

8180

8180

Form 504 Rev. June 1941 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
<i>Air Photographic</i> Plane Table Hydrographic	Sheet No. T-8180 Ship Shoal Inlet
VIRGINIA SHIP SHOAL INLET QUADRANGLE N 3707.5 - W 7545/7.5	
LOCALITY	
State	Virginia
General locality	Outer Coast
Locality	Ship Shoal Inlet
1942	
CHIEF OF PARTY	
Lieut. Comdr. Kenneth G. Crosby Lieut. Comdr. William D. Patterson	

U. S. GOVERNMENT PRINTING OFFICE 315551

December 21, 1945

DATA RECORD

T- 8180

Quadrangle (II): Ship Shoal Inlet

Project No. (II): CS 278-C

Field Office: Salisbury, Md.

Chief of Party: W. D. Patterson

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

Instructions dated (II III): 3-4-42

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

Completed survey received in office: Nov. 10, 1942

Reported to Nautical Chart Section: Nov. 11, 1942

Reviewed: Feb. 16, 1943 Applied to chart No. Date:

Redrafting Completed: Mar. 27, 1943

Registered: 12/45

Published: 1943

Compilation Scale: 1:20,000

Published Scale: 1:25,000

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): Good, 1933

37° 12' 48.740" (1502.6 m) 75° 49' 15.777" (389 m)

Lat.: ~~37° 12' 48.740" (1502.6 m.)~~Long.: ~~75° 49' 15.777" (389 m.)~~Adjusted
~~Unadjusted~~

State Plane Coordinates (VI):

Virginia System of Plane Coordinates, south zone.

X = 2,780,022.00 feet Y = 331,533.27 feet

Military Grid Zone (VI) "A"

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
8997	Apr. 18, 1942	3:30 P.M.	1:20,000	+ 0.1 Ft.
8998	"	3:32	"	"
8999	"	3:34	"	"
9000	"	3:36	"	"
9004	"	3:48	"	"
9005	"	3:50	"	"

Tide from (III): Predicted Tides, Ship Shoal Inlet, Outer Coast, Va.

Mean Range: 4.0 Ft.

Spring Range: 4.8 Ft.

Camera: (Kind or source) U.S.C. & G.S. Nine-Lens (8 $\frac{1}{2}$ " Focal length)

Field Inspection by: C. Hanavich & C.O. Rector date: July 1942

Field Edit by: *Wendell Bever, photo. Aid* date: Jan. 1943

Date of Mean High-Water Line Location (III): April 18, 1942

Projection and Grids ruled by (III) Washington Offc. date: 9-23-42

" " " checked by: " " date: 10-7-42

Control plotted by: A. L. Kidwell, Jr. Topo. Engr. date: 10-7-42

Control checked by: V. F. Simmons, Asst. Engr. Drafts. date: 10-9-42

Radial Plot by: Tampa Office Personnel date: 10-1942

Detailed by: W. E. Snyder, Asst. Photo Aid date: 10-1942

Reviewed in compilation office by: date: Nov. 1942

E.L. Maxwell & J.H.S. Billmyer
Deck Officer Prin. Engr. Drafts.

Elevations on Field Edit Sheet

checked by: *Wendell Bever, photo. Aid* date: Jan. 1942

STATISTICS (III)

Land Area (Sq. Statute Miles): 7.8

Shoreline (More than 200 meters to opposite shore): 69

Shoreline (Less than 200 meters to opposite shore): 210

Number of Recoverable Topographic Stations established: 7

Number of Temporary Hydrographic Stations located by radial plot: 4

Leveling (to control contours) - miles: 0

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:

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-8180
Ship Shoal Inlet Quadrangle

CONTROL

As the main radial plot appeared to be poor, all points were investigated by the compiler and changed where necessary. It is believed that the detailing is as accurate as possible with the amount of control furnished.

Two triangulation stations, for which there were no picking cards, were plainly discernable on all photographs. However they were not discovered until the main radial plot had been run. These stations were picked direct on the office prints and were used in investigating radial points. They are stations "Center House on Flats, 1934", and "Shack, New Inlet, 1934".

RADIAL PLOT

The main radial plot is discussed in the descriptive report for sheet T-8176.

DETAILING

The detailing of this sheet was done from photographs which were moderately clear and of fair scale.

The field inspection was satisfactory for detailing.

SUPPLEMENTAL DATA

There were no graphic control surveys by this Bureau or maps and plans of other organizations used to supplement the photographs.

DETAILS OFFSHORE FROM THE HIGH WATER LINE

Two buildings, in the vicinity of Lat. $37^{\circ} 14'$ and Long. $75^{\circ} 50'$, fall offshore from the high water line. One of these is a triangulation station and one a topographic station.

LANDMARKS AND AIDS TO NAVIGATION

Although there are numerous channels and islands on this sheet, there are no landmarks or navigational aids.

HYDROGRAPHIC CONTROL

Seven recoverable and four temporary topographic stations suitable for the control of hydrographic surveys were located by the radial plot.

The geographic positions of the recoverable stations are shown on forms 524.

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

This sheet was compared with the quadrangles of the area published by the Corps of Engineers, U. S. Army, revised to 1933, and used on this project as a geographic name sheet.

Numerous large discrepancies were noted, but great changes are possible in a short period of time due to the marshy character of the terrain and the exposure to the open Atlantic Ocean.

COMPARISON WITH NAUTICAL CHARTS

A comparison was made with U. S. C. & G. S. Chart No. 1222, (Scale 1:80,000) printed in August 1942.

The same discrepancies mentioned under the previous heading were noted.

The map compilation should supersede the charted information.

Respectfully submitted,

William E. Snyder

William E. Snyder,
Asst. Photogrammetric Aid

Forwarded by:

Kenneth G. Crosby
Kenneth G. Crosby,
Chief of Party.

FIELD EDIT REPORT
Quadrangle T-8180
Project CS-278-C
F.L.Gallen, Chief of Party

1. This quadrangle consists of a group of islands bordering the Atlantic Ocean. The greater part of these islands is marshland. Narrow strips of sand and dune areas are present along the easterly edges of the islands. The shoreline, particularly that bordering the Atlantic, is very unstable being strongly effected by strong tidal currents.
6. By means of a hand level nine elevations were shown on the higher dunes of the islands. As the dunes are unstable vertically and horizontally, these elevations will vary over a period of time. The maximum elevation was found to be 19 feet.
14. No roads are found on this quadrangle.
15. No bridges are found on this quadrangle.
16. Buildings were classified according to instructions.
17. There were no political boundary lines on this sheet.
18. Geographic Names: Refer to Geographic Names Report for Project CS-278-C.
46. Field edit consisted of visual inspection of the area. Where necessary taped distances were used in location. All additions and corrections were made on the map manuscript and later transferred to the smooth sheet after the field work had been accomplished. The inking on the field edit sheet was done in accordance with the following scheme:

FEATURES

COLORS

Additions, elevations
Political boundary Names

Black
Purple

47. The location of the detail is believed to be accurate and complete.
48. A horizontal accuracy test was run on sheets T-8174 and T-8175.

A vertical accuracy test was not necessary as there are no contours on this sheet.

Submitted by

Wendell Bever
Wendell Bever,
Photogrammetric Aid.

Approved by:

F.L. Gallen
F. L. Gallen, Chief of Party

Fr 180

LANDMARKS FOR CHARTS

Onancock, Virginia

January 7, 1943

**TO BE CHARTED
~~TO BE DELETED~~**

I recommend that the following objects which have ~~(never been)~~ 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. I. Gallen

Chief of Party.

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and floating 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.

GEOGRAPHIC NAME LIST FOR T-8180

Big Creek ✓
Big Creek Marsh ✓
Big Inlet ✓ *see below*
Black Rock Channel ✓
Bungalow Inlet ✓
Evans Creek ✓
Godwins Island ✓
Godwins Island Creek ✓
Red Drum Drain R (Great Drum Drain)
Little Inlet ✓
Main Ship Shoal Channel ✓
Mink Island ✓
Mink Island Bay R (Mink Bay)
Mink Island Creek ✓
Mockhorn Island *add*
Mud Hole ✓
Mud Hole Creek ✓
Mud Hole Inlet ✓
Myrtle Beach ✓
Myrtle Island ✓
New Inlet ✓
Old House Creek ✓
Shell Creek ✓
~~Big Inlet R~~ (Ship Shoal Inlet) ✓
Ship Shoal Island ✓
Smith Island ✓
Smith Island Bay ✓
Smith Island Beach ✓
South Bay ✓
White Perch Channel ✓
Wreck Island ✓

Division of Charts
Section of Field Records
Review of Air Photographic Survey T-8180

Main Radial Plot:

Photos 8997, 8998 & 8999 were the only ones in the office. All points checked within the required degree of accuracy. However the weaker parts of the plot though not below standard could have been considerably strengthened if the field party had had more than a third of the control existing in the area. The two thirds (or four stations not used for control) made an excellent check and serve to prove that "this map complies with the national standard map accuracy requirements." These additional stations have been plotted on the manuscript and all existing control now appears there.

567 cards have been turned in for 3 Landmarks and 13 "529" cards for H&T stations.

Comparison with Previous Surveys show constant shift of sand back and forth. T-3835 $\frac{1}{20,000}$ 1921, the last survey, shows a 1500 meters inlet cutting Smith Island, which had appeared since the 1910 survey (T-3191 $\frac{1}{20,000}$ ¹⁹¹⁰⁻¹¹), this has in the meantime closed up to about 200 meters. Myrtle Island has made North West 300 meters and North into ship shoals inlet & 700 meters.

Comparison with 3223 $\frac{1}{20,000}$ 1910-11 reveals that the coast of Wreck Island has eroded 325 meters to the west and a spit has made south 550 meters into new inlet and is forming a hook. The changes of an earlier date are noted in the descriptive reports for these surveys.

U.S.E.

Quadrangle "Cape Charles" $\frac{1}{62,500}$ shows no contours. But was copied from C&G.S. Chart 1222 1919 and therefore shows the same differences as T-3191 & T-3223. There are several changes in the islands and bays behind the coast but since this is mostly marsh and mud flats and very shallow water there is not a well defined ^{H.W.} coast line anyway.

Chart ^{$\frac{1}{20,000}$ 8/5/42} 1222 was made from 1921 survey and shows the wide opening at bangalow inlet. No other significant changes.

Reviewed by: Peter Kerr, Photogrammetric Aid.

ABBREVIATIONS

ROADS

W	—	Width (feet bet. shoulders)
P	—	Private road
OP	—	Overpass
UP	—	Underpass
X	—	Abandoned trail, road, etc.
RR	—	Railroad tracks; as 2 tracks

WOODS CLASSIFICATION

Density Classification

1	—	Scattered
2	—	Thinly wooded
3.	—	Heavily wooded
4	—	Densely wooded

Types of woods

D	—	Deciduous
P	—	Evergreen and pine
R	—	Brush
S	—	Scrub
Y	—	Cypress
L	—	Young trees (LP—young pines LD—young deciduous trees)

SHORE LINE

HWL	—	Mean high water; fast land
LWL	—	Low water line
LL	—	Light line; marsh shore line
M	—	Marsh inshore limits
MW	—	Marsh grass in water
Dk	—	Dock
Pier	—	Pier
Se W	—	Sea wall
Bkhd	—	Bulkhead
Jet	—	Jetty
Dol	—	Dolphin
Pile	—	Pile
S	—	Sand
Mud	—	Mud
Rk	—	Rock or rocky
Sty	—	Stony
Conc	—	Concrete
Wo	—	Wood
Blf	—	Bluff
Dune	—	Dune

BOUNDARIES

F	—	Fence
Sty F	—	Stone fence
F B	—	Fire Break
Hdg	—	Hedge
Park	—	Park
Cem	—	Cemetery
Co	—	County
Md.	—	Maryland
Va.	—	Virginia
Bdy	—	Boundary

VEGETATION

C	—	Cultivation
Gr	—	Grass

BUILDINGS

Ho	—	House
Ba	—	Barn
Sh	—	Shed
Bldg	—	Building
Bo Ho	—	Boat House
Ch	—	Church (give name)
Ct Ho	—	Court House (give name)
P O	—	Post Office (give name)
Sch	—	School (give name)
Hos	—	Hospital (give name)
RR Sta	—	Railroad station
Sto	—	Country store or gas sta.
P Sta	—	Power Station
Ck H	—	Chicken House
D	—	Dwelling

LANDMARKS

FT	—	Fire tower
TT	—	Transmission tower
RT	—	Radio Tower or mast
Air Bn	—	Airway beacon
Bn	—	Non-lighted aid to navigation
Lt	—	Lighted aid to navigation
Tk	—	Low tank
Tk elev	—	Tall tank
Stk	—	Stack

STREAMS, PONDS & BRIDGES

D	—	Largest ditches only
DX	—	Small
IS	—	Intermittent stream
PD	—	Probable drainage
Cr	—	Creek
Ca	—	Canal
Brg	—	Bridge, (capacity & clearance)
Cv	—	Culvert (capacity)
Lev	—	Levee
Dam	—	Dam
P	—	Pond
IP	—	Intermittent pond

ROAD CLASSIFICATION FOR MAPS OF ALL SCALES

CLASS	LABEL	STRUCTURE	LOADING
1	Dependable hard-surface heavy duty road.	Concrete, asphaltic concrete bituminous Macadam, H-15 type structures.	Will bear heaviest loads with little maintenance.
2	Secondary, hard-surface all-weather road.	Surface-treated, oiled gravel, waterbound Macadam, structures generally lighter than H-15 but sturdy.	Will bear fairly heavy military loads in all weather if maintained.
3	Loose-surface graded, dry-weather road.	Gravel or stone surface, stable material, selected sand-clay, etc. Drained and graded.	Will bear light military loads in good weather.
4	Unimproved road.	Graded and drained earth, with very light structure.	Generally unsuitable for military loads.
4U	Truck road	Woods roads, farm roads, etc. over which a standard gage vehicle can be driven.	
5	Trail	(Horse trails, foot trails, etc.)	

Roads with more than two (2) lanes are indicated by note along road, e. g. 3 LANE. Change in lanes shown by tick at point of change. Main roads have two lanes unless otherwise marked.

Private roads are designated by the letter P after the road classification.

WOODS CONCEALMENT CLASSIFICATION

Class A: Trees over 10' high and thick enough to hide troops.

Class B: Brush thick enough to hide troops but dense enough to impede progress.

Class C: Scattered brush thick enough to hide troops but not thick enough to impede progress.

	Remarks	Decisions
1	✓ Pending decision by the USGB the old name of Ship Shoal Inlet will have to be applied, especially since it is also title of quadrangle. It is doubtful if the Board will modify this old name.	372758 U.S.G.B. decision
2		371758 USGB
3	Referred to USGB: apply this name pending its decision (formerly Black Reek	371758
4	Channel) U.S.G.B. decision approves Black Rock	"
5	Channel to cover both features,	"
6	eliminating Bay Creek	"
7		"
8		"
9		"
10		"
11		"
12		"
13	See line 3, above	"
14		"
15		"
16		"
17		"
18		"
19		372757
20		"
21		372758
22	Apply this form pending USGB decision with respect to this or Goodwins Island	" U.S.G.B. decision = Goodwin I.
23		"
24	Apply this name rather than Great Drum Drain pending decision of USGB	" U.S.G.B. decision
25	Apply name two places; see line 22, above	372757 See line 22
26		372758
27		"

GEOGRAPHIC NAMES

Survey No. T-8180

SHIP SHOAL INLET quadrangle
No. 1
Name on Survey

On Chart
No.

On previous survey
No.

On U. S. quadrangle
Maps

From local
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

A

B

C

D

E

F

G

H

K

	A	B	C	D	E	F	G	H	K	
✓ Ship Shoal Inlet										1
✓ Smith Island (Name to be applied both sides of Bungalow Inlet)										2
✓ Big Creek Black Rock Channel										3
✓ Mink Island Bay										4
✓ Mink Creek										5
✓ Little Inlet										6
✓ Myrtle Island										7
✓ Main Ship Shoal Channel										8
✓ Smith Island Beach										9
✓ Bungalow Inlet										10
✓ Myrtle Beach										11
✓ Mink Island										12
✓ Big Creek Marsh										13
✓ Smith Island Bay										14
✓ Mud Hole										15
✓ Mud Hole Inlet										16
✓ Mud Hole Creek										17
✓ Shell Creek										18
✓ Wreck Island										19
✓ New Inlet										20
✓ Ship Shoal Island										21
✓ Godwin Island										22
✓ Mockhorn Island										23
✓ Red Drum Drain										24
✓ Godwin Island Creek										25
✓ South Bay										26
✓ White Perch Channel										27

T-8180

No. 2

Remarks.

Decisions

1	Apply this name pending USGB decision for line 3 of page No. 1	372758
2		"
3		"
4		
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GEOGRAPHIC NAMES

Survey No. T-8180

No. 2

Name on Survey

	A.	B.	C.	D.	E.	F.	G.	H.	K.	
✓ <u>Black Rock Channel</u> ✓										1
✓ <u>Evans Creek</u> ✓										2
✓ <u>Old House Creek</u> ✓										3
✓ <u>Atlantic Ocean</u> ✓										4
										5
										6
										7
										8
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										27

L. Heck 11/6/43

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.

published quadrangle at 1:20,000 scale
Black and white cloth-mounted copy of the 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.

Copy of the original 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.

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-G 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, drive-ways, 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 "blue-line" 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.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-8180

SHIP SHOAL INLET 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

For a report on the closest horizontal accuracy test see the descriptive report on survey T-8177.

No vertical accuracy test was performed on this sheet as there were no contours.

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-3191	1:20,000	1910-11
T-3223	1:20,000	1910-11
T-3835	1:40,000	1921
Smith Island (U.S.E.)	1:62,500	1919 (made from 1910 survey)

Comparison with Nautical Charts No. 1222

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:

The details of T-8180 are complete and adequate for chart correction.

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

Only changes of a minor nature were necessary during the review of this map manuscript.

Reviewed February 12/42 (43?)
under direction of D. H. Benson

By Peter Kerr
per W.M.

Inspected by B. G. Jones 12/6/45.

Examined and approved:

Chief, Surveys Branch

K. T. Adams
Chief, Topography Section

Division of Photogrammetry

Chief, Div. of Charts

Chief, Div. of Coastal Surveys