

9497

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-59 (50) Office No. T-9497

LOCALITY

State New Jersey

General locality Atlantic City

Locality Manahawkin

194 51

CHIEF OF PARTY

Harry F. Garber, Chief of Field Party

Louis J. Reed, Div. Photo., Washington, D.C.

LIBRARY & ARCHIVES

DATE May 4, 1956

9497

DATA RECORD

T-9497

Project No. (II): Ph-59(50) Quadrangle Name (IV): MANAHAWKIN

Field Office (II): Pleasantville, N. J. Chief of Party: Harry F. Garber

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

Instructions dated (II) (III):

26 May 1950
22 June 1950 (Sup. I)Copy filed in Division of
Photogrammetry (IV)
Office Files

Method of Compilation (III): Stereoplanigraph and Kelsh Plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): S-
K-

Scale Factor (III): Photos: 24,000, Diapositives: 24,000, Manuscript: 10,000

Date received in Washington Office (IV): **JAN 30 1951** Date reported to Nautical Chart Branch (IV): **2-5-51**

Applied to Chart No.

Date:

Date registered (IV): **9 Nov. 1955**Publication Scale (IV): **1:24,000**

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
~~Unadjusted~~

Plane Coordinates (IV):

State:

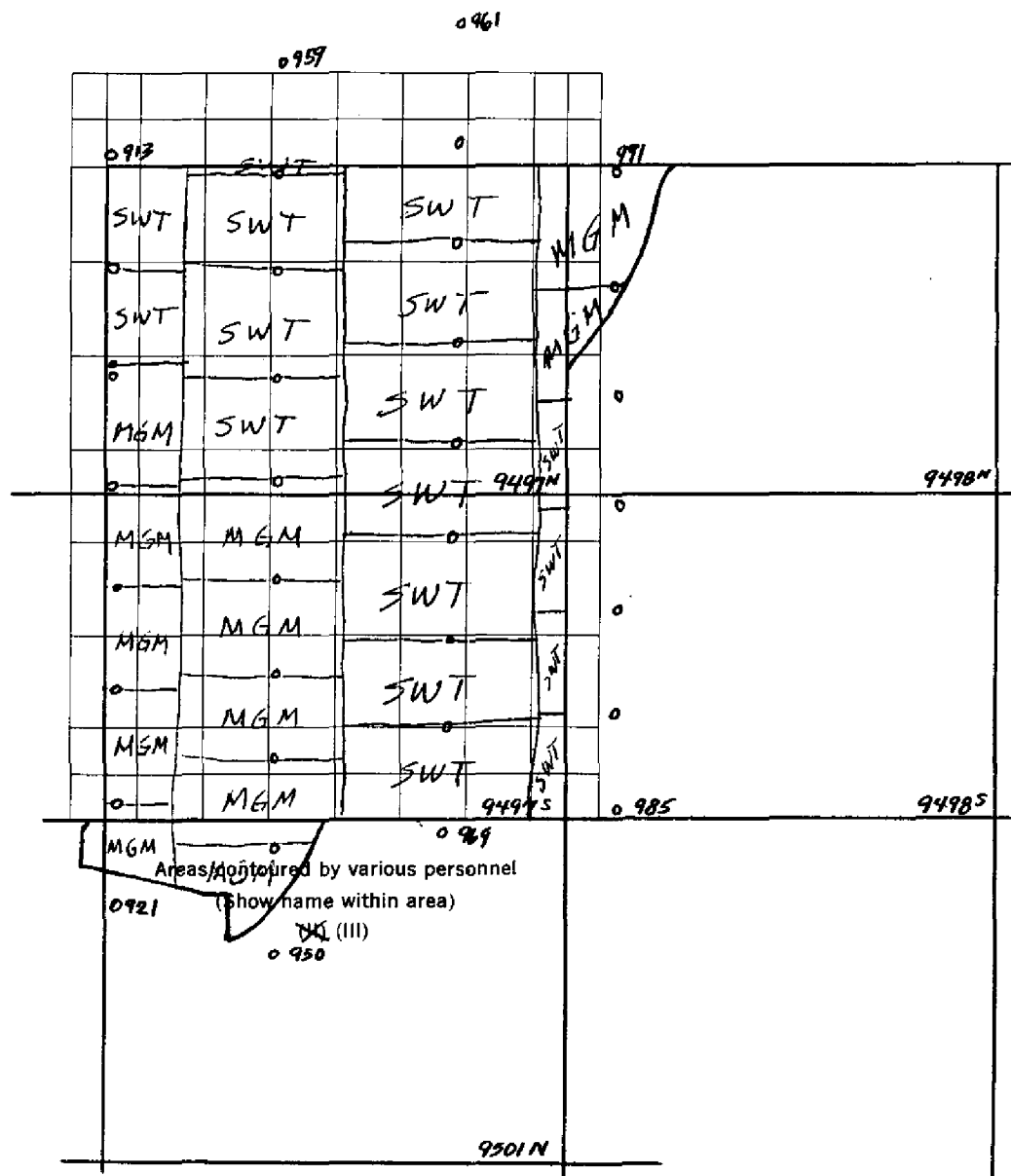
Zone:

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.



Michael G. Misulian (MGM) --- Stereoplanigraph.
Stanley W. Trow (SWT) --- Kelsh Plotter.

DATA RECORD

Field Inspection by (II): H. B. Moore

Date: July 1950

Planetable contouring by (II): none

Date: _____

Completion Surveys by (II): Joseph K. Wilson

Date: Oct., Nov., 1951

Mean High Water Location (III) (State date and method of location):

The shoreline is as of 1950 when field inspection was made of it. A major portion of this shoreline is in swampy areas and is classified "apparent."

Projection and Grids ruled by (IV): Ruling Machine

Date: 14 July 1950

Projection and Grids checked by (IV): *Whately* E. Ward

Date: 14 July 1950

Control plotted by (III): Robert L. Sugden

Date: 4 August 1950

Control checked by (III): Bernard J. Colner

Date: 8 August 1950

Stereoplanigraph

~~Radiograph or Stereoscopic~~

Control extension by (III): Michael G. Misulia

Date: 25 August 1950

delineation by Michael G. Misulia Date:
Stereoscopic Instrument ~~compilation~~ (III): ~~by~~ and and
Contours Stanley W. Trow Date: 30 October 1950

compilation
Manuscript ~~delineation~~ by (III):

Robert L. Sugden

Date: 15 Nov. 1950

Photogrammetric Office Review by (III):

ORVIS N. DALBEY
~~Louis J. Reed~~

30 JAN 1951
Date: ~~20 Nov. 1950~~

Elevations on Manuscript
checked by (II) (III):

Louis J. Reed

30 JAN 1951
Date: ~~20 Nov. 1950~~

Camera (kind or source) (III): USC&GS "0" Camera, Wide-Angle, 6 inches

| Number | Date | Time | Scale | Stage of Tide |
|--------|-------|-------|--------|-------------------|
| 912 | | | | |
| thru | all | | all | |
| 922 | 16 | | 24,000 | |
| 950 | April | | | |
| thru | 1950 | | | |
| 970 | | | | |
| 985 | | | | |
| thru | | | | |
| 992 | | | | |
| 970 | | 13:12 | | 0.8 ft. below MSI |
| 985 | | 13:24 | | 0.7 ft. below MSI |

Tide (III)

Reference Station: Sandy Hook
 Subordinate Station: Long Point
 Subordinate Station:

| Ratio of Ranges | Mean Range | Spring Range |
|--------------------|---------------|-----------------|
| 0.5 | 2.2 | 2.7 |

Washington Office Review by (IV): K. N. Maki

Date: 9-29-52

Final Drafting by (IV): F.L. JOHNSON

11-15-54

Date: 11-30-54

Drafting verified for reproduction by (IV):

W.D. Hallin T-9497-N
T-9497-S1-24-54
Date: 1-26-54

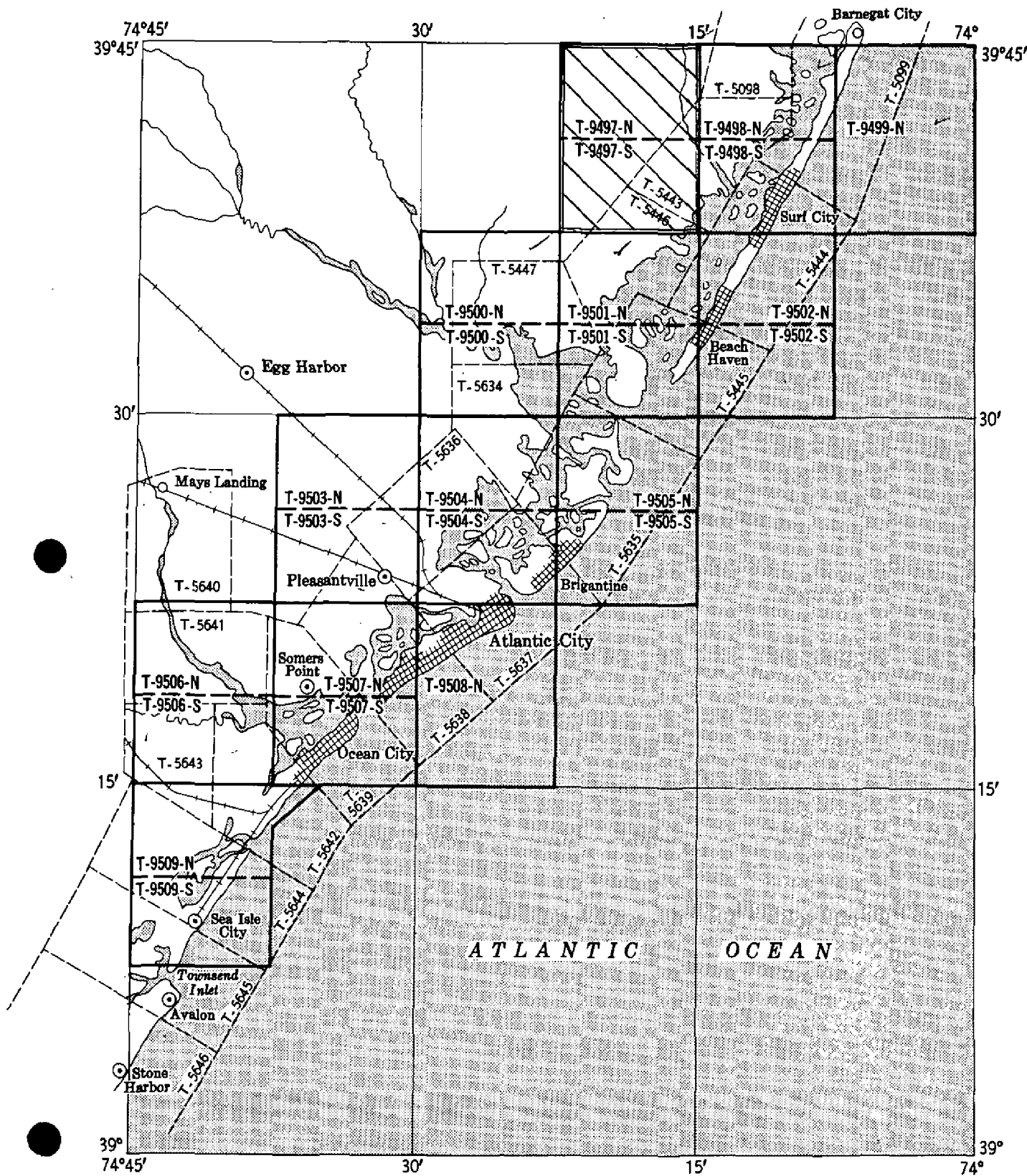
Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 58 sq. mi. (9497 only)
 Shoreline (More than 200 meters to opposite shore) (III): 8 miles (9497 only)
 Shoreline (Less than 200 meters to opposite shore) (III): none
 Control Leveling - Miles (II): 106.9 miles
 Number of Triangulation Stations searched for (II): 47 Recovered: 46 Identified: 15
 Number of BMs searched for (II): 37 Recovered: 36 Identified: 12
 Number of Recoverable Photo Stations established (III): 8
 Number of Temporary Photo Hydro Stations established (III): none

Remarks:

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 T-9497

Topographic map T-9497 is one of 13 similar maps in project Ph-59(50). This project covers the New Jersey coast from Townsend Inlet north to Barnegat City. T-9497 is the northwesterly map in this project. Planimetry and contouring was done by a combination of stereoplanigraph and Kelsh plotter methods. The field operations preceding compilation included complete field inspection, the establishment of some additional horizontal control, and the determination of numerous elevations required to control the stereo-plotting instruments vertically. The compilation was at 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-9497 will include 2 one-half quadrangle cloth-mounted prints at scale 1:10,000 identified as T-9497 N/2 and T-9497 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-9497
Project Ph-59

Harry F. Garber, Chief of Party

The field work for this quadrangle was done under the direction of 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 and Vertical control, recovery and identification | June-July 1950 |
| H. R. Moore Carto. Curv. Aid | Horizontal and vertical control, recovery and identification | July 1950 |
| M. A. Stewart Carto. Surv. Aid | Fly levels | June-July 1950 |
| M. C. Moody Carto. Surv. Aid | Fly levels | July 1950 |

2. AREAL FIELD INSPECTION

The area is served by two arterial highways which are routes N.J. S-40 and U.S. 9 & (N.J. 4). Connecting these highways is the Tuckerton-Warren Grove Road, a hard surface highway which runs through the western part of the quadrangle. Throughout the woodland areas are an excellent pattern of secondary roads which are seldom traveled except by hunters and as access roads to the numerous cranberry bogs. Except along the New York road, U.S. 9 & (N.J. 4), the area is sparsely settled. The largest town is Manahawkin at the junction of N.J. S-40 and U.S. 9. The towns of Cedar Run, Mayetta, Staffordville, West Creek and Parkertown follow in order going south on U.S. 9 from the junction. The only settlement in the western section is the farming village of Warren Grove. Isolated buildings in the wooded sections are owned by gun clubs, and are occupied only during the hunting seasons. The commercial enterprises are limited to the removal of gravel from open cuts which are located just south of Highway S-40, and cranberry culture. The bogs are scattered throughout the quadrangle.

The cut boundary lines in the woodland areas are tract limits of The Bass River State Forest Reservation. (See Boundary Report.)

Running through the central wooded section is the remains of a large firebreak. It is now useless as such as it is overgrown with brush but is clearly visible on the photograph.

The photography for the area was good and the tone detail clear. It was noted that the photographs were taken during an extremely wet season, and that the cranberry bogs were flooded at the time of photography.

3. HORIZONTAL CONTROL

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

(a) A third order traverse approximately 10 miles long was run near the western limit of the quadrangle originating at N.J.G.C.S. station 5626, approximately two miles north of the northwest corner of the quadrangle, and terminating at triangulation station Mathis 1935, near the southwest corner. The designation is 26M. Six monumental stations were established and positions were obtained for Mathis Azimuth Mark and two township boundary markers. Six picture points were identified on the photographs and located by the traverse for control of the Photogrammetric Plot. The New Jersey Geologic Survey had set monuments along this road, but the marks were never located. Apparently many of these monuments were destroyed when the road was widened as only 3 monuments, numbers 2269, 2272, 2273 were recovered. New companion monuments for these stations were set by this party.

Four directions were observed with a Wild T2 Theodolite using the standard traverse targets and tripods as manufactured by Wild. One Azimuth Tie was observed on triangulation station "Aero Beacon (RCA) 1931" from a station approximately midway of the line. A 300 foot steel tape, which was checked against a standardized Invar tape before and after the traverse 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 macadam road, with the tape supported throughout, and levels run to determine the difference in grade at each tape length and station. Stadia distances were observed while running the levels as a check against dropped tape lengths.

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

(e) The only station reported lost is Cedar Bridge Fire Tower 1932, which has been dismantled. This station was located approximately two miles north of the northwestern limit of the quadrangle.

4. VERTICAL CONTROL

All known bench marks were searched for and reported on form 685A.

(a) Listed are the ones used.

| <u>Designation</u> | <u>Establishing Agency</u> | <u>Order</u> |
|--------------------|----------------------------|--------------|
| B 7 | U.S.C.&G.S. | First |
| W 7 | " | " |
| Mon 2254 | N.J.G.C.S. | Unknown |
| " 2255 | " | " |
| " 2256 | " | " |
| " 2257 | " | " |
| " 5609 | " | " |
| " 5612 | " | " |
| " 5615 | " | " |
| " 5619 | " | " |
| " 5622 | " | " |
| " 5623 | " | " |
| " 5635 | " | " |
| " 5648 | " | " |

(3) Level lines failed to close when Mon. 2256 was used. A closed loop based on USC&GS bench mark W-7 proved Mon. 2256 to be in error 2.0 feet and Mon 2257 in error 0.4 foot. Elevations on these monuments and along lines based on them were changed accordingly.

106.9 Miles of supplemental levels were run with Wye and semi precise levels to establish elevations at photograph points for use by the stereoscopic instruments. Elevations were established and identified at points with a level plane of at least 25 feet in diameter. In addition, even 10 foot contour intervals were indicated along most of the lines where they crossed the road. The largest error of closure was 0.72 foot. Adjustments were prorated accordingly to the number of set ups.

The first and last level points are:

97-1 to 97-159 and
97-1a to 97-54a

5. CONTOURS AND DRAINAGE

See report by Washington office. *Attached - item #34.*

6. WOODLAND COVER

Woodland cover has been classified in accordance with the latest instructions. A growth of scrub oak and pine, peculiar to the area, exists in the northwestern part of the quadrangle. This growth is very uniform in height and very dense. These areas have been labeled as to height believing that the stereoscopic instrument operator can use this information to advantage while contouring the areas.

7. SHORELINE AND ALONGSHORE FEATURES

Only a very small portion of the quadrangle, in the southeast portion, touches the shoreline. The shoreline is all apparent except along man-made built-up areas, which have been duly inspected and classified.

8. OFFSHORE FEATURES

None exist.

9. LANDMARKS AND AIDS

None

10. BOUNDARIES, MONUMENTS AND LINES

This will be the subject of a special report that will be submitted by Mr. R. L. McGlinchey, Cartographic Survey Aid.
Filed in Div. Photogrammetry general files.

11. OTHER CONTROL

Recoverable Topographic Stations are: Forms 524

| | |
|-------------------|------|
| Boundary Mon. No. | 2 |
| " | " 3 |
| " | " 4 |
| " | " 5 |
| " | " 6 |
| " | " 16 |
| " | " 31 |
| " | " 32 |

12. OTHER INTERIOR FEATURES

Roads were classified in accordance with the current instructions. Buildings were inspected and classified in accordance with supplement one of the project instructions, dated 22 June 1950. *All photogrammetry and project instructions on file in Div. Photogrammetry office files.*

13. GEOGRAPHIC NAMES

This will be the subject of a special report that will be submitted by Mr. H. R. Moore, Cartographic Survey Aid.
Filed in Geographic Names Section, Div. Charts

12. GEOGRAPHIC NAMES

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

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA - *Div. Photogrammetry general files.*

In addition to the above-mentioned reports, the field data are listed in transmitting letters dated 31 July and 10 August 1950.

15 August 1950

Submitted By:

George E. Varnadoe by H.F.B.

George E. Varnadoe
Cartographic Engineer

Approved:
15 August 1950

Harry B. Garber
Harry B. Garber
Chief of Party

RADIAL PLOT REPORT
Stereoscopic Mapping Section
Washington Office

21. Area Covered:

Refer to Map - Layout Sketch, page 5. Note that two areas were completed outside the limits of the quadrangle being report on; they are to be included in their proper map manuscripts when the sheets are worked.

22. Method:

The stereoplanigraph was employed in the extension of control for this project using contact diapositives of the metrogon mapping photography and vinylite manuscripts to which the field identified control had been plotted and checked. The first flight extended consisted of eight models made up of photographs 961 thru 969, and it may be identified as the flight strip just west of the community of Manahawkin on the Photo and Control Sketch, following. The other three flights were completed in order, the secondary control established by the extension of one flight serving as additional control for positioning adjacent flights, thereby tying all four together into one plot. When completed, each model had at least six horizontal control points established and numbered on the manuscript and the identification had been made on an office set of paper photographs contact printed from the same film negatives used in producing the diapositives for the project. The six control points were selected near the corners of each model and near the principle point of each photograph in such position that each point served to control two models in line of flight and, in addition, one or two models in an adjacent flight.

23. Adequacy of Control:

The horizontal control furnished for this quadrangle was quite adequate as to density. Identification was good and every station was used and held during the extension. A poor location for control stations was selected in a few cases; changing the location by an inch at map scale would have produced control in two successive models instead of one and at the same time produced control in one or two models of an adjacent flight.

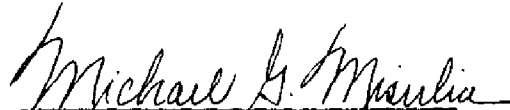
24. Supplemental Data:

No graphic control surveys were produced in the area of this plot. T-6399 - several ^{short} sections of shoreline - does not conflict with T-4497.

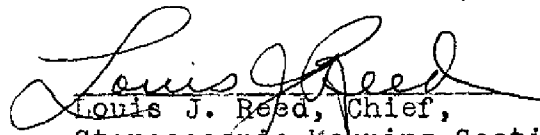
25. Photography:

Adequate coverage of excellent quality was available for this project. One improvement could have been made; the four N-S flights could have been shifted a half interval either east or west causing the coverage to be complete with three flights rather than by two plus small portions if two others on the two flanks, and then only three flights of models would have to have been extended.

Submitted by:


Michael G. Misulia

Cartographer-Photogrammetric


Louis J. Reed, Chief,
Stereoscopic Mapping Section,
Washington Office



1 of 7

MAP T 9497 N PROJECT NO. Ph-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR (Page 1 of 4)

| 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 FROM GRID OR PROJECTION LINE IN METERS | | FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS | |
|----------------------|-------------------------------|-------|---|--------|---|---------|------------------|--|-------|--|--|
| | | | | | | | | | | | |
| MCKINLAY, 1932 dm | GP 17 | NA | 39 43 | 12.203 | | | | 1950.45 | 376.4 | 1474.1 | |
| NJGCS | 292-13 | 1927 | 74 15 | 00.923 | | | | 1429.0 | 22.0 | 1407.0 | |
| 5609 | MON NJGCS | | 314,798.24 | | 4,798.24 | 201.76 | | | | | |
| | Descript. " | | 2,113,156.02 | | 3,156.02 | 1843.98 | | | | | |
| NJGCS | " | " | 316,034.56 | | 1,034.56 | 3965.44 | | | | | |
| 5610 | " | " | 2,111,894.88 | | 1,894.88 | 3105.12 | | | | | |
| NJGCS | " | " | 317,388.24 | | 2,388.24 | 2611.76 | | | | | |
| 5611 | " | " | 2,110,549.79 | | 549.79 | 4450.21 | | | | | |
| NJGCS | " | " | 318,800.13 | | 3,800.13 | 1199.87 | | | | | |
| 5612 | " | " | 2,109,609.24 | | 4,609.24 | 390.76 | | | | | |
| NJGCS | " | " | 320,019.04 | | 19.04 | 4980.96 | | | | | |
| 5613 | " | " | 2,108,866.18 | | 3,866.18 | 1133.82 | | | | | |
| NJGCS | " | " | 321,288.74 | | 1,288.74 | 3711.26 | | | | | |
| 5614 | " | " | 2,108,136.94 | | 3,136.94 | 1863.06 | | | | | |
| NJGCS | " | " | 322,892.22 | | 2,892.22 | 2107.78 | | | | | |
| 5615 | " | " | 2,107,157.02 | | 2,157.02 | 2842.98 | | | | | |
| NJGCS | " | " | 324,821.71 | | 4,821.71 | 178.29 | | | | | |
| 5616 | " | " | 2,105,909.46 | | 909.46 | 4090.54 | | | | | |
| NJGCS | " | " | 326,141.80 | | 1,141.80 | 3858.20 | | | | | |
| 5617 | " | " | 2,105,159.19 | | 159.19 | 4840.81 | | | | | |
| NJGCS | " | " | 328,220.39 | | 3,220.39 | 1779.61 | | | | | |
| 5618 | " | " | 2,103,829.89 | | 3,829.89 | 1170.11 | | | | | |
| NJGCS | " | " | 330,051.31 | | 51.31 | 4948.69 | | | | | |
| 5619 | " | " | 2,102,706.50 | | 2,706.50 | 2293.50 | | | | | |

1 FT. = 3046006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

2087

MAP T. 9497 N PROJECT NO. Rn-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR (Page 2 of 2)

| 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) | FORWARD | (BACK) |
| NJGCS 5620 | MON NJGCS Description | NA 1927 | 332,031.45 2,101,543.31 | 2031.45 | 2968.55 | | | | | |
| NJGCS 5621 | MON " | " | 333,999.26 2,100,277.17 | 3999.26 | 1000.74 | | | | | |
| 5609 | ss Prickling Card | " | 314,934.13 2,113,110.85 | 4934.13 | 65.87 | | | | | |
| 5613 | ss " | " | 319,224.72 2,109,255.28 | 4224.72 | 775.28 | | | | | |
| 5617 | ss " | " | 326,480.32 2,104,989.87 | 4255.28 | 744.72 | | | | | |
| 5619 | ss " | " | 330,097.06 2,102,767.56 | 1480.32 | 3519.68 | | | | | |
| 26M-18, 1950 dm | Field Comps | " | 330,094.96 2,082,802.52 | 4989.87 | 10.13 | | | | | |
| MON 2273, 1935 dm | " | " | 327,238.18 2,082,274.67 | 97.06 | 4902.94 | | | | | |
| 26M-21, 1950 dm | " | " | 323,697.75 2,082,681.94 | 2767.56 | 2232.44 | | | | | |
| MON 2272, 1935 dm | " | " | 318,715.59 2,083,340.80 | 94.96 | 4905.04 | | | | | |
| MON 2252, 1935 dm | NJGCS Deso. | " | 315,353.75 2,115,078.07 | 2802.52 | 2197.48 | | | | | |
| MON 2253, 1935 dm | " | " | 314,060.25 2,114,549.97 | 2238.18 | 2761.82 | | | | | |
| | | | | 2274.67 | 2725.33 | | | | | |
| | | | | 3697.75 | 1302.25 | | | | | |
| | | | | 2681.94 | 2318.06 | | | | | |
| | | | | 3715.59 | 1284.41 | | | | | |
| | | | | 3340.80 | 1659.20 | | | | | |
| | | | | 353.75 | 4646.25 | | | | | |
| | | | | 78.07 | 4921.93 | | | | | |
| | | | | 4060.25 | 939.75 | | | | | |
| | | | | 4549.97 | 450.03 | | | | | |

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

M. 2388

MAP T. 9497 S..... PROJECT NO. Ph-59(50)..... SCALE OF MAP 1:10,000..... SCALE FACTOR 704 of 7

| 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 FROM GRID OR PROJECTION LINE IN METERS | |
|-------------|-------------------------------|-------|---|---|---------|---------------------|--|--------|---|--------|
| | | | | FORWARD | (BACK) | | FORWARD | (BACK) | FORWARD | (BACK) |
| MATHIS 1932 | GP-12 | NA | 39 39 33.421 | | | 1850.4 | 1030.7 | 819.7 | | |
| " | 292-11 | 1927 | 74 20 51.266 | | | 1430.3 | 1222.1 | 208.2 | | |
| " | " | " | 300,989.46 | 989.46 | | | | | | |
| " | " | " | 2,089,840.91 | 4840.91 | | | | | | |
| MATHIS ss | Pricking Card | " | 39 39 (1020.4m) | | | 1850.4 | 1020.4 | 830.0 | | |
| " | " | " | 74 20 (1235.9m) | | | 1430.3 | 1235.9 | 194.4 | | |
| (USE) | Sep. | " | 292,143.73 | 2143.73 | 2856.27 | | | | | |
| DINNER 1946 | Sheet | " | 2,113,403.64 | 3403.64 | 1596.36 | | | | | |
| ✓NJGCS MON | NJGCS | " | 306,056.42 | 1056.42 | 3943.58 | | | | | |
| 2254 | Desc. | " | 2,109,063.27 | 4063.27 | 936.73 | | | | | |
| 2254 ss | Pricking Card | " | 305,912.14 | 912.14 | 4087.86 | | | | | |
| NJGCS MON | NJGCS | " | 2,109,137.81 | 4137.81 | 862.19 | | | | | |
| 2255 | Desc. | " | 304,766.00 | 4766.00 | 234.00 | | | | | |
| NJGCS MON | " | " | 2,108,611.95 | 3611.95 | 1388.05 | | | | | |
| 2256 | " | " | 294,280.87 | 4280.87 | 719.13 | | | | | |
| " | " | " | 2,102,569.31 | 2569.31 | 2430.69 | | | | | |
| 2256 ss | Pricking Card | " | 294,740.99 | 4740.99 | 259.01 | | | | | |
| NJGCS MON | NJGCS | " | 2,102,471.04 | 2471.04 | 2528.96 | | | | | |
| 2257 | Desc. | " | 293,193.20 | 3193.20 | 1806.80 | | | | | |
| " | " | " | 2,101,705.35 | 1705.35 | 3294.65 | | | | | |
| " | " | " | | | | | | | | |
| " | " | " | | | | | | | | |
| " | " | " | | | | | | | | |

M-2388-1

| | 1970 | 1980 | 1990 | 2000 | 2006 |
|---|-------------|-------------|-------------|-------------|-------------|
| Population | 1,000,000 | 1,500,000 | 2,000,000 | 2,500,000 | 2,600,000 |
| GDP (US\$) | 100,000,000 | 200,000,000 | 300,000,000 | 400,000,000 | 450,000,000 |
| Per capita GDP (US\$) | 100 | 133 | 150 | 160 | 173 |
| Life expectancy at birth (years) | 45 | 55 | 65 | 70 | 72 |
| Infant mortality rate (per 1,000 live births) | 100 | 80 | 60 | 40 | 35 |
| Unemployment rate (%) | 10 | 12 | 15 | 18 | 20 |
| Government expenditure as % of GDP | 5 | 8 | 10 | 12 | 15 |
| Private investment as % of GDP | 10 | 12 | 15 | 18 | 20 |
| Foreign direct investment as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Export as % of GDP | 15 | 20 | 25 | 30 | 35 |
| Import as % of GDP | 10 | 12 | 15 | 18 | 20 |
| Balance of trade as % of GDP | 5 | 8 | 10 | 12 | 15 |
| Current account balance as % of GDP | -2 | -1 | 0 | 1 | 2 |
| Public debt as % of GDP | 0 | 5 | 10 | 15 | 20 |
| Central bank assets as % of GDP | 0 | 2 | 5 | 10 | 15 |
| M2 money stock as % of GDP | 10 | 15 | 20 | 25 | 30 |
| Money velocity | 1.0 | 1.2 | 1.5 | 1.8 | 2.0 |
| Fiscal deficit as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Primary deficit as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Interest payments on public debt as % of GDP | 0 | 1 | 2 | 3 | 4 |
| Capital expenditures as % of GDP | 5 | 8 | 10 | 12 | 15 |
| Operating expenditures as % of GDP | 5 | 8 | 10 | 12 | 15 |
| Revenue from taxes as % of GDP | 10 | 12 | 15 | 18 | 20 |
| Revenue from non-tax sources as % of GDP | 5 | 8 | 10 | 12 | 15 |
| Expenditure on social security as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on health care as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on education as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on defense as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on infrastructure as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on research and development as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on culture as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on sports as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on tourism as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on environment as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on housing as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on transport as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on communication as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on energy as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on food as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on clothing as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on recreation as % of GDP | 0 | 2 | 5 | 10 | 15 |
| Expenditure on other goods and services as % of GDP | 0 | 2 | 5 | 10 | 15 |

COMPUTED BY:

DATE:

CHECKED BY.

DATE _____

MAP T-9498 N..... PROJECT NO..... Ph-59(50)..... SCALE OF MAP 1:10,000..... SCALE FACTOR 705 of 7

SCALE OF MAP 1:10,000.

PROJECT NO. Ph-59(50)

MAP T-9498 N.

SCALE FACTOR:

SCALE OF MAP 1:10,000.

PROJECT NO. Ph-59(50)

MAP T-9498 N.

| 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) | |
| MCKINLAY ss | Pricking NA Card 1927 | NA 1927 | 39 43 (362.5m) | | | 1850.5 | 362.5 | 1488.0 | |
| | | | 74 14 (1414.8m) | | | 1429.0 | 1414.8 | 14.2 | |
| 8603 ss | " | " | 336,931.01 | 1931.01 | 3068.99 | | | | |
| | " | " | 2,118,967.61 | 3967.61 | 1032.39 | | | | |
| " | " | " | 39 45 27.44 | | | | 845.26 | | |
| | " | " | 74 14 36.68 | | | | 873.13 | | |
| 1932 GP-29 | GP-29 W.T. 292-10 | " | 39 45 20.405 | | | 1850.5 | 629.3 | 1221.2 | |
| BARNEGAT | | | 74 13 19.191 | | | 1428.3 | 456.8 | 971.5 | |
| " | " | " | 336,248.28 | | | | | | |
| " | " | " | 2,125,023.10 | | | | | | |
| 9497N | | | | | | | | | |
| PP-3,1950(Temp) | nd nm | " | 333,026.6 | 3026.6 | 1973.4 | | | | |
| | | | 2,083,223.2 | 3223.2 | 1776.8 | | | | |
| Bdy Mon No 16, 1950 dm | " | " | 330,382.8 | 382.8 | 4617.2 | | | | |
| | | | 2,082,872.1 | 2872.1 | 2127.9 | | | | |
| PP-4,1950(Temp) | nd nm | " | 326,175.9 | 1175.9 | 3824.1 | | | | |
| | | | 2,082,387.5 | 2387.5 | 2612.5 | | | | |
| PP-5,1950(Temp) | nd nm | " | 318,942.3 | 3942.3 | 1057.7 | | | | |
| | | | 2,083,296.3 | 3296.3 | 1703.7 | | | | |
| 142 | | | | | | | | | |

1 FT 3048006 METER

COMPUTED BY:...

DATE _____

CHECKED BY:

DATE _____

M. 2388-12

MAP T. 9498 S.

PROJECT NO. Ph-59(50)

SCALE OF MAP 1:10,000.

SCALE FACTOR:

R No 6 of 7

[illegible]

1 ET = 3048006 METER

COMPUTED BY:

DATE: _____

CHECKED BY:

DATE _____

M-2388-12

MAP T- 9501 N PROJECT NO. Ph-59(50) SCALE OF MAP 1:10,000 SCALE FACTOR No 7 of 7

[illegible]

1 FT. = 3048006 METER

COMPUTED BY:...

DATE:

CHECKED BY:

DATE _____

Compilation Report

Stereoscopic Mapping Section
Washington Office31. Delineation:

Two stereoscopic plotting instruments were employed in the delineation of this quadrangle, the Stereoplanigraph and the Kelsh Plotter. A breakdown of areas completed by each may be found in the Data Records, page 2 of this report. The project was in the nature of a test to see how well each instrument could delineate contours in the heavy woods covering the area, a field check of the results having been planned. The control extension was first accomplished on the Stereoplanigraph and, since both instruments use the same diapositives, both were delineating simultaneously. Photo coverage and field inspection were complete and adequate.

32. Control:

Reference side-headings 3, 4, and 23.

33. Supplemental Data:

None exist other than that mentioned in side-headings 14 and 24.

34. Contours and Drainage:

No particular difficulty was encountered in the extension of control because of good photographs, excellent control identification, and an abundance of spot elevations. No areas of questionable contours are reported for the part delineated on the Stereoplanigraph but the following in the Kelsh Plotter portions are brought out for attention by the field editor.

Area 1, Model 987-988: Swamp limits and the 10 ft. contour were difficult to determine and should be checked during field edit. Checked by F.E. See F.E. report.

Area 2, Model 957-958: Contours near and where they cross the north boundary of the quadrangle are somewhat doubtful due to a scarcity and wide spacing of elevations. Contours that are quite doubtful are identified on the manuscript by dashed lines. See F.E. report and attached letter 25 Feb. 1952.

Area 3, Model 962-963: The statement made above for Area 2 applies here also. ✓

Area 4, Model 963-964: The 60 ft. contour is doubtful where it crosses the highway, route No. 40, in the vicinity of NJGCS Monuments 5616 and 5617, N 39° 43' 30" and W74° 17' 30". Contour corrected.

35. Shoreline and Alongshore Details:

Areas of shoreline inspection were very small and adequate on this quadrangle. No low water or shoal lines were located by either field or office.

36. Offshore Details:

None.

38. Control for Future Surveys:

No topo or hydro stations have been established during this survey. *Refer to item #11 for bdy. mon. described on Form 524.*

39. Junctions:

No junctions have been checked in the completion of this manuscript; other adjoining sheets are not available. *Checked during review.*

40. Horizontal and Vertical Accuracy:

Standard

46. Comparison with Existing Maps:

A comparison was made during delineation and later during review with War Department, Corps of Engineers, U. S. Army, Tuckerton Quadrangle of New Jersey N3930-W7415/15, 1:62,500 scale, edition of 1932-78 revision and reprinting of 1942. The following major differences were noted:

- a. The northwest quarter of the quad is now covered with timber where no timber was shown.
- b. Several high points were overlooked during the original survey in the area between Westecunk Creek and Old North Green Street Road.
- c. It is noted that contours close downstream on Four Mile Branch from where they are indicated on the former map.

47. Comparison with Nautical Charts:

- a. USC & GS Chart 825, New Jersey, Intracoastal Waterway, Manasquam Inlet to Little Egg Harbor, 1:40,000, published July 1946(4th edition), last revised 20 March 1950.
- b. USC & GS Chart 1216, Sea Girt to Little Egg Inlet, 1:80,000, published January 1940 (9th edition) last revised 14 August 1950.

48. Geographic Name List:

See separate two pages following, form M234.

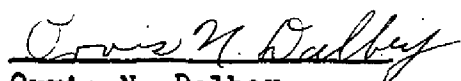
49. Notes for the Hydrographer:

None.

50. Compilation Office Review:

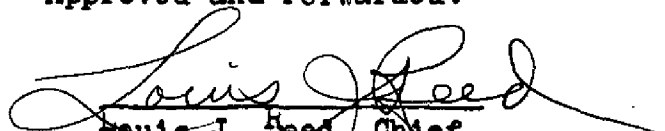
See T-2 form following.

Submitted by:



Orvis N. Dalbey
Cartographer-Photogrammetric

Approved and Forwarded:



Louis J. Reed, Chief,
Stereoscopic Mapping Section,
Washington, Office.

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9497

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. Orvis M. Dalbey
Reviewer

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

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.

Inoqueline B. Phillips
Compiler

Frank J. Tareza
Supervisor

43. Remarks:

SPECIAL REPORT ON FIELD INSPECTION
OF BUILDINGS

Quadrangle T-9497, Project Ph-59(50)

November, 1951

1. Authority

This report is being submitted in accordance with paragraph 9 of Supplemental Instructions No. 1, dated 22 June 1950, for Project Ph-59(49).

2. Eastern Half of T-9497N

There was no field inspection of the buildings in this quarter of the quadrangle. The delineation of the buildings was found to be accurate in direct proportion to their visibility on the field photographs. A few cases were found where buildings, obscured by trees, were omitted. The classification of the buildings was accomplished entirely by the field editor. This method could be used to advantage in beach areas with few trees and where nearly all buildings are class one.

3. Western Half of T-9497N

The buildings were field inspected in accordance with Photogrammetry Instruction No. 29 within this area, and the obscure buildings were circled. This method worked out very well, as there were but few changes to be made by the field editor. However, the test is not conclusive as the buildings in the area are very sparse.

4. Eastern Half of T-9497S

In this area, all buildings were circled and classified by the field inspector. However, no buildings were marked for deletion. This makes a lot of work for the field inspector and clutters up a photograph where there is a density of buildings; at times making it unreadable.

5. Western Half of T-9497S

The buildings in this area were field inspected in accordance with Photogrammetry Instructions No. 29. There were very few buildings within this area so that the results of the test are rather indeterminate.

6. Conclusion

The density of the buildings in the eastern sections was so much greater than the western sections that it is difficult to make direct comparisons. However, it is felt that some form of field inspection of buildings should be made at the time of field work, and not leave it all to the field editor. There is not much point in mapping buildings, only to delete them later. Neither is there much point in circling every building to be mapped, as nine tenths of them are obvious. This not only takes time but clutters up a photograph. It is believed that all class 2 buildings should be so noted, and buildings partially obscured by trees should be circled, and those entirely obscured by trees should be plotted on the photographs. All deletions should be made on the photographs. By this method, the map should be nearly correct before field edit.

However, there is a tendency on the part of field inspectors to overemphasize the obvious, and pass over lightly things of a marginal nature that require a little thought and judgment in making appropriate field notes. I am trying to get the point across that most of the time of field inspection should be spent on details that are not clear on the photographs rather than the obvious. The inspectors have been instructed to examine the pictures through the compiler's eyes, and if some feature is not clear or self-evident, to make appropriate notes, and to make decisions on marginal features, while looking at them on the ground. As we become more proficient in the art of field inspection, it is believed that the compilation of buildings with the field notes, as outlined above, should offer no great problem to the compiler.

Respectfully submitted,

Harry F. Garber

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

FIELD EDIT REPORT
Quadrangle T-9497
Project Ph-59(50)

Harry F. Garber, Chief of Party

The field edit of this quadrangle was accomplished during the months of October and November, 1951.

51. METHODS

Inspection of the quadrangle was accomplished by traversing all passable roads by truck, and by walking to other areas which required special attention. Standard surveying methods were employed in addition to visual inspection for additions and corrections.

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

One 1:20,000 scale field edit sheet and four 1:10,000 scale sheets with vertical profile tests are submitted with the field edit information.

52. ADEQUACY OF COMPILATION

The map compilation was adequate, with the exception of a few corrections and additions.

On the portions of the quadrangle where initial field inspection was accomplished, the corrections and additions were largely due to new construction or razing of buildings. In the northeast corner of the quadrangle, where no field inspection was undertaken, a few buildings not readily discernible on the photographs have been added. Attention is invited to "Special Report on Building Classification" submitted with this report.

The firebreaks, which have been questioned on the discrepancy print, should be deleted. The firebreaks are covered with a heavy growth of young trees and brush and are hardly discernible on the ground. They are no longer effective as firebreaks.

Mr. T. T. Taylor of Brant Beach, New Jersey, who ran the boundary line between Union and Stafford Townships in 1932, has verified that this line does turn at the monument in the northeastern portion of the quadrangle and does not continue as indicated on the discrepancy print. It was noted on the official county map of Ocean City that the line continued straight at this point, but according to Mr. Taylor, the county map is in error.

Many changes were made in the swamp delineation along the southeastern portion of the quadrangle. The area is covered chiefly with gum trees and a few scattered pines. The land is spongy but not always covered by water. The new swamp line has been indicated in purple on the photographs.

53. MAP ACCURACY

The horizontal positions of the map details in general appear to be excellent.

Two vertical accuracy tests were run along the western edge of the quadrangle on 1:10,000 scale double-weight matte prints. The tests proved the contours in this area to be of excellent quality. Of the 155 points tested, 66% were in error 1 foot or less; 28% were in error 1 foot to 1/2 contour interval; and 6% were in error 1/2 contour interval to 1 contour interval. See attached Vertical Accuracy Test Report.

Two profiles were run along the northern portion of the quadrangle on 1:10,000 scale double-weight matte prints to determine contour discrepancies which were noted by the stereoscopic mapping section. The two traverses are referred to in this report as Vertical Profile No. 1 and No. 2. Vertical Profile No. 1 proved to be basically correct, but on Profile No. 2 a decided error was noted. The instrument operator has dropped a contour interval along latitude $39^{\circ}44'45''$ and the error exists from approximate longitude $74^{\circ}20'30''$ eastward. An additional line along a trail to the east was run to assist the office compiler. It is believed that with the elevations shown, the contours can be corrected.

Attention is called to several active borrow pits within the quadrangle. The field editor has shown the lowest elevation, as well as the lowest depression contours within the areas. They have also been labeled "Active".

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Mr. T. T. Taylor, civil engineer and surveyor who has been a resident in this area for forty years, states that he will be willing to examine the proof copy of this quadrangle for possible errors. Mr. Taylor's address is: Brant Beach, New Jersey.

15 November 1951

Submitted by:

Joseph K. Wilson 1272.
Joseph K. Wilson,
Cartographer

20 November 1951

Approved by:

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

VERTICAL ACCURACY TEST REPORT

Quadrangle T-9497
Project Ph-59(50)

This is a report of the results of the two vertical accuracy tests in this quadrangle. Included in this report is the tabulation of the results of two vertical profiles run in the northern portion of the quadrangle to determine discrepancies noted by the compiler.

These planetable traverses originated and terminated on level points established at road intersections. All traverses were run on a copy of the 1:10,000 scale double-weight matte prints.

Vertical Accuracy Test No. 1

A total of 2 lineal miles was traversed by planetable to test 75 points on contours. The horizontal closure was negligible. The vertical closure was 0.2 foot and no adjustment was made.

The results of the 75 points tested are as follows:

73% were in error 1 foot or less; and
27% in error 1 foot to 1/2 contour interval.

Vertical Accuracy Test No. 2

A total of 2.3 lineal miles was traversed by planetable to test 80 points on contours. The horizontal closure was negligible. The vertical closure was 0.3 foot and no adjustment was made.

The results of the 80 points tested are as follows:

67% were in error 1 foot or less;
28% in error 1 foot to 1/2 contour interval; and
5% in error 1/2 to 1 contour interval.

Vertical Profile No. 1

A total of 1.8 lineal miles was traversed by planetable to test 56 points on contours. The horizontal closure was negligible. The vertical closure was 0.5 foot and appropriate adjustment was made.

The results of the 56 points tested are as follows:

68% were in error by 1 foot or less;
25% in error by 1 foot to 1/2 contour interval; and
7% in error by 1/2 to 1 contour interval.

Vertical Profile No. 2

A total of 2.8 lineal miles was traversed by planetable to test contours. Since a noticeable error was found to exist, no tabulation was compiled for this report.

It is believed that with the elevations shown on the profile sheet, the office compiler can correct the contours. All contours shown in red on this sheet are approximate and the office compiler should not hesitate to make changes.

15 November 1951
Submitted by:

Joseph K. Wilson
Joseph K. Wilson, *H.F.S.*
Cartographer

20 November 1951
Approved by:

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

VERTICAL ACCURACY TEST REPORT
QUADRANGLE T-9497
PROJECT PH-59

This report is on vertical accuracy of contours as accomplished by the stereoscopic instruments, in the Washington Office, in the eastern half of quadrangle T-9497 and a small portion of T-9498 and T-9501, as shown on four sheets labeled "Vertical Accuracy Test Sheet A, B, C & D" which are a part of this report.

A total of approximately 6.4 lineal miles was traversed by plane-table methods to test 99 points on contours in 8 different sections. These tests originated and terminated at either horizontal control stations with elevations or acute road intersections with elevations.

The horizontal closures were negligible except on sheet D where it was 25 feet. This sheet (D) is of light weight paper and the bad horizontal closure was attributed to paper distortion. The point of closure is labeled on the sheet and no adjustment was made. The greatest error in vertical closure was 0.4 feet, and no adjustment was made.

The tests proved that of the 99 points tested 52% were in error by 1 foot or less; 32% were in error by 3 feet or less and 16% were in error more than 3 feet but not more than 5 feet ($\frac{1}{2}$ contour interval). Two small isolated contours (tops) were omitted, One on sheet A, the other on sheet C.

52 %
32
16
100 %

This report does not cover the sheet that was returned to the Washington Office by Mr. B. G. Jones, which was dealt with separately.

Submitted by:

3 Nov. 1950

George E. Varnadoe
George E. Varnadoe
Cartographic Engineer

Approved by:

3 Nov. 1950

Harry F. Garber
Harry F. Garber
Chief of Party

24 78
POST OFFICE ADDRESS:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
P.O. Box 109,
Pleasantville, New Jersey

TELEGRAPH ADDRESS:

25 February 1952

EXPRESS ADDRESS:

To:: Chief, Division of Photogrammetry
U.S. Coast & Geodetic Survey
Department of Commerce
Washington 25, D. C.

Subject: Recontouring of T-9497, Project Ph-59
Reference your letter of 6 December 1951.
78-mkl

In compliance with your letter of 6 December 1951, the re-contouring of T-9497 has been completed.

The work was accomplished on a section of a double weight matte print (1:10,000 Scale), that has been labeled "Vertical Profile No. 3".

A traverse has been run by planetable along the northern limits of the quadrangle between longitudes 74°-18'-30" and 74°-22'-00". Also several lines were run throughout the sub-standard area. All planetable traverses originated and terminated on level points established at road intersections or bench marks. All horizontal closures were good and on none of the lines was the vertical closure more than 0.5 foot.

It was found that, except for a few instances, the contours were in error about one-half contour interval on this part of the sheet. It was also found that the shapes of the contours, as delineated by the Kelsh Plotter, were very good. In view of this, the field editor has made his corrections directly on the 1:10,000 scale section.

An effort was made along the northern limits, to assure that the details will unquestionably join any subsequent quadrangle mapping to the north, and it is also believed that the junction to the south has been now made satisfactory and will meet our accuracy requirements.

It is desired to bring to your attention the fact that this entire area is covered by a very dense growth of scrub pine and oak trees and that the planetable contouring has been therefore an unduly slow process.

CC: Comdr. Taylor

Joseph K. Wilson
Joseph K. Wilson
Sub Chief of Party

GEOGRAPHIC NAMES

Survey No.

T-9497
North Half

Name on Survey

Page 18

| | 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 | | |
| BASS RIVER STATE FOREST | | | | | | | | | | 1 |
| CEDAR RUN | | | | | | | | | | 2 |
| EAGLESWOOD | (township) | | | | | | | | | 3 |
| EGG HARBOR | (") | | | | | | | | | 4 |
| EIGHT MILE BRANCH | | | | | | | | | | 5 |
| FOUR MILE BRANCH | | | | | | | | | | 6 |
| MILL CREEK | | | | | | | | | | 7 |
| MANAHAWKIN | | | | | | | | | | 8 |
| MANAHAWKIN LAKE | | | | | | | | | | 9 |
| STAFFORD | (township) | | | | | | | | | 10 |
| TUCKERTON WARREN GROVE ROAD | | | | | | | | | | 11 |
| UNION | (township) | | | | | | | | | 12 |
| WARREN GROVE | | | | | | | | | | 13 |
| West Creek | | | | | | | | | | 14 |
| Lakeside Speedway | | | | | | | | | | 15 |
| U.S. 9 and N.J. 4 | | | | | | | | | | 16 |
| N.J. 540 | | | | | | | | | | 17 |
| | | | | | | | | | | 18 |
| | | | | | | | | | | 19 |
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| | | | | | | | | | | 26 |
| | | | | | | | | | | 27 |

Names underlined in red
are approved, prior to
Field Edit 9-12-51

L. Heck

Rechecked 9-24-52

H. Quimby

Review Report T-9497
Topographic Map
29 September 1952

62. Comparison with Registered Topographic Surveys.-

| | | |
|---------|----------|------------------------|
| T-119 | 1:20,000 | 1840-41 |
| T-1315a | 1:20,000 | 1872 |
| T-5443 | 1:10,000 | 1932 |
| T-5446 | 1:10,000 | 1932 |
| T-6399 | 1:10,000 | 1935 (Graphic Control) |

T-9497 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.

64. Comparison with Contemporary Hydrographic Surveys.-

None

65. Comparison with Nautical Charts.-

825, 1:40,000, Intracoastal Waterway, ed. 1946, Corr. to
5/14/51.
1216, 1:80,000, ed. 1940, Corr. to 4/23/51

There are no significant differences between the map
and the charts.

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. Results of the vertical accuracy tests which are summarized in the attached field edit report are satisfactory. This map complies with the National Standards of Accuracy. ✓

67. Delineation.-It is to be noted that the division between swamp and trees on this map manuscript has been shown by the curlicue tree symbol instead of the conventional dashed line. The divisions within the cranberry bogs are symbolic and do not necessarily indicate actual drainage patterns.

Reviewed by:

K. N. Maki
K. N. Maki

Approved:

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

W. S. Swanson
Chief, Div. of Photogrammetry
4 May 1956

H. Edmonston
Chief, Nautical Chart Branch
Div. of Charts *CFW*

J. B. Hull
Chief, Div. of Coastal Surveys

History of Hydrographic Information
Quadrangle T-9497S

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

Depths in feet and the depth curve at 6-feet - mean low water datum - originate with the following:

U.S.C. & G.S. Hydrographic Surveys:
H-6215 (1936) 1:10,000

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

K. N. Maki

K. N. Maki
Div. of Photogrammetry
27 March 1953