

T-10642

Original

T-10642

T-10642

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No.	Office No. T-10642
LOCALITY	
State	MASSACHUSETTS
General locality	MARTHA'S VINEYARD
Locality	EDGARTOWN GREAT POND
1955-1961	
CHIEF OF PARTY	
I. R. Rubottom, Chief of Field Party	
A. L. Wardwell, Tampa Photo Office	
LIBRARY & ARCHIVES	
DATE	

COMM-DC 61300

DESCRIPTIVE REPORT - DATA RECORD *

T - 10642

Project No. (II): Ph 116

Quadrangle Name (IV):

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

Chief of Party: I. R. Rubottom

Photogrammetric Office (III): Tampa Fla.
Balto. Md.

Officer-in-Charge: A. L. Wardwell
W. E. Randall

Instructions dated (II) (III): Instructions Ph-116, Field, Supp. II 9 July 1953
Instructions Ph-116, Field, Supp. III, 11 Aug. 1953
Amendment to Instructions, Project 6116, 30 Nov. 1955
Instructions, Project 6116 Field Supp. IV, 17 April 1956
Instructions (Office) 21 May 1957
Supplemental (Office) Ph-116 8 May 1961
Method of Compilation (III): Kelsh Plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:4,600

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

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~~ 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): FOOTINGS, 1949

Lat.:

Long.:

Adjusted

~~Unadjusted~~

Plane Coordinates (IV): Lambert

State: Massachusetts Zone: Island

Y = 147,658.64

X = 169,070.03

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

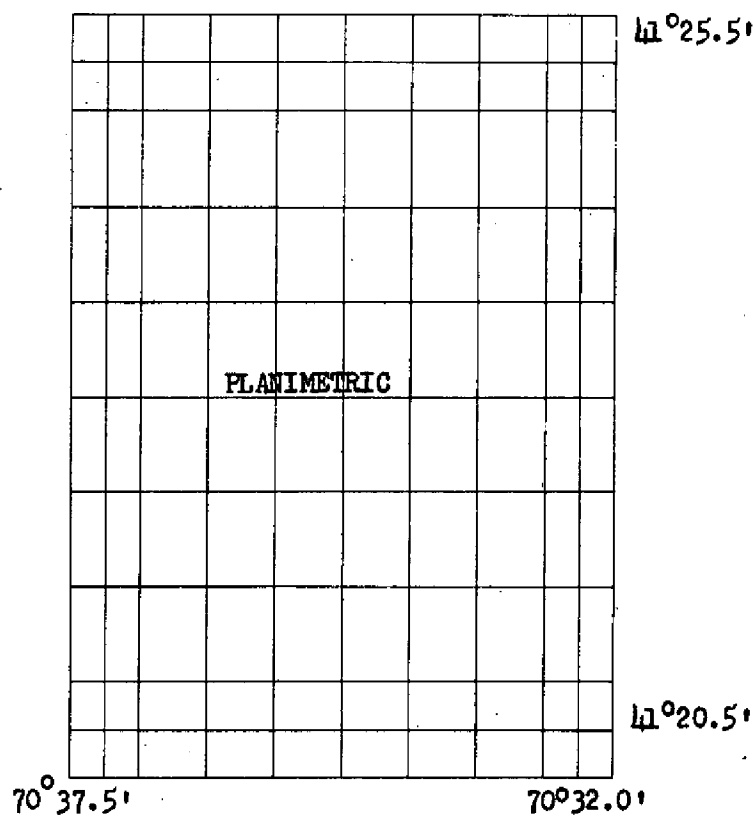
When entering names of personnel on this record give the surname and initials, not initials only.

* See Supplemental Compilation Report
& Summary

FORM 181a
(4-23-54)

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY



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

DESCRIPTIVE REPORT - DATA RECORD

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

Date: **April and
June 1956**

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

Date:

Completion Surveys by (II): **Inapplicable**

Date:

Mean High Water Location (III) (State date and method of location): **June 1956, Air Photo Compilation**
Revision: April 1961, Office interpretation

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

Date:

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

Date:

Control plotted by (III): **W. O.**

Date:

Control checked by (III): **W. W. Dawsey**

Date: **Nov. 1957**

~~XXXXXXXX~~ Stereoscopic

Date:

Control extension by (III): **W. O.**

Planimetry **W. W. Dawsey**

Date: **Dec. 1957**

Stereoscopic Instrument compilation (III):

~~XXXXXXXX~~

Date:

Manuscript delineated by (III): **W. W. Dawsey**

Date: **Dec. 1957**

Shoreline revision: **J. C. Richter**

June 1961

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

Date: **Jan. 1958**

Revision review: **R. Glaser**

June 1961

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
55W-5073 -	15 March 1955	10:20	1:25,000	+1.3
55W-5074	"	10:20	"	"
55W-5075	"	10:21	"	"
55W-5097	"	10:39	"	+0.3
55W-5098	"	"	"	"
55W-5099	"	"	"	"
55W-5100	"	10:40	"	"
COLOR:				
61-S-6715	4-15-61	5:05	1:15,000	+0.4 (low water)
61-S-7815-16	5-5-61	6:50	1:15,000	+0.1 (low water)
INFRA-RED:				
61-L-1523-24	4-9-61	2:50	1:10,000	+0.4 (high water)
61-L-1551	4-9-61	4:30	1:10,000	-0.1 (high water)

Predicted Tide (III)

Reference Station: **Newport R. I.**
Subordinate Station: **Off Jobs Neck Pond**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
--	3.5	4.4
-0.8MHW	2.7	3.2

Washington Office Review by (IV): **S. G. Blunkbaker**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): **25 Sq. MI.**Shoreline (More than 200 meters to opposite shore) (III): **35 MI.***~~Shoreline (Less than 200 meters to opposite shore) (III):~~Control Leveling - Miles (II): **Inapplicable**Number of Triangulation Stations searched for (II): **5**Recovered: **3**Identified: **2**Number of BMs searched for (II): **None**

Recovered:

Identified:

Number of Recoverable Photo Stations established (III): **None**Number of Temporary Photo Hydro Stations established (III): **None**

Remarks:

* 13 MI. shoreline revised - June 1961

SHORELINE MAPPING PROJECT PH-116

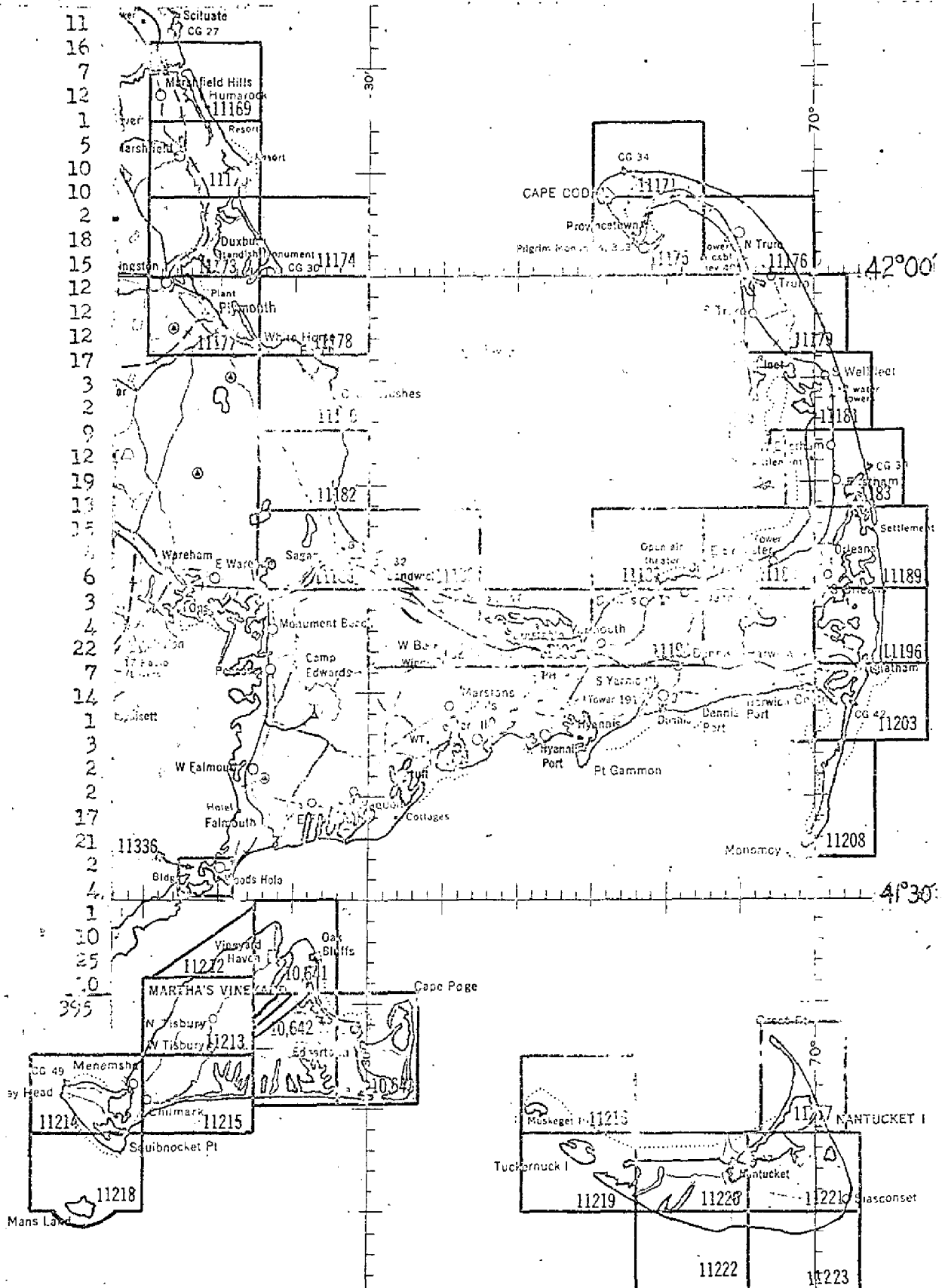
5

CAPE COD, MASS.

Special Mileage for Cost Accounts

Lin. Mi. Area
Shoreline Sq. Mi.

1169	24	11
1170	12	16
1171	10	7
1172	26	12
1174	6	1
1175	18	5
1176	12	10
1177	14	10
1178	4	2
1179	15	18
1180	9	15
1181	31	12
1182	7	12
1183	23	12
1185	8	17
1186	6	3
1187	5	2
1188	13	9
1189	20	12
1192	5	19
1193	32	13
1194	7	15
1196	14	4
1197	24	6
1198	14	3
1199	12	4
1200	7	22
1201	22	7
1202	25	14
1203	5	1
1204	22	3
1205	9	2
1206	12	2
1207	24	17
1208	20	21
1209	6	2
1210	7	4
1211	7	1
1212	18	10
1213	12	25
1214	10	10
TOTALS	395	



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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 251

1
and 264. Copies of the bases (Chart Compilation manuscripts) were registered as T-12497 and T-12499. 7 CA
2

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.

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.

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
3 60

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.

J. A. Blankenship

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FIELD INSPECTION REPORT

Project 27190

Map T-9081

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

Leo F. Beugnet

Leo F. Beugnet
Cartographic Survey Aid

Approved:

I. R. Rubottom

I. R. Rubottom
Chief of Party

Martha's Vineyard Phone

MAP T-10642.

PROJECT NO.:

SCALE OF MAP:

SCALE FACTOR

STATION

SOURCE OF
INFORMATION
(INDEX)

DATUM

LATITUDE OR *y*-COORDINATE
LONGITUDE OR *x*-COORDINATE

DISTANCE FROM GRID IN FEET.
OR PROJECTION LINE IN METERS

DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FORWARD	(BACK)
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

FACTOR DISTANCE
GRID OR PROJECTION LINE
IN METERS

RWARD (BACK)

NAVY AIRPORT

TANK 1943

FIRE TOWER

1939

WHITE TANK,

1928

P. 15

1927

141508.58 ✓

168852.71 ✓

147658.64 ✓

110907003 ✓

145-870-25

190 10% 41

8702 (4, 298)

106.5(4893.5)

3 FT. = .3048006 METER

COMPILED BY:

M Keller

DATE _____

5-20-57

CHECKED BY: **1**

Denver

□ & T T

5/21/57

M - 2388-12

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COMPILATION REPORT T-10642PHOTOGRAMMETRIC PLOT REPORT

21 through 30.

A stereoplanigraph bridge was run in the Washington Office to control photographs 55W-5072 to 5076 inclusive and 55W-5097 to 5100 inclusive. The Bridging Report is submitted with the Descriptive Report for T-11215. It is noted that 24 points were already plotted on the manuscript when it was received and when the plotting was checked 5 moved from 0.4 mm (4 meters) to 0.8 mm (8 meters).

31. DELINEATION

The Kelsh Plotter was used. Delineation was done on a black line impression of T-9081 (T-10642). Shoreline and interior changes and additions were made in red ink. The field inspection was adequate.

32. CONTROL

All control was held.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

The drainage was delineated as interpreted from the photographs, and notes furnished by the field inspector.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was satisfactory for delineation of shoreline features. The approximate low-water line was shown according to the field inspection.

36. OFFSHORE DETAILS

No statement.

37. LANDMARKS AND AIDS

Form 567 for Non Floating Aids or Landmarks for Charts are being submitted with this report.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

To the North, T-10641 - Satisfactory
 To the East, T-10643 - Satisfactory
 To the South, No Contemporary Survey
 To the West, T-11213 and T-11215 - Satisfactory

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with three U. S. Geological Survey Topographic Quadrangles: EDGARTOWN MASS., TISBURY GREAT POND and VINEYARD HAVEN MASS., Scales 1:31,680 surveyed in 1942, Revised 1951. Only minor differences were noted.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with C&GS Charts:
 No. 346 - Scale 1:10,000 corrected to Aug. 13, 1956.
 No. 347 - " " " " Aug. 25, 1955
 No. 1209 - Scale 1:80,000 corrected to Aug. 5, 1957
 No. 1210 - " " " " Aug. 12, 1957

Only minor differences were noted.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

W. W. Dawsey
W. W. Dawsey
Carto. Photo Aid

Approved and Forwarded:

A. L. Wardwell
A. L. Wardwell
Chief of Party

SUPPLEMENTAL COMPILATION REPORT

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*
see Addendum

T-10642

The approximate low-water line, breaker areas, and the apparent edge of shallow areas were delineated by office interpretation on overlays from the 1:15,000 scale color photographs. These details were then transferred to the manuscript by use of the vertical projector.

Ratio prints of the infrared photography were used to revise the high-water line.

In the southern portion of the manuscript, only the shoreline and offshore details bordering the Atlantic Ocean were revised. In the northern section of the manuscript the shoreline and offshore details of Nantucket Sound and Sengekontacket Pond were revised.

Respectfully submitted
21 June 1961

R. Glaser
R. Glaser
Carto. (Photo.)

Approved and forwarded

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

2790T-1

Addendum:

Only those interior details needed for the compilation of Chart

261 have been added or revised from 1961 photography.

48. GEOGRAPHIC NAME LIST

The Quadrangles listed under Item 46 and the Nautical Charts listed under Item 47 were used for comparing Geographic Names already shown on the Black Line Print. The Quadrangles were used in their entirety for the incompletd sections. Differences noted were also questioned on an ozilid print for further investigation.

ATLANTIC OCEAN

~~NASHMORES NECK~~ 7
NASHMORES NECK) OK
a/w

BOLD WATER POINT

BRAN POINT

OCEAN HEIGHTS

BUTLER NECK

OYSTER POND

BUTLER NECK POINT

PAQUA POND

CRACKATUCKET COVE

POCKETPAGES NECK

COUNTY ROAD

POHOGONOT ROAD

DIVIDEND POINT

RIPLEY COVE

DODGER HOLE

SARSON ISLAND

DUARTE POND

SCRUBBY NECK

DUKE COUNTY

SENGEKONTACKET POND

EDGARTOWN GREAT POND

SLOUGH COVE

EDGARTOWN PUMPING STATION

SOUTH BEACH

EDGARTOWN OAK BLUFF ROAD

SWAN NECK POINT

EDGARTOWN BEACH

TURKEYLAND COVE

FRESH POND

WATCHA POND

HAYSTACK POINT

WEST POINT

JACOBS POND

~~EDGARTOWN - WEST TISBURY ROAD~~ 9

JERNEGAN POND

WING ROAD

JANES COVE) OK
a/w

WINTUCKET COVE

~~JAMES COVE~~

JERNEGANVILLE

JOBS NECK

JOBS NECK COVE

JOBS NECK POND

KANOMIKA NECK

KING POINT

LITTLE POND

LILY POND

LYLES BAY

MARTHAS VINEYARD

MARTHAS VINEYARD AIRPORT

MARTHAS VINEYARD COOPERATIVE DAIRY

MARTHAS VINEYARD STATE FOREST

MASHACKET NECK

MAJORS COVE

MASSACHUSETTS

Names checked
and approved
5-15-65
A. J. Wright

15

49. NOTES FOR THE HYDROGRAPHER

Pass Points were dropped along the shore to facilitate the location of Photo-Hydro stations. The Pass Points and the identified Horizontal Control Points have been transferred to all the office ratio prints.

Shoreline pass points from 1961 photographs added for hydrography in May 1963

PHOTOGRAMMETRIC OFFICE REVIEW

50.

T- 10642

1. Projection and grids MMS 2. Title MMS 3. Manuscript numbers MMS 4. Manuscript size MMS
4a 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) MMS 7. Photo hydro stations XX 8. Bench marks XX
9. Plotting of sextant fixes XX 10. Photogrammetric plot report XX 11. Detail points XX

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline MMS 13. Low-water line MMS 14. Rocks, shoals, etc. MMS 15. Bridges MMS 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 MMS 32. Public land lines XX

MISCELLANEOUS

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

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

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REVIEW REPORT
T-10641, T-10642, T-10643, T-10643A

62. Comparison with Registered Topographic Surveys

10641	No. 1802 - 1:10,000 - 1888
	No. 4427 - 1:10,000 - 1928
	No. 9080 - 1:20,000 - 1948
10642	No. 2299 - 1:20,000 - 1897
	No. 9081 - 1:20,000 - 1948
10643A	No. 1702 - 1:10,000 - 1866
	No. 2299 - 1:20,000 - 1897
	No. 9082 - 1:20,000 - 1948

The PH-116 surveys supersede the prior surveys for charting purposes in the common areas. Refer to side headings 65 and 66 of this report concerning T-10643 and T-12497.

63. Comparison with Maps of Other Agencies

USGS Quad., Edgartown, Mass. - 1:24,000 - 1951
USGS Quad., Vineyard Haven, Mass. - 1:24,000 - 1951
USGS Quad., Tisbury Great Pond, Mass. - 1:24,000 - 1951

No significant differences were noted.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

Chart 261 - 1:20,000, revised June 4, 1965

T-12497 (side heading 62) is the source of basis topography for this chart. Refer to side heading 66.

66. Adequacy of Results and Future Surveys

Maps T-10641 and T-10642 meet the National Standards of Map Accuracy and Bureau requirements. Areas of map T-10643 are substandard in datum. These three maps are the source of T-12497 and the basic topography. Chart 261 (side headings 62 and 65). T-10643A meets the required standards.

A general description of the various procedures used in compiling the subject maps and the related registered map T-12497 are discussed in the "Summary" for this survey. In

addition, the "Summary" makes recommendations concerning future use of the subject maps as bases for revision.

Reviewed by:

S. G. Blankensaker

S. G. Blankensaker

Approved by:

Charles L. Lensen
Chief, Photogrammetric Branch

L. F. Woodcock
Chief, Photogrammetry Division Chief, Marine Charts Division

TO BE CHARTED
TO BE DELETED

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

2022-2023

~~SECRET~~

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

Dr. D. D. D.

A. L. Jarduelli

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.

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 the hydrographic office. Information under heading should be given.

