8165

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

OW
Diag. Ch. 7d-3

Type of Survey Topographic

Field No. ..... Office No. T-8165

~~Chesconessex Quad. N3745-W7545~~

LOCALITY

State Virginia

General locality Chesapeake Bay

Locality Pocomoke Sound, Vicinity of Tobacco Island

194 2

CHIEF OF PARTY

Lieut. Comdr. Kenneth G. Crosby

LIBRARY & ARCHIVES

DATE June 6, 1946

8165

B-1870-1 (1)

Form T-1

DATA RECORD

T- 8165

Quadrangle (II): Chesconessex Project No. (II): CS-278-C

Field Office: Salisbury, Md. Chief of Party: F. L. Gallen

Compilation Office: Tampa, Fla. Chief of Party: K. G. Crosby

Instructions dated (II III):
3/4/42
3/27/42
8/13/42

Copy filed in Descriptive Report No. T- (VI)

Completed survey received in office: 10/12/42

Reported to Nautical Chart Section: 10/42

Reviewed: 3/10/43 Applied to chart No. Date:

Redrafting Completed:

Registered: 5/46 Published: 10/21/43

Compilation Scale: 1:20,000 Published Scale: 1:31,680

Scale Factor (III): Unity

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Sea Level

Reference Station (III): CAMP 1942

Lat.: 37° 46' 43"952 (1355.0 m) Long.: 75° 46' 22"169 (542.5 m) ~~Adjusted~~ Unadjusted

State Plane Coordinates (VI): Virginia South Zone

X = Y =

Plane coordinates are not available for this station
J.H.S.

Military Grid Zone (VI) "A"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
8534	4/13/42	11:14 AM	1:20,000	1.75 ft.

Tide from (III): Predicted tables for Watts Island, Chesapeake Bay, Md.

Mean Range: 1.7 feet Spring Range: 2.0 ft.

Camera: (Kind or source) U.S.Coast & Geodetic Survey nine lens (focal length $8\frac{1}{4}$")

Field Inspection by: C.C.Fryer, S. C. Dionisio date: June 1942

Field Edit by: W. E. Clarke date: Oct. 1942

Date of Mean High-Water Line Location (III): April 13,1942.

Projection and Grids ruled by (III) Washington Off. date:

" " " checked by: " " date:

Control plotted by: A.L.K., C. H.W. date: Aug.1942

Control checked by: F.H.E. date: Sept.1942

Radial Plot by: Personnel of Tampa Office date: Sept.1942

Detailed by: D.K. E.L.M. date: Sept.1942

Reviewed in compilation office by: E.L.M., J.H.S.B. date: Oct.1942

Elevations on Field Edit Sheet
checked by: Salisbury Office date: Oct.1942

STATISTICS (III)

Land Area (Sq. Statute Miles):	6.81
Shoreline (More than 200 meters to opposite shore):	35.5
Shoreline (Less than 200 meters to opposite shore):	55.4
Number of Recoverable Topographic Stations established:	12
Number of Temporary Hydrographic Stations located by radial plot:	None
Leveling (to control contours) - miles:	2.6

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

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

Remarks:

General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C. S. 278-C was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000.

Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, driveways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templets) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the ~~Baltimore~~ Tampa Photogrammetric Office.

FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.

Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

PROCESSING IN THE WASHINGTON OFFICE

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blueline" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T-8165

GENERAL

The general locality of the area covered by this sheet is Chesapeake Bay, Pocomoke Sound, vicinity of Tobacco Island.

With the exception of the towns of Chessconessex and Deep Creek, practically the entire area is marshlands with little vegetation outside of brush.

Practically all buildings visible on the photographs have been shown.

Roads have been shown by a centerline and should be smooth drafted 30 feet in width.

An island (Boiling Point) in Lat. 37°, 48' - Long. 75°, 45' should be investigated because it could not be located on the photographs. See item 18 of field edit report for clarification.

CONTROL

No triangulation or other control stations could be recovered on this sheet.

MAIN RADIAL PLOT

A continuous main radial plot was laid on September 17, and 18, 1942 to locate radial points, hydrographic and topographic stations, bench marks, and photograph centers. The plot extended over the areas covered by Sheets Nos. T-8157, T-8158, T-8159, T-8160, T-8165, T-8166, T-8167 and T-8168.

The usual practice of laying the main radial plot was followed. This consisted of plotting and checking the control on the survey sheets and then transferring these points to the base grid sheets by matching individual grid squares. The amount of adjustment in each grid square was negligible. The base grid sheets were taped to the plotting table and allowed to remain for 24 hours. They were then picked up and retaped to the table because considerable movement had taken place. A final adjustment was made wherever necessary and all grid lines were matched.

The plot consisted of 35 nine-lens templates and four single-lens templates. The following list shows the number of triangulation stations which fell on each template:

TEMPLATE	No. OF TRIANGULATION STATION
8537	15
8674	14
8576 & 8539	13
8673 & 9064	12
8700 & 9066	11
8577, 8536, 8781 & 5-221	10
8571, 8575, 8701, 8780 & 8782	9
8535 & 9065	7
8540, 8570, 8574, 8647 8699 & 8986	6
Remaining templates	1 to 5

Only about three percent of the radial lines failed to pass through their designated triangulation stations, and most of these shaded the control points.

This radial plot was excellently controlled by numerous, uniformly distributed triangulation stations. The most rigidly controlled templates were laid first, and the least rigidly controlled were laid last. Excellent agreement along the flight lines, as well as the intersections of the radial lines to adjacent photographic centers, was obtained throughout the plot.

Excessive tilt was encountered in the following photographs: 8700 (maximum displacement $2\frac{1}{2}$ inches); 8701 (maximum displacement $1\frac{1}{2}$ inches); 8575 (maximum displacement $\frac{3}{4}$ inch). All of the other photographs show very little tilt.

The following five templates were omitted: 8538, 8572, 8579, 8675 and 8987. These templates were superfluous, ample excellent intersections already having been obtained by surrounding templates.

All of the intersections were transferred from the radial plot to the survey sheets by again matching the grid squares to those of the base grid sheets. Sixty percent of the points were located by common intersections of five to eight radial lines. Thirty-five percent of the points were located by common intersections of three to five radial lines. Four percent of the points were located by common intersections of two radial lines only and one percent of the points are indicated by one radial line only. This unusual condition occurs only on Sheet No. T-8157. The detailer will be required to investigate these points.

The western part of this plot joins a previously laid radial plot, and good agreement was obtained with previously located radial points.

The ample control, the excellent agreement along the flight lines, and the numerous common intersections of radial lines for the various points indicate that the positions of the radial points are not more than 0.25 m.m. of their correct location. No points were picked in triangles of error. Where such triangles of error occurred, radial lines were transferred on to the survey sheets, to be further investigated by the individual detailer.

Various colored inks were used on the mounted office prints and on the survey sheets to designate triangulation, traverse and topographic stations, etc. The following key is furnished for this information:

Photographs (Office Prints)

Triangulation & Traverse Stations	2.5 m.m.	blue circle
Marked Hydro. & Topo. Signals	2.5 m.m.	green circle
Radial Points (Main Plot)	2.5 m.m.	red circle
Radial Points (Additional)	3.5 m.m.	red circle
Photograph centers		Double circle

Survey Sheets

Triangulation Stations	3.5 m.m.	high black triangle
Hydro. & Topo. Stations	2.5 m.m.	black circle
Radial Points (Main Plot)	2.5 m.m.	purple circle on back
Radial Points (Additional)	3.5 m.m.	purple circle on back
Radial Points (Questionable)	3.5 m.m.	green circle on back

This plot was laid by a Senior Engineering Aid, assisted by three Photogrammetric Aids. The time consumed in laying this plot and transferring

the radial points to the survey sheets amounted to 63½ man hours.

INTERPRETATION OF PHOTOGRAPHS

The photographs were clear and no trouble was experienced in their interpretation.

FIELD INSPECTION

The field inspection was made by C. C. Fryer and S. C. Dionisio during May and June, 1942.

The legend used by the field inspector has been made a part of this report.

Field notes were limited, with a few exceptions, to the delineation of shoreline.

In several cases important differences were noted between the shorelines drawn on the field photos and that which was clearly shown on the office photos. In these cases the survey sheet was drawn to conform with the office photos.

Some road classification has been made, based on the Virginia State Road map for Accomac County, however, this should be checked and completed in the field.

Some strips of cleared land appear on the photos between the towns of Chessconessex and Deep Creek, evidently a power line clearing. This should be located in the field.

LANDMARKS

A light is shown on chart #1223 but was not covered in the field, and has not been shown on the sheet. No other prominent landmarks appear in this area. *This light is shown by field edit party.*

JUNCTIONS

This sheet joins T-8161 on the north, T-8166 on the east, T-8169 on the south, and T-8164 on the west. The only land junction is with T-8166 and T-8169 which junctions agree very well.

COMPARISONS WITH OTHER SURVEYS

Due to large scale differences, accurate comparison with the maps and charts of this area was not practicable.

GEOGRAPHIC NAMES

Geographic names were taken from a geographic name sheet made up on the U.S.G.S. Crisfield quadrangle by the field party.

Respectfully submitted,

Daniel Kushner
Photogrammetric Aid

Forwarded by:
Kenneth G. Crosby,
Chief of Party....

FIELD EDIT REPORT
QUADRANGLE T-8165
Project CS-278-C
F. L. Gallen, Chief of Party

1. The marsh area on this sheet is comprised of a series of necks and points which extend out into Pocomoke Sound and with marsh islands scattered about. There is little fast land.

5. U.S.C. & G. S. Bench Mark A 301 was established by F. L. Gallen, Chief of Party in 1942.

15. The bridge classification was carried out in accordance with the instructions. There are no bridges on this sheet. Ha Ha

16. Political boundaries and names were obtained from maps issued by the Virginia State Roads Commission and were verified in the field.

18. Geographic Names were taken from a special report CS-278-C submitted by A. J. Wraight, Photogrammetric Aid.

Upon investigation in the field no island called "Scott Island", as shown on Nautical Chart No. 1223 and on the compilation sheet, was found. The island which is shown on the Nautical Chart and compilation sheet as "Scott Island" is known as Boiling Point Island by the local fishermen and townspeople. Noted 1/14/43 LH.

46. All additions, deletions and corrections were made on the map manuscript, and transferred to a smooth copy after the field edit was completed.

The inking of the map manuscript was done in accordance with the following scheme:

FEATURES	COLOR
Additions, bench marks, wye level elevations	Black
Deletions	Green
Drainage features	Blue
Political boundaries and names	Purple

47. The position and amount of detail on this map manuscript is complete and accurate.

48. Horizontal accuracy tests were run in quadrangles T-8159 and T-8172. There are no contours on this sheet; the maximum elevation was found to be 9 feet.

Submitted by

W. E. Clark for F.L.G.

W. E. Clark, Photogrammetric Aid

Approved by:

F. L. Gallen

F. L. Gallen, Chief of Party

Form 567
(Rev. April 1942)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

T-8165

~~LANDMARKS FOR CHARTS~~
PERMANENT AIDS TO NAVIGATION

TO BE CHARTED } STRIKE OUT ONE
~~TO BE DELETED~~

Onancock, Va. January 1, 19 43

I recommend that the following objects which have (~~have not~~) been inspected from seaward to determine their value as landmarks, be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing.

F. L. Gallen *Chief of Party.*

GENERAL LOCALITY POCOMOKE SOUND, VA.

NAME AND DESCRIPTION	POSITION LATITUDE ° ′	LATITUDE D. M. METERS	LONGITUDE ° ′	LONGITUDE D. P. METERS	DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
BEACH ISLAND SHOAL LIGHT	37 47	1515	75 50	485	N.A. 1927	Plane-table	1942		x		1223

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." 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.

U. S. GOVERNMENT PRINTING OFFICE 16—27869-1

GEOGRAPHIC NAME LIST FOR T-8165

Back Creek
Back Way Gut
Beach Island
Big Marsh — Beasley channel
~~Boiling Point~~ — see Scott I, below
Camp Island
Camp Island Gut R
Chesconessex
Chesconessex Creek
Deep Creek — Deep Creek (village)
Deep Creek Channel
Guilford Flats
Herron Island Bar
Island Bay
Long Ridge
Old Beach
Pocomoke Sound
Pomco Creek
Rainy Point
Rock Gut
Rogue's Island
Russell Island R ~~(Soren's Island)~~
Savage Island ~~(Russell Island)~~
Scott Island
Tobacco Island
The Thoroughfare
West Marsh Tump
West Marsh Bar

T-8165

No. 1

	Remarks	Decisions
1		377757
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		377758
15		"
16		"
17		"
18		"
19	omitted from black plate	378757 USGB
20	"	"
21	"	"
22	"	"
23		"
24	"	"
25		"
26		"
27	Note remarks Desc. Report that islet previously ~~reported does not exist,~~ and that local usage applies this name to Scott Island (p. 2, line 6)	"

M 234

GEOGRAPHIC NAMES

Survey No. T-8165

CHESCONESSEX quadrangle

No. 1 Name on Survey	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Chesconessex	✓									1
Deep Creek	✓									2
Deep Creek	✓	(village)								3
Tobacco Island	✓									4
Island Bay	✓									5
Camp Island Gut	✓									6
Long Ridge	✓									7
Back Way Gut	✓									8
Savage Island	✓									9
Rainy Point	✓									10
Big Marsh	✓									11
Rogue Island	✓									12
Rock Gut	✓									13
Pompco Creek	✓									14
Chesconessex Creek	✓									15
Beach Island	✓									16
Old Beach	✓	(an island)								17
Back Creek	✓									18
Guilford Flats	no	Wittman								19
Beasley Channel	"	"								20
Herron Island Bar	"	"								21
Deep Creek Channel	"	"								22
West Marsh Tump	✓									23
West Marsh Bar	no									24
Camp Island	✓									25
Russell Island	✓									26
~~Boiling Point~~		(islet)								27

M 234

T-8165

No. 2

	Remarks	Decisions
1		378758-60
2	Officially adopted spelling	
3		
4		378757
5	Await compilation: reported to have disappeared. omit but shown	378758
6	Apply this name pending USGB decision.	378757
7		
8		
9		
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27		

M 234

GEOGRAPHIC NAMES

Survey No. T-8165

No. 2

Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Pocomoke Sound	✓									1
Accomack County										2
Virginia Highways	649	656	657							3
The Thorofare	✓									4
~~Muddy Marsh~~										5
Scott Island										6
Lee (political district)										7
										8
										9
										10
										11
										12
										13
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										26
										27

Hecks 1/4/43

M 234

RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

Registered and Filed in the Vault

Cloth-mounted copy of the published quadrangle.

Black and white cloth-mounted copy of the published quadrangle at 1:20,000 scale. ~~map manuscript.~~ This copy is filed to preserve original survey detail shown on the manuscript at 1:20,000 scale which may not have been shown on the published sheet. For ~~political boundaries~~, woodland, ~~marsh, and swamp limits~~, refer to the published quadrangle for the finally adopted positions.

Descriptive Report.

Filed in the Photogrammetric Section - Surveys Branch

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Reviewing Unit.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Original celluloid manuscript.

Copies of specifications and all instructions to field parties and field offices.

Filed in Reproduction Branch

Glass negatives of the color separation drawings.

Filed in the Library

Special report on field work by Commander K. T. Adams, 1944.

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. L. Gallen, 1944.

Season's report on field work by Commander R. L. Schoppe, 1944.

Delivered to the Army Map Service in accordance with the contract

Film negatives and film positives of the color separation drawings.

All color separation drawings.

~~Original celluloid manuscript.~~

A correction sheet consisting of a copy of the first edition of the quadrangle with notes in red indicating changes desirable at the next printing.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-8165

CHESCONESSEX QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy Refer to pages 3 and 4 of the Descriptive Report for quadrangle T-8159 for a copy of the results of the nearest horizontal accuracy test.

As the land area within the limits of this quadrangle is less than 20 feet above mean-sea-level (the maximum elevation is 9 ft.), no vertical accuracy test was required.

Previous Surveys

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

T-308	1:20,000	1850	
T-349	1:20,000	1851	
T-2647	1:20,000	1904	
T-2654	1:20,000	1904	
Crisfield	1:62,500	1919	U.S.G.S.

Comparison with Nautical Charts Nos. 1223

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

Mud Island which is shown on the chart, but could not be identified on any of the nine-lens photographs, should be deleted when the chart is revised.

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

Only minor corrections were necessary during the review of this quadrangle.

Reviewed 3/10/43 By H. H. Balling per J.H.S.
under direction of D. H. Benson

Inspected by B. G. Jones B.G. Jones 5/46

Examined and approved:

K.T. Adams
Chief, ~~Surveys Branch~~ Division of Photogrammetry

Robert W. Knox
Chief, Div. of Charts
Robert W. Knox
Chief, Nautical Chart Branch

Chief, Topography Section

Raymond P. Ingman
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. _____

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
8-8-48	1221	E. L. Hewitt	Before After Verification and Review
1/12/54	568	J. Walker et al	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.