

8756

Diag'd. on Diag. Ch. 294

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT
Canton

Type of Survey Topographic-Photogrammetric

Field No. Office No. T-8756
Project No. PH-7(46)C

LOCALITY

State New Jersey

General locality Delaware River & Bay

Locality Bayside to Hope Creek

194 7

CHIEF OF PARTY

Thos. B. Reed

LIBRARY & ARCHIVES

DATE June 21, 1948

8756

DATA RECORD

T- 8756

Quadrangle (II): Canton Project No. (II): Ph-7(46)

Field Office: Camden, N.J. Chief of Party: E. L. Jones

Compilation Office: Chief of Party:
Baltimore Photogrammetric Office Thos. B. Reed

Instructions dated (II III):
25 March 1946
19 July 1946

Copy filed in Descriptive
Report No. T- (VI)
Division of Photogrammetry
Office Files.

Completed survey received in office:
8 April 1948

Reported to Nautical Chart Section:

Reviewed: 27 May 1948 Applied to chart No. Date:

Redrafting Completed:

Registered: 10 June 1948 Published:

Compilation Scale: 1:20,000 Published Scale: 1:24,000

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927 Datum Plane (III): MSL

Reference Station (III): ARNOLD, 1933

Lat.: Long.: Adjusted
39° 23' 15.30" 471.9 m 75° 25' 41.160" 985.0m ~~520.0m~~

State Plane Coordinates (VI):

N.J. State Grid:

X = 1,784,779.64 Feet Y = 202,773.25 Feet.

Delaware State Grid:

X = 496,768.30 Feet Y = 505,351.22 Feet.

Military Grid Zone (VI)

PHOTOGRAPHS (III)
75th meridian

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
15570	3/21/46	1120	1:20,000	6.1' above MLW
15571	3/21/46	1120	1:20,000	6.1' above MLW
15585	3/21/46	1220	1:20,000	6.5' above MLW
15586	3/21/46	1220	1:20,000	6.5' above MLW
46D1523 to 46D1532 incl..	3/1/46	13:44 to 13:50	1:16,000	0.3' to 1.8' above MLW. (see descriptive reports for T-8779 and T-8781)

Tide from (III): Actual tide observation at Philadelphia, Pa. with correction to Liston Point to Woodland Beach.

Mean Range: 5.7'

Spring Range: 6.4'

Camera: (Kind or source) US. Coast and Geodetic Survey nine lens camera.
Focal length 8 1/4"

Field Inspection by: E.L.Jones

date: April to Aug. 1946

Field Edit by: Donald G. Flippo

date: Feb to Mar. 1948

Date of Mean High-Water Line Location (III): Same as date of photographs supplemented by field inspection.

Projection and Grids ruled by (III) T.L.Jansen

date: 4 Oct. 1946

" " " checked by: T.L.Jansen

date: 4 Oct. 1946

Control plotted by: L.A.Senasack

date: 25 Oct. 1946

Control checked by: G.O.Fellers

date: 25 Oct. 1946

Radial Plot by: F.J.Tarcza

date: Dec. 1946

Detailed by: J.C.Richter

date: Oct. and Nov. 1947
Dec. 8 to 20 1947

Reviewed in compilation office by: Raymond Glaser

date: Dec. 3, 4, 5, 1947
Dec. 23, 24, 26, 1947

manuscript
Elevations on ~~field notes~~
checked by: Raymond Glaser

date: Dec. 23, 24, 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 43

Shoreline (More than 200 meters to opposite shore): 8.8 statute miles

Shoreline (Less than 200 meters to opposite shore): 53.9 statute miles
Measured along centerline of stream.

Number of Recoverable Topographic Stations established: 3

Number of Temporary Hydrographic Stations located by radial
plot: none

Leveling (to control contours) - miles: 35 linear

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

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

Remarks:

F-8756

39°30'

39°30'

75°30'

75°22.6

Howell

Hundley

Delaware Bay



Contoured by
J. E. Hundley



Contoured by
J. S. Howell

75°30'

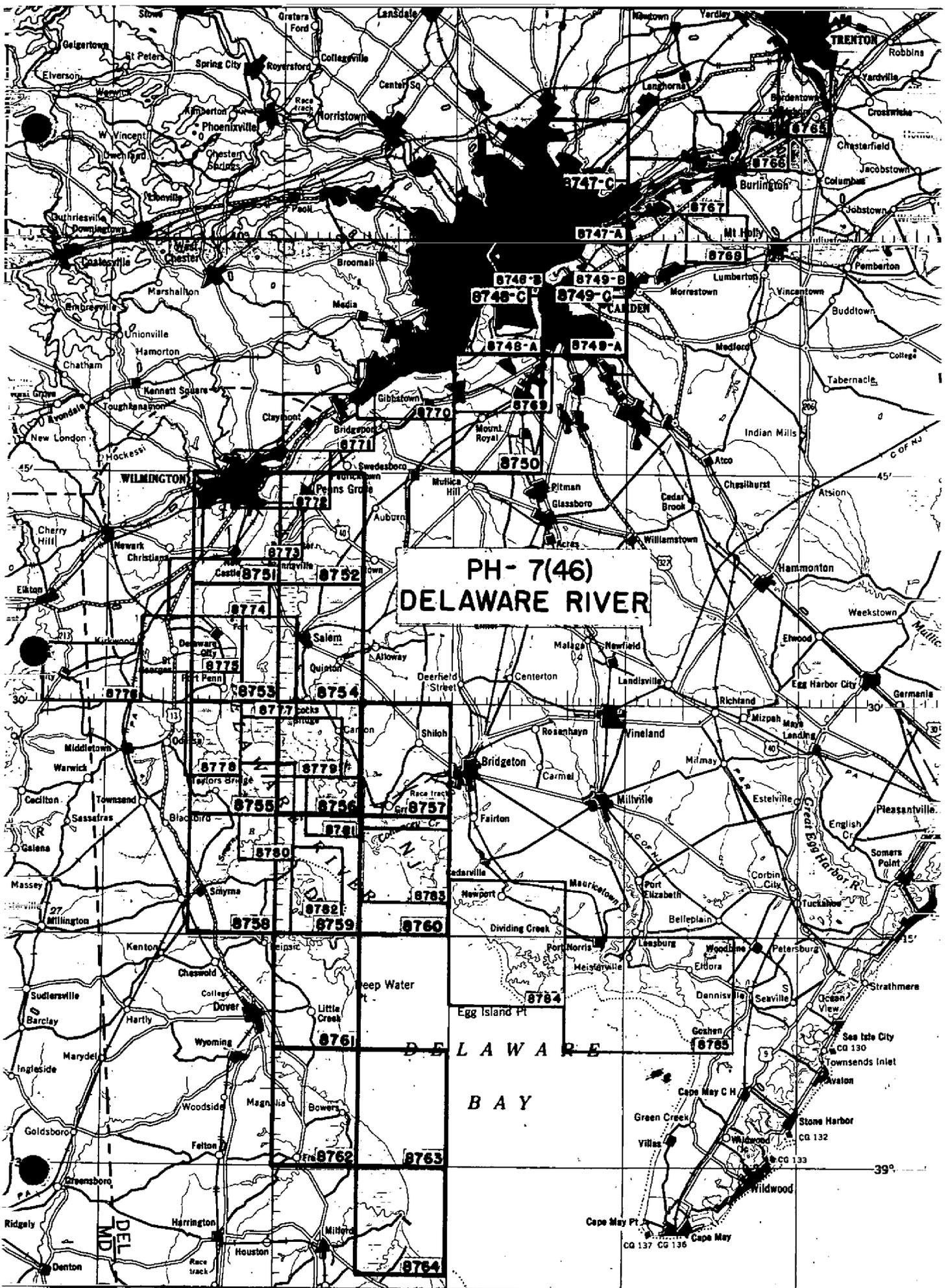
75°22.5

39°22.5

39°22.5

PH- 7(46)
DELAWARE RIVER

DELAWARE
BAY



ABBREVIATIONS FOR FIELD INSPECTION PHOTOS
Project Ph-7 (46)
10 May 1946

ROADS

Rd - road
X - abandoned (delete)
RR - railroad track
RR(2) - railroad, 2 tracks

SEAPLINE

MHW - mean highwater
MLW - mean low water
M - marsh
Mud - mud
S - sand
Rky - rocky
Rk - rock
Dk - dock
Jet - jetty
Bkhd - bulkhead

STREAMS, PONDS

D - large ditch
DX - small ditch (delete)
Cr. - creek
P - pond

OBSTRUCTIONS TO NAV

Shl - shoal
Cov - covers
Wk - wreck
Subm - submerged
Dol - dolphin
Pile - pile

VEGETATION

Gr - grass
WH - woods, hard wood
WS - woods, soft wood
WM - woods mixed
B - brush
SH - scattered hardwood
SS - scattered softwood
O - orchard

BUILDINGS

d - dwelling
b - barn
Bo Ho - boat house

BUILDINGS (con'td)

Ch - church
C.H. - courthouse
P.O. - post office
Sch - school
R R Sta - railroad station
Hosp - hospital

LANDMARKS & AIDS TO NAV:

TK - tank
TK(ELEV) tank elevated
Stk - stack
En - beacon
Lt - light
Rg - range
F Rg - front range
R Rg - rear range
Chy - chimney
Cup - cupola
Spipe - stand pipe
Gab - gable

BOUNDARIES

Bdry - boundary
Cem - cemetery
F - fence

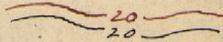
BRIDGES

Br - bridge
Culv - culvert
Cl - clearance
Hor - horizontal
Ver - vertical (above MHW)
Wo - wood
Conc - concrete

STATIONS

BM - bench mark
T Sta - topo station
S Sta - substitute station
TBM - tidal bench mark
(d) - described
(dm) - described and marked

SYMBOLS
Project Ph-7 (46)
29 April 1946

MEAN HIGH WATER LINE (fast line).....	-----
OFF SHORE EDGE OF MARSH (apparent shoreline).....	-----
GRASS IN WATER.....	Gr
IN SHORE LIMITS OF MARSH.....	-----
MEAN LOW WATER LINE (definite).....	-----
APPROXIMATE MEAN LOW WATER LINE.....	-----
INTERMITTANT DRAINAGE.....	-----
PERENNIAL DRAINAGE.....	-----
CONTOURS.....	
PLANE TABLE ELEVATIONS FOR CONTOURS.....	X17 or X17
FLY LEVEL ELEVATIONS.....	— CE 12
BENCH MARKS, marked and described.....	OJ-16, 1940 (dm)
TOPO STATIONS, natural object, described.....	— T. Sta. (d) GILL, 1946
TOPO STATIONS, marked and described.....	— T. Sta. (dm) MINK, 1946
TOPO STATIONS, additional Hydro Control, not named.....	— T. Sta. #8703
LANDMARKS.....	— Landmark: STACK, metal (55' high)
FIXED AIDS TO NAVIGATION, (official light list name).....	— CHERRY PT. LT. 13
TRIANGULATION STATIONS.....	— A SMITH, 1940
SUBSTITUTE STATIONS.....	— S. Sta. A SMITH, 1940
BOUNDARIES: Refer to U.S.C.S. Bulletin 788 E for symbol, ink in purple or violet ink.	

FIELD INSPECTION REPORT
T 8756 (39° 22.5' / 75° 22.5' / 7.5')
Project Ph-7 (46)
Sub-project C
E. L. Jones, Chief of Party

All phases of field work were completed in accordance with the Director's Instructions, Project Ph-7 (46), dated 25 March, 1946, and Supplemental Instructions No. 1, dated 14 June, 1946, except for deviations herein noted.

Filed in Division of
Photogrammetry
Office Files.

The writer, James E. Hundley, Sr. Photo Aid, completed all phases of field work except for about 10% of the contouring which was done by John C. Howell, Topo. Engineer, (indicated on the attached sketch).

1. Description of the Area:

The area, located on the eastern shore of Delaware Bay, about midway between Philadelphia and Cape May, is, for the most part, undulating with the elevation ranging from sea level to slightly over 100 feet above mean sea level.

The principal industries are agriculture, fishing, and muskrat trapping. In the past, the chief means of transportation was by water, now greatly supplemented by fast motor trucks to transport perishable products.

Geologically, the country is old with no particular drainage pattern in flood plains bordering the tidal zone; however, in the northeasterly portion of the quadrangle, the drainage pattern is more pronounced. In many places along the bay there is considerable shoreline erosion; an investigation indicated that during the past 13 years it has eroded about 35 feet.

2. Completeness of Field Inspection:

Field inspection is felt to be adequate and complete. For full details refer to appropriate paragraph headings below.

3. Interpretation of the Photographs:

Two sets of photographs were used, single lens 1/10000 scale contact prints, for shoreline inspection and horizontal control identification, and 9-lens 1/20000 scale photos for vertical control identification, contouring, and interior inspection.

Since photography was of the first part of March, 1946, no difficulty was encountered in the interpretation of photographic details for the various phases of the work. All photographs filed in Division of Photogrammetry General Files.

4. Horizontal Control:

Four horizontal control stations were recovered. All were identified on the photographs, either by swinging arcs or pricked direct.

5. Vertical Control:

Vertical control consisted of recovery and identification of existing bench marks on 9-lens photographs, and establishing 4th order levels.

Recovery:

All USC&GS bench marks were searched for, and where New Jersey Geodetic Control Survey monuments existed, they were ~~were~~ recovered at about half mile intervals.

Levels:

About 35 linear miles of 4th order levels were completed during the month of May, 1946, by wye leveling methods, carrying elevations to the nearest .01 of a foot. Average error of closure was 0.14 feet and maximum error of closure was 0.42 feet. J. H. Dorsey, Photo Aid, was trained on the quadrangle by Hundley and was responsible for about 30% of the 4th order levels.

6. Contours and Drainage:

Contouring was started May 20, 1946, by the writer and completed August 5, 1946, by John C. Howell, Topographic Engineer. (See sketch for areas by each man.)

Contouring was done in the field directly on 1/20000 scale 9-lens photographs by planetable methods. The contour interval was 10 feet; all work was done as near the center portion of the photos as possible to minimize distortion and large scale changes.

Preliminary to field work a stereoscopic examination of the photographs was made; drainage was delineated and other data entered on the photos. After field work was completed, another stereoscopic examination was made to check the shapes of contours.

The pedograph and hand level were used to good advantage in wooded areas to supplement planetable control.

7. Mean High Water Line:

The average range of tide is 5.8 ft. at Bayside, N.J.

8. Low Water Line:

In general the low water line was not delineated because of the difficulty of viewing the shoreline at low water. Where such visits were practicable, it was generally noted that the low water line and apparent shoreline coincide because most banks are perpendicular to the water. In a few instances, the low water line was found to be outside the apparent shoreline because storms, causing the banks to slough off, created a mud plain.

9. Wharves and Shoreline Structures:

No comment necessary.

10. Details Offshore from High Water Line:

Small islands, approximately 60 Meters in diameter, bare at MHW, appear offshore near the mouth of Hope Creek, Alder Cove, and Bayside. They are covered with marsh grass and are plainly visible at MHW within a reasonably close distance.

Fishing Creek.
Island near mouth of Hope
Creek falls in limits of T-8755.

11. Landmarks and Aids to Navigation:

There are no new landmarks. Charted landmarks were verified and are shown on attached Form No. 567. Copy attached.

12. Hydrographic Control:

Tan, 1946
Mag, 1946
Nay, 1946

Three recoverable topographic stations were established, pricked on the photographs, and described on Form No. 524.

Filed in Division of
Photogrammetry General
Files.

13. Landing Fields and Aeronautical Aids:

One small private landing field appears in the southeastern part of the quadrangle. The field has grass runways and will accommodate only the smallest of aircraft. No aeronautical aids exist within limits of the quad.

14. Road Classification:

No comment necessary.

15. Bridges:

There are no bridges over navigable waters.

16. Buildings:

No comments necessary.

17. Boundaries:

No comments necessary.

18. Geographic Names: ^{8/14 ✓}

Geographic name information was obtained by the author while contouring. All geographic name information will be compiled into a special report prepared by Lowell I. Bass, Engineering Aid.

19. Coast Pilot Information:

Coast Pilot information was investigated during the course of field work; and a special project report compiled by George E. Varnadoe, Photogrammetrist. Report not submitted.

Submitted 3 September, 1946

James E. Hundley
James E. Hundley,
Sr. Photo Aid

Approved 6 September, 1946

Edmund L. Jones
Edmund L. Jones,
Chief of Party

COMPILATION REPORT

QUADRANGLE - CANTON

SURVEY No. T-8756

T-8756 (Canton Quadrangle) is one of ten topographic manuscripts in Project PH-7(46)C located along the Delaware River and Bay. These surveys are to be compiled in accordance with instructions dated 25 March 1946 and July 1946 by graphic photogrammetric methods.

All instructions filed in Division of Photogrammetry Office Files.

26. CONTROL

See radial plot report for layout of control in this area. A list of stations on Form No. M-2388-12 is included in this report.

27. RADIAL PLOT

Refer to the report for the combined radial plot covering the areas of T-8755 to T-8759 inclusive submitted to the Washington Office, 26 February 1947. See also reports for combined radial plots covering the areas of T-8777 to T-8779 (scale 1:10,000) submitted to the Washington Office 24 June 1947 and for the areas of T-8780 to T-8782 (scale 1:10,000) submitted to the Washington Office 7 March 1947.

28. DELINEATION

Radial plot reports filed in Division of Photogrammetry attached Desc. Report T-8755 General Files.

The compilation is in accordance with written instructions pertaining to Project PH-7(46) dated 19 July 1946.

The mean high water line bordering along the Delaware River and Delaware Bay as delineated on the quadrangle was traced from three (3) shoreline manuscript reproductions: the southeastern corner of Survey T-8777, the southeastern half of Survey T-8779 and the northwestern portion of Survey T-8781.

For pertinent information relative to delineation of shoreline area, refer to Descriptive Reports No. T-8777, T-8779, T-8781, and to the respective shoreline surveys which show the shoreline features at a larger scale.

Contours and elevations were traced from field photographs.

29. SUPPLEMENT DATA

Map of New Jersey - Delaware Boundary in Delaware River and Bay to accompany the decree of the Supreme Court of the United States dated March 30, 1935 by Sherman and Sleeper, Engineers

Filed in Division of Charts

30. MEAN HIGH WATER LINE

All of the mean high water line not covered by shoreline surveys and not identified by the field party has been delineated in the compilation office after stereoscopic examination of the photographs. (See paragraph 28 above). Shoreline has been brought into agreement with field inspection. See review report.

31. MEAN LOW WATER LINE:

Only that portion of the mean low water line identified by the field party has been delineated on the map manuscript.

Approximately 35% of the mean low water line has been shown.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

Several small islets located at the mouth of Stow Creek, Lower Deep Creek, Fishing Creek and at Alder Cove are awash at MHW.

Three (3) wrecked ships located south of Arnold Point are awash at MHW.

See also paragraph 10 of the field report.

33. WHARVES AND SHORELINE STRUCTURES:

Delineated in accordance with field photographs.

34. LANDMARKS AND AIDS TO NAVIGATION:

See form No. 567 attached to the field report. Copy attached to this report.

35. HYDROGRAPHIC CONTROL

None shown

See descriptive report for Shoreline Survey No. T-8781 for location and description of two (2) photo hydro stations.

36. LANDING FIELDS AND AERONAUTICAL AIDS

See paragraph 13 of the field report.

37. GEOGRAPHIC NAMES

Geographic names have been taken from the final names standards dated 12-9-46. A list of geographic names is attached to this report. Approved by L. Heck, Geographic Names Section, Division of Charts.

38. JUNCTIONS

Junction has been made with Survey No. T-8754 to the north and Survey No. T-8757 to the east and are in agreement except for the contours noted on overlay for correction by the field edit party. Junction has been made with

38. JUNCTIONS (Continued)

Survey No. T-8759 to the south and Survey No. T-8755 to the west and are in agreement.

39. DISCREPANCY OVERLAY

Descriptions and explanatory notes concerning doubtful topographic features have been shown on the discrepancy overlay.

40. BRIDGES

No comments

41. BOUNDARIES

All boundaries with exception of New Castle and Kent County, N.J.- Delaware Boundary have been shown on the map manuscript in accordance with field identification thereof. The two (2) excepted boundaries were plotted on map manuscript from legal description furnished compilation office.

No legal descriptions were furnished for the following:

Stow Creek Township
Lower Alloways Creek Township

Descriptions available
in Division of Photogrammetry,
General Files.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Survey No. T-8756 has been compared in detail with the War Department, Corps of Engineers, U. S. Army, Shiloh, New Jersey-Delaware Quadrangle, scale 1:62,500 and found to be in fair agreement.

45. COMPARISON WITH NAUTICAL CHARTS

Survey No. T-8756 has been compared with Nautical Chart No. 294, scale 1:40,000, published September 1943 (10th edition) (First Edition, 1895) corrected to 13 July 1946, and Nautical Chart No. 1218, scale 1:80,000, published January 1942 (8th Edition) (First Edition 1913), corrected to 13 July 1946.

The following topographic information shown on the map is of sufficient importance to warrant immediate application to the chart:

None

The following topographic details above the plane of mean high water are not shown on this manuscript, but are believed to still exist and should be carried forward on this chart:

None

Low water features are shown in part and will be completed by the hydrographic party.

Minor changes in cultural and shoreline details shown on this manuscript need no special discussion.

Respectfully submitted
23 December 1947

John C. Richter
Engineering Aid
Compilation and Descriptive Report

Raymond Glasser
Cartographer
Photogrammetric Office Reviewer

Harry P. Rudolph
Supervisor

Approved and forwarded
7 January 1948

Thos BORD
Officer in Charge
Baltimore Photogrammetric Office

Field Edit Report of Map Manuscript T-8756
Project Ph-7(46)
R. J. Sipe, Chief of Party

The field edit of this quadrangle was accomplished during the period 9 February to 13 March 1948 by Donald G. Flippo, Photogrammetric Aid. All work was done in accordance with the field edit instructions for project Ph-7(46), dated 24 August 1945 and supplemental field instructions.

14. Road Classification: Roads were reclassified in accordance with Amendment to Photogrammetry Instructions No. 10, dated 24 October 1947.

17. Boundary Monuments and Lines: The descriptions for the county and township lines in this quadrangle will be found in the legal descriptions for quadrangle T-8757. Filed in Division of Photogrammetry General Files.

46. Methods: All delineated features such as roads, structures, drainages, and contours were checked either visually by driving along roads or trails or by planetable method.

Delineation and some additions were made directly on the field edit print. Some additions and corrections were noted on the photographs with a reference to the photograph on the field edit print. A legend of the symbols and the colored ink used during the field edit is on the field edit prints.

47. Adequacy of the Compilation: Several outbuildings had been compiled but these have been deleted or left with regards to size according to instructions. Many structures were added and many contour corrections have been shown on the photographs also noted on the map manuscript.

The relative position of compiled detail was found to be entirely satisfactory. With the addition of the field edit data to the manuscript, this map will be complete and accurate

48. Accuracy Tests: One vertical accuracy test was made in this quadrangle. It is thought that this map will meet the vertical accuracy requirements.

The field edit party has made no attempt to verify the horizontal accuracy of this map.

49. Review of First Proof: The gentleman named below has expressed his willingness to review the first proof.

Mr. James S. Sparks, C.E.
Grant Street
Salem, New Jersey

Respectfully submitted

Donald G. Flippo

Donald G. Flippo
Photogrammetric Aid
13 March 1948

GEOGRAPHIC NAMES

- Alder Cove ✓
- Alloway Creek Neck Road ✓
- Arnold Point ✓
- Bacons Neck ✓
- Bacons Neck Road ✓
- Bay Side ✓
- Buck Horn Road (one word per my sister)
- Bucks Ditch ✓
- Canton ✓
- Canton Baptist Church
- Canton Drain ✓
- Canton Road ✓
- Cat Gut ✓
- Cherry Tree Creek ✓
- Cumberland Causeway ✓
- Cumberland County ✓
- Davis Mill ✓
- Delaware ✓
- Delaware Bay ✓
- Delaware River ✓
- Devils Gut ✓
- Fishing Creek ✓
- Garrison Corner ✓
- Garrison Corner Road ✓
- Goose Pond ✓
- Grandad Meadows ✓
- Greenwich Airport ✓
- Greenwich Township ✓
- Gum Tree Corner ✓
- Hancocks Bridge Rd. ✓
- Harmersville ✓
- Hope Creek ✓
- Jacobs Creek ✓
- Kent County ✓
- Bacon's Neck School (not on manuscript)
- Little Creek ✓
- Locust Meadow ✓
- Long Bridge Road ✓
- Long Pond ✓
- Lower Deep Creek ✓
- Mad Horse Creek ✓
- Malapartis Creek ✓
- Maskell Mill ✓
- Maskell Mill Harmersville Road ✓
- Muddy Creek ✓
- New Castle County ✓
- New Jersey ✓
- Newport Meadows ✓
- Othello Road ✓
- Oyster Cove ✓
- Pattys Fork ✓
- Phillips Creek ✓
- Pine Island ✓
- Raccoon Ditch ✓
- Salem County ✓
- Shore Ditch ✓
- Silver Lake Fork ✓
- Silver Lake Meadow ✓
- Solters Creek ✓
- Stathems Neck ✓
- Stow Creek ✓
- Stow Creek Landing ✓
- Stow Creek Township ✓
- Stow Neck Road ✓
- Stretch Point ✓
- Tattletown Jericho Road ✓
- Terrapin Gut ✓
- Three Corner Bridge (see manuscript)
- Turners Fork ✓
- Upper Deep Creek ✓
- Willis Corner ✓

Add:

- Denn Branch ✓
- Stony Inlet ✓
- Bay side Road ✓
- Lower Alloways Creek Township ✓
- Quinton Township ✓

Names preceded by .
are approved 4/26/48.

(highway numbers not checked, as county
road maps not available) L. Heck

Division of Photogrammetry
Review Report of
Topographic Map Manuscript T-8756

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

28. Detailing.-- The entire shoreline from triangulation station ALDER (U.S.E.) south to the limits of the manuscript was changed to agree with the shoreline survey T-8781. The shoreline now represented is the apparent shoreline and is in agreement with the shoreline as defined by field inspection. See review report for T-8781, + T-8785

43. Comparison with Previous Surveys:

T-63	1:20,000	1841
T-141	1:10,000	1841
T-155	1:20,000	1842-3
T-1550	1:20,000	1882-3

These surveys are superseded by the map manuscript in all common areas.

44. Comparison with Existing Topographic Quadrangles:

Vineland, Del.-N.J., U.S.G.S.,	1:125,000	1886-96
Shiloh, N.J.-Del, U.S.G.S.,	1: 62,500	1886-89
Shiloh, N.J.-Del., U.S.E.,	1:62,500	1932-38, 1940

45. Comparison with Nautical Charts:

Chart No. 294	1:40,000	11-17-47
Chart No. 1218	1:80,000	12-18-47

This map manuscript has not been applied to nautical charts 294 and 1218.

Reviewed by:



K. N. Maki
5-27-48

APPROVED BY:

S. V. Griffith
Chief, Review Section
Division of Photogrammetry

W. A. Green
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. R. Green
Chief, Div. of Coastal
Surveys

