

10495

Original

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-10495
LOCALITY	
State	Rhode Island
General locality	Narragansett Bay
Locality	Quonset Point
1954 - 19 56	
CHIEF OF PARTY	
Ira R. Rubottom	Chief of Party
William F. Deane, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE	26 FEB 1968

COMM-DC 61300

10495

DESCRIPTIVE REPORT - DATA RECORD

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T-10495

Ph-163

Project No. (II): ~~PS163~~ 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

~~Mean Sea Level (MSL) 1929~~

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): ALLEN 2, 1944

Lat.: 41° 36' 43.926" (1355.2 m) Long.: 71° 24' 48.645" (1126.3 m)

Adjusted

~~UNADJUSTED~~

Plane Coordinates (IV):

State: Rhode Island Zone: —

Y=

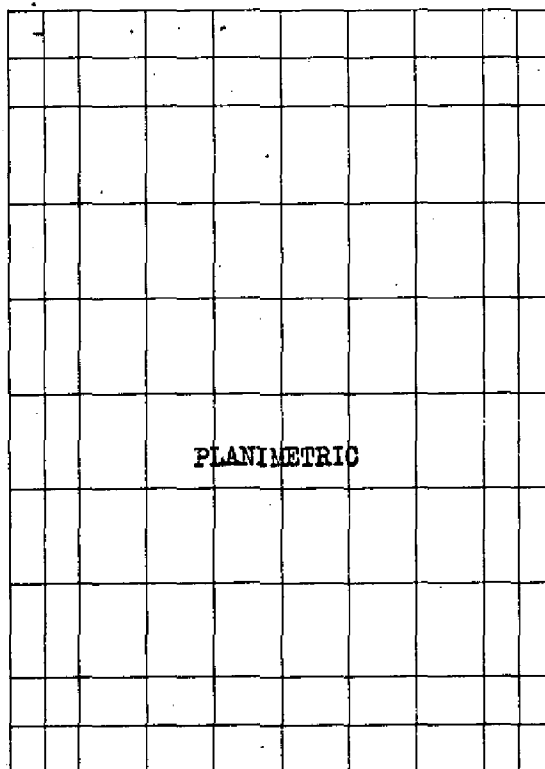
X=

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° 26.25'



41° 37.5'

41° 33.75'

71° 22.5'

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

DESCRIPTIVE REPORT - DATA RECORD

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

Number	Date	PHOTOGRAPHS (III)		Scale	Stage of Tide
		Time	EST		
56-W-160 & 161	5/1/56	0830		1:30,000	1.4' above MLW
56-W-200	"	0900		"	1.9' " "

Tide (III)
(From predicted tables)

Reference Station: Newport, R. I.
Subordinate Station: Wickford
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	3.5	4.4
	3.8	4.7

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

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): 4.5
Shoreline (More than 200 meters to opposite shore) (III): 7 miles
Shoreline (Less than 200 meters to opposite shore) (III): 0.5 miles

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 19 Recovered: 12 Identified: 2

Number of BMs searched for (II):

Recovered: Identified:

Number of Recoverable Photo Stations established (III): None

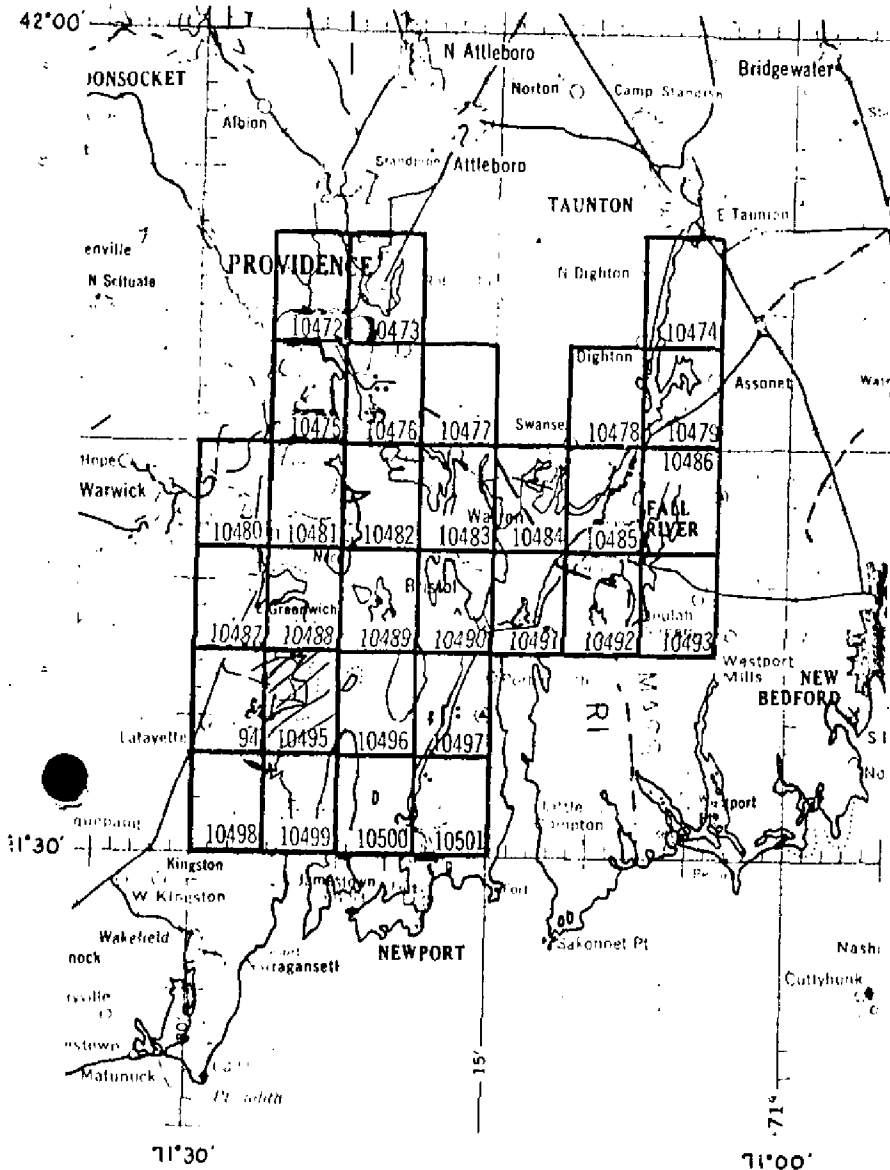
Number of Temporary Photo Hydro Stations established (III): See paragraph 38.

Remarks:

PLANIMETRIC MAPPING PROJECT PH - 163

Narragansett Bay, Mass. - Rhode Island

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OFFICIAL MILEAGE FOR COST ACC		
SHEET NO.	Lin.Mi. SHORELINE	ARE SQ.
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	9	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	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-10495

T-10495 is one of thirty similar maps comprising project PH-163. The project area covers the Narragansett Bay, Rhode Island-Massachusetts area.

Field inspection was complete except for the limited inspection of rock detail. This map was not field edited. Only the north quarter of the area covered is in common with a contemporary hydrographic survey H-8313. Boat sheet shoreline was provided from other sources. T-10495 was applied during smooth plotting of the hydrographic survey. The project was bridged by multiplex and compiled by Kelsh plotter.

The addendum to this Summary includes an evaluation of the accuracy and adequacy of project maps.

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.

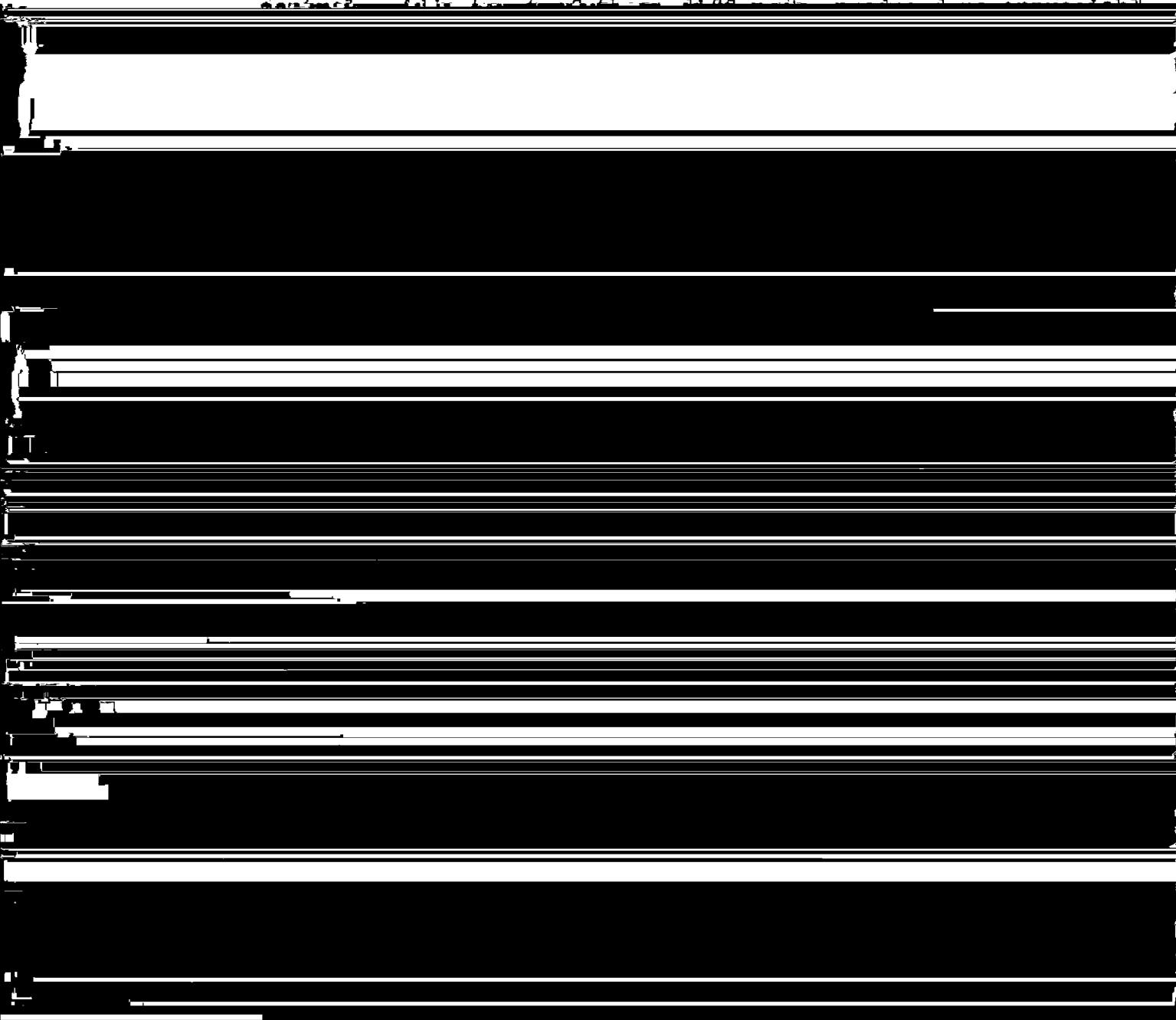
In part, the problems encountered in survey H-8316 (and H-8394) during hydrography and by verifiers can be attributed to the enlargement of these photogrammetric maps from 1:10,000 to 1:5,000 scale for use in hydro support. Similar problems on

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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



FIELD INSPECTION REPORT
Project 25120
Map T-10495

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

Martin C. Moody
Martin C. Moody
Cartographic Survey Aid

Approved:

Ira R. Rubottom
Ira R. Rubottom
Chief of Party

FIELD INSPECTION PHOTOGRAPHS -
56W 159, 160, 161, 162, 200
54W 1051

PHOTOGRAPHS 56W 159, 160, 200
WERE MISSING AT THE TIME OF
FINAL REVIEW - APPARENTLY LOST.

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

SCALE OF MAP 1:10,000 SCALE FACTOR 1.000

NAD 83 ELEVATION	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)
362	1646.3	204.8					
889	182.7	1206.4					
512	1404.1	446.9					
311	563.0	826.5					
991	740.1	1110.9					
316	401.1	988.6					
859	489.3	1361.7					
315	146.2	1243.1					
878	520.7	1330.3					
356	1096.9	292.9					
300	626.3	1224.7					
726	1035.9	353.8					
300	626.3	1224.7					
990	1157.9	231.9					
598	450.4	1400.6					
328	424.5	965.2					
69	638.3	1212.7					
06	719.5	670.3					
124	1114.5	736.5					
530	1054.5	335.1					
422	938.5	912.5					
113	1253.3	136.3					
926	1355.2	495.8					
645	1126.3	262.9					

CHECKED BY: Henry P. Eichert

DATE 23 July 1957

SCALE OF MAP..... 1:10,000

SCALE FACTOR

- 9 - 12 -

CHECKED BY: **Henry P. Eichert**

DATE 23 July 1957

COMM-DC-57843

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COMPILATION REPORT
T-10495

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

U.S.G.S. Wickford quadrangle, 1959 edition, for county boundary.
Final name sheet dated 5 March 1957.

Copy of boat sheet H-8313 for comparison.

Map of U. S. Naval Air Station, Quonset Point, R. I.

Station map of U. S. Naval Construction Battalion Center, 1956.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage is complete.

35. SHORELINE AND ALONGSHORE DETAILS

All shoreline details are from field inspection which was thorough.

The low water lines are from field inspection.

The latest chart shows a large pier under construction at Davisville Depot since photography and field inspection.

36. OFFSHORE DETAILS

Refer to paragraph 8 of the field report.

Three named submerged features could not be delineated from the photographs. The charted piles and boiler SW of Hope Island (T-10496) were not visible on the photographs.

37. LANDMARKS AND AIDS

Forms 567 have been submitted for one aid to navigation, one aeronautical aid and six landmarks to be charted.

38. CONTROL FOR FUTURE SURVEYS

No recoverable topographic stations were established. Refer to the 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

Junctions have been made as follows:
To the north with survey T-10488
To the east with survey T-10496
To the south with survey T-10499
To the west with survey T-10494

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. BOUNDARIES

The Washington County-Newport County boundary, as delineated on the U.S.G.S. Wickford quadrangle, was transferred in the vertical projector. An approximate Portsmouth-Jamestown boundary was also transferred.

42 - 45 Inapplicable.

46. COMPARISON WITH EXISTING MAPS

U.S.G.S. Wickford, R. I. quadrangle, scale 1:24,000, edition of 1959.
Bureau survey T-5751(944), scale 1:20,000, date of issue 1949.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 236, scale 1:20,000, published February 17, 1958
revised 9/22/58.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: The large pier E-120 at Davisville Depot charted as under construction does not appear on this survey. There is no indication of this on the photography or field inspection.

The charted piles and boiler SW of Hope Island could not be identified.

Respectfully submitted
29 January 1959

Joseph W. Vonasek
Joseph W. Vonasek
Carto. (Photo.)

Approved and forwarded

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

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PHOTOGRAMMETRIC OFFICE REVIEW

T-10495

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. Novasick
Reviewer

Henry P. Eichel
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-10495
December 1966

62. Comparison with Registered Topographic Surveys

T-5751	1:20,000	1944
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T-10495 supersedes the prior survey for nautical charting purposes in the common area.

63. Comparison with Maps of Other Agencies

A comparison was made during compilation with USGS, Wickford quad. The only discrepancies noted, in school names, street names, etc., are inapplicable to either hydrographic surveys or modern charts.

64. Comparison with Hydrographic Surveys

64.1 Contemporary Surveys

H-8313	1:10,000	1956
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The common area includes only the north quarter of T-10495. Planimetric survey shoreline was applied to the smooth sheet during verification. No changes were made on smooth sheet in T-10495 shoreline.

64.2 Prior Surveys

Outside the area of common coverage with H-8313 (side heading 64.1) the area mapped on T-10495 is covered by H-6970, dated 1944. Survey H-6970 includes considerable rock details not shown on T-10495. Field inspection of rock details was incomplete and the photography was poor for interpreting these features. Refer to side heading 65 concerning a possible discrepancy in the position of a rock.

Many details on H-8313 are outdated as the result of cultural and natural changes that occurred between 1944 and 1956 (time of survey T-10495).

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65. Comparison with Nautical Charts

No. 236

1:20,000

July 1966

The chart contains considerable rock information - charted from H-6970 (side heading 64) and other sources - that is not shown on T-10495.

One discrepancy in rock location, amounting to approximately 60 feet ground distance, between nautical chart 236 and T-10495 was called to the attention of the Marine Chart Division. The rock (latitude $41^{\circ} 34.75'$, longitude $71^{\circ} 21.1'$) was charted from H-6970. The rock is located in the same position on surveys T-10495 and T-5751, dated 1944.

26.1' agt

66. Adequacy of Results and Future Surveys

The addendum to the Summary included in this Descriptive Report evaluates the adequacy and accuracy of project maps. The maps will be registered; remapping, however, is recommended for future hydrographic survey support purposes.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

Charles L. ...
Chief, Photogrammetric Branch

J. Ralph Sabieralski FEB 09 1968
Chief, Photogrammetry Division

John O. Boyer 2/26/68
Chief, Marine Chart Division.

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1-9-68

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-163 (Rhode Island)

T-10495

Allen Harbor

Brig Ledge

Calf Pasture Point

Cold Spring Rock

Conanicut Island

Davisville Depot

Davol Pond

Fries Pond

General Rock

Hall Creek

Jamestown-J.P.

Kiefer Park

NAS Quonset Point-J.P.

Narragansett Bay

Newport County-J.P.

~~North Kingston~~

~~North Kingstown-J.P.~~

~~Old Gray Rock~~

~~Old Gay Rock-J.P.~~

Old Sow Rock

Portsmouth-J.P.

Quonset Point

Shore Acres

Spink Neck

Washington County-J.P.

West Passage

Approved by:

A. Joseph Wraight

A. Joseph Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

29 Jan. 1959

from seaward to determine their value as landmarks be
sek

William F. Deane

Chief of Party.

ION	LONGITUDE *		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
	'	"							
25	07.889	N.A.	1927	Triang. T-10495	13 July 1956 (1944)	X	X		236, 1210
	182.7	"							
	45.530	"							
	1054.5	"							
25	17.316	"	"	"	13 July 1956 (1944)	X	X		236, 353 1210
	401.1	"							
	44.726	"							
	1035.9	"							
25	49.990	"	"	"	13 July 1956 "	X	X		236, 353, 1210
	1157.9	"							
		"							
		"							
25	47.356	"	"	"	13 July 1956 "	X	X		236, 353, 1210
	1096.9	"							
		"							
		"							

0 to 804. Positions of charted landmarks and *nonfloating* could be considered for the charts of the area and not by given.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland

29 January, 1959

end that the following objects which have ~~(1444/1444)~~ been inspected from seaward to determine their value as landmarks be ~~deleted/1444~~ the charts indicated.

Information given have been checked after listing by Joseph W. Vonasek

William F. Deane

Chief of Party.

shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* station, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by survey sheets. Information under each column heading should be given.

DOGS AND METERS

Comm-DC 28356

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

AERONAUTICAL

NONNAVIGATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Baltimore, Maryland

29 January, 1959

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

The positions given have been checked after listing by Joseph V. Vonnack

William F. Deane

Chief of Party.

STATE	RHODE ISLAND			POSITION					METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
	CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE *		LONGITUDE *								
				° ' "	D. M. METERS	° ' "	D. P. METERS	DATUM						
AIRPORT BEACON	Quonset Naval Air Station (Δ Quonset Aero Light)		41 35	30.422	71 24	56.113	R.A. 1927	Primar. P-10195	1/34/57	1946	Enclon	Sectional		
										</				

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

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T-10495
NOTE TO REVIEWER

Consideration was given to showing some landmark buildings at the Naval Air Station. The recommended landmarks are so numerous in the area. The very large buildings are also numerous. The charts of the area show no buildings even though some were delineated on survey T-5751(1944). For these reasons no buildings were delineated on this manuscript.

The Form 526 for station WHITE ROCKS BEACON, 1912 indicates a structure in the vicinity but no location data was furnished. The chart shows no structure at this position:

Lat. $41^{\circ} 24' 26.293''$ 811.2 m
Long. 71 25 03.767 87.3

24
23

NOTES TO ACCOMPANY CRONAFLEX PRINT
OF SURVEY T-10495, PROJECT PH-163

The map manuscript was compared with the copy of graphic control sheet No. PH-I-H-56, Projects 13870 and 25120, 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 those photo-hydro stations that could not be identified. All other photo-hydro stations on the control sheet that fall within the limits of this survey were verified within 0.5 mm and removed from the map manuscript. No information was received in this office for any photo-hydro stations south of latitude 41° 37' 00".

Station Name	Photogrammetric Position
PIX	0.7 mm E

Stations not identified:

MID
VIA

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

Respectfully submitted
13 November 1958

E. L. Williams
E. L. Williams
Carto. (Photo.)

Approved and forwarded



