# T- 11216

ORIGINAL

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey

Field No. Office No. T-11216

LOCALITY

State Messachusetts

General locality Nantucket Island

Locality Muskeget Island

CHIEF OF PARTY

E. H. Kirsch, Chief of Party

Photogrammetry Division, Vash., D. C.

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T. 11216

## DESCRIPTIVE REPORT - DATA RECORD T- 11216

PROJECT NO. (II):			
PH-116			
FIELD OFFICE (II):		CHIEF OF PART	γ
Rel+	imore, Md.	Tr ta	. Kirsch
PHOTOGRAMMETRIC OFFICE (III):	inore; na.	OFFICER-IN-CHA	
Washington, D.	<b>7.</b>	L. W. S	wanson
Baltimore, Md.		W. E. R	andall
INSTRUCTIONS DATED (II) (III):			
30 April 1953	Supp TT\		
9 July 1953 (1 15 Dec. 1955 (1	Supp. 11,		
20 Jan 1950			_
Supplemental in	structions (Office)	PH-116 8 Ma	y 1961
PH-6102 Instruc	tions 10 May 1961		
METHOD OF COMPILATION (III):			
Stereoplanigraph	1		
MANUSCRIPT SCALE (III):		SCOPIC PLOTTING IN	STRUMENT SCALE (III):
1:10,000		0,000	
DATE RECEIVED IN WASHINGTON OFFICE	(IV): DATE R	EPORTED TO NAUTIC	AL CHART BRANCH (IV):
June 1960			
APPLIED TO CHART NO.	DATE:		DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):		VERTICAL DATE	IM (III):
			L EXCEPT AS FOLLOWS:
N. A. 1927		Elevations shown	as (25) refer to mean high water
			as (5) refer to sounding datum
		i.e., mean low wa	ter or mean lower low water
REFERENCE STATION (III):			i
Peak 1955			i
LAT.:	ONG.:	ADJUSTED	
		UNADJUSTED	•
PLANE COORDINATES (IV):		STATE	ZONE
Y= 122,944.7 X=	255,477.6	Mass.	Island
POMAN NIMEBALS INDICATE WIGHTING	UE HEM IS TO BE SUTHER BY	I) RIELD BARTY (U)	PUOTOGE ANNE TRIS OFFICE
ROMAN NUMERALS INDICATE WHETHER T OR (IY) WASHINGTON OFFICE.	THE HEM IS TO BE SHIFTED BY !!	O CIELO PARTY, UIII	FRO JOURAMME [HIC OFFICE,
WHEN ENTERING NAMES OF PERSONNEL	ON THIS RECORD GIVE THE SURNA	ME AND INITIALS, NO	T INITIALS ONLY.

## **DESCRIPTIVE REPORT - DATA RECORD**

FIELD INSPECTION BY (II):		DATE:
R. L. McGlinchey		July 1955
MEAN HIGH WATER LOCATION (III) (STATE DATE	AND METHOD OF LOCATION):	<del></del>
Field Inspection - July 1 Revised in 1961 using 196	955 l "Tide controlled" Photogray	ohy (infra-red)
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. Rilev		Jan. 1955
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
A, Riley		Jan. 1955
CONTROL PLOTTED BY (III):		DATE
R. Fuechesel		1960
CONTROL CHECKED BY (III):		DATE
J. Perrow		1960
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT		DATE
	None	
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	R. Fuechsel	June 1960
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
*K. N. Maki		June 1960
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
K. N. Maki Revision Rev	riew - R. Glaser	June 1960 June 1961
REMARKS:		

\*Shoreline Revision - L/ Senasack - 1961

#### **DESCRIPTIVE REPORT - DATA RECORD**

AMERA (KIND OR SOURCE) (III):

## Wild Avigon

NUMBER	DATE			
		TIME	SCALE	STAGE OF TIDE FT
55 W 5065 5066	15 Mar.1955	10:15	1:25,000	+ 0.6
615 6610, 6611 6613	, 4-12-61	3:25	1:20,000	- 0.1 (Low water)
61L 1557 thru 1559	4-12-61	7:43	1:10,000	- 0.1 (High water

	TIDE (III)			
		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:	Boston		9.5	11.0
SUBORDINATE STATION:	Muskeget Island, W. Side	0.17	1.6	1.9
SUBORDINATE STATION:				
		DATE:		<u> </u>

washington Office Review BY (IV): S. G. Blankenbake	er	July 1964
PROOF EDIT BY (IV):		DATE:
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	RECOVERED:	IDENTIFIED:
NUMBER OF BM(\$) SEARCHED FOR (II):	RECOVERED:	IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

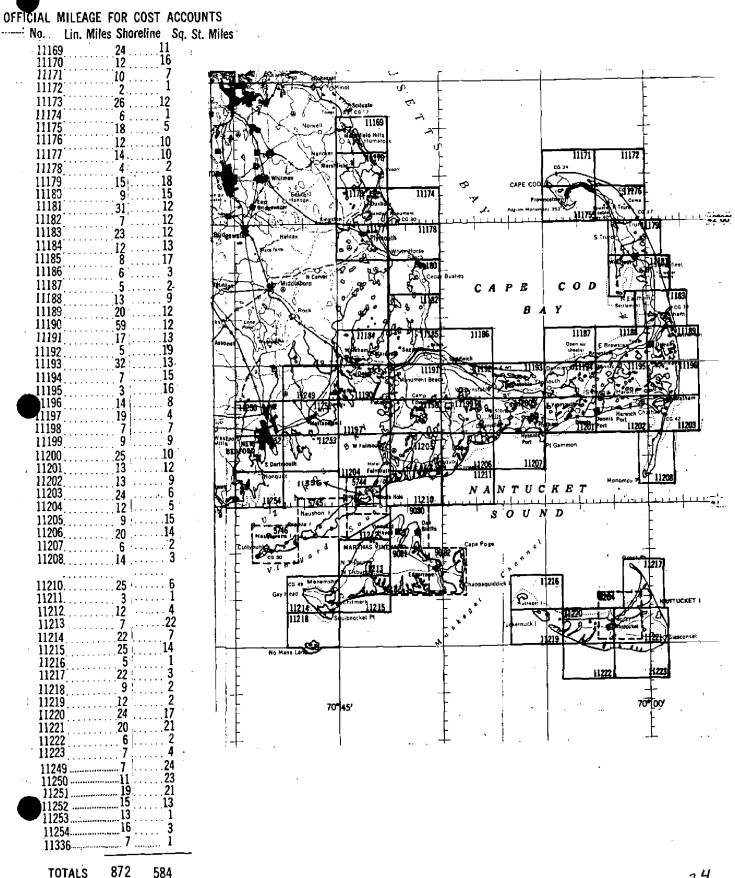
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

\* Tide controlled photography

# SHORELINE MAPPING PROJECT 6116 CAPE COD, MASS.





### Summary to Accompany Descriptive Reports

#### T-11216 and T-11222

The subject maps are two of 40 similar maps comprised project Project PH-116. Project coverage includes (1) Cape Cod shoreline, (2) the entire east shore of Cape Cod, and (3) the islands of Martha's Vineyard and Nantucket. T-11216 and T-11222 cover parts of Nantucket Island.

T-11216 was first compiled in 1956. This compilation was incorrectly oriented. An entirely new map was compiled in 1960. This map and T-11222 (1956) were revised in 1961 from "tide controlled" infrared and color photographs taken in 1961. Neither the 1960 compilation of T-11216, nor the 1956 compilation of T-11220 will be registered (refer to item 61 of the final review report). No records of the 1956 compilation of T-11216 are included.

The revised copies of the two maps were applied to a chart drawing base (T-12500). Refer to the Descriptive Report for T-12500 (PH-6102) concerning the additional work.



FIELD REPORT -

See Descriptive Report T-11221

FORM 164 (4-23-54)

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT

COAST AND GEODETIC SURVEY CONTROL RECORD

	1				_	N.A. 1927 - DAILM	POWATOR GOTOAR
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR V-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	CORRECTION	FROM GAID OR PROJECTION LINE IN METERS FORWARD (BACK)	FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
	Field	N.A.	122,939,88				
PEAK, 1955	Comp.	1927	255,471.74				,
S.S. PEAK,	Office		123,226,78				
1955	Comp.	=	255,139,07				
CONTROL PT.	Field		120,902.63				
(Temp.Sta.)	Comp.	=	254,871,19				
SS CONTROL			121,333.21				
FT. A 1955	Comp.		254,919,62				
EAST	Field		121,376,12				
CHIMNEY	Comp.	=	256,134,80				
WEST	:	. :	122,789,14				
CHIMNEY	=		251,961.16				
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#### COMPILATION REPORT T-11216

## 31. Delineation

The Stereoplanigraph was used for detailing. Since the land area covered only a small portion of the model, special methods were used to set the model in the instrument. Two areas of shifting sand were indicated on the field photographs as former water areas. These areas were delineated on the instrument and checked with a projector.

#### 32. Control

The four horizontal control stations recovered on this island afford adequate control. All stations were held within .2 mm.

- 33. Supplemental Data Not applicable
- 34. Contours and Drainage Not applicable.
- 35. Shoreline and Alongshore Details Not applicable.
- 36. Offshore Details Not applicable.
- 37. Landmarks and Aids Not applicable.
- 38. Control for Future Surveys Not applicable.
- 39. Junctions

Junctions were made with T-11219 to the south.

# 40. Horizontal and Vertical Accuracy

The horizontal datum and azimuth of Muskeget Island are based on four horizontal stations of less than 3rd-order accuracy.

# 46. Comparison with Existing Maps

USGS Nantucket County, Massachusetts Tuckernuck Island Quadrangle 1:31680 1951



# 47. Comparison with Nautical Charts

Nautical Chart No. 1209 Nantucket Sound and Approach 1:80,000 1943, Corr. to 8/30/54

- (b) "Items to be applied to Nautical Charts Immediately" None
- (c) "Items to be Carried Forward" None

Submitted by

Perrow Jr.

J. D. Perrow, Jr.

Approved

C. N. Maki

Super. Photogrammetric Engineer

E. H. Ramey

Super. Cartographer

#### SUPPLEMENTAL COMPILATION REPORT

#### T-11216

The approximate low-water line, breaker areas and the apparent edge of shallow areas were delineated by office interpretation on overlays from the 1:20,000 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.

Respectfully submitted

22 June 1961

R. Maser

Carto. (Photo.)

Approved and forwarded

William E. Randall

CDR, C&GS

Baltimore District Officer

#### Addendum:

Only those interior details needed for the compilation of Chart 265 have been added or revised from 1961 photography.

## Review Report

## T-11216 and T-11222

## 61. General

T-11216 and T-11222 are two of seven planimetric surveys covering Nantucket Island. Two maps each are registered for the other five surveys (refer to the Descriptive Reports for these maps). T-11216 and T-11222 have not been used for shoreline for hydrography; only the revised (1961) final maps for T-11216 and T-11222 will be registered.

Control for T-11216 consists of stations of less than 3rd order accuracy - refer to side heading 40. of the 6ompilation Report.

## 62. Comparison with Registered Topographic Surveys

Prior to the subject surveys, the most recent maps covering the area were compiled in 1887. T-11216 and T-11222 were not compared with these surveys.

## 63. Comparison with Maps of Other Agencies

Quadrangle Tuckernuck Island, scale 1:24,000, date 1951 Quadrangle Nantucket, scale 1:24,000, date 1951.

No significant differences were noted.

## 64. Comparison with Contemporary Hydrographic Surveys

Inapplicable

# 65. Comparison with Nautical Charts

265 scale 1:40,000 date 1963

Topography for this chart was provided through T-11216, T-11222 and other PH-116 maps. These maps were reduced and then applied to the nautical chart base or drawing.

# 66. Adequacy of Results and Future Surveys

Refer to side heading 61 of this report concerning horizontal control for T-11216. Horizontal accuracy of this map is dependent upon control of less than 3rd order accuracy. T-11222 meets the National Standards of Map Accuracy and Bureau Requirements.

Reviewed by:

S. G. Blankenbaker

Approved by:

Chief, Photogrammetric Branch Chief, Nautical Chart Division

Chilef; Photogrammetry Division

GEOGRAPHIC NAME	S		/ 	red res	, S. /	//.		Mao	AKIOS /	5
Survey No. T-11216	/.	No. O	or to or	S. Model	or deriving	Or local Mode	O Gire of	Mag Medilitation of the state o	N. S. J. Bri	(6)
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Atlantic Ocean										1
Massachusetts		-								2
Muskeget Island					ļ	<u> </u>		ļ. <u>-</u> ,	<del> </del>	3
Nantucket Sound								ed		4
Tuckernuck Bank						7.1	p 1.0			5
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