

# 10501

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-10501
LOCALITY	
State	Rhode Island
General locality	Narragansett Bay
Locality	Middletown
1954-56	
CHIEF OF PARTY	
I.R. Rubottom, Chief of Party	
W.F. Deane, Balto. District Officer	
LIBRARY & ARCHIVES	
DATE	February 18, 1968

USCOMM-DC 5087

# 10501

DESCRIPTIVE REPORT - DATA RECORD

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T-10501

Ph-163

Project No. (II): ~~24126~~

Quadrangle Name (IV):

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

Chief of Party: Ira R. Rubottom

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: William F. Deane

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

~~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

Reference Station (III): DRAPER, 1932

Lat.:  $41^{\circ} 32' 24.818''$  (766.6 m) Long.:  $71^{\circ} 16' 00.833''$  (19.3 m)

Adjusted

~~coordinates~~

Plane Coordinates (IV):

State: Rhode Island Zone: ---

Y=

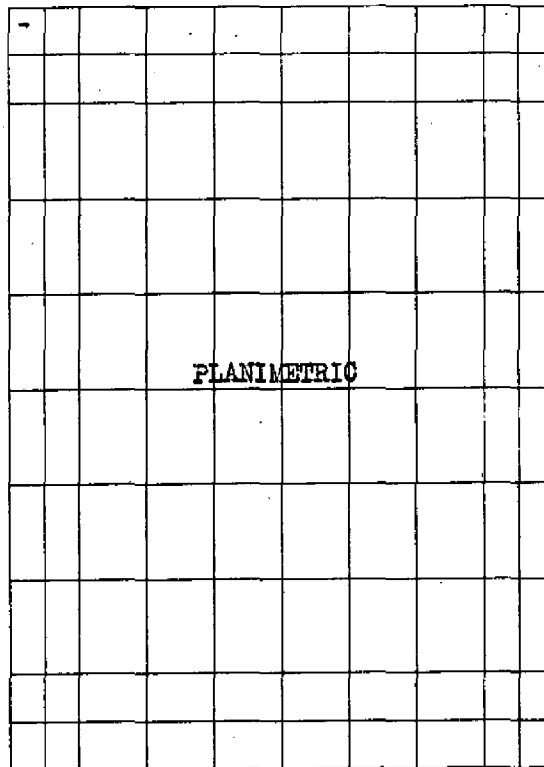
X=

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.

DESCRIPTIVE REPORT - DATA RECORD

71° 18.75'



41° 33.75'

41° 30.0'

71° 15.0'

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

DESCRIPTIVE REPORT - DATA RECORD

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Field Inspection by (II): John S. Winter  
Leo F. Beugnet

Date: May - October 1956

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1956 date of photography  
supplemented by field inspection.

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

Date: 3/15/57

Projection and Grids checked by (IV): H. D. Wolfe

Date: 3/15/57

Control plotted by (III): J. C. Richter

Date: 8/5/57

Control checked by (III): J. C. Grogan

Date: 8/15/57

~~Stereoscopic~~ Stereoscopic E. L. Rolle  
Control extension by (III):

Date: 2/10/58

Planimetry J. C. Richter  
Stereoscopic Instrument compilation (III):  
Contours ----

Date: June 1958

Date: ----

Manuscript delineated by (III): R. J. Ryan  
(Scribed)

Date: 6/9/59

Photogrammetric Office Review by (III): J. W. Vonasek

Date: 12/8/58

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

Date:

## DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): U.S.C. &amp; G. S. Type "W" camera 6" focal length. - 5 -

Number	Date	Time	Scale	Stage of Tide
56-W-238 & 239	5/1/56	0928	1:30,000	1.8 above MLW
56-W-471 thru 474	"	1148	"	2.6 above MLW
43644	4/22/54	1534	1:10,000	0.0 above MLW

Tide (III)  
(from predicted tables)Reference Station: Newport, R. I.  
Subordinate Station:  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
--	3.5	4.4

Washington Office Review by (IV): S.G. BLANKEN BAKER

Date: DEC. 1966

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 13.5

Shoreline (More than 200 meters to opposite shore) (III): 2 miles

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

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 13 Recovered: 10 Identified: 7

Number of BMs searched for (II): Recovered: Identified:

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

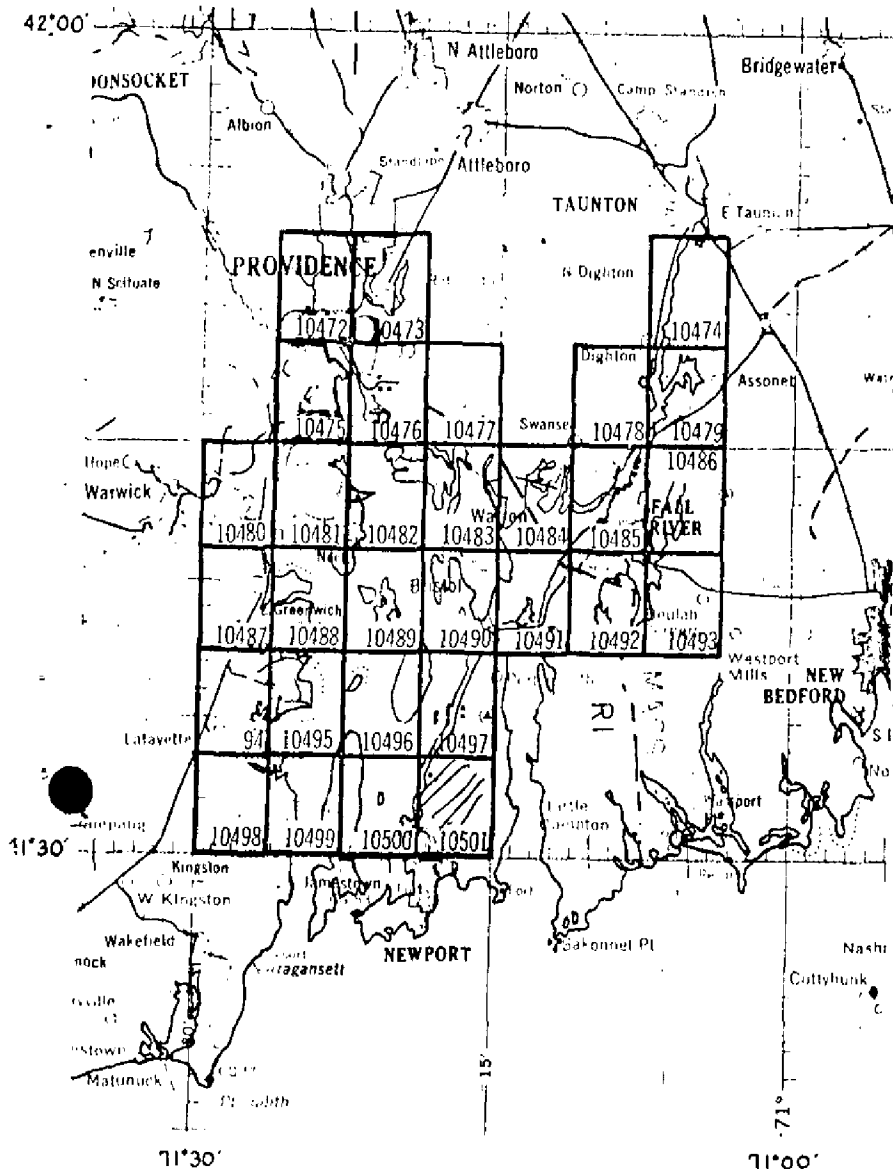
Number of Temporary Photo Hydro Stations established (III): see item 38.

Remarks:

# PLANIMETRIC MAPPING PROJECT PH - 163

Narragansett Bay, Mass. - Rhode Island

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OFFICIAL MILEAGE FOR COST ACCT		
SHEET NO.	lin. M.	sq. M.
10472	10	1
10473	7	1
10474	- 0 -	1
10475	8	10
10476	6	11
10477	2	12
10478	1	13
10479	7	12
10480	2	13
10481	4	13
10482	8	14
10483	6	21
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	1	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-10501

T-10501 is one of 30 planimetric maps comprising Job PH-163. The project covers the Narragansett Bay, Massachusetts-Rhode Island area.

The project area was field inspected. This survey has not been used for hydrographic survey support purposes. No field edit of the map was accomplished.

The project area was bridged by multiplex. T-10501 was compiled by Kelsh plotter.

A cronaflex copy of the map will be registered.

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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

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FIELD INSPECTION REPORT

Project 25120

Map T-10501

Please refer to the Field Inspection Report for Map T-10494  
for all data pertaining to this map.

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

Approved:

*Ira R. Rubottom*

Ira R. Rubottom  
Chief of Party

FIELD INSPECTION  
PHOTOGRAPHS —

56 W 230, 238, 239, 379  
471, 472, 473, 474

54W 1125

PHOTOGRAPHS 56W 379 and 471, 54W  
1125 WERE MISSING AT THE  
TIME OF FINAL REVIEW —  
APPARENTLY LOST.

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY  
DESCRIPTIVE REPORT  
CONTROL RECORD

MAP T. 10501

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\mu$ -COORDINATE LONGITUDE OR $x$ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
BOULDER ON SHORE, 1917	G-6242 p. 101	N.A. 1927	41 32 31.58 71 14 08.77	974.3 876.7 203.3 1187.4		East of Project	
MARSHALL, 1932	G-4740 p. 57	"	41 32 41.624 71 18 00.235	1284.1 566.9 5.4 1385.3			
NEWPORT ST. GEORGES TOWER, 1932	G-1246 p. 6	"	41 29 28.88 71 16 24.71	890.9 960.1 573.2 818.6		South of Project	
NEWPORT CHANNING MEMORIAL CH. SPIRE 1934	G-4740 p. 63	"	41 29 07.061 71 18 38.738	217.8 1633.2 898.7 493.3		South of Project	
DRAPER, 1932	G-1246 p. 3	"	41 32 24.848 71 16 00.833	766.6 1084.4 19.3 1371.5			
PARADISE ROCK 2, 1917	G-4664 p. 55	"	41 30 02.899 71 15 46.676	89.4 1761.6 1082.6 309.0			
BLACK POINT, 1917	G-6242 p. 99	"	41 31 47.687 71 13 47.622	1471.2 379.8 1104.0 287.0		East of Project	
RECTANGULAR BARN WEATHERVANE, 1917	G-6242 p. 101	"	41 30 21.208 71 14 54.365	654.3 1196.7 1260.8 130.7		East of Project	
RAPOSO, 1934	G-4740 p. 63	"	41 32 03.89 71 18 43.27	120.0 1731.0 1003.1 387.8			
MEMO, 1932	G-4740 p. 57	"	41 30 39.272 71 18 37.887	1211.6 639.4 878.6 512.8			

1 FT. = 3048006 METER  
COMPUTED BY: J. C. Richter

DATE 7/22/57

CHECKED BY: J. C. Cregan

DATE 8/7/57

COMM-DC-57843

SCALE FACTOR 1.000

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- 13 -  
- 12 -

COMPILATION REPORT  
Project Ph-163  
T-10501

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

Map of the City of Newport, R. I., 1950  
U. S. Naval Station, Newport, R. I. Map showing Government Property  
Melville to Long Wharf, 2/6/56.  
Final Name sheet dated 5 March 1957.

34. CONTOURS AND DRAINAGE

Drainage is complete. Contours are inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

All shoreline details are from field inspection which was thorough.

The low water line was office interpreted on nine-lens photograph  
43644.

36. OFFSHORE DETAIL

Refer to paragraph 8 of the field report.

37. LANDMARKS AND AIDS

Forms 567 were submitted for two landmarks and one aid to navigation  
to be charted and one landmark to be deleted.

38. CONTROL FOR FUTURE SURVEYS

Of the two hydrographic signals in the area, one was identified in the office and its position agreed with the planetable position, sheet Ph-I-N-56.

No topographic stations were located.

39. JUNCTIONS

Junctions have been made as follows:

To the north with T-10497

To the east with T-11430, PH-142

To the south with T-11433, PH-142

To the west with T-11500

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The Portsmouth-Middletown boundary was taken from the U. S. G.S. quadrangle.

42 - 45. Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. 7½ minute quadrangle, Prudence Island, R. I., scale 1:24,000, dated 1955, edition of 1958.

Bureau Survey T-5751 (1944), scale 1:20,000, date of issue 1949.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 236, scale 1:20,000 published February 17, 1958 corrected to September 22, 1958.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Approved and forwarded

*William F. Deane*

William F. Deane,

CDR, C&GS

Baltimore District Officer

Respectfully submitted

18 July 1958

*John C. Richter*

John C. Richter

Carto. Photo. Aid

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PHOTOGRAMMETRIC OFFICE REVIEW

T-10501

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

CONTROL STATIONS

5a. Classification label ☒

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. Joseph W. Wares Henry J. Fair  
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-10501  
December 1966

62. Comparison with Registered Topographic Surveys

T-5751                      1:20,000                      1944

T-10501 supersedes the prior survey for nautical charting purposes in the common area.

63. Comparison with Maps of Other Agencies

USGS quad, Prudence Island    1:24,000    1955

No significant differences were noted.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

Comparison was made with prior hydrographic survey H-6859; no discrepancies were noted.

65. Comparison with Nautical Charts

No. 236                      1:20,000                      July 1966

The chart includes rock information not shown on T-10501. The inadequacy resulted from incomplete field inspection and photography that was poor for the purpose of interpreting rocks.

66. Adequacy of Results and Future Surveys

Except for inadequacies in rock detail this survey meets Bureau requirements. The addendum to the "Summary" for this Descriptive Report contains information pertaining to the adequacy and accuracy of project maps. The maps are to be registered; remapping, however, is recommended for future hydrographic survey support purposes.

Reviewed by

  
S. G. Blankenbaker

Approved by

  
Chief, Photogrammetric Branch

J. Ralph Sobieralski FEB 12 1968  
Chief, Photogrammetry Div.

John A. Poyer 2/26/68  
Chief, Marine Chart Div.

1-9-68

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-163 (Rhode Island)

T-10501

✓ Bailey Brook	✓ Newport
✓ Bliss Hill	✓ Newport Airport
✓ Coddington Cove	✓ Normans Brook
✓ East Passage	✓ Paradise Brook
✓ Gomes Brook	✓ Paradise Rocks
<del>✓ Green End Pond</del>	✓ Portsmouth (Township)
✓ Honeyman Hill	✓ Rhode Island
✓ Lawtons	✓ Sisson Pond
✓ Lawton Valley	✓ Slate Hill
✓ Maidford River	✓ South Portsmouth
✓ McAllisters Point	✓ St. Marys Pond
✓ Miantonomi Memorial Park	✓ Tonomoy Hill
✓ Middletown (Village & Township)	<del>✓ Two Mile Corner</del>
✓ Narragansett Bay	✓ Twomile Corner
✓ Newport	✓ Whitehall

Approved by:

*A. Joseph Wraight*  
A. Joseph Wraight  
Chief Geographer

Prepared by:

*Frank W. Pickett*  
Frank W. Pickett  
Cartographic Technician

**TO BE CHARTED**  
**~~TOP SECRET~~**

**STRIKE OUT ONE**

## **MONEY/CHARTING/AXES/OR LANDMARKS FOR CHARTS**

Baltimore, Maryland      21 October, 1958

I recommend that the following objects which have ~~(11444444)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(11444444)~~ the charts indicated.

The positions given have been checked after listing by

**William F. Deane**

**Chief of Party.**

[illegible]

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.

\* TABULATE SECONDS AND METERS

## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

**STRIKE OUT ONE**

**TO BE CHARTED  
IN 1957/1958**

Baltimore, Maryland

21 October, 1958

I recommend that the following objects which have ~~(b)(4), (b)(6)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(b)(4), (b)(6)~~ the charts indicated.

The positions given have been checked after listing by

**William F. Deane**

Chief of Party.

[illegible]

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.

\* TABULATE SECONDS AND METERS

Comm-DC 28356

**STRIKE OUT ONE**

**Baltimore, Maryland**

8 December, 1958

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be ~~deleted from~~ the charts indicated.

The positions given have been checked after listing by

**William F. Deane**

Chief of Party.

NOTE - See form 526 submitted by I. R. R., 1956

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.

\* TABULATE SECONDS AND METERS

