

5745

Diag. Cht. No. 1210-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey PLANIMETRIC

Field No. PH-31(48)-C Office No. T-5745

### LOCALITY

State MASSACHUSETTS

General locality ELIZABETH ISLANDS

Locality NAUSHON ISLAND - PASQUE ISLAND

194 2

CHIEF OF PARTY

R. J. Sipe

LIBRARY & ARCHIVES

DATE \_\_\_\_\_

B-1870-1 (1)

5745



# DATA RECORD

T - 5745

Project No. (II): PH-31(48)C

Quadrangle Name (IV):

Field Office (II): Washington, N. C.

Chief of Party: Riley J. Sipe

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: Thos. B. Reed

Instructions dated (II) (III): Field, 9 April 1948  
Informal office 18 January 1949

Copy filed in Division of  
Photogrammetry (IV)  
*Office Files.*

Method of Compilation (III): graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.00

Date received in Washington Office (IV): 7-19-49

Date reported to Nautical Chart Branch (IV): 8-1-49

Applied to Chart No.

Date:

Date registered (IV): 2-6-51

Publication Scale (IV): 1:10,000

Publication date (IV): 8-18-50

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

Mean sea level except as follows:  
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): NAUSHON, SOUTHWEST 2, 1887

Lat.: 41° 27' 0.291" (39.8m) (39.8m): Long. 70° 47' 20.149" (467.7m) ~~Adjusted~~ ~~Unadjusted~~

Plane Coordinates (IV):

State: Mass.

Zone: Island

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.







# DATA RECORD

Field Inspection by (II): E.T. Jenkins; R. A. Horn

10/4/48 to  
Date: 11/23/48

Planetable contouring by (II): *None*

Date:

Completion Surveys by (II): *None*

Date:

Mean High Water Location (III) (State date and method of location): 5/2/48

Projection and Grids ruled by (IV): W.E.W.

Date: 8/13/48

Projection and Grids checked by (IV): W.E.W.

Date: 8/13/48

Control plotted by (III): R. A. Horn

Date: 2/4/49

Control checked by (III): F.J. Tarcza

Date: 2/4/49

Radial Plot ~~3291475836534~~  
~~3291475836534~~ by (III): F.J. Tarcza

Date: 2/8/49

Stereoscopic Instrument compilation (III):

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): W.J. Hughes  
D.A. Maskell

Date: 4/20/49 to  
5/27/49  
6/6/49 to  
6/10/49

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

Date: 6/16/49 to 6/24/49

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

Date:



Camera (kind or source) (III): U.S.Coast and Geodetic Survey single lens camera,  
type "J"

Number	Date	Time	Scale	Stage of Tide
48J911	5/2/48	1417	1:10,000	2.3' above MLW
912	"	1418	1:10,000	2.4 & 1.8' above MLW (N&S shores)
913	"	1418	"	2.9' above MLW
914	"	1419	"	"
915	"	1419	"	"
916	"	1419	"	"
930	"	1430	"	1.2' above MLW
931	"	1431	"	"
932	"	1432	"	"
933	"	1433	"	"
934	"	1433	"	"

Tide (III)

Reference Station: Newport  
Subordinate Station: See remarks  
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
1.0	3.5	4.4

Washington Office Review by (IV): C. Hanavich

Date: 10-12-49

Final Drafting by (IV): R. Breene & A. Berry

Date: 2-28-50

Drafting verified for reproduction by (IV): C. Kupiec

Date: 3-31-50

Proof Edit by (IV): C. J. Streifler

Date: 7-24-50

Land Area (Sq. Statute Miles) (III): 8  
Shoreline (More than 200 meters to opposite shore) (III): 19  
Shoreline (Less than 200 meters to opposite shore) (III): 3  
Control Leveling - Miles (II):  
Number of Triangulation Stations searched for (II): 4  
Number of BMs searched for (II):  
Number of Recoverable Photo Stations established (III): 0  
Number of Temporary Photo Hydro Stations established (III): 0

Recovered: 4 Identified: 4\*  
Recovered: Identified:

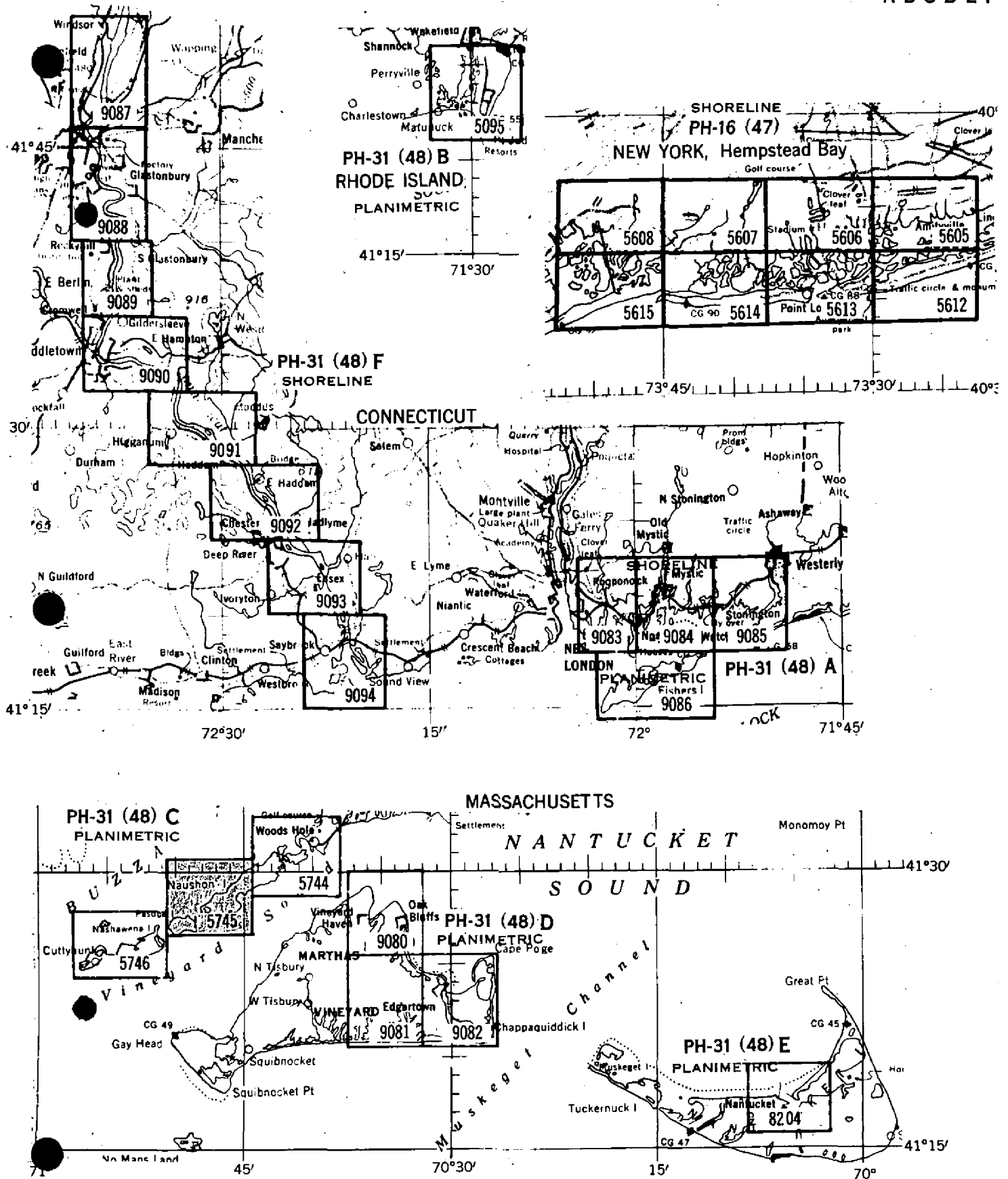
Remarks:

	Ratio of Range	Mean Range	Spring Range
Quicks Hole South	0.7	2.5	3.1
Quicks Hole Middle	0.9	3.0	3.7
Quicks Hole North	1.0	3.5	4.4
Tarpaulin Cove	0.5	1.9	2.4
Kettle Cove	1.1	3.8	4.7

\* One additional control station was established and identified during field inspection.



# PLANIMETRIC AND SHORELINE MAPPING PROJECTS PH-16(47) - PH-31(48) A-B-C-D-E-F





## Summary to Accompany T-5745

T-5745 is one of three planimetric maps in project Ph-31(48), subproject C. This subproject covers the area of the Elizabeth Islands including Woods Hole on the southwest tip of Cape Cod, Massachusetts. T-5745 covers the west portion of Naushon Island, and all of Pasque Island.

The photographic coverage which consisted of 1:10,000 scale single-lens ratio prints was adequate and the compilation is complete. The field operations preceding compilation included complete field inspection, establishment and identification of additional horizontal control, clarification and annotation of photographic detail and an investigation of geographic names. The graphic compilation was done at a scale of 1:10,000.

Data pertaining to this survey will be filed as follows:

1. Filed in the Div. of Photogrammetry
  - a. The original acetate manuscript at 1:10,000 scale with final review corrections applied.
  - b. Geographic names sheet
  - c. Pricking cards for identification of horizontal control.
  - d. Forms 524
  - e. Duplicate descriptive report
2. Filed in the Bureau Archives
  - a. A clothbacked lithographic print of T-5745 at 1:10,000 scale
  - b. Descriptive Report

*See Review Report on foul areas  
and rocks alongshore*



FIELD REPORT

PLANIMETRIC SURVEY T-5745

For field data covering Survey T-5745, refer to field inspection report for sub-project PH-31(48)C, - locality of Woods Hole and Elizabeth Islands, Massachusetts submitted by Riley J. Sipe, Chief of Party bound with descriptive report for Survey T-5746.



RADIAL PLOT REPORT

PROJECT Ph-31 (48) C

SURVEYS T-5744, T-5745, T-5746

For report on the radial plot for these three surveys, see  
Descriptive Report T-5746



MAP T-5745

PROJECT NO. PH-31(48)C

SCALE OF MAP 1:10,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\psi$ -COORDINATE LONGITUDE OR $\lambda$ -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)
NAUSHON, 1844	G-3720 Pg. 219	N.A. 1927	41 29	24.462				754.7	1096.3		
			70 44	33.520				777.6	614.2		
SUB. PT. NAUSHON, 1844			41 29					766.4	1084.6		
			70 44					733.8	658.0		
TARPAULIN COVE LIGHTHOUSE, 1904	G-5985 Pg. 410	"	41 28	07.348				226.7	1624.3		
			70 45	28.882				670.2	722.2		
NAUSHON SOUTHWEST 2, 1887	G-5985 Pg. 407	"	41 27	01.291				39.8	1811.2		
			70 47	20.149				467.7	925.0		
SUB. PT. - NAUSHON SOUTHWEST 2, 1887			41 27					46.4	1804.6		
			70 47					451.9	940.8		
LAMB, 1948	G-7806 Pg. 520	"	41 27	18.084	6-2804	Library		557.9	1293.1		
			70 49	30.388	7805	"		705.3	687.3		
SUB. PT. LAMB, 1948			41 27					551.3	1299.7		
			70 49					741.2	651.4		
PASQUE, 1844	G-3720 Pg. 219	"	41 26	57.274				1766.9	84.1		
			70 50	04.579				106.3	1286.4		
SUB. PT. "A" PASQUE, 1844			41 26					1778.3	(72.7)		
			70 50					138.3	(1254.4)		
SUB. PT. "B" PASQUE, 1844			41 26					1781.0	(70.0)		
			70 50					79.2	(1313.5)		

1 FT. = 3048006 METER

COMPUTED BY: Wayne Lineweaver

DATE 1-28-49

CHECKED BY: Frank J. Tarcza

DATE 2/2/49

M-2388-12



# COMPILATION REPORT T-5745

This manuscript is one of three planimetric surveys in Project PH-31(48), sub-project "C", covering the area of Elizabeth Islands, Mass.

## PHOTOGRAMMETRIC PLOT REPORT

The photogrammetric plot report has been submitted separately to the Washington office on 14 February 1949. *Bound with descriptive report for T-5746. Covers sheets T-5744-45-46*

### 31. DELINEATION

Graphic methods were used in the delineation of this survey.

Part of Nashawena Island falls in the extreme southwest corner but was delineated on Survey No. T-5746.

### 32. CONTROL

Refer to the photogrammetric plot report for T-5744 to T-5746, submitted by Frank J. Tarcza, February 1949, regarding density and placement of control.

### 33. SUPPLEMENTAL DATA

None

### 34. CONTOURS AND DRAINAGE

Inapplicable

### 35. SHORELINE AND ALONGSHORE DETAILS

Approximately ten percent of the outline of the shallow areas is based on data furnished by the field party. The remainder was delineated from office interpretation of the photographs.  
*See Revised Report*

### 36. OFFSHORE DETAILS

No comment - *See Revised Report*

### 37. LANDMARKS AND AIDS

Refer to form 567 submitted by R. A. Horn, 20 November 1948.  
*See Revised Report*



38. CONTROL FOR FUTURE SURVEYS

No recoverable topographic stations or photo-hydro stations were established.

39. JUNCTIONS

Junctions to the east with sheet 5744 and to the west with sheet 5746 were made and both are in agreement.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment

41. TIDAL BENCH MARKS

There are tidal bench marks listed in the area of Tarpaulia Cove, Kettle Cove and Robinson Hole, but they were not delineated because they were not identified by the field party.

46. COMPARISON WITH EXISTING MAPS

This manuscript has been compared with the U. S. Geological Survey quadrangle, Naushon Island, edition of 1944, scale 1:31,680 and Woods Hole, advance edition, (surveyed in 1936), scale 1:24,000. Previous surveys Nos. T-1937 (1889-96) and T-1938 (1889) of this bureau, scale 1:10,000, exist in the area of this survey but were not available for comparison.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with U.S.C. & G.S. chart No. 345, March 1942 (7th edition) corrected to May 31, 1948, scale 1:10,000, and also with USC&GS chart No. 249, September 1941 (14th edition) corrected to May 3, 1948, scale 1:40,000 and found to be in good agreement.

Items to be applied to nautical charts immediately:

None

Items to be carried forward

None.

Respectfully submitted  
13 June 1949

*Doris A. Maskell*  
Doris A. Maskell  
Cartographic Draftsman

Approved and forwarded  
July 1949

*Thos B Reed*  
Thos. B. Reed  
Officer in Charge  
Baltimore Photogrammetric Office



50.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-5745

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

## CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy JW 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) JW 7. Photo hydro stations JW 8. Bench marks JW 9. Plotting of sextant fixes JW 10. Photogrammetric plot report JW 11. Detail points JW

## ALONGSHORE AREAS

(Nautical Chart Data)

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

## PHYSICAL FEATURES

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

## CULTURAL FEATURES

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

## BOUNDARIES

31. Boundary lines JW 32. Public land lines JW

## MISCELLANEOUS

33. Geographic names JW 34. Junctions JW 35. Legibility of the manuscript JW 36. Discrepancy overlay JW 37. Descriptive Report JW 38. Field inspection photographs JW 39. Forms JW 40. Joseph W. Vanecek Joseph W. Vanecek  
Reviewer Supervisor, Review Section of 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:



## R E M A R K S

6, 9, 15, 16, 29, 30, 31, 32: None of these items appear on the manuscript.

8. Tidal Bench Marks are discussed in the compilation report.

13. No LWL was furnished.

36. A discrepancy overlay is not needed.



5725-T

**TO BE CHARTED**

**STRIKE OUT ONE**

**NONFLOATING AIDS OCCASIONALLY FOR CHARTS**  
Division of Photogrammetry  
Washington, D. C.

Oct. 10 1941

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

The positions given have been checked after listing by C. Hanauvich

S. V Griffith

C. Let No. 847 (1949)

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 shall be given.



48. GEOGRAPHIC NAMES

- ✓. Black Woods
- ✓. Blaney Pond
- ✓. Buzzards Bay\*

- ✓. Crane Pond
- ✓. Crescent Beach

- ✓. Eagle Hollow
- ✓. Elizabeth Islands

- ✓. French Watering Place

~~Gosnold~~

- ✓. Hollow Gate Path
- ✓. Kettle Cove

Political name

- ✓. Mt. Cary
- ✓. Mt. Surat

✓. Anacin Road

- ✓. Naushon Island
- ✓. Naushon Point

~~Naushon Island~~

✓. North Shore Road

✓. North ~~Shore~~ Road

- ✓. Pasque Island

- ✓. Quicks Hole

~~and Quicks Hole Pond~~

- ✓. Rams Head
- ✓. Ramshead Woods
- ✓. Robinsons Hole

- ✓. Silver Beach
- ✓. South Bluff
- ✓. South Bluff
- ✓. South Rock

✓. South Bluff Road

- ✓. Tarpaulin Cove

- ✓. Vineyard Sound\*

- ✓. Weepecket Islands
- ✓. West Beach
- ✓. West End Pond

✓. Western Hills Path -

Witches Glen

only on T5744

- ✓. Yellow Gate Wall - see descriptive report for T-5744 (name approved therein)

\* Name of township in which the Elizabeth Islands lie; does not appear on the manuscript.

~~Witches Glen~~

\* after name signifies a Board decision (6th Rep. or later)

Names preceded by - are  
approved 9-13-49 ✓ = J-30-50  
L. Heck. a.d. 61.



15.

Review Report of T-5745

Planimetric

12 October 1949

2. Completeness of Field Inspection.-No inland inspection of marsh areas was noted on the field photographs.

31. Delineation.-Numerous marsh areas and brush covered swales (noted as marsh and brush) were added to the manuscript during review. Under the stereoscope these areas appeared to be low and wet. A comparison was made with registered topographic surveys and maps of other agencies to substantiate this interpretation.

Offshore grass in water areas indicated on the manuscript in the vicinities of Kettle Cove and Tarpaulin Cove were deleted. Dark under-water discolorations in these areas had been noted by the field inspector as "vegetation" which apparently was intended to be interpreted as under-water marine growth.

On Naushon Island and NE of West End Pond, the location of a trail (an enclosed loop) was changed to agree with the field delineation after examining it with a stereoscope.

In the few instances where the field inspector had indicated intermittent ponds these had been delineated as such by the compiler, but in other areas ponds comparable in size and appearance had been shown as perennial; this inconsistency was resolved by indicating all ponds perennial, and deleting small and insignificant ponds for the following reasons: maps of other agencies as well as previous surveys by this Bureau indicate all ponds as perennial. It is believed that this is the truer representation, since most of these ponds have no surface drainage (field note) except for seepage and evaporation.

33. Supplemental Data.-The following surveys of this Bureau were inspected for any additional information and were used to some extent to substantiate the interpretation of photographic detail: T-1937 (1889); T-1938 (1889); T-192 Bis (1933) Sheet 2 of 3; T-192 bis (1933), Sheet 1 of 3. All surveys listed are at the scale of 1:10,000 *and are superseded by T-5745 for nautical charting purposes.*

35. Shoreline and Alongshore Details.-The conventional symbol for the delineation of rocky bluffs was not used. Although the symbolization was not changed during the review, they were noted as being rocky. In one or two instances, the field inspector had indicated the bluffs to be sand and rock. Also, the statement was found in the descriptive report submitted for topographic survey T-6621 (1938), that most of the shore line along the Elizabeth Islands was rocky with numerous rocks along the foreshore broken up by occasional short stretches of sand beaches.



It was found that the delineation of some of the foul areas by the field inspector was too generalized in that no distinction was made between foul areas and shallow areas not foul, and in some instances the selection of the photograph with the best definition to indicate the foul areas or individual rocks was not made. All shallow areas outlined by the compiler were noted as being foul with numerous rocks awash at MHW; these areas were checked and changes were made to distinguish the foul from the shallow areas. In most instances foul areas were discernible on the photographs, but this was not so of the shallow areas.

The numerous offshore rocks awash, which were located in position, on the manuscript, were checked. Most of these rocks were not located specifically by the field inspector on the photograph except for the notation on the photograph that the area was foul with numerous rocks awash MHW; it was found that the location or existence of some of these rocks was doubtful and they were deleted. A few rocks were added. *Refer to "Supplement to Review Report" for statement on*

36. Offshore Details.-Two rocks at latitude  $41^{\circ}27.32'$  longitude  $70^{\circ}50.45'$  and latitude  $41^{\circ}27.45'$  longitude  $70^{\circ}50.25'$  were deleted. These rocks were identified by the field inspector on photograph 912 in an area where a great deal of light was reflected, and were questionable since they could not be seen on photograph 911 with good definition. Furthermore, they would fall in about 11-14 feet of water on Chart 345, where no rocks are shown.

37. Landmarks and Aids.-Only one non-floating aid to navigation is found on the manuscript. Since it was not found listed on Form 567, filed as Chart Letters 650 (1949) and 826 (1948), in the Nautical Chart Branch, Division of Charts, it has been listed on Form 567 and a copy attached to this report. *C.L. 847(1949)*

39. Comparison with Existing Maps.-

1. Naushon Island, Mass., quadrangle; sheet 6866 IV NE; Scale 1:25,000; First Edition (AMSI) 1947.
2. Cuttyhunk, Mass., quadrangle; sheet 6866 IV NW; Scale 1:25,000; First Edition (AMSI) 1947.
3. USGS Cuttyhunk, Mass., quadrangle; scale 1:31,680; Edition of 1944.
4. USGS Naushon Island, Mass., quadrangle; scale 1:31,680; Edition of 1944; reprinted 1946.

47. Comparison with Nautical Charts.

1. Nautical Chart No. 345; scale 1:10,000; published March, 1942; last correction 9-6-48.
2. Nautical Chart No. 249; scale 1:10,000; published September, 1941; last correction 6-13-49.

*No significant differences occur between the map and the charts. Note item 36.*



Reviewed by:

Charles Hanavich  
Charles Hanavich

APPROVED:

S. V. Griffith  
Chief, Review Section F. W. M.  
Division of Photogrammetry

H. B. Monroton  
Chief, Nautical Chart Branch  
Division of Charts

O. S. Reading  
Chief, Div. of Photogrammetry

W. G. Greenburg  
Chief, Div. of Coastal Surveys  
L. S. H.



## Supplement to Review Report

During the review of this survey alongshore and offshore rocks shown on the manuscript have been verified by the reviewer against prior surveys listed under item 33 and/or the photogrammetric survey or by positive identification in stereopairs of photographs. Many offshore rocks have not been shown because they could not be positively identified on the photographs and were not located by the photogrammetric field party. Offshore rocks should be located by subsequent hydrographic surveys. The fore-shore is generally foul and boulder strewn with many bare rocks, rocks awash and sunken rocks. A foul line marks the limits of such areas.

S. V. Griffith  
Chief, Review Section



## NAUTICAL CHARTS BRANCH

SURVEY NO. 5745

## Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.