Form 504
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Photogrammetric Shoreline

Field No.: Office No.: T-8778

LOCALITY
State: Delaware
General locality: Delaware River
Locality: Liston Point to Reedy Island

194

CHIEF OF PARTY
Thos. B. Reed

LIBRARY & ARCHIVES
DATE: July 25, 1951
DATA RECORD

T-3778

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

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

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

Instructions dated (II III): Copy filed in Descriptive Report No. T-
25 March 1946, 19 July 1946 (VI)

Completed survey received in office: 28-49

Reported to Nautical Chart Section: 8-15-49

Reviewed: 8 Sep 1949 Applied to chart No. Date:

Redrafting Completed: March 13, 1951

Registered: 19 July 1951 Published:

Compilation Scale: 1:10,000 Published Scale: 1: 10,000

Scale Factor (III): 1.000


Reference Station (III): Fennimores, 1933

Lat.: 39° 27' 56.333" (1737.3m) Long.: 75° 36' 48.009" (1147.7m) Adjusted

State Plane Coordinates (VI): Delaware and New Jersey

X = Y =

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>46-D-1956</td>
<td>3-12-46</td>
<td>11:25</td>
<td>1:10,000</td>
<td>1.5 above MLW</td>
</tr>
<tr>
<td>46-D-1957</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>46-D-1958</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>46-D-1959</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>46-D-1960</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>46-D-1961</td>
<td>&quot;</td>
<td>12:10</td>
<td>&quot;</td>
<td>1.1 above MLW</td>
</tr>
<tr>
<td>46-D-1962</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>46-D-1963</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>46-D-1481</td>
<td>3-1-46</td>
<td>12:35</td>
<td>&quot;</td>
<td>1.9 above MLW</td>
</tr>
</tbody>
</table>

### Tide from (III):
Actual tide observations at Philadelphia corrected to Reedy Island to Liston Point.

**Mean Range:** 5.7'

**Spring Range:** 6.4'

### Camera:
(Kind or source) U.S. Coast and Geodetic Survey single lens camera. Wide angle, type "D"—Focal length 12".

### Field Inspection by:
E. L. Jones

**Date:** June-August 1946

### Field Edit by:
Refer to field edit for topographic quadrangles T-8753 + T-8755

**Date:** April and Oct. 1946

### Date of Mean High-Water Line Location (III):
Same as date of photographs supplemented with field inspection obtained during June-August 1946.

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

**Checked by:** T.L. Janson

### Control Plotted by:
Leroy A. Senasack

### Control Checked by:
George O. Fellers

### Radial Plot by:
Frank J. Tarcza
Harry R. Rudolph

### Detailed by:
Richard W. Gawlik

### Reviewed in Compilation Office by:
J.W. Vonasek

### Manuscript Elevations on:
checked by: J.W. Vonasek

**Date:** 11 July 1947
STATISTICS (III)

Land Area (Sq. Statute Miles): 10

Shoreline (More than 200 meters to opposite shore): 11.5 miles (statute)

Shoreline (Less than 200 meters to opposite shore): 30 miles (statute)
(Measured along the center line of stream)

Number of Recoverable Topographic Stations established: 7

Photo Hydro Points
Number of Temporary Hydrographic Stations located by radial plot: 1

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:
FIELD REPORT

SHORELINE MANUSCRIPT, SURVEY NO. T-8778

The area of this shoreline survey is in the area covered by Topographic Surveys Nos. T-8753 and T-8755. For data covering Survey No. T-8778, refer to the field reports of the above mentioned topographic surveys, filed in their respective descriptive reports.
<table>
<thead>
<tr>
<th>STATION</th>
<th>Source of Information (index)</th>
<th>Datum</th>
<th>Latitude or y-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>
</tr>
</thead>
<tbody>
<tr>
<td>PORT PENN PRESBYTERIAN CHURCH SPIRE</td>
<td>G-1751 Pg. 129</td>
<td>N. A. 1927</td>
<td>39° 31' 00.250&quot; 41° 51' 00.250&quot;</td>
<td>7.7 (1842.7)</td>
<td>1002.1 (431.2)</td>
<td></td>
</tr>
<tr>
<td>REEDY ISLAND QUARANTINE STATION WHITE WATER TANK, 1933</td>
<td>G-1751 Pg. 129</td>
<td></td>
<td>39° 30' 54.680&quot; 45° 54.680&quot;</td>
<td>1686.3 (164.1)</td>
<td>1088.0 (345.3)</td>
<td></td>
</tr>
<tr>
<td>REEDY ISLAND BAKER FRONT RANGE LT. 1933</td>
<td>G-1751 Pg. 129</td>
<td></td>
<td>39° 30' 33.124&quot; 45° 33.124&quot;</td>
<td>1021.5 (828.9)</td>
<td>2.5 (1430.9)</td>
<td></td>
</tr>
<tr>
<td>REEDY ISLAND LT. 1933</td>
<td>G-1751 Pg. 129</td>
<td></td>
<td>39° 30' 02.760&quot; 45° 30.02.760&quot;</td>
<td>85.1 (1765.3)</td>
<td>228.6 (1205.0)</td>
<td></td>
</tr>
<tr>
<td>REEDY (U.S.E.) 1911</td>
<td>G-1664 Pg. 74</td>
<td></td>
<td>39° 30' 01.952&quot; 45° 30.01.952&quot;</td>
<td>60.2 (1790.2)</td>
<td>232.6 (1201.0)</td>
<td></td>
</tr>
<tr>
<td>LISTON FRONT, 1933</td>
<td>G-1664 Pg. 66</td>
<td></td>
<td>39° 28' 55.978&quot; 45° 35.2137&quot;</td>
<td>1726.4 (124.0)</td>
<td>746.5 (687.4)</td>
<td></td>
</tr>
<tr>
<td>SUB. STA. LISTON FRONT</td>
<td></td>
<td></td>
<td>39° 28' 31.237&quot; 45° 35' 31.237&quot;</td>
<td>1738.0 (112.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REEDY ISLAND JETTY MIDDLE LT., 1934</td>
<td>G-1913 Pg. 137</td>
<td></td>
<td>39° 28' 58.100&quot; 45° 34' 27.166&quot;</td>
<td>1791.8 (58.6)</td>
<td>662.4 (771.5)</td>
<td></td>
</tr>
<tr>
<td>PENNIMORES, 1933</td>
<td>G-1664 Pg. 75</td>
<td></td>
<td>39° 27' 56.333&quot; 45° 36' 48.009&quot;</td>
<td>1737.3 (113.1)</td>
<td>1147.7 (286.6)</td>
<td></td>
</tr>
<tr>
<td>PENNIMORES, 1933 H.M. No. 1</td>
<td></td>
<td></td>
<td>39° 27' 36.333&quot; 45° 36' 48.009&quot;</td>
<td>1743.6 (106.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REEDY ISLAND DYKE, FLASHING GREEN LT. 1932</td>
<td>G-1751 Pg. 129</td>
<td></td>
<td>39° 28' 03.889&quot; 45° 34' 29.802&quot;</td>
<td>1177.1 (257.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REEDY ISLAND FRONT RANGE LT., 1934</td>
<td>G-1913 Pg. 137</td>
<td></td>
<td>39° 26' 44.154&quot; 45° 34' 36.580&quot;</td>
<td>1362.7 (488.7)</td>
<td>874.7 (560.0)</td>
<td></td>
</tr>
</tbody>
</table>
COMPILATION REPORT

SHORELINE MANUSCRIPT, SURVEY NO. T-8778

T-8778 is one of 12 shoreline manuscripts in Project No. Ph-7(46)C located along the Delaware River and Bay. These surveys are to be compiled in accordance with instructions dated 25 March 1946 and 19 July 1946 by graphic photogrammetric methods.

26. CONTROL

See layout of control submitted to the Washington Office, June 24, 1947. A list of stations on Form No. M2388-12 is included in this report.

27. RADIAL PLOT

The area of Survey No. T-8778 is included in two combined radial plots made with celluloid templates. The southern portion of Survey No. T-8778 is included in the radial plot for the area of Surveys Nos. T-8730, T-8782 and the southern part of T-8778. The northern portion of Survey No. T-8778 is included in the radial plot for the area of Surveys Nos. T-8777, T-8779 and the northern portion of T-8778. The reports for these radial plots were submitted to the Washington Office 7 March 1947 and 24 June 1947, respectively.

28. DELINEATION

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

Because of inadequate photographic coverage, it was impossible to delineate the area at the mouth of "Silver Run" completely. For complete delineation of this area and of interior detail, see Surveys Nos. T-8755 and T-8753.

30. MEAN HIGH WATER LINE

The shoreline was delineated from single lens photographs (1:10,000 scale field ratio prints) in accordance with the field identification shown thereon. Where no inspection was furnished, a stereoscopic study of the photographs was employed.

31. MEAN LOW WATER LINE

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

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

No comment.

33. WHARVES AND SHORELINE STRUCTURES

Delineated in accordance with field identification.
34. **LANDMARKS AND AIDS TO NAVIGATION**

See Form 567 submitted with reports for Surveys Nos. T-8753 and T-8755.

35. **HYDROGRAPHIC CONTROL:**

One photo-hydro point has been shown on the shoreline manuscript, described as follows: "No. 5508, North Chimney of white house."

36. **LANDING FIELD AND AERONAUTICAL AIDS**

None.

38. **GEOGRAPHIC NAMES**

Geographic names were taken from final names standards, dated 12-9-46 and 12-10-46, furnished by the Washington Office. A list of geographic names is attached to this report.

39. **JUNCTIONS**

The junction to the southeast with Survey No. T-8780 has been made and is in good agreement.

The junction to the North with Survey No. T-8775 will be made when that survey has been compiled. The junctions to the east with Surveys Nos. T-8777 and T-8779 are all water areas.

There are no contemporary surveys to the south, and to the west is the project limits.

40. **BOUNDARIES**

None shown.

41. **BRIDGES**

The bridges appearing on this manuscript are over non-navigable waterways and have been classified by the field party.

44. **COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS**

Survey No. T-8778 has been compared in detail with the U.S. Geological Survey Smyrna and Wilmington quadrangles, scale 1:62,500 and was found to be in good agreement.
45. **COMPARISON WITH NAUTICAL CHARTS**

T-8778 has been compared with Nautical Chart No. 294, scale 1:40,000 and found to be in fair agreement.

The following topographic information shown on T-8778 is of sufficient importance to warrant immediate application to the chart:

None.

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

None.

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

Respectfully submitted
18 July 1947

Richard W. Jaworlek
Air Photo Observer
Compilation and Descriptive Report

Joseph W. Wuttmark
Photogrammetric Engineer
Photogrammetric Office Reviewer

Henry C. Radle
Supervisor

Approved and forwarded
23 July 1947

John C. Fierro
Officer in Charge
Baltimore Photogrammetric Office
NOTES FOR
HYDROGRAPHIC PARTIES
DELAWARE RIVER
SHORELINE MANUSCRIPT, SURVEY NO. T-8778
PROJECT NO. PH-7(46)C

The 2½ millimeter circle, accompanied with a name and date,
indicates the position of a recoverable photo (topographic) station
and the 2½ millimeter circle, accompanied by "No. 5508" is the posi-
tion of the photo-hydro point, appearing on this manuscript.

T-8778 has been compared to Nautical Chart No. 294, scale
1:40,000 and was found to be in fair agreement.

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sufficient importance to warrant immediate application to the chart:

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water are not shown on this manuscript, but are believed to still exist
and should be carried forward on the chart:

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the hydrographic party.

Respectfully submitted
18 July 1947

[Signature]
Air Photographic Observer

Approved and forwarded
23 July 1947

[Signature]
Officer in Charge
Baltimore Photogrammetric Office
GEOGRAPHIC NAMES

- Angle Rod Creek
- Appoquinimink River
- Augustine Beach
- Augustine Creek
- Bayview Beach
- Big Ditch
- Blackbird Creek
- Canadas Beach
- Coffee Ground Ditch
- Delaware River
- Fennimore Landing
- Gravel Ditch
- Gut
- Lower Break
- Mill Creek
- Peach House Ditch
- Port Penn
- Rays Ditch
- Reedy Island
- Reedy Island Dike
- Robs Island
- Silver Run
- Skunk Hill Ditch
- The Island
- Upper Break

* Not shown on final name standard sheet. Taken from nautical chart No. 294.

**Delaware**

Names preceded by **are approved.** 2/14/49

L. Heck
34. Landmarks and Aids to Navigation:

Two landmarks (Δ) (Form 567 filed under T-8753)

1. Reedy Island white water tank (60')
2. Fort Penn Presbyterian Church Spire (70')

Eleven Aids

1. Old Reedy Island (Δ) 567 T-8753
2. Baker Range Front (Δ) 567 T-8753
3. Liston Range Front 567 524 T-8755
4. Appoquinimink Range Front 567 524 T-8755
5. Appoquinimink Range Rear 567 524 T-8755
6. Reedy Island Jetty (Δ) 567 T-8755
7. Reedy Island Jetty, Middle (Δ) 567 T-8755
8. Reedy Island Range Front (Δ) 567 T-8755
9. Reedy Island Gap South Side Br.
10. White Wooden Day Beacon
11. Reedy Island Dike Lower Bell, Buoy 2

The submerged part of the dike (between Reedy Island Jetty Light and Bell Buoy 2) was traced from its seeming position evidenced on photograph D-1461(1946)

Bell Buoy 2 ("Marks lower end of dike"—Light List) was cut in during review from visible positions on photographs D-1958 and D-1959(1946) after the submerged part of the dike had been tentatively drawn. The cuts placed the Buoy in a position suggesting that the dike exists as drawn.

39. Recoverable Topographic Stations;—Besides the stations (Aids) 3, 4, and 5 above, Forms 524 were filed(under T-8755) for:

NEAR 1946
YAKE 1946
BODS 1946

43. Comparison with Previous Topographic Surveys:

<table>
<thead>
<tr>
<th>Station</th>
<th>Scale (feet)</th>
<th>Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-146</td>
<td>1:10,000</td>
<td>1841</td>
<td>(No contours)</td>
</tr>
<tr>
<td>T-1547-a</td>
<td>1:20,000</td>
<td>1882</td>
<td>(with contours)</td>
</tr>
<tr>
<td>#T-2214</td>
<td>1:400</td>
<td>1896</td>
<td>(with depth curves in pencil)</td>
</tr>
</tbody>
</table>

* This is, primarily, a plan of the Reedy Island U.S. Quarantine station layout and boundary; and of the USCGS tidal indicator at the Philadelphia Maritime Exchange Reporting Station. HWL, LWL, old piers and depth curves are drawn in pencil only.
44. **Comparison with Existing Topographic Quadrangles:**

<table>
<thead>
<tr>
<th>Quadrangle</th>
<th>Scale</th>
<th>Date (ed)</th>
<th>Revision (rep)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.N. Wilmington, Del.</td>
<td>1:62,500</td>
<td>1906</td>
<td>1944</td>
</tr>
<tr>
<td>U.S.N. Smyrna, Del.-N.J.</td>
<td>1:62,500</td>
<td>1931</td>
<td>1946</td>
</tr>
</tbody>
</table>

45. **Comparison with Nautical Charts:**

<table>
<thead>
<tr>
<th>Chart No.</th>
<th>Scale</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>294</td>
<td>1:40,000</td>
<td>7/19/43</td>
</tr>
</tbody>
</table>

The piling barrier between the mainland and the Reedy Island dike has been removed from the channel and is not shown on T-8753 (Field Edit Report, T-8753).

Reviewed by:

Lena F. Stevens

Approved by:

[Signature]
Chief, Division of Photogrammetry

[Signature]
Chief, Nautical Chart Branch
Division of Charts