of contours in the NE corner of the survey was transferred from a worksheet compiled using the stereoplanigraph in the Washington Office and submitted with the data for Survey T-9501.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate. No low water or shoal lines were indicated by the field party and none are shown.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Form 567 for seven nonfloating aids to navigation is submitted with this report.

38. CONTROL FOR FUTURE SURVEYS

Forms 524 for eight recoverable topographic stations in the area were submitted on 9 November 1951...six stations established, two previous stations recovered. These stations are listed under item 49.

39. JUNCTIONS

Junctions with the following surveys have been made and are in agreement:

T-9501 to the east
T-9504 to the south

There are no contemporary surveys to the north and west. To facilitate junction of future surveys with this survey, compilation has been extended 1/2" beyond neat limit to the north and west.

40. HORIZONTAL AND VERTICAL ACCURACY.

No comment.

41 through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Survey T-9500 has been compared with:

1. Army Map Service, Tuckerton, N.J. quadrangle, scale 1:50,000 dated 1948.
2. USC&GS Topographic Map T-5447 (1936) and T-5634 (1936) scale 1:10,000.

47. COMPARISON WITH NAUTICAL CHARTS

Survey T-9500 has been compared with USC&GS chart No. 826, scale

47. COMPARISON WITH NAUTICAL CHARTS (continued)

1:40,000, published in June 1949, corrected to 3 November 1950.

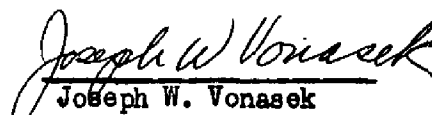
Items to be applied to nautical charts:

None.

Items to be carried forward:

None.

Respectfully submitted


Joseph W. Vonasek
Cartographer (Photo)

Approved and forwarded

Hubert A. Paton
Comdr., C&GS
Officer in Charge

T-9500

Akimbo Point
Atlantic County

Ballanger Creek
Bass River
Bass River State Forest
Bass River Township
Basses Bay
Big Creek
Big Graveling Creek
Blood Ditch
Blood Point
Bogans Cove
Broad Creek
Burlington County

Chestnut Neck
 * Chestnut Neck Battle Monument
City of Port Republic (for boundary)
Collins Cove
Collins Point
Cramer Creek

Deep Point ——— DANE BRIDGE ROAD (th name is ok, but it lies to
Doctor Point N. of this map)

East Branch

Galloway Township
Giffords Mill Branch
Goose Cove
Graveling Point
Great Bay
Greenbush Road
Greenbush

Gretna: can find no
 justification for
 this name.

Hickory Point Yacht Club
Hillside Cemetery - (note correct position, per Field Edit)

Ives Branch

Jobs Creek
Judies Creek

Lake Absegami
Landing Creek
Leektown
Little Egg Harbor Township
Loveland Thorofare

48. Geographic Names, T-9500 (continued)

Mathis Road
Mattix Run
Merrygold Branch Merrygold (locality or settlement)
Miller Cemetery
Miller Road
Moss Mill Road
Moss Point
Mott Creek
Mullica River
Munion Field Road

Nacote Creek
New Gretna ← N.J. 4

Oak Island
Ocean County
Old Port Road
Osborne Island
Oyster Creek
Oyster Creek (village)
Oysterbed Point

Pitney Road
Port Republic
 * Port Republic Hunting and Fishing Grounds
Quaker Ditch
Radio Road
Roundabout Creek

St. Pauls Church (two, one in New Gretna, other in Port Republic)
Stage Road Swimming over Point
Swan Bay

Turtle Island ← U.S. 9

Wading River
Wading River (village) Wading River New Gretna Road
Washington Township
Wells Island
West Branch (name ok. East and West Branches join to form Bass R.)
Wigwam Creek
Willis Creek
Winter Creek
Wolf Run

Names underlined in red are approved

12-15-52

L. Heck

*Names from field inspection data

N.B. From Jan, 1953, road numbers in N.J. are to be changed. U.S. highways will no longer have state numbers (on authority of Keystone Auto. club monthly magazine)

48a. Geographic Names

The following additional geographic names were found on a blue print of a map submitted for the plotting of Bass River State Forest Zable, Atlantic City Park and No. 7K (Pharo) tracts: (See Special report on boundaries)

* Blue Goose Pond

Fish Creek :

* Little Oak Island
Lower Pasture Creek ✓

Mathis Thorofare ...

* North Calf Island

Pollys Ditch ✓

WorldsEnd Creek ✓

* Exact location doubtful

Waterway names in above
list approved 12-21-52
L. Heck

Field edit corrections in red

T-9500

49. NOTES FOR THE HYDROGRAPHER

Eight recoverable topographic stations are shown on the manuscript:

- * MULLICA SW GABLE 1935
- * NORTH GABLE RED SHACK, 1935
- * WHITE, 1950
- MON 3, 1950
- MON 9, 1950
- MON 18, 1950
- MON 19, 1950
- MON 21, 1950

N TOWER 1951

S TOWER 1951

* Station destroyed in storm of 1950

50-

PHOTOGRAMMETRIC OFFICE REVIEW

T- 9500

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 None 8. Bench marks ✓ 9. Plotting of sextant fixes None 10. Photogrammetric plot report ✓ 11. Detail points ✓

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ✓ 13. Low-water line ✓ 14. Rocks, shoals, etc. None 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 None 24. Contours in general ✓ 25. Spot elevations ✓ 26. Other physical features ✓

CULTURAL FEATURES

27. Roads ✓ 28. Buildings ✓ 29. Railroads None 30. Other cultural features ✓

BOUNDARIES

31. Boundary lines ✓ 32. Public land lines None

MISCELLANEOUS

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

40. _____
Reviewer

g. J. Blau
Supervisor, Review Section or Unit

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.

J. B. PHILLIPS
Compiler

Frank J. Hargis
Supervisor

43. Remarks:

See Item 48A

70
7/5/50 # DEC 21 1951
711
78

FIELD EDIT REPORT
Quadrangle T-9500
Project Ph-59(50)

Paul Taylor, Chief of Party

The field edit of this quadrangle was accomplished during the month of December, 1951.

51. METHODS

The quadrangle was inspected by traversing all passable roads by truck, walking to areas which required special investigation, and by skiff along water portions. In addition to visual inspection, standard surveying methods were used for corrections and additions.

All additions, corrections and deletions have been either indicated on the field edit sheet or referenced to the field photographs. A legend describing the symbols and the colored inks used is shown on the field edit sheet.

One 1:20,000 scale sheet is submitted with the field edit information, and one 1:10,000 scale sheet with the vertical accuracy test.

52. ADEQUACY OF COMPILATION

The map compilation, in general, is adequate and will be complete after field edit data has been applied.

Special attention is called to the classification of the buildings. It will be noted that an undue number of buildings required deletion; especially in the northwest portion of the quadrangle. The deletion of the buildings along the Mullica River was due to the storm of 1950.

All vertical bridge clearances were remeasured during this survey. It was found that, with the exception of the bridge at Port Republic, all clearances were in error from two to three feet.

Many changes were made in the swamp delineation throughout the entire quadrangle, particularly in the northwestern part where no swamp had been previously shown. The field editor has outlined numerous areas to aid the compiler. It is recommended that extreme caution and thoroughness be used in adding and changing swamp areas.

53. MAP ACCURACY

The horizontal positions of the map detail appear to be good.

One vertical accuracy test was run along the northeastern edge of the quadrangle on a 1:10,000 scale double weight matte print. Of the 80 points tested, 75% were in error 1 foot or less and 25% in error 1 foot to 1/2 contour interval.

Several small errors of contour expression were corrected.

One active borrow pit was noted during this inspection and appropriate changes have been shown.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Mr. Cornelius C. Garrison, local tax assessor, who has been a resident of this area for forty-five years, states that he would be willing to examine a proof copy for possible errors. Mr. Garrison's address is: Fort Republic, New Jersey.

56. LANDMARKS AND AIDS

(a) Two power transmission towers, located at the Mullica River Highway Bridge, were identified by photogrammetric methods and are recommended on Form 567 for charting.

(d) In reference to the nomenclature of the lights along the Mullica River, it was found, after questioning a number of the local residents, that these lights are commonly known by the point of land where they exist; such as Swimming Over Point light, Oyster Creek light, etc. In no case are they referred to as "Mullica River" lights.

57. OTHER CONTROL

Two topographic stations were located during this field edit; Mullica River North Transmission Tower and Mullica River South Transmission Tower. Three previously established topographic stations were destroyed by the storm of 1950. Form 524 is submitted.

14 December 1951
Submitted by:

Joseph K. Wilson,
Cartographer

18 December 1951
Approved by:

Paul Taylor
Paul Taylor
Lt. Comdr., USC&GS
Chief of Party

VERTICAL ACCURACY TEST REPORT

Quadrangle T-9500
Project Ph-59(50)

This is a report of the results of the vertical accuracy test in this quadrangle. The planetable traverse originated and terminated on New Jersey Geodetic Control Survey Monument.

A total of 2.4 lineal miles were traversed by planetable to test 80 points on contours. The horizontal closure was negligible. The vertical closure was 0.4 foot and no adjustment was made.

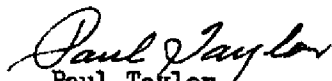
The results of the 80 points tested are as follows:

75% were in error 1 foot or less; and
25% in error 1 foot to 1/2 contour interval.

14 December 1951
Submitted by:

Joseph K. Wilson
Cartographer

18 December 1951
Approved by:


Paul Taylor
Lt. Comdr., USC&GS
Chief of Party

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED

TOCINDEXED

STRIKE OUT ONE

NON-FLUATING AIDS OR LANDMARKS FOR CHARTS

Pleasantville, New Jersey 13 December 1951

I recommend that the following objects which have ~~(XXXXXX)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(XXXXXX)~~ the charts indicated.

The positions given have been checked after listing by A. Glass

Harry F. Garber day J.K.W.
Harry F. Garber

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* *unmanned* buoys determined, shall be reported on this form. The data should be considered for the charts of the area and not by other means.

Information regarding each buoy ready to be given

COAST PILOT

Review Report T-9500
Topographic Map
23 December 1952

62. Comparison with Registered Topographic Surveys.-

T-119	1:20,000	1840-41
T-1166	"	1869-70
T-1333	"	1871
T-5446	1:10,000	1932
T-5447	"	1932
T-5634 (supp.)	"	1932
T-6401b	"	1935
T-6501a	"	1935-36
T-6402	"	1935

T-9500 supersedes all the above surveys in common areas.

63. Comparison with Maps of Other Agencies.-

Tuckerton, N.J., U.S.E. 15' quadrangle, 1:62,500,
1932-38, reprinted 1942.

Swamp areas are more extensively developed on T-9500 than on the U.S.E. quadrangle. Cultural changes which have occurred subsequent to the publication of the U.S.E. quadrangle are shown on T-9500.

64. Comparison with Contemporary Hydrographic Surveys.- None

65. Comparison with Nautical Charts.-

826, 1:40,000, Intracoastal Waterway, ed. 1949,
corr. to 12-5-49.

1216, 1:80,000, ed. 1940, corr. to 4-23-51

1217, 1:80,000, ed. 1948, corr. to 2-13-50

Only very minor differences in shoreline configuration and cultural features exist between the charts and T-9500.

Two transmission towers located just west of the U.S. Highway No. 9 crossing of the Mullica River are not shown on Chart 826. The submerged cables in this same area are not shown on chart 826.

66. Adequacy 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. The map complies with the National Standards of Accuracy. ✓

Reviewed by:

K. N. Maki
K. N. Maki

Approved;

L. C. Lande
Chief, Review Section
Div. of Photogrammetry

H. C. Edmonson
Chief, Nautical Chart Branch
Division of Charts

L. W. Swanson
Chief, Div. of Photogrammetry *WKS*
28 Sept. 1955

Carl O. Heaton *CH*
Chief, Div. of Coastal Surveys

History of Hydrographic Information

Quadrangle T-9500

Hydrography was applied to the north and south half of this quadrangle in accordance with Division of Photogrammetry general specifications of 18 May 1949.

Depths in feet and the depth curves at 6, 12, 18 and 30 feet-mean low water datum-originate with the following:

U.S.C. & G.S. Hydrographic Surveys:

H-5893	(1935)	1:10,000
H-5894	(1935)	1:10,000

Hydrography was compiled by K. N. Maki and verified by

O. Svendsen.

K. N. Maki
K. N. Maki
Div. of Photogrammetry
April 1953