

10475

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Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-163 Office No. T-10475

LOCALITY

State Rhode Island

General locality Narragansett Bay

Locality Providence (South)

~~1954~~ - 1956

CHIEF OF PARTY

I. R. Rubottom, Chief of Party

William E. Randall, Balto. Dist. Officer

LIBRARY & ARCHIVES

DATE February 26, 1968

USCOMM-DC 5087

10475

DESCRIPTIVE REPORT - DATA RECORD

- 1 - 2

T - 10475

Ph-163

Project No. (II): ~~75128~~ Quadrangle Name (IV):

Field Office (II): **West Providence, R. I.**

Chief of Party: **Ira E. Riddett**

Photogrammetric Office (III): **Baltimore, Maryland**

Officer-in-Charge: **William E. Randall**

Instructions dated (II) (III):

Copy filed in Division of
Photogrammetry (IV)

(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**
(Pantograph ratio 3/5)

Scale Factor (III): **1.000**

Date received in Washington Office (IV): **23 AUG 1950**

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 (25) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): **KETTLE POINT, 1843**

Lat.: **41° 47' 45.853(1414.7 m)** Long.: **71° 22' 41.108 (949.1 m)**

Adjusted
Quadrangle

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

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

71° 26.25'



41° 48.75'

41° 45.0'

71° 22.5'

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

DESCRIPTIVE REPORT - DATA RECORD

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

-5-

Number	Date	PHOTOGRAPHS (III) Time (EST)	Scale	Stage of Tide
56-W-167 thru 169	5/1/56	0833	1:30,000	1.5' above MLW
56-W-179 thru 182	"	0844	"	1.9' " "

Tide (III)
(from predicted tables)

Reference Station: **Newport, R. I.**
Subordinate Station: **Providence**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	3.5'	4.4'
1.3'	4.6'	5.7'

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

Date: **Nov., 1966**

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **11**
Shoreline (More than 200 meters to opposite shore) (III): **11 Statute miles**
Shoreline (Less than 200 meters to opposite shore) (III): **6 Statute miles**
Control Leveling - Miles (II):
Number of Triangulation Stations searched for (II): **11** Recovered: **5** Identified: **3**
Number of BMs searched for (II): **7** Recovered: **7** Identified: **1**
Number of Recoverable Photo Stations established (III): **None**
Number of Temporary Photo Hydro Stations established (III): **See item 38**

Remarks:

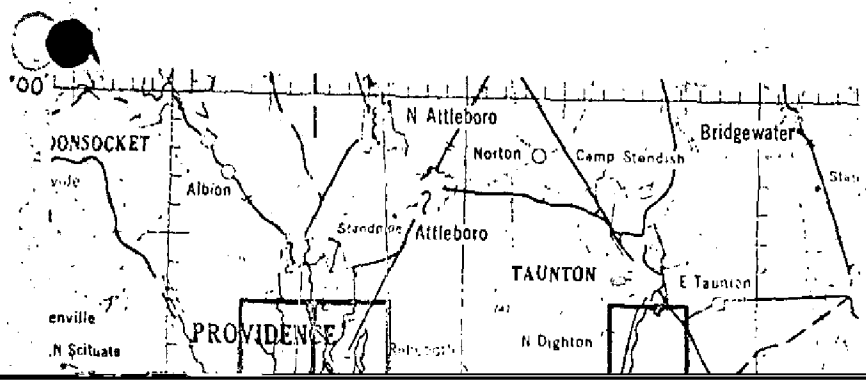
Seven (7) third-order triangulation stations established.

All bench marks searched for are Tidal Bench Marks.

PLANIMETRIC MAPPING PROJECT PH - 163

Narragansett Bay, Mass. - Rhode Island

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OFFICIAL MILEAGE FOR COST ACCOUNT		
SHEET NO.	Lin. Mi.	AREA
	SHORELINE	SQ. MI.
10472	10	12
10473	7	13
10474	- 0 -	14
10475	8	10
10476	6	11

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS
T-10472, T-10473, T-10475 and T-10476
Job PH-163

Job PH-163 is comprised of thirty planimetric surveys and covers the Narragansett Bay, Rhode Island-Massachusetts area.

A complete field inspection preceded compilation. Limited field edit was accomplished in conjunction with contemporary hydrographic surveys H-8314 and H-8316. The project was bridged by multiplex and compiled by Kelsh plotter.

Difficulties encountered by the hydrographic survey verifier in adjusting hydrographic information based on plane table and photogrammetric control are discussed in the individual review reports and in the Addendum to this Summary.

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

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.

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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-10475

Please refer to the Field Inspection Report for Map T-10472
for all data pertaining to this map.

Isaiah Y. Fitzgerald
Photogrammetric Engineer

Approved:

I. R. Rubottom
Chief of Party

FIELD PHOTOGRAPHS FOR THIS
MAP -

56W 133, 134, 167, 168,
169, 180, 181, 182

54W 1041, 1096, 1097,
1098, 1099A

NOTE: PHOTOGRAPHS CIRCLED COULD NOT
BE FOUND AT TIME OF FINAL
REVIEW.

URBAN AREA LIMITS WERE INSPECTED
ON 54W PHOTOGRAPHY (CONTACT).
PHOTO NUMBERS ARE LISTED IN
THE PROJECT COMPLETION
REPORT.

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

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
171	N.A. 1927	41 47	38.298	1181.6	669.5		FORWARD	(BACK)	FORWARD (BACK)
		71 22	48.780	1126.3	259.0				
170	"	41 48	16.646	513.6	1337.5	OFF PROJECT			
		71 28	23.875	551.2	833.8				
171	"	41 47	55.631	1716.3	134.8				
		71 23	39.075	902.1	483.0				
		41 47	42.354	1306.7	544.4				
168	"	71 23	27.688	639.3	746.0				
		41 46	03.975	122.6	1728.5				
168	"	71 23	10.767	248.7	1137.2				
		41 48	39.546	1220.1	631.0				
168	"	71 23	44.232	1021.0	363.9				
		41 48	42.415	1308.6	542.5				
168	"	71 24	34.697	800.8	584.0				
168	"	41 47	15.79	487.1	1364.0				
168	"	71 24	11.23	259.3	1126.1				
168	"	41 47	45.853	1414.7	436.4				
168	"	71 22	41.108	949.1	436.2				
168	"	41 45	58.606	1808.1	43.0				
168	"	71 23	30.775	710.9	675.0				
168	"	41 45	43.759	1350.1	501.0				
168	"	71 22	33.135	765.5	620.6				
168	"	41 48	40.55	1251.0	600.1	OFF PROJECT			
168	"	71 28	03.17	73.2	1311.8				

DATE 25 July 1957
CHECKED BY J. C. Cregan
DATE 12 August 1957
COMM-DC-57843

SCALE FACTOR 1.000

- ~~1~~ - (12)

DATE 12 August 1957

COMPILATION REPORT
Project Ph-163
T-10475

Photogrammetric Plot Report is part of the descriptive report for survey 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.

City of Providence Map, published 1955, was used for compiling the town line between Providence and East Providence from Kettle Pt. on T-10475 to Bishop Pt. on T-10472.

Map of City of Cranston, 1956 for comparison.

Map of Town of East Providence, 1954 for comparison.

Copies of boat sheets for surveys H-8314 and H-8316 were available for comparison.

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 lines are from field inspection.

36. OFFSHORE DETAILS

The piles at Sawtuxet Cove were located by sextant fixes recorded on back of field photograph No. 56-W-182.

37. LANDMARKS AND AIDS

Forms 567 were submitted for six (6) landmarks and four (4) aids. Four (4) of the above points were located photogrammetrically from field identification during delineation by Kelsh Plotter.

38. CONTROL FOR FUTURE SURVEYS

No points, other than those mentioned under item 37, were established.

Refer to attached notes regarding the photo-hydro stations in the area of this survey and 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

To the north with T-10472.

To the east with T-10476.

To the south with T-10481.

There is no contemporary survey to the west.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41 thru 45. Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. 7½ minute quadrangle, Providence, R. I., scale 1:24,000, edition of 1959.

Bureau Survey T-5748 S/2 (1944), scale 1:10,000.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 352, scale 1:10,000, published January 9, 1945. Revised 6/6/55.

Chart No. 278, scale 1:20,000 published November 11, 1946. Revised 8/25/58.

Items to be applied to Nautical Charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
8 December 1958

J. D. McEvey,
Carto. (Photo.)

Approved and forwarded

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

PHOTOGRAMMETRIC OFFICE REVIEW

T.

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

5a. 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. Joseph W. Bouasak Henry J. Fisher
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.

S. G. Blompenbaker Supervisor
Compiler

W.O., Nov. 1966

43. Remarks:

REVIEW REPORT
Planimetric Maps
T-10472, T-10473, T-10475 and T-10476
November 1966

61. General Statement

Field edit, accomplished by hydrographic survey parties during contemporary surveys H-8314 and H-8316, consisted of a check of landmarks, MHW line and topographic features seaward from the shoreline. Hydrographic survey changes in photogrammetric details were applied to the photogrammetric surveys during the subject final review.

Hydrographic survey verification and review preceded this review. The verifier (H-8316) encountered considerable difficulty in adjusting hydrographic information. These difficulties were never entirely eliminated. Since the difficulties were related, in part, to photogrammetric survey information, the Washington Office Review Group checked hydrographic signal location (previously located by plane table methods and identified on photographs) and the location of shoreline and alongshore features by graphic methods using field photographs containing primary control identified for bridging and the identified signals. New positions were obtained for 57 signals and shoreline changes were made in several areas. Most of the problems in adjusting hydrographic information and the related discrepancies between the surveys were resolved through application of the subject revisions. The combined Addendum to Summaries included in each Descriptive Report contains a discussion of the subject revision work and other problems encountered that relate to overall project accuracy and future surveys.

62 through 65. Comparisons

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

Refer to side heading 61 concerning comparison with contemporary hydrographic surveys. Comparison with nautical charts and maps of other agencies were made by photogrammetric compilers.

A number of discrepancies -- involving features (school names, boundaries, etc.) not applicable to either hydrographic surveys or nautical charts -- between these surveys and USGS quads were noted on discrepancy prints. The discrepancies were not resolved during field edit (hydro party); they cannot be resolved in the office.

66. Adequacy of Results and Future Surveys

Refer to the "Addendum to Summaries" included in this Descriptive Report.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

Charles Thayer
Chief, Photogrammetric Branch

Ralph Sobiechowski MAR 25 1968
Chief, Photogrammetry Division

John O. Boyer
Chief, Marine Chart Division

GEOGRAPHIC NAMES

FINAL NAME SHEET

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

T-10475

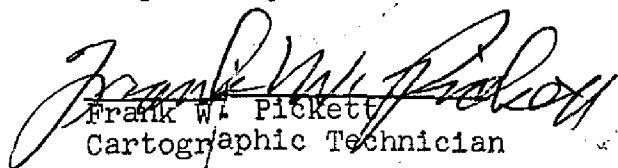
NOT APPLICABLE FOR
THIS MAP

·Allens Avenue	· Harbor Junction
·Auburn	·Harbor Junction Wharf
·Barrington Parkway	·Hospital Pond
·Bellefonte	·Kent County
·Bellefonte Pond	·Kettle Point
·Boston Post Road	·Knight Memorial Library
·Brigg Jr. High School	·Lakewood
·Broad Street	·Locust Grove Cemetery
·Congregational Sons of Israel Cemetery	·Lovett Rock
·Copps Cove	·Marsh Island
·Cranberry Bog	·Mashapaug Brook
·Cranberry Island	·Mashapaug Pond
·Cranston	·Metacomet Golf Club
·Cunliff Lake	·Municipal Wharf
·Deep Spring Lake	·Narragansett Boulevard
·Dillon Memorial Park	·Narragansett Parkway
·East Providence	·Narragansett Yacht Club
·Eddy Street	·Nelson W. Aldrich High School
·Edgewood	·New York, New Haven and Hartford
·Edgewood Pond	·Norwood
·Edgewood Yacht Club	·Oakland Cemetery
·Elmwood	·Park Avenue
·Elmwood Avenue	·Park View Jr. High School
·Elon Lake	·Pawtuxet
·Fenner Pond	·Pawtuxet Cemetery
·Fields Point	·Pawtuxet Cove
·Flower Island	·Pawtuxet Reservation
·Fuller Rock	·Pawtuxet River
·Gilbert Stuart Jr. High School	·Pierce Memorial Field
·Grace Cemetery	·Pleasure Lake

Approved by:


A. Joseph Wraight
Chief Geographer

Prepared by:


Frank W. Pickett
Cartographic Technician

NOTE: Wraight's list continued on page 18A

T-10475 con't

- ✓Polo Lake
- ✓Posneganset Pond
- ✓Providence
- ✓Providence County
- ✓Providence River
- ✓Reservoir Avenue
- ✓Rhode Island Hospital
- ✓Rhode Island Yacht Club
- ✓Robin Hill
- ✓Rock Island
- ✓Roger Williams Jr. High School
- ✓Roger Williams Park
- ✓Rose Island
- ✓Saint Joseph Hospital
- ✓Sassafrass Point
- ✓Scopulous Island
- ✓Silver Hook
- ✓South Providence
- ✓Star Island
- ✓Stillhouse Cove Park
- ✓Sunshine Island
- ✓U. S. 1
- ✓U. S. Alt. 1
- ✓U. S. Armory
- ✓U. S. Naval Reserve
- ✓Warwick
- ✓Warwick Avenue
- ✓Warwick R. R.
- ✓Watchemoket Cove
- ✓Washouset Point
- ✓Wilkes Barre Pier
- ✓William H. Hall Library
- ✓Willow Lake

(19)

REPORT TO ACCOMPANY CRONAFLEX PRINT
OF SURVEY T-10475, PROJECT PH-163

This ^{map} manuscript was compared with copies of graphic control sheets Nos. Ph-1-B-56 and Ph-1-C-56, Projects Nos. 13870 and 25120, scale 1:10,000. Common photo-hydro stations whose positions differ by more than 0.5 mm are listed below. Also listed are those photo-hydro stations that could not be identified. All other photo-hydro stations within the limits of this survey were verified within 0.5 mm and were not plotted on the manuscript.

<u>STATION NAME</u>	<u>PHOTOGRAMMETRIC POSITION</u>	
WAG	0.7 mm	SE
WIT	0.9 mm	SE
GAM	0.6 mm	SE
YES	0.8 mm	ENE
RUM	0.7 mm	N
FIG	0.7 mm	W

STATION NOT IDENTIFIED

RIP	ACE	POT	TEX	TAP
LAD	ROB	ZIP	ROB	BAG
KEN	PAD	YAM	PAL	WAX

It is recommended that the photo-hydro stations plotted on the map manuscript be used in making the smooth sheets.

Respectfully submitted
8 September 1958

Approved and forwarded

Leroy A. Senasack
Carto. Photo. Aid

William F. Deane,
CDR C&GS
Baltimore District Officer

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

STRIKE OUT ONE

TO BE CHARTED
TO BE CHARTED

Baltimore, Maryland
12 October, 1959

I recommend that the following objects which have ~~(None)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted)~~ the charts indicated.

The positions given have been checked after listing by **Joseph W. Vonasek**

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

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

MONTHLY CHANGING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland

12 October 1959

I recommend that the following objects which have ~~(not been)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted sheets)~~ the charts indicated.

The positions given have been checked after listing by **Joseph W. Vorasak**

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

NOTE TO REVIEWER
T-10475

The delineation of the boundaries in the vicinity of Providence River should be verified. (T-10472, T-10473, T-10475, T-10476, T-10482). They are based mainly on field inspection on photographs 56-W-167, 168, 181, 210. The field report states that the boundary of the Town

