

# 8782

12.1.48

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline Survey
	Project No. PH-7(46)
Field No.	Office No. T-8782
LOCALITY	
State	Delaware
General locality	Delaware River
Locality	Woodland Beach to Leipsic River
1946	
CHIEF OF PARTY	
E. W. Jones and William F. Deane	
LIBRARY & ARCHIVES	
DATE	September 8, 1948

9/5/51 - ch 1218 - examined for critical corvins; not applied  
at this time. JVE

## DATA RECORD

T- 8782

Quadrangle (II):

Project No. (II): PH-7(46)C

Field Office:  
New Castle, Delaware

Chief of Party: E. L. Jones

Compilation Office:  
Baltimore Photogrammetric Office

Chief of Party: Wm. F. Deane

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

OFFICE FILES OF THE  
 Copy filed in ~~Descriptive~~  
~~Report No. T~~ (VI)  
 DIVISION OF PHOTOGRAMMETRY

Completed survey received in office: Feb. 11, 1947

Reported to Nautical Chart Section: Feb. 18, 1947

Reviewed: MAY 1948 Applied to chart No. Date:

Redrafting Completed:

Registered: August 16, 1948 Published:

Compilation Scale: 1:10,000 Published Scale:

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927 Datum Plane (III): M. S. L.

Reference Station (III): GAME, 1933

Lat.:	Long.:	Adjusted
39° 18' 12.297" 379.2m	75° 26' 14.083" 337.4m	Unadjusted

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>75th Meridian Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
46-D1591-96 incl.	3/1/46	1505	1:10,000	1.5' above M.L.W.
46-D1933-40 incl.	3/12/46	1100	1:10,000	2.0' above M.L.W.
46-D1942-44 incl.	3/12/46	1108	1:10,000	1.9' above M.L.W.

Tide from (III): Actual tide observations at Atlantic City, N.J., with corrections to Woodland Beach to Mahon River.

Mean Range: 5.8'

Spring Range: 6.7'

Camera: (Kind or source) U. S. Coast and Geodetic Survey wide angle single lens type "D" camera - focal length 12". All negatives are on file in the Washington Office.

Field Inspection by:

date: June 1946

E. L. Jones

Field Edit by:

date:

D. G. FLIPPO

August 1947

Date of Mean High-Water Line Location (III): Same as date of photographs supplemented by field data obtained during June 1946.

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

date: 8/9/46

" " " checked by: S.R.

date: 8/9/46

Control plotted by: L. A. Senasack

date: 9/19/46

Control checked by: G. O. Fellers

date: 9/19/46

Radial Plot by: F. J. Tareza

date: 1/15/47

Detailed by: R. E. Rudolph

date: 1/16 to 1/28/47

Reviewed in compilation office by: J. W. Vonasek

date: 2/4/47

Elevations on Field Edit Sheet

checked by: Not Applicable

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 8

Shoreline (More than 200 meters to opposite shore):  $6\frac{3}{4}$  statute miles.

Shoreline (Less than 200 meters to opposite shore): 21 statute miles  
(centerline only)

Number of Recoverable Topographic Stations established: 5

Number of Temporary Hydrographic Stations located by radial plot: 3

Leveling (to control contours) - miles: Not Applicable

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:

SCALE FACTOR:

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

429.1	(421.2)
477.0	(960.5)

337.4	(1100.2)
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604.9  
(1245.4)

$(0.777)$	$7.766$
$(8.02)$	$5.6281$

DATE 9/18/46

M - 2388-12

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FIELD REPORT  
FOR 8782  
SURVEY NO. T-8759

~~See the field report for Survey No. T-8759.~~

The field inspection and field edit of T-8782  
were done contemporaneously with these operations  
for T-8759 and the reports on these phases  
are contained in the Descriptive Report for  
T-8759

S. V. Gifford

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8782

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:

See report for combined radial plot covering the southern portion of Survey No. T-8778 and the entire areas of Surveys Nos. T-8780 and T-8782 submitted to the Washington office 7 March 1947.

28. DELINEATION:

Attached to  
Desc. Report T-8781  
also see T-8780

The compilation is in accordance with the written instructions pertaining to Project No. PH-7(46) dated 19 July 1946.

Neither the photographs nor the field inspection available for delineation of this manuscript were adequate. Only one photograph covers the area at the mouth of Hay Ditch. The recoverable photo (topographic) station IDAE, 1946, which falls within this area, had to be pricked direct from the photographs holding the nearest available detail points. All the mean high water line was delineated after stereoscopic examination of the photographs because the field unit, in attempting to identify what they described as "apparent shoreline - top of low bluff (marsh line)", identified instead the outer limits of mud and/or vegetation as it appeared on the photographs which were taken very near mean low water. Refer to Item 28 of Final Review Report for clarification.

30. MEAN HIGH WATER LINE:

The mean high water line has been delineated in accordance with the office interpretation of the photographs. (See No. 28 above).

31. LOW WATER LINE:

Approximately 10% of the mean low water line was identified by the field unit. However, since the photographs were taken very near low water it was assumed that the outer limits of vegetation or mud was the approximate position of the mean low water line and has been shown on the map.

31a. SHOAL AND REEF LINES

None visible on the photographs.



32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

Two wrecks, one at the mouth of Hay Ditch and the other approximately 3/4 mile southeast of Sluice Ditch are shown on the map.

33. WHARVES AND SHORELINE STRUCTURES:

No comment.

34. LANDMARKS AND AIDS TO NAVIGATION:

Refer to Item 11 of the field report for T-8759.

35. HYDROGRAPHIC CONTROL:

3 hydrographic signal sites.

A descriptive list of the hydrographic signal sites has been compiled and is attached to this report. Two additional copies have been furnished for the use of the hydrographic parties.

37. GEOGRAPHIC NAMES:

Geographic names were taken from a geographic names investigation furnished by the Washington office. It is to be noted that there are two streams with the name "Broad Gut", one near Matty Ditch and the other near Sluice Ditch. A list of the names is attached to this report. <sup>The Field Edit party and the Geographic Names Section of the Division of Charts, approve 2 streams with name BROAD GUT,</sup>

38. JUNCTIONS:

Junction with Survey No. T-8780 to the northwest has been made and is in agreement. There are no other junctions with surveys of the same scale. T-8782 is within the area of Survey No. T-8759.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

T-8782 has been compared in detail with the United States Army Engineers, Shiloh, NJ-Del. Quadrangle, scale 1:62,500 edition of 1941 and found to be in good agreement.

45. COMPARISON WITH NAUTICAL CHARTS:

T-8782 has been compared with chart No. 1218, scale 1:80,000, published January 1942, corrected 13 July 1946.

The following topographic information shown on T-8782 is of sufficient importance to warrant immediate application to the chart:

Two wrecks, one at the mouth of Hay Ditch and the other approximately 3/4 mile southeast of Sluice Ditch.

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 the chart:

None.

Low water features are shown only 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  
16 April 1947

Ruth E. Rudolph  
Photogrammetric Aid  
Compilation and Descriptive  
Report

Harry R. Rudolph  
Supervisor

Joseph W. Vonasek  
Photogrammetric Engineer  
Photogrammetric Office  
Reviewer

Approved and Forwarded  
27 April 1948

Thos. B. Baird  
Officer in Charge  
Baltimore Photogrammetric Office

Division of Photogrammetry  
Review Report of  
Shoreline Manuscript T-8782

Shoreline manuscript T-8782 is a 1:10,000 scale map manuscript entirely covered by the 1:20,000 scale quadrangle T-8759.

The field inspection for the two maps was carried on as a single mapping operation with the division of the two maps occurring during graphic compilation.

A field edit survey of T-8759 was made and where applicable has been applied to this map manuscript.

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

26. Control.--Sub station "A", Game, has been removed from the map manuscript. The field inspection party did not recommend it for control of the radial plot because the pricking was indefinite. They selected an alternate station, Bombay Sextant which was used to control the plot.

Even though the compilation office obtained a radially plotted position for sub-station "A", Game, which agreed with the computed position within the required tolerances, it has been removed because the sub-station was neither marked, nor used to control the radial plot.

28. Delineation.--The compilation office reported inadequate field inspection and photo coverage.

Inadequate Field Inspection: The delineation of shoreline features followed the field inspection notes and was found to be adequate and to comply with the project instructions.

It is believed that the author of the compilation report, confused manuscript T-8782 with another manuscript on the eastern side of Delaware Bay, where differences have occurred between field and office interpretation of shoreline.

Inadequate Photo Coverage:

Even though the single lens photo coverage was sketchy in some places, the accuracy of the map was not materially affected, as indicated by the contemporary 1:20,000 scale nine-lens photo plot used in quadrangle T-8759.

The nine-lens plot both strengthened and proved the relative accuracy of the shoreline map manuscript, as indicated by the location of recoverable photo (topographic) stations.

The location of all photo (topographic) stations by the two plots was in excellent agreement except station ~~100A~~, 1946.

~~100A~~ <sup>100E</sup> ~~100A~~ was located on the shoreline manuscript without the aid of cuts, as overlapping photo coverage was not available. The nine-lens plot located the same station by cuts and agreement was well within the tolerances for the 1:20,000 scale map manuscript and slightly exceeded the accuracy requirements for the 1:10,000 scale shoreline manuscript.

It is doubtful that improvement in the location of station ~~100A~~ <sup>100E</sup> is possible, and it is recommended that the station be used with caution. The location may be in error as much as 7 or 8 meters at the relative map scales.

37. Geographic Names.--All Geographic Names shown on the map manuscript have been approved by the Geographic Names Section, of the Division of Charts.

44. Comparison with Existing Topographic Surveys.--In addition to the comparison mentioned under item 44 of the compilation report, comparison was made with the following topographic surveys. The planimetry in all common features is superseded by T-8782.

63	1:20,000	1841
141	1:10,000	1841
1547b	1:20,000	1882-3
3088	1:20,000	1910
4667	1:10,000	1931-2

45. Comparison with Nautical Charts.--

Comparison was made with the following nautical charts.

1218	1:80,000	1942	Corrected to Dec. 1947
<del>249</del>	<del>1:40,000</del>	<del>1895</del>	<del>Corrected to Nov. 1947</del>


This map manuscript has not been applied to nautical charts. Refer to compilation report for information shown on T-8782 which is of sufficient importance to warrant immediate application to the charts.

47. Adequacy of Compilation.--An examination of map manuscript T-8782 reveals it to be complete in all details as

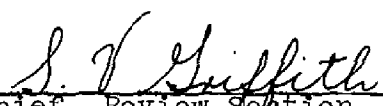
T-8782  
Page 3


a base for nautical charts or hydrographic surveys.

Reviewed by:

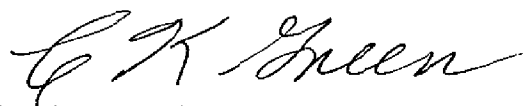
  
Harland R. Cravat  
May 1, 1948

APPROVED:

  
Chief, Review Section  
Div. of Photogrammetry

  
Chief, Nautical Chart Branch  
Div. of Charts

  
Ch., Div. of Photogrammetry

  
Chief, Div. of Coastal Surveys

# GEOGRAPHIC NAMES

Bank Ditch ✓  
Bay Pond ✓  
Bombay Hook Island ✓  
Bombay Hook National Wildlife Refuge ✓  
Bombay Hook Point ✓  
Broad Gut (near Matty Ditch) ✓  
Broad Gut (near Sluice Ditch) ✓  
Cove Pond Ditch ✓  
Delaware River Bay  
Duck Creek ✓  
Fraland Beach ✓  
~~Fraland Cove~~  
Georges Island ✓  
Goose Point ✓  
Hay Ditch ✓  
Log Pond ✓  
Long Bar Point ✓  
Matty Ditch ✓  
Mikes Ditch ✓  
~~Mikes Gut~~  
Raymond Gut ✓  
Raymond Pond Pool  
Salt Pond Ditch ✓  
Shearneck Gut ✓  
Sluice Ditch ✓  
Terrapin Gut ✓  
Thrumcap ✓  
Wier Gut ✓

NOTES  
FOR  
HYDROGRAPHIC PARTIES

DELAWARE RIVER

MAP MANUSCRIPT, SURVEY NO. T-8782

PROJECT No. PH 7(46)C

The 2 millimeter circles, accompanied with a name and date are the position of the recoverable photo (topographic) station. All other such circles, accompanied with a number only, are the positions of the hydrographic signal sites. Two copies of the list of descriptions of the hydrographic signal sites have been furnished for your use.

The following topographic information shown on T-8782 is of sufficient importance to warrant immediate application to the chart:

Two wrecks, one at the mouth of Hay Ditch and the other approximately  $3/4$  mile southeast of Sluice Ditch.

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 the chart:

None.

Low water features are shown only 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  
16 April 1947

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Photogrammetric Aid

Approved and Forwarded  
27 April 1948

  
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Officer in Charge,  
Baltimore Photogrammetric Office

# LIST OF DESCRIPTIONS OF THE HYDROGRAPHIC SIGNAL SITES

Signal No.	Description	Pricked on Photo No.
5901	Station is the bowsprit of an old wreck located on the eastern shore of Bombay Hook Island approximately 3/4 mile southeast of Sluice Ditch.	46-D-1944
5902	Station is a large black post about 8 feet high located on the eastern shore of Bombay Hook Island about midway between Sluice Ditch and Station 5901.	46-D-1944
5903	Station is the south chimney of house located on the west side of road about one mile southeast of Woodland Beach.	46-D-1939

Listed by:

Photogrammetric Aid

Checked by:

Joseph W. Donack  
Photogrammetric Engineer