

5556

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

JUL 26 1935

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. T-5556
~~Hydrographic~~

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 23 1936

Acc. No.

State North Carolina

LOCALITY

~~North Carolina East Coast~~

Pamlico Pamlico River

~~North of Pamlico River~~

Willow Point

Photographs taken Oct. 1934

CHIEF OF PARTY

S. B. Grenell

5556

Applied to chart No 832 Jan 21, 1937 R.L.J.
Applied to chart correction 1231 April 15, 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. 5556

State.....North Carolina.....

General locality.....~~North Carolina East Coast~~ Pamlico *Rungo River*

Locality.....~~Mouth of Pamlico River~~ *Willow Point*

Scale *** 1:10,000..... Date of *photos* *Oct 9, 1934* ~~survey~~ ~~1934~~, 19.....

~~Vassar~~ Air photo compilation party No. 18

Reviewed & recommended for approval:

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

photos plotted by:

~~Surveyed by~~ *S. B. Hickman*

Inked by.....J. A. Giles.....

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated.....Dec. 14, 1934....., 19.....

Remarks:.....*compilation of aerial photos nos.: M-78 103 to 116*

** Blueprint on scale 1:10000*

--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. 5556

PHOTO NO. M-78 103 to PHOTO NO. 116

BY	START	FINISH
ROUGH RADIAL PLOT <u>W. H. Bates</u>	<u>4-9-35</u>	<u>4-10-35</u>
SCALE FACTOR (1.00) <u>F. B. Hickman</u>	<u>4-10-35</u>	<u>"</u>
SCALE FACTOR CHECKED <u>S. B. Grenell</u>	<u>"</u>	<u>"</u>
PROJECTION <u>A. M. Gruber</u>	<u>4-13-35</u>	<u>4-13-35</u>
PROJECTION CHECKED <u>J. C. Tison, Jr.</u>	<u>"</u>	<u>"</u>
CONTROL PLOTTED <u>F. B. Hickman</u>	<u>"</u>	<u>"</u>
CONTROL CHECKED <u>John Tassapoufos</u>	<u>"</u>	<u>"</u>
TOPOGRAPHY TRANSFERRED _____	_____	_____
TOPOGRAPHY CHECKED _____	_____	_____
SMOOTH RADIAL LINE PLOT <u>F. B. Hickman</u>	<u>4-13-35</u>	<u>4-16-35</u>
RADIAL LINE PLOT CHECKED <u>S. B. Grenell</u>	_____	<u>"</u>
DETAIL INKED <u>J. A. Giles</u>	<u>4-17-35</u>	<u>5-22-35</u>
AREA DETAIL INKED <u>8.1</u>	Square Statute Miles	
LENGTH OF SHORE LINE OVER 200m. <u>18.6</u>	Statute Miles	
LENGTH OF SHORE LINE UNDER 200m. <u>13.3</u>	Statute Miles	
GENERAL LOCATION <u>North Carolina East Coast Pungo River</u>		
LOCATION <u>Mouth of Pamlico River Willow Point</u>		
DATUM STATION <u>Fortescue, 1935</u>	LATITUDE <u>35-24-56.28" (1734.5M)</u>	
DATUM <u>N. A. 1927</u>	LONGITUDE <u>76-29-49.35 (1245.1M)</u>	<i>(unadjusted)</i>

Refer to pages 5 to 8a, report for compilation T 5550 for a discussion of camera errors in this area and the need for more than the usual amount of ground control.

On this compilation control in addition to the triangulation has been furnished by a traverse along the road from triangulation station Fortescue, 1935 at lat. $35^{\circ} 25'$, long. $76^{\circ} 29.8'$ northward and westward to triangulation station Makleyville, 1933. The greater portion of this traverse falls without the limits of this compilation but by extending the plot across the junction with T 5555 the traverse can easily be of use for control.

The control is adequate to support the estimate of accuracy given on page 3.

The weakest portion of the plot is east of long. $76^{\circ} 28'$ where the detail is well out on the wing with no control stations. In this area errors in location may exceed somewhat the estimate of 10 to 20 meters.

REPORT OF COMPILATION:

RADIAL LINE PLOT:

The standard radial line plot method was used. Some difficulties as experienced in all pictures so far on this project. Some ~~points~~ ^{prints} out in scale. This is especially noticeable on "C" prints. In some cases it was necessary to hold a station on one side of the "C" prints, drawing in cuts around it, then re-adjusting to control on the opposite side for cuts in that area. These intersections are checked by the "D" skews as the plot comes forward. *See opposite page.*

ADJUSTMENT OF PHOTOGRAPHS:

Radial points were well selected and spaced. Very little interlacing was necessary. No excessive tilt. Few additional points necessary and these were obtained by interlacing method. No unusual difficulties encountered.

INTERPRETATION:

In general, pictures were clear with detail sharply defined with exceptions as follows:

Shoreline at (35-24)(76-27.4), detail dim in places. Interpretation doubtful. Pretty far out on wing of M-78 107-C. Interlacing was necessary?

South shoreline of creek at 35-24.4) (76-27.6) doubtful due to overhang of trees. No adjoining flight - Interpretation of shoreline made by study under stereoscope. *Photo No (M-78) 111.*

South shoreline of creek at (35-24.8) (76-27.5) doubtful. Detail far out on wing with trees overhanging shoreline. Stereoscope was used to determine high water line *Photo No (M-78) 111. planetable T-6346*

Shoreline at (35-24.5) (76-32.3) disagrees with topo sheet by an average of 15 meters. Investigation shows that the azimuth of this shore is in error on topo sheet but some of the disagreement may be in interpretation because rodding on ^{planetable sheet T-6346} ~~topo~~ may have included a small mud flat not clear on photograph.

Standard topographical ~~symbols~~ were used throughout this compilation.

COMPARISONS WITH CONTEMPORARY SURVEYS:

Sheet joins sheet #5555 on north at (35-25) all junctions have been made and are complete and satisfactory.

Compilation shoreline was compared with topo sheet "K" by Lieut. J. A. Bond 1935, and discrepancies were adjusted in this office. See General Report by Lieut. S. B. Grenell. *Sheet "K" is T-6346. T-6345 (1934) also covers a small portion of this compilation. Lam.*

COMPARISONS WITH OTHER SURVEYS:

The compilation has been checked with charted area - chart 1231. No detail to be removed from charts. Comparison made with old topo ~~photo-static~~ sheet (#1231) dated 1870. The value of this comparison is doubtful due to obsolescence of ~~these charts.~~ *c this survey?*

*either
Probably means T-1355 (1873) or T-1273 (1870)
Lam.*

ACCURACY AND COMPLETENESS:

This compilation is complete and within the prescribed limits of accuracy, that is, within 10 meters on well defined detail and within 20 meters on less well defined detail.

PHOTOGRAPHS:

No.	to	No.	Time	Date	Stage of Tide
M-78	103	116	10:20AM	10-9-34	Periodic tide-negligible.

NEW PLACE NAMES:
None

None

SEE NEXT PAGE FOR NEW PLACE NAMES

NEW PLACE NAMES

C. Charted
 W. E. Well established
 L. N. Local Name
 O. S. On old topo survey sheets

NAME	LEGEND	REMARKS
^u Carrituck Pt	C - O.S. ✓	
Crooked Cr	W. E. ✓	
Hobbs Cr.	W. E. ✓	
Persimmon Pt	C. - O.S. ✓	
Marie Cr.	L. N.	
Box cr.	W. E. ✓	
Bell Cr.	W. E. ✓	
Berry Cr.	W. E. ✓	
Willow Cr.	W. E. ✓	
Willow Pt.	C. - O.S. ✓	
Mash Rock Cr.	L. N.	
Long Cr.	W. E. ?	
Roos Cr.	W. E.	Spelling doubtful
Raccoon Cove	W. E. ✓	
Little Cove	W. E. ✓	
Big Cove	W. E. ✓	
Spencer Bay	W. E. ✓	
Chellybelle Cr.	W. E. ✓	
House Cr.	L. N.	
Jeanette Cr.	L. N.	
Long Cr.	W. E. ?	
Little Hummock Cr.	L. N.	
Swan Cr.	L. N.	
Short Pt.	W. E. ✓	
Striking Bay	W. E. ✓	
Spencer Pt.	W. E. ✓	
Ditch Cr.	L. N.	
Rattlesnake Cr.	L. N.	
Stave Landing	L. N.	

J. A. Giles
 J. A. Giles
 Compiler

Field reviewed by:

A. M. Gruber
 A. M. Gruber,
 Surveyor

* NOT TO BE CHARTED, BUT OK ON PHOTO COMPILATION.

	Remarks	Decisions
1		
2		
3	*	
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7	*	
8	*	
9	*	
10	*	
11	*	
12	*	
13		
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17		
18	*	
19	GERMANTON ON T1355	
20	*	
21		
22	*	
23	*	
24	*	
25		
26		
27	*	

GEOGRAPHIC NAMES

Survey No. T-5556

Name on Survey	On Chart No. 1231		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								
✓ <u>Pungo River</u>	✓									1
✓ <u>Currituck Point</u>	✓									2
✓ <u>Crooked Creek</u>				✓						3
✓ <u>Hobb Creek</u>				✓						4
✓ <u>Persimmon Point</u>	✓									5
✓ <u>Abel Bay</u>	✓									6
✓ <u>Marie Creek</u>				-						7
✓ <u>Box Creek</u>				-						8
✓ <u>Bell Creek</u>				-						9
✓ <u>Berry Creek</u>				✓						10
✓ <u>Chellybelle Creek</u>				-						11
✓ <u>House Creek</u>				-						12
✓ <u>Spencer Bay</u>				✓						13
✓ <u>Big Cove</u>				-						14
✓ <u>Bell Bay</u>		1355								15
✓ <u>Little Cove</u>				-						16
Long Creek (1)										17
not approved due to duplication										
✓ <u>Jeanette Creek</u>				-						18
✓ <u>Germantown Bay</u>	✓									19
✓ <u>Rattlesnake Creek</u>				-						20
✓ <u>Spencer Point</u>				-						21
✓ <u>Ditch Creek</u>				-						22
✓ <u>Little Hummock Creek</u>				-						23
✓ <u>Swan Creek</u>				-						24
✓ <u>Striking Bay</u>				✓						25
✓ <u>Short Point</u>				✓						26
✓ <u>Willow Creek</u>				✓						27

times into
 3/19/26
 [Signature]

Remarks

Decisions

	Remarks	Decisions
1	*	
2	**	
3		
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5	<i>Perhaps ROSE as per Boy of that name.</i>	
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7		7-110-110
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GEOGRAPHIC NAMES

Survey No. *T-5556*

Name on Survey	Source											
	A	B	C	D	E	F	G	H	K			
<u>Stave Landing</u>				✓								1
<u>Mash Rock Creek</u>				✓							*	2
<u>Long Creek (2)</u>	<i>Not approved due to duplication</i>										3	
<u>Raccoon Cove</u>				✓								4
<u>Roos Point</u>	<i>Not approved until verification</i>										5	
<u>Pamlico River</u>	1231											6
<u>Willow Point</u>	1231											7
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*Chart 1231
L. Clayton 3/19/36*

REVIEW OF AIR PHOTO COMPILATION T 5556 (1934)
Scale 1:10,000

Comparison with Graphic Control Surveys

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

T 6345 (1934), 1:10,000. About 1/2 mile of shoreline on T 6345 is the only common detail with this compilation. There are no discrepancies except where T 6345 joins T 6346 which is discussed under the comparison with T 6346.

T 6346 (1935), 1:10,000. There is a disagreement of stations HIT and CUP at $35^{\circ} 24.5'$, $76^{\circ} 32.3'$. Station HIT is inside the high water line on T 6346 while it falls on the high water line of this compilation. Station CUP is on the high water line of T 6346 while it falls outside the high water line of this compilation. The discrepancy is about 0.7 mm. Agreement of other planetable stations with the compilation shoreline in this vicinity indicates that the difference is one of interpretation rather than of error in the planetable traverse or the photo plot. The compilation has been checked with the photos which are clear and has not been changed. There are no other discrepancies between T 6346 and this compilation.

Comparison with Previous Topographic Surveys

T 1213 (1870), 1:20,000; T 1273 (1872), 1:20,000. Comparison with T 1213 and T 1273 shows that the compilation is complete and adequate in order to supersede those small portions of T 1213 and T 1273 which it covers.

T 1355 (1873), 1:20,000. In addition to adjoining areas covered the survey for T 1355 covers the greater portion of this compilation. There have been large changes of shoreline since the time of survey T 1355. Cultural changes have occurred in the high ground areas along latitude $35^{\circ} 24.5'$. This compilation supersedes T 1355 over the common area.

Comparison with New Hydrographic Surveys

H 5874 (1935), 1:10,000. There are no discrepancies except at station CUP which falls 0.7 mm. outside the high water line. This may not be a discrepancy if the station is some small object in the water. It does not show on the photographs.

Comparison with the Chart

Chart No.1231. The small island at lat. $35^{\circ} 23.7'$, long. $76^{\circ} 30.2'$ in Abel Bay is no longer in existence.

The report for this compilation does not mention landmarks. Chart letter 180 (1936) covers the aids to navigation while chart letter 199 (1936) covers landmarks for the whole project.

March 30, 1936.

Leonard A. McSauer
V.B.G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. *T.5556*Chief of Party: *S. B. Grenell*Compiled by: *J. A. Giles*Project: *Inland Route North Carolina* 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-6346 (1935), covers a large portion of the H.W.L. of this compilation. Partion covered by G.G.S. T-6345 is small. R.A.U. ✓
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) *Control of the plot was not discussed.* ✓
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44) ✓
There is no broad sand beach in this area and no difficulty was experienced in showing the H.W.L. in correct position in places where sand occurs on the beach.

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-87

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)~~ *no low water lines shown* ✓
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 Lieut. J.A. Bond, 1935~~
No recoverable objects submitted on Form 524. ✓
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)
Submitted by Lieut. J.A. Bond, 1935
See. Ch. Letter 180 (1936) non-floating aids to navigation. ✓
Ch. Letter. 199 (1936). landmarks.
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)~~ *None*
No bridges ✓
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) *OK* ✓
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. McSain* March 30, 1936.
Ray Jones

Examined and approved:

C. K. Green.
Chief, Section of Field Records

L. O. Robert
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

W. H. ...
Chief, Division of Hydrography
and Topography.