**DESCRIPTIVE REPORT**

**Type of Survey**  Planimetric

**Field No.**  Ph-163  **Office No.**  T-10481

**LOCALITY**

**State**  Rhode Island

**General locality**  Narragansett Bay

**Locality**  Warwick Pond

1956

**CHIEF OF PARTY**

I.R. Rubottom, Chief of Party  W.E. Randall, Balto. District Officer

**LIBRARY & ARCHIVES**

**DATE**  February 11, 1968
DESCRIPTIVE REPORT - DATA RECORD

Ph-163
Project No. (II):  Ph73P44
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):  1:6,000
(Fantograph Ratio 3/5)

Scale Factor (III):

Date received in Washington Office (IV):  OCT 11 1960
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):  MHW

Elevations shown as (2F) refer to mean high water
Elevations shown as (2G) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III):  No. 10 (RISFC) 1956

Lat.:  41° 44' 33.44"  (1031.7 m)  Long.:  71° 22' 47.558"  (1099.0 m)  Adjusted

Plane Coordinates (IV):
Y =           State:  Rhode Island  Zone:
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)
(I) (II) (III)
FIELD INSPECTION by (II): Mathew A. Stewart
Leo F. Bougnit

Date: May - October 1956

Planetary contouring by (II):

Date:

Completion Surveys by (II):

Date:

REFER TO FOOTNOTE PAGE S

Mean High Water Location (III) (State date and method of location): 1 May 1956, Photogrammetric

Projection and Grids ruled by (IV): J. B. Phillips
Date: 8/5/57

Projection and Grids checked by (IV): J. B. Phillips
Date: 8/5/57

Control plotted by (III): B. Kurs
Date: 8/28/57

Control checked by (III): J. C. Cregan
Date: 9/4/57

Stereoscopic
Control extension by (III): D. M. Brant
Date: 9/30/57

Planimetry B. Kurs
Date: 8/18/58

Stereoscopic Instrument compilation (III):

Date:

Manuscript delineated by (III): C. A. Lipscomb
Date: 7/8/60

(Scribed)

Photogrammetric Office Review by (III): E. L. Rolle
Date: 4/13/60

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

Date:
DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): C&GS Type "W", 6" focal length

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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<tbody>
<tr>
<td>56-W-164 &amp; 165</td>
<td>5/1/56</td>
<td>0831</td>
<td>1:30,000</td>
<td>1.8' above MLW</td>
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<tr>
<td>56-W-182 thru 184</td>
<td></td>
<td>0845</td>
<td></td>
<td>1.9'</td>
</tr>
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</table>

Tide (III)

(From Predicted Tide Tables)

<table>
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<tr>
<th>Reference Station</th>
<th>Subordinate Station</th>
<th>Subordinate Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newport, R. I.</td>
<td>East Greenwich</td>
<td>Nayatt Point, R. I.</td>
</tr>
</tbody>
</table>

Washington Office Review by (IV): S. G. BLANKENBAKER

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 11.6
Shoreline (More than 200 meters to opposite shore) (III): 6.7
Shoreline (Less than 200 meters to opposite shore) (III): 3.0
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): 10
Number of BMs searched for (II):
Number of Recoverable Photo Stations established (III): None
Number of Temporary Photo Hydro Stations established (III): None

Remarks:

One (1) third-order triangulation station established.

FIELD EDIT:
LIMITED FIELD EDIT BY HYDROGRAPHIC SURVEY PARTY H-8314
DATE: 1956
NO FIELD EDIT SHEET SUBMITTED.
SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS
T-10477, T-10481, T-10482 and T-10483

Job PH-163 is a planimetric survey project comprised of thirty maps covering Narragansett Bay, Rhode Island-Massachusetts.

A complete field inspection preceded compilation. Limited field edit was accomplished in conjunction with contemporary hydrographic surveys. The project was bridged by multiplex and compiled by Kelsh plotter.

Refer to the accompanying addendum concerning adequacy and accuracy of the subject maps and recommendations regarding future surveys.

Cronaflex copies of the maps 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 differences 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. Rebridging by analytic aerotriangulation and new mapping with new color and infrared photography is recommended.

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 boundaries, it is recommended that the project maps not be considered sources for political boundaries (with the exception of the State Line).
FIELD INSPECTION REPORT
Project 25120
Map T-10481

Please refer to the Field Inspection Report for Map T-10480 for all data pertaining to this map.

Leo F. Beugnet
Leo F. Beugnet
Cartographic Survey Aid

Approved:
Ira R. Rubottom
Chief of Party

FIELD INSPECTION PHOTOGRAPHS -
56W-164 thru 166
56W-183 thru 185
54W-1048, 1090B, 1099C,
1099D, 1100, 1101

PHOTOGRAPHS 54W 1099B, 1099C, 1099D 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 $\mathbf{\phi}$-COORDINATE</th>
<th>LONGITUDE OR $\mathbf{\lambda}$-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
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<tr>
<td>405 USGS, 1934</td>
<td>Narragansett Bay Quad. p. 1</td>
<td>N.A. 1927</td>
<td>41° 44' 12.52&quot;</td>
<td>71° 24' 25.29&quot;</td>
<td>1311.8                        539.3</td>
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<td>596 USGS, 1934</td>
<td></td>
<td></td>
<td>41° 43' 57.56&quot;</td>
<td>71° 25' 22.68&quot;</td>
<td>1775.8                        75.3</td>
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<td>406 USGS, 1934</td>
<td></td>
<td></td>
<td>41° 43' 59.45&quot;</td>
<td>71° 24' 26.28&quot;</td>
<td>1834.1                        17.0</td>
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<tr>
<td>B2 USGS, 1934</td>
<td></td>
<td></td>
<td>41° 44' 30.58&quot;</td>
<td>71° 26' 13.98&quot;</td>
<td>943.4                         207.6</td>
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<td></td>
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<tr>
<td>C2 USGS, 1934</td>
<td></td>
<td></td>
<td>41° 44' 53.02&quot;</td>
<td>71° 23' 32.94&quot;</td>
<td>1635.7                        215.3</td>
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<tr>
<td>No. 10(RISFC), 1956</td>
<td>G.P. p. 168</td>
<td></td>
<td>41° 44' 33.140&quot;</td>
<td>71° 22' 47.558&quot;</td>
<td>1031.7                        819.4</td>
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<tr>
<td>Sub. Pt.</td>
<td>Comp.</td>
<td></td>
<td>41° 44'</td>
<td>71° 24'</td>
<td>1396.4                        494.7</td>
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<tr>
<td>596 USGS</td>
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<td>41° 43'</td>
<td>71° 25'</td>
<td>1776.5                        74.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 to compile this manuscript.

32. **CONTROL**

   Adequate horizontal control.
   Vertical control is inapplicable.

33. **SUPPLEMENTAL DATA**

   Planetable Sheets Ph-1-C-56 and PH-1-G-56 (comparison).
   Final Name Standard dated 5 March 1957.

34. **CONTOURS AND DRAINAGE**

   Contours are inapplicable.
   All visible drainage was delineated.

35. **SHORELINE AND ALONGSHORE DETAILS**

   Shoreline inspection was adequate. All alongshore details believed to be adequately shown.

36. **OFFSHORE DETAILS**

   Refer to paragraph 8 of the field report for T-10480.

37. **LANDMARKS AND AIDS**

   Submitted on Form 567.
38. CONTROL FOR FUTURE SURVEYS

No topographic stations were established.

A number of hydrographic signals in this area were observed in
the Kehle models. Their positions were in fair to good agreement with
the graphic control surveys (PH-1-C-56 and PH-1-D-56). Many signals
could not be seen in the models so that verification was impossible.
Refer to the Descriptive Report to accompany Graphic Control Survey
Sheets PH-1-A-56 through PH-1-N-56 submitted for this project.

39. JUNCTIONS

The manuscript junctions with T-10475 to the north; T-10488 to the
south; T-10482 to the east and T-10480 to the west. All junctions are
in agreement.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41 - 45 No comment.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. 7½ minute quadrangle of East Greenwich, R. I., scale
1:24,000, revised 1957, edition of 1959.

47. COMPARISON WITH NAUTICAL CHARTS

C&GS Chart No. 353, scale 1:40,000, 19th edition 10 March 1958,
revised 29 June 1959.

USCGS Chart No. 278, scale 1:20,000, 10th edition 11 Nov. 1946,
corrected to 17 January 1959.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
18 August 1958

Bernard Kurs
Carto. Photo. Aid

Approved and forwarded

William E. Randell
LCGR, C&GS
Baltimore District Office
PHOTOGRAHAMETRIC OFFICE REVIEW


CONTROL STATIONS


ALONGSHORE AREAS
( Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES

31. Boundary lines 32. Public land lines

MISCELLANEOUS


Reviewer

Supervisor, Review Section or Unit

13 APRIL 1960

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.

S.G. BLANKEN BAKER

Supervisor

43. Remarks: NOV, 1966
REVIEW REPORT
Planimetric Maps
T-10477, T-10481, T-10482 and T-10483
November 1966

61. General Statement

These surveys provided, in part, hydrographic support data for surveys H-8313, 8314 and 8396. Changes in photogrammetric survey details, shown in red on the hydrographic surveys, were applied to the subject maps during this review.

62. thru 65. Comparisons

All prior Bureau topographic information (topographic and hydrographic surveys - and the subject maps) located in the alongshore area was evaluated by hydrographic survey parties and/or verifiers. Prior Bureau surveys were not compared with the new maps during the subject review.

Comparison was made with contemporary hydrographic surveys (refer to side headings 61 and 66, the Summary and its addendum).

Comparison with nautical charts and maps of other agencies were made by photogrammetric compilers. A number of discrepancies - involving features (school and street names and boundaries) not applicable to either hydrographic surveys or modern charts - between these surveys and USGS quadranglies were noted on discrepancy prints. These discrepancies can be disposed of only through a field check. The compilation report for project map T-10475 contains a general discussion of boundary discrepancies.

66. Adequacy of Results and Future Surveys

Hydrographic survey verifiers experienced considerable difficulty in adjusting hydrography (H-8396) and in mapping rock information. Some plane table signal positions were corrected by photogrammetric methods prior to completion of smooth sheet plotting. Refer to the Summary and its addendum included in the Descriptive Report concerning the adequacy of results and future surveys.

Reviewed by:

S. G. Blankenbaker

Approved by:

Charles Bowman
Chief, Photogrammetric Branch

Ralph Stobie  FEB 05 1969
Chief, Photogrammetry Division

John J. Boyer  2/2/69
Chief, Marine Chart Division
GEOGRAPHIC NAMES
FINAL NAME SHEET

PH-163 (Rhode Island)
T-10481

- Baker Creek
- Bayside
- Brush Neck
- Brush Neck Cove
- Buckeye Brook
- Buttonwoods Cove
- Coles
- Conimicut
- Gaspee Point
- Green Island
- Horse Neck
- Hoxsie
- Kettle Corner
- Knowles Brook
- Lakewood
- Lincoln Park
- Little Sand Pond
- Lockwood Brook
- Lockwood Corner
- Norwood
- Oakland Beach
- Occupessatuxet Cove
- Old Mill Creek
- Old Warwick Cove
- Palace Garden
- Passeonquis Cove
- Posneganset Pond
- Providence River
- Rock Island
- Sand Pond
- Little Pond
- Shawomet
- Spring Green
- Spring Green Pond
- Theodore Francis Greene Airport
- Tuscatucket River
- Warner Brook
- Warwick
- Warwick Pond
- Warwick Neck
- Wilde Corner

Approved by: A. Joseph Wright
Chief Geographer

Prepared by: Frank W. Pickett
Cartographic Technician
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 Joseph U. Vonasek

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDES</th>
<th>LONGITUDES</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO</td>
<td>AIRPORT BRACK (located at Theodore Francis Green Airport, Providence)</td>
<td>41 43</td>
<td>33.99 1203</td>
<td>71.26 203</td>
<td>U.S. Photo 1927 I-10121</td>
<td>1 Oct. 1956 Boston Chart</td>
<td>27B 353 1210</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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.
NOTES FOR THE REVIEWER

The geographic position for triangulation station 596, USGS, 1934 is evidently in error. For additional information refer to a letter dated 18 March 1959, included with the Photogrammetric plot report in the Descriptive Report for quadrangle T-10472. It is recommended that this station be removed from the manuscript at time of final review.

During the Photogrammetric office review, the hydrographic signals, which were difficult to see in the Kelsh models, were transferred graphically from the field photographs to the manuscript and then compared with the graphic control surveys. Discrepancies were noted at signals HAS and IMP.

In places where field inspection was inadequate, U.S.G.S., 7½ minute quadrangle of East Greenwich, R. I., scale 1:24,000; 1959 was used.
## Instructions
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>
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<tbody>
<tr>
<td>353</td>
<td>12-16-70</td>
<td>H. Danley</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
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<tr>
<td>378</td>
<td>2-16-71</td>
<td>W. Clark</td>
<td>Full Part Before After Verification Review Inspection Signed Via Drawing No.</td>
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<td>353</td>
<td>6-10-71</td>
<td>W. Clark</td>
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