Form	504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. Ph-116 Office No.

LOCALITY

MASSACHUSETTS

General locality

CAPE COD

Locality

CHATHAM



CHIEF OF PARTY Lorin F. Woodcock, Chief of Party William F. Deane, Balto. District Officer

LIBRARY & ARCHIVES

DATE

T-11203

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

Field: Instructions dated (II) (III): 30 April 1953

Copy filed in Division of

Suppl.1 dtd 9 June 1953

Photogrammetry (IV)

Suppl.2 dtd 9 July 1953 Ltr of 10 July 1953

Office: 12 Feb. 1954 17 Dec. 1954

Suppl.3 dtd 11 Aug 1953

22 Nov. 1957

Ltr of 28 Aug 1953

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):

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 $(\underline{\mathfrak{o}})$ refer to sounding datum i.e., mean low water or mean lower low water

Reference Station (III): PINE, 1868

Lat.: 41° 40' 07.925" (244.5m)

59' 35.549" (822.4m)

Adjusted XIXAGE) CISSOE

Plane Coordinates (IV):

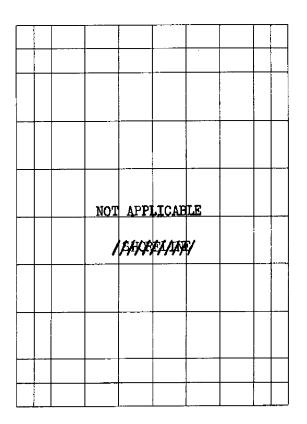
State: Mass.

-Zone: Mainland

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

Long.:

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



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

DATA RECORD

Field inspection by (II): B. F. Lampton, Jr.

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):

1954 field inspection.

Office interpretation of photographs taken 3/15/55 and 11/15/55.

Projection and Grids ruled by (IV): A. Riley

1/3/55 Date:

Projection and Grids checked by (IV): A. Riley

1/3/55 Date:

Control plotted by (III): H. R. Rudolph

1/21/55 Date:

Control checked by (III): J. Steinberg

1/31/55 Date:

Radial Plot on Store os service

2/18/55 Date:

H. R. Rudolph TCZCHOGOCKROKOCKOW (III):

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

J. Y. Councill Manuscript delineated by (III):

C. A. Lipscomb

2/17/56 Date:

Photogrammetric Office Review by (III): H. R. Rudolph

7/13/56 Date:

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): Production & Marketing Administration single-lens and U.S.C. & G. S. single lens camera "J" and "W".

4

	1		PHOTOGRAPHS (III)			
-	Number	Date	Time	Scale	Stage of Tide	
	DPL-3K-15 thru 18	6/3/52	1018	1:10,000	3.4' above MLW	
	DPL-5K-84 thru 87	7/25/52	1336	11	6.41 11 11	
	53-J-478 thru 480	4/29/53	0809	11	2.01 11 11	
	53-J-494 thru 498	4/29/53	0833	II .	2.61 11 11	
	53-J-723 thru 724	5/9/53	unknown	11	unknown	
	55-W-5013 and 5014	3/15/55	0941	1 (0.81	above MLW-Outer Coast)
)) w)OL) and)OL4	21-2122	0741	(0.51	" -Immer Coast)
	55-W-2564 and 2565	11/15/55	1232	" (7.21	" " -Outer Coast)
			12)2	" (3.91	" " -Inner Coast)
	53-J-492 and 493	4/29/53	832	" 2.61	" -Outer Coast	

	Tide (I	II)	
From	predicted	tide	tables

Reference Station: Boston
Subordinate Station: Chatham
Subordinate Station: Stage Harbor

Washington Office Review by (IV): S.G. Blanken baker

Date: Sept , 1964

|Ratio of | Mean | Spring

Range

6.7

Range

9.5 11.0

Ranges

0.38

Date:

Date:

Date:

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): 7

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

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

Control Leveling - Miles (II): None

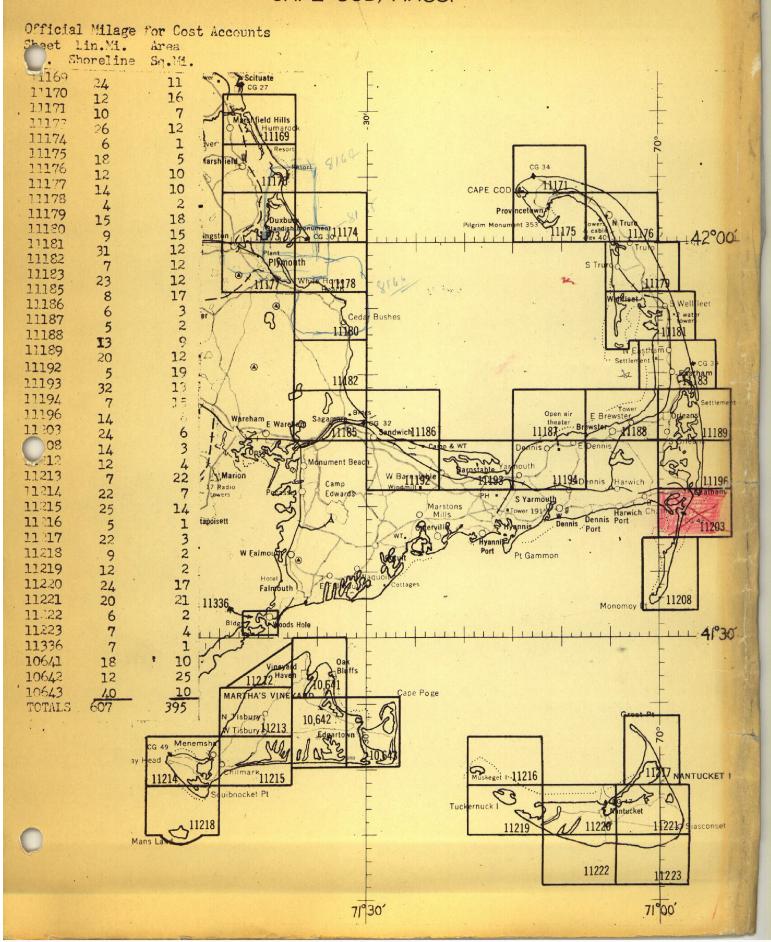
Number of Triangulation Stations searched for (II): 32 Recovered: 18 Identified: 17
Number of BMs searched for (II): 3 Recovered: 2 Identified: 2

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

Remarks: In addition, one new station was established and identified.

NOTE: Control station CHATHAM OLD WINDMILL, 1920 - Image does not appear on 15 November 1955 photographs. Station should be considered lost.





Summary to Accompany Descriptive Reports

T-11203 and T-11208

September 1964

These maps were compiled as a part of Project 7H-116. The project is comprised of 40 planimetric maps extering (1) Cape Cod Bay Shoreline, (2) the entire cast shore of Cape Cod, and (3) Nantucket, Martha's Vineyard and No Man's Low calands. 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 mainland within the sheet is densely settled, but not sufficiently to be considered urban area. The land is of typical dune formation, with numerous inlets and marshes along the shore and ponds in the interior depressions. Harding Beach, at the southern part of the mainland, is a bar of low dunes backed by marsh.

Stage Island and Morris Island, at the north end of Monomoy Island, are stable and hilly, and covered with dense trees and brush. The portion of Monomoy Island within the sheet is sand flats, with scattered low dunes. It is subject to frequent change and occasional break-through. Nauset Beach is a typical barrier beach, with dunes backed by marsh and sand flats. Many of the dunes are grass covered but not sufficiently so to stabilize them. Nauset Beach is also subject to frequent change, especially at the southern tip, which appears to be building outward.

The field inspection is believed to be complete. Field notes have been applied to the following photographs: 53-J-478 through 53-J-480; 53-J-495 through 53-J-497; DPL-5K-84; DPL-5K-85.

The quality of the photography is adequate.

HORIZONTAL CONTROL

All horizontal control was searched for and identified if recovered, with the exception of lllM, Mass Geod Survey, which was recovered but not identified.

One triangulation station was established, STAGE HARBOR LIGHT 1954.

The following stations of Mass Geodetic Survey were recovered: 111H, 111N, and 111P; all 1937.

The following stations have been reported as lost on Form 526: CHATHAM CHURCH SPIRE 1846; CHATHAM FLAGSTAFF 1868; MATTAQUASAN HOTEL TANK 1920; WILDER(MGS)1938; REGGIE(MGS)1938; CROWELL(MGS)1938; GRASSY 1920; SOUTH PT 1886; CHATHAM SOUTH BOATHOUSE WEST GABLE 1920; BASIN 1868; MORRIS (MGS)1938; MOSQUITO 1868; MORRIS IS 1846; MORRIS IS 2 1880; and SHELLS 1868.

At station CROWELL (MGS) 1938. Reference Mark No. 2 was identified.

4. VERTICAL CONTROL

The following tidal bench marks were recovered and identified; Chatham, Stage Harbor Tidal Bench Mark 1 Reset and Bench Mark 2. Chatham, Stage Harbor Tidal Bench Mark 3 was not found.

5. CONTOURS AND DRAINAGE

Contours inapplicable.

Drainage consists chiefly of fresh water ponds and tidal streams in marsh and is clearly visible on the photographs. No perennial streams above marsh level were noted during field work.

6. WOODLAND COVER

Inapplicable.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line along Monomoy Island and Nauset Beach are subject to frequent change and have been indicated on the photographs as it was at time of photography.

In many places it is impractical to assign a definite junction between fast shoreline and apparent shoreline at endge of marsh because of narrow tidal flats between the inshore limit of marsh and fast ground.

On the Nantucket Sound side of Monomoy Island, low dunes have built up on tidal flats and at the outer edge of marsh. Some of the sandy areas visible on the photographs are covered at MHW and the shoreline is difficult to interpret. It is believed that sufficient notes have been shown to permit correct delineation.

It was impractical to inspect the mean low water line at time of mean low water and its location has been left for the hydrographic party.

The foreshore is sand throughout the sheet.

There are no bluffs or cliffs of landmark value.

Wharves, piers and other shoreline structures are covered by field inspection notes. The shore ends of two submarine telephone cables have been indicated on the photographs.

8. OFFSHORE FEATURES

Offshore features have been indicated on the photographs and consist chiefly of two wrecks along the shore and a piling. See also Paragraph 9.

9. LANDMARKS AND AIDS

Landmarks and aids to navigation have been reported on Forms 567. STAGE HARBOR DAYBEACON (triangulation station STAGE HARBOR LIGHTHOUSE 1880) is listed in the Complete List of Lights and Other Marine Aids, Atlantic Coast of the United States for 1954, as an aid to navigation; however, it is recommended that it be shown on the chart with a landmark symbol because of the nature of the object. It has been reported on Form 567 as both a landmark and an aid to navigation.

In addition to the listed aids, there are ten 4x4 inch posts marking the edge of the shoal on the west side of Stage Harbor. It is believed that these posts are not sufficiently substantial to be shown as aids to navigation and it is recommended that the piling symbol be used. Posts Nos. 2, 3 and 5 had these numbers painted on them. The remainder of the posts were numbered consecutively for convenience in listing and have no relation to the actual numbers of the posts.

The posts have been located by transit cuts, and Forms 24A are being submitted.

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

None was established.

12. OTHER INTERIOR FEATURES

Buildings along the waterfront have been completely inspected and indicated on the field photographs. The interior limits of complete field inspection have been indicated by a violet line. Classification of buildings has been indicated by a numeral "l" or "2" with leaders to the buildings. Beyond the limits of complete field inspection only public buildings have been noted. No landmark buildings have been noted in the interior.

Roads have been classified in accordance with Section 5441 of the Topographic Manual. There is some traffic on Monomoy Island and Nauset Beach of four-wheel drive vehicles and cars equipped with special large tires. The major trails used by these vehicles have been indicated as landmark features in areas of sparse culture.

There is one bridge over navigable water. The data for this bridge are as follows:

Mitchell River, Mass., bascule, horizontal clearance (channel span) 17.3 feet, vertical clearance 10.2 feet, 11:45 AM EDT, Friday 18 June 1954.

There are Coast Guard telephone lines on Monomoy Island and Nauset Beach that are landmark features. They have been indicated on the photographs.

A portion of Chatham Airport lies within the sheet.

13. GEOGRAPHIC NAMES

No discrepancies in geographic names were noted during field work.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Form 28B, submitted with data for Sheet T-11203.

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

Letter of Transmittal No. Ph-116-33, Triangulation Data, forwarded to Division of Geodesy 9 August 1954.

Letter of Transmittal No. Ph-116-35, Data, Sheet T-11203, forwarded to Washington Office AUG 10 1954

Submitted 9 August 1954

B. Frank Lampton, Jr. Cartographic Sur. Aid.

Approved & Forwarded

AUG 10 1954

Lorin F. Woodcock Chief of Party

PHOTOGRAMMETRIC PLOT REPORT Project No. Ph-116 Surveys Nos. T-11189, T-11196, and T-11203

21. AREA COVERED

This photogrammetric plot covers the areas of Surveys Nos. T-11189, T-11196 and T-11203. These are shoreline surveys located along the east coast of Cape Cod, Mass., extending from Blue Bill Hole on Monomoy Island northward to Nauset Harbor. They include the areas of Pleasant Bay, part of Nantucket Sound, and part of Cape Cod Bay.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Mass. State Grids, Mainland zone, in red at a scale of 1:10,000 were furnished by the Washington office. Base sheets were prepared in this office.

The positions of all horizontal control stations and most of the substitute stations were plotted using the meter bar and beam compass. The positions of four of the substitute stations were plotted graphically with steel protractor.

A sketch showing the layout of the surveys in this plot and the distribution of control and photograph centers is attached to this report. A list of control station names is also attached to this report.

Photographs:

The photographs used in the plot are as follows: Forty (40) single lens photographs taken by PMA in June and July 1952 at a scale of 1:20,000 and ratioed to a scale of 1:10,000:

DPL-3K-7 to DPL-3K-18 inclusive. DPL-4K-37 to DPL-4K-49 inclusive. DPL-5K-74 to DPL-5K-88 inclusive.

Two isingle lens photographs taken by the USC&GS in April 1953:

53-J-497 and 53-J-498

Standard symbols were used on all photographs.

Templets:

Vinylite templets were made for all photographs. The master templet was used to correct for film and paper distortion.

Closure and Adjustment to Control:

Vinylite base sheets were prepared in this office. All identified control was transferred to the base sheets by matching common grid lines.

22. METHOD - RADIAL PLOT (cont'd)

Closure and Adjustment to Control: (cont'd)
This includes the control located on Survey No. T-11189 which was
identified in this office, three stations located on survey No. T-11188
and one station located on Survey No. T-11183. The stations used on surveys Nos. T-11183 and T-11188 were identified by the field party. The
field party also identified a landmark on survey No. T-11183. This
landmark (CUPOLA, NORTH EASTHAM TOWN HALL) and a topographic station
(CHIMNEY SMALL HOUSE) which was identified in this office, were transferred to the manuscript for survey No. T-11183 from topographic map No.
T-5735 and then to the base sheets.

Several pass points and photograph centers located on survey No. T-11208 by a previous plot were also transferred to the base sheets.

The radial plot was then constructed on the base sheets.

The templets for photographs 5K-8l thru 5K-88 were laid first. Then the templets for J-497 and J-498 were laid. A very good junction was made with survey No. T-11208. The templets for photographs 3K-14 thru 3K-18, 4K-37 thru 4K-49, and 3K-7 thru 3K-13 were then laid in the order as listed. Finally the templets for 5K-74 thru 5K-80 were laid. After making some adjustments to the two outside flights a satisfactory plot was made.

Six (6) control stations identified by the field party and one (1) identified in this office could not be held in the plot.

Transfer of Points:

The positions of all pass points and photograph centers were pricked directly on the map manuscripts by superimposing the manuscripts on the plot and matching common grid lines.

23. ADEQUACY OF CONTROL

The control was inadequate along the outer coast in the northern part of survey No. T-11196, along the northern part of survey No. T-11189 and the southern part of survey No. T-11203.

As previously stated all of the control could not be held in the radial plot.

Survey No. T-11203:

CHATHAM BARS INN, TANK, 1931 - The radially plotted position of this station falls 9.4 mm northwest of its geographic position. The "TANK" which was the station, has been destroyed. There is a building but no "tank" at the geographic position.

111N, MGS, 1937 - The radially plotted position of the sub. point falls about 0.2 mm north of its computed position. The image identified on photograph No. J-478 taken in April 1953 was the "north tip of a white stone wall". This image was very poor on the 1952 photographs.

23. ADEQUACY OF CONTROL (cont'd)

There are several other control stations in the immediate vicinity of these two stations which were held in the plot.

Survey No. T-11196:

111F, MGS, 1937 - The radially plotted position of the sub. point falls about 0.3 mm northwest of the computed position. The position of the substitute station was computed from a sun azimuth and may be in error. Other stations to the north, east and south were held.

CURTIS BUNGALOW CHIMNEY, 1920 - The radially plotted position falls 4.4 mm southeast of its geographic position. This station has been identified in error by the field party. There is no "building" at the geographic position as plotted or as shown on topographic map No. T-5736. This station should be considered as destroyed.

NORTH BOATHOUSE WEST GABLE, 1920 - The radially plotted position of the station falls 1.0 mm east of its geographic position. Another station nearby was held in the plot. The geographic positions falls in the sand beach area.

CHATHAM RMI 1835 - There are only two radials to this station, both of which fall just east of the geographic position. The angle was too slim to give a radially plotted position. It is believed that the field identification is in error as the image identified is too indefinite for positive identification.

Survey No. T-11189:

ORLEANS ORTHODOX CHURCH SPIRE 1887 - The radially plotted position of this station falls 1.0 mm north of its geographic position. This station was identified in the compilation office. This church may have been rebuilt or moved.

24. SUPPLEMENT AL DATA

Topographic Map No. T-5735 was used as a guide while identifying control on survey No. T-11189. T-5735 was also used to locate the landmark and topographic station mentioned under "Closure and Adjustment To Control".

25. PHOTOGRAPHS

The overlap in the line of flight and between flights was adequate. Photographic coverage was adequate.

The position of photograph centers for 3K-18 and 4K-37 should be considered weak.

No tilt determinations were made since there was very little evidence of tilt in any of the photographs.

4

Respectfully submitted 23 February 1955

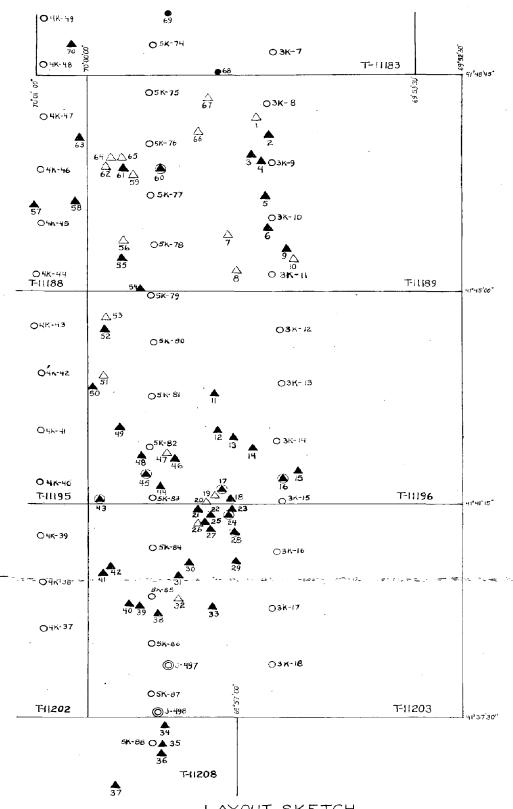
Harry R. Rudolph Carto. Photo. Aid

LIST OF CONTROL

No.	Name of Station	Identification
1.	WARNER, 1933	None
2.	MUNSARD CHIMNEY, 1909	Office direct
3•	MAYO'S HOUSE SOUTH CHIMNEY, 1868	Office direct
4.	CUMMING'S, F., CUPOLA, 1909	Office direct
5•	POCHET, MGS, 1868	Office direct
6.	POCHET, HOUSE CHIMNEY, 1909	Office direct
7∙	MAYO, 1868	none
8.	SAMPSON, 1868	no ne
9•	COAST GUARD STATION NO. 40, 1920	none
9•	ORLEANS, COAST GUARD STATION SIGNAL MAST, 1934	Office direct
10.	ORLEANS LIFE SAVING STATION, CUPOLA, 1868	none
11.	STRONG, 1868	Sub. Pt
12.	HOUSE ON BLUFF CHIMNEY (C), 1920	direct
12.	CREY HOUSE CHIMNEY (B), 1920	direct
13.	HOUSE ON BLUFF CHIMNEY (A) 1920	direct
14.	KENT'S HOUSE CHIMNEY, 1920	direct
15•	OLD HARBOR COAST QUARD STATION SIGNAL MAST, 1934	none
15.	COAST GUARD STATION NO. 41, 1920	direct
16.	NORTH BOATHOUSE WEST GABLE, 1920	direct
17.	CURTIS' BUNGALOW CHIMNEY, 1920	direct
17.	111L, MGS, 1937	none
18.	PAINES HOUSE CHIMNEY, 1920	direct
19.	111K,MGS, 1937	none
20.	111J, MGS, 1937	none
21.	111H, MGS, 1937	sub. pt.
22.	CHATHAM, ROMAN CATHOLIC CHURCH, 1920	direct
23.	111P, MGS, 1937	sub. pt.
24.	CHATHAM BARS INN, TANK, 1931	direct
25.	CHATHAM, CONG. CHURCH SPIRE, 1868	direct
26.	111M, MGS, 1937	none
27•	CHATHAM, METHODIST CHURCH, 1920	direct
28 •	111N, MGS, 1937	sub. pt
29•	CHATHAM, SOUTH LIGHTHOUSE, 1880	direct
30.	CHATHAM, OLD WINDMILL, 1920	direct
31.	CROWELL RM 2, MGS, 1938	sub. pt.
32.	MORRIS, MGS, 1938	none
33.	COAST GUARD STATION NO. 42, 1920	direct
33.	CHATHAM COAST GUARD STATION SIGNAL MAST, 1934	direct
34.	TELEPHONE, 1954	sub. pt.
35•	CLUBHOUSE FLAGSTAFF, 1902	direct

LIST OF CONTROL (cont'd)

No.	Name of Station	Identification
36.	HAMMONDS, 1954	Sub. Pt.
37.	INWARD, 1954	Sub. Pt.
38.	HARDING EAST, MGS, 1938	Sub. Pt.
39.	HARDING WEST, MGS, 1938	Sub. Pt.
40.	STAGE HARBOR LIGHTHOUSE, 1880	direct
400		
40.	STAGE HARBOR LIGHT, 1954	direct
41.	116AP, MGS, 1938	Sub. Pt.
42.	PINE, 1868	Sub. Pt.
43.	111F, MGS, 1937	Sub. Pt.
44.	CHATHAM STANDPIPE, 1931	direct
45.	CHATHAM RMl, 1835	direct
46.	CHATHAM, ACME LAUNDRY, WATER TANK, 1934	direct
47.	111Q MGS, 1937	none
48.	MARCONI RADIO MAST, 1920	direct
49.	111R MGS, 1937	Sub. Pt.
	•	
50.	111R MGS, 1937	Sub. Pt.
51.	111T MGS, 1938	none
52+	111U MGS, 1938	Sub. Pt.
53.	111V MGS, 1938	none
54.	SOUTH ORLEANS, C. E. RODGERS WATER TANK, 1934	office direct
55•	111w MGS, 1938	office direct
56.	111X MGS, 1938	none direct
57.	140K MGS, 1939	Sub. Pt.
58.	MILL HILL, 1835	Sub. Pt.
59.	111Y MGS, 1938	none
<i>)</i> /•	1111 11003 1770	IOIIC
60.	ORLEANS ORTHODOX CHURCH SPIRE, 1887	office direct
61.	111Z, MGS, 1938	office direct
62.	111AC, MGS, 1938	none
63.	ALDEN, 1933	Sub. Pt.
64.	111AB, MGS, 1938	none
•-		•••
65.	111AA, MGS, 1938	none
66.	DRUMMOND, 1902	none
67.	FREEMAN, 1887	none
68.	CHIMNEY, SMALLHOUSE, (Rec. Topo. Sta.)	office direct
69.	CUFOLA, NORTHEASTHAM TOWN HALL (Landmark)	office direct
70.	HERRING, 1933	Sub. Pt.



LAYOUT SKETCH
PH-116
SURVEYS NOS. T-11189, T-11196 and T-11203
O SINGLE LENS PHOTOGRAPHS - 1952
O SINGLE LENS PHOTOGRAPHS - 1953
A CONTROL STATIONS (Identified)
CONTROL STATIONS (Not identified)
CONTROL STATIONS (Not held in plot)
TOPOGRAPHIC STATIONS (Held in plot)

DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE

CONTROL RECORD

COAST AND GEODETIC SURVEY

SCALE OF MAP 1:10,000

Ph-116

PROJECT NO....

MAP T- 11203

FORM 164 (4.23.54)

SCALE FACTOR

DISTANCE FROM GRID OR PROJECTION LINE FROM GRID OR PROJECTION LINE IN METERS COMM. DC. 5784 (BACK) 17 FORWARD 580.8) (1072.1)(1685.4)(573.4)(1110.7) (1305.4)55/4.0) (1276.7)952.6) 15.0) 8.9 (336.1) (1813.0)365.9) (565.6) (1618.6)(661.3)(1039.9)654.5 929.8) (1248.5)(973.2) (1782.5)(1606.6) (BACK) N.A. 1927 - DATUM FORWARD 727.0 898.5 244.5 822,4 232.5 814.6 779.0 733.7 165,8 277.0 574.4 807.5 877.9 38.1 921.3 139.7 88,6 545.7 834.3 1343.2 1051.9 811,1 1379.3 1022,1 DATUM OR PROJECTION LINE IN METERS DISTANCE FROM GRID IN FEET. (BACK) FORWARD LONGITUDE OR x-COORDINATE LATITUDE OR y.COORDINATE 17.688 29.123 58.053 15.172 26,292 31.713 11.976 29.863 040.00 05.373 07.925 35.549 36.058 02,222 25.25 31.42 39 农 39 9 & 8 옃 8 읔 39 39 农 없 5 8 왔 8 农 8 \$ 크 ਨ 农 53 8 69 69 8 69 8 9 69 다 69 8 듸 9 口 69 Ţ ∄ 다 듸 그 되 4 크 크 DATUM N.A. 1927 Ħ E E = F = = = = = SOURCE OF INFORMATION G-3656 p. 139 G-3812 p. 220 G-3656 p• 135 230 G-3812 G-4024 p• 230 p. 220 COAST GUARD G-3692 SIGNAL MAST p. 154 COAST GUARD STATION G-3656 No. 42, 1920 | p. 138 (INDEX) Field Comp Sub. Pt. PINE, 1868 HARDING EAST, MCS, HARDING WEST, MCS, 1938 116 AP, MGS, 1938 STAGE HARBOR LT., CHATHAM BARS INN, Sub. Pt. HARDING EAST, MGS, 1938 Pt. 116 AP, Sub. Pt. HARDING WEST, MGS, 1938 STATION PINE, 1868 TANK, 1931 1938 CHATHAM STATION 1934 Sub. 1938

COMPUTED BY. J. W. Robinson 1 FT. = .3048006 METER

30 Dec. 1954 DATE....

CHECKED BY. B. F. Lampton

DATE 30 Dec. 1954

FORM **164** (4-23-54)

DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY CONTROL RECORD SCALE OF MAP 1:10,000

PROJECT NO. Ph-116

MAP T. 11203

SCALE FACTOR

DISTANCE FROM GRID OR PROJECTION LINE FROM GRID OR PROJECTION LINE IN METERS COMM- DC- 57843 (BACK) 18 FORWARD 37.8) (897.3) (1336.7)(1313.6)(1230.7)(1046.0)706.4) 320.6) (1337.4)57.6) (1321.6) 570.7) (1220-1) 362.2) 531.7) 316.8) (253.2)(1845.4) (1826.7)719.9) (BACK) N.A. 1927 - DATUM FORWARD 478.0 817.1 167.7 992/3 817.6 804.1 513.7 514.3 953.7 5.7 2h.h 157.4 1161.8 36.3 74.7 1597.9 1486.2 1207.2 1203.4 1330.3 DATUM PLOTTED ORAPHICALLY PLOTTED GRAPHICALLY OR PROJECTION LINE IN METERS DISTANCE FROM GRID IN FEET. (3431.80)(1188.40) (2317.57)124.14) (1744-33) (1039.45)(1051.8)(2361.8)(BACK) FORWARD 3,255,67 1,568.20 3,960.55 3,811.60 2,682,53 4.875.86 3,948.2 2,638.2 30.914 35.327 16.672 262.ਸ2 01.571 LONGITUDE OR x-COORDINATE 03.227 LATITUDE OR V.COORDINATE 57.51 16.65 1,019,875,86 251,568.20 253,811,60 253,960,55 1,022,682,53 253,948,21 1,022,638.22 1,023,255,67 9 乌 乌 39 8 읔 쯌 农 乌 57 57 ₹ 69 69 69 口 69 그 69 디 8 4 크 듸 DATUM N.A. 1927 Ξ = = = = Ħ = = = = PWD Traverse p. 97 PWD Traverse SOURCE OF Traverse G-3656 p. 138 G-3656 P- 135 G-3656 p. 138 0-3694 p. 165 (INDEX) p. 97 p. 97 2 Sub. Pt. CROWELL R. M. P MGS, 1938 CHATHAM METHODIST CHATHAM, SOUTH LIGHTHOUSE, 1880 ŝ LIGHTHOUSE, 1880 111P, MGS, 1937 111H, MGS, 1937 111N, MGS, 1937 CHATHAM, OLD WINDMILL, 1920 Sub. Pt. 111H, Sub. Pt. 111P, CROWELL R. M. MGS, 1938 Sub. Pt. 111N, STATION STAGE HARBOR снивсн, 1920 MGS, 1937 MGS, 1937 MGS, 1937

COMPUTED BY J. W. Robinson 1 FT.= .3048006 METER

30 December 1954

DATE....

CHECKED BY: B. F. Lampton

30 December 1954 DATE....

FORM 164 (4-23-54)

MAP T. 11203

STATION

FROM GAID OR PROJECTION LINE FROM GRID OR PROJECTION LINE IN METERS FORWARD SCALE FACTOR 64.1) 421.1) 758.6) 96.1) (1667.8)613.5) (BACK) N.A. 1927-DATUM FORWARD 765.4 966.3 183.4 744.2 1427.9 1786.7 DATUM CORRECTION SCALE OF MAP 1:10,000 COAST AND GEODETIC SURVEY OR PROJECTION LINE IN METERS DISTANCE FROM GRID IN FEET. (2488.93) (315.21)CONTROL RECORD (BACK) FORWARD 4,684.79 2,511.07 DESCRIPTIVE REPORT U.S. DEPARTMENT OF COMMERCE 11.781 LONGITUDE OR * COORDINATE 05.943 32,177 57.912 LATITUDE OR "-COORDINATE 1,019,684.79 252,511.07 PROJECT NO. Ph-116 57 3 겂 크 69 8 크 듸 DATUM N.A. 1927 = = SOURCE OF Traverse p. 97 G-3656 P- 135 G-3656 p. 139 (INDEX)

CHURCH SPIRE, 1868

CHATHAM CONG.

CATHOLIC CHURCH,

CHATHAM, ROMAN

111M, MGS, 1937

(BACK)

CHECKED BY B. F. Lampton

олте 30 December 1954

COMPUTED BY. J. W. Robinson

1 FT. = 3048006 METER

COMM-DC-57843 DATE 30 December 1954

19

COMPILATION REPORT T-11203

31. DELINEATION

This manuscript was delineated by graphic methods.

32. CONTROL

Refer to the Photogrammetric Plot Report.

It was noted on the photographs dated November 1955, that station CHATHAM, OLD WINDMILL, 1920 has been removed.

33. SUPPLEMENTAL DATA

The U.S.G.S. Chatham quadrangle, Topographic Survey No. T-5736, and Nautical Charts Nos. 257 and 1208 were used for Geographic Names.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.

Drainage: Some of the marsh and swamp areas shown on the Chatham quadrangle were not field inspected. They were delineated by office interpretation using the quadrangle as a guide.

35. SHORELINE AND LONGSHORE DETAILS

Shoreline inspection was adequate. An approximate low water line was delineated in a few places where the low stage photographs show a fairly definite line.

Practically all of the shoreline along both sides of Nauset Beach, both sides of Monomoy Beach, Harding Beach, the east side of Morris Ialand and the east side of the mainland had changed since 1952 and 1953 photography and has been redelineated from office inspection of the photographs taken 15 March 1955 and 15 November 1955.

The telephone line across the east side of Morris Island has been shown according to field inspection as its image is not visible on the photographs. Two portions of this telephone line now fall in water areas.

The ten piles across the channel between Stage Island and Toms Neck which were located by transit cuts are not visible on the 1955 photographs; however, they are shown on the manuscript.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Forms 567 have been submitted for three landmarks and three aids to navigation to be charted and five landmarks to be deleted.

Refer to paragraph 9, field report, regarding Stage Harbor Daybeacon.

38. CONTROL FOR FUTURE SURVEYS

No recoverable topographic stations were established.

No photo-hydro stations have been located in this office. Refer to the hydrographic survey data for stations located by the hydrographic party.

39. JUNCTIONS

T-11196 - to the north - Junction made and is in agreement.

T-11202 - to the west - Survey has not been compiled; however,
junction details have been transferred to the manuscript.

T-11208 - to the south - Junction in disagreement as the 1955 photo-

graphy moved the shoreline westward approximately 1.5 millimeters.

To the east is an all-water area.

40. HORIZONTAL AND VERTICAL ACCURACY.

Refer to the photogrammetric plot report.

山 - 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with U.S.G.S. Chatham quadrangle, scale 1:31680 edition of 1943, revised in 1947, and with Topographic Survey No. T-5736 of this bureau.

47. COMPARISON WITH NAUTICAL CHARTS

Chart 257, scale 1:20,000, published 1951, corrected to 11/28/52. Chart 1208, scale 1:80,000, published 1942, corrected to 1/4/54.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted 20 February 1956

Frank J. Tarcza

Super. Carto. (Photo.)

Approved and forwarded

Villiam f. Wean William F. Deane,

CDR C&GS

Baltimore District Officer



PHOTOGRAMMETRIC OFFICE REVIEW

T- //203

1. Projection and grids H.R.R. 2. Title H.R.R. 3. Manuscript numbers H.R.R. 4. Manuscript size H.R.R.
4a. Classification label 14. R. F.
CONTROL STATIONS
5. Horizontal control stations of third-order or higher accuracy 14.12.12. 6. Receverable horizontal stations of les
than third-order accuracy (topographic stations)
9. Plotting of sextant fixes H.R.R. 10. Photogrammetric plot report H.R.R. 11. Detail points H.R.R.
ALONGSHORE AREAS
(Nautical Chart Data)
12. Shoreline $H.R.R.$ 13. Low-water line $H.R.R.$ 14. Rocks, shoals, etc. $H.R.R.$ 15. Bridges $H.R.R.$ 16. Aid
to navigation $H.R.R.$ 17. Landmarks $H.R.R.$ 18. Other alongshore physical features $H.R.R.$ 19. Other along-
shore cultural features H.R.R.
PHYSICAL FEATURES
20. Water features H.R.R. 21. Natural ground cover22. Planetable contours23. Stereoscope
instrument contours 24. Contours in general 25. Spot elevations 26. Other physical
features H. & R.
CULTURAL FEATURES
27. Roads H.R.R. 28. Buildings H.R.R. 29. Railroads H.R.R. 30. Other cultural features HeRR
BOUNDARIES
91. Boundary lines 32. Public land lines
31. Doundary lines 32. Fubility land lines
MICOSIA ANSOLIO
MISCELLANEOUS
33. Geographic names <u>H. R.R.</u> 34. Junctions <u>H. R.R.</u> 35. Legibility of the manuscript <u>H. R.R.</u> 36. Discrepance
overlay 37. Descriptive Report H.R.R. 38. Field inspection photographs N.R.R. 39. Forms M.R.R. 40. Harry R. Rudolph
Reviewer Supervisor, Review Section of Unit
41. Remarks (see attached sheet)
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
M-2023-12

2024

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 factor 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 quadrangles 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 Monomory Point.

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

64. Comparison with Contemporary Hydrographic Surveys

Inapplicable * see page 25

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. J. Blankenbaker

Approved by:

Chief, Photogrammetric Branch

Chief, Nautical Chart Division

Chief, Photogrammetry Division

* Sub-heading 64 - The subject map and contemporary burveys T-11189 and T-11196 - "Incomplete Manuscript" compilation stage - provided the shoreline for hydrographic survey H-8348, dated 1955-56. Extensive shoreline changes were made in the maps, in T-11189 and T-11196 in particular, during final compilation . For T-11189 and T-11196 in particular, complete manuscripts were registered - as "a" sheets. No copy exists of the incomplete manuscript for the subject map-T-11203. There is a difference between the hydrographic survey and the final map for survey T-11203 in position of the submerged cable located between the town of Chothom and Nouset Beach. The Descriptive Report for the H-8348 indicates the photogrammetric survey (T-11203, incomplete) is the source of the charted Cable.

The coble is mapped on the final photogrammetric map from

field inspection dota.

SE. Blanken loke

J OF COMMERCE DETIC SURVEY COAST AND G U.S. DEPARTM

NONFLOATING AIDS OR/ILAMDINIARIES/FOR CHARTS

STRIKE OUT ONE	
BE CHARTED	BE/ PRIVETED
0	VO

Groton Connecticut

19.54 9 August

I recommend that the following objects which have (haracozon) been inspected from seaward to determine their value as landmarks be charted on (Actorical Systems) the charts indicated.

Isaiah Y. Fitzgerald The positions given have been checked after listing by /s/ Loris F. Woodenck

							75/	* T CT 7/	A TOT TO I . MOOGOCK		Chief of Party.
STATE	MASSACHUSETTS			-	POSITION			METHOD		TMAN	
			3	LATTUDE *	LONG	LONGITUDE #		LOCATION	DATE	(3 3H	CHARTS
CHARTING	DESCRIPTION	BIGNAL	•	D. M. WETERS	•	D. P. METERS	DATUM	BURVEY F_1203	LOCATION	OHERI OHERI	
1	(Chatham Light Lighthouse, 1880)		क्ष १५	16.672	25 69	36.3	N.A.	Tri ang.	1880	H	257, 1208, 1209
	STAGE HARBOR LIGHT		41 39	29.863 921.3	65 69	070-90	£	Triang.	1954	H	257, 1208,
	STAGE HARBOR DAYBEACON (Stage Harbor Lighthouse, 1880)		भ ३१	30.91h 953.7	69 59	03.227 74.7	=		1880	×	257, 1208,
			(
			,								

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 Comm-DC 28356 * TABULATE SECONDS AND METERS

I OF COMMERCE **DETIC SURVEY** COAST AND G U.S. DEPARTIN

Form 567 April 1945

NONFLOAFING/AIDS/OR LANDMARKS FOR CHARTS

TO BE CHARTED STRIKE OUT ONE THE HEALTH AND STRIKE OUT ONE

Groton, Connecticut

19 17

9 August

I recommend that the following objects which have (http://td// been inspected from seaward to determine their value as landmarks be

charted on (491/44/1/16/14) the charts indicated.

The positions given have been checked after listing by Isaiah Y. Fitzgerald

STATE	NASCA AUTOTOTO			-	POSITION			GOHTAM		THAI	lava:
	The same of the sa		3	LATTYODE *	LONG	LONGITUDE #		LOCATION		SE CH	CHARTS
CHARTING		BIGNAL	•	D. M. WETERS	•	n. P. METERS	DATUM	PURVEY No.	LOCATION	OHSKI	#\$440
TOWER	(CHATHAM METHODIST CHURCH, 1920)	ηę)	01 17	51.792	25 69	35.327 817.1	N.A. 1927	Triang.	1920	×	1208, 1209, 257
TOWER)				-	03.227	2	Triang.	1880	×	1208, 1209,
	(same as STAGE HARBOR DAYBEACON in Light List). (Previously chart	ęģ									
	as OLD TOWER on Chart 257.)								5		
CITED I.A	(COAST CHARD STATION No. 42, 1920		1.1 0.5	26.292	60 63	31.713	=	=	0001		1208, 1209,
	cupola, ht= 42 (84)			44	77 70	1.66		:	7250	4	727
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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 Comm-DC 28356 individual field survey sheets. Information under each column heading should be given. * TABULATE SECONDS AND METERS

COAST AND d

Form 567 April 1943

U.S. DEPARTMENT OF COMMERCE DETIC SURVEY

/MONWELOATING/AIDS/OR LANDMARKS FOR CHARTS

STRIKE OUT ONE #16/66/16/14/AMPHED/)(TO BE DELETED

Groton, Connecticut

19.54 9 August

I recommend that the following objects which have (http//htgl) been inspected from seaward to determine their value as landmarks be

The positions given have been checked after listing by Isaiah Y. Fitzgerald

							/8/	Loris	Loris F. Woodcock Chief of Party.	ock Ch	lef of Party.
	MASSACHUSETTS		-/	_	POSITION			METHOD			
			Š	LATTUDE*	LONG	LONGITUDE *		LOCATION	DATE	IS SH	CHARTS
CHARTING	DESCRIPTION	BIGNAL	٥	" D.M. MÉTERS	1 0	" D. P. WETERS	DATUM	SURVEY No.	LOCATION	DHENI DHENI DENYH	
	No longer exists		נינון דו		69 57.7					×	257, 1208,
SPIRE	Visibility from seaward poor		ט-נון נין		69 57.7						257, 1208,
SIGNAL	(FLAG TOWER on Chart 257) to be repl by CUPOLA, a better landmark	peorlde.	д 39.4		69 57.5						257. 1208
	Not visible from water areas covered by this chart		12 40-3		0.72 69						257
	Not visible from water areas covered by this chart		1 10.3		69 57.0						=
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Comm-DC 28356 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. * TABULATE SECONDS AND METERS

T-11203.

Geographic Names.

Atlantic Ocean Aunt Lydias Cove

(not Lydia's)

Barn Hill Road

Barnstable County

(title only)

Bearses Pond

Black Pond

Blue Bill Hole

Bridge Street

Broad Creek

Blue Pond

Cape Cod

(title only)

Cedar Street

Champlain Road

Chatham

Chatham Roads

Chatham Airport

Depot Street First Universalist Church

<u>Harding Beach</u>

Harding Beach Road

Little Mill P nd

Long P int

(not Newty Pond: Lynn Pond on chart 257) Lynn Pond

Main Street

Massachusetts OK (title only)

Mill Pond

Matchell River

Monomoy Beach

Monomoy Island

Morris Island

Mantucket Sound

Nauset Beach

Old Harbor Road

Cyster Pond

Cyster Pond River

Ryders Road

Taylor Point The Neck

Toms Neck

Seaside Cemetery

Seaview Street

Shore Road

Stage Harbor

Stage Harbor Road

Stage Island

Stetson Cove

Union Cemetery

West Chatham

White P nd

State No. 28

Names approved 4-8-58

5=15-65- A.J. Wraight Names rechicked + approved -

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

INSTRUCTIONS

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

1. Letter all information.

2. In "Remarks" column cross out words that do not apply.

3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

<u></u>	<u> </u>	1	1
CHART	DATE	CARTOGRAPHER	REMARKS
1209	10-21-69	& Beeler	Full-Part Before After Verification Review Inspection Signed Via
			Drawing No. Appd thru Cht 257 9 1.208 - soperaed ed
			by post-storm photography
1208	3.74 72	DL Pollibre	Full Full After Verification Review Inspection Signed Via
,.	1	3.221 00000	Drawing No. 37 Comider Adequately analised
		<u></u>	Drawing No.32 Consider Adequately applied No. Collection Dell of 770 7 Echart 2571.
1209	S-12 72	O. Chapman	Full Part Before After Verification Review Inspection Signed Via
1007	0 13-73	O. Crayeman	
		<u> </u>	G chart 257 x 13. Superseded by BA85330, T-12492, T-12493
	<u> </u>		Drawing No. 40, 100. Cort. Lhru. 161 270 777 octor 257 x 13. Superseded by BP85330, 7-12492, T-12493 & later shots revisions. Consider Adequately confied. Full Pan Betwee After Verification Review Inspection Signed Via
257	9-//-73	J. Bailer	Part Fair Detore After Verification Review Inspection Signed Via
	<u> </u>)	Drawing No. 13 No corr. Superseded by T-12493
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FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

USCOMM-DC 8558-P68