

5553

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

JUL 26 1955

Acc. No.

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Sheet No. 5553
~~Hydrographic~~

State North Carolina

LOCALITY

~~North Carolina East Coast~~

Pungo River

Pungo Creek

19354

CHIEF OF PARTY

S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1934

5553

Applied to Chart Correction 1231 April 6, 1937 H.E.M.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No.

REGISTER NO. 5553

State North Carolina

General locality Pungo River
~~North Carolina East Coast~~

Locality Pungo Creek

Scale 1:10,000 * Date of photos. ~~survey~~ 10 - 9 - 34, 19

~~Vessel~~ Air Photo Compilation Party No. 18

Reviewed and recommended for approval;

Chief of party Lieut. (j.g.) S. B. Grenell *S. B. Grenell*

Photos plotted by: H. B. Hickman

~~Surveyed by~~

Inked by J. W. Osteen, Jr.

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated December 14, 1934, 19

Remarks: Compilation of aerial photos Nos. M-78 49 to 69

* *Blueprint on scale of 1:10 000*

--NOTES OF COMPILATION--

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnell will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the chart compiled is based upon the information contained herein.

SHEET No. 5553

PHOTO NO. (M-78) 49 to PHOTO NO. 69

BY	START	FINISH
ROUGH RADIAL PLOT <u>S. B. Grenell</u>	<u>2-24-35</u>	<u>2-26-35</u>
SCALE FACTOR (1.000) <u>S. B. Grenell</u>	<u>"</u>	<u>"</u>
SCALE FACTOR CHECKED <u>F. B. Hickman</u>	<u>"</u>	<u>"</u>
PROJECTION <u>A. M. Gruber</u>	<u>3-7-35</u>	<u>3-7-35</u>
PROJECTION CHECKED <u>S. B. Grenell</u>	<u>"</u>	<u>"</u>
CONTROL PLOTTED <u>F. B. Hickman</u>	<u>4-3-35</u>	<u>4-3-35</u>
CONTROL CHECKED <u>John Tassapoulos</u>	<u>"</u>	<u>"</u>
TOPOGRAPHY TRANSFERRED		
TOPOGRAPHY CHECKED		
SMOOTH RADIAL LINE PLOT <u>F. B. Hickman</u>	<u>4-3-35</u>	<u>4-8-35</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>		<u>"</u>
DETAIL INKED <u>J. W. Osteen, Jr.</u>	<u>4-9-35</u>	<u>5-9-35</u>
AREA DETAIL INKED <u>22.6</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>12.7</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>12.2</u>	Statute Miles	
GENERAL LOCATION <u>North Carolina East Coast Pungo River.</u>		
LOCATION <u>Pungo Creek</u>		
DATUM <u>Stdy Cady - 18935</u>	LATITUDE <u>35 - 30' - 25.10" (773.5m)</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>76 - 41 - 54.33" (1369.2m)</u> <i>(unadjusted).</i>	

With reference to the first two paragraphs and the last paragraph on the opposite page: - See pages 5 to 8a of report for compilation T 5550 for a discussion of camera errors in this area and need for more than the average amount of ground control.

Considering the camera errors the triangulation control on this compilation is insufficient. Additional control has been obtained by holding the photo plot to the graphic control location of high water line as indicated by the planetable stations. The planetable stations are closely spaced and fall generally along high water line. The compilation shoreline is in agreement with the graphic control surveys and is as accurate as those surveys and no more so.

The traverse closures are not given in the control survey reports but the sheets appear to have been carefully surveyed and there is no reason to question their accuracy except that the traverses have been rather long, particularly on T 6341 along Pungo River.

The estimate of 10 to 20 meters given on the opposite page is accepted as reasonable for the detail along and near the shore. Back from the shoreline, particularly at the northeast and southwest corners of the sheet and between Pungo River and Broad Creek, the value of 10 to 20 meters may be exceeded somewhat. Due to the errors in camera adjustment the accuracy can be determined closely ^{only} by a ground check.

B.G. Jones

REPORT OF COMPILATION:RADIAL LINE PLOT:

Due to lack of control on this sheet, plot was held on shoreline as near as possible taken from topo sheets by J. A. Bond. T-6341; T-6342.

* No difficulties experienced except with "C" and "D" wings as has been the case with all pictures on this project. As explained in other notes, these prints are off in scale. When too great a difference was noted cuts were omitted.

Control all held except ¹⁹³⁵ Yeatsville, had to be held off slightly in order to check in more closely on Bond's shoreline.

Common points good. *This means that the common points of the parallel strips of photographs are in agreement on the compilation.*

Scale factor 1.00

This sheet joins 5552 on the east - same scale. (1/10,000)

ADJUSTMENT OF PHOTOGRAPHS:

Photographs for this compilation were without excessive tilt. Radial points were well selected and spaced and it was not necessary to establish additional points.

This flight, M-78, was stopped with photograph # 55 near Long. 76 - 42'. Therefore, houses in the vicinity of Yeatsville, falling far out on the wings of the paralleling flight were omitted.

INTERPRETATION:

The photographs were clear and detail sharply defined only within a radius of about eight inches of the "B" prints. At Lat. 35 - 30'; Long. 76 - 43', field notes showed old piling in the water; as these were easily picked up on the photographs they were enclosed by a dashed line on the compilation.

Two groups of piling are shown by dashed lines near station Davis. These were located by use of the topo sheet. T-6342.

All land in this section is flat and low. This necessitates ditches close together for irrigation. It was thought advisable to denote all cultivation by ditch symbols rather than the usual cultivation symbol.

COMPARISONS WITH CONTEMPORARY SURVEYS:

Junctions with adjoining compilations are complete and satisfactory. This compilation was checked with topo sheets "E" and "F" - J. A. Bond, Chief of Party, 1934. No major changes were necessary. T-6341 (E); T-6342 (F)

COMPARISONS WITH OTHER SURVEYS:

There ^{are} ~~were~~ no available charts of this area to check detail with, ~~except~~ the old topo sheets dated 1871 ~~which~~ are obsolete.

ACCURACY AND COMPLETENESS:

* see opposite page.

The amount of probable error in well defined detail ~~is~~ ^{is} not more than 10 meters; in less well defined detail not more than 20 meters.

PHOTOGRAPHS:

No.	to	No.	Time	Date	Stage of Tide
M-78	49	69	11:00 AM	10-9-34	No tide

BRIDGE DATA:

Pungo Creek, Highway - Swing Span. Channel width - 35 feet. Clearance 6 feet above M.L.W. Clearance 3 feet above H. W.

NEW PLACE NAMES:

- W. E. Well Established local name known throughout area.
- L. N. Local name, known in immediate area only.
- C. Charted
- O. S. Appears on old Topo sheet.

Name	Legend	Remarks
Jack Creek	W. E. - O. S.	
Sage Cut	L. N.	
Ward Point	W. E.	
Old Mill Creek	W. E. - O. S.	
Sullivan Point	L. N.	
Graveyard Point	L. N.	From old cemetery located nearby
Spady point	L. N.	
Smith Creek	L. N.	
Little Creek	L. N.	
Scott Creek	W. E. - O. S.	

J. W. Osteen, Jr.
 J. W. Osteen, Jr.
 Draftsman

Field Reviewed by

A. M. Gruber
 A. M. Gruber
 Surveyor

Survey No. T - 5553 ⁴

GEOGRAPHIC NAMES
 Date. ~~July~~ August 2 1935

Chart No. 1231

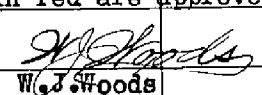
NORTH CAROLINA

Diagram No. _____

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	<u>Deep Run</u> ✓				
✓	<u>Broad Creek</u> ✓				
✓	<u>Yeatesville</u> ✓				
✓	<u>Muddy Island</u> ✓				
✓	<u>Hell Swamp</u> ✓				
✓	<u>Old Mill Creek</u> ✓		Same		
✓	<u>Graveyard Point</u> ✓		"		
✓	<u>Pungo Creek</u> ✓	Same			
✓	<u>Sullivan Point</u> ✓		"		
✓	<u>Spady Point</u> ✓		"		
✓	<u>Ward Point</u> ✓		"		
✓	<u>Jack Creek</u> ✓		"		
✓	<u>Scott Creek</u> ✓		"		
✓	<u>Little Creek</u> ✓		"		
✓	<u>Sage Gut</u> ✓		"		
✓	<u>Smith Creek</u> ✓				
Names underlined in red are approved.					
 W. J. Woods					

REVIEW OF AIR PHOTO COMPILATION T 5553 (1935)
Scale 1:10,000

Comparison with Graphic Control Surveys

(1) On the following graphic control surveys the shoreline has been shown in pencil and was located with an accuracy only adequate for boat sheet purposes. Recoverable details and planetable stations, however, have been located with the usual standards of accuracy, have been used for control of the compilation, and agree with the compilation except in the cases mentioned below.

(2) T 6341 (1935), 1:10,000

There is good agreement of the planetable stations of T 6341 and the shoreline of this compilation.

(3) T 6342 (1935), 1:10,000

There is good agreement of all plane table stations and the high water line of this compilation except five or six of them which are not in agreement by about 0.3 mm.

The position of Cady R. M. No. 2 was transferred in this office by ^{Cady}L.A.M., checked by ^{R.M. Berry}R.M. Berry. All other recoverable details, the groups of piles were transferred in the field.

(4) Over the respective common areas all details shown on T 6341 and T 6342 are shown on this compilation except non-recoverable planetable positions and the magnetic declinations.

Comparison with Previous Topographic Surveys

T 1273 (1872), 1:20,000

The survey for T 1273 covers Pungo River between Wade Point and Pungo Creek. There have been changes of topography here since the time of the survey for T 1273. T 1273 is superseded by this compilation over the common area which is comparatively small.

T 1310 (1873), 1:20,000

The survey for T 1310 covers the northern section of Pungo River and its tributaries. T 1310 shows the stream lines to their source and the swamp which borders these streams. In the areas which are now under cultivation these streams have been changed and the cultivated areas are now drained by a system of ditches. In the wooded areas, however, these streams and swamps are probably in existence at this time but the upper limits of them cannot be seen on the photos. Stream lines are shown on the compilation as far as they can be seen on the photographs.

The private roads shown on T 1310 just south of Broad Creek, and just north of Pungo Creek between long. $76^{\circ} 40.4'$ and $76^{\circ} 42'$ have been abandoned as well as the farms and buildings which they served. T 1310 is superseded by this compilation over the common area except for the steam lines mentioned above.

Comparison with New Hydrographic Survey

H 5873 (1935), 1:10,000

There is good agreement between H 5873 and this compilation over the common high water line area.

Comparison with the chart, No. 1231

Changes to be made to this chart as a result of this compilation are discussed under the comparison with previous topographic surveys.

The report for this compilation does not mention landmarks. The list of landmarks and non-floating aids to navigation which was to have been submitted in a separate report by the party making the graphic control surveys cannot be found in this office. This will probably be filed as a chart letter when it is received.

March 23, 1936

Leonard A. McGowan
v B.G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. *T-5553*.Chief of Party: *S. B. Grenell*Compiled by: *J. W. Osteen Jr.*Project: *F. P. 76. S. B. Grenell*Instructions dated: *Dec. 14, 1934*

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b, c, d, e, g and i; 26; and 64) ✓
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g, n) ✓
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d, e) *None*
Graphic Control Surveys T-6341 and T-6342 (1935) 1/10,000. ✓
cover this area.
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28) *None transmitted ✓*
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report. ✓
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c, h, i) ✓
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44) ✓ ✓
No sand beach in this area.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs." M-67

8. ~~The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)~~
high
no low water lines shown as there is little or no tide in this area. R.am.
9. ~~Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)~~
Submitted by Lt. J. A. Bond
None submitted. -
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
To be Submitted by Lt. J. A. Bond ✓
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c) ✓
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k) ✓
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted. ✓
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) ✓
15. The drafting is satisfactory and particular attention has been given the following:
1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
 2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine black dots. ✓
4. Closely spaced lines are drawn sharp and clear for printing. ✓
5. Topographic symbols for similar features are of uniform weight. ✓
6. All drawing has been retouched where partially rubbed off. ✓
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. ✓

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time. ✓

17. Remarks:

18. Examined and approved;



Chief of Party

19. Remarks after review in office:

Reviewed in office by: Leonard A. McGinnis. March 23, 1936.
v B. J. Jones

Examined and approved:



Chief, Section of Field Records



Chief, Division of Charts



Chief, Section of Field Work



Chief, Division of Hydrography and Topography.