

10473

Diag. Cht. No. 1210-2 Insert.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-163 Office No. T-10473

LOCALITY

Massachusetts Ph. 1 T. 2

DESCRIPTIVE REPORT - DATA RECORD

-2-

T - 10473

Ph-163

Project No. (II): ~~105126~~

Quadrangle Name (IV):

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

Chief of Party: Ira E. 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): 1:6000
(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) Datum:~~

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): FORT HILL, 1956

Lat.: $41^{\circ} 48' 52.576''$ (622.1 m) Long.: $71^{\circ} 23' 18.670''$ (430.9 m)

Adjusted

~~105126~~

Plane Coordinates (IV):

State: Rhode Island Zone: ---

Massachusetts

Mainland

Y=

X=

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

or (IV) Washington Office.

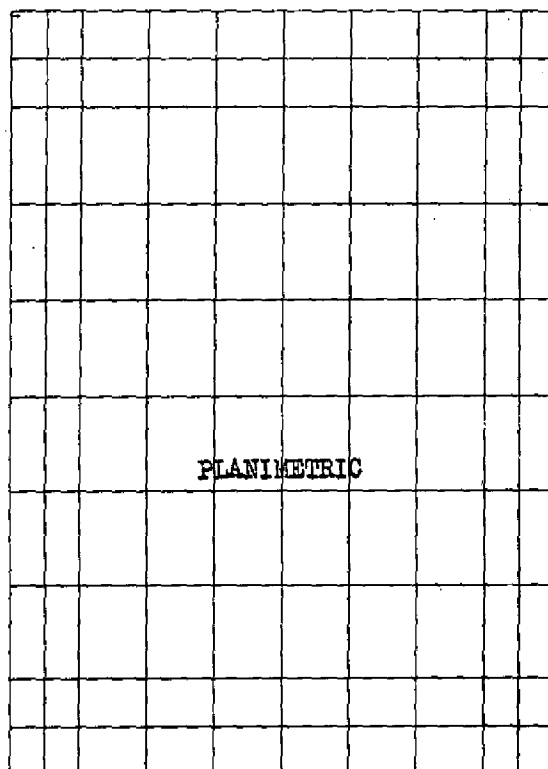
When entering names of personnel on this record give the surname and initials, not initials only.

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

-3-

71° 22.5'



41° 52.5'

PLANIMETRIC

41° 48.75'

71° 18.75'

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

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

-5-

Tide (III)

Ratio of Ranges	Mean Range	Spring Range

Date: Nov. 1966

Date:

Date:

Date:

Control Leveling - Miles (II):

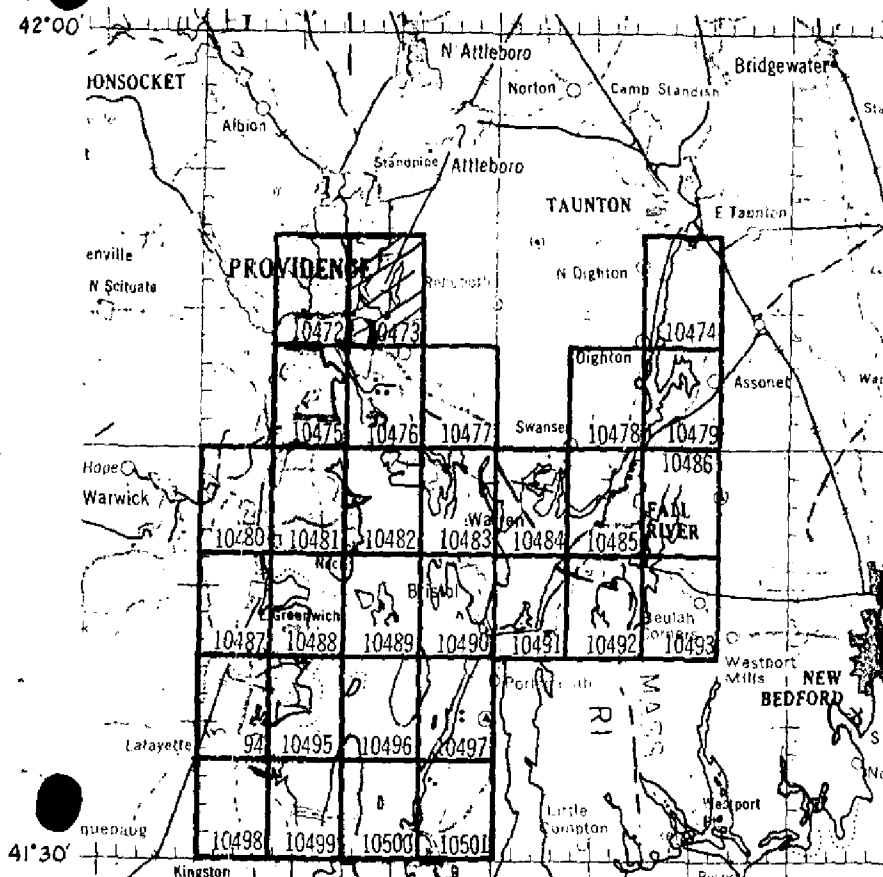
Number of Triangulation Stations searched for (II):	35	Recovered:	19	Identified:	9
Number of BMs searched for (II):	121	Recovered:	111	Identified:	67
Number of Recoverable Photo Stations established (III):	1				
Number of Temporary Photo Hydro Stations established (III):	See item No. 38				

Remarks:

One (1) third-order triangulation station established.

Bench Marks searched for all are Tidal Bench Marks.

Narragansett Bay, Mass.- Rhode Island



OFFICIAL MILEAGE FOR COST AC		
1 in. Mi. A		
SHEET NO.	SHORELINE	SQ.
10472	10	
10473	7	
10474	- 0 -	
10475	8	
10476	6	
10477	2	
10478	1	
10479	7	
10480	2	
10481	4	
10482	8	
10483	6	
10484	8	
10485	8	
10486	7	
10487	3	
10488	6	
10489	7	
10490	8	
10491	8	
10492	4	
10493	3	
10494	2	
10495	1	
10496	1	
10497	1	
10498	1	
10499	1	
10500	1	
10501	1	


SUMMARY TO ACCOMPANY DESCRIPTIVE REPORTS

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.



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

FIELD INSPECTION REPORT

Project 25120

Map T-10473

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

Isaiah Y. Fitzgerald
Photogrammetric Engineer

Approved:

Ira R. Ribottom

Ira R. Ribottom
Chief of Party

FIELD PHOTOGRAPHS FOR
THIS MAP —

56W (177), (178), 179, (212),
(213), (214), (216)

54W 1093, 1094

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

URBAN AREA LIMITS WERE
INSPECTED ON 54W PHOTOS.
PHOTO NUMBERS ARE LISTED
IN THE PROJECT COMPLETION
REPORT

PHOTIC SURVEY
RD

1:10,000

SCALE FACTOR 1.000

IN FEET, METERS (CK)	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)
0.9	OFF PROJECT				
7.6					
1.9					
7.2					
6.19					
3.00					
4.1					
2.7					
1.8					
2.5					
5.3					
1.0					
3.1					
6.6					
9.2	OFF PROJECT				
1.6					
3.4	OFF PROJECT				
5.6					
3.0					
4.5					
2.2					
1.9					
3.9					
3.1					

J. C. Cregan

DATE 9 August 1957

COMM-DC-57843

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

MAP T. 10473

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (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
					FORWARD	(BACK)		FORWARD	(BACK)	
71 E MGS	C of B Prov. Quad p. A-18	N.A. 1927	41 49	09.734	300.3	1550.8				
	"	"	71 20	23.355	539.0	845.8				
71 G MGS	"	"	41 49	26.822	827.5	1023.6				
	"	"	71 20	32.986	761.2	623.4				
71 H MGS	"	"	41 49	34.544	1065.8	785.3				
	"	"	71 20	35.028	808.4	576.3				
71 J MGS	p. A-20	"	41 49	43.975	1356.7	494.4				
	"	"	71 20	36.407	840.2	544.4				
71 L MGS	p. A-21	"	41 50	27.747	856.1	995.0				
	"	"	71 21	00.968	22.3	1362.0				
71 M MGS	"	"	41 50	43.778	1350.6	500.5				
	"	"	71 21	09.226	212.8	1171.4				
71 N MGS	p. A-22	"	41 50	51.624	1592.7	258.4				
	"	"	71 21	17.436	402.2	982.0				
71 P MGS	"	"	41 51	33.793	1042.6	808.5				
	"	"	71 21	17.717	408.6	975.3				
71 Q MGS	"	"	41 52	45.177	1393.8	457.3	OFF PROJECT			
	"	"	71 21	17.379	400.7	982.8				
71 R MGS	p. A-23	"	41 53	35.973	1109.8	741.3	OFF PROJECT			
	"	"	71 21	16.046	369.9	1013.3				
71 S MGS	"	"	41 53	51.797	1598.1	253.0	OFF PROJECT			
	"	"	71 21	18.953	436.9	946.2				
71 AB MGS	p. A-28	"	41 54	02.446	75.4	1775.7	OFF PROJECT			
	"	"	71 18	49.104	1131.9	251.1				

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

DATE 25 July 1957

CHECKED BY: J. C. Cregan

DATE 9 August 1957

COMM. DC-57843

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

MAP T-10473

PROJECT NO. Ph-163

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (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	
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
71 AD MGS	C of E Prov. Quad p. A-29	N.A. 1927	41 54	17.222	531.3	1319.8	OFF PROJECT				
			71 18	53.615	1235.8	147.1					
GREAT ROCK, 1835	GTZ 3889 p. 225	"	41 51	31.833	982.1	869.0	OFF PROJECT				
			71 17	15.548	358.6	1025.3					
SEEKONK-PAWTUCKET LINE STONE (WEST) MGS	C of E Prov. Quad p. A-52	"	41 52	06.052	186.7	1664.4					
			71 20	11.839	273.0	1110.7					
SEEKONK-PAWTUCKET LINE STONE (EAST) MGS	"	"	41 52	05.303	163.6	1687.5					
			71 20	11.570	266.8	1116.9					
Sub. Sta. 71 R MGS	Comp.	"	41 53		1168.99	682.1	OFF PROJECT				
			71 21		367.43	1015.8					
Sub. Sta. 71 P MGS	"	"	41 51		1088.14	762.96					
			71 21		425.60	958.40					
Sub. Sta. 71 M MGS	"	"	41 50		1335.98	515.12					
			71 21		206.57	1177.63					
Sub. Sta. 461 USGS	"	"	41 49		445.70	1405.40					
			71 22		170.51	1214.09					
Sub. Sta. 71 AB MGS	"	"	41 54		83.8	1767.3	OFF PROJECT				
			71 18		1089.5	293.5					
Sub. Sta. M 44 E MGS	"	"	41 49		1679.5	171.6					
			71 18		381.2	1003.4					
Sub. Sta. M 44 F MGS	"	"	41 50		405.9	1445.2	OFF PROJECT				
			71 16		984.6	399.9					
Sub. Sta. M 44 G MGS	"	"	41 50		1136.8	714.3	OFF PROJECT				
			71 15		894.9	489.4					

1 FT. = 3048006 METER

COMPUTED BY J. C. Richter

DATE 25 July 1957

CHECKED BY J. C. Cregan

DATE

9 August 1957

COMMA-DC-57843

COMPILATION REPORT
Project Ph-163
T-10473

Photogrammetric Plot Report is part of the descriptive report for survey T-10472.

31 and 32.

See Compilation Report for T-10472.

33. SUPPLEMENTAL DATA

Final Name Standard dated 5 March 1957.
Map of the City of Pawtucket, 1950.
Copy of Boat Sheet H-8316 for comparison.
Map of the Town of East Providence, edition of 1954.

34 through 36.

See Compilation Report for T-10472.

37. LANDMARKS AND AIDS

Forms 567 are submitted, herewith, for three (3) landmarks and one (1) aeronautical aid.

38. CONTROL FOR FUTURE SURVEYS

Form 524 is submitted herewith for one (1) recoverable topographic station, established during delineation by Kelsh plotter from field identification.

Refer to the attached notes regarding the photo-hydro stations in the area of the 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.

Refer, also, to the report: "Verification of Horizontal Datum," regarding positions of photo-hydro signals in this area; copy of which is bound with Descriptive Report for T-10472.

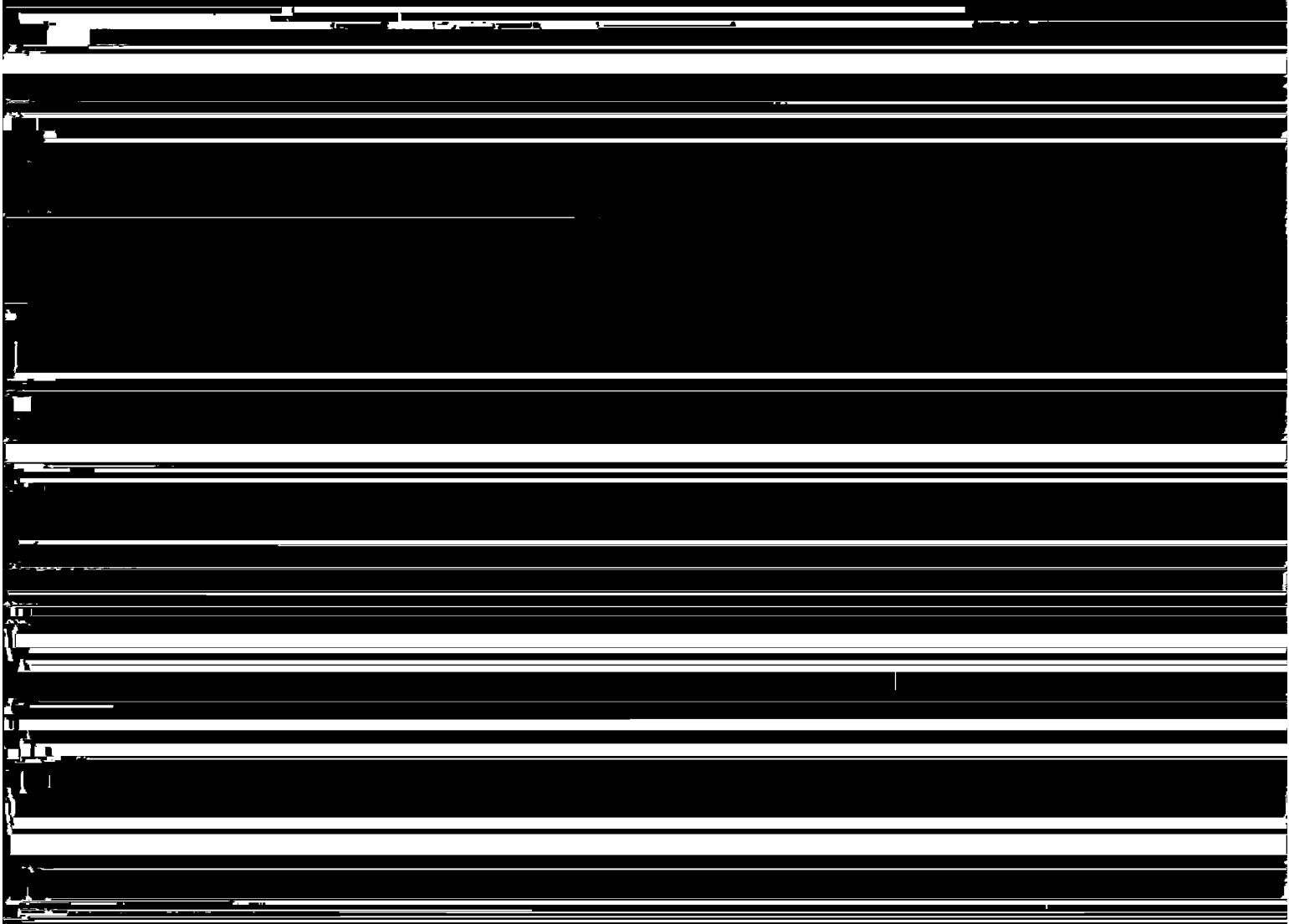
39. JUNCTIONS

To the south with T-10476.

To the west with T-10472.

There are no contemporary surveys to the north and east.

40 through 45.



U.S.G.S. 7½ minute quadrangle East Providence, Massachusetts -
Rhode Island, scale 1:31,680 - edition of 1941 reprinted 1951.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 352, scale 1:10,000, edition of January 9, 1945. Revised
June 6, 1955.

Chart No. 278, scale 1:20,000, 10th edition November 11, 1946.
Revised August 25, 1958.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

15

PHOTOGRAMMETRIC OFFICE REVIEW

T-10473

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

4a. 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. Vondra Henry P. Eicher
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. Blankenbaker Supervisor
Compiler

43. Remarks:

W.G., Nov, 1966

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 H. Hume
Chief, Photogrammetric Branch

J. Ralph Sobieralski
Chief, Photogrammetry Division

JAN 30 1968

John P. Boyer 2/13/68
Chief, Marine Chart Division

1-9-68

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-163 (Rhode Island)

T-10473

✓ Bishop Cove	✓ Narragansett Race Track
✓ Bucklin Point	✓ Omega Pond
✓ Carpenters Corner	✓ Pawtucket
✓ Central Pond	✓ Pawtucket Golf Course
✓ Coles Brook	✓ Phillipsdale
✓ East Providence	✓ Providence
✓ East Providence Cemetery	✓ Rumford
✓ East Providence Center	✓ Runnins River
✓ East Providence Reservoir	✓ Seekonk River
✓ <i>Glenyon Wharf - J.F.</i> Greenwood Point	✓ Slater Memorial Park
✓ Ledgemont Golf Course	✓ Tenmile River
✓ McCoy Stadium	✓ Walker Point
✓ Mt. Saint Marys Cemetery	✓ Watchemoket

Approved by:

A. Joseph Wraight
A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

REPORT TO ACCOMPANY CRONAFLEX PRINT
OF SURVEY T-10473, PROJECT PH-163

The map manuscript was compared with copies of graphic control sheets Nos. PH-1-A-N/2 - 56, and PH-1-A-S/2 - 56, Project 6163, scale 1:10,000. The following is a list of photo-hydro stations, indicating how far and in what direction the photogrammetric position falls from the common point on the graphic control sheet. Also listed are the photo-hydro station that could not be identified. All other photo-hydro stations within the limits of this survey were verified within 0.5 mm and are not shown on the print of the map manuscript.

Station Name	Photogrammetric Position
OAK	1.1 mm E
PAL	1.1 mm E

Station not identified:
TOY

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

Respectfully submitted
17 September 1958

Leroy A. Senasack
Carto. Photo. Aid

Approved and forwarded

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

NAVIGATION AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~1/24/73~~
1/24/73

Baltimore, Maryland 17 August 1959

I recommend that the following objects which have ~~(deleted)~~ 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 H. 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

Comm-DC 28356

NOTE TO REVIEWER

The description of the Massachusetts-Rhode Island State boundary is part of the Special Report, State Boundaries, Project Ph-142.

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-10473

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	Part	REMARKS
278	8-15-69	D. Chapman	Full Part Before	After Verification Review Inspection Signed Via Drawing No. 25 EXAM - NO. CORV
352	12-4-69	Jeff Stuart	ADQUATE Full Part Before	After Verification Review Inspection Signed Via Drawing No. adequate applied until recons.
353	12-16-70	H. Danley	Full Part Before	After Verification Review Inspection Signed Via Drawing No.
278	2-15-73	W. Chandler	Full Part Before	After Verification Review Inspection Signed Via Drawing No.
353	6-18-73	W. Chandler	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.