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

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Planimetric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Ph-163</td>
</tr>
<tr>
<td>Office No.</td>
<td>T-10493</td>
</tr>
</tbody>
</table>

LOCALITY

<table>
<thead>
<tr>
<th>State</th>
<th>Massachusetts</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>Narragansett Bay</td>
</tr>
<tr>
<td>Locality</td>
<td>North Westport</td>
</tr>
</tbody>
</table>

1956

CHIEF OF PARTY
Ira R. Rubottom, Chief of Party
W. E. Randall, Baltimore District Officer

LIBRARY & ARCHIVES

DATE
February 26, 1968
Ph-163

Project No. (II): 43966

Quadrangle Name (IV):

Field Office (II): East Providence, R. I.

Chief of Party: Ira R. Rubottom

Photogrammetric Office (III): Baltimore, Maryland

Officer-in-Charge: William E. Randall

Instructions dated (II) (III):

(II) 9 April 1956

13 March 1957

Method of Compilation (III): Kelsh Plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:16,000

(Pantograph ratio 3/5)

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Reference Station (III): FALL RIVER TIVERTON CORNER 4, 1891

Lat.: 41° 39' 36.96" (1140.4 m) Long.: 71° 07' 59.035 (1365.8 m) Adjusted

Plane Coordinates (IV):

State: Zone:

Y = X =

Roman numerals indicate whether the item is to be entered by (II) 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.
Areas contoured by various personnel
(Show name within area)
(l) (ll) (lll)
Field Inspection by (II): John R. Smith  

Date: May - October 1956

Planetary contouring by (II):  

Date:

Completion Surveys by (II): NO FIELD EDIT  

Date:

Mean High Water Location (III) (State date and method of location): Inapplicable

Projection and Grids ruled by (IV): J. B. Phillips  

Date: 8/7/57

Projection and Grids checked by (IV): J. B. Phillips  

Date: 8/7/57

Control plotted by (III): E. L. Rolle  

Date: 8/27/57

Control checked by (III): B. Kurs  

Date: 9/4/57

Stereoscopic Instrument compilation (III):

Date: 3/19/58

Stereoscopic Instrument compilation (III): J. C. Richter  

Date: 1/23/59

Scribed Manuscript by (III): J. C. Cregan  

Date: 10/18/60

Photogrammetric Office Review by (III): E. L. Rolle  

Date: 9/13/60

Elevations on Manuscript checked by (II) (III):  

Date:
**DESCRIPTIVE REPORT - DATA RECORD**

**Camera (kind or source) (III):** USC&GS Type "W" Camera 6"

**PHOTOGRAPHS (III)**

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time (EST)</th>
<th>Scale</th>
<th>Stage of Tide</th>
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</thead>
<tbody>
<tr>
<td>56-W-295 thru 297</td>
<td>5/1/56</td>
<td>1017</td>
<td>1:30,000</td>
<td>No tide water</td>
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<tr>
<td>56-W-334 and 335</td>
<td>&quot;</td>
<td>1057</td>
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**Tide (III)**

<table>
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<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
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</tbody>
</table>

Reference Station: 
Subordinate Station: 
Subordinate Station: 

Washington Office Review by (IV): **S.G. BLANKENBACHER**

Date: **JAN., 1968**

Final Drafting by (IV): 

Drafting verified for reproduction by (IV): 

Proof Edit by (IV): 

**Land Area (Sq. Statute Miles) (III):** 13.5 sq. mi.

**Shoreline (More than 200 meters to opposite shore) (III):** None

**Shoreline (Less than 200 meters to opposite shore) (III):** None

**Control Leveling - Miles (II):**

**Number of Triangulation Stations searched for (II):** 5  
**Recovered:** 1  
**Identified:** 1

**Number of BMs searched for (II):**

**Number of Recoverable Photo Stations established (III):** None

**Number of Temporary Photo Hydro Stations established (III):** None

Remarks:
Summary to Accompany Descriptive Report
T-10493

T-10493 is one of 30 planimetric maps comprising Project PH-163. Project maps cover the Narragansett Bay, Rhode Island, Massachusetts, area.

Field inspection preceded compilation. This map was not field edited.

The project area was bridged by multiplex and compiled by Kelsh plotter.

The addendum to this summary includes a discussion of project map accuracy and adequacy.

A cronaflex copy of the map will be registered.
ADDENDUM TO SUMMARIES TO ACCOMPANY
JOB PH-163 MAPS T-10472 through T-10501
(ACCURACY AND FUTURE SURVEYS)

Most of the project maps were used in contemporary hydrographic survey operations. Four hydrographic surveys accomplished in the period of time between 1943 and 1955 cover the project area outside the areas of contemporary surveys.

The contemporary hydrographic surveys have been registered. With one exception they are classified "basic". Survey H-8367 is classified as "basic for charting only".

Considerable difficulty was experienced during smooth plotting and verification of some hydrographic surveys in using signals located by plane table methods. Many of the objects were identified on field photographs by the plane table party. Field identification of these objects was re-examined in the Baltimore Office, Compilation Unit. Some of the objects were relocated photogrammetrically and this revised information was furnished for use in smooth plotting.

The Norfolk Processing Office Addendum to Accompany Survey H-8316 mentions difficulties experienced when plotting sextant angles locating piles, piers, shoreline changes, etc. - they were seldom in agreement with photogrammetric manuscript positions. The Washington office verifier was unable to adjust the subject information using the available hydrographic data. To assist in resolving the discrepancies, the Photogrammetry Division (Washington Office Review Group) rechecked signal locations on Maps T-10472, T-10473, T-10475 and T-10476. Fifty-seven signal locations and random portions of shoreline were revised by graphic methods using available field photographs that included field-identified primary control and signals. This additional work is subject to error due to the condition of the photographs and the more limited use of project control; many discrepancies between the surveys, however, were resolved by using the revised information. No requests for similar rechecks were made by verifiers of other hydrographic surveys.

In part, the problems encountered in survey H-8316 (and H-8394) during hydrography and by verifiers can be attributed to the enlargement of these photogrammetric maps from 1:10,000 to 1:5,000 scale for use in hydro support. Similar problems on
other hydrographic surveys were attributed, in part, to
incorrect transfer of signals, substandard plotting and use
of weak sextant fixes.

Control for project bridging (multiplex) was classified
"over abundant" (150 stations). While 25% of the stations
were "difficult to see", only two stations were not held.
Pass points between strips were averaged-adjustment less
than 0.5 mm.

In addition to the previously mentioned supplemental work
(relocation of signals and shoreline), two stereoplanigraph
models were set to test horizontal map accuracy. The models
covered parts of maps T-10472 and T-10473. A datum difference
was found to exist between Bureau control and MGS and USGS
control. Adjustment of these difference produced no appreciable
shift in map details.

Rock information mapped on some of the photogrammetric surveys
was incomplete as the result of poor photography inadequately
supplemented by field inspection. The hydrographer located
many rocks missed on the photogrammetric survey; and, in
addition, the hydrographic survey reviewers found it necessary
to bring forward considerable rock information without the
benefit of verification by either the photogrammetric surveys
or the contemporary hydrographic surveys.

These surveys have been used, in part, for nautical charting
through both direct application of details and indirectly
through contemporary hydrographic surveys. As previously
mentioned, all but one of the contemporary hydrographic
surveys have been registered as "basic surveys". Registration
of these maps is recommended. Future use of the maps
for hydro support purposes is not recommended due to the
previously discussed problems that were encountered. Re-
bridging by analytic aerotriangulation and new mapping with
new color and infrared photography is recommended.

S. G. Blankenbaker

NOTE: POLITICAL BOUNDARIES—With the exception of the
Mass. - Rhode Island state line, none of the numerous
mapped political boundaries are shown on modern
charts. In consideration of the loss of some field
photographs, and requests by photogrammetric
office reviewers for field verification of bound-
daries, it is recommended that the project maps
not be considered sources for political boundaries
(with the exception of the state line). See
FIELD INSPECTION REPORT
Project 25120
Map T-10493

Please refer to the Field Inspection Report for Map T-10474 for all data pertaining to this map.

Martin C. Moody
Cartographic Survey Aid

Approved:
Ira R. Rutherford
Chief of Party

FIELD INSPECTION PHOTOGRAPHS-
56W 273, 275, 295, 296, 297

Photographs 275 and 295 were missing at the time of final review—apparently lost.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>LONGITUDE OR x-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boundary Stone Dartmouth 1, 1887</td>
<td>G.P. List p. 613</td>
<td>N.A. 1927</td>
<td>41</td>
<td>14.516</td>
<td>147.8, 1403.3</td>
<td>STATION &quot;Lost&quot; - NOT PLOTTED</td>
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<tr>
<td>Boundary Stone Dartmouth 2, 1887</td>
<td>p. 614 Fall River Quad (Use P. A. 28)</td>
<td>&quot;</td>
<td>41</td>
<td>07.85</td>
<td>242.2, 1608.9</td>
<td>STATION &quot;Lost&quot; - NOT PLOTTED</td>
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<tr>
<td>M68 MGS Sub Pt</td>
<td>Comp</td>
<td>&quot;</td>
<td>41</td>
<td>39.101</td>
<td>1206.3, 644.8</td>
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<tr>
<td>M68 MGS</td>
<td>&quot;</td>
<td>&quot;</td>
<td>41</td>
<td>04.0808</td>
<td>111.2, 1276.9</td>
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</table>

1 FT. = 30.48006 METER

COMPUTED BY: J. C. Richter DATE: 7/30/57 CHECKED BY: J. C. Cregan DATE: 8/15/57
COMPILATION REPORT  
Project Ph-163  
T-10493

The photogrammetric plot report for this survey is part of the descriptive report for Survey No. T-10472.

31. **DELINEATION**

The Kelsh plotter was used for delineation.

32. **CONTROL**

Horizontal control was adequate.  
Vertical control is inapplicable.

33. **SUPPLEMENTAL DATA**

Geographic Name Standard, dated 5 March 1957.

34. **CONTOURS AND DRAINAGE**

Drainage is complete.  
Contours are inapplicable.

35. **SHORELINE AND ALONGSHORE DETAILS**

The shoreline of North and South Watuppa Pond was delineated mostly from office interpretation. There is no tidal water within the limits of this manuscript.

36. **OFFSHORE DETAIL**

An abundance of rocks are scattered throughout the water area on this quad. By office interpretation, most of these rocks were delineated. In congested areas only the more prominent rocks were shown.

37. **LANDMARKS AND AIDS**

None.
38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

To the north T-10486.
To the south T-11429 (Ph-142).
To the west T-10492.
No contemporary survey to the east.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The boundary between the city of Fall River and the town of Westport in the northwest corner of map was delineated from U.S.G.S. 7½ minute quad. of Fall River East, Mass., 1951. This quad. was also used to delineate the boundary for the Watuppa Reservation. Adjustments were made to identifiable features.

The boundaries between the city of Fall River and the towns of Westport and Dartmouth in the northeast corner of map were delineated using the positions of two lost boundary monuments, a photogrammetric position of a boundary monument, and the above mentioned quad.

42 through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Map of Bristol County, Mass., 1944.

47. COMPARISON WITH NAUTICAL CHARTS


Items to be applied to nautical charts immediately: None.
Items to be carried forward: None.

Respectfully submitted
13 September 1960

Approved and forwarded

Edward L. Rolle
Carto. (Photo.)

William E. Randall
LDDR, C&GS
Baltimore District Office
PHOTOGRAMMETRIC OFFICE REVIEW
T. 10493

1. Projection and grids
2. Title
3. Manuscript numbers
4. Manuscript size

CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy
6. Recoverable horizontal stations of less than third-order accuracy (topographic stations)
7. Photo hydro stations
8. Bench marks
9. Plotting of sextant fixes
10. Photogrammetric plot report
11. Detail points

ALONGSHORE AREAS
(Nautical Chart Data)
12. Shoreline
13. Low-water line
14. Rocks, shoals, etc.
15. Bridges
16. Aids to navigation
17. Landmarks
18. Other along-shore physical features
19. Other along-shore cultural features

PHYSICAL FEATURES
20. Water features
21. Natural ground cover
22. Planetary contours
23. Stereoscopic instrument contours
24. Contours in general
25. Spot elevations
26. Other physical features

CULTURAL FEATURES
27. Roads
28. Buildings
29. Railroads
30. Other cultural features

BOUNDARIES
31. Boundary lines
32. Public land lines

MISCELLANEOUS
33. Geographic names
34. Junctions
35. Legibility of the manuscript
36. Discrepancy overlay
37. Descriptive Report
38. Field inspection photographs
39. Forms

Reviewed by

Supervisor, Review Section Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT
42. 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
Supervisor

43. Remarks:
62. Comparison with Registered Topographic Surveys
No prior registered Bureau surveys cover the mapped area.

63. Comparison with Maps of Other Agencies
U.S.G.S. Fall River East, Mass. 1:24,000 1963
No significant differences were noted.

64. Comparison with Hydrographic Surveys
No Bureau hydrography has been accomplished in the mapped area.

65. Comparison with Nautical Charts
353 1:40,000 revised 1/17/66
No significant differences were noted.

66. Adequacy of Results and Future Surveys
The addendum to the Summary for this report includes a discussion of project map accuracy and adequacy. Registration of project maps is recommended. For those project maps covering areas of tidal waters, remapping is recommended for future hydrographic survey support purposes. For this survey, many offshore rocks located in large "ponds" (lakes) were delineated from office inspection of photographs. This information has not been carried forward to Chart 353 - probably because the chart is not intended for use in small craft navigation in the area. The mapped rocks should be checked in the field (or new photography obtained) prior to charting for purposes of use in navigation.

Reviewed by

S. G. Blankenbaker

Approved by

Chief, Photogrammetric Branch
Ralph Sobieski  MAR 26 1969
Chief, Photogrammetry Division

John D. Rogers
Chief, Marine Chart Div.
GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-163 (Mass. & R. I.)

T-10493

-Berryman Corner
-Beulah Corners
-Blossom Road
-Bread and Cheese Brook
-Briggs Road
-Brownell Corner
-Dartmouth
-Davis Road
-Fall River
-First Christian Church
-Gifford Road
-Highland Avenue
-Hillcrest
-Lady of Grace Church
-Lakeside
-Mouse Mill Road
-New York, New Haven and Hartford
-North Watuppa Pond
-Old County Road
-Old Bedford Road
-Sanford Road
-South Watuppa Pond
-Suburban Park
-The Narrows
-Watuppa Grange
-Watuppa Reservation
-Westport
-Yellow Hill

Approved by:

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Cartographic Technician

* This is State Route 177 (Southern portion of map) - Negative and vault copy of map produced prior to preparation of subject list.
A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

<table>
<thead>
<tr>
<th>CHART</th>
<th>DATE</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>353</td>
<td>12-4-86</td>
<td>James Brewer</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No. 40</td>
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<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
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