

33114
ORIGINAL

~~SECRET~~
T-11208

T-11208

T-11208

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No. Ph-116	Office No. T-11208
LOCALITY	
State	MASSACHUSETTS
General locality	CAPE COD
Locality	MONOMOY POINT
1954 1952-1954	
CHIEF OF PARTY	
Lorin F. Woodcock, Chief of Party	
E. H. Kirsch, Baltimore Photo. Office	
LIBRARY & ARCHIVES	
DATE	

DATA RECORD

T - 11208

(1)

Project No. (II): **Ph-116**

Quadrangle Name (IV):

Field Office (II): **New Bedford, Mass.**

Chief of Party: **L. F. Woodcock**

Photogrammetric Office (III): **Baltimore, Md.**

Officer-in-Charge: **E. H. Kirsch**

Instructions dated (II) (III): **30 April 1953**
Supp.1-9 June 1953
Supp.2-9 July 1953
Ltr of 10 July 1953
Supp.3-11 Aug 1953
Ltr of 28 Aug 1953

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): **1.000**

Date received in Washington Office (IV): **2-17-55**

Date reported to Nautical Chart Branch (IV): **2-24-55**

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): **GRASSY, 1954**

Lat.: **41° 35' 08.57" (264.4 m)** Long.: **69° 59' 12.16" (281.7 m)**

~~XXXXXXXX~~
Unadjusted

Plane Coordinates (IV):

State: **Massachusetts** Zone: **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.

(2)

SHORELINE

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

DATA RECORD

3

Field inspection by (II): B. F. Lampton
I. Y. Fitzgerald

Date: June-July 1954

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1953 date of photography.
July 1954 - Field Inspection

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): B. Kurs

Date: 4 Aug. 1954

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

Date: 6 Aug. 1954

Radial Plot or ~~Stereoscopic~~
~~Orthorectification~~ (III): F. M. Wisiecki

Date: 9 Aug. 1954

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): J. Honick

Date: 9 Feb. 1955

Photogrammetric Office Review by (III): R. Glaser

Date: 11 Feb. 1955

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

Date:

Camera (kind or source) (III): PMA single lens 8 $\frac{1}{4}$ " focal length.
U.S.C. & G. S. single lens, "J" camera.

(4)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
53-J-498 to 505	4/29/53	0837	1:10,000	1.5 above MLW
52-DPL-5K-87 to 93	7/25/52	1336	"	3.6 " "
52-DPL-5K-96 to 101	7/25/52	1345	"	3.6 " "

Tide (III)

From Predicted Tide Tables

Reference Station: BOSTON
Subordinate Station: Monomoy Point
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	9.5	11.0
0.4	3.7	4.3

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

Date: Sept. 1964

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 2.7

Shoreline (More than 200 meters to opposite shore) (III): 14 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 26 mi.

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II): 12 Recovered: 11 Identified: 10

Number of BMs searched for (II): 6 Recovered: 6 Identified: 2

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

⑥

Summary to Accompany Descriptive Reports

T-11203 and T-11208

September 1964

These maps were compiled as a part of Project PH-116. The project is comprised of 40 planimetric maps covering (1) Cape Cod Bay Shoreline, (2) the entire east shore of Cape Cod, and (3) Nantucket, Martha's Vineyard and No Man's Land Islands. The subject maps cover Monomoy Point and the Chatham area.

More recent Bureau maps have been compiled in the area - refer to side heading 61 of the final review report.

2. AREAL FIELD INSPECTION

The land area covered by this map is a typical barrier beach, although with somewhat less marsh on the back side than is usual. The higher ground is all sand, partly grass covered in places, but not sufficiently so to stabilize all dunes. The limits of marsh are difficult to define in places because of drifting sand which is gradually raising the level of the marshes. Comparison with older maps shows that the Atlantic shoreline is receding and the sand beach has covered considerable marsh and some sloughs.

The entire land area is included within Monomoy Wildlife Refuge.

Field notes have been applied to photographs 53-J-498 through 53-J-505.

The field inspection is believed to be complete. Because of the nature of the land, complete field inspection was done throughout the sheet. The photographs used for field work were quite clear and of good quality.

3. HORIZONTAL CONTROL

The following monumented third-order triangulation stations were established: TELEPHONE, HAMMONDS, INWARD, GRASSY, TUCKET, POISON, and POWDER, all 1954. In addition, the high point of an offshore shipwreck was located by triangulation. This point was established for the purpose of locating the wreck on the map manuscript and not for use in the radial plot, as there was no point on the wreck visible on the photographs that would be suitable. 41°35'15"
69°57'15"

Attention is called to triangulation station CLUBHOUSE FLAGSTAFF 1902. According to the best information obtainable by this party, this station is still in good condition, however, there are discrepancies in the original 1902 description and the 1939 recovery note. The building appears to be in good condition at present; in 1939 it was reported to be in poor condition. Also, 52 years is a rather long time for a fishing shanty to last in terrain of this nature. It is believed that this station should be used with caution.

The following station has been reported as lost on Form 526: MONOMOY LIFE SAVING STATION, NE CHIMNEY, 1886.

4. VERTICAL CONTROL

The following tidal bench marks were recovered: POWDER HOLE, MONOMOY POINT, TIDAL BENCH MARK 2 RESET (1949); BENCH MARK 4 (1931); BENCH MARK 10 (1906); BENCH MARK 11 (1906); BENCH MARK 12 (1939); and BENCH MARK 13 (1939).

5. CONTOURS AND DRAINAGE

Contours inapplicable.

The drainage within the sheet is chiefly marsh with a few marshy sloughs and some drainage ditches in the marshes. There are a number of ponds in low areas and several ponds have been made as part of the game refuge program by scooping out marsh with a bulldozer. One pond has been made at Inward Point by building an earth dam.

6. WOODLAND COVER

Inapplicable.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line has been indicated on the field photographs and has been shown as of the date of photography. The mean high water line along the Atlantic Beach has a serrated appearance caused by surf action that is quite evident at the site.

Near the north limit of the sheet along the Nantucket Sound shore, some small dunes have built up along the west side of a marsh. The dunes are barely above mean high water and much of the sand area visible on the photographs covers at mean high water. The mean high water line is rather difficult to interpret in this area but it is believed that sufficient notes have been shown to permit correct delineation.

At a number of points where marsh joins with fast shoreline no definite position can be assigned to the junction because of narrow tidal flats between the inner edge of the marsh and the fast shoreline.

The low water line along the Atlantic shore is too near the mean high water line to be shown separately. There are some large tidal flats along the Nantucket Sound shore, but it was impractical to inspect these at time of mean low water.

The foreshore throughout the sheet is sand except for some small areas of grass which have been indicated on the photographs. There are some low sand bluffs along the Atlantic shore but these are not believed to be prominent enough to be considered landmark features.

There are no wharves, piers, or similar shoreline structures in the sheet.

8. OFFSHORE FEATURES

There is a large shipwreck in the Atlantic Ocean within the sheet. The high point of the wreck was located by triangulation and the point sighted on has been indicated on the photographs.

There are no offshore rocks.

9. LANDMARKS AND AIDS

All landmarks for charts have been reported on Form 567. There are no fixed aids to navigation.

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

It was not necessary to establish any recoverable topographic stations within the sheet.

12. OTHER INTERIOR FEATURES

None of the buildings within the sheet are continuously occupied. They are chiefly used by sportsmen for short periods. The Coast Guard Station at Monomoy Point is now abandoned and the old Monomoy Life Saving Station is now demolished except for one dilapidated building.

The condition of buildings varies from fair to poor. It is believed that all buildings not deleted on the photographs should be shown as landmark features.

There is some automobile traffic within the sheet with four-wheel drive vehicles and cars equipped with special large tires. North and south traffic follows the beach at low water and one of the interior trails at high water. It is believed that the chief trails are of sufficient importance to be shown and they have been indicated on the photographs.

The telephone line from the Chatham Coast Guard Station to the abandoned Monomoy Point Coast Guard Station is still in use and is a landmark feature. Much of this line is underground cable.

13. GEOGRAPHIC NAMES

No discrepancies in geographic names were noted during field work.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Triangulation sketch and Form 28B, submitted with data for Sheet 11208.

Letter of Transmittal No. PH-116-30, Triangulation Data, forwarded to Division of Geodesy 13 July 1954.

Letter of Transmittal No. Ph-116-31, Forms 567, to be forwarded to Washington Office at a later date.

Letter of Transmittal No. Ph-116-32, Data, Sheet 11208, forwarded to Washington Office 22 July 1954.

Submitted
21 July 1954

B. Frank Lampton, Jr.

B. Frank Lampton, Jr.
Cartographic Survey Aid

Approved & Forwarded
22 July 1954

Lorin F. Woodcock
for

Lorin F. Woodcock
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT

Project No. Ph-116

Survey No. T-11208

21. AREA COVERED

The radial plot covers the area in survey T-11208. It is a shore-line survey of Monomoy Island, located at the south and western end of Cape Cod in Massachusetts.

22. METHOD - RADIAL PLOT

Map Manuscripts:

A vinylite sheet with polyconic projections in black and Massachusetts Mainland Grids in red, at a 1:10,000 scale was furnished by the Washington office.

A sketch showing the distribution of control and photograph centers is attached to this report.

Photographs:

Single lens photographs at 1:20,000 contact scale and ratioed to 1:10,000 scale were used in this radial plot. Twenty photographs were used, numbered as follows:

DPL-5K-87 through DPL-5K-93

DPL-5K-96 thru DPL-5K-101

53-J-498 through 53-J-505

Templets:

Vinylite templets were made from all photographs using a master templet to correct errors due to paper distortion.

Closure and Adjustment to Control:

A vinylite sheet with 5,000 foot grids was used as a base sheet. All identified control was transferred to the base sheet by matching common grid lines.

Since the centers of the 1953 photos fall in land areas, this flight was adjusted first, holding all control stations. The centers of photos of the other two flights all fall in water areas and these were laid last, holding control and pass points established by the center flight.

Transfer of Points:

The position of all pass points and photo centers were pricked directly on the map manuscript by superimposing the manuscript on the completed plot and matching common grid lines.

23. ADEQUACY OF CONTROL

The distribution of control was adequate.

24. SUPPLEMENTAL DATA

No graphic control surveys were used in this radial plot.

25. PHOTOGRAPHY

The photographic coverage and definition of the photographs were adequate.

A few photographs in the 53-J series are tilted but not enough to warrant a tilt determination.

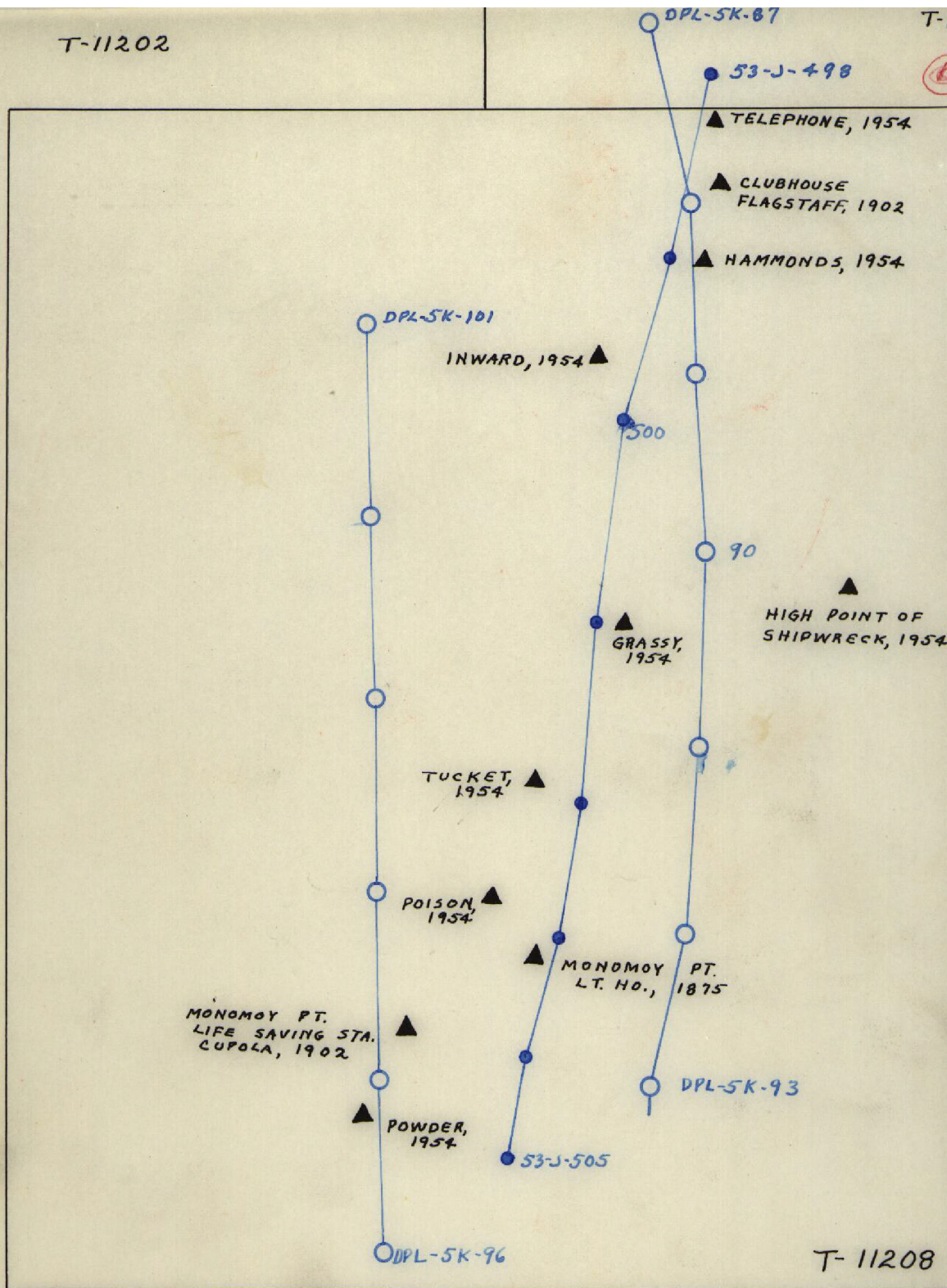
Respectfully submitted
9 August 1954

Frank M. Wisiecki

Frank M. Wisiecki
Carto. Photo. Aid

T-11202

T-11203



LAYOUT SKETCH

PROJECT PH-116

SURVEY T-11208

- Office Photographs, 1953, USCGS
- " " 1952, PMA
- ▲ Control Stations, (Identified)

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

MAP T. 11208

PROJECT NO. Ph-116

SCALE OF MAP 1:10,000

SCALE FACTOR

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)	
TELEPHONE, 1954	Field Comp.	N.A. 1927	41	37	25.88		798.4	(1052.6)	
			69	58	25.90		599.6	(789.4)	
HAMMONDS, 1954	"	"	41	36	49.17		1516.9	(334.1)	
			69	58	38.88		900.2	(489.0)	
INWARD, 1954	"	"	41	36	17.88		551.6	(1299.4)	
			69	59	25.86		598.8	(790.5)	
GRASSY, 1954	"	"	41	35	08.57		264.4	(1586.7)	
			69	59	12.16		281.7	(1108.1)	
TUCKET, 1954	"	"	41	34	14.93		460.6	(1390.5)	
			69	59	45.29		1049.3	(340.8)	
POISON, 1954	"	"	41	33	46.54		1435.8	(445.3)	
			69	59	54.82		1270.2	(120.0)	
POWDER, 1954	"	"	41	32	40.35		1244.8	(606.2)	
			70	00	53.82		1247.4	(143.2)	
CLUBHOUSE, 1902	P. 213 G-3723	"	41	37	01.32		40.7	(1810.3)	
			69	58	30.94		716.3	(672.8)	
MONOMOY POINT, 1875	"	"	41	33	33.199		1024.2	(826.8)	
			69	59	39.091		905.9	(484.5)	
MONOMOY POINT, LIFEGUARD STATION, 1902	P. 214 G-3723	"	41	33	11.969		369.3	(1481.8)	
			70	00	31.465		729.2	(661.3)	
CUPOLA, 1902	"	"	41	35	08.19		252.7	(1598.4)	
HIGH POINT OF SHIPWRECK, 1954	Field Comp.	"	69	57	45.38		1051.1	(338.6)	

MAP T. 11208

PROJECT NO. Ph-116

SCALE OF MAP 1:10,000

SCALE FACTOR

[illegible]

1 FT. = .3048Q06 METER

COMPUTED BY: B. Kurs

DATE 8/2/54

CHECKED BY: J. W. Vonasek

DATE 8/3/54

COMM-DC-57843

COMPILATION REPORT
Project No. Ph-116
Survey No. T-11208

31. DELINEATION

Graphic methods were used to delineate this manuscript.

The vertical projector was used to compensate for scale difference between the photographs and the map manuscript.

32. CONTROL

Refer to Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.

Drainage: No comment.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate.

Shallow areas were delineated from office interpretation of the photographs. No low-water lines were furnished by the field party.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Forms 567 for 2 landmarks have been submitted.

38. CONTROL FOR FUTURE SURVEYS

There are no recoverable topographic stations on this manuscript.

39. JUNCTIONS

Junction has been made and is in agreement with T-11203 to the north. All water area to the east, west and south.

40. HORIZONTAL AND VERTICAL CONTROL

Refer to Radial Plot Report.

41. - 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with survey T-5737 (1941), scale 1:10,000, and U.S. G. S. Quadrangle, Monomoy Point, Mass., scale 1:31,680, Edition of 1942.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart No. 257, scale 1:20,000 published Sept. 1951 (2nd Edition) corrected to Aug. 18, 1952; Chart No. 250, scale 1:40,000 published June 1947 (20th Edition) corrected to Nov. 19, 1951; and Chart No. 1209, scale 1:80,000, published May 1943 (8th Edition) corrected to September 21, 1953.


Items to be applied to Nautical Charts immediately:

None.


Items to be carried forward:

None

Respectfully submitted
10 Feb. 1955


Jack Honick
Carto. Photo. Aid

Approved and forwarded


E. H. Kipsch,
Comdr. USC&GS
Officer in Charge
Baltimore Photo. Office

48. GEOGRAPHIC NAMES LIST

Atlantic Ocean

Hammonds Bend

Inward Point

Monomoy Beach
Monomoy Island
Monomoy Point

Nantucket Sound

Powder Hole

Salls Drain

Trail Creek

Wreck Cove

*Names approved
5-15-65
A. J. Wright*

PHOTOGRAMMETRIC OFFICE REVIEW

T. 11208

(18)

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) none 7. Photo-hydro stations ☒ 8. Bench marks ☒
9. Plotting of control 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. ~~Placetable 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. R. Glaser
ReviewerJoseph Steinberg
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:

M-2623-12

Review Report

Planimetric Surveys T-11203 and T-11208

61. General

These maps have been superseded for nautical charting purposes by T-12492 scale 1:40,000 and T-12493, scale 1:20,000. The later surveys, based on new aerotriangulation were compiled to provide topography for nautical chart construction in 1963 from tide controlled infrared and color photography taken in 1961.

62. Comparison with Registered Topographic Surveys

5736	1:10,000 scale	1941
5737	1:10,000 scale	1941

The prior surveys were outdated by T-11203 and T-11208 for nautical charting purposes.

63. Comparison with Maps of Other Agencies

USGS quadrangle ^{Chatham} ~~Catham~~, Mass., 1961, scale 1:24,000, USGS quadrangle Monomoy Point, Mass., 1953, scale 1:24,000

The 1953 quadrangle is outdated due to extensive physical changes on Monomoy Point.

No significant differences were noted between 11203 and the 1961 quadrangle.

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

65. Comparison with Nautical Charts

250	scale 1:40,000
257	scale 1:20,000

New bases for these charts were compiled by photogrammetric methods in July 1963 (refer to item 61). The subject maps are outdated for charting purposes.

66. Adequacy of Results and Future Surveys

These maps meet the National Standards of Map Accuracy and Bureau requirements.

Reviewed by:

S. G. Blankenbaker

S. G. Blankenbaker

Approved by:

Charles L. Lemen

Chief, Photogrammetric Branch
let

Chief, Nautical Chart Division

J. E. Waugh 7/26/65

Chief, Photogrammetry Division

22

Record of Application to Charts

—
SMA

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.