# 12492

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### Form 504

U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Chart 250
Field No. Ph-6102 Office No. T-12492
LOCALITY
State Massachusetts
General locality Cape Cod
Locality Monomoy Island
,
19 61-63
CHIEF OF PARTY
M.J.Tonkel, Baltimore Dist. Officer
LIBRARY & ARCHIVES

May 1964

USCOMM-DC 5087

	FORM (12-61)		181	a
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### CHART 250

U.S. DEPARTMENT OF COMMERCA COAST AND GEODETIC SURVEY

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

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PROJECT NO. (II):		<del></del>	
Ph-6102			
FIELD OFFICE (II):		CHIEF OF PARTY	Y
			•
PHOTOGRAMMETRIC OFFICE (III):	• •	OFFICER-IN-CHA	RGE
Baltimore, Maryland		Commande	er M. J. Tonkel
NSTRUCTIONS DATED (II) (III):		·	:
W 30 - 30/3			
May 10, 1961			
	`	•	
ETHOD OF COMPILATION (III):			
Graphically, using the verti	ical projector	r, holding st	tereoplanigraph positio
ANUSCRIPT SCALE (III):			STRUMENT SCALE (III):
1:40,000			
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPO	ORTED TO NAUTICA	AL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:		DATE REGISTERED (IV):
EEOGRAPHIC DATUM (III):	I	VERTICAL DATU	  M (III): MLW
NA 1927			L EXCEPT AS FOLLOWS:
		į.	as (25) refer to mean high water as (5) refer to sounding datum
			ter or mean lower low water
			•
REFERENCE STATION (III):		<u> </u>	
AT.: LONG.:			· · · · · · · · · · · · · · · · · · ·
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LANE COORDINATES (IV):		STATE	ZONE
EARL COORDINALLS (177)		JINIE	LONE
x =			
POMAN NIMEDALS INDICATE WESTERS SEE THE	ENTERES SU (III) -	IELD BARTY (U.)	BHOTOGRAMMETERS COTTO
ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE OR (IV) WASHINGTON OFFICE.	ENIERED IT NU F	IEED FARLY, UID	. HO TO GRAMME TRIC OFFICE,

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



FIELD INSPECTION BY (II):		DATE:
Joseph K. Wilson		August 1961
MEAN HIGH WATER LOCATION (III) (STATE DATE	AND METHOD OF LOCATION):	
April 17 - Infrared ph	otography at highwater (offic	e interpretation)
•		
PROJECTION AND GRIDS RULED BY (IV):	,	DATE
J. D. C.		8/17/61
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
G. H. Everett		8/18/61
CONTROL PLOTTED BY (III):		DATE
J. D. McEvoy	1/23/63	
CONTROL CHECKED BY (III):	DATE	
C A Tingsomb	3 /22 /62	
C. A. Lipscomb	1/23/63	
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT	ENSION BY (III):	DATE
R. Fuechsel		Oct. 1961
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
Graphic Compilation	J. D. McEvoy	2/11/62
	CONTOURS	DATE
	,	
MANUSCRIPT DELINEATED BY (III):	L	DATE
C. A. Lipscomb		2/13/63
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
R. Glaser		3/29/63

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

(3)

CAMERA (KIND OR SOURCE) (HI):

C&GS "L" and "S" camera (6" focal length)

	P	HOTOGRAPHS (III)			
NUMBER	DATE	TIME	SCALE	STAGE	OF TIDE
61-L-1689 thru 1694 61-S-6741 " 6747 61-S-6796 " 6799	4/17/61	1205 0735	1: 15,000 1: 10,000 1: 15,000	3.4 -0.6	
		TIDE (III)			
1000 PM				RATIO OF ME	AN SPRING

		RANGES	RANGE	RANGE
REFERENCE STATION: Boston	+		9.5	11.0
SUBORDINATE STATION: Monomoy Point		0.39	3.7	4.3
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV): R. Glaser		DATE:	1/8/63	
PROOF EDIT BY (IV):	DATE:			
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 3			D: 3	
NUMBER OF BM(S) SEARCHED FOR (II):	RECOVERED:	IDENTIFIE	D	

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

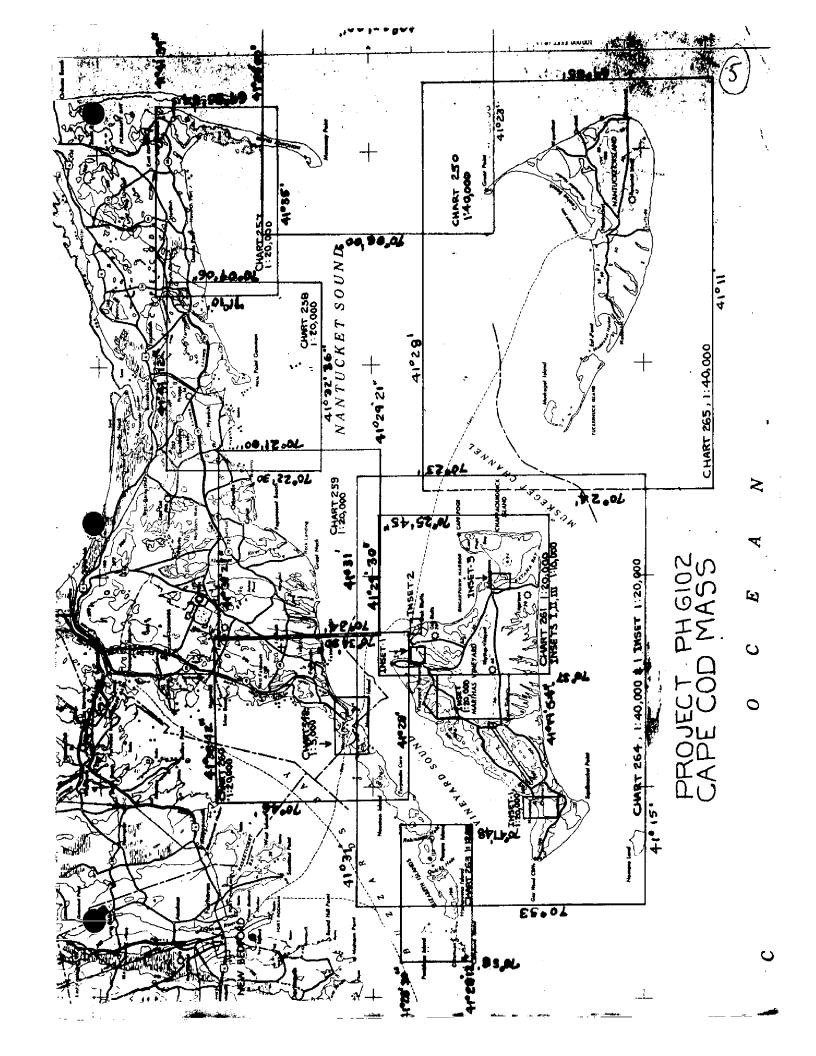
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

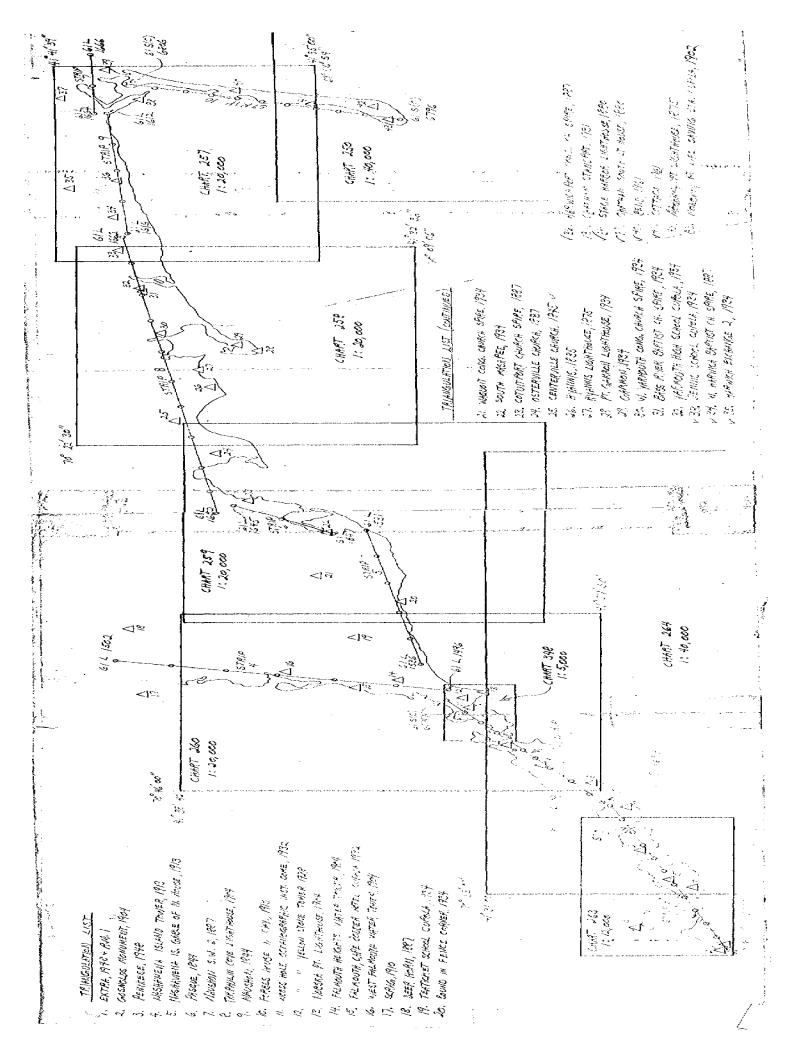
REMARKS:

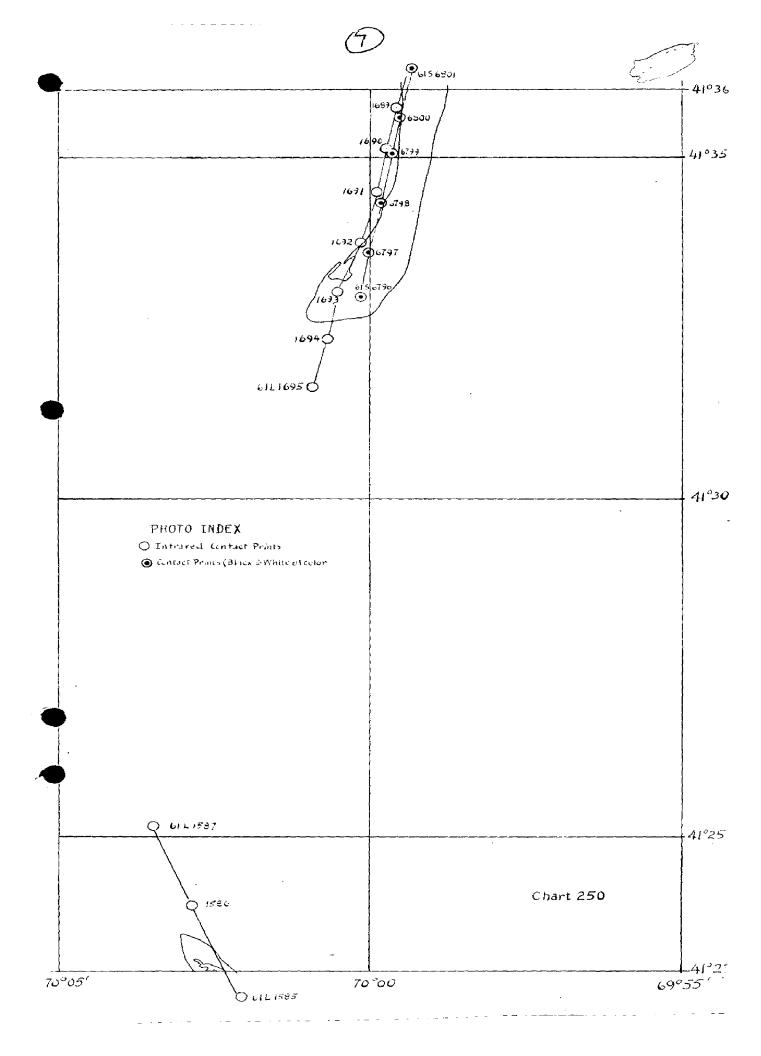
\* Photography was tide - Controlled



RIMARKS COMPLETION DATE Advance Manuscript March 29, 1963 Field Editapplied Oct 7, 1963







### Summary to Accompany Descriptive Report T-12492 (Chart 250)

Chart drawing 250 is one of ten new charts in Project 21038. It is one of the most easterly charts in the project and covers the southern portion of Monomoy Island and the northernmost tip of Nantucket Island. This is part of a pilot project wherein personnel of the Division of Photogrammetry produce topography for nautical charts by compiling to chart scale directly on Mercator projections ruled in the Nautical Charts Division. Compilation was accomplished graphically, holding to positions established by stereoplanigraph. Field operations preceding compilation consisted only of photoidentification of horizontal control; after compilation, the map was field-edited. The area of Monomoy Island was covered by infra-red "L" photographs and "S" photography in color, both taken in April 1961. The chart drawing is on vinylite and covers 13 minutes in latitude and 23 minutes in longitude. Hydrographic data will be added by the Nautical Chart Division and after further processing the chart will be published at a scale of 1:40,000. The registered copies under T-12492 will consist of a cronaflex film positive and a cronar film negative of the completed chart drawing.

\* References - Side heading #31 and #65 of this Descriptive Report.

Chart details on Nantucket Island were transferred to the subject chart drawing (250) from new chart drawing #265, scale 1:40,000. Drawing 265 was compiled from T-11217 (planimetric map) subsequent to the revision of T-11217 from tide controlled infrared and color photography. Drawing 265 was field edited. That portion of drawing 250 compiled specifically for #250 - the Monomovy Point area - was field edited; the Nantucket Island chart information transferred to drawing 250 from 265 was not rechecked in the field.

DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY CONTROL RECORD

COMM. DC. 57843 DATE February 6, 1963 FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS (BACK) FORWARD SCALE FACTOR 80.2) DISTANCE FROM GRID OR PROJECTION LINE . IN METERS 177.7) (431.8) (181.5)(206.7) 370.5) 165.3) 279.8) (8.404) (173.9) (121.1) 431.5) (BACK) N.A. 1927 - DATUM FORWARD 165.9 226.5 31.0 182.3 183.0 268.4 31.2 170.0 58.0 173.6 256.1 92.3 DATUM D. M. Brant SCALE OF MAP 11 10 0000 OR PROJECTION LINE IN METERS DISTANCE FROM GRID IN FEET. (BACK) CHECKED BY: FORWARD 31.465 7.518 4.014 11,969 46.199 04.049 February 5, 1963 28,656 29,311 39,091 23.723 29,978 33,199 LONGITUDE OR x-COORDINATE LATITUDE OR V-COORDINATE 6102 35 8 35 於 35 얾 33 & 33 8 23 8 PROJECT NO. • ф 2 69 69 8 디 69 디 크 댸 口 DATE. DATUM N.A. = = = = = SOURCE OF INFORMATION Clary Readout G. P. P. 213 G.P. p. 214 Office (INDEX) COMPUTED BY. J. D. McEVOY Memo 0° P = MONOMOY POINT LIFE SAVING STATION CUPOLA, 1902 POINT LICHTHOUSE MONOMOY POINT LICHTHOUSE 1875 MAP T. 250 NANTUCKET CREAT 1 FT. = .3048006 METER STATION COTTAGE 1961 COLTAGE 1961 COTTACE 1961 Sub. Ft. 2 Sub. Pt. 1



FORM **164** (4.23-54)

# (0)

### Compilation Report

### Chart 250

No field inspection report was submitted. The Photogrammetric Plot Report is bound with the Descriptive Report for Chart 348.

### 31. DELINEATION

Compiled graphically using the vertical projector, holding stereo-planigraph points.

Monomoy Island was delineated on a work sheet then drafted on chart manuscript.

Great Point, northern tip of Nantucket Island, was drafted from a reduction of Planimetric Manuscript T-11217, Nantucket Island.

32. CONTROL

Horizontal points from the stereoplanigraph bridging were adequate.

\* Refer to Page Bof this Descriptive Report

### 33. SUPPLEMENTAL DATA

The data used in the compilation is tabulated on the history form which is attached.

### 34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage is complete.

### 35. SHORELINE AND ALONGSHORE DETAIL

All details were from office interpretation, using infrared photographs for high water and black and white prints of color photography for low water and shallow lines.

The infrared and black and white prints were tide controlled.

### 36. OFFSHORE DETAILS

None.

### 37. LANDMARKS AND AIDS

Landmarks and Aids were plotted from triangulated positions. Copies of Form 567 are attached.



### 38. CONTROL FOR FUTURE SURVEYS

Chart details are sufficient for future corrections or additions using aerial photographs.

### 39. JUNCTIONS

Junction has been made with Chart 257, 1:20,000 scale, using the vertical projector.

### 40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. through 45.

Inapplicable.

### 46. COMPARISON WITH EXISTING MAPS

U. S. G. S. quadrangle Monomoy Point, Massachusetts, 1:24,000 scale - 1940, revised 1953.

### 47. COMPARISON WITH NAUTICAL CHARTS

C&GS Chart 250, scale 1:20,000 - 22nd edition, April 23, 1962.

### 48. GEOGRAPHIC NAMES

Geographic names have been omitted at the request of Mr. Everett of Chart Division.

Respectfully submitted

Joseph D. McEvoy Carto. (Photo.)

Approved and forwarded

Commander, SedS

Baltimore District Officer

[2]

FIELD EDIT REPORT
Project PH-21038
Chart 250
Cape Cod, Massachusetts
(Monomoy Island)

638 1 W 638 0 - 1853 20 -

The area was field-edited during the period 10 July through 12 July 1963. All notations are inked in blue on the descrepancy print.

Nautical Landmarks and Fixed Aids

The two nautical landmarks were visually checked and verified. The dates of verification were noted on old form 567.

### Roads

No roads are to be charted, roads shown on descrepancy print should be charted as trails.

### Shoreline

All shoreline was inspected during the period 10 July through 12 July 1963. The eastern and southern shores have changed and it appears to have changed uniformly since 1961 photography. There are two areas on the western shore that have been noted on the discrepancy print and referenced to the photographs. These two areas are under constant change and have been inked on photographs as approximate.

Field Edit notations are inked on the following photographs: 61-S-6741, 6743, 6745, 6746, and black &white print of color print 61-S-6796.

Submitted by:

Erwest W. Hartford Chief Sub Unit 6420

23 July 1963

Review Report T-12492 (Chart 250) November 8, 1963

### 61. General Statement

See Summary accompanying Descriptive Report.

### 62. Comparison with Registered Topographic Surveys

The new chart drawing was not compared with registered topographic surveys during final review due to the existence of a published chart at the same scale as the new drawing.

### 63. Comparison with Maps of Other Agencies

U.S.G.S. Monomoy Point, Mass. quadrangle, scale 1:24,000, dated 1940, revised 1953.

U.S.G.S. Great Point, Mass. quadrangle, scale 1:24,000, dated 1943, revised 1951.

The new chart drawing indicates changes in the configuration of the shoreline, particularly at the most southwesterly tip of Monomoy Point.

### 64. Comparison with Contemporary Hydrographic Surveys

No comparison was made due to the existence of a published chart at the same scale as the new drawing.

### 65. Comparison with Nautical Charts

No. 250 1:40,000 22nd Edition April 23, 1962 (22nd Edition)

The shoreline on this chart is the result of a revision using "storm damage" photography taken in April 1962. Due to its poor quality, this photography has since been destroyed.

Using April 1961 color photography, the field edit party furnished measured reference distances to the mean high-water line from locations identified on the photographs. The topography and shoreline on the new chart drawing reflects the results of this field edit which was accomplished in July 1963.

Almost all of the shoreline of Monomoy Island on the new chart drawing has changed position as compared with the published chart, the areas around Powder Hole and the tip of Monomoy Point showing the most obvious change.

Shoreline Nantucket Island - Refer to page 8 of this
Report

# 1 5

### 66. Adequacy of Results and Future Surveys

The chart drawing topography meets the National Accuracy Standards and Bureau requirements.

Reviewed by:

Carto. (Photo.)

Approved by:

Baltimore District Officer

Chief, Cartographic Branch

Shief, Photogrammetry Division

5 Vertical projector, holding stereophynigasph positions. Time (hrs) Manimetric detail compiled graphically using the Traced from a reduction of 1:10,000 Hanuscript Vertical projector used to delineate low water Office inspection for offshore objects REMARKS (over Completed Corrections and additions applied INFORMATION APPLIED Storted HISTORY OF CARTOGRAPHIC WORK\_NAUTICAL CHART DIVISION FILES line and shallow line Verified by Landmarks PRINT DATE UTH Rec'd LITH Ver Monomoy Island Monomoy Island Monomoy Island Great Point Wantucket Island Hems ဝ ÷ × LOCALITY 250 읎 ٠ . Time (hrs) TO REPRODUCTION Ż ・ソグゴひ 뿔 Landmarks Type of Information Topo Completed 4 DATE ί. Topo Authority FUTURE 5.0+5 Started ş SOURCE OF INFORMATION CORR April 1961 April 1961 Planimetric Revised Manuscript T-11217 April 1961 April 1961 July 1963 Date REC Ratio Prints Blockand white ofce for 615-6796 thru 6799 DATE Photos (Introved) Compiled by #691 hu426891-119 615-6741 thru 6748 Discrepancy Print Ž Forms 567 Photo (Color File No Field Edit 0 # G\$ 925 Pev. 2/62 4 m γ DRAWING 9 CHART APPLIED i i FE \*\*OJECT SEET

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3-29-63

3-29-63

R. Glaser R. Glasu

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3-21-63

2-11-63

8-30-63

J.D. Mc F. YRU ( Entration ) 8-14-W

C. ALipscomb (Waffing)

J.D. MEFroy

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### Mercator Projection Data on N.A. 1927 Datum

(16)

Chart No. 250

Location			
Scale		Latitude	
Major Projection Interval		Minor Projection Interval	
Border		Material	
Dimensions in Millimeters			
Limits			
1' Long. at Middle Latitude		=	
Remarks			
Computed by		Checked by	
West to East	(machine)	South to North	(machine )
69° 56'	56.1783	(neatiling) 41 - 36 " 4.634"	72.1048
57 48.7074	59,6574	margin Line (1)	
58	63, 1365	" (2)	72,9508
59	66.6156	4 4 (3)	73,0508
76° 00	70.0947		
77.0729	73,5738		
02 10:95	77.0529		
	80,5320		
04	84.0111		
76° 65'	87.4902		712
Neatling 66'	90,9693		
margin line (1)	91.7193		
" 7 (2)	91.8193		
u " (3)	91.9193		

Nantuckel Round Location \_ Latitude 41° 30′ Scale\_ 16 40,000 1' (ticks 5' (black \_Minor Projection Interval\_\_ Major Projection Interval\_ 1.0-1.0. 7.5 Material Border\_ Continueters Dimensions in Millimeters 41-23' to 41°-36'; Ing. 69-43 to 41030' = 34791 1' Long. at Middle Latitude\_ Remarks\_ Checked by\_ Computed by\_\_ CH toWest meching Machine 800 bar Scale) West to East South to North 600 bas Ocalo Settings) Margin line 1 (Initial) 10,000 11,0000 10.1000 11.1000 11. 2000 10.9500 14. 4291 4.6198 69° 45 17.9082 4,6210 46 21, 3873 4.6222 24,8664 26' 24,8664 4.6234 27' 30.4364 28, 3455 4.6246 35.0610 31.8246 4.6258 69-50 39.6868 35,3037 4.6270 30 51 38.7828 4.6282 48,9420 42, 26/9 4.6294 53 32' 45,7410 4.6306 097 58,2020 49, 2201 4.6318 34 52,6992 4.6330

410

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35

PHOTOGRAMMETRIC OFFICE

OF COMMERCE U.S. DEPARTME

Form 567 (4-61)

# COAST AND GEODETIC SURVEY

MONOTOPING MINISTOR LANDMARKS FOR CHARTS

Sorveror Point, Chepachinistia

19.63

Current 15

tiller J. Torbeil

I recommend that the following objects which have (http://dipp. been inspected from seaward to determine their value as landmarks be charted on (http://dippelith.) the charts indicated.

J. D. Ste wov The positions given have been checked after listing by

1 1	SEAL CONTRACTOR (Cape Cod Area)				POSITION			METHOD	DATE		E CHANT	,	
	- [		5	LATITUDE*	LONGITUDE	ruD£ ≄		AND	100	180	S AFFECTED	, a	
	DESCRIPTION	SIGNAL		" D.M. MEYERS	•	D. P. METERS		BURVEY No.			1440	<b>4</b>	همر:
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	(Newson) Point Lighteouse, 15/5)		22	0.0		20.03 20.03 20.03	•	•	973/64 /	ŽH	70	<b>\</b>	
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USCOMM-DC 25412-P61 This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 6-36, Fig. 79. Positions of charted landmarks and non-floating sids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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.

\* TABULATE SECONDS AND METERS

### NAUTICAL CHART DIVISION

### **RECORD OF APPLICATION TO CHARTS**

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-12492

### INSTRUCTIONS

- A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

  1. Letter all information.

- In "Remarks" column cross out words that do not apply.
   Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
1709	9-25-64	h.j. keeler	Full Research After Verification Review Inspection Signed Via
	7		Drawing No.
			<u> </u>
250	1/12/65	Theresa Ware	Full Parr Beture After Verification Review Inspection Signed Via
			Drawing No. No verision - considered fully officed
<u> 5e</u>	e mate	on History	Full Pass Before After Forthanien Review Inspection Signed Via
265	4-26-65	J.T.Galkhan	Drawing No# 3 No revision - fullyappld ne p. 8
270	8-27-65	h.j. keeler	Full Para Science After Verification Review Inspection Signed Via
			Drawing No.
			<u> </u>
114-sc	9-24-74	Robt @ Heeley	Full Pers Defense After Verification Review Inspection Signed Via
PAGE A		<u> </u>	Drawing No.    CONSIDER ADEQUATELY APPLIED
	<u> </u>		Full Part Before After Verification Review Inspection Signed Via
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