8191

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic Topographic

Field No. Office No. T-8191

LOCALITY

State North Carolina

General locality Brunswick, N. C.

Locality Bolivia, N. C.

CHIEF OF PARTY
FL. Gallen and

LIBRARY & ARCHIVES

Fred. L. Peacock

DATE December 21,1945

8-1870-1 [1

DATA RECORD

T-8191

Quadrangle (II):

Project No. (II):

Bolivia 72 minute

CS-284

Field Office:

Chief of Party:

Myrtle Beach, S. C.

F. L. Gallen

Compilation Office:

Chief of Party:

Baltimore, Maryland

Fred. L. Peacock

Instructions dated (II III):

G... 413 3 4

July 15, Oct. 19, 23 & 27, 1942

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

Completed survey received in office:

July 24, 1943 July 25, 1943

Reported to Nautical Chart Section:

Reviewed: Oct. 8, 1943 Applied to Chart No.

Date:

Redrafting Completed: Wec. 7,1943

Registered:

Published: 1944

Compilation Scale: 1:20,000

Published Scale: /:31,680

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 Datum Plane (III): Mean Sea Level

Reference Station (III): HARVEL, 1932

Let.: 34° 02° 10.298" 317.3 Long.: 78° 09° 20.522" 526.4 Adjusted (1531.4)m (1012.7)m Handjusted

State Plane Coordinates (VI): North Caralina (Single zone)

X = 2,255,824.92 Ft. Y = 105,249.93 Ft.

Military Grid Zone (VI)

Zone "B"

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide				
Nine Lens 8119 to 8122 8130 to 8132 8145 to 8147	Inc. 4/1/42 Inc. 4/1/42 Inc. 4/6/42	12:33p.m. 12:52p.m. Clock stopped	1:20,000 1:20,000 1:20,000	There are no tidal waters within the limits of this map manuscript.				

Tide from (III): No tide computation necessary

Mean Range:

SPring Range:

Camera: (Kind or source) U. S. Coast & Geodetic Survey nine lens camera (focal length $8\frac{1}{4}$)

and contouring
Field Inspection/by: Al

Allen Murphy

ate: Sp

Spring, 1943

Field Edit by: Louis Levin

date: Aug 1943

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

Projection-and-Grids ruled by (III) C. H. R.

date: April 6, 1943

" " checked by:

C. H. R.

date: April 6, 1943

Control Plotted by:

Charles C. Tropp

date: April 8, 1943

Control Checked by:

John M. Reinoldi

date: April 14, 1943

Radial Plot by: Joseph Steinberg, J. Edward Deal, Jr. date: May, 1943

Detailed by: John M. Reinoldi

date: June 8 to July 22,

1943

Reviewed in compilation office by: Henry P. Eichert

date: July 17-22, 1943

Elevations on Field Edit Sheet checked by: Levin

date: Aug 13, 1943

STATISTICS (III)

61 Land Area (Sq. Statute Miles);

Shoreline (More than 200 meters to opposite shore):

None

Shoreline (Less than 200 meters to opposite shore):

None

Number of Recoverable Topographic Stations established:

One Azimuth Reference Monument

Number of Temporary Hydrographic Stations located by radial Plot: none

46 miles Leveling (to control contours) - miles: Unknown

Roman numerals indicated 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:

FIELD INSPECTION REPORT QUADRANGLE T-8191 PROJECT CS-2814 F. L. Gallen, Chief of Party

The vegetation in this quadrangle is chiefly evergreen except in the swampy areas where much brush and deciduous trees exist. There is much second growth pine as some sections have suffered from fires and extensive lumbering.

This quadrangle is crossed by U.S. Route 17 running across the center from W to E and making a sharp turn in a NE direction. This is a class I road, hard surfaced macadam. Several class 3 roads exist, and class 4 and 4 U are very numerous. The lumber companies have built many small woods roads that were an aid to topography, but their value for any length of time is questionable.

The one village in this quadrangle is Bolivia, N.C. (not incorporated), situated on U.S. 17 in the E section of aerial photograph 8120.

Many scattered farms exist in this quadrangle and agriculture seems to be spreading rapidly in this section. New areas are being cleared, and many new buildings are being erected. Although farming is making a bid for the lead, lumbering is still the predominate industry.

- Field inspection in this quadrangle is believed to be complete.
- 3. See report for T-8192
- 4-5. See report for T-8188
- 6. The drainage of this quadrangle is mainly dendritic, many of the streams having rather narrow and deep-cut valleys. These streams account for elevations varying from 2 or 3 feet above sea level up to about 65 feet in the northern section. This type drainage is accompanied by many intermittent gulleys. Sub-surface solution cavities have caused numerous depressions, and intermittent ponds. This can be seen readily on aerial photograph 8120. In the NW part of the center chamber, and to the E along the W.B & S. R.R. The low elevations of some of the streams have caused them to meander and form rather extensive swamps. In general it should be said that the drainage of this quadrangle is typical of country which is undergoing shore-line emergence.

Quadrangle T-8191 - cont.

- 17. Political boundaries will be added by the Field Edit party.
- 19. Junctions with adjacent quadrangles are in agreement.

Submitted by:

Allen Murphy perFLG

Allen Murphy Jr. Topo. Engr.

Approved and Forwarded

F. L. Gallen

Chief Of Party

26 CONTROL:

Six U. S. Coast & Geodetic Survey Triangulation Stations lie within the limits of this map manuscript. They are:

BOLIVIA, 1942
BOLIVIA FIRE TOWER, 1942
BOLIVIA, JOHNSON LUMBER CO. STACK, 1942
GREEN, 1942
HARVELL, 1932
SUPPLY, 1932

In order to assure good identification of the horizontal control on the office photographs, the field inspection party established a Field Inspection Station near the triangulation station SUPPLY, 1932.

This Field Inspection Station is shown with a 2.5mm circle in orange ink on the glossy side of the map manuscript.

Three U. S. Coast & Geodetic Survey Stations lie just outside the limits of this map manuscript. They are:

MILL, 1932 WINNABOW, 1942 PINEY, 1942

Field Inspection Stations were established by the field party near triangulation stations WINNABOW, 1942 and PINEY, 1942.

All of the above horizontal control was used in the establishment of secondary control and detail points.

27 RADIAL PLOT:

Special report for the radial plat is filed in Man Jones

Section of The radial plat is filed in Man Jones

The radial plat can this

The radial plot for this map manuscript is described in Section 4 of the descriptive report of the radial plots for Projects CS-275 and CS-284, which has been submitted to the Washington Office.

28 DETAILING:

Nine lens unmounted photographs were used for the compilation of this map manuscript.

The field inspection on this map manuscript was satisfactory. All drainage and the limits of swamp and low ground areas as field inspected, was verified on the office photographs by stereoscopic examination, and only slight changes were made.

28 DETAILING: (cont'd)

Additional drainage revealed by stereoscopic examination of the office photographs has been shown by a dot and dash symbol.

Where the field inspection party did not furnish this compilation office with the limits of swamp and marsh areas, these areas have been shown with the usual symbol but have not been outlined with a dashed, black acid ink line.

29 SUPPLEMENTAL DATA:

No previous surveys covering the area of this map manuscript were available to the compilation office. A blue-line print of the North Carolina, State Highway and Public Works Commission map of Brunswick County, was furnished the compilation office by the field party.

Paragraphs 30 to 35 Inclusive do not apply to this map manuscript.

There is no data available to this compilation office regarding landing fields or aeronautical aids.

The authorized aids.

The authorized aids.

The authorized aids.

A discrepancy overlay has been prepared to accompany this map manuscript. On it are noted questions concerning interpretation of detail and such notes as are deemed likely to be of assistance during the field edit. Also shown, are the names or numbers of all bench marks, for the use of the Baltimore Compilation Office for identification purposes when scaling the bench marks to establish their geographic positions. A list of general notes is shown to aid in the interpretation of symbols and detail.

The traverse test points Nos. T-1 to T-4 inclusive, of the Horizon-tal Accuracy Test Traverse No. 4 are shown with double circles in black ink and numbered.

38 GEOGRAPHIC NAMES:

The field inspection party furnished a copy of a map of the North LH Carolina, State Highway and Public Works Commission, of Brunswick County. On this map is shown undisputed, disputed, and recommended geographic names for portions of Projects CS-275 and 284. A list of undisputed, disputed and recommended geographic names pertaining to this map manuscript is attached to this descriptive report.

39 HORIZONTAL ACCURACY: The hosizontal accuracy test fell within recurrents the are traverse point which was off

Because of difficulties encountered in the running of main radial plots for Projects CS-275 and 284, the test points for horizontal accuracy test traverse No. 4 were resected on the map manuscript on which they fell. This was done prior to the compilation of the map manuscripts.

The positions of these test traverse points were scaled from the map manuscript and sent to the Washington Office for comparison with the computed geographic positions furnished by the field inspection party.

The results of the horizontal test traverse No. L furnished the compilation office by the Washington Office, indicate that the test > 1 traverse points T-1, 63 T-3 and T-4 which fall on this map manuscript are within the limits of accuracy for planimetric detail as specified in the instructions for war mapping. Traverse test point T-2 is 145.9 meters in error in Latitude with the computed geographic position.

The results of the horizontal test traverse No. 4 will be attached to the descriptive report for the map manuscript for Survey No. T-8198. The traverse test points No. T-1 to T-4 inclusive fall within the limits of the map manuscript for Survey No. T-8191.

40 AZIMUTH REFERENCE MONUMENTS:

One Azimuth Reference monument lies within the limits of this map manuscript. It is:

GREEN, AZIMUTH, 1943

. The position and description of this Azimuth reference monument, is submitted with this descriptive report on Form No. 524.

RECOMMENDATIONS FOR FUTURE SURVEYS:

The planimetric detail as presented on this map manuscript is believed to be complete, but is subject to field edit for corrections, additions, and deletions.

JUNCTIONS: 12

The following satisfactory junctions have been completed with this map manuscript:

On the North, with Map Manuscript for Survey No. T-8185

On the South, with Map Manuscript for Survey No. T-8198

On the West, with Map Manuscript for Survey No. T-8192 On the East, with Map Manuscript for Survey No. T-8190

43 REMARKS:

The description as prepared by the field inspection party adequately describes the area covered by this map manuscript.

山 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

There are no Topographic Quadrangles avilable to this office for comparison. (there are now published)

A general comparison was made with a copy of the North Carolina State Highway and Public Works Commission map of Brunswick County, scaled $1^n = 1$ mile. In general, the agreement was fair.

45 COMPARISON WITH NAUTICAL CHARTS:

There are no nautical charts covering the area of this map manuscript.

Respectfully submitted, July 20, 1943

John M. Reinoldi

Sr. Photogrammetric Aid

Map Manuscript, Discrepancy Overlay and Descriptive Report Reviewed by:

Henry P. Lichert

Jr. Photogrammetric Engineer

Compilation of Map Manuscript Supervised by:

Joseph Steinberg

Asst. Photogrammetric Eng.

and

J./Edward Deal. Jr.

Asst. Photogrammetric Eng.

Approved & Forwarded: July 23, 1943

Fred. L. Peacock

Commander, C & G Survey

Officer-in-Charge

Baltimore Photogrammetric Office

LIST OF GEOGRAPHIC NAMES

Undisputed

Antioch Antioch Bridge Beaver Dam Bay Bell Swamp Road Boggy Branch Boggy Branch Bridge Bolivia Bolivia Branch Bolivia Bridge Bolivia Road Cherry Tree Swamp Clark's Branch Clements Curve Ford Branch Half Hell Half Hell Branch Half Hell Bridge Half Hell Road

Holden Creek Lennon Road Lewis Road Middle Swamp Bridges Midway Branch New Hope Hew Hope Road Nucitt Branch Pinch Gut Bridge Piney Grove Piney Grove Bridge Ramshead Branch Ramshead Bridge Rattlesnake Branch Red Run Sarah's Hole -delate Suburb Suburb Road Sullivan Island

LIST OF GEOGRAPHIC NAMES

Recommended

√Bell Swamp

Lockwoods Folly River

/Middle Swamp

/Pinch Gut Creek

*River Swamp

Scotts Branch

Disputed

Bell Swamp Creek

Lockwood Folly River

Middle Swamp Creek

Piney Grove Swamp

River Swamp Creek

Beaverdam Creek

*Map showing Geographic Names does not indicate Recommended name.

5

FIELD EDIT REPORT T-8191 PROJECT CS-284

- In field editing the area just west of Bolivia, it was found that a few creeks were misnamed on the map manuscript. The correct names were ascertained after consulting some of the local farmers. The following farmers, who have lived in this area for the past forty years, are given as references: Homer Holden, and L. J. McKeethen of Bolivia, North Carolina.
- The field edit was accomplished by visual inspection, making all additions and corrections on the map manuscript, and transferring all detail to a smooth copy while inking.

The following color scheme was used in inking the field edit sheet.

· FEATURES COLORS

Additions, corrections, wye level elevations and crosses

RED

Deletions

GREEN

Contours

BROWN

Civil Boundaries

VIOLET

- The position and amount of detail on this map manuscript is believed to be complete and adequate.
- A horizontal accuracy test was run in this quadrangle and in quad. No. 8198. Test proved accuracy of plot is within allowable

The vertical accuracy test is the subject of a special

report for project CS-284.

The verticle accuracy test placed to be well within the tequired limits.

Submitted by

Louis Levin per fer.

Louis Levin

Photogrammetric Aid

Approved and Forwarded

F. L. Gallen

Chief of Party

Damanin

No. 1

	Remarks.	Decisions						
1								
2		Road Maps						
3		339782	U.S.G.B.					
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6								
7	Apparently abandoned: listed in May, 1941, Railway Guide, but not in October, 1943.		·					
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	Brunswick County	w									1
	U.S. Highway No. 17	W	>								2
	Lockwoods Folly River	1									3
	Lockwoods Folly Twp	V									4
	Town Creek Twp	W									5
	Smithville Twp	W									6
	Wilmington, Brunswick	and Sou	thern	Railr	pad Cor	pany		(Ab	9.)		7
	N.C. Highway No. 130	W									8
	Suburb	V			K.						9
	Midway Branch	v									10
	Sarahs Hole <	V,_	dalata								11
	Antioch	V									12
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	Rattlesnake Branch		,						1		14
	Half Hell	Vo							1211		15
	Half Hell Branch	1							•		16
	Half Hell Bridge	w .									17
	Half Hell Road	1									18
- 17	Suburb Road	V									19
	Piney Grove	v									20
	Piney Grove Bridge	1									21
	River Swamp	//									22
1	Middle Swamp	V									23
	Middle Swamp Bridges	1/									24
	Pinch Gut Creek	1									25
A.	Bolivia	V									26
	Bolivia Banch	VV									27
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No. 2

Decisions Remarks. Note that this and following name are shifted from the positions on the county map. Names Report listed this name, but it is crossed out and McKeethens Curve substituted: authori- 340781 ty for change not shown. _ 15_ __18 'n Ħ

M 234

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	Red Run	V									1
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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 1:31,660 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/mapmanuscript. 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 wamp-limits; refer to the

published quadrangle for the finally adopted

positions.

Descriptive Report.

Division

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.

Original celluloid 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.284, 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, driveways, 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 Tempa-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 "blueline" 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- 8191

BOLIVIA 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

The horizontal accuracy test fell within the requirments. The one traverse point which was off considerably proved on investigation to be computed wrong.

The vertical accuracy test proved to be well within the required limits. A report of these tests is filed in the <u>Previous Surveys</u> Division of Photogrammetry files.

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.

There are no previous topographic surveys in this area.

Comparison with Nautical Charts Nos.

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:

There are no nautical charts which cover the area of this map manuscript.

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 Oct. 8, 1943

under direction of D. H. Benson

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

Examined and approved:

Chief, Surveys-Branch

Division of Photogrammetry

Chief,-Tepegraphy-Section

of Charts

Surveys