

11247



Diag. Cht. No. 1222-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)

Field No. Ph-119 Office No. T-11247

LOCALITY

State Virginia

General locality Cape Charles

Locality Butlers Bluff to Kiptopeke
and Magothy Bay

1953-55

CHIEF OF PARTY

E.H.Kirsch, Chief of Field Party
W.F.Deane, Balto. District Officer

LIBRARY & ARCHIVES

DATE September 1961

USCGM-DC 5087

11247

DESCRIPTIVE REPORT - DATA RECORD

T- 11247

Project No. (II): PH-119

Quadrangle Name (IV):

Field Office (II): Exmore, Va.

Chief of Party: E. H. Kirsch

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: E. H. Kirsch

Instructions dated (II) (III): 2 July 1953
15 February 1956

W. F. Deane
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):

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): M. H. W.

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): KIPTOPEKE, 1939

Lat.: 37° 08' 15.817" (487.6 m.) Long.: 75° 57' 57.776" (1426.0 m)

Adjusted
~~unadjusted~~

Plane Coordinates (IV):

State: Virginia

Zone: South

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

DESCRIPTIVE REPORT - DATA RECORD

NOT APPLICABLE

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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): R. L. McGlinchey

Date: Jan. 1954

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): 1953-54 field inspection on 1953 photographs (Revised by office interpretation of 1955 photographs)

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

Date: 1/21/54

Projection and Grids checked by (IV): C. Hanavich

Date: 1/22/54

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

Date: 2/20/54

Control checked by (III): A. Queen

Date: 2/23/54

Radial Plot ~~by (III): H. R. Rudolph~~

Date: 3/10/54

~~checked by (III):~~

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): J. Honick
F. Wisiecki

Date: 5/13/54
11/29/56

Photogrammetric Office Review by (III): R. Glaser

Date: 7/18/57

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

(4)

Camera (kind or source) (III): USC&GS nine-lens and single lens camera "W"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
40604 and 40605	5/30/53	1402	1:10,000	0.6' above MLW
40464 & 40465	"	1242	"	1.5' " "
40544 thru 40546	"	1347	"	0.8' " "
40549	"	1354	"	0.3' " "
55-W-4313 thru 4316	3/10/55	1357	"	0.2' " "
55-W-4323 thru 4326	"	1404	"	0.2' " "
55-W-4583 & 4584	3/14/55	1200	"	2.5' " "

Tide (III)
From predicted tables

Reference Station: Hampton Roads
Subordinate Station: Kiptopeke Beach
Subordinate Station: Smith Island (Ref. - Sandy Hook)

Ratio of Ranges	Mean Range	Spring Range
	2.5	3.0
	2.7	3.2
	3.5	4.2

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

Date: MAR. 31, 1961

Final Drafting by (IV): Baltimore Office

Date:

Drafting verified for reproduction by (IV): S.G. Blankenbaker

Date: MAR., 1961

Proof Edit by (IV): S.G. BLANKENBAKER

Date: MAY, 1961

Land Area (Sq. Statute Miles) (III): 10 sq. miles
Shoreline (More than 200 meters to opposite shore) (III): 35 miles
Shoreline (Less than 200 meters to opposite shore) (III): 20 miles
Control Leveling - Miles (II): None
Number of Triangulation Stations searched for (II): 14
Number of BMs searched for (II): (Tidal) 5
Number of Recoverable Photo Stations established (III): 2 * *
Number of Temporary Photo Hydro Stations established (III):
Number of Triangulations established 3

Recovered: 9 Identified: 6
Recovered: 5 Identified: 5 *

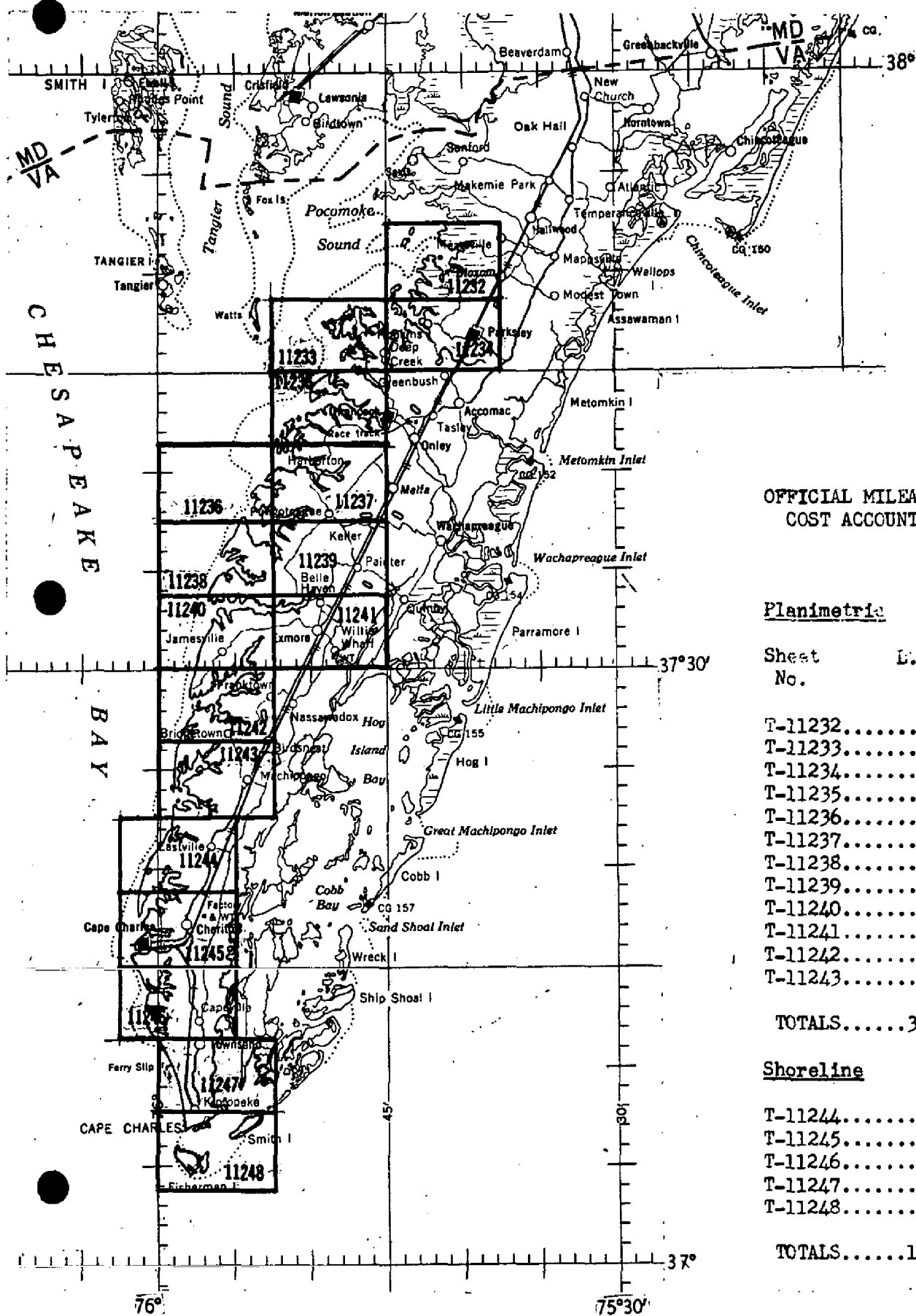
Remarks:

* TWO (2) TBM'S DELINEATED.
* * 4 AIDS TO NAVIGATION LOCATED BY PHOTOGRAMMETRIC METHODS.
NEW POSITIONS ESTABLISHED FOR FIVE (5) 1942 TOPO STATIONS.

(5)

PLANIMETRIC and SHORELINE MAPPING PROJECT PH-119

CAPE CHARLES TO POCOMOKE SOUND, VIRGINIA



OFFICIAL MILEAGE FOR COST ACCOUNTS

Planimetric

Sheet No.	L.M.S.	Sq. Miles
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T-11232.....	32.....	18
T-11233.....	30.....	7
T-11234.....	20.....	26
T-11235.....	38.....	17
T-11236.....	8.....	2
T-11237.....	21.....	25
T-11238.....	25.....	9
T-11239.....	4.....	27
T-11240.....	27.....	15
T-11241.....	27.....	26
T-11242.....	39.....	19
T-11243.....	32.....	22

TOTALS.....303.....213

Shoreline

T-11244.....	20.....	8
T-11245.....	30.....	5
T-11246.....	27.....	5
T-11247.....	37.....	10
T-11248.....	16.....	4

TOTALS.....130.....32

(6)

SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT

T-11247 is one of seventeen 1:10,000 scale maps in Project PH-119. The project covers the eastern shore of the Chesapeake Bay in Virginia from Bessley Bay (Lat. 37° 52' 45") southerly to Cape Charles (Lat. 37° 03' 45").

The project is subdivided into two sections. Section "A" comprised of planimetric surveys T-11232 to T-11243 covers the northern part of the project. Section "B" is comprised of shoreline surveys T-11244 through T-11248.

The principal purpose of the project was to provide shoreline and control for hydrographic surveys. In addition, contour revisions were required in section "A" for the purpose of revising Bureau War Mapping Quadrangles produced for the War Department (1943). In checking contours during field inspection no changes were found over the entire area that warranted changing the original contours.

Field work was accomplished in 1953. Radial plotting and graphic compilation were accomplished in the Baltimore Office. Nine-lens photographs taken in 1953 were used in radial plotting. The nine-lens photographs and single-lens photographs taken in 1955 were used in compilation.

Maps T-11232 through T-11237 were field edited in 1956. The remainder of the maps in the project will be registered as correct to the date of field inspection (1953).

A crenarflex positive of advance manuscript T-11247 was furnished the hydrographic survey party prior to sounding. Items registered under T-11247 will include a Descriptive Report and a positive impression on crenar of the scribed copy of the manuscript.

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

MAP T. 11247

PROJECT NO. PH-119

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -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)	FORWARD	(BACK)	FORWARD (BACK)
KETCHAM 2, 1910 R. M. 2	Computed	N.A. 1927	37	11	12.633		389.4	(1460.2)	
Sub. Pt. KETCHAM 2, 1910 R. M. 2		"	75	56	26.553		655.0	(825.0)	
			37	11			440.4	(1409.2)	
			75	56			642.4	(837.6)	
CUSHMAN, 1929	G 1800 p. 116	"	37	09	31.536		972.2	(877.4)	
			75	54	35.518		876.4	(604.1)	
Sub. Pt. CUSHMAN, 1929		"	37	09			954.6	(895.9)	
			75	54			830.2	(650.3)	
KIPTOPEKE GRAVITY STATION, 1938	G 4218 p. 290	"	37	08	15.735		485.1	(1364.5)	
			75	57	57.396		1416.6	(64.3)	
CABLE, 1929	G 1800 p. 116	"	37	08	00.545		16.8	(1832.8)	
			75	56	11.437		282.3	(1198.7)	
Sub. Pt. CABLE, 1929		"	37	08			45.6	(1804.0)	
			75	56			304.7	(1176.3)	
KIPTOPEKE, 1939	G-4218 p. 290	"	37	08	15.817		487.6	(1362.0)	
			75	57	57.776		1426.0	(54.9)	
Sub. Pt. KIPTOPEKE, 1939		"	37	08			600.6	(1249.0)	
			75	58			13.0	(1467.9)	
CENTER MOCKHORN 2, 1910	G-1800 p. 115	"	37	10	59.980		1849.0	(0.6)	
			75	53	59.689		1472.3	(7.7)	
Sub. Pt. CENTER MOCKHORN 2, 1910		"	37	10			1840.1	(9.5)	
			75	53			1465.6	(14.4)	
SOUTH SHACK EAST GABLE, 1934	G-6464 p. 728	"	37	10	23.064		711.0	(1138.6)	
			75	51	53.163		1311.5	(168.7)	

1 FT. = 3048006 METER

COMPUTED BY: J. Steinberg

DATE

2/1/54

CHECKED BY: A. Queen

DATE

2/19/54

COMM-DC-5784

MAP T-11247.

PROJECT NO. PH-119

SCALE OF MAP 1:10,000

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER

COMPUTED BY: J. Steinberg

DATE.....2/1/54

CHECKED BY: A. Queen

DATE 2/19/54

COMM-DC-5784

COMPILATION REPORT
T-11247

The Field Inspection Report is part of the descriptive report for survey T-11246.

The Photogrammetric Plot Report is part of the descriptive report for survey T-11248.

31. DELINEATION

This manuscript was delineated by graphic methods from 1953 nine-lens photographs. When 1955 single lens photographs were available, the shoreline was checked for any changes. No appreciable change in shoreline was noted except in the SE corner of the manuscript where some correction was made at the unnamed inlet on Smith Island.

32. CONTROL

Control was adequate. See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

The A. M. S. TOWNSEND, Va. quadrangle and USC&GS Chart No. 1222 were used for geographic names. No geographic name sheet was included with field data.

34. CONTOURS AND DRAINAGE

Contours - Inapplicable.
Drainage - No comment.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate. Offshore limits of mud, sand and shallow lines were delineated by office interpretation.

36. OFFSHORE DETAILS

Oysterbeds were delineated by office interpretation in addition to those identified on field photographs.

37. LANDMARKS AND AIDS

Forms 567 are being submitted for seven aids and one landmark be charted and one aid to be deleted.

38. CONTROL FOR FUTURE SURVEYS

Forms 524 are being submitted for two new recoverable topographic stations, six stations recovered and five lost.

39. JUNCTIONS

Junctions have been made with surveys T-11246 to the north and T-11248 to the south. There is no contemporary survey to the east and to the west is an all-water area.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41 - 45 Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with A. M. S. TOWNSEND quadrangle, scale 1:24,000 edition of 1950.

47. COMPARISON WITH NAUTICAL CHARTS

Chart No. 1222, scale 1:80,000 published January 1953 corrected to 6/25/55.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
29 November 1956

F. M. Wisiecki
F. M. Wisiecki
Carto. Photo. Aid

Approved and Forwarded

William F. Deane
William F. Deane,
CDR. C&GS
Baltimore District Officer

(11)

PHOTOGRAMMETRIC OFFICE REVIEW

T-11247

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

4a. Classification label ☒

5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo-hydro stations ☒ 8. Bench marks ☒
 9. Plotting of ^{Theod. L.} ~~constant 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. ~~Planetable 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. G. Sloan ☒ Joseph Steinberg ☒
 Reviewer Supervisor, Review Section of Unit

41. Remarks (see attached sheet)

Scribing ☒ H.R.R.

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:

REVIEW REPORT
SHORELINE SURVEY T-11247
March 1961

61. General Statement:

Road delineation is incomplete on T-11247. The existence of Geological Survey quadrangle TOWNSEND, 1955 was apparently the reason for the elimination of some roads. A new Nautical Chart (No. 362 - 1:40,000 Scale) covering the area of this survey has been compiled (to be published at a later date). The USGS quadrangle was available as source material for the chart. Comparison of the shoreline survey with the quadrangle is discussed under side heading No. 63 of this report.

In compliance with project instructions woodland was not compiled on T-11247.

62. Comparison with Registered Topographic Surveys:

No. 495	1852-88	1:20,000	No. 2676	1904-05	1:20,000
No. 509	1852	" "	No. 3191	1910-11	" "
No. 1203	1869-70	" "	No. 7074 A&B	1949	1:10,000
No. 2675	1905	" "	No. 8181	1942	1:20,000

T-11247 supersedes the prior Bureau surveys for Nautical charting purposes in common areas.

63. Comparison with Maps of Other Agencies:

Townsend, Va.	AMS	1:25,000	1942
Townsend, Va.	USGS	1:24,000	1955

The AMS quadrangle was compiled by this Bureau (Bureau registry No. 8181). T-11247 and the quadrangles are in good agreement over-all in the horizontal position of common features. There are some shoreline differences resulting from differences in interpretation of apparent shoreline.

Differences in positions of common features (Kiptopeke Beach Ferry Pier, breakwaters and breakwater lights at Kiptopeke Beach) exist between T-11247 and the USGS quadrangle.

- 8 -

64. Comparison with Hydrographic Surveys:

7910	1:10,000	1950
7791	1:10,000	1949
8217	1:10,000	1954

H-7910 and H-7791 are Chesapeake Bay Surveys. There are some shoreline differences between T-11247 and H-7791 resulting from natural changes that occurred during the elapsed time between the surveys.

Shoreline and topography for H-8217 were obtained from T-11247 and T-11248. T-11247 was compared with the verified smooth sheet. No changes affecting the hydrographic survey were made during final review.

There are no recent hydrographic surveys of the Magothy Bay - Smith Island Bay areas.

65. Comparison with Nautical Charts:

No. 1222	1:80,000	1959	revised 6/20/60
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There are no important differences between the chart and T-11247.

66. Adequacy of Results and Future Surveys:

The elimination of some roads from this survey is discussed under side heading No. 61 of this report. T-11247 meets the Bureau requirements for shoreline surveys and together with the 1955 USGS quadrangle provides the necessary data for nautical charting. Some aids to navigation were moved or rebuilt and a channel dredged (SE tip of Cape Charles) subsequent to this survey.

T-11247 meets the National Standards of Map Accuracy.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

- 3 -

APPROVED BY:

L. C. Hande
Chief, Review & Drafting Sec.
Photogrammetry Division

J. E. Waugh 10/10/61
Chief, Nautical Chart
Division

L. J. Woodcock
Asst. Chief, Photogrammetry Division

J. Bowie
Chief, Operations Division

GEOGRAPHIC NAME LIST

Big Creek Marsh
Butlers Bluff

Cape Charles
Cedar Grove
*Chesapeake Bay

Eggnog Creek

Fort John Custis

Holly Bluff Creek
Holly Bluff Island

Jones Cove
Jones Creek

*Kiptoeke
Kiptoeke Beach

~~Long Point Channel~~
Long Point Island

Magotha
Magothy Bay
Main Ship Shoal Channel
Mill Creek
Mockhorn Island
Mockhorn Point
Mud Inlet

Pennsylvania R.R.
Potts Creek
*Pudding Creek

Raccoon Creek
Raccoon Island

Smith Island
Smith Island Bay

Thoms Creek
Tommys Ditch
Townsend.
*The Thorofare
Yearlys Creek

* B.G.N. Decision


GEOGRAPHIC NAMES SECTION
15 SEPTEMBER 1960

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOP SECRET//COMINT//NOFORN

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Exmore, Virginia

28 January, 1954

I recommend that the following objects which have ~~(added to)~~ been inspected from seaward to determine their value as landmarks be ~~deleted from~~ the charts indicated.

The positions given have been checked after listing by

/s/ E. H. Kirsch

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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

**TO BE CHARTED
YB/HF/BEN/ELC**

STRIKE OUT ONE

MONITORING AIDS FOR CHARTS

Baltimore, Maryland

1961

I recommend that the following objects which have ~~(b)(7)(D)~~ been inspected from seaward to determine their value as landmarks be charted on ~~Charted~~ the charts indicated.

The positions given have been checked after listing by R. Glaser

William F. Deane
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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED
04/07/04/04/04

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland July 1957

1957

I recommend that the following objects which have ~~(b)(4), (b)(7)(D)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(b)(4), (b)(7)(D)~~ the charts indicated.

The positions given have been checked after listing by R. Glaser

William F. Deane *Chief of Party.*

William F. Deane

[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.

NAUTICAL CHARTS BRANCH

SURVEY NO. T11248

Record of Application to Charts

[illegible]

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.