

11790

Original

77-6

Diag. Cht. No. 77-6.

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	PLANIMETRIC
Field No. Ph-6008	Office No. T-11790
LOCALITY	
State	MARYLAND
General locality	CHESAPEAKE BAY
Locality	RANDLE CLIFF BEACH
1960	
CHIEF OF PARTY	
G. F. Wirth, Chief of Field Party	
V. Ralph Sobieralski, Tampa District Office	
LIBRARY & ARCHIVES	
DATE	APR 19 1963

USCOMM-DC 5087

11790

DESCRIPTIVE REPORT - DATA RECORD

T - 11790

Project No. (II): Ph-6008

Quadrangle Name (IV):

Field Office (II): Chesapeake Beach, Maryland

Chief of Party: George F. Wirth

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: V. Ralph Sobieralski

Instructions dated (II) (III): 31 August 1960

Copy filed in Division of
Photogrammetry (IV)

Amendment I: 24 October 1960

Method of Compilation (III): Stereoscopic Instrument (Kelsh Plotter)

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:6,000

Scale Factor (III): Pantographed to 1:10,000

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 lower low~~ 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): NAVY 1944

Lat.:

Long.:

Adjusted
~~Horizontal~~

Plane Coordinates (IV):

State: Maryland Zone:

Y= 301,811.65 ft.

X= 934,336.64 ft.

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.

FORM 181a
(4-23-54)

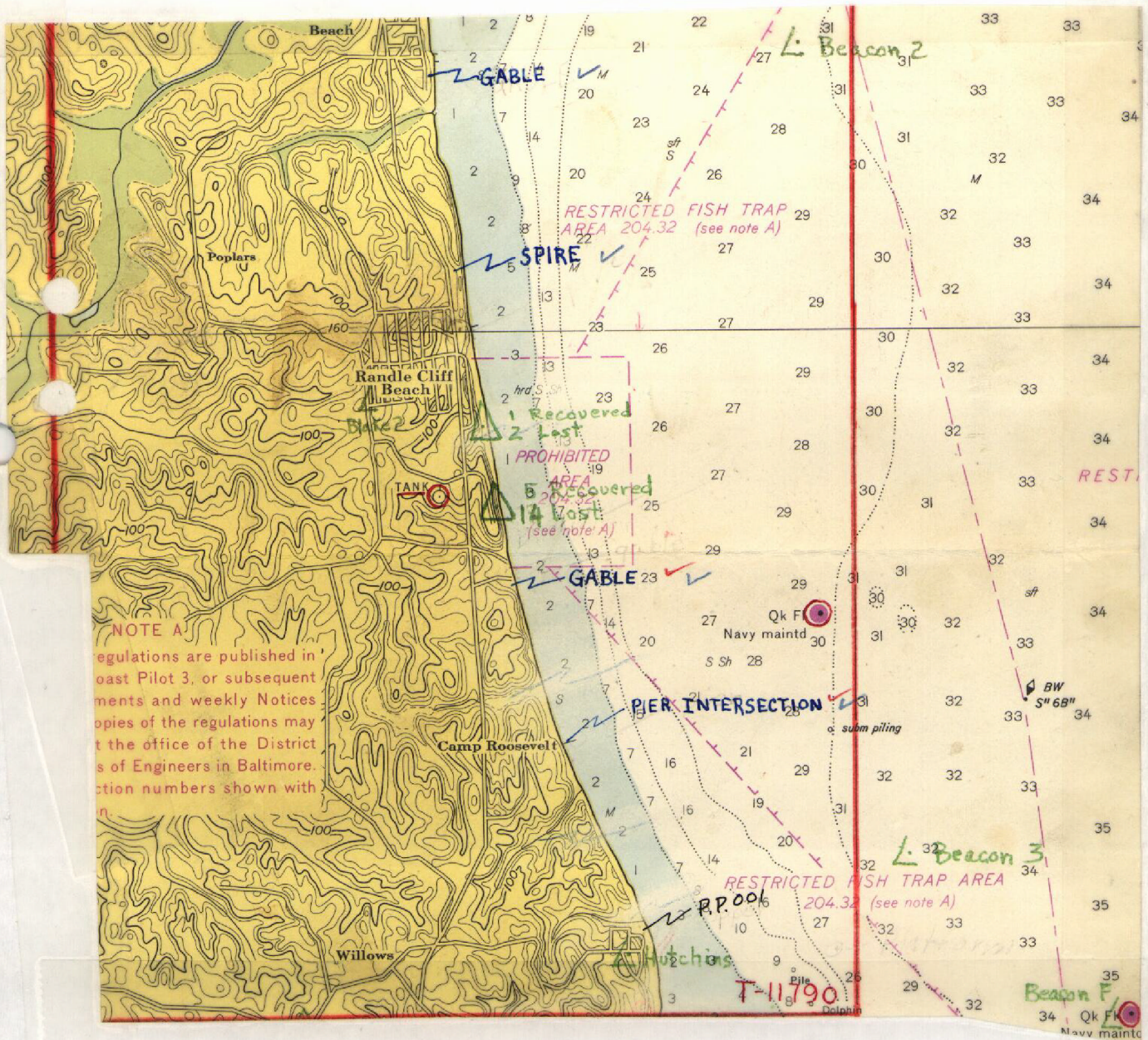
DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PLANIMETRIC

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

Inapplicable



DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): G. F. Wirth
C. H. Nixon
J. E. Tolodziecki, Jr.

Date: Nov. 1960

Planetable contouring by (II): Not applicable

Date:

Completion Surveys by (II): Not applicable

Date:

Mean High Water Location (III) (State date and method of location): Air photo compilation
Reference measurements: November 1960

Projection and Grids ruled by (IV): R.A.C. (W.O.)

Date: Oct. 1960

Projection and Grids checked by (IV): J.D.C. (W.O.)

Date: Oct. 1960

Control plotted by (III): R. E. Smith

Date: Nov. 1960

Control checked by (III): V. P. Cackowski

Date: Nov. 1960

~~Stereoscopic~~ Stereoscopic

Date: Oct. 1960

Control extension by (III): R. E. Fueschel (W.O.)

Planimetry
Stereoscopic Instrument compilation (III): I. I. Saperstein
~~CSHISSE~~

Date: Dec. 1960

Date:

Manuscript delineated by (III): I. I. Saperstein

Date: Dec. 1960

of Compilation
Photogrammetric Office Review/by (III): W. H. Shearouse

Date: Jan. 1961

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

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): Wild Single-lens "S"

4.

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
60S8585	23 July 1960	09:53	1:30,000	+ 0.5
8586	" "	09:54	"	"
8587	" "	09:55	"	"

Predicted Tide (III)

Reference Station: Baltimore, Md.
Subordinate Station: Chesapeake Beach
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	1.1	1.3
H.W. 8.6	1.0	1.2

Washington Office Review by (IV):

Date:

Final Drafting by (W): R. Dossett (Tampa District Office)

Date: Mar. 1961

Reviewed by: W. H. Shearouse " " "

Mar. 1961

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 9

Shoreline (Measured from mean low water to mean high water): 4.8 statute miles

~~Shoreline (Measured from mean low water to mean high water): 4.8 statute miles~~

Control Leveling - Miles (II): Inapplicable

Number of Triangulation Stations searched for (II): 30 Recovered: 6 Identified: 2

Number of BMs searched for (II): 9 Recovered: 6 Identified: 2

Number of Recoverable Photo Stations established (III): 5

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

Remarks: II Two stations searched for are east of the limits of this sheet. They are "BEACON 3, 1944" and "BEACON F, 1945". Both stations are destroyed.

FIELD INSPECTION REPORT and PREFACE to FIELD INSPECTION
REPORT were submitted with T-11789

8.

Boundaries, Monuments, and Lines Report

Project PH-6008

Chesapeake Bay

West Shore, Maryland

Sheet Numbers T-11789 through T-11793

Table of Contents

Incorporated Town Limits	1
Limits of Naval Research Laboratory, Chesapeake Bay Annex	1
County Boundary Lines	2

Compiled by:

Charles H. Nixon
Charles H. Nixon

Approved by:

George F. Wirth
George F. Wirth
Chief of Party

Incorporated Town Limits

The limits of Chesapeake Beach and North Beach, Maryland have been shown on field photographs.

Chesapeake Beach Boundary was scaled by angles and distances from:

Map Showing Boundary Of Town Of
Chesapeake Beach
Calvert County, Maryland

by
Albert E. Pohmer
Surveyor & Civil Engineer
215 N. Charles Street
Baltimore, Maryland
Sheets 1,2,&3
July 1942

North Beach Boundary was scaled by angles and distances from:

Plat of North Chesapeake Beach
Calvert County, Maryland
1900 Re-Platted 1908

by
Charles P. Calvert
Surveyor
456 Louisiana Ave.
Washington, D.C.

Re-Platted
John A. Marshall
1725 3rd St., N.E.
Washington, D.C.

Limits of Naval Research Laboratory,
Chesapeake Bay Annex

The fence marking the boundary of the Naval Research Laboratory, Chesapeake Bay Annex, has been delineated on the photographs. See Plate 2 for the boundary of the Navy Dock Area at Fishing Creek. Plate 2 has been submitted with T-11790.

County Boundary Lines

Two lines of the Boundary Line between Anne Arundel and Calvert County fall within the limits of this Project. From the original description of the County Boundary, as it was layed out in 1824, it was found that there are two boundary monuments within the limits of Survey T-11789. Part of the recorded description follows.

"Beginning at a stone marked on the Plat No. 1 on the west side of Chesapeake Bay and at the mouth of a small creek called South or Muddy Creek fixed on by the Commissioners and running with said Creek north twenty six degrees west one hundred and fifty two perches to the head thereof at a stone marked on the Plat No. 2 also fixed by the said Commissioners then with the yellow and green line west four degrees north sixteen hundred and thirty four perches to a chestnut tree and stone marked on the Plat No. 3 on the south side of Halls Creek then north thirty five degrees west one hundred and twenty two perches to the Elm and stone marked on the Plat No. 4...

Recorded 20 April 1825

LIBER W.S.G. 11

Folio 61

At Hall of Records in Annapolis, Maryland

No. 4

No. 3

No. 2

No. 1

The monument referred to as No. 1 is now submerged and probably disturbed. Local residents state that they have seen the monument at extreme low water. A search was made for this monument when the water was lower than normal but no trace could be found.

Monument No. 2 was recovered in good condition and identified by photogrammetric methods. See forms 152 for information on Photo Points 904 and 905. See form 738 for Traverse Computations.

Monument No. 3 was also recovered in good condition but was inaccessible for identification because of its field location. Monument No. 3 was in a wooded area and West from the limits of the photography.

The County Boundary in question is represented on U.S.G.S. Quadrangles in a different position which does not follow the described boundary. On the "North Beach, Maryland Quadrangle" the eastern line appears to contain Monument No. 1 and No. 2 but then continues to the North Westward before turning due West. About 3.8 miles along the line heading due West the Boundary appears to follow a stream until it reaches a point where it then proceeds in a due North direction. There is no mention of the Boundary line following this stream in the 1825 description.

Another reference found in the investigation is the description of the eighth voting district of Anne Arundel County which follows the County Boundary. A part of that description follows.

Section 7-10 District number eight.
P. 117 of the Anne Arundel County Code 1957

..."thence with the Calvert County line, due south, 2.8 miles to where said line intersects the middle of Hall Creek; thence with Hall Creek in a southeasterly direction, 0.95 miles; thence leaving the creek and running in an easterly and due east course with the Calvert County line 4 miles; then in a southeasterly direction, 0.75 miles to the shores of Chesapeake Bay"...

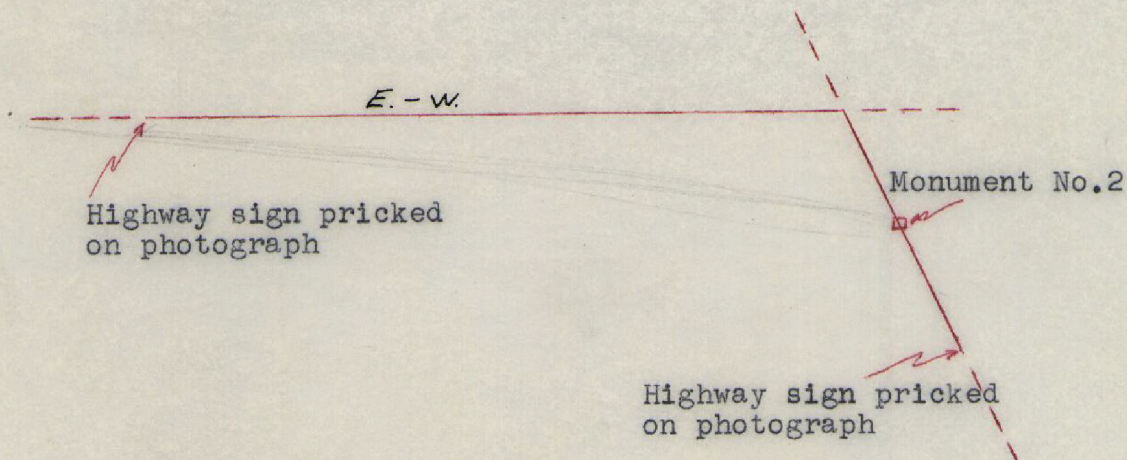
This description follows the U.S.G.S. Quadrangle Boundary line and seems to be the accepted Boundary.

A Highway sign between North Beach and Rose Haven designating the Boundary was pricked on a field photograph. Another Highway sign near the Western Western limits of the photography appeared to fall on the U.S.G.S. Quadrangle Boundary line and its position was pricked on a field photograph.

Further investigation revealed no new survey or decision that could have changed the Boundary line from the original 1824 Survey.

Since the state highway signs and voting district description agree with the boundary as delineated on the U.S.G.S. Quadrangle, it is recommended at this time that the boundary be shown in this position.

Recommended Boundary



Boundary in Red

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

MAP T 11790 PROJECT NO. Ph-6008 SCALE OF MAP 1:10,000 SCALE FACTOR 1

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
BROWNE BASE NORTH, 1944	P.C. 176	N.A. 1927	300,629.23 ✓ 934,487.98 ✓	9 1632.0 28 4832.5			1.1.5. Jan. 61 ETO " 61
BROWNE BASE SOUTH, 1944	P.C. 176		299,476.46 ✓ 934,775.54 ✓	9 1280.6 28 4920.1			✓ " " " " "
BLAKE 2, 1898	P.C. 260		302,299.50 ✓ 932,129.49 ✓	9 2141.1 28 4113.6			✓ " " " " "
ILL, 1898	P.C. 220		299,471.35 ✓ 934,882.27 ✓				Pl. " " " " "
BENCH MARK No. 8, 1960	P.C. 176		299,388.90 ✓ 934,647.06 ✓	9 1253.9 28 4881.0			✓ " " " " "
HUTCHINS, 1934	P.C. 26		288,912.32 ✓ 938,064.41 ✓				Pl. " " " " "
BENCH MARK No. 3, 1944	P.C. 176		299,811.96 ✓ 934,726.69 ✓	9 1382.9 28 4905.3			✓ " " " " "
BENCH MARK No. 4, 1944	P.C. 176		300,035.04 ✓ 934,728.87 ✓	9 1450.9 28 4905.9			✓ " " " " "
BENCH MARK No. 5, 1944	P.C. 176		300,323.05 ✓ 934,631.63 ✓	9 1538.6 28 4876.3			✓ " " " " "
BENCH MARK No. 6, 1944	P.C. 176		300,508.74 ✓ 934,584.35 ✓	9 1595.2 28 4861.9			✓ " " " " "
BENCH MARK No. 7, 1945	P.C. 187		298,856.17 ✓ 934,958.51 ✓				Pl. RES 11-16-61 ✓ VPC "
NAVY, 1944	P.C. 175		301,811.65 ✓ 934,336.64 ✓				Pl. RES " " ✓ VPC "

COMPILATION REPORT
T-11790

PHOTOGRAMMETRIC PLOT REPORT

The stereo bridge was run in the Washington Office and the report is submitted with T-11793.

31. DELINEATION

The Kelsh Plotter was used for the delineation. The field inspection was adequate and no difficulty was encountered in the delineation except as noted under Item 41.

32. CONTROL

The placement and density of bridge points were adequate.

33. SUPPLEMENTAL DATA

Station map of Chesapeake Bay Annex, U. S. Naval Research Laboratory, Chesapeake Beach, Md., scale 1 inch = 150 ft.

34. CONTOURS AND DRAINAGE

Contours are inapplicable. The beds of most drains could not be seen because of dense vegetation. However, the ravines were apparent and the drainage was delineated at the bottom of the ravines.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details have been delineated according to the field inspection, which was adequate. A flight of single lens infra-red high water photographs was used as a check for the mean high water line. No low-water or shoal lines have been shown.

36. OFFSHORE DETAILS

All offshore details have been shown according to the field inspection.

37. LANDMARKS AND AIDS

One landmark and one fixed aid to navigation have been located and were submitted on Form 567 on 10 Feb. 1961 under date of 26 January 1961.

38. CONTROL FOR FUTURE SURVEYS

No marked topographic stations were established, but five (5) natural objects were located by Kelsh Plotter. A list of the above stations is included under Item 49.

39. JUNCTIONS

Junctions have been made with T-11789 to the north; T-11791 to the south. The junction with USGS quadrangle NORTH BEACH scale 1:24,000 to the west appears satisfactory. Chesapeake Bay to the east.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41. BOUNDARIES

The boundary of the U. S. Naval Research Laboratory was delineated according to the map listed under Item 33, and not according to field inspection as shown on ratio photograph 60-S-8586. The field inspector drew the boundary along the fence, whereas in certain areas this is not true according to the official map. A comparison with the USGS quadrangle NORTH BEACH shows the quadrangle in agreement with the official map.

The boundary of Chesapeake Beach was taken from ratio photograph 60-S-8587 as delineated by the field inspector. It will be noted, however, that while a boundary map of Chesapeake Beach was available showing bearings and distances, according to the Boundary Report submitted by the field party, the map

itself was not submitted but the boundary was drawn on the ratio photograph, with its tilt and poor scale.

Copy of the Boundary Report is included in this report.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS quadrangle NORTH BEACH, 1:24,000 edition of 1953 and is favorable. There are no planimetric maps available for comparison.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 551, 1:40,000, 2nd edition 23 May 1960. The map listed under Item 46 is probably the source of topography for the chart and the same differences apply.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

I. I. Saperstein
I. I. Saperstein
Cartographer (Photo)

Approved and Forwarded:
V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

49. NOTES FOR THE HYDROGRAPHER

The following is a list of unmarked topographic stations:

EAST GABLE, 1960

SPIRE, 1960

TANK, 1960 (Landmark)

EAST GABLE, 1960

PIER INTERSECTION, 1960

A large tower is reported by the field inspector to be under construction at approximate latitude $38^{\circ}39.3'$, longitude $76^{\circ}31.7'$. It is requested that it be inspected for landmark value.

TIDE COMPUTATION

PROJECT NO. Ph. 6008 T. 11790

Time and date of exposure 0954 23 July 1960 Reference station BALTIMORE, MD.

Mean range 1.0

Ratio of ranges HW -0.1
LW 0.0

Date of field inspection Nov. 1960 Subordinate station Chesapeake Beach

	Time		Height feet	Height x Ratio of ranges	Range of tide
	h.	m.			
High tide	03	14	1.7	1.6	✓
Low tide	09	57	0.5	0.5	✓
Duration of rise or fall	06	43		1.1	✓

	Time		High tide at Ref. Sta.	Time difference	Corrected time at Subordinate station
	h.	m.			
High tide at Ref. Sta.	06	42			
Time difference	-3	28			
Corrected time at Subordinate station	03	14			

	Time		Low tide at Ref. Sta.	Time difference	Corrected time at Subordinate station
	h.	m.			
Low tide at Ref. Sta.	13	33			
Time difference	-3	36			
Corrected time at Subordinate station	09	57			

	h.	m.	feet	Photo. No.
Time High L. T.	09	57		
Required time	09	54	0.5	6058586
Interval	00	30	0.0	
Time H. T. or L. T.			0.5	
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				

Computed by 115

Checked by Q. J. O.

PHOTOGRAMMETRIC OFFICE REVIEW OF ADVANCE MANUSCRIPT

T-11790

1. Projection and grids WHS 2. Title WHS 3. Manuscript numbers WHS 4. Manuscript size WHS
4a Classification label UNCLASSIFIED

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy WHS 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) WHS 7. Photo hydro stations XX 8. Bench marks WHS 9. Plotting of sextant fixes XX 10. Photogrammetric plot report W.O. 11. Detail points W.O.

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline WHS 13. Low-water line XX 14. Rocks, shoals, etc. XX 15. Bridges XX 16. Aids to navigation WHS 17. Landmarks WHS 18. Other alongshore physical features WHS 19. Other along-shore cultural features WHS

PHYSICAL FEATURES

20. Water features WHS 21. Natural ground cover WHS 22. Planetable contours XX 23. Stereoscopic instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features WHS

CULTURAL FEATURES

27. Roads WHS 28. Buildings WHS 29. Railroads WHS 30. Other cultural features WHS

BOUNDARIES

31. Boundary lines WHS 32. Public land lines XX

MISCELLANEOUS

33. Geographic names WHS 34. Junctions WHS 35. Legibility of the manuscript WHS 36. Discrepancy overlay XX 37. Descriptive Report WHS 38. Field inspection photographs WHS 39. Forms WHS

40. William A. Rasure for
Reviewer
William H. Shearouse

Milton M. Slavney
Supervisor, Review Section or Unit
Milton M. Slavney

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

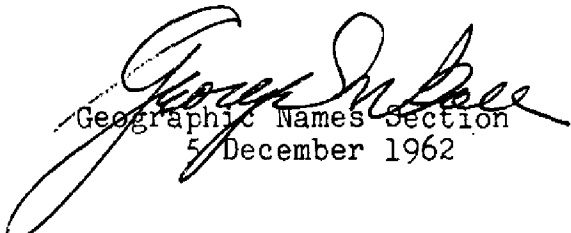
Supervisor

43. Remarks:

M-2623-12

48. Geographic Names:

Camp Roosevelt
Chesapeake Bay
Chesapeake Beach
Fishing Creek
Holiday Beach
Locust Grove Beach
Poplars
Randle Cliff Beach
Willow Beach Colony
Willows


Geographic Names Section
5 December 1962

REVIEW REPORT
OF SHORELINE MANUSCRIPTS
T-11789 thru T-11793
February 1963

61. General Statement

This project PH-6008 consists of five (5) shoreline manuscripts. These maps were prepared for revision of our Nautical Charts and for source material for the completion of the reimbursable project for the Maryland Department of Tidewater Fisheries.

62. Comparison with Registered Topographic Surveys

T-2395	1903	1:20,000
T-2836	1907	1:20,000
T-2842	1907	1:20,000
T-2868	1908	1:20,000
T-5348	1935	1:10,000
T-6956 a&b	1944	1:10,000
T-6957 a&b	1944	1:10,000

Cultural and shoreline changes have been continuous. T-11789 thru T-11793 are to supersede the above listed surveys for common area for nautical charting.

63. Comparison with Maps of Other Agencies

North Beach Md.	1:24,000	U.S.G.S.	1953
Prince Frederick Md.	1:24,000	U.S.G.S.	1953
Leonardtown Md.	1:24,000	U.S.G.S.	1936-1950

These are minor shoreline and cultural changes due to the difference in survey dates.

64. Comparison with Contemporary Hydrographic Surveys

None

65. Comparison with Nautical Charts

551	1:40,000	May 1960
553	1:40,000	1954 revised to Mar. 1960

See Item 47

66. Accuracy of Results and future Surveys

Subject T-sheets (5) have been compiled according to instructions and meet the requirements of adequacy and accuracy.

Reviewed by:

Approved by:

Charles J. Lenn
Chief, Cartographic Branch

J. E. Waugh 4/17/63
Chief, Photogrammetry Div.

L. C. Lande

James G. Taylor
Chief, Nautical Charts Division

Wm. G. Connerly
Chief, Operations Division

