Form 804
U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)
Field No. Office No. T-13145

LOCALITY
State New Jersey
General locality Barnegat Bay
Locality Toms River

1967
CHIEF OF PARTY
J. Bull, RADM, Director, Atlantic Marine Center

LIBRARY & ARCHIVES

DATE
PROJECT NO. (I):
Job PH-6713

FIELD OFFICE (II):
Ipswich, Massachusetts

PHOTOMGRAMMETRIC OFFICE (III):
Atlantic Marine Center, Norfolk, Virginia

CHIEF OF PARTY
J. K. Wilson
OFFICER-IN-CHARGE
J. Bull, RADM, USN
Director, AMC

INSTRUCTIONS DATED (II) (III):
May 26, 1967 (FIELD)
July 17, 1967 (OFFICE)
Aug. 10, 1967 (SPECIAL) (AMC-12-27)

METHOD OF COMPILATION (III):
Kelsh Stereo-Plotter

MANUSCRIPT SCALE (III):
1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:6,000 Pantographed to 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):
MAY 29, 1968

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:____________________________________

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):
N.A. 1927

VERTICAL DATUM (III): MHW

REFERENCE STATION (III):
TOMS RIVER STANDPIPE 1932

LAT.: 39° 57.5' 14.13 (435.8)

LONG.: 74° 11.44.60 (1058.7)

STATE: New Jersey

ZONE: ____________________________

PLANE COORDINATES (IV):

X =

Y =

Roman numerals indicate whether the item is to be entered by (III) field party, (III) photogrammetric office,
or (IV) Washington office.

When entering names of personnel on this record give the surname and initials, not initials only.
<table>
<thead>
<tr>
<th><strong>FIELD INSPECTION BY (III):</strong></th>
<th><strong>DATE:</strong></th>
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<tbody>
<tr>
<td>E. W. Hartford</td>
<td>June 28, 1967</td>
</tr>
<tr>
<td>P. B. Walbott</td>
<td>July 5, 1967</td>
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<tr>
<th><strong>MEAN HIGH WATER LOCATION (III) [STATE DATE AND METHOD OF LOCATION]:</strong></th>
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<tbody>
<tr>
<td>Air Photo Compilation</td>
<td></td>
</tr>
<tr>
<td>Date of Photography April 1967</td>
<td></td>
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<tr>
<td><em>Field Inspection - 1967</em></td>
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<td>A. E. Roundtree</td>
<td>May 5, 1967</td>
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<td>L. F. Van Scoy</td>
<td>May 10, 1967</td>
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<td>A. Shands</td>
<td>Aug. 8, 1967</td>
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<tr>
<td>A. Shands</td>
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<tr>
<td>L. Neterer, Jr.</td>
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<th><strong>RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):</strong></th>
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<td>R. B. Kelly</td>
<td>Aug. 2, 1967</td>
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<tr>
<td>PLANIMETRY</td>
<td></td>
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<td>CONTOURS</td>
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<td>Inapplicable</td>
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<td>C. Bishop</td>
<td>Aug. 8, 1967</td>
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<td>J. Minton</td>
<td>Sept. 11, 1967</td>
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<th><strong>DATE:</strong></th>
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<td>R. E. Smith</td>
<td>Aug. 15, 1967</td>
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<table>
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<th><strong>REMARKS:</strong></th>
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### Photographs (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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</thead>
<tbody>
<tr>
<td>67L-1746R</td>
<td>April 25, 1967</td>
<td>1157</td>
<td>1:30,000</td>
<td>0.57' above MLW</td>
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<tr>
<td>67L(c)-1738</td>
<td>&quot;</td>
<td>1144</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>67L(c)-1499 thru 1502</td>
<td>&quot;</td>
<td>0952</td>
<td>1:15,000</td>
<td>0.54' &quot;</td>
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<tr>
<td>67L(c)-1474 thru 1476</td>
<td>&quot;</td>
<td>0944</td>
<td>1:15,000</td>
<td>0.54' &quot;</td>
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### Predicted Tide (III)

<table>
<thead>
<tr>
<th>Reference Station</th>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
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</thead>
<tbody>
<tr>
<td>Sandy Hook, N.J.</td>
<td>4.6</td>
<td>5.6</td>
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<table>
<thead>
<tr>
<th>Subordinate Station</th>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coates Point (Highway Bridge)</td>
<td>0.11</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Toms River (T°wn)</td>
<td>0.13</td>
<td>0.6</td>
<td>0.7</td>
</tr>
</tbody>
</table>

### Office Review by (IV):

Atlantic Marine Center

### Date:

April 19, 1967

### Proof Edit by (IV):

Ve. W. Slusky

### Remarks:

None
<table>
<thead>
<tr>
<th>Compilation Record</th>
<th>Completion Date</th>
<th>Remarks</th>
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<tr>
<td>Compilation Complete pending Field Edit</td>
<td>August 1967</td>
<td>Superseded</td>
</tr>
<tr>
<td>Corrections made from Hydro Party</td>
<td>November 1967</td>
<td>Superseded</td>
</tr>
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</table>

*Final Review* April 1968
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-13145

Shoreline manuscript T-13145 is one of three 1:10,000 scale maps in Ph-6713, Toms River, New Jersey. The sketch on page 5 of this report shows the position of this manuscript in the project.

Ph-6713 is a stereo-instrument project in advance of hydrographic surveys of the area. Compilation was by Kelsh Plotter using the same 1:30,000 diapositives of the April 25, 1967 infra-red photography that were used in the stereoplanigraph bridge. A ratio black and white print of the April 25, 1967 1:30,000 scale color photograph 67-L(c)-1737 was used for reference in compilation, and was processed and furnished for hydrographic support. It is noted that the center of only the processed photograph 67-L-1637 appears on the map manuscript. Color ratio prints of the April 21, 1967, 1:15,000 scale photographs 67-L(c)-1175 and 1176 were also furnished the compiler, and were very useful in final review.

Field work preceding compilation consisted of control identification on 1:30,000 color transparencies, (flight 67-L(c)-1733 through 1738), during June 1967; and field inspection was done in June and July 1967 on 1:15,000 scale contact color prints 67-L(c)-1176, 1177, and 1179.

In accordance with AMENDED INSTRUCTIONS - SPECIAL PROJECT AMC-12-67 of August 18, 1967, see pages 20 and 21 of this report, field edit was not done. The hydrographer did fully answer the compiler's questions on the ozalid and cronaflex "Field Information Prints" during August and September 1967.

The compilation manuscript was a vinylite sheet 3 minutes and 45 seconds in latitude and longitude. The smooth manuscript was on cronaflex for registry and record after final review.

Final review was done in April 1968 at the Atlantic Marine Center.
FIELD INSPECTION REPORT
JOB PH-6713
MAPS T-13145, T-13146, T-13147

This report is submitted for three maps, since there are no areas requiring special treatment.

2. AREAL FIELD INSPECTION

The area lies along the North and South shores of Toms River, extending to the East across Barnegat Bay to Ortley Beach and Seaside Heights, and to the West to the Garden State Parkway.

The area of field inspection is the immediate shore line of Toms River from the mouth westward to the Garden State Parkway (Instructions dated 26 May 1966). 1967

This area is extensively developed, and is accessible by truck.

Field inspection is complete; no part being omitted or left for field edit.

Photographic quality is very good. Photographs were taken in April 1967.

Photographs used for field inspection are listed below Maps:

<table>
<thead>
<tr>
<th>T-13145</th>
<th>T-13146</th>
<th>T-13147</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-L-1476</td>
<td>67-L-1477</td>
<td>67-L-1492</td>
</tr>
<tr>
<td>1494</td>
<td>1495</td>
<td>1493</td>
</tr>
<tr>
<td>1496</td>
<td>1497</td>
<td></td>
</tr>
</tbody>
</table>

3. HORIZONTAL CONTROL

Horizontal control recovery has been completed in accordance with project instructions.

The identification of horizontal control was accomplished during period June 22, 1967, through June 28, 1967.

The control was identified on color transparencies of 1:30,000 scale.
4. **VERTICAL CONTROL**  
   None.

5. **CONTOURS AND DRAINAGE**  
   Contours are inapplicable.

   Drainage is composed of small streams, and drains with a very few swamp and marsh areas.

6. **WOODLAND COVER**  
   Woodland cover was classed in accordance with the Topographic Manual.

7. **SHORELINE AND ALONGSHORE FEATURES**  
   The high-water and apparent shoreline have been indicated on the photographs by symbol.

   The field inspection was accomplished by visual inspection from skiff.

   The high-water line is clearly visible on the photographs by bulkheads and the change in color tone on the sand beaches, which is from a redish color to a white color, and is shown by the inspector in several places on the photographs.

   Special attention is invited to a small area just west of Island Heights; this shore line has been filled for a new beach since photography. Measurements were taken at this area to the high-water line, and are shown on Photograph 67-L-1496.

8. **OFFSHORE FEATURES**  
   This phase was checked, and adequate field inspection notes were made on the photographs.
9. **LANDMARKS AND AIDS**

Non-floating aids to navigation were verified as to existence and correct number. These aids are identified on photograph 67-L-1492, and located in Map T-13147.

There are six private aids in Toms River; these are single pile structures about 10 feet above the water with a light at the top, and are maintained by the state. The channel is also marked by buoys. These and the lights are seasonal (June 1 to September 1). Five aids are identified on Photographs 67-L-1476, 1477, and 1494. One was located by sextant fix, and submitted on form 274.

All landmark buildings recommended for charting are circled on the photographs.

Two landmark bluffs are noted on photographs 67-L-1496 and 1497.

Nautical landmarks outside the field inspection area were visually inspected, and are to be carried forward. Forms 567 are submitted for one deletion, and four (4) to be charted. There were no Nautical Landmarks in the area of field inspection.

10. **BOUNDARIES, MONUMENTS AND LINES**

Inapplicable.

11. **OTHER CONTROL**

None.

12. **OTHER INTERIOR FEATURES**

Three submerged cable shore ends were identified on the photographs: Two on photo 67-L-1476, and one on photo 67-L-1493.

13. **GEOGRAPHIC NAMES**

None.
14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

None.

7 July 1967
Submitted by:

E. W. Hartford
Chief, sub-unit, Photo Party 62
PHOTOGRAMMETRIC PLOT REPORT
Job PH-6713
Toms River, New Jersey

August 2, 1967

21. Area Covered

The area covered extends along Toms River from the city of Toms River, New Jersey, to the city of Seaside Heights, New Jersey. Included in the area are T-sheets, T-13145 thru T-13147, all at 1:10,000 scale.

22. Method

One strip of infrared photography (67-L-1746R thru 1751R) was bridged on the C-8 stereoplanigraph to provide passpoints for B-8 compilation and ratio points for low-altitude, color photography. Five horizontal control stations were used in the IBM bridge adjustment with the companion points and one other station used as checks.

23. Adequacy of Control

The horizontal control provided complied with job instructions and was adequate in quality and quantity. All control held within National Map Accuracy Standards with the exception of ISLAND HEIGHTS STANDPIPE, 1932 "SS". This point was identified on color photography and could not be clearly identified on the infrared photography.

24. Supplemental Data

Local USGS quads and sea level datum were used to rough control elevation during bridging operations.

25. Photography

The infrared photography used for bridging was adequate in coverage, overlap and definition.

Reviewed by:

Approved by:

Robert B. Kelly

John D. Perrow, Jr.
JOB PH-6713
TOMS RIVER
NEW JERSEY

Shoreline Mapping
Scale 1:10,000

1. TOMS RIVER STANDPIPE, 1932, c. 62
2. ISLAND HEIGHTS STANDPIPE, 1932, c. 51
3. WRIGHTS LIGHT CUPOLA, 1935, c. 62
4. BARNE, 1962
5. SEaside HEIGHTS 1932, c. 62
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toms River</td>
<td>G.P.</td>
<td>39° 57' 14.13&quot;</td>
<td>435.8 (1414.7)</td>
</tr>
<tr>
<td>Stationpipe 1932</td>
<td>Vol. 1</td>
<td>74° 11' 44.60&quot;</td>
<td>1058.7 (.365.5)</td>
</tr>
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</table>

1 ft. = 0.3048006 meter

COMPUTED BY: A. G. Rauck, Jr.  DATE: August 8, 1967

CHECKED BY: C. H. Bishop  DATE: August 10, 1967
31. **DELINEATION:**

The Kelsh Plotter was used.

Photography and field inspection were adequate.

32. **CONTROL:**

See Photogrammetric Plot Report.

33. **SUPPLEMENTAL DATA:**

None

34. **CONTOURS AND DRAINAGE:**

Contours are inapplicable.

Drainage was delineated from office interpretation of the photographs with the aid of field inspection.

35. **SHORELINE AND ALONGSHORE DETAILS:**

The shoreline inspection was adequate.

No low water line was shown.

36. **OFFSHORE DETAILS:**

No statement.

37. **LANDMARKS AND AIDS:**

Form 567 for two Landmarks and three Aids have been submitted to the Washington Office under date of November 6, 1967.

38. **CONTROL FOR FUTURE SURVEYS:**

Refer to Item 49.
39. JUNCTIONS:

There are no contemporary surveys to the north, south, or west. Junction is in agreement with T-13146 to the east.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with USGS Quadrangle TOMS RIVER, N.J. scale, 1:24,000, dated 1953.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with Nautical Chart No. 824-SC, scale 1:40,000, 5th edition, dated January 1967.

Items to be applied to nautical charts immediately:

None

Items to be carried forward:

None

Approved and Forwarded

Submitted by

J. Bull, RADM, USESSA
Director, Atlantic Marine Center

R. E. Smith
Cartographer
GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-6713 (Toms River, N. J.)
T-13145

- Beachwood
- Cedar Point
- Davenport Branch
- Jakes Branch
- Kilpatrick Point
- South Toms River
- Sunken Branch
- Toms River (river)
- Toms River (town)
- Wrangle Brook

* Feature is beyond compilation limits

Approved by:
A. Joseph Wraight
Chief Geographer

Prepared by:
Frank W. Pickett
Cartographic Technician
49. NOTES FOR THE HYDROGRAPHER

The following are the descriptions and list of Photo-hydro stations. These are office selections.

4501 - North east corner of Bkld.
4502 - West end of Boat house gable
4503 - T intersection of pier

There are no recoverable topographic stations.


Give heights and submit Form 567 for TANK and TOMS RIVER STANDBPIPE, 1932 at latitude 39° 57' 14", longitude 74° 11' 44".
**PHOTOGRAMMETRIC OFFICE REVIEW**

**T-10883  13195**

<table>
<thead>
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<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
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**CONTROL STATIONS**

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<th>5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY</th>
<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS)</th>
<th>7. PHOTO HYDRO STATIONS</th>
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**BENCHMARKS**

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<th>8. BENCHMARKS</th>
<th>9. PLOTTING OF SEXTANT FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
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<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>Bridge (W.O.)</td>
<td>Kelsh</td>
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**ALONGSHORE AREAS (NAUTICAL CHART DATA)**

<table>
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<tr>
<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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**AIDS TO NAVIGATION**

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<th>16. AIDS TO NAVIGATION</th>
<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
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<tbody>
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**PHYSICAL FEATURES**

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<tr>
<th>20. WATER FEATURES</th>
<th>21. NATURAL GROUND COVER</th>
<th>22. PLANETABLE CONTOURS</th>
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**STEREOGRAPHIC INSTRUMENT CONTOURS**

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<th>23. STEREOGRAPHIC INSTRUMENT CONTOURS</th>
<th>24. CONTOURS IN GENERAL</th>
<th>25. SPOT ELEVATIONS</th>
<th>26. OTHER PHYSICAL FEATURES</th>
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**CULTURAL FEATURES**

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<tr>
<th>27. ROADS</th>
<th>28. BUILDINGS</th>
<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
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**BOUNDARIES**

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<th>31. BOUNDARY LINES</th>
<th>32. PUBLIC LAND LINES</th>
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**MISCELLANEOUS**

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<tr>
<th>33. GEOGRAPHIC NAMES</th>
<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
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<tbody>
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**DISCREPANCY OVERLAY**

<table>
<thead>
<tr>
<th>36. DISCREPANCY OVERLAY</th>
<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
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<tbody>
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<td>RES</td>
<td>RES</td>
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**REVIEWER**

<table>
<thead>
<tr>
<th>R. E. Smith</th>
<th>SUPERVISOR, REVIEW SECTION OR UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Albert C. Rauck, Jr.</td>
</tr>
</tbody>
</table>

**REMARKS (SEE ATTACHED SHEET)**

**FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT**

Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

**COMPILER**

<table>
<thead>
<tr>
<th>R. E. Smith</th>
<th>SUPERVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Albert C. Rauck, Jr.</td>
</tr>
</tbody>
</table>

**REMARKS**

Hydro. Party corrections were made from Field Information Ozalid and cronaflex copy of sheet.
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated. The positions given have been checked after listing by

<table>
<thead>
<tr>
<th>STATE</th>
<th>NEW JERSEY</th>
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</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>TOWNS RIVER</td>
<td>Beachwood Municipal Waterworks Poultryman’s Service Co. steel</td>
</tr>
<tr>
<td>TANK</td>
<td></td>
</tr>
<tr>
<td>ELEVATOR</td>
<td>Poultryman’s Service Co. steel ht. = 75 (85)</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* Tabulate seconds and meters
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by R. E. Smith

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIGHT 19</td>
<td>Priv. Maintd.</td>
<td>39.96</td>
<td>74.76</td>
<td>N.A.</td>
<td>830/67 X</td>
<td></td>
<td>1216</td>
</tr>
<tr>
<td>LIGHT 13</td>
<td>&quot;</td>
<td>39.96</td>
<td>74.76</td>
<td>N.A.</td>
<td>830/67 X</td>
<td></td>
<td>1216</td>
</tr>
<tr>
<td>LIGHT 7</td>
<td>&quot;</td>
<td>39.96</td>
<td>74.76</td>
<td>N.A.</td>
<td>830/67 X</td>
<td></td>
<td>1216</td>
</tr>
</tbody>
</table>
## TIDE COMPUTATION

**PROJECT NO. PH-6713 TOMS RIVER**

**Time and date of exposure**: APRIL 24, 1967 9:44

**Reference station**: SANDY HOOK, N.J.

**Subordinate station**: COATES POINT (HIGHWAY BRIDGE)

### Table

<table>
<thead>
<tr>
<th>Time</th>
<th>Height</th>
<th>Height x Ratio of ranges</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High tide</td>
<td>4.9 x 0.11 = 0.539</td>
<td>High tide at Ref. Sta. 0.454</td>
</tr>
<tr>
<td></td>
<td>Low tide</td>
<td>- 0.4 x 0.11 = -0.44</td>
<td>Time difference + 4.19</td>
</tr>
</tbody>
</table>

**Duration of rise or fall**: 6:27

**Range of tide**: 0.583

<table>
<thead>
<tr>
<th>Time</th>
<th>Height</th>
<th>Height x Ratio of ranges</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High tide</td>
<td>0.539</td>
<td>Feature bares Stage of tide above MLW Feature above MLW</td>
</tr>
<tr>
<td></td>
<td>Low tide</td>
<td>0.01</td>
<td>Feature above MLW</td>
</tr>
</tbody>
</table>

### Additional Data

- **M.H.W. = 0.45'**
- **Mean range = 0.5'**
- **M.T.L. = 0.2'**
- **Ratio of ranges**: H.W. = 0.11, L.W. = 0.11

### Computed by

A.C. RAUCKAHR 8/7/67

**Checked by**: CHP 8/7/67

**Photo. No.**

- 67L(c) 1474
- 67L(c) 1486
- 67L(c) 1488
- 67L(c) 1502
### Tide Computation

**Project No.:** 6713 TOMS RIVER

**Time and Date of Exposure:** April 25, 1967

**Reference Station:** SANDY HOOK, N.Y.

**Subordinate Station:** COATES POINT (HIGHWAY BRIDGE)

<table>
<thead>
<tr>
<th>Time</th>
<th>Height feet</th>
<th>Height x Ratio of Ranges</th>
<th>Time difference</th>
<th>Corrected Time at Subordinate Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Tide</td>
<td>5.2</td>
<td>0.41 = 2.1</td>
<td>4.12</td>
<td>12:31</td>
</tr>
<tr>
<td>Low Tide</td>
<td>-1.2</td>
<td>0.41 = -0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range of Tide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>h. m.</th>
<th>Ht. H. T. or L. T.</th>
<th>Tabular Correction</th>
<th>Stage of Tide above MLW</th>
<th>Feature Bases</th>
<th>Photo. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:31</td>
<td>0:572</td>
<td>Feature Bases</td>
<td>Stage of Tide above MLW</td>
<td>Feature above MLW</td>
<td>67L 1744 R</td>
<td></td>
</tr>
<tr>
<td>11:44</td>
<td>0:47</td>
<td>Feature Bases</td>
<td>Stage of Tide above MLW</td>
<td>Feature above MLW</td>
<td>67L 1752 C</td>
<td></td>
</tr>
<tr>
<td>0:34</td>
<td>0:0</td>
<td>Feature Bases</td>
<td>Stage of Tide above MLW</td>
<td>Feature above MLW</td>
<td>67L (c) 1733</td>
<td></td>
</tr>
<tr>
<td>11:37</td>
<td>0:0</td>
<td>Feature Bases</td>
<td>Stage of Tide above MLW</td>
<td>Feature above MLW</td>
<td>67L (c) 1739</td>
<td></td>
</tr>
</tbody>
</table>

**Computed by:** A.C. RAUCHER
**Checked by:** C.N.R. 8/17/67

**Mean Range:** 0.45

**M.T.L.:** 0.2

**Ratio of Ranges:** M.W. = 0.11

**Low T.L. = 0.11**
UNITED STATES GOVERNMENT

Memorandum

in lieu of Field Edit Report

TO : Director
Atlantic Marine Center

ATTN : Chief, Photogrammetric Processing Branch

FROM : Officer-In-Charge
Hydrographic Field Party 745

DATE: 30 October 1967

SUBJECT: SP-AMC-12-67 — Investigation of Chart Deficiencies,
Coast of New Jersey — Additional Field Information
for Compilation Ph-6713 — Vicinity of Toms River

Pursuant to Amended Instructions for SP-AMC-12-67 dated
18 August 1967, additional field information was obtained
for compilation of sheets T-13145, -6, & -7 during the period
August - October 1967. The majority of the work being done
on 30 & 31 August 1967.

Sextant positions with check angles using triangulation or
photo points were obtained for all aids not compiled in
the project area. All aids and landmarks on T-13147 were
additionally checked by a planestable cut from BARNE, 1962.
A two-position theodolite cut was obtained as a check for
the Ocean Gate Water Tank which was located by the party
with two photo cuts on T-13146.

A few of the more important details remaining to be compiled
were noted, however a thorough edit was in no way undertaken.

Enclosures
As per Form 413

Gerald M. Ward
LT - USESSA

BUY U.S. SAVINGS BONDS REGULARLY ON THE PAYROLL SAVINGS PLAN
18 August 1967

Officer in Charge
Hydrographic Field Party 745

AMENDED INSTRUCTIONS -- SPECIAL PROJECT AMC-12-67 -- INVESTIGATIONS OF CHART DEFICIENCIES -- COAST OF NEW JERSEY

1. A photogrammetrist will not be assigned to provide photo-hydro support for hydrography in Toms River.

2. Office identified points have been picked to supplement existing pass points, land marks and triangulation. Each office identified point has been numbered and a description of each point will be furnished.

3. Field edit of the Toms River manuscripts will not be required. Notes to the hydrographer listing additional information required for compilation will be furnished.

4. A strong sextant fix with check angle will be acceptable for location of the fixed aids in lieu of location by triangulation.

5. Forward field notes and Form 567s for the Toms River manuscripts to Chief, Photogrammetric Processing Branch, Atlantic Marine Center.

6. Receipt of these amended instructions shall be acknowledged.

[Signature]
Bull
Director
Atlantic Marine Center
REVIEWS REPORT T-13145
SHORELINE
April 1968

61. GENERAL STATEMENT:

See Summary on page 6 of this Descriptive Report.

An ozalid Comparison Print (page 24 of this report), which shows the differences noted in Items 62, and 65, is included with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

T-9827 North half; 1:10,000; Oct. 1952 Kelsh; Field Edit June 1953; Final Review May 1955.

The T-9827 differences are on the Comparison Print in blue.

This survey is generally in good agreement with T-9827; the only major differences are obviously from construction. Some minor changes are also noted in the Comparison Print. The Comparison Print notes the differing height and elevation for Toms River Standpipe: 105' (135') on T-13145, and 100' (128') on T-9827 n/2. T-9827 n/2 gave no height and/or elevation for the tank both maps show near latitude 39° 56.3', longitude 74° 11.52'.

T-9827 shows a geographic name, Kilpatrick Pt., that does not appear on the geographic name list or Name Standard quadrangle submitted for T-13145, and is therefore not on this map. The name is used for the same feature, latitude 39° 57.0', longitude 74° 11.7', on nautical chart 8245C, see item 65 of this report.

T-13145 supersedes the previous registered surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

TOMS RIVER, N.J.: U.S.G.S. quadrangle; 1:24,000; 1953

This quadrangle is a reduction of U.S.C.&G.S. topographic survey T-9827 North and South halves, used for item 62. The same differences therefore exist, excepting the quadrangle does not use the name Kilpatrick Pt. and does not show a height and/or elevation for Toms River Standpipe.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

A "Chart Investigation Smooth Sheet" for Special Project AMC-12-67,
(see pages 20 and 21 of this report), is being prepared by hydrographic party 745 for transmittal to Washington in May 1968. This smooth sheet will use prints of the final reviewed manuscript T-13145 as the source of shoreline information.

65. COMPARISON WITH NAUTICAL CHARTS:


The chart differences with T-13145 are on the Comparison Print in red.

Light 19 has apparently been moved about 100 meters northeast of the chart position.

The point at latitude 39° 57.0', longitude 74° 11.7' has been changed by construction.

There is a difference in the pier and shoreline near latitude 39° 56.65' and Longitude 74° 11.35'.

The chart delineation of the pond west of longitude 74° 12.1' should be revised from T-13145.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with the project instructions, Bureau requirements, and meets the National Standards of Map Accuracy. No accuracy tests were run in the field.

Reviewed by:

M. M. Slavney

Approved by:

J. Bull, RADM, USESSA
Director, Atlantic Marine Center

Approved by:

Charles S. Hein
Chief, Photogrammetric Branch

Ralph P. Lohman
Chief, Photogrammetry Division

JUN 27 1968

Chief, Nautical Chart Division
"CHART INVESTIGATION SMOOTH SHEET for Special Project AMC-12-67"

Should be in agreement, see Item 6h of this Descriptive Report.