<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Photogrammetric Planimetric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Ph-7 (46) B</td>
</tr>
<tr>
<td>Office No.</td>
<td>T-8784</td>
</tr>
<tr>
<td>State</td>
<td>New Jersey</td>
</tr>
<tr>
<td>General locality</td>
<td>Delaware River</td>
</tr>
<tr>
<td>Locality</td>
<td>Nantuxent Pt. to Dividing Creek</td>
</tr>
<tr>
<td>CHIEF OF PARTY</td>
<td>E.L. Jones</td>
</tr>
<tr>
<td>DATE</td>
<td>May 19, 1949</td>
</tr>
</tbody>
</table>
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):
   Copy filed in Descriptive Report No. T-6 (VI)-
   25 March 1946 Division of Photogrammetry Office Files.
   19 July 1946

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


Reference Station (III): FORTESCUE 3, 1932

Lat.: 39° 14' 10.789" 332.7 m.    Long.: 75° 10' 17.078" 109.6 m Adjusted

State Plane Coordinates (VI):
   Del. State Grid:
   \( x = 569,472.47 \) Feet
   \( y = 450,353.45 \) Feet

   N. J. State Grid:
   \( x = 1,857,026.31 \) Feet
   \( y = 147,173.54 \) Feet

Military Grid Zone (VI)
PHOTOGRAPHS (III)

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

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 ft

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

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

Elevations on Field Edit Sheet checked by: Manuscript  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:
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR γ-COORDINATE LONGITUDE OR x-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOSCELYNE, 1834</td>
<td>G447 pg. 24</td>
<td>N.A. 1927</td>
<td>39° 18' 39.794&quot; 39° 18' 40.166&quot;</td>
<td>1227.2 (623.1) 556.7 (880.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JOSCELYNE 2, 1932</td>
<td>G447 pg. 24</td>
<td>N.A. 1927</td>
<td>75° 08' 23.238&quot; 75° 08' 22.551&quot;</td>
<td>1238.7 (611.6) 524.7 (894.8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NANTUXENT, 1933</td>
<td>G1664 Pg. 66</td>
<td>N.A. 1927</td>
<td>39° 16' 29.515&quot; 39° 14' 35.906&quot;</td>
<td>910.2 (940.1) 860.7 (577.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORTESCUE 3, 1932</td>
<td>G1249 Pg. 15</td>
<td>N.A. 1927</td>
<td>39° 14' 10.789&quot; 75° 10' 17.078&quot;</td>
<td>409.6 (1029.4) 279.4 (1570.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POINT WOODEN TOWER, 1933</td>
<td>G1751 Pg. 131</td>
<td>N.A. 1927</td>
<td>39° 12' 09.06&quot; 75° 10' 04.88&quot;</td>
<td>117.1 (1322.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGG, 1933</td>
<td>G1664 pg. 65</td>
<td>N.A. 1927</td>
<td>39° 10' 47.491&quot; 75° 08' 08.795&quot;</td>
<td>117.1 (1322.6) 211.1 (1229.1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGG ISLAND LT. HOUSE, 1933</td>
<td>G 1751 Pg. 132</td>
<td>N.A. 1927</td>
<td>39° 10' 43.373&quot; 75° 08' 13.407&quot;</td>
<td>117.1 (1322.6) 321.8 (1118.4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUB.STA. JOSCELYN 2, 1932</td>
<td>N.A. Pg. 31</td>
<td>N.A. 1927</td>
<td>39° 18' 75° 08'</td>
<td>1241.3 (690.3) 558.0 (879.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MON. 3087, 1935</td>
<td>New Jersey N.A. State Grid</td>
<td>N.A. 1927</td>
<td>173,0710 1,858,331.5</td>
<td>3,071.0 (6,925.0) 936.0 (2,112.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cumberland County</td>
<td>N.A. 1927</td>
<td>1,858,331.5 8,331.5 (1,668.5)</td>
<td>2,539.4 (508.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MON. 3091, 1940</td>
<td>N.A. Pg. 31</td>
<td>N.A. 1927</td>
<td>159,863.7 9,863.7 (136.3)</td>
<td>3,006.5 (41.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N.A. 1927</td>
<td>1,858,531.4 8,531.4 (1,468.6)</td>
<td>2,600.4 (447.6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MON. 3093, 1940</td>
<td>N.A. Pg. 31</td>
<td>N.A. 1927</td>
<td>149,827.0 9,827.0 (173.0)</td>
<td>2,995.3 (52.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>N.A. 1927</td>
<td>1,857,343.0 7,343.0 (2,557.0)</td>
<td>2,238.1 (809.9)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SYMBOLS
Project Ph-7 (46)
29 April 1946

MEAN HIGH WATER LINE (fast line)..........................

OFF SHORE EDGE OF MARSH (apparent shoreline)...........

GRASS IN WATER...........................................

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......................

F I L Y  L E V E L  E L V A T I O N S ..........................

RENCH MARKS, marked and described........................

TOPO STATIONS, natural object, described................

TOPO STATIONS, marked and described......................

TOPO STATIONS, Addition Hydro Control, not named........

LANDMARKS..................................................

FIXED AIDS TO NAVIGATION, (official light list name)...

TRIANGULATION STATIONS.................................

SUBSTITUTE STATIONS.....................................

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

SHORELINE
MHW - mean high water
MLW - mean low water
M - marsh
Md - mud
S - sand
Rk - rocky
Rc - rock
Dk - dock
Jet - jetty
Bkhd - bulkhead

STREES, PONDS
D - large ditch
DX - small ditch (delete)
Cr - creek
P - pond

OBSTRUCTIONS TO NAV
Sno - snail
Cov - covers
Wk - wreck
Subm - submerged
Dol - dolphin
Pile - pile

VEGETATION
Gr - grass
WR - woods, hard wood
WS - woods, soft wood
WK - woods mixed
B - brush
SH - scattered hardwood
SS - scattered softwood
O - orchard

BUILDINGS
d - dwelling
b - barn
Bo Ho - boat house

BUILDINGS (cont'd)
Ch - church
C.H. - courthouse
P.O. - post office
Sch - school
RR Sta - railroad station
Hosp - hospital

LANDMKS & AIDS TO NAV:
TK - tank
TK(E)E" tank elevated
Stk - stack
Fl - fence
Ht - height
Rg - range
Fg - front range
Rg - rear range
Chm - chimney
Cup - cupola
Lrne - stand pipe
Cnd - gable

BOUNDARIES
Bry - boundary
Cem - cemetery
F - fence

BRIDGES
Br - bridge
Culv - culvert
Cl - clearance
Hor - horizontal
Ver - vertical (above MHW)
No - wood
Conc - concrete

STATIONS
Bl - bench mark
T Sta - topo station
S Sta - substitute station
T3M - tidal bench marker
(d) - described
(dm) - described and marked
FIELD INSPECTION REPORT
SHORELINE SHEETS NO's 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°07'-30" to 39°20'1-00" and Longitudes 74°50'-00" to 75°15'-00". The outstanding cultural features covered by these sheets are, Maurice River, Moore's 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 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.
<table>
<thead>
<tr>
<th>Sta</th>
<th>Date</th>
<th>Sta</th>
<th>Date</th>
<th>Sta</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat</td>
<td>1946</td>
<td>Wear</td>
<td>1946</td>
<td>False Egg</td>
<td>1938</td>
</tr>
<tr>
<td>Gam</td>
<td>1946</td>
<td>Dyer</td>
<td>1946</td>
<td>Doby</td>
<td>1938</td>
</tr>
<tr>
<td>Act</td>
<td>1946</td>
<td>Fort</td>
<td>1946</td>
<td>Lee</td>
<td>1938</td>
</tr>
<tr>
<td>Deb</td>
<td>1946</td>
<td>Chim</td>
<td>1946</td>
<td>Cove</td>
<td>1938</td>
</tr>
<tr>
<td>Wed</td>
<td>1946</td>
<td>Trip</td>
<td>1946</td>
<td>Denn</td>
<td>1946</td>
</tr>
<tr>
<td>Sag</td>
<td>1946</td>
<td>Fast</td>
<td>1946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Her</td>
<td>1946</td>
<td>Flag</td>
<td>1946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quo</td>
<td>1946</td>
<td>Gabe</td>
<td>1946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bat</td>
<td>1946</td>
<td>Sad</td>
<td>1946</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ram</td>
<td>1946</td>
<td>Cox</td>
<td>1938</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 or 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.

(A) Excessive building and clearing prevented the location of a point on the Maurice River Range by triangulation, planimetric or photogrammetric methods. Three 2-point sextant fixes were carefully taken on this range. There are as follows:

**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

<table>
<thead>
<tr>
<th></th>
<th>TANK</th>
<th>FAST</th>
<th>COVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check</td>
<td>24°20'30&quot;</td>
<td>57°00'00&quot;</td>
<td></td>
</tr>
<tr>
<td>Check</td>
<td>25°13'30&quot;</td>
<td>55°36'50&quot;</td>
<td></td>
</tr>
<tr>
<td>Check</td>
<td>60°20'20&quot;</td>
<td>53°13'30&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TANK</td>
<td>FAST</td>
<td>COVE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.
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-8775.

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. Varnadore, Photogrammetric Engr. Report not submitted.

Respectfully submitted:

[Signature]

Ben J. Bryant,
Photo. Aid

Approved and Forwarded
July 11, 1946

[Signature]

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 8½ 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 Nantucket 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 32.5 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 templates 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 templates 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

Harry R. Rudolph
Harry R. Rudolph
Photogrammetric Engineer

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

- Office Photograph
- Field Photograph
- Triangulation Station

Note: All horizontal control stations accompanied with their respective numbers (544, 543) are listed on the following pages.

LAYOUT SKETCH
PROJECT NO. PH-7-46B
SURVEYS NO. T-8784 & 8735
LIST OF CONTROL
PROJECT PH-7-46-B
SURVEYS NO. T-8784 & T-8785

514. SHARP, 1935
515. SQUARE BRICK SMOKESTACK, 1935
516. MATS, 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, V.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. 39093, 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.
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, filed in Div. dated 25 March 1946 and 19 July 1946, pertaining to Project Ph-746. 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. 

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 (topo) graphic stations.

FALSE EGG, 1938, a recoverable photo (topographic) station, occupies the same geographic position as the triangulation station FALSE EGG ISLAND POINT WOODEN TOWER, 1933.

FALSE EGG, 1936 (Form No. 526) 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. Fort 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 by L. Heck, Geographic Names Section.

38. JUNCTIONS:

A satisfactory junction was made with Survey No. T-8760 to the west and with Survey No. T-8783 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 Fort 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. Banks
Photogrammetric Aid
Compilation and
Compilation Report

Raymond H. Glass
Photogrammetric Aid
Review

Harry T. 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. Filippo, 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)

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

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

[Signature]

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):

<table>
<thead>
<tr>
<th>LIGHT</th>
<th>LIST</th>
<th>Chart Not Checked in Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Aid</td>
<td>Page</td>
<td>Lat.</td>
</tr>
<tr>
<td>Dennis Creek L.t.</td>
<td>235</td>
<td>38°09.9'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>74°53.8'</td>
</tr>
</tbody>
</table>

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.

Edward L. Jones,  
Chief of Party
Subject: Shoreline

21 February 1947

U.S. Coast and Geodetic Survey
Baltimore 18, Maryland

Lieutenant William F. Deane

I have just received your recently submitted field inspection report T-874 for the shoreline.

The descriptive report simply stated that the shoreline was delineated from an office interpretation of the photographs. In a preliminary review of your recently submitted field inspection report T-874, it is found that the field inspection was not followed in delineating the shoreline.

The descriptive report of the field inspection is to be reviewed and the general accuracy of the map.

The descriptive report of the field inspection is to be reviewed and the general accuracy of the map.

The shoreline in question, as I suspected, is a border line case where either the marsh edge or apparent shoreline could be shown without affecting the general accuracy of the map.

The shoreline in question, as I suspected, is a border line case where either the marsh edge or apparent shoreline could be shown without affecting the general accuracy of the map.

I do not want you to blindly follow the field inspector everywhere. You should feel free to question it and make changes whenever it appears wrong. However, you should always give the benefit of some doubt, and the information and correspondence furnished you for your own information.

No change will be made on T-874 and the other sheets in this vicinity until you send the changes over.

Please call to my attention any questions you may have regarding the shoreline data shown on the field inspection report T-874.

Sincerely,

[signature]

[Typed note on page]:

4:00 P.M. Dec. 18, 1947

[Handwritten note]:

T-874

[Handwritten note]:

(approved)

[Handwritten note]:

(see text below)
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
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 im-
portance 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.

Photogrammetric Aid
Compilation and
Compilation Report

Photogrammetric Aid
Review

Approved and Forwarded
3 February 1947

Officer in Charge
Baltimore Photogrammetric
Office
DESCRIPTION OF ACCURATE PHOTO (TOPOGRAPHIC) STATIONS.

DOBY, 1938  Located on the eastern shore of Delaware Bay on b. 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".

DIEB, 1946  Located on the eastern shore of Delaware Bay on Nantuxent
Pt. on the N.E. tip of a grass point which is the south bank
Field Photo. of a small stream. Station is a standard U.S.C.& G.S. topo-
No.15613  graphic disk stamped "DIEB, 1946" set in the top of a 6"
 diameter concrete monument projecting 6" above ground.

DYER, 1946  Located on eastern shore of Delaware Bay approximately
Field Photo. 2 mi. N. of Fortescue, N.J. Station is south gable of
No.15614  lone house in Dyers Cove.

FALS, 1938  Located on eastern shore of Delaware Bay approximately 2.0
Field Photo. miles N.E. of Egg Island light house and about 325.0' N. of
No.15621  the mouth of Straight Creek. Station is N.J. State Board
of Shell Fisheries bronze disk stamped "FALS, 1938"
set in 10" sq. concrete block directly under 4-legged white
latticed structure approximately 25.0' high.

FORT, 1946  Located on eastern shore of Delaware Bay in Fortescue, N.J.
Field Photo. Station is west end of northernmost of two longest piers at
No.15614  Fortescue house.

Fortescue Light 1946, 1939.
Field Photo. Located on eastern shore of Delaware Bay approximately 0.4
No.15614  mi. north of main road to Fortescue, N.J. Light is on south
bank Fortescue Creek near the mouth.

GALK, 1946  Located on eastern shore of Delaware Bay, approximately 1.5
Field Photo. miles west of Fortescue Beach on Beadon Point, approximately
No.15614  1/2 way between tip of Beadon Pt. and mouth of Crow and Figs
Creek on north bank of small creek at edge of sand and
grass. Station is standard U.S.C.& G.S. topographic disk
stamped "GALK, 1946" set in concrete monument projecting 6"
above the ground.

SAG, 1946  Located on eastern shore of Delaware Bay approximately 1 mi.
Field Photo. N of Egg Island light house approximately 500' S of spot where
No.15621  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.
RAN, 1946  Located on E shore on Delaware Bay approximately 1 mi.
S/S of Fortescue, N.J. at S/S corner of bridge over Oyster
Creek. Station is a standard U.S.C.& G.S. topographic
disk stamped "RAN, 1946" set in 6" concrete monument
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
disk stamped "WAD, 1946" set in top of 6" concrete monument.

Listed by:  Checked by:
Donald M. Brand  Raymond R. Brown
Photogrammetric Aid  Photogrammetric Aid
GEOGRAPHIC NAMES
FOR MAP MANUSCRIPT
T - 3734
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 Fort Landing
- Newport
- Newport Neck
- Ogden Creek
- Oyster Creek
- Oranaken Creek
- Padgetts Creek
- Raybin Beach
- Sow and Pigs Creek
- Straight Creek
- Sayres Neck
- The Glades
- Turkey Point
- Weir Creek
- West Millville Gun Club

Plus:
- Hansey Creek
- Pages Run
- Bear Swamp
- State No. 46
- Nantuxent Cove

Names preceded by are approved 4/19/48
L. Heck
Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

30. Low 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--

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-152</td>
<td>1:20,000</td>
<td>1842</td>
</tr>
<tr>
<td>T-157</td>
<td>1:20,000</td>
<td>1842</td>
</tr>
<tr>
<td>T-1549b</td>
<td>1:20,000</td>
<td>1883-4</td>
</tr>
<tr>
<td>T-1661</td>
<td>1:20,000</td>
<td>1884-5</td>
</tr>
<tr>
<td>T-1668</td>
<td>1:10,000</td>
<td>1931-2</td>
</tr>
</tbody>
</table>

44. Comparison with Existing Topographic Surveys--

<table>
<thead>
<tr>
<th>Location</th>
<th>Survey</th>
<th>Scale</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vineland, Del., N.J.</td>
<td>USGS</td>
<td>1:125,000</td>
<td>1886-96</td>
</tr>
<tr>
<td>Maurice Cove, N.J.</td>
<td>USGS</td>
<td>1:62,500</td>
<td>1886</td>
</tr>
<tr>
<td>Port Norris, N.J., Del.</td>
<td>USGS</td>
<td>1:62,500</td>
<td>1940-41</td>
</tr>
<tr>
<td>Shiloh, N.J., Del.</td>
<td>USGS</td>
<td>1:62,500</td>
<td>1886-89</td>
</tr>
<tr>
<td>Bridgeton, N.J.</td>
<td>USGS</td>
<td>1:62,500</td>
<td>1886</td>
</tr>
<tr>
<td>Bridgeton, N.J.</td>
<td>USE</td>
<td>1:62,500</td>
<td>1932-38, 1940</td>
</tr>
<tr>
<td>Shiloh, N.J., Del.</td>
<td>USE</td>
<td>1:62,500</td>
<td>1932-38, 1940</td>
</tr>
<tr>
<td>Bridgeton, N.J., Del., AIS</td>
<td></td>
<td>1:62,500</td>
<td>1942, 1946</td>
</tr>
</tbody>
</table>

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.
Reviewed by:

K. N. Makin
5-6-48

APPROVED:

S. T. S. Griffith
Chief, Review Section
Div. of Photogrammetry

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

M. E. Edmundson
Chief, Nautical Chart Branch
Div. of Charts

K. T. Adams
Chief, Div. of Photogrammetry