

8065

Diag. Cht. No. 78-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric Shoreline

Field No. Office No. T-8065

LOCALITY

State Virginia

General locality Nansemond River

Locality Nansemond River from Stockley Land-
ing to Suffolk & Western Branch
from its mouth to Milners Neck

1941-'44

CHIEF OF PARTY

H.O. Fortin, Chief of Party

F.L. Peacock, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE February 23, 1950

8-1870-1 (1)

8065

DATA RECORD

Form T-1

T- 8065

Quadrangle (II); Smithfield, Va. 15 min (U.S.G.S.) Project No. (II); C.S. 283

Field Office: Air Photographic Party No. 2
 Chief of Party: ^{Henry O. Fortin} ~~Fred. L. Peacock~~

Compilation Office: Baltimore Photogrammetric Office
 Chief of Party: Fred. L. Peacock

Instructions dated (II III):
 March 26, 1942-July 15, 1942;
 Sept. 30, 1942; Nov. 14, 1942; and Nov. 24, 1942
 Copy filed in Descriptive Report No. T- (VI)

Completed survey received in office: 10-27-44

Reported to Nautical Chart Section: Nov, 1944

Reviewed: ^{Dorothy Moseley} 11/1/46 Applied to chart No. Date:

Redrafting Completed: 11-29-49

Registered: 8 Feb. 1950 Published:

Compilation Scale: 1:10,260 Published Scale:

Scale Factor (III): 0.97466

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean ^{High Water} Sea Level

Reference Station (III): FORT, 1934, r. 1944

Lat.: 36° 47' 00.593" Long.: 76° 33' 38.896" 964.5
 (523.3)m ~~unadjusted~~ Adjusted

State Plane Coordinates (VI): Virginia, South Zone

X = 2, 567, 881.33

Y = 169, 728.89

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	Eastern Standard <u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
7722-7723	10/26/41	10:28 am	1:10,000	0.8' above M.L.W.
7724-7725	10/26/41	10:28 am	1:10,000	1.2' above M.L.W.
7716-7717	10/26/41	10:15 am	1:10,000	1.0' above M.L.W.
7718	10/26/41	10:15 am	1:10,000	0.7' above M.L.W.

Tide from (III): Tables of predicted tides-reference station-Hampton Roads
with corrections for Suffolk and for Holliday Point

Mean Range: 3.8' and 3.2'

Spring Range: 4.6' and 3.8'

Camera: (Kind or source) U.S.C.&G.S. nine lens camera (focal length 8 $\frac{1}{4}$ "
All negatives on file in the Washington Office

Field Inspection by:
Lieutenant Commander Henry O. Fortin

date: February 1944

Field Edit by: *None*

date:

Date of Mean High-Water Line Location (III):

Date of photographs supplemented by date of field inspection obtained
in 1944. Seasons field reports previously submitted

Projection and Grids ruled by (III) JT (Washington Office) **date:** 8/9/44

" " " **checked by:** JT (Washington Office) **date:** 8/10/44

Control plotted by: Edward H. Snyder **date:** 8/17/44

Control checked by: Ruth E. Rudolph **date:** 8/18/44

Radial Plot by: J. Edw. Deal, Jr. and Edw. H. Snyder **date:** 8/21/44 to 8/24/44

Detailed by: M. Eleanor Herzog **date:** 9/4/44 to 10/16/44
Ruth E. Rudolph

Reviewed in compilation office by: Henry P. Eichert **date:** 10/20/44 to 10/24/44

Elevations on Field Edit Sheet
checked by: *Not applicable*

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): This Map Drawing includes shoreline and adjacent planimetric detail only

Shoreline (More than 200 meters to opposite shore): 2 statute miles

Shoreline (Less than 200 meters to opposite shore): 19 statute miles
Measured along approximate centerline of streams

Number of Recoverable Topographic Stations established: 5
(including one U.S.E. triangulation station for which no geographic position is available to the Compilation Office)

Number of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles:

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:

SUMMARY TO ACCOMPANY T⁸⁰⁶⁵

T⁸⁰⁶⁵, Scale 1:10,000, is one of 40 shoreline surveys in Project CS-283 along the James River, Virginia.

Project CS-283 was originally planned as a planimetric mapping project but was limited to shoreline surveys only after War Mapping Project CS-289, covering practically all the James River, was undertaken.

Topographic Quadrangle, T⁸²⁹⁴ (Project CS-289) completely covers T⁸⁰⁶⁵. The former was compiled in 1944 from 1:20,000 scale photographs taken in 1942, in contrast with T⁸⁰⁶⁵, compiled in 194~~2~~⁵ from 1:10,000 scale photographs taken in 1941.

Field Inspection

Field inspection data for the area of ⁸⁰⁶⁵ Tennessee are contained in the "Report on Field Inspection of Air Photographs, James River and Tributaries, Virginia" by Henry O. Fortin, dated ~~Feb 20~~ Feb 20, 1944. Filed in Division of Photogrammetry, General Files

26. CONTROL

This Map Drawing includes the shoreline and adjacent planimetric detail of that portion of the Nansemond River and its tributaries between Stockley Landing and Suffolk and that portion of the Western Branch of the Nansemond River and its tributaries from its mouth to Milners Neck.

The following horizontal control stations fall within the limits of the Map Drawing:

UNITED STATES COAST AND GEODETIC SURVEY SECOND ORDER TRIANGULATION STATIONS:

- BURNETTS, 1934, r. 1944 (F.I.P. "BUR")
- BYRUM, 1934, r. 1944 (F.I.P. "RUM")
- *DUMP, 1934, r. 1944 F.I.P. "DUM")
- EAST, 1934, r. 1944 (F.I.P. "EAST")
- FORT, 1934, r. 1944 (F.I.P. "FOR")
- *GREGORY, 1934, r. 1944 (F.I.P. "GREG")
- N.B.P. (U.S.E.) 1932, r. 1934, r. 1944 (F.I.P. "TUL")
- *OLIVER, 1934, r. 1944 (F.I.P. "VER")
- PINNER, 1934, r. 1944 (F.I.P. "PIN")
- REID, 1934, r. 1944 (F.I.P. "DIE")
- ROUND, 1934, r. 1944 (F.I.P. "ROU")
- SACK, 1934, r. 1944 (F.I.P. "SAC")
- TREE, 1934, r. 1944 (F.I.P. "REE")
- WILROY, 1934, r. 1944

* The F.I.P.'s for these stations could not be held during the running of the radial plot. It is believed that this is probably due to an error of the measurements in the field. The new radially plotted positions of the stations have been shown with double red circles on the reverse side of the Map Drawing. (See the report for the Combined Radial Plot for Surveys Nos. T-8053, T-8054, T-8063, T-8064, T-8065, and T-8066.)

UNITED STATES COAST AND GEODETIC SURVEY INTERSECTION TRIANGULATION STATION,

SUFFOLK RADIO MAST STATION WLPM, 1944

UNITED STATES GEOLOGICAL SURVEY TEMPORARY TRAVERSE STATIONS,

Y-ROAD NORTH

CENTER OF ROAD OPPOSITE MAIL BOX

ROAD SOUTHWEST OPPOSITE THREE MAIL BOXES

SIGN-POST READING "RAILROAD CROSSING 1 MILE"

SECOND CLASS ROAD CROSSING

INTERSECTION OF NORTH RAIL OF SOUTHERN RAILWAY AND EAST RAIL OF ATLANTIC COAST LINE RAILROAD. AT "ATLANTIC COAST LINE CROSSING" A ROAD CROSSING IS 1000 FEET EAST ALONG TRACK.

26. CONTROL: (Continued)

ROAD CROSSING NEAR WILROY STATION
PIPE CULVERT (F.I.P. "PIPE")
ROAD CROSSING
NORTHEAST END OF TRESTLE AD 14-31

None of these above mentioned traverse stations could be held during the running of the radial plot. The new radially plotted positions have been shown on the reverse side of the Map Drawing with double red circles.

Also shown on the Map Drawing, but not used as horizontal control during the running of the radial plot, are thirteen (13) United States Engineer Corps stations which were established by planetable in 1934 and were recovered in 1944. The planetable positions were furnished the Compilation Office and were verified by the radial plot. (See the report for the Combined Radial Plot for Surveys Nos. T-8053, T-8054, T-8063, T-8064, T-8065, and T-8066.)

- NAY (F.I.P. "YAN")
- NAZ (F.I.P. "ZAN")
- NBA (F.I.P. "GRASS")
- NBC (F.I.P. "RED")
- NBE (F.I.P. "ROY")
- NBF (F.I.P. "NOL")
- NBG (F.I.P. "WIL")
- NBQ (F.I.P. "CED")
- NBT (F.I.P. "HIT")
- NBV (F.I.P. "OAK")
- NBW
- NWC (F.I.P. "PINE")
- WEL

One United States Engineer Corps station, namely, EE-2, has been radially plotted as no geographic position was furnished the Compilation Office. It has been shown with the conventional triangulation station symbol. The position and description of this station are being submitted on Form 524 with this descriptive report.

The following horizontal control stations fall just outside the limits of this Map Drawing:

UNITED STATES COAST AND GEODETIC SURVEY SECOND ORDER TRIANGULATION STATIONS (All were established in 1934 and recovered in 1944)

GLEBE (F.I.P. "LEB")
STOCKLEY (F.I.P. "STOCK")
THOMPSON (F.I.P. "THOM")
TROT (F.I.P. "ROT")
WATER

26. CONTROL (Continued)

UNITED STATES COAST AND GEODETIC SURVEY INTERSECTION TRIANGULATION
STATION

GLEBE SHOAL BEACON, 1934, r. 1944

UNITED STATES COAST AND GEODETIC SURVEY PRECISE TRAVERSE STATION

SHADE, 1918, r. 1919, r. 1944

All of the horizontal control stations mentioned, except those otherwise noted, were used for the establishing of photograph centers, secondary control points and detail points.

27. RADIAL PLOT:

The radial plot for this Map Drawing is part of the Combined Radial Plot for Surveys Nos. T-8053, T-8054, T-8063, T-8064, T-8065, and T-8066, the descriptive report for which was submitted to the Washington Office on September 15, 1944. *Filed in Div. of Photogrammetry General Files.*

28. DETAILING:

The shoreline and immediate adjacent planimetric detail of the part of the Nansemond River and its tributaries shown on this Map Drawing have been detailed in accordance with The Director's letters dated March 26, 1942, July 15, 1942, and September 30, 1942, pertaining to Project No. CS-283.

Positions of minor detail points and recoverable topographic stations were determined by the usual radial line method.

The stereoscope was used to verify the shoreline field inspection data furnished the Compilation Office by the Field Inspection Unit. These data were transferred to the office photographs and then detailed on the Map Drawing. In general, the field inspection data were satisfactory.

Portions of the Mean High Water Line and Marsh Line along the Nansemond River and the Western Branch of the Nansemond River, which could not be definitely identified by the Field Inspection Unit, were shown on the field inspection photographs with dashed, red lines for the Mean High Water Line and with dashed green lines for the outer limits of marsh. The portions of these undetermined sections of Mean High Water Line and Marsh Line which could not be accurately determined by careful stereoscopic examination of the office photographs have been shown on the Map Drawing with a dashed, heavy-weight, acid ink line for the undetermined Mean High-Water Line, and a dashed, light-weight, acid ink line for the undetermined Marsh Line.

All drainage, within the limits of the Map Drawing, flowing into the Nansemond River and its tributaries has been detailed. In instances where the drainage was obscured by overhanging trees or brush and could not be

28. DETAILING (Continued)

accurately determined by stereoscopic examination of the photographs; this indefinite drainage was shown on the Map Drawing with a light-weight, dashed, acid ink line.

The shoreline and immediate adjacent planimetric detail in the north-west corner of this Map Drawing, beyond the dam at the head of Exchange Creek, has not been inspected in the field and has been detailed from stereoscopic examination of the office photographs. Because of insufficient photographs the accuracy of the detail in this area may not be within the allowable error.

Roads were not classified by the Field Inspection Unit and have been shown according to the Compiler's interpretation from the nine lens office photographs after comparison was made with available topographic quadrangles.

Tree areas, not classified in the field, were interpreted by the Compiler from the nine lens office photographs after comparison with classified areas of similar appearance. These unclassified areas have been detailed and shown with conventional symbols.

All buildings immediately adjacent to the shoreline have been detailed.

Except, as previously mentioned herein, the number of nine lens photographs covering the area of this survey, was sufficient to adequately compile this Map Drawing. Their scale was in good agreement with the scale of the Map Drawing Projection. The spacing of the photographs in each flight strip provided satisfactory center chamber coverage for the area of this Map Drawing.

A list of abbreviations used on the Map Drawing, accompanied by explanatory notes, has been shown in the right hand margin.

29. SUPPLEMENTAL DATA:

An ozalid of the War Mapping Map Manuscript for Survey No. T-8294, Project No. CS 289, scale 1:20,000 was furnished the Compilation Office.

30. MEAN HIGH-WATER LINE

The conventional full, heavy-weight and light-weight, black, acid ink lines have been used to differentiate between the Mean High-Water Line and the outer limits of marsh bordering the Mean High-Water Line respectively. The light-weight line is an indication of low, wet land at Mean High-Water and is not considered to be the Mean High-Water Line. It is referred to in this descriptive report as the Marsh Line.

(Also see paragraphs 4 and 5 of section #28 -DETAILING, of this descriptive report.

31. LOW-WATER AND SHOAL LINES

No Mean Low-Water Line has been shown on the Map Drawing, and none was

31. LOW-WATER AND SHOAL LINES: (Continued)

indicated by the field inspection data, or was visible on the nine lens photographs.

Several areas, identified by the Field Inspection Unit as mud areas are believed to be shoal areas, as the Field Inspection Report identifies. The dotted lines bounding these areas as shoal lines. They have been shown on the Map Drawing bounded by a short dash, light-weight, black acid ink line with the word "Shoal" (mud) and in one instance the word "Shoal" (mud flat) lettered within the area.

There are several small areas inside the field identified "mud flat" area to which the Field Inspection Unit has applied the word "Tufting". This term is not explained and is not entirely clear to the Compiler. From a close inspection of these areas on the photographs it appears that they are marshy spots interspersed with grass in water areas and open water areas at high water. Such areas have been interpreted as similar to "A" of "Figure 1, Field Memorandum No. 1, 1938", but backed by a definite berm of firm ground or high marsh as in "C" of the same memorandum. They have been shown symbolized similarly to area "C".

32. DETAILS OFFSHORE FROM THE HIGH WATER LINE:

Piling areas, dolphins, stake areas, stumps, snags, logs, and trees in water were identified by the Field Inspection Unit and have been detailed accordingly. Pertinent notes are shown near each of these offshore details.

33. WHARVES AND SHORELINE STRUCTURES

Numerous piers, catwalks, remains of old wharves and piers, and a retaining wall were identified by the Field Inspection Unit on the field photographs. These were detailed on the Map Drawing accompanied by appropriate notes.

One small wooden pier, newly constructed, on the eastern shore of the Nansemond River at approximate latitude 36° 46' 30" was not visible on the office photographs. It has been detailed on the Map Drawing in red acid ink from information furnished the Compilation Office by the Field Inspection Unit on Field Photograph No. 7718 accompanied by an appropriate note.

34. LANDMARKS AND AIDS TO NAVIGATION:

No objects were recommended for charting as "Landmarks" by the Field Inspection Unit.

There are no fixed aids to navigations within the area covered by this Map Drawing.

35. HYDROGRAPHIC CONTROL:

The Compilation Office was furnished the identification of four (4) recoverable topographic stations. These were identified on the 1:10,000 field photographs by numbers, and their descriptions listed in field sketch books (Form 274) by corresponding numbers. These stations were transferred to the office photographs and radially plotted on the Map Drawing. The numbers and descriptions of these stations have been lettered near the station to which they refer.

As instructed, the Field Inspection Unit did not identify any station to be used as temporary hydrographic signal sites.

Form 524 is being submitted with this descriptive report for the four (4) recoverable topographic stations. They are:

- ~ S.W. GABLE BARN-GALVANIZED ROOF
- ~ N.E. GABLE ONE-STORY L-SHAPED HOUSE
- ~ N. GABLE TWO-STORY WHITE HOUSE
- ~ FER

The last named station, FER, was also radially plotted and Form 524 submitted during the compilation of War Mapping Map Manuscript for Survey No. T-8294. A comparison between the scaling from the Map Manuscript and the scaling from the Map Drawing reveals a slight disagreement. Due to good identification on the 1:10,000 photographs it is believed that the radially plotted position as shown on this Map Drawing is more accurate than that shown on the Map Manuscript.

Form 524 is also being submitted for EE-2, a United States Engineer Corps triangulation station as mentioned in section #26-Control, of this descriptive report.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

A small portion of one landing field, namely: Monogram Bombing Field falls within the limits of this Map Drawing and has been detailed. A note calling attention to the field as being a restricted area has been shown on the Map Drawing.

One station, namely, WLPM Radio Antenna, was shown as an aeronautical aid on the War Mapping Map Manuscript. This station is now the triangulation station SUPFOLK RADIO MAST STATION WLPM, 1944.

37. JUNCTIONS:

To the north - a complete and satisfactory junction was made with Map Drawing for Survey No. T-8064.

To the south - a complete and satisfactory junction was made with Map Drawing for Survey No. T-8066.

To the east and west - there are no contemporary surveys

39. GEOGRAPHIC NAMES:

As instructed, no geographic names investigation was furnished the Compilation Office by the Field Inspection Unit. The geographic names shown on this Map Drawing were taken from the following available sources:

- U. S. Coast and Geodetic Survey Chart No. 529, dated March 6, 1944.
- U. S. Geological Survey, Smithfield, Va. 15 min. Quadrangle surveyed in 1918, edition of 1929, reprinted 1938
- War Mapping Map Manuscript No. T-8294

All of the names but one are undisputed. The exception, shown as Brewer Creek on the Map Manuscript and the U.S.G.S. Quadrangle, but shown as Burnetts Mill Creek on the chart has been shown as Brewer Creek on the Map Drawing. This name was given preference as there was a geographic names investigation made for the War Mapping Project.

A list of these names is attached to this descriptive report.

40. HORIZONTAL ACCURACY:

The probable error in the positions of detail points, the Mean High-Water Line and well-defined objects is believed to be within the limits of satisfactory accuracy.

41. RECOMMENDATIONS FOR FUTURE SURVEYS:

This rough draft, shoreline survey for the Map Drawing for Survey No. T-8065 is believed to be complete in all details for charting and no other surveys are deemed necessary,

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

A visual comparison only could conveniently be made with the United States Geological Survey, Smithfield, Va., 15 minute quadrangle, edition of 1929, reprinted 1938, scale 1:62,500. Common planimetric detail appeared to be in generally good agreement. A detailed comparison would probably reveal many discrepancies as it was found that the United States Geological Survey horizontal control was not in agreement with the United States Coast and Geodetic Survey horizontal control.

The following differences were noted:

Norfleets Mill Pond shown on the quadrangle located at Milners Neck, has been shown on the Map Drawing as part of a marsh area and no definite pond was visible on the photographs.

In the extreme northwest corner of the Map Drawing a pond has been detailed which does not appear on the quadrangle as such but as a part of Exchange Creek.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES: (Continued)

Comparison was also made with the War Mapping Map Manuscript for Survey No. T-8294, scale 1:20,000, by use of the vertical projector, and was found to be in very good agreement except for minor indentations and protrusions in the Mean High-Water Line and Marsh Line.

45. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with the United States Coast and Geodetic Survey Chart No. 529 published September, 1940, issue of March 6, 1944, scale 1:40,000. Due to scale difference only a visual comparison could conveniently be made. Common planimetric detail was found to be in generally good agreement.

Respectfully submitted
October 24, 1944

Ruth E. Rudolph
Ruth E. Rudolph
Asst. Photogrammetric Aid

Compilation and Descriptive
Report Reviewed by:

Henry P. Eichert
Henry P. Eichert
Junior Photogrammetric Engr.

Compilation of Map Drawing
Supervised by:

J. Edward Deal, Jr.
J. Edward Deal, Jr.,
Assistant Photogrammetric Engr.

Approved and Forwarded
October 27, 1944

Fred. L. Peacock
Fred. L. Peacock
Chief of Party, C & G Survey
Officer in Charge
Baltimore Photogrammetric Office

GEOGRAPHIC NAMES

Survey No. T-8065

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Virginia</u>											1
<u>Nansemond River</u>											2
<u>Southern</u>											3
<u>State No. 642</u>											4
<u>State No. 10 Chuckatuck Road</u>											5
<u>Monogram Bombing Field</u>											6
<u>Dumpling Island</u>											7
<u>Oyster House Creek</u>											8
<u>Star Creek</u>											9
<u>Wilroy Swamp</u>											10
<u>Mantonville Point</u>											11
<u>Abraham Point</u>										(not Abreham)	12
<u>Lint Creek</u>											13
<u>Lint Landing</u>											14
<u>Burnetts Mill Creek</u>										(not Brewer Creek)	USCB 15
<u>Maskrat Bluff</u>											16
<u>Conan Creek</u>											17
<u>Pitohkill Creek</u>											18
<u>Thompson Landing</u>											19
<u>Brook Point</u>											20
<u>Western Branch</u>											21
<u>Sack Point</u>											22
<u>Brick Kiln Landing</u>											23
<u>Reids Ferry</u>											24
<u>Exchange Creek</u>											25
<u>Milners Neck</u>											Names underlined in red are approved. 8-18-49 L. Heck 26
<u>Lake Prince</u>											27

DIVISION OF PHOTOGRAMMETRY

Review Report Of

Topographic Survey, Manuscript No. T-8065

Paragraph numbers not used in this review have been adequately covered in other parts of this report.

28. Detailing.

Only one minor change was made on this manuscript during the review. A clearing at approximately latitude $36^{\circ}48'30''$ - longitude $76^{\circ}33'45''$, (west of Nansemond River), was incorrectly shown as a marsh. This area on the photograph appears to be similar to other clearings in the vicinity and dissimilar to other marsh areas.

44. Comparison with Existing Topograph Maps and Quadrangles.

The following existing topographic surveys covering the area of T-8065 have been compared with the manuscript and, in the areas common to both, the shorelines and drainage are in good agreement and cultural features have changed only slightly.

T-1352a	1874	1:10,000
T-1352c	1874	1:10,000
T-1598	1874	1:10,000 (triangulation)
T-6421a	1934	1:10,000
T-6421b	1934	1:10,000
T-8294	1944	1:20,000

This map supersedes the above surveys for nautical charting purposes.

A visual comparison of the U. S. Geological Survey Quadrangle, "Smithfield, Va." - 1:62,500, 1929, with T-8065 shows favorable agreement except the marsh and woodland area, latitude $36^{\circ}46'30''$ - longitude $76^{\circ}33'00''$, (just west of the Nansemond River), where considerable differences exist.

There was a slight discrepancy in the junctions of T-8065 and T-8064 (to the north) in the marsh line, at latitude $36^{\circ}48'30''$ - longitude $76^{\circ}35'30''$. The delineation of the marsh and woodland on T-8065 was correct as compiled and T-8064 has been corrected in this area thus resulting in a satisfactory junction.

** Corrections were not brought forward to the map manuscript from this survey.*

Reviewed by:

Wesley Moseley
Photogrammetric Aid
11/17/46

Reviewed under the direction of:

S. V. Griffith
Chief, Review Section
11/14/46

Approved by:

B. J. Jones 11/15/46
Technical Assistant to the Chief,
Division of Photogrammetry

H. R. Johnston
Chief, Nautical Chart Branch

O. S. Reading
Chief, Division of Photogrammetry

H. J. Crosby
Acting Chief, Division of Coastal Surveys