

10492

original

Diag. Cht. No. 1210-2.

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey <u>Planimetric</u>	
Field No. <u>Ph-163</u>	Office No. <u>T-10492</u>
LOCALITY	
State <u>Massachusetts - Rhode Island</u>	
General locality <u>Narragansett Bay</u>	
Locality <u>Fall River (south)</u>	
<u>1956</u>	
CHIEF OF PARTY	
Ira R. Rubottom, Chief of Party	
W. E. Randall, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE <u>2/26/68</u>	

USCOMM-DC 5087

10492

DESCRIPTIVE REPORT - DATA RECORD

- 2 -

T- 10492

Ph-163

Project No. (II): ~~165146~~

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

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Kelsh plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6,000
(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): ~~MHW~~

~~Mean Sea Level (MSL) as determined by the~~

~~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): FALL RIVER - TIVERTON CORNER 3, 1891

Lat.: 41° 40' 05.316(164.0)

Long.: 71° 10' 35.852 (829.4)

Adjusted
~~UNADJUSTED~~

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.

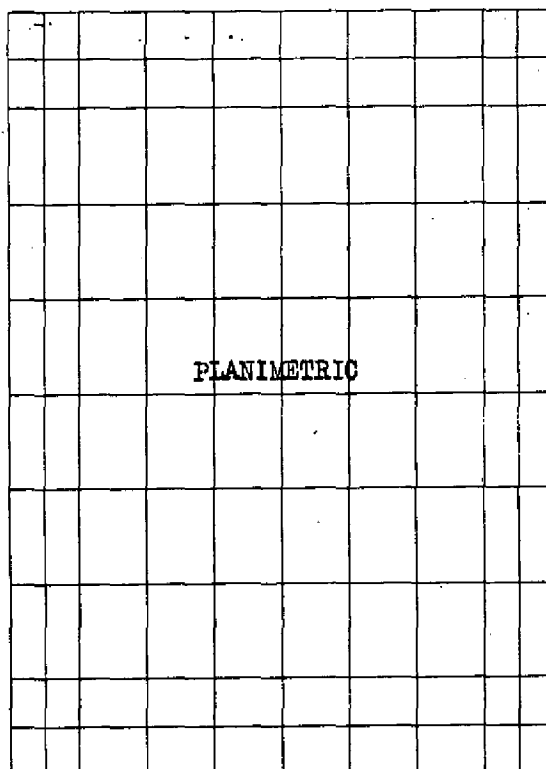
When entering names of personnel on this record give the surname and initials, not initials only.

FORM 181a
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

71° 11.25'



41° 41.25'

41° 37.5'

71° 07.5'

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

DESCRIPTIVE REPORT - DATA RECORD

- 5 -

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

Number	Date	PHOTOGRAPHS (III) Time (EST)	Scale	Stage of Tide
56-W-273 and 274	5/1/56	0946	1:30,000	No tidal waters
56-W-332 and 333	"	1057	"	" " "

Tide (III)
No tide water

Reference Station:
Subordinate Station:
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): 12 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): 6

Recovered: 5

Identified: 1

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

6

42°00'

WONSOCKET

Albion

N Attleboro

Norton

Camp Standish

Bridgewater

OFFICIAL MILEAGE FOR COST ACC

lin.Mi.

APP

SHEET NO.

SHORELINE

SQ. F

10/72

10

12

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

T-10492

T-10492 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.

8

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
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-10492

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

Mart - C. Moody
Martin C. Moody
Cartographic Survey Aid

Approved:

Frank J. Fitzgerald
for
Ira R. Rubottom
Chief of Party

FIELD INSPECTION PHOTOGRAPHS -
56W 260, 262, 273, 274, 275
PHOTOGRAPHS 260 AND 275 WERE
MISSING AT THE TIME OF FINAL
REVIEW - APPARENTLY LOST.

1.000

1 FT. = 3048008 METERS	3/27/57	8/15/57	COMM-DC-57843
COMPUTED BY: K. Heywood	DATE	DATE	
COMPUTED BY: J. C. Richter	DATE	CHECKED BY: J. C. Oregon	

12
- 6 -

COMPILATION REPORT
T-10492

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. Two stateline boundary monuments were established in the Kelsh model using C.S.I. card identification. These two monuments, plus two triangulation station corners, were used to delineate the state boundary between Massachusetts and Rhode Island.

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

All shoreline was delineated from office interpretation. This consisted of large ponds in the area. 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 quadrangle. By office interpretation most of these rocks were delineated. In congested areas only the more prominent rocks were shown.

37. LANDMARKS AND AIDS

Form 567 has been submitted. Copy is bound with Descriptive Report for T-10485.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

To the north with T-10485.
To the east with T-10493.
To the west with T-10491.
To the south with T-11428 (Ph-142).

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The boundary between the town of Westport, Massachusetts and the city of Fall River, Massachusetts was delineated from U.S. G. S. 7½ minute series of Fall River, Massachusetts-Rhode Island.

42. through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. 7½ minute series of Fall River, Mass.-R. I., scale 1:31,680, edition of 1944, reprinted with corrections in 1950.

Map of city of Fall River, Mass., 1903.

47. COMPARISON WITH NAUTICAL CHARTS

C&GS chart No. 353, scale 1:40,000; 19th edition, 10 March 1958, revised 25 January 1960.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
19 October 1960

Edward L. Rolle

Edward L. Rolle
Carto. (Photo.)

Approved and forwarded

William E. Randall

William E. Randall
LCDR, C&GS
Baltimore District Officer

T. 10492

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

CONTROL STATIONS

4a. Classification label PD

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

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline PD 13. Low-water line X 14. Rocks, shoals, etc. PD 15. Bridges X 16. Aids to navigation X 17. Landmarks PD 18. Other alongshore physical features PD 19. Other along-shore cultural features PD

PHYSICAL FEATURES

20. Water features PD 21. Natural ground cover PD 22. Planetable contours X 23. Stereoscopic instrument contours X 24. Contours in general X 25. Spot elevations X 26. Other physical

Review Report
T-10492
Jan. 1968

62. Comparison with Registered Topographic Surveys

T-5750 1:20,000 1949

T-10492 supersedes the prior survey for nautical charting purposes in the common area.

63. Comparison with Maps of Other Agencies

USGS Fall River, Mass. - Rhode Island 1:24,000 1949

No significant differences were noted.

64. Comparison with Hydrographic Surveys

Inapplicable - there is no tidal water within the limits of this map.

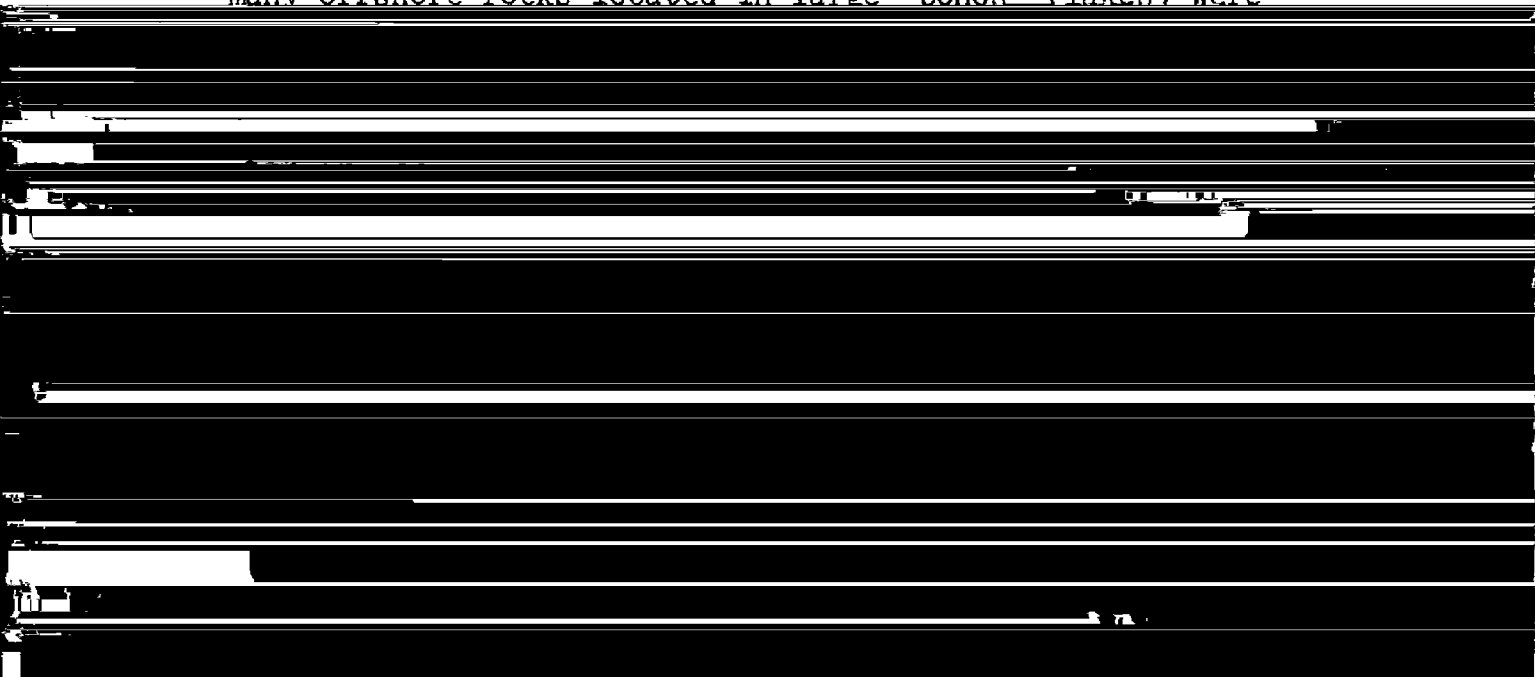
65. Comparison with Nautical Charts

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



2 14

Chlorine 7. Each chlorine atom is bonded to

John D. Boyer
Chief, Marine Chart Division

GEOGRAPHIC NAMES

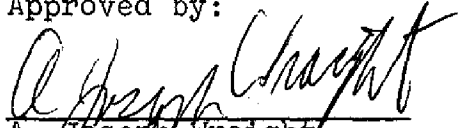
FINAL NAME SHEET

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

T-10492

·Bay Street	·Newport County
·Bleachery Pond	·New York, New Haven and Hartford
·Blessed Sacrament School	·North Tiverton
·Bliss Corners	·Notre Dame Cemetery
·Brayton Avenue	·Old County Road
·Brayton Avenue School	·Plymouth Avenue
·Bristol County	·Pocasset Cedar Swamp
·Bulgarmarsh Road	·Quequechan River
·Cook Hill	·Ranger School
·Cook Pond	·Rhode Island
·Coughlin School	·Saint Marys Cemetery
·Eagleville	·Saint Patricks School
·Eagleville Road	·Sawdy Pond
·Eastern Avenue	·Slade School
·Fall River	·South Main Street
·Fish Road	·South Watuppa Pond
·Flint Village	·Stafford Pond
·Globe Street	·Stafford Road
·Globe Village	·State Avenue
·Green School	·Stone School
·Healy School	·Stony Brook
·Henry Lord Junior High School	·Sucker Brook
·Jewish Cemetery	·Tiverton
·Laurel Lake School	·Townsend Hill
·Laurel Street	·Tucker Street
·Letourneau School	·Warren Street
·Maplewood Park	·Watson School
·Massachusetts	·Westport
·Newhall Street	·Woodman Street

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

