

10486

Orig.

Diag. Cht. No. 1210-2.

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Planimetric
Field No. Ph-163	Office No. T-10486
LOCALITY	
State	Massachusetts
General locality	Narragansett Bay
Locality	North Watuppa Pond
1956	
CHIEF OF PARTY	
Ira R. Rubottom, Chief of Party	
W. E. Randall, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE	February 1968

USCGM-DC 5087

10486

DESCRIPTIVE REPORT - DATA RECORD

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T - 10486

Project No. (II): **Ph-163**
~~25120~~ Quadrangle Name (IV):

Field Office (II): **East Providence, R. I.** Chief of Party: **Ira R. Ribottom**
Photogrammetric Office (III): **Baltimore, Md.** Officer-in-Charge: **William E. Randall**

Instructions dated (II) (III):
(II) **9 April 1956** Copy filed in Division of
13 March 1957 Photogrammetry (IV)

Method of Compilation (III): **Kelsh Plotter**

Manuscript Scale (III): **1:10,000** Stereoscopic Plotting Instrument Scale (III): **1:6,000**
Scale Factor (III): **1.000** (**Pantograph ratio 3/5**)

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): **M. H. W.**

~~Mean sea level except as follows:~~
~~Elevations shown as (25) refer to mean high water~~
~~Elevations shown as (5) refer to sounding datum~~
~~i.e., mean low water or mean lower low water~~

NO TIDEWATER

Reference Station (III): **BARE FIELD, 1887**

Lat.: **41° 41' 39.204" (1209.5 m)** Long.: **71° 05' 30.590" (707.4 m)** Adjusted
Unadjusted

Plane Coordinates (IV): State: **Mass.** Zone:

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

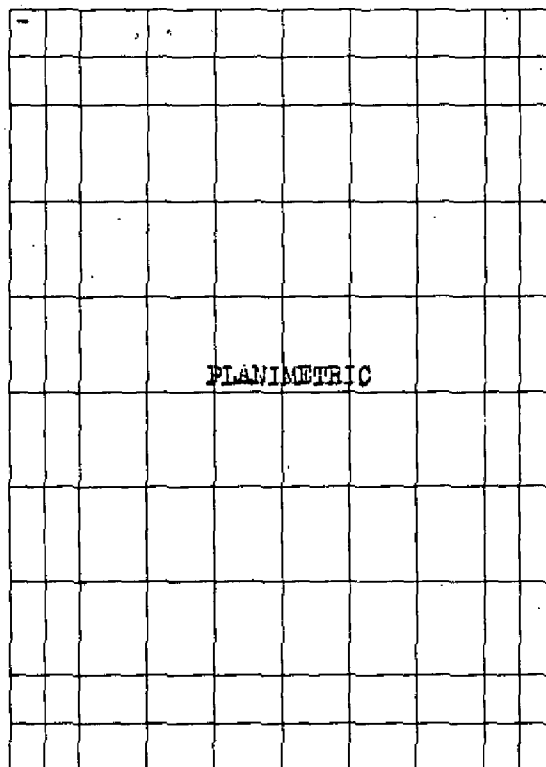
When entering names of personnel on this record give the surname and initials, not initials only.

FORM 181a
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

71° 07.5'



41° 45.0'

41° 41.25'

71° 03.75'

Areas contoured by various personnel
(Show name within area)
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

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Field Inspection by (II): John R. Smith

Date: May - October 1956

Planetable 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: 8/28/57

Control checked by (III):

J. C. Cregan

Date: 9/4/57

~~Radial Plot or~~ Stereoscopic

Control extension by (III):

E. L. Rolle

Date: 3/28/58

Planimetry J. C. Richter

Date: 10/31/58

Stereoscopic Instrument compilation (III):

~~Contours~~

Date:

scribed

Manuscript ~~checked~~ by (III): C. A. Lipscomb

Date: 12/27/60

Photogrammetric Office Review by (III):

E. L. Rolle

Date: 11/17/60

Elevations on Manuscript

checked by (II) (III):

Date:

DESCRIPTIVE REPORT - DATA RECORD

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

Number	Date	PHOTOGRAPHS (III) Time (EST)	Scale	Stage of Tide
56-W-292 thru 294	5/1/56	10:16	1:30,000	No tidewater

Tide (III)

Reference Station:
Subordinate Station: No tidewater
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

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

Date: JAN. 1968

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 14 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: 4

Identified: 2

Number of BMs searched for (II): Recovered:

Identified:

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

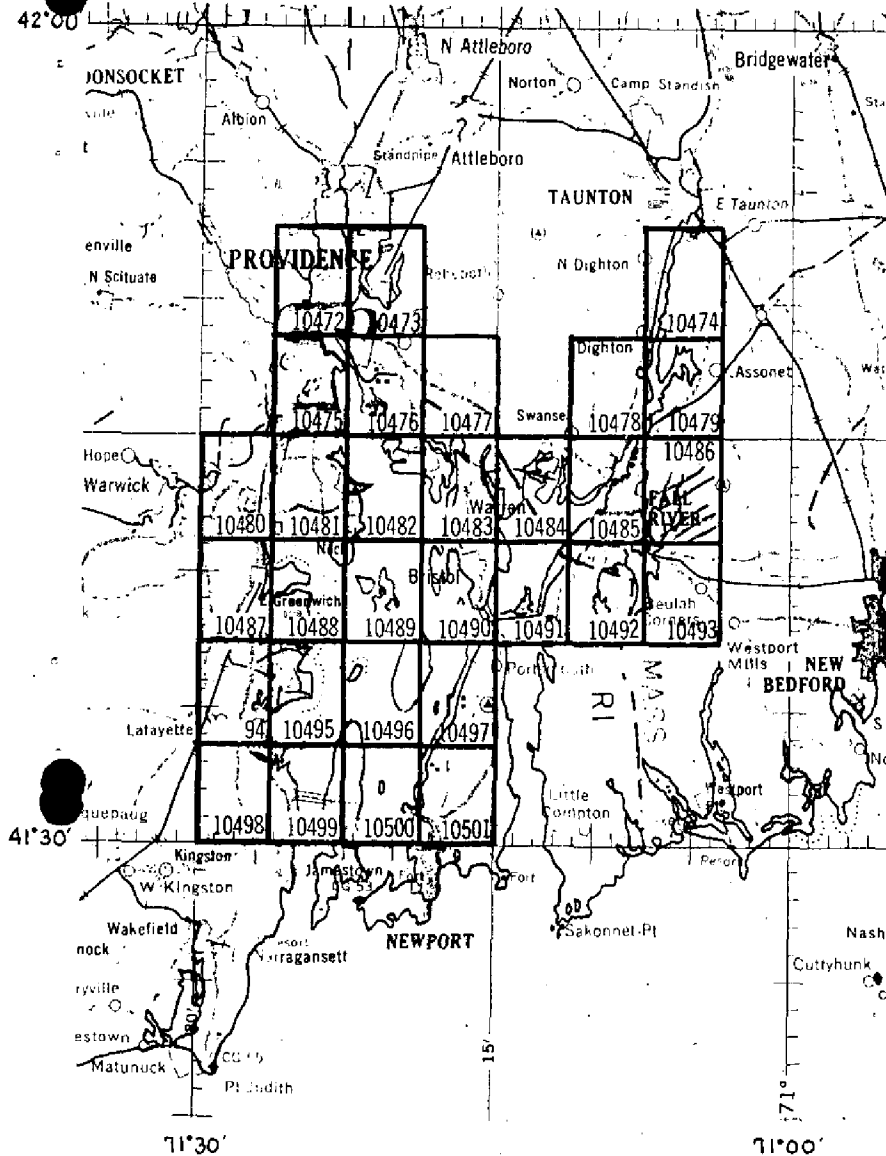
Number of Temporary Photo Hydro Stations established (III): None.

Remarks:

PLANIMETRIC MAPPING PROJECT PH - 163

Narragansett Bay, Mass. - Rhode Island

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OFFICIAL MILEAGE FOR COST ACCOUNTING		
SHEET NO.	Lin. Mi. SHORELINE	AREA SQ. MI.
10472	10	12
10473	7	13
10474	- 0 -	14
10475	8	10
10476	6	11
10477	2	13
10478	1	13
10479	7	12
10480	2	13
10481	4	13
10482	8	4
10483	6	11
10484	8	8
10485	8	10
10486	7	10
10487	3	13
10488	6	6
10489	7	3
10490	8	7
10491	8	6
10492	4	11
10493	3	13
10494	2	13
10495	5	6
10496	5	4
10497	5	7
10498	- 0 -	14
10499	10	7
10500	6	4
10501	2	13
TOTALS	158	294

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SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

T-10486

T-10486 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 a 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.

See Addendum, Page 8

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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

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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
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 boundaries, 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-10486

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

Martin C. Moody
Martin C. Moody
Cartographic Survey Aid

Approved:

Ira R. Rubottom
for
Ira R. Rubottom
Chief of Party

FIELD INSPECTION PHOTOGRAPHS -
56W 275, 277, 291, 292, 293

ALL PHOTOGRAPHS MISSING AT THE
TIME OF FINAL REVIEW - APPARENTLY
LOST.

COMPILATION REPORT
T-10486

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 Watuppa Pond was delineated partially from office interpretation. There is no tidal water within the limits of this manuscript.

36. OFFSHORE DETAIL

A number of rocks and small islands are scattered throughout the water area on this quadrangle. By office interpretation, most of these 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 with T-10479.

To the south with T-10493.

No contemporary survey to the east.

To the west, the join was made with T-10485, with one exception.

The boundary line for Watuppa Reservation compiled on T-10486 was not continued onto T-10485, as this information was not furnished on the adjoining U.S.G.S. quadrangle.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The reservation boundaries were delineated with the aid of eight photogrammetric positions, of boundary monuments and the U.S.G.S. quadrangle of Fall River East, Mass. 1951. (See para. 10 of Field Report). Comparison was made with the photographs and adjustments were made to identifiable features. ** see below*

The boundary between Fall River and Westport was delineated using the positions of three boundary monuments; two photogrammetric positions of boundary monuments and the above mentioned U.S.G.S. quadrangle.

42. through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. Fall River East, Mass., scale 1:31,680, edition of 1951.
Map of Bristol County, Mass., scale 1:63,360, issued 1944.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 353, scale 1:40,000, 19th edition March 10, 1958, revised January 25, 1960.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Approved and Forwarded

William E. Randall

William E. Randall

LCDR, USGS

Baltimore District Officer

Respectfully submitted
17 November 1960

Edward L. Rolle

Edward L. Rolle
Carto. (Photo.)

* Field photographs not available during final review. Boundary delineation not checked SED

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PHOTOGRAMMETRIC OFFICE REVIEW

T. 10486

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

5. Classification label ☒

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 alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable 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 ☒

40. Edward L. Rolle Joseph Steinberg
Reviewer Supervisor, Review Section or 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:

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Review Report
T-10486
Jan. 1968

61. General Statement

T-10486 is the only Bureau survey covering the mapped area. No tidewater is located in the surveyed area.

62. Comparison with Registered Bureau Surveys

Refer to heading 61.

63. Comparison with Maps of Other Agencies

USGS Fall River East, Mass. Quad 1:24,000 1963

No significant differences were noted.

64. Comparison with Hydrographic Surveys

Refer to heading 61.

65. Comparison with Nautical Charts

353 1:40,000 Revised 1/17/66

No significant differences were noted in the common area.

66. Adequacy of Results and Future Surveys

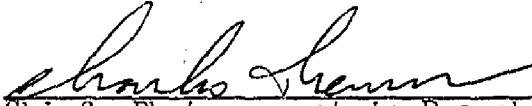
The addendum to the Summary for this survey includes a discussion of (1) project map accuracy and adequacy and, (2) the adequacy of photography and field inspection. Registration of project maps is recommended.


For those project maps covering areas of tidal waters, re-mapping 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 the photographs. This information has not been carried forward to chart 353 - probably because the chart is not intended for use in small craft navigation. The mapped rocks should be checked in the field (or new photography obtained) prior to charting for purpose of use in navigation.


Reviewed by

S. G. Blankenbaker
S. G. Blankenbaker

Approved by


Chief, Photogrammetric Branch

 MAR 26 1968
Chief, Photogrammetry Division


Chief, Marine Chart Division

GEOGRAPHIC NAMES

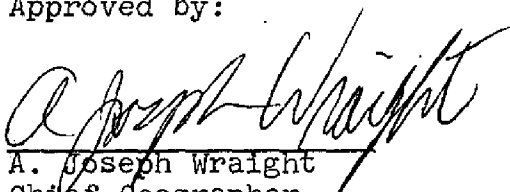
FINAL NAME SHEET

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

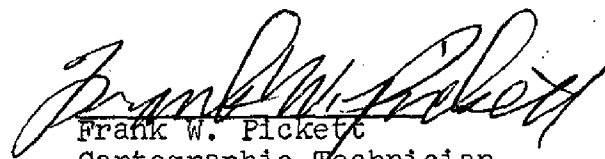
T-10486

·Bell Rock Road	·North Watuppa Boulevard
·Blossom Brook	·North Watuppa Pond
·Blossom Road	·Pond Swamp
·Fall River	·Saint Patricks Cemetery
·Fighting Rock Corner	·State Wildlife Sanctuary
·Freetown Fall River State Forest	·Steep Brook (brook)
·Highland Brook	·Steep Brook (village)
·Indian Town Road	·Watuppa Reservation
·King Philip Brook	·Watuppa Reservation Headquarters
·King Philip Spring	·Westport
·Meridian Street	·Wilson Road
·Mill Brook	·Yellow Hill Road
·New Boston Road	

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-10486

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.

3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]