

10479

Original

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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-10479
LOCALITY	
State	Massachusetts
General locality	Taunton River
Locality	ASSONET
1956	
CHIEF OF PARTY	
Ira R. Rubottom, Chief of Party	
W. E. Randall, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE	February 26, 1968

USCOMM-DC 5087

9
6
4
7
9

DESCRIPTIVE REPORT - DATA-RECORD

- 2 -

T- 10479

Ph-163

Project No. (II): ~~75120~~

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): NA 1927

Vertical Datum (III): MHW

~~MEAN LOW WATER OF MEAN LOWER LOW WATER~~

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): ASSONET, 1874

Lat.: 41° 47' 24.778" (764.5 m) Long.: 71° 05' 56.973" (1315.6 m)

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.

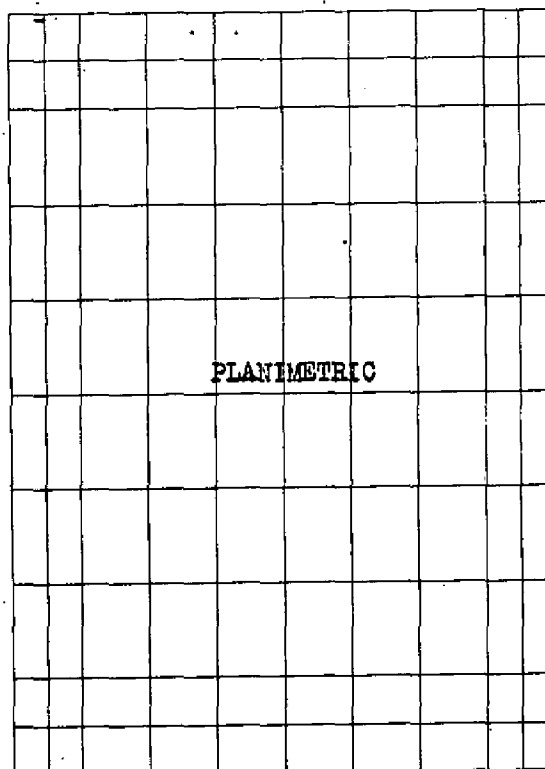
When entering names of personnel on this record give the surname and initials, not initials only.

FORM 181a
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

71° 07.5'



41° 48.75'

41° 45.0'

71° 03.75'

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

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Number	Date	PHOTOGRAPHS (III) Time (EST)	Scale	Stage of Tide
56-W-290 thru 292	5/1/56	1013	1:30,000	2.9' above MLW

*Also photographs 56W 277
278
279
Models set on pass points established by bridge
56B*

Tide (III)
(From predicted tables)

Reference Station: Newport, R. I.
Subordinate Station: Fall River, Massachusetts
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	3.5'	4.4'
1.3	4.4'	5.5'

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

Date: Dec. 1967

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 10

Shoreline (More than 200 meters to opposite shore) (III): 15.7 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 3.6 mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 10 Recovered: 8

Identified: 4

Number of BMs searched for (II):

Recovered:

Identified:

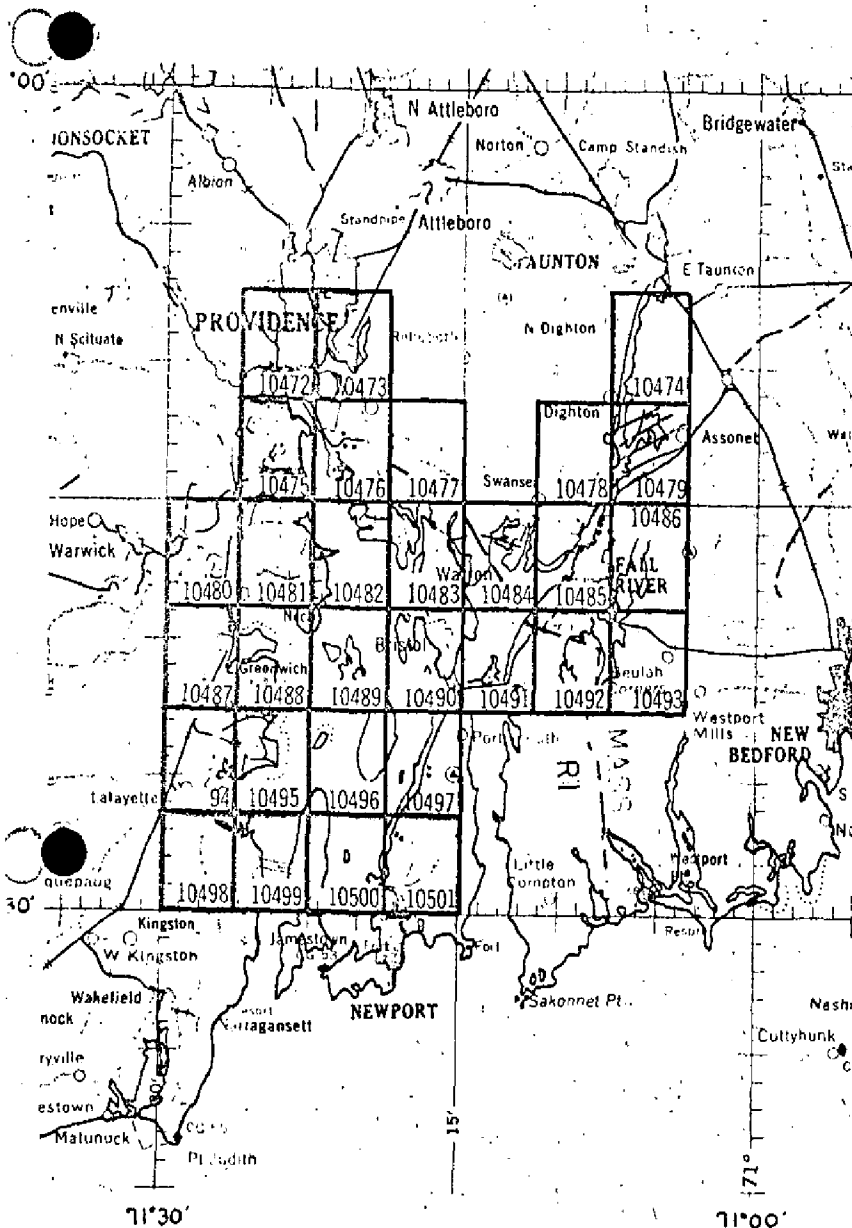
Number of Recoverable Photo Stations established (III): 0

Number of Temporary Photo Hydro Stations established (III): 0

Remarks:

PLANIMETRIC MAPPING PROJECT PH - 163

Narragansett Bay, Mass.- Rhode Island



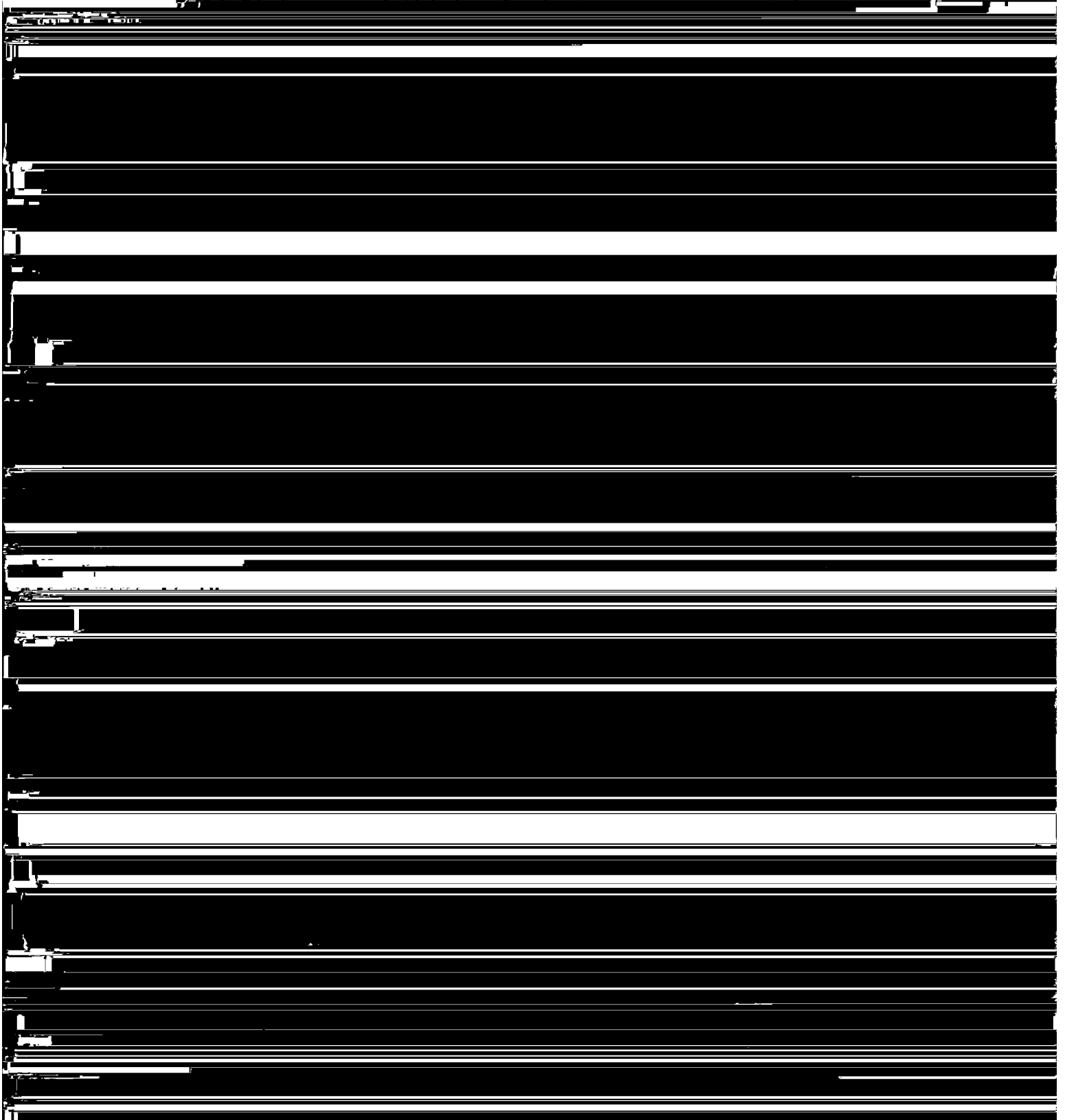
OFFICIAL MILEAGE FOR COST ACCOUNT

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	2	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-10479



- 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

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FIELD INSPECTION REPORT
Project 25120
Map T-10479

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;

Isiah Y. Fitzgerald
for
Ira R. Rubottom
Chief of Party

FIELD PHOTOGRAPHS -
56W 277, 278, 279, 280

PHOTOGRAPHS 277, 278, 279
WERE MISSING AT THE TIME OF
FINAL REVIEW - APPARENTLY LOST.

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

MAP T. 10479

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -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	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
RIDGE, 1874	G.P. List p. 598	N.A. 1927	41 45	32.925	1015.8	835.3					
			71 07	11.071	255.8	1130.4					
PAYNE, 1937	p. 110	"	41 46	33.877	1045.2	805.9					
			71 03	15.650	361.4	1024.3					
ASSONET, 1874	p. 598	"	41 47	24.778	764.5	1086.6					
			71 05	56.973	1315.6	69.9					
ASSONET BAPTIST CHURCH, 1890	p. 612	"	41 47	29.421	907.7	943.4					
			71 04	14.699	339.4	1046.1					
FARM HOUSE WHITE CHIMNEY, 1874	p. 608	"	41 48	29.812	919.8	931.3					
			71 04	53.127	1226.4	158.6					
BROWNS HILL, 1874	p. 597	"	41 47	24.721	762.7	1088.4					
			71 06	27.752	640.8	744.6					
TERRY, 1874	"	"	41 46	30.908	953.6	897.5					
			71 06	43.163	996.9	388.8					
FALL RIVER FREETOWN SOMERSET (BOUNDARY) STONE FREETOWN 3)	p. 608	"	41 45	54.944	1695.1	156.0					
			71 06	58.011	1340.1	45.9					
27A 16 MGS	p. 608	"	41 48	25.895	798.9	1052.2					
			71 07	21.238	490.3	894.8					
Sub Pt PAYNE, 1937	Comp.	"	41 46		1064.8	186.3					
			71 03		385.7	1000.0					
Sub Pt RIDGE, 1874	"	"	41 45		1057.5	793.6					
			71 07		222.5	1163.7					
Sub Pt ASSONET, 1874	"	"	41 47		754.3	1096.8					
			71 05		1288.1	97.4					

1 FT. = 3048006 METER

COMPUTED BY: A. K. Heywood

DATE 3/27/57

CHECKED BY: J. C. Cregan

DATE 8/13/57

COMM-DC-57843

COMPILATION REPORT
Project Ph-163
T-10479

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

Final name standard dated 5 March 1957.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.
Drainage is complete.

35. SHORELINE AND ALONGSHORE DETAILS

All shoreline and alongshore details are from adequate field inspection.

No low-water or shoal lines are shown.

36. OFFSHORE DETAILS

Refer to paragraph 8 of the Field Report.

37. LANDMARKS AND AIDS

Form 567 has been submitted for one aeronautical aid.

38. CONTROL FOR FUTURE SURVEYS

No supplemental control was established.

39. JUNCTIONS

Junctions have been made as follows:

To the north with T-10474.

To the east - no contemporary survey.

To the south with T-10486.

To the west with T-10478.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The state reservation boundaries were projected from the G. S. quadrangle (see paragraph 10, field report). Comparison was made with the photographs and adjustments were made to identifiable features.

42 through 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U. S. Geological Survey 7½ minute quadrangle Assonet, Massachusetts, scale 1:31,680, edition of 1951.

47. COMPARISON WITH NAUTICAL CHARTS

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

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted



Edward L. Rolle
Carto. (Photo.)

Approved and forwarded



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

PHOTOGRAMMETRIC OFFICE REVIEW

T. 10479

1. Projection and grids JCR 2. Title JCR 3. Manuscript numbers JCR 4. Manuscript size JCR
4a. Classification label JCR

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy JCR 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 JCR 11. Detail points JCR

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads JCR 28. Buildings JCR 29. Railroads JCR 30. Other cultural features JCR

BOUNDARIES

31. Boundary lines JCR 32. Public land lines —

MISCELLANEOUS

33. Geographic names JCR 34. Junctions JCR 35. Legibility of the manuscript JCR 36. Discrepancy overlay JCR 37. Descriptive Report JCR 38. Field inspection photographs JCR 39. Forms JCR
40. John C. Richter 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-10479

December 1967

62. Comparison with Registered Topographic Surveys

T-1418	1:5,000	1875
T-1419a	1:2,500	1875
T-5750	1:20,000	1944

T-1418 contains considerable rock details not shown on the subject survey. Except for a small area (southwest corner of the Map) no Bureau hydrographic surveys have been accomplished in the area covered by survey T-10479. Prior photogrammetric survey T-5750 provided boat sheet shoreline for the prior hydrographic survey (H-7939). Differences in shoreline between H-7939 and T-10479 are discussed under side heading 64.

63. Comparison with Maps of Other Agencies

USGS quad, Assonet	1:24,000	1963
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No significant differences were noted.

64. Comparison with Hydrographic Surveys

H-7939	1:10,000	1951
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A 4.0 mm datum difference exists between the surveys.

65. Comparison with Nautical Charts

No. 353	1:40,000	Revised 1/17/66
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No significant differences were noted.

66. Adequacy of Results and Future Surveys

Project photography was generally poor for the purpose of interpreting alongshore rock details, and field inspection was inadequate in this regard -- most of the hydrographic surveys covering the project area show many rocks that are not shown on project maps. (Refer to heading 62, map T-1418).

Four pass points (Lat. 41° 47' 33", Long. 71° 07' 22.5";
Lat. 41° 46' 58.5", Long. 71° 06' 57"; Lat. 41° 46' 31.5",
Long. 71° 06' 49.5"; Lat. 41° 47' 31", Long. 71° 05' 42",

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T-10479, cont.

southern most of two rocks) located in the water area were not symbolized to indicate the nature of the objects. Inspection of available photography -- complete coverage was not available -- indicates that the objects are rocks; and, they were symbolized as rocks awash during final review. These objects should be field inspected.

The addendum to the Summary for this Descriptive Report includes a discussion of adequacy and accuracy of project maps. Registration of the maps is recommended; however, remapping is recommended for future hydrographic survey support purposes.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

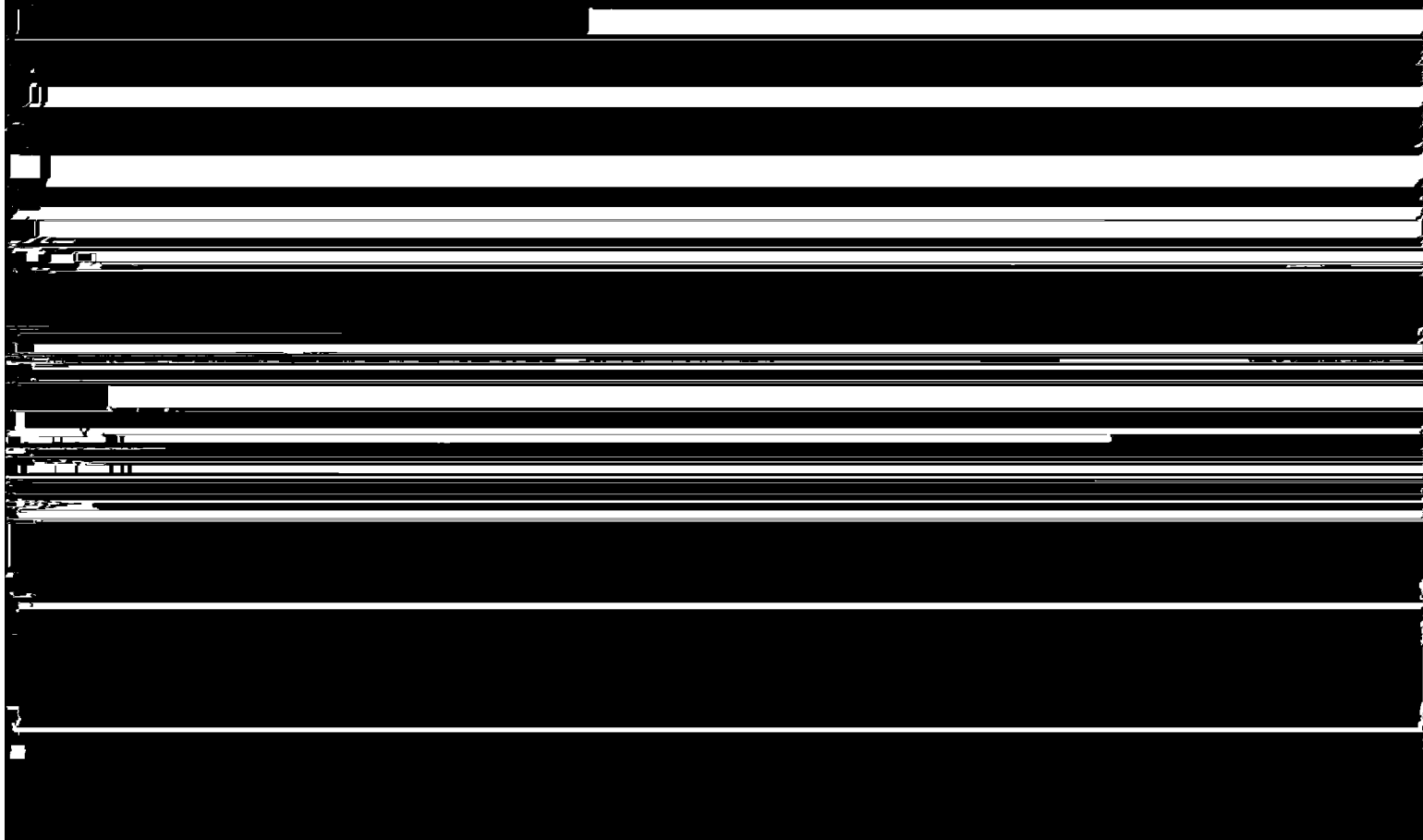
Approved by:

Charles H. Hanner
Chief, Photogrammetric Branch

S. G. Blankenbaker

MAR 25 1968

W. A. Hanner



GEOGRAPHIC NAMES

FINAL NAME SHEET

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


T-10479

Assonet	New York, New Haven and Hartford
Assonet Baptist Church	North Main Street
Assonet Bay	Pierces Point
Assonet Burial Ground	Pine Island
Assonet Neck	Pleasant Street
Assonet River	Rattlesnake Brook
Bayview Avenue	Saint Bernards Church
Bell Rock Road	Sandy Point
Berkley	Shepherds Cove
Bethel Cemetery	Shoves Neck
Bryants Neck	Somerset
Conspiracy Island	South Main Street
Copicut Road	South School
Dighton	State Wildlife Sanctuary
Fall River	Taunton River
Fall River Municipal Airport	Terry Brook
Ferry Point	Watuppa Reservation
First Congregational Church	Westcott Island
Freetown	Whale Rock
Freetown Fall River State Forest	Winslow Point

Approved by:

Prepared by:

A. Joseph Wraight
Chief Geographer


Frank W. Pickett
Cartographic Technician

19 60

marks be

on of
Chief of Party

OFFSHORE CHART

CHARTS
AFFECTED

on Sectional
Chart

-17-

ds to navi-
r the charts

MMDC 27126

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-10479

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.

CHART	DATE	CARTOGRAPHER	REMARKS
353	11-26-68	F.B. Lewis	Full Part Before After Verification Review Inspection Signed Via Drawing No. 40. Made minor topo changes.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.

			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.