DESCRIPTIVE REPORT

Airphoto

Topographic

Sheet No. 5569

Form 594
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State  North Carolina

LOCALITY

Alligator River

Albemarle Sound

Alligator River (lower part)

Whipping Creek

Date of photographs Autumn, 1936

CHIEF OF PARTY

S. B. Groenell

U.S. GOVERNMENT PRINTING OFFICE 1936
Applied to closed 8-31- Nov. 4, 1936 FHE.
add note on page one.
on indented right side.
In this area the moon high
not line has been left off
above in the Cypress area
where the pool inundation
showed the ground to be
flooded as receive
in this part the inundation
reach and the base
were where on about#
with the line but
the bed must been inundated
and line was removed.
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. 5569

REGISTER NO. 5569

State. North Carolina

General locality. Albemarle Sound, Alligator River

Locality. Alligator River (lower part) Whipping Creek

$\times$ Scale Factor 1.02

Scale. 1:20,000 Date of survey. Photographs, fall 1934

Vessel. Party # 18

Chief of party. S. E. Grenell

Surveyed by. Aerial photographs

Inked by. S. E. Grenell

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

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

Instructions dated December 14, 1934

Remarks:

Blueprint on scale 1:19608
NOTES ON 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 personnel 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. 5569

M-83

PHOTO NO. 36 TO PHOTO NO. 43

80 BY START 90 FINISH

ROUGH RADIAL PLOT W. R. Taylor 7-16-35 7-17-35

SCALE FACTOR (1.0) W. R. Taylor & S. B. Grenell

SCALE FACTOR CHECKED S. B. Grenell

PROJECTION J. Tassopoulos 7-17-35 7-17-35

PROJECTION CHECKED J. C. Tison, Jr. 7-24-35

CONTROL PLOTTED J. C. Tison, Jr. 7-25-35

CONTROL CHECKED F. B. Hickman 7-25-35

TOPOGRAPHY TRANSFERRED No field topography in this area.

TOPOGRAPHY CHECKED

SMOOTH RADIAL LINE PLOT J. C. Tison, Jr. 8-22-35

RADIAL LINE PLOT CHECKED S. B. Grenell 10-14-35

DETAIL INKED S. B. Grenell 11-27-35

AREA DETAIL INKED 60.0 sq. Statute Miles

LENGTH OF SHORELINE OVER 200 m. 24.5 Statute Miles

LENGTH OF SHORELINE UNDER 200 m. 12.5 Statute Miles

GENERAL LOCATION Albemarle Sound

LOCATION Alligator River (lower part)

DATUM STATION COVE 2 1935 Latitude 35° 38' 51.866 (15984)

Datum: N.A. 1927 Longitude 76° 02' 04.338 (1087)
Refer to pages 5 to 8a, report for compilation T-5556 for a
discussion of camera errors in this area and the
need for more than the usual amount of ground
control.

P.M.,
4/8/56.
REPORT OF COMPILATION:

The radial plot of this compilation was begun by F. B. Hickman, Surveyor, and later completed by J. C. Tison, Jr., A.I.D. The detail was inked by the writer after the party complement was reduced to two officers and one draftsman. Due to the lack of funds, this work was carried on as rapidly as possible and large, heavily wooded areas have been left blank and indicated by notes only on the overlay sheet to save time in inking. In reviewing this compilation, reference should be made to the General Report for Compilations 5557 to 5573, which is attached to the Desc. Report 1-5567.

RADIAL LINE PLOT: (See opposite page)

The plot was run through this compilation with no more than the usual difficulties encountered on all plots on this project. These difficulties are caused by photographic errors as explained in the report mentioned above. The control was adequate for holding the radial plot of all definite detail as compiled and the standard of accuracy is believed to be within the required limits.

The eastern section of this sheet is covered by compilation 5573, scale 1:10,000. Numerous control stations fell within the limits of compilation 5573 and were plotted on this compilation in wash ink and used to hold the radial plot. These stations are not shown on this compilation. The radial plot for this compilation was completed, various radial points were transferred to the 1:10,000 scale photographs of compilation 5573 and their positions transferred by the enlarging projector to the 1:10,000 projection. As the radial plot on 5573 progressed it was noted that these common points checked in exactly - with a few exceptions obviously due to transferring indefinite points from the 1:20,000 to the 1:10,000 scale photographs. This excellent agreement was a check on the accuracy of both radial plots.

ADJUSTMENT OF PHOTOGRAPHS:

With the exception of the detail in the northwest corner of the compilation, most of the definite detail such as shoreline, roads, ditches, etc. fell on or close to the "B" prints and was clear and well defined. The cultivated area in the northwest corner, while quite far out on the wings, was covered by two or three untilted and quite clear prints so it was not difficult to ink in this detail to perfect junctions with adjoining compilations.

INTERPRETATION OF DETAIL:

A greater portion of the "shoreline" of the Alligator River is shown by a broken, wavy line to indicate the indefinite nature of this feature which is not an actual fastland shoreline but rather a wall of dense cypress growing in the shallow water which extends for an indefinite distance back into the dense swamp.

Except where cleared for cultivation, all forested
areas are shown by a dense, mixed growth or by the conventional cypress swamp symbol. This symbol has been carried back from the water areas only for a short distance with the remainder of the photographed area left blank and noted on the overlay sheet as to the nature of the vegetation. These blank areas are actually so densely wooded as to appear on the photographs as a closely woven carpet of vegetation even when examined under a magnifying glass and the stereoscope.

The area covered by the photographs has been indicated in red on the overlay sheet to show how far the unbroken swamp is known to extend; although no symbol has been inked in to denote the extent of this feature.

Due to the limited time allowed for field inspection of this area, the field inspection party was unable to visit any of the three lakes east of the Alligator River so no definite information is available as to the character of the lakes of the limiting width or depth of the passages leading to them. There is apparently no habitation on or around these lakes and no local names for them are known.

PLACE NAMES:

ALLIGATOR RIVER                     Charted
POPLAR RIDGE POINT                   "
WHIPPING CREEK                      "
SWAN CREEK                          "
GRAPEVINE BAY                       "
GRAPEVINE LANDING                   Very well known local name.
RATTLESNAKE BAY                     Local name.

Respectfully submitted,

[Signature]
S. B. Granell,
Jr. H. & G. Engr.,
Chief of Party.
<table>
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<th>Remarks</th>
<th>Decisions</th>
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<td>Alligator River</td>
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<td>Grapevine Bay</td>
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<td>Grapevine Landing</td>
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<td>Rattlesnake Bay</td>
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Names underlined in red and signed by "[Signature]" on 7/21/36.
Comparison with Graphic Control Surveys

T 6370a, T 6370b (1935), 1:10,000 - There are no discrepancies between T 6370a, T 6370b and this compilation. The foul line at Poplar Ridge Point and the stake at lat. 35° 42', long. 76° 03.2' have been transferred to the compilation. All details on T 6370a and T 6370b are shown on this compilation except non-recoverable plane table positions and the magnetic declination.

Comparison with Previous Topographic Surveys

T 285 (1849), 1:20,000. - The survey for T 285 covers the central part of Alligator River. Comparatively large changes of shoreline have taken place in the marsh areas at lat. 35° 44', long. 76° 02.5'. T 285 is superseded by this compilation over the common area.

T 3437 (1914), 1:20,000 - The wharf and fishing camp at lat. 35° 43.6', long. 76° 02.6' are gone. The position of the high water line around these islands has changed.

The road at Grapevine Landing, lat. 35° 43.1', long. 76° 03.7' has been abandoned. An examination of the photographs under the stereoscope shows a drainage ditch here. The compilation is adequate in order to supersede the position of T 3437 which it covers.

Comparison with Charts Nos. 1231, 3252

The report for this compilation does not mention landmarks. According to the reports for T 6370a, T 6370b, there are no landmarks in this area, except the aids to navigation.

The section of road at lat. 35° 43.3', long. 76° 03.8' has been abandoned.

The small object at lat. 35° 40.7', long. 76° 00.6' cannot be seen on the photographs. This is probably the stump which is shown on T 3437 (1914) and H 5914 (1935).

Comparison with New Hydrographic Surveys

H 5914 (1935). There are many stumps, trees, logs awash shown on H 5914 which do not appear on this compilation. They cannot be seen on the photographs.

The sounding records noted a line of piles near Poplar Ridge Point. These piles cannot be seen on the photographs.
There is a canal extending beyond the limits shown on this compilation at lat. 35° 43', long. 76° 08.3'. It runs in a northerly direction through the wooded area to the road at lat. 35° 43.8', long. 76° 08.4'. Through this wooded area it cannot be seen from the photographs and for this reason it is not shown there.

The report for this compilation does not mention the probable accuracy of location. A rough estimate of this error is from 0.5 to 1.0 mm. for intersected points and from 1.0 to 1.5 mm. for other points between intersections.

April 10, 1936.

Leonard A. McMannus

B. G. Jones
REVIEW OF AIR PHOTO COMPILATION NO. T-5569

Chief of Party: J. B. GRENEL Compiled by: J. B. Grene

Project: Party # 18

Instructions dated: 12-14-34

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 wharves, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 20; and 66 g, n) None.

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)

Graphic control surveys T-6370 a and T-6370 b. (1935)

4. Blueprints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 69) 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.

No contemporary field top. surveys
Shoreline checked hydro. survey, J. F. Lyman 1935.

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)

See descriptive report re. cypress shackle

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."
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) None

9. Recoverable objects have been located and described on Form 584
in accordance with circular 30, 1932, circular letter of March 3,
1933, and circular 31, 1934. (Par. 59, 60, and 57)
    No recoverable objects found except road and
    ditch intersections etc. as shown. None

10. A list of landmarks was furnished on Form 587 and instructions
in the Director's letter of July 16, 1934, Landmarks for Charts,
complied with. (Par. 16, 1936)
    Landmarks (only) furnished by R. P. Eymon 1936

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 naviga-
tion is given in the descriptive report. (Par. 16c)
    16 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 M.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 Longi-
tude 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; Jan 30, 1936

[Signature]
Chief of Party

19. Remarks after review in office:

Reviewed in office by: Leonard A. McKeen, April 10, 1936

Examined and approved:

G. K. Green
Chief, Section of Field Records

L. O. Holt
Chief, Division of Charts

Fred L. Peacock
Chief, Section of Field Work

[Signature]
Chief, Division of Hydrography and Topography.