

8784

Diag'd. on Diag. Ch. No. 1218-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric Planimetric

Field No. Ph-7 (46) B Office No. T-8784

LOCALITY

State New Jersey

General locality Delaware River

Locality Nantuxent Pt. to Dividing Creek

1946-'47

CHIEF OF PARTY

E.L.Jones

LIBRARY & ARCHIVES

DATE May 19, 1949

8784

DATA RECORD

T- 8784

Quadrangle (II):

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

Field Office: New Castle, Del. Chief of Party: E. L. Jones

Compilation Office: Chief of Party: William F. Deane
 Baltimore Photogrammetric Office

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:

23 January 1948

Reported to Nautical Chart Section:

Reviewed: 6 May 1948 Applied to chart No. Date:

Redrafting Completed:

Registered: 19 May 1948

Published: May 1949

Compilation Scale: 1:20,000

Published Scale: 1:20,000

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): M.H.W.

Reference Station (III): FORTESCUE 3, 1932

Lat.:

39° 14' 10.789" 332.7 m.

Long.:

75° 10' 17.078" 409.6 m

Adjusted

Unadjusted

State Plane Coordinates (VI):

Del. State Grid:

x = 569,472.47 Feet

y = 450,353.45 Feet

N. J. State Grid:

x = 1,857,026.31

Y = 147,173.54 Feet

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
15613-15616	3-21-46	13-35	1:20,000	5.2' above MLW
15611 and 15612	3-21-46	13-20	1:20,000	5.2' above MLW
15621	3-21-46	13-53	1:20,000	4.8' above MLW

Tide from (III): Actual tide observations at Atlantic City, N. J. with correction for Ben Davis Pt. to False Egg Island Pt.

Mean Range: 5.7'

Spring Range: 6.7'

Camera: (Kind or source) U S.Coast and Geodetic Survey nine lens camera, focal length 8 $\frac{1}{4}$ "

Field Inspection by: E.L. Jones

date: April, May,
and June 1946

Field Edit by: Donald G. Flippo

date: Oct. 13-20, 1947

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

Projection and Grids ruled by (III) Theodore L. Janson date: 8/13/46

" " " checked by: Theodore L. Janson date: 8/13/46

Control plotted by: Leroy A. Senasack date: 10/7/46

Control checked by: George O. Fellers date: 10/8/46

Radial Plot by: Frank J. Tarcza date: 10/24/46

Detailed by: Donald M. Brant date: 10/25/46
1/13/46

Reviewed in compilation office by: Raymond Glaser date: 1/14/47 to
1/20/47

Elevations on ^{Manuscript}~~Field Edit Sheet~~
checked by: _____

date: _____

STATISTICS (III)

Land Area (Sq. Statute Miles): 36

Shoreline (More than 200 meters to opposite shore): 16 statute miles

Shoreline (Less than 200 meters to opposite shore): 56 statute miles
measured along center line

Number of Recoverable Topographic Stations established: 10

Number of Temporary Hydrographic Stations located by radial
plot: none

Leveling (to control contours) - miles:

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:

MAP T. 8784

PROJECT NO. Ph-7(46)-B

SCALE OF MAP 1:20,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -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)
JOSCELYNE, 1834 ✓	G447 pg. 24	N.A. 1927	39° 18' 39.794"			1227.2 (623.1)	
JOSCELYNE 2, 1932 ✓	G447 pg. 24	N.A. 1927	75° 08' 23.238"			556.7 (880.8)	
			39° 18' 40.166"			1238.7 (611.6)	
			75° 08' 22.651"			524.7 (894.8)	
NANTUXENT, 1933 ✓	G1664 Pg. 66	N.A. 1927	39° 16' 29.515"			910.2 (940.1)	
			75° 14' 35.906"			860.7 (577.5)	
✓	G1249 pg. 15	N.A. 1927	39° 14' 10.789"			332.7 (1517.6)	
PORTESCUE 3, 1932 ✓			75° 10' 17.078"			409.6 (1029.4)	
FALSE EGG ISLAND ✓	G1751 Pg. 131	N.A. 1927	39° 12' 09.06"			279.4 (1570.9)	
POINT WOODEN ✓			75° 10' 04.88"			117.1 (1322.6)	
TOWER, 1933 ✓	G1664 pg. 65	N.A. 1927	39° 10' 47.491"			1464.5 (385.8)	
EGG, 1933 ✓			75° 08' 08.795"			211.1 (1229.1)	
EGG ISLAND LT. ✓	G 1751 Pg. 132	N.A. 1927	39° 10' 43.373"			1337.5 (512.8)	
HOUSE, 1933 ✓			75° 08' 13.407"			321.8 (1118.4)	
SUB. STA. JOSCELYN 2, 1932 ✓		N.A. 1927	39° 18'			1241.3 (690.0)	
			75° 08'			558.0 (879.5)	
MON. 3087, 1935 ✓	New Jersey State Grid, Cumberland County	N.A. 1927	173,0710	3,071.0 (6,929.0)		936.0 (2,112.0)	
			1,858,331.5	8,331.5 (1,668.5)		2,539.4 (508.6)	
MON. 3091, 1940 ✓	" "	N.A. 1927	159,863.7	9,863.7 (136.3)		3,006.5 (41.5)	
			1,858,531.4	8,531.4 (1,468.6)		2,600.4 (447.6)	
MON. 3093, 1940 ✓	" "	N.A. 1927	149,827.0	9,827.0 (173.0)		2,995.3 (52.7)	
			1,857,343.0	7,343.0 (2,657.0)		2,238.1 (809.9)	

1 FT. = 3048006 METER
COMPUTED BY Leroy A. Senasack



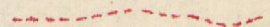

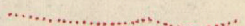
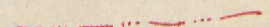

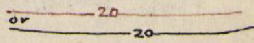
DATE 10/4/46

CHECKED BY George O. Fellers

DATE 10/4/46

M. 2388-12

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.....	X 17 or X 17
FLY LEVEL ELEVATIONS.....	CE 12 59.7
BENCH MARKS, marked and described.....	○ J-16, 1940 (dm)
TOPO STATIONS, natural object, described.....	— T Sta. (d) BILL, 1946
TOPO STATIONS, marked and described.....	— T Sta. (d m) MINK, 1946
TOPO STATIONS, addition Hydro Control, not named.....	— T Sta. 8703
LANDMARKS.....	— Landmark: STACK, black (45' high)
FIXED AIDS TO NAVIGATION, (official light list name)...	— Cherry Pt. Lt. 14
TRIANGULATION STATIONS.....	— A SMITH, 1925
SUBSTITUTE STATIONS.....	— S. Sta. Δ SMITH, 1925
BOUNDARIES: Refer to U.S.G.S. Bulletin 788 E for symbol, ink in purple or violet ink.	

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

SEACRELINE

MHW - mean high water
MLW - mean low water
M - marsh
Mud - mud
S - sand
Rky - rocky
Rk - rock
Dk - dock
Jet - jetty
Blhd - 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
Fn - beacon
Lgt - light
Rng - range
F Rng - front range
R Rng - rear range
Chy - chimney
Cup - cupola
S. pipe - stand pipe
Gbl - 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

FIELD INSPECTION REPORT
SHORELINE SHEETS NOs T-8784 & 8785
Project Ph-7 (46)
Sub-Division B
E. L. Jones, Chief of Party

1. Description of the Area

These sheets cover an area on the Eastern shore of Delaware Bay, between Latitudes $39^{\circ}07'30''$ to $39^{\circ}20'00''$ and Longitudes $74^{\circ}50'00''$ to $75^{\circ}15'00''$. The outstanding cultural features covered by these sheets are, Maurice River, Moores Beach, Thompson Beach, Bivalve, Port Norris and Fortescue Beach. The beaches are used mostly as summer resorts. The area for approximately 1/4 mile inland that this party inspected is a marsh area dominated with small ponds. Commercial fishing and oystering are the main industries for the local population.

2. Completeness of Field Inspection

Field inspection covered an area from the shoreline to approximately 1/4 mile inland. This inspection was done according to instructions issued for this project. Shoreline inspection was done by this party with a small skiff with an outboard motor and is believed to be adequate. Deletions have been shown on photographs in green ink. Two submerged cables are delineated on single lens photos in Maurice River.

3. Interpretation of Photographs

All photographs were clear. Marsh area is toned by light grey which is covered by short grass and a shade darker grey which is taller grass. Brush is found to be of a darker color than marsh, water shows up black and sand is white. There were no wooded sections along the area inspected by this party.

4. Horizontal Control

Horizontal control was recovered and identified on photographs according to instructions for Project Ph-7 (46) - dated 3/25/46, and is believed to be adequate. All U. S. C. & G. S. Triangulation Stations were recovered or searched for.

(New Jersey State & U. S. C. & G. S.) Traverse stations were identified, at 1 mile intervals, on single lens photo and 2 mile intervals on 9 -lens photos. For these stations recovery notes were made in duplicate, so that a copy may be furnished the Topographic Engineer of the New Jersey Geodetic Control Survey. Five New Jersey State Board of Shell Fisheries Hydro Stations, (Monumented and towered) were picked direct on the photos. 20 topographic stations including Monumented Stations and Natural objects were established at approximately 1 mile intervals along the shore. These stations are listed below and Form 524 is being submitted for each:

Filed in Div. Photogrammetry
General Files.

Sta	Date	Sta	Date	Sta	Date
Cat	1946	Wear	1946	False Egg	1938
Gam	1946	Dyer	1946	Doby	1938
Act	1946	Fort	1946	Lee	1938
Deb	1946	Chim	1946	Cove	1938
Wad	1946	Trip	1946	Demm	1946
Sag	1946	Fast	1946		
Her	1946	Flag	1946		
Quo	1946	Gabe	1946		
Bat	1946	Sad	1946		
Ran	1946	Cox	1938		

5. Vertical Control

Inapplicable to these sheets.

6. Contours and Drainage

Inapplicable to these sheets.

7. Mean High Water Line

In accordance with the instructions issued for this Project, and supplemental instructions dated March 18, 1944, the entire shoreline was inspected visually in the field by the following methods. In most cases from a boat kept close to and paralleling the shoreline. Where the shoreline has been developed and is served by roads, and where topographic stations were established, it was inspected by walking along the shoreline.

Except for a few small areas, mentioned above, the H.W.L. is indefinite, or is too far removed from the grass line to be of value to the charts. Where this condition exists the apparent shoreline follows along the outside edge of vegetation. This vegetation is usually supported by a low mud bank, which is in most cases vertical and is 4 to 6 feet high (above M.L.W.) Generally the L.W.L. follows this same line, but in some cases the tide and wave action has caused this mud bank to sluff off and flatten out and in this case the L.W.L. is outside the grass line. The single lens photos were taken at very near low water, and the L.W.L. is discernible on these photos.

Where the H.W.L. is definite, sufficient measurements were taken from topographic features to positively locate this line - measurements were also taken from all topographic stations where a topographic station was established on as near the grass shoreline (apparent shoreline) The measurement taken was to the H.W.L. left by the last high tide (usually a line of drift grass, etc) and in some cases will not agree with the line (apparent shoreline) that should be charted.

It is believed that sufficient notes and symbols have been made on the photos so that the compiler will not be left in doubt about any section of the shoreline.

8. Low Water Line

The single lens photographs were taken at approximate low tide and the low water line is discernible. On the 9-lens photographs the L.W.L. was measured from some identifiable object at intervals and inked on photographs. The L.W.L. was inspected at the same time as the H.W.L.

9. Wharves & Shoreline Structures

All wharves and shoreline structures were inked and labeled on photographs, deletions are in green ink.

10. Details Offshore from Highwater Line

All details offshore were inspected and labeled on photographs, deletions are in green ink.

11. Landmarks and Aids to Navigation

Non-floating aids to navigation to be charted or deleted are listed on Form #567 and will accompany this report. All aids were checked against the 1945 Light List and are in agreement except the light shown at the mouth of Dennis Creek which is no longer in existence. This is being reported on Form 567 and a letter to the Director. A copy of this letter is attached to this report.

All landmarks to be charted or deleted are listed on Form #567 to accompany this report.

All form 567's filed in Division of Charts.

- (A) Excessive building and clearing prevented the location of a point on the Maurice River Range by triangulation, planetable or photogrammetric methods. Three 3-point sextant fixes were carefully taken on this range. There are as follows:

(B) POINTS ON MAURICE RIVER RANGE

TANK - Leesburg State Prison Silver Water Tank
FAST - Abandoned Lighthouse Dome - (East Point)
COVE - N.J. State Board of Shell Fisheries, 1938
DOBY - N.J. State Board of Shell Fisheries, 1938
Front Range - Front Range of Range Lights

		TANK	24°20'30"
		FAST	
		COVE	57°00'00"
	Check Position		
Check		TANK	25°13'30"
		FAST	
		COVE	55°36'50"
	Check Position		
Check		FAST	60°20'20"
		FRONT RANGE	
		DOBY	53°13'30"

12. Hydrographic Control:

In addition to the 25 Topographic Stations mentioned in paragraph #4 (Horizontal Control) 2 additional Hydrographic Stations were established according to instructions for this Project, while shoreline inspection was being done.

The 2 additional stations are numbered 8501 and 8502 and labeled with a short description on Photographs.

13. Landing Fields and Aeronautical Aids:

Inapplicable to these sheets.

14. Roads:

Inapplicable to these sheets.

15. Bridges:

There were no bridges on the 2 sheets where shoreline was inspected. See item 15 "Bridges" in report for T-8785.

16. Buildings:

The buildings along the shoreline were inspected; those to be deleted are in green ink.

17. Boundaries:

Inapplicable to these sheets.

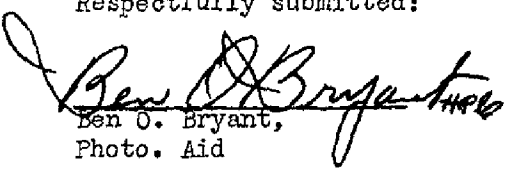
18. Geographic Names:

Geographic name information was obtained for the area of this quadrangle during the course of the field work. This information was compiled into a special project report for this sub-division by Lowell I. Bass, Engineering Aid.


19. Coast Pilot Information:

Coast Pilot information was obtained in the field and a special project report was compiled by George E. Varnadoe, Photogrammetric Engr. Report not submitted.

Respectfully submitted:


Ben O. Bryant,
Photo. Aid

Approved and Forwarded
July 11, 1946


E. L. Jones,
Chief of Party

RADIAL PLOT REPORT

PROJECT PH-7 (46) B

SURVEYS NO. T-8784 & T-8785

1. The layout of the map manuscripts, horizontal ground control and photographs are shown on the attached sketch.

PHOTOGRAPHS

2. Nine lens taken with the U.S.Coast and Geodetic Survey Nine Lens Camera, focal length $8\frac{1}{4}$ inches at a scale of 1:20,000 on celluloid coated paper.

MANUSCRIPTS

3. Scale 1:20,000 polyconic projections, New Jersey State Grids and Delaware State Grids (grids on 10,000 foot intervals) ruled on the ruling machine and checked in the Washington Office. In making the radial plot the base sheets were joined by matching the common New Jersey State Grid lines. This radial plot covers the areas of Surveys Nos. T-8784 and T-8785.

GENERAL DESCRIPTION

4. This combined radial plot covers the area along the northeastern shore of Delaware Bay from Reeds Beach northwestward to just west of Nantuxent Point.
5. The field inspection party did not establish any new horizontal control stations since sufficient previously established horizontal control stations were recovered and identified on the photographs. This plot includes 27 horizontal control stations and 10 photographs.

FIELD INSPECTION

6. The field identification of horizontal control should be classified as good.

SUMMARY

7. A few more photographs would have been desirable. However, it is believed that the plot as run with the available photographs is within the desired limits of accuracy.

DETAILS OF RADIAL PLOTTING

8. The scale for the projection sheets was determined by the Washington Office. The plot was made with celluloid templets.
9. The templets were prepared from a master templet furnished by the Washington Office. The positions shown on the master templet of the

photograph center and fiducial marks were transferred to each templet to be used in making the plot.

Each templet was then placed over the photograph of which the templet was to be made. The center shown on the templet was held to the principal point of the photograph. Fiducial marks in each chamber of the photograph were matched with their corresponding marks on the templet and if they coincided, all radials in this chamber were traced. The templet was then rotated to the next chamber and respective fiducial marks were examined. If, after examination the fiducial marks did not coincide, the amount of error was corrected by adjusting the radials between the fiducial marks. This rotation was continued around the photograph until all the radials had been adjusted and drawn.

10. All pass points established by the radial plot for Map Manuscript Survey No. T-8760 that could be transferred to the projection sheet for Survey No. T-8784 either just inside or outside the detail limits of the sheet were transferred to the projection sheet for Survey No. T-8784.
11. When the transfer of the pass points from Survey No. T-8760 to Survey No. T-8784 was made it was noticed that the Delaware State grid lines as ruled on the projection sheet for Survey No. T-8784, did not match with their corresponding grid lines as ruled on the projection sheet for Survey No. T-8760. When the common polyconic projection lines and New Jersey State grid lines of the two projection sheets were matched, the Delaware State grid Y coordinates as plotted on the projection sheet for Survey No. T-8760 fell approximately 32 meters north of the Y coordinates as plotted on the projection sheet for Survey No. T-8784. The X coordinate line common to both sheets crossed each other at a very slim angle.

The position of the Y coordinate was then computed in this compilation office and it was found that the Y coordinate as plotted on the projection sheet for Survey No. T-8784 was actually plotted $32\frac{1}{2}$ meters south of its true position.

This error in plotting of the Delaware State grid lines did not cause any difficulty in making the radial plot because none of the horizontal control had been plotted using the Delaware State grid system of coordinates.

12. All horizontal control stations and previously established pass points were then transferred to the base grid sheets for Surveys Nos. T-8784 and T-8785 by carefully matching the common New Jersey State grid lines. The two base sheets were then joined by matching common New Jersey State grid lines.

13. A combined radial plot was laid for the areas of Surveys Nos. T-8784 and T-8785 using the celluloid templets previously prepared. All of the horizontal control that could be identified accurately on the office photographs was "held to" either tangentially or better. Satisfactory results were obtained.
14. The projection sheets for Surveys Nos. T-8784 and T-8785 were then placed over the templets as laid on the base sheets and, after carefully matching common New Jersey State grid lines, the pass points as radially intersected and the photograph centers were pricked directly on the projection sheets. The plot was then verified by orienting all photographs under the projection sheets.
15. The photograph centers have been shown on the map manuscript with 10 millimeter blue ink circles accompanied with their respective photograph numbers. The pass points considered strong have been shown with a 3 millimeter blue ink circle inscribed within a 5 millimeter blue ink circle. The pass points considered weak, those determined by only two radials or three or more very slim angle cuts, have been shown with a 5 millimeter green ink circle.
16. The positions of all pass points and photograph centers are considered to be within 0.5 millimeters of their correct geographic positions.

REMARKS

17. The identification and distribution of horizontal control and selection of substitute stations was good.
18. The distribution of photographs was good. However, a few more photographs would have been desirable.
19. The positions of all photo (topographic) stations have been determined by the radial plot and are shown as pass points accompanied with their respective names.

Respectfully submitted
20 November 1946

Approved and Forwarded
26 November 1946

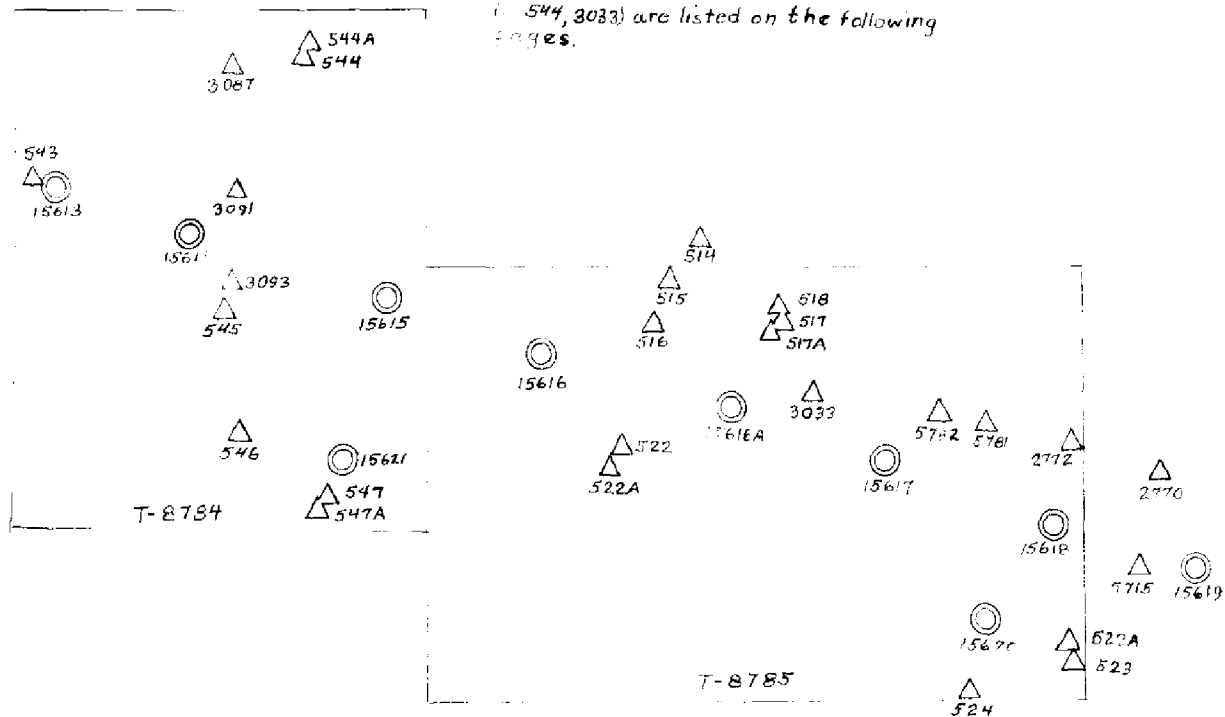
William F. Deane
William F. Deane
Chief of Party, C&G Survey
Officer in Charge
Baltimore Photogrammetric Office

Harry R. Rudolph
Harry R. Rudolph
Photogrammetric Engineer

Legend

- Office Photograph
- Field Photograph
- △ Triangulation Station

Note: All horizontal control stations
(accompanied with their respective numbers
i. 544, 3033) are listed on the following
pages.



LAYOUT SKETCH
PROJECT NO PH-7-46B
SURVEYS NOS T-8784 & 8785

LIST OF CONTROL

PROJECT PH-7-46-B

SURVEYS NO. T-8784 & T-8785

- 514. SHARP, 1935
- 515. SQUARE BRICK SMOKESTACK, 1935
- 516. MATTS, 1935
- 517. LEESBURG, 1932
- 517A. LEESBURG STATE PRISON FARM WATER TANK, 1935
- 518. LEESBURG STATE PRISON BRICK SMOKESTACK, 1935
- 522. EAST, 1933
- * 522 A EAST POINT LIGHT, 1933
- 523. GOSHEN, 1933
- 523 A. GOSHEN, M.E. CHURCH STEEPLE, 1933
- 524 REEDS, 1933
- ** 543 NANTUXENT, 1933
- ** 544 JOSCELYNE, 1932
- 544 A. JOSCELYNE 2, 1932
- 545. FORTESCUE 3, 1932
- ** 546. FALSE EGG ISLAND POINT, WOODEN TOWER 1933
- ** 547. EGG, 1933
- 547 A. EGG ISLAND LIGHT HOUSE, 1933
- 3033 MONUMENT NO. 3033, 1935
- 5782 MONUMENT NO. 5782, 1937
- 5783 MONUMENT NO. 5783, 1937
- 2772 MONUMENT NO. 2772, 1935

2770 MONUMENT NO. 2770, 1935

5715 MONUMENT NO. 5715, 1935

3087 MONUMENT NO. 3087, 1940

3091 MONUMENT NO. 3091, 1940

39093 MONUMENT NO. 3093, 1940

* Identified as Recoverable Photo (Topographic) Station "FAST 1946".
Used to control radial plot.

** No recovery in 1944, not used to control the radial plot

All other stations recovered and identified in 1946, and used to
control the radial plot.

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8784

26. CONTROL:

Refer to the radial plot report for a layout of control in this area. ~~Filed in Division Photogrammetry General Files.~~ Attached

27. RADIAL PLOT:

The radial plot for the area of this survey is part of a combined plot made with celluloid templates, and covers the entire area of Surveys Nos. T-8784 and T-8785. Satisfactory results were obtained. The report for the radial plot was submitted to the Washington Office November 26, 1946. Attached

28. DELINEATION:

The compilation is in accordance with the written instructions, dated 25 March 1946 and 19 July 1946, pertaining to Project Ph-7(46). Filed in Div. Photogrammetry Office files.

Sufficient data for office delineation of the shoreline was furnished the compilation office; however, the field unit did not inspect any inland features in the area of this survey. Therefore, all streams, ditches, marsh areas, roads and buildings were delineated by office interpretation of the photographs.

Because of insufficient photographic coverage only slim angle radials could be obtained in the vicinity of Dyers Cove.

No bridges were identified by the field unit and therefore only those bridges which were clearly discernible on the photographs were delineated.

30. MEAN HIGH-WATER

In several areas the M.H.W.L. could not be definitely identified on the photographs by the field unit, due to grass-in-water. The field unit indicated the apparent shoreline in these areas. However, the compilation office, after careful stereoscopic examination, delineated the Mean High Water Line according to this interpretation. See review report.

31. MEAN LOW-WATER LINE:

The position of the mean low water line has been delineated in accordance with the field data and has not been shown unless identified by the field unit. The approximate position of the mean low water line has been shown with a dotted line.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

The field inspection for the interpretation of details offshore from the mean high-water line was adequate.

33. WHARVES AND SHORELINE STRUCTURES:

No comment.

34. LANDMARKS AND AIDS TO NAVIGATION:

Refer to Form No. 567 attached to field report for Surveys Nos. T-8784 and T-8785. *Filed in Div. Charts.*

35. HYDROGRAPHIC CONTROL:

10 Recoverable photo (topographic) stations.

A descriptive list of all the hydrographic control stations has been compiled and attached to this report. Two additional copies have been furnished for the use of the hydrographic parties.

Form No. 524 is being submitted for each of the photo (topographic) stations. *Filed in Div. Photogr. General Files.*

FALSE EGG, 1938, a recoverable photo (topographic) station, occupies the same geographic position as the triangulation station FALSE EGG ISLAND POINT WOODEN TOWER, 1933. *524 card for False Egg removed from file. Form 526 (Primary Rec. Card) substituted*

37. GEOGRAPHIC NAMES:

Geographic names were taken from a geographic names investigation furnished by the Washington Office 9 December 1946 on a corrected copy of the United States Army Engineers, N.J.-Del. Port Norris Quadrangle map and a corrected copy of Army Map Service Bridgeton, N. J. map.

A list of geographic names is attached to this report. List is approved

38. JUNCTIONS:

by L. Heck, Geographic Names Section.

A satisfactory junction was made with Survey No. T-8760 to the west and with Survey No. T-8785 to the east. There are no contemporary surveys to the north or south of the map manuscript.

39. HORIZONTAL ACCURACY:

The position of all detail of importance is believed to be within 0.5 millimeter.

40. RECOMMENDATIONS FOR FUTURE SURVEYS:

T-8784 is complete with respect to all topographic details necessary for charting.

44. COMPARISON WITH TOPOGRAPHIC QUADRANGLES:

T-8784 has been compared in detail with Corps of Engineers U.S. Army New Jersey-Delaware Port Norris Quadrangle, scale 1:62,500, 1940-41 and Army Map Service New Jersey, Bridgeton map, scale 1:50,000.

44. COMPARISON WITH TOPOGRAPHIC QUADRANGLES: (Continued)

Within the common area of the two surveys, T-8784 is complete for all planimetric details shown on the quadrangle with the exception of:

The West Millville Gun Club and road leading to it at Dyers Cove.

45. COMPARISON WITH NAUTICAL CHARTS:

T-8784 has been compared in detail with Chart No. 1218 published at Washington, D. C. January 1942, scale 1:80,000, corrected to July 13, 1946.

a. The following information shown on T-8784 is of sufficient importance to warrant immediate application to the chart:

Several piers at the mouth of Fortescue Creek and at the mouth of Nantuxent Creek.

b. 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.

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

e. This survey shows minor changes in cultural and shoreline details, none of which needs discussion.

Donald M. Brant
Photogrammetric Aid
Compilation and
Compilation Report

Raymond H. Hauer
Photogrammetric Aid
Review

Harry R. Rudolph
Supervisor

Approved and Forwarded
Date: 3 February 1947

William F. Dean
Officer in Charge
Baltimore Photogrammetric
Office

Field Edit Report of Map Manuscript T-8784
Project Ph-7(46)
R. J. Sipe, Chief of Party

The field edit of this quadrangle was accomplished during the period 13 October to 20 October 1947 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.

15. Bridges: Three bridges over navigable waters have been measured and added to the field edit print. The streams which these bridges overpass are in all cases used only by very small boats and skiffs: (Not listed in 1941 Bridge list)

Bridge	Type	Hor. Cl.	Vert..Cl..
Weir Creek	Wooden(fixed)	11.2'	W.L.= 2.3 at 12:40 PM 10/16/47
South branch of Weir Creek	Wooden(fixed)	10.7'	W.L.= 1.0 at 12:30 PM 10/16/47
Fortesque Creek	Steel (fixed)	29.5'	W.L.= 1.9 at 11:30 PM

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

Delineation and some additions were made directly on the field edit sheet. Some buildings to be added to the map manuscript are shown on the photograph by a red circle. A legend to the symbols and to the colored inks used during the field edit is on the field edit print.

47. Adequacy of the Compilation: Some compiled roads were deleted during the field edit. These were, however, valuable to the field editor in some instances. Several small outbuildings had been compiled but these have been deleted. Several structures have been added.

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.

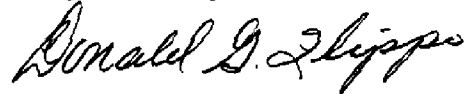
48. Accuracy Test: No contours were ran on this print therefore no vertical accuracy test has been made.

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

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

Mr. Victor Estadt
Fortesque, New Jersey

Respectfully submitted

A handwritten signature in cursive script, reading "Donald G. Flippo".

Donald G.. Flippo
Photogrammetric Aid
28 October 1947

P. O. Box 110

New Castle, Delaware

1 July 1946

To: Director
U. S. Coast & Geodetic Survey
Washington 25, D. C.

Subject: Discrepancy in Published Description of Non-Floating Aid
to Navigation, Report of.

There is reported the following discrepancy of the published
description of a non-floating aid to navigation within the limits
of Project Ph-7 (46):

<u>NAME OF AID</u>	<u>LIGHT LIST</u>	<u>Chart No.</u>	<u>Checked in Field</u>	<u>Sheet</u>	<u>Discrepancy</u>
	<u>Page</u>	<u>Lat.</u> <u>Long.</u>	<u>by</u> <u>Date</u>		
Deanis Creek Lt.	236	1210 39°09.9' 74°53.8'	B.O.B. 5-14-46	8785	Light non-existent. Structure in poor repair.

The investigation did not include the verification of published
light characteristics, depths of water or is it complete for the area
covered by this project

Edmund L. Jones,
Chief of Party

*See also map located within
envelope of T-8785*

78

(T-8784)

71-RCR

Please file this so you will
be sure to see it when you review
T-8784 and adjoining sheets

21 February 1947

* Notice was told Deane that we would not
change his shoreline as compiled. Call me

TO: Lieutenant William F. Deane
U. S. Coast and Geodetic Survey
601-611 Gorsuch Avenue
Baltimore 18, Maryland

for details any
time Bgg.

Subject: Shoreline

Reviewer please call to my attention

See letter
of 30 Dec.
1947, copy
of which is
filed in desc.
report for
T-8785

In a preliminary review of your recently sub-
mitted shoreline manuscript T-8784, it is found that
the field inspection was not followed in delineating
the shoreline.

The descriptive report simply stated that the
shoreline was delineated from an office interpretation
of the photographs.

(field insp.
apparent shore-
line to be used)

The shoreline in question, as I suspected, is
a borderline case where either the mean-high-water
line with scattered tufts of grass offshore, or an
apparent shoreline could be shown without effecting
the general accuracy of the map.

This matter was called to the attention of the
field inspector, Mr. George E. Varnadoe, for comment
and the correspondence is furnished you for your
information.

I do not want you to blindly follow the field
inspection, especially on shoreline. You should feel
free to question it and to make changes whenever it
appears wrong. However, you should always give the
field inspector the benefit of some doubt, and if
changes are made they should be fully covered in the
descriptive report.

No change will be made on T-8784 and the other
sheets in the vicinity and you should continue com-
piling this shoreline as on T-8784 until you get out
of this particular situation since we do not wish to
make a radical change in interpretation at a sheet edge.

7774
Lt. Deane

- 2 -

21 February 1947

In borderline cases, such as the shoreline on this sheet, you should be very strongly influenced by the field inspection interpretation since it is viewed in the field from the ground. In this particular case, the field inspector interpreted the shoreline as it would look to a boatsman and not as it would appear from the air.

for K. T. Adams
Chief, Div. of Photogrammetry

NOTES
FOR
HYDROGRAPHIC PARTIES
DELAWARE RIVER

MAP MANUSCRIPT SURVEY NO..T - 8784

PROJECT NO. PH-7 (46)

The two millimeter circles, accompanied with a name and date are the positions of the recoverable photo (topographic) stations.

The dotted line is the approximate position of the mean low water line.

a. The following information shown on T-8784 is of sufficient importance to warrant immediate application to the chart:

Several piers at the mouth of Fortescue Creek and at the mouth of Nantuxent Creek.

b. 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.

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

This survey shows minor changes in cultural and shoreline details, none of which need discussion.

Donald M. Brant
Photogrammetric Aid
Compilation and
Compilation Report

Raymond Glaser
Photogrammetric Aid
Review

Harry R. Rudolph
Supervisor

Approved and Forwarded
3 February 1947

William F. Deane
Officer in Charge
Baltimore Photogrammetric
Office

DESCRIPTION OF RECOVERABLE PHOTO (TOPOGRAPHIC)
STATIONS.

- DOBY, 1938 Located on the eastern shore of Delaware Bay on E. bank of Dividing Creek approximately 300 m. N.E. of mouth.
Field Photo. Station is a N.J. State Board of Shell Fisheries bronze
No.15621 disk set in 10" concrete post directly beneath four legged white latticed structure approximately 25' high. Stamped "DOBY, 1938".
- DEB, 1946 Located on the eastern shore of Delaware Bay on Nantuxent Pt. on the NE tip of a grass point which is the south bank of a small stream. Station is a standard U.S.C. & G.S. topographic disk stamped "DEB, 1946" set in the top of a 6" diameter concrete monument projecting 6" above ground.
Field Photo.
No.15613
- DYER, 1946 Located on eastern shore of Delaware Bay approximately 2 mi. N. of Fortescue, N.J. Station is south gable of lone house in Dyers Cove.
Field Photo.
No.15614
- FALSE EGG, 1938 Located on eastern shore of Delaware Bay approximately 2.0 miles NW of Egg Island light house and about 325.0' N. of the mouth of Straight Creek. Station is N.J. State Board of Shell Fisheries bronze disk stamped "FALSE EGG, 1938" set in 10" sq. concrete block directly under 4-legged white latticed structure approximately 25.0' high.
Field Photo.
No.15621
- FORT, 1946 Located on eastern shore of Delaware Bay in Fortescue, N.J. Station is west end of northernmost of two longest piers at Fortescue, N. J. Station is end of pier in front of Fortescue house.
Field Photo.
No.15614
- FORTESCUE LIGHT #1646, 1939. Located on eastern shore of Delaware Bay approximately 0.4 mi. north of main road to Fortescue, N. J. Light is on south bank Fortescue Creek near the mouth.
Field Photo.
No.15614
- GAM, 1946 Located on eastern shore of Delaware Bay, approximately 1.5 miles west of Fortescue Beach on Beadon Point, approximately 1/2 way between tip of Beadon Pt. and mouth of Sow and Rigs Creek on north bank of small creek at edge of sand and grass. Station is standard U.S.C. & G.S. topographic disk stamped "GAM, 1946" set in concrete monument projecting 6" above the ground.
Field Photo.
15614
- SAG, 1946 Located on eastern shore of Delaware Bay approximately 1 mi. N of Egg Island light house approximately 500' S of spot where small intermittent stream flows into Delaware Bay and 5.5 m. west of old duck blind. Station is standard U.S.C. & G.S. topographic disk stamped "SAG, 1946" set in top of 6" concrete monument.
Field Photo.
No.15621

RAN, 1946 Located on E shore on Delaware Bay approximately 1 mi.
SW of Fortescue, N.J. at SW corner of bridge over Oyster
Creek. Station is a standard U.S.C. & G.S. topographic
Field Photo. disk stamped "RAN, 1946" set in 6" concrete monument
No. 15614 projecting 6" above ground.

WAD, 1946 Located on eastern shore Delaware Bay about 1.0 mi. W.
of Egg Island light house on south bank of small, inter-
mittent stream. Station is standard U.S.C. & G.S. topographic
Field Photo. disk stamped "WAD, 1946" set in top of 6" concrete monument.
No. 15621

Listed by:

Donald M. Brant
Photogrammetric Aid

Checked by:

Raymond J. Hauer
Photogrammetric Aid

GEOGRAPHIC NAMES

FOR MAP MANUSCRIPT

T - 8784

Undisputed

- ✓ • Beadon Creek
- ✓ • Beadon Cove
- ✓ • Beaver Dam
- ✓ • Beadon Point
- ✓ • Big Brother Creek
- ✓ • Bowers Creek
- ✓ • Cedar Creek
- ✓ • Cedarville
- ✓ • Delaware Bay
- ✓ • Dividing Creek (Town)
- ✓ • Dividing Creek
- ✓ • Downs Wharf
- ✓ • Dyers Creek
- ✓ • Dyers Cove
- ✓ • Eagle Island
- ✓ • Egg Island Point
- ✓ • False Egg Island Point
- ✓ • Fishing Creek
- ✓ • Fortescue
- ✓ • Fortescue Road
- ✓ • Fortescue Neck
- ✓ • Fortescue Creek
- ✓ • Gandy Beach
- ✓ • Hay Gut Creek
- ✓ • Hollywood Beach
- ✓ • Howells Creek

- ✓ • Indian Creek
- ✓ • Jones Island
- ✓ • King Pond
- ✓ • Little Brother Creek
- ✓ • Money Island
- ✓ • Maple Creek
- ✓ • Maurice River Cove
- ✓ • Middle Branch
- ✓ • Nantuxent Point
- ✓ • Nantuxent Creek
- ✓ • New Port Landing
- ✓ • Newport
- ✓ • Newport Neck
- ✓ • Ogden Creek
- ✓ • Oyster Creek
- ✓ • Oranoken Creek
- ✓ • Padgetts Creek
- ✓ • Raybin Beach
- ✓ • Sow and Figs Creek
- ✓ • Straight Creek
- ✓ • Sayres Neck
- ✓ • The Glades
- ✓ • Turkey Point
- ✓ • Weir Creek
- ✓ • West Millville Gun Club

- Plus: • Hansey Creek
- Pages Run
 - ~~Deer Swamp~~
 - State No. 46
 - Nantuxent Cove

Names preceded by
are approved. 4/19/48
L. Heck

Division of Photogrammetry
Review Report of
~~Shoreline~~ Map Manuscript T-8784
Planimetric

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

30. Mean High Water Line.--The shoreline was delineated from an office interpretation of the photographs. Following the recommendation of the letter of 30 December 1947, attached to descriptive report T-8785, the apparent shoreline as originally indicated by the field inspector was shown on the map manuscript by the reviewer. The apparent shoreline is the approximate line of grass or vegetation visible at mean high water and has been shown by a fine line.

41. State Grids.--The radial plot report for surveys T-8784 and T-8785 noted that an error had been made in ruling the Delaware State Grid. This error was rectified by the reviewer. The new grid has been shown by one centimeter black lines intersecting each 10,000 foot interval and by half centimeter black ticks outside but touching the neat lines. The original grid shown in green ink was left on the map manuscript, but the black ticks used to emphasize the even 10,000 foot intervals were removed. An explanatory note has been placed on the map manuscript.

43. Comparison with Previous Surveys.--

T-152	1:20,000	1842
T-157	1:20,000	1842
T-1549b	1:20,000	1883-4
T-1661	1:20,000	1884-5
T-4668	1:10,000	1931-2

44. Comparison with Existing Topographic Surveys.--

Vineland, Del.,-N.J.	USGS	1:125,000	1886-96
Maurice Cove, N. J.	USGS	1:62,500	1886
Port Norris, N.J., Del.	USE	1:62,500	1940-41
Shiloh, N.J., Del.	USGS	1:62,500	1886-89
Bridgeton, N.J.	USGS	1:62,500	1886
Bridgeton, N.J.	USE	1:62,500	1932-38, 1940
Shiloh, N.J., Del.,	USE	1:62,500	1932-38, 1940
Bridgeton, N.J., Del., AMS		1:62,500	1942, 1946

45. Comparison with Nautical Charts.--

Chart No. 1218, 1:80,000, 12-8-47

This map manuscript has not been applied to nautical chart 1218.

Page 2
T-8784

Reviewed by:

K. N. Maki
K. N. Maki
5-6-48

APPROVED:

S. V. Griffin
Chief, Review Section
Div. of Photogrammetry

M. Edmonston
Chief, Nautical Chart Branch
Div. of Charts

K. T. Adams
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Div. of Coastal Surveys