

T-11218

T-11218

T-11218

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT	
Type of Survey	PLANIMETRIC
Field No.	Office No. T-11218
LOCALITY	
State	MASSACHUSETTS
General locality	MARTHA'S VINEYARD
Locality	SQUIBNOCKET POINT
<u>1955-1961</u> CHIEF OF PARTY I. R. Rubottom, Chief of Field Party Arthur L. Wardwell, Tampa Photo. Office	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T-11218

* See not at bottom of page

Project No. (II): 27190 (Ph-116) Quadrangle Name (IV):

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

Chief of Party: I. R. Rubottom

Photogrammetric Office (III): Tampa, Florida 1957
Baltimore, Md. 1961

Officer-in-Charge: Arthur L. Wardwell

Instructions dated (II) (III): Wash. D.C. 1965

W.E. Randall
J.E. Waple
Copy filed in Division of

Instructions, Project Ph-116, Field, Supp. II, 9 July 1953 Photogrammetry (IV)

" " " " " III, 11 Aug 1953

Amendment to Instructions, Project 6116, 30 November 1955

Instructions, Project 6116, Field, Supp. IV, 17 April 1956

Instructions (Office) 21 May 1957

Method of Compilation (III): Kelsh Plotter and Graphic Compilation (NO MANS LAND)

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:5,000

Scale Factor (III): Pantographed to 1:10,000

Date received in Washington Office (IV): MAR 26 1958 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):

Mean sea level except as follows: M.H.W.
Elevations shown as (25) refer to mean high water
Elevations shown as (2) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): QUIB, 1939

Lat.:

Long.:

Adjusted

~~Unadjusted~~

Plane Coordinates (IV):

State: MASS.

Zone: Island

Y= 112,648.37

X= 125,282.18

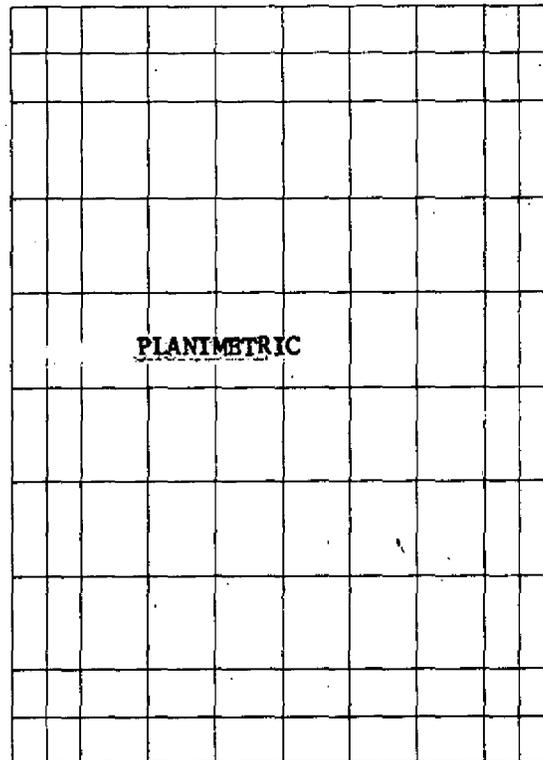
Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

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

* NOTE: Refer to the descriptive Report "Summary" concerning revision information applied in 1961 & 1965

DESCRIPTIVE REPORT - DATA RECORD

70° 52.50
41 18.75



41 15.00

70° 45.00

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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): **J. R. Smith**

Date: **April-June and August 1956**

Planetable contouring by (II): **Inapplicable**

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

Tide controlled infra-red photography taken in 1961

**June 1956
April 1957 (NO MANS LAND)
Air Photo compilation**

Projection and Grids ruled by (IV): **J. B. Phillips (W.O.)**

Date: **21 May 1957**

Projection and Grids checked by (IV): **J. B. Phillips (W.O.)**

Date: **21 May 1957**

Control plotted by (III): **R. E. Smith Jr.**

Date: **23 Oct. 1957**

Control checked by (III): **R. J. Pate**

Date: **23 Oct. 1957**

Radial Plot or ~~Stereoscopic~~
Control-extension by (III): **R. E. Smith Jr**

Date: **Dec. 1957**

Planimetry **R. E. Smith Jr**

Date: **Dec. 1957**

Stereoscopic Instrument compilation (III):
Graphic compilation ~~UNRECORDED~~ **R. E. Smith Jr**

Date: **Dec. 1957**

Manuscript delineated by (III): **R. E. Smith Jr**

Date: **Dec. 1957**

*Manuscript Revised J.C. Richter
" " J.C. Richter*

*Sept. 1961
1965*

Photogrammetric Office Review by (III): **M. M. Slavney**

Date: **Jan. 1958**

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): **WILD C&GS**

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
55-W-5086	15 Mar. 1955	10:28	1:25,000	+1.4
57-S-267	22 Apr. 1957	10:35	"	+1.3
57-S-268	"	10:35	"	"
57-S-269	"	10:35	"	"
57-L-1676	"	10:35	"	"
57-L-1677	"	10:35	"	"
57-L-1678	"	10:35	"	"
61 L 1513 (Infrared)	9 April 1961	14:45	1:30,000	+0.4 (above MHW) } *
61 M(c)026,027	12 April 1961		1:60,000	
61 S(c)6580-6590	9 April 1961	08:55	1:15,000	+0.8 (above MLW) } *
7673-7682	3 May 1961	16:45	1:15,000	+0.3 (above MLW) }

Tide, (III)
Predicted Tides (1961)

Reference Station: **NEWPORT, R.I.**
Subordinate Station: **OFF CHILMARK POND**
Subordinate Station: **NO MANS LAND ISLAND**

Ratio of Ranges	Mean Range	Spring Range
-	3.5	4.4
-	2.9	3.5
-	3.0	3.6

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

Date: *OCT. 1965*

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **2**
Shoreline (More than 200 meters to opposite shore) (III): **8 mi.**
~~Shoreline (Less than 200 meters to opposite shore) (III):~~
Control Leveling - Miles (II): **Inapplicable**
Number of Triangulation Stations searched for (II): **7** Recovered: **4** Identified: **4**
Number of BMs searched for (II): **3** Recovered: **1** Identified: **1**
Number of Recoverable Photo Stations established (III): **0**
Number of Temporary Photo Hydro Stations established (III): **0**

Remarks:
All bench marks are tidal bench marks

** Tide controlled photography*

Summary to Accompany Descriptive Reports

T-11212 through T-11215

T-11218 and T-10641 through T-10643

The subject surveys are a part of Project PH-116. The project, comprised of forty shoreline surveys, scale 1:10,000, covers (1) Cape Cod Bay shoreline, (2) approximately one half of the east shore of Cape Cod, (3) No Mans Land Island, and (4) the islands of Nantucket and Martha's Vineyard. The subject maps cover Martha's Vineyard and No Mans Land Islands.

Several methods have been used in compiling these maps; and, in addition, they have been revised several times by both graphic and B-8 methods. This summary gives a general account of the compilation and revision procedures and makes recommendations concerning possible future use of the maps.

For the original basic compilations, supplemental control was established in part by stereoplanigraph bridge. Outside of the bridged area Kelsh models were set on identified triangulation stations. Map information on black-line impressions of T-8081, T-8082, and T-8083 was either revised or verified using a combination of control established by the bridge and Kelsh models. PH-116 designations for the revised maps are T-10641, T-10642, and T-10643. New projections were ruled for T-11212 through T-11215, and T-11218.

The maps were revised by graphic methods with 1961 infrared and color photography-in 1961 to provide topography for chart drawings 261, scale 1:20,000 and 264, scale 1:40,000, (Project-6102).

At the time PH-6102 was planned there were no requirements for support of hydrography. Requirements for hydro support in 1965 are discussed in subsequent sections of this Summary. As noted in the Descriptive Reports for the PH-116 maps, errors in the positions of some bridge points were found during compilation. Kelsh models, adjusted to identified control, were used to compile the areas improperly controlled by the bridge.

The revised shoreline maps were reduced and applied in the Photogrammetry Division to new chart bases for Charts 261

and 264. Copies of the bases (Chart Compilation manuscripts) were registered as T-12497 and T-12499.

Prior to registration and to forwarding copies to the Marine Charts Division, the new maps (T-12497 and T-12499) were reviewed in the Washington Office. Considerable rock information was added at that time - directly to new map T-12499 by vertical projector.

7
2
RS 22893

Copies of the PH-116 shoreline maps were required for hydro support in 1965. Due to the incompleteness of rock information, applied during revision in 1961, the along-shore areas of maps T-11212 through T-11215, and T-11218 were again revised with the 1961 color photography using a B-8 instrument. Maps T-10641 through T-10643 were complete, requiring no further work.

RS 772

The maps required for hydro support were: T-11214; T-11215; T-11218; T-10642; and T-10643. Additional work accomplished in 1965 included the revision of shoreline for the preceding maps - 1964 panchromatic photography by B-8 instrument. Revision surveys RS-770 (T-11214), RS-771 (T-11215), RS-772 (T-11218), RS-816 (T-10642), and T-10643A (T-10643) were produced.

Except for T-10643A the revisions surveys reflect only shoreline changes that occurred between 1961 and 1964. An error in datum in T-10643 was found during application of the 1964 photography. The substandard area was re-plotted (radial plot) with the 1964 photography. The revision survey, T-10643A, reflects both the corrected datum and shoreline changes that occurred between 1961 and 1964.

In compiling T-10643A only the features visible on the 1964 panchromatic photography were shown. During the subject final review it was noted that some features (three rocks, piers, wrecks, etc.) shown on T-10643 are not shown on T-10643A. The three rocks were carried forward to the revision survey during review; however, a field edit would be necessary to resolve all discrepancies in cultural features located along the shoreline - portions of some piers, as an example, may still exist as underwater hazards.

T-10643 will be registered since it is the source of topography for Charts 261 and 264.

The error in datum in map T-10643 and the difference in rock information between two registered sources covering

8
8

the west side of Martha's Vineyard Island will be called to the attention of the Marine Charts Division.

During the 1965 revision of the shoreline maps covering the west side of Martha's Vineyard Island (1961 photography, by B-8 instrument) evidence of possible local errors in datum approaching the allowable error of 0.5 mm were noted. While the maps to be registered meet Bureau requirements (hydrography and charting), for accuracy, further revision may possibly result in substandard products.

S. G. Blankenbaker

FIELD INSPECTION REPORT
Project 27190
Map T-11218

Please refer to the Field Inspection Report for Map T-11212
for all data pertaining to this map.

I. Y. Fitzgerald
I. Y. Fitzgerald
Photogrammetric Engineer

Approved:
I. R. Rubottom
I. R. Rubottom
Chief of Party

9.

(11)

COMPILATION REPORT T-11218

PHOTOGRAMMETRIC PLOT REPORT

21 through 30

Model 55-W-5086-5087 was controlled by identified triangulation stations. Model 55-W-5086-5085 was set up on points dropped from the preceding model and from points established on the stereoplanigraph bridge for the flight north of this one. The stereoplanigraph bridge report is included with T-11215.

A direct radial plot was run to locate pass and detail points for NO MANS LAND Island using ratio photographs 57-S-267, 268 and 269 fixed by three identified ground control stations.

31. DELINEATION

MARTHA'S VINEYARD was compiled with Kelsh Plotter, and the field inspection was satisfactory.

NO MANS LAND was compiled graphically from office interpretation of ratio prints from 1957 photographs S-267 through 269 and L-1676 through 1678. There was no field inspection of NO MANS LAND.

32. CONTROL

See Item 21 through 30.

33. SUPPLEMENTAL DATA

None used.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage has been delineated according to field inspection notes and photographic interpretation.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate on MARTHA'S VINEYARD. There was no inspection on NO MANS LAND; therefore the shoreline and the approximate low-water line have been delineated according to photographic interpretation.

36. OFFSHORE DETAILS

No statement

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Junction is in agreement with T-11214 to the north. There is no contemporary survey to the south, east and west, these being bounded by water.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U. S. Geological Survey quadrangle SQUIBNOCKET, MASS., scale 1:31,680, surveyed in 1942, revised in 1951. Only minor differences were noted.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with USC&GS Chart No. 1210, scale 1:80,000, 6th edition, Feb. 10, 1943, revised Aug. 12, 1957. Only minor differences were noted.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Rexford E. Smith Jr.
Rexford E. Smith Jr.
Carto Photo Aid

Approved and forwarded:

William A. Rasur
for Arthur L. Wardwell
Chief of Party

TIDE COMPUTATION

PROJECT NO. Ph. 116 T-112-18

Time and date of exposure 10:35 Apr. 22, 1957 Reference station

NEWPORT R.I.

Mean range 3.0
Spring " 3.6
Ratio of ranges

Date of field inspection Subordinate station NO MANS LAND ISLAND

High tide	Time		Height feet	Height x Ratio of ranges	High tide at Ref. Sta.	Time		Low tide at Ref. Sta.	Time difference	Corrected time at Subordinate station	
	h.	m.				h.	m.				
High tide	13	52	2.7	2.2	14	09	14	09	7	11	
Low tide	7	36	0.6	0.6	-0	15	-0	15	+0	25	
Duration of rise or fall	6	16		1.6		13	52			7	36

Time H. T. or L. T. Required time Interval	h.	m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet	feet	Photo. No.
Time H. T. or L. T. Required time Interval	9	36	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	0.6	1.3	57-4-1676 57-5-267
Time H. T. or L. T. Required time Interval	10	35	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	0.7		
Time H. T. or L. T. Required time Interval	2	59	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	1.3		
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			
Time H. T. or L. T. Required time Interval			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			

(13)

Computed by P. E. Smith Checked by P. E. Smith

(14)

SUPPLEMENTAL COMPILATION REPORT

T-11218

Ratio prints of the infrared photography were used to revise the high water line by holding common details. No coverage was available for No Man's Land.

The low water line from the color photographs was found to be close to the high water line and was not compiled.

Rocks awash in the vicinity of No Man's Land were interpreted on the color photography and were added to the manuscript.

Respectfully submitted
19 September 1961

John C. Richter

John C. Richter
Carto. (Photo.)

Approved and forwarded

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

*correction applied to
original manuscript*

MOST OF THE 1961 CORRECTIONS WERE
APPLIED TO A CROWAR (ADVANCE) COPY/
WORK ACCOMPLISHED AS A PART
OF PH-6102

50. PHOTOGRAMMETRIC OFFICE REVIEW
T- 11218

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

Classification label Unclassified

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads MMS 28. Buildings MMS 29. Railroads XX 30. Other cultural features MMS

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

33. Geographic names MMS 34. Junctions MMS 35. Legibility of the manuscript MMS 36. Discrepancy overlay XX 37. Descriptive Report MMS 38. Field inspection photographs MMS 39. Forms MMS

40. M. M. Slavney Reviewer William A. Rasure Supervisor, Review Section or Unit
M. M. Slavney Reviewer Wm. A. Rasure

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:

REVIEW REPORT
T-11212, T-11213, T-11214, T-11215, T-11218
October 1965

62. Comparison with Registered Topographic Surveys

T-11212	No. 1802 - 1:10,000 - 1888
	No. 2390 - 1:20,000 - 1897
	No. 1845 - 1:10,000 - 1888
T-11213	No. 1845 - 1:10,000 - 1888
	No. 2390 - 1:20,000 - 1897
T-11214	No. 1844 - 1:2,500 - 1888
	No. 1846 - 1:10,000 - 1888
	No. 2389 - 1:20,000 - 1897
T-11215	No. 2389 - 1:20,000 - 1897
	No. 2391 - 1:20,000 - 1898
T-11218	No. 1856 - 1:5,000 - 1888
	No. 1898 - 1:20,000 - 1898

The PH-116 surveys supersede the prior surveys for charting purposes in the common areas. For charting at scale 1:40,000 or smaller, T-12499, scale 1:40,000, 1961, should be used for interior details in the common areas (refer to side heading 65).

63. Comparison with Maps of Other Agencies

USGS quadrangles - 1:24,000 scale

- Vineyard Haven, 1961
- Naushon Island, 1949
- Squibnocket, 1951

No significant difference were noted.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

Chart 264, scale 1:40,000, revised June 8, 1964

T-12499 (side heading 62) is the source of basic topography for this chart. Refer to the Descriptive Report "Summary" for the subject maps concerning the revision (1961 color photography, by B-8 instrument in 1965) of rock information on the maps subsequent to their application to T-12499.

66. Adequacy of Results and Future Surveys

These maps meet the National Standards of Map Accuracy and Bureau requirements. Refer to the Descriptive Report Summary concerning future use of these maps as bases for further revision.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

Charles L. ...
Chief, Photogrammetric Branch

L. J. Woodcock
Chief, Photogrammetry Division Chief, Nautical Chart Division

GEOGRAPHIC NAMES

(18)

T-11218

Atlantic Ocean
Marthas Vineyard
No Mans Land
Squibnocket Beach
Squibnocket Ridge
Squibnocket Point
Squibnocket Pond

A. J. Wraight

A. J. Wraight
Chief, Geographic Branch

