

5222

U. S. COAST & GEODETIC SURVEY
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Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: Georgia

DESCRIPTIVE REPORT

Photo
Topographic
~~Hydrographic~~

Sheet No. 5222

LOCALITY.

VICINITY OF ALTAMAHA SOUND
~~Southwest branch of Altamaha Sound,~~
BUTTERMILK SOUND
~~Coast of Georgia. ATLANTIC COAST~~

1934

CHIEF OF PARTY

Lieut.(j. g.) S. B. Grenell

Applied to nmr competition. chrt. 575 Jan 1937. PBC

Applied to Chart 1242 Mar. 16, 1939 G.K.S.

Applied to chart 574 Dec. 5, 1936 - JFW.

Applied to Chart. 840 Nov. 26, 1935 W.A.B.

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.

5222

REGISTER NO. 5222

State Georgia

General locality ~~Atlantic Coast of Georgia~~ VICINITY of ALTAMAHA SOUND

Locality ~~SOUTHWEST BRANCH of Altamaha Sound~~ BUTTERMILK SOUND

Scale 1:10,000 Date of Photographs: 11/24/33 & 12/18/33

Date of ~~Survey~~ Comp. May, 1934

Vessel

Reviewed and recommended for approval:

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

Photographs plotted by: R. D. Cross

Inked by C. E. Helfrich

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 10, 1933

Remarks: Compilation of aerial photographs Nos. (789) M8 to M9,
M65 to M74, M201 to M205

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. 5222
~~(789)M65 - M74~~ M8 to M9
 PHOTO NO. ~~(789)M201~~ TO PHOTO NO. M205

BY START FINISH

ROUGH RADIAL PLOT _____

SCALE FACTOR (1.000) (Enlargements) _____

SCALE FACTOR CHECKED S.B. Grenell _____

PROJECTION A. A. Futral 3/16/34 3/16/34

PROJECTION CHECKED R. D. Cross 4/9/34 4/9/34

CONTROL PLOTTED R. D. Cross 4/9/34 4/10/34

CONTROL CHECKED A. A. Futral 4/10/34 4/10/34

TOPOGRAPHY TRANSFERRED _____

TOPOGRAPHY CHECKED _____

SMOOTH RADIAL LINE PLOT F. B. Hickman 4/17/34 4/20/34

RADIAL LINE PLOT CHECKED S. B. Grenell 4/20/34 4/20/34

DETAIL INKED C. E. Helfrich 5/7/34 6/9/34

AREA DETAIL INKED 25.3 sq. Statute Miles

LENGTH OF SHORELINE OVER 200 m. 49.9 Statute Miles

LENGTH OF SHORELINE UNDER 200 m. 48.1 Statute Miles

GENERAL LOCATION VICINITY of ALTAMAH Sound
Coast of Georgia

LOCATION BUTTERMILK Sound
Southwest branch Altamaha Sound.

DATUM STATION Butter 1933 Latitude 31° - 18' + 1724.5 m
N. A. 1927 Datum Longitude 81° - 23' + 640.1 m *unadjusted*

INSPECTION REPORT

(1)

SHEET No. 5222

REFERENCE:

In reviewing this sheet reference should be made to the General Report for single lens sheets attached to sheet No. 5206

GENERAL INFORMATION:

This sheet has no particular topographic features not discussed in the General Report of above reference. The fast land areas are heavily wooded with a mixed growth of pine and deciduous trees with the live oak predominating. The undergrowth is generally deciduous with a small amount of scrub palmetto and palm along the fringes. The latter is of such minor importance as to be seldom indicated by symbol.

On the east side of Buttermilk Sound there were once extensive rice fields, now abandoned. Part of the old dyke and ditch system still remains as a prominent topographic feature. On this sheet the dykes have been shown as a double row of sand dots rather than by the standard symbol because the latter is too broad when a ditch is shown parallelling the dyke.

In a few places, where the marsh line is bordered with a flat mud area at low water, the area has been outlined with a light dashed line enclosing a broken marshline symbol to indicate mud flats. These flats are sometimes covered with a sparse growth of grass which is submerged at high water but which appears as the channel edge at low water..

CONTROL:

All the triangulation stations on this sheet were included in the control revision survey of C. M. Durgin, 1932-33. There were no topographic control stations used on this sheet. ^{unadjusted.}

The radial plot was difficult to adjust because there were three flights on the sheet crossing at angles. However, after reinspection and relocation of a few control stations the plot checked through perfectly. The main difficulty was that the original field inspection was made on poor photographs-5-lens, 1:20,000 and later transferred to the single lens prints when they were received.

LANDMARKS FOR CHARTS:

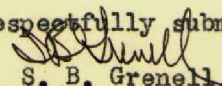
Form 567 was submitted for this area by the party of J. A. Bond, 1934.

COAST PILOT NOTES:

Notes for this area were submitted by J. A. Bond, 1934.

LIST OF NAMES:

All names of topographic features appearing on this sheet were taken from charts of current issue.

Respectfully submitted,

S. B. Grenell,
Chief of Party

REPORT OF COMPILATION:-

COMPILATION METHOD:

Sheet No. 5222 was compiled by the use of radial plot method.

ADJUSTMENT METHOD:-

No difficulty was encountered in running the radial control plot. The drafting was facilitated by the close scale of the photographs and accurate radial plot on this sheet. Very little adjustment was necessary.

INTERPRETATION:-

The photographs were reasonably clear. The photographic detail was interpreted without difficulty.

The usual graphic symbols were used with one exception. Sand dots were used to show broken embankments of abandoned rice fields.

INFORMATION FROM OTHER SOURCES:-

The only information available was from the photographs.

COMPARISON WITH OTHER SURVEYS:-

All junctions with adjoining sheets are accurate and satisfactory.

ACCURACY AND COMPLETENESS:-

The area covered by this sheet is complete in every detail as nearly as can be determined by the photographs.

All well defined detail is located with a probable error of not more than 4 meters; less well defined detail with an error of not more than 10 meters.

PHOTOGRAPHS:-

No.	to	No.	Date	Time	Stage of tide
(789)M8		M10	11/24/33	10:45	3/6
(789)M65		M74	11/24/33	11:45	4/6
(789)M201		M204	12/18/33	10:45	6/8

C. E. Helfrich
C. E. Helfrich,
Draftsman

Approved:

S. B. Grenell
S. B. Grenell
Chief of Party.

REVIEW OF AIR PHOTO COMPILATION NO. 5222

Chief of Party: S. B. GRENNELL

Compiled by: C. E. Helprich

Project: F.P. 4, Ga., Party # 18

Instructions dated: Nov. 10, 1933.

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) *No changes* ✓
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 available at time of plot.* ✓
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) *done* ✓
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. *None available at date of review.* ✓
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) ✓

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)
- ✓ 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)
Form 524 Submitted by Lieut. H. P. Odessy, 1934
- ✓ 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)
Form 567 as per TP #9
- ✓ 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
- ✓ 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. R. 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;

8/28/34

S. B. Schull

Chief of Party

19. Remarks after review in office:

see following pages
see following pages

Reviewed in office by: *D. H. Benson* ✓ *B. G. Jones*
✓ *B. G. Jones*

Examined and approved:

K. T. Adams

Asst Chief, Section of Field Records

L. O. Abbott

Chief, Division of Charts

J. S. Borden

Chief, Section of Field Work

G. W. de

Chief, Division of Hydrography and Topography.

February 21, 1935.

REVIEW OF AIR PHOTO COMPILATION T-5222.

Comparison with other surveys:

The contemporary ^{Graphic Control} plane table surveys show locations of stations for hydrographic and air photo control, no shoreline being shown. The compilation party did not use the plane table surveys as they were not available when the compilation was made, and no field comparison was made between the plane table work and the compilation.

1- Portions of the following ^{1934 Graphic Control} plane table surveys fall within the area covered by the compilation; T-6162(a), T-6163(a), T-6169, T-6197. On T-6169 the recoverable described stations Urt(d), Sen(d), and Tot(d) ^{are} described on form 52-A and were plotted on the compilation by S. A. Blawson, and checked by L. A. Kilsauer. These are the only recoverable stations falling on the compilation except for three beacons, Frederica River Front Range Beacon, named Sad on T-6169, and Buttermilk Sound Front Range Beacon, and Buttermilk Sound Rear Range Beacon, named respectively Nut and Say on T-6163(a). These beacons were spotted on the photographs. The positions were scaled from the plane table surveys and plotted on the compilation by S. A. Blawson, and checked by L. A. Kilsauer.

The compilation and plane table surveys listed above are in agreement. All detail shown on these surveys within the area of the compilation is now shown on the compilation except for temporary plane table stations and the ranges listed below.

(a) T-6169, Frederica River Range 1, $208^{\circ}11'$ from ~~south~~ ^{north} lettered on plane table. Scales $208^{\circ}23'$. The range was probably determined by drawing a line through the range beacon locations on the plane table and scaling. There is no indication that a point was established on the extension of the range to strengthen this azimuth.

(b) T-6169, Frederica River Range 2, $225^{\circ}00'$ from ~~south~~ ^{north} shown on plane table. Scales $225^{\circ}05'$. Probably the range was determined as noted in paragraph (a).

(c) T-6163(a), One Mile Cut Range, $306^{\circ}50'$ from ~~south~~ ^{north} indicated on plane table. Scales $306^{\circ}47'$. Probably determined as noted in paragraph (a).

(d) T-6197, Little St. Simon Island Range $222^{\circ}58'$ from north on plane table. Probably determined as noted in paragraph (a). Scales ~~$223^{\circ}09'$~~ ^{$223^{\circ}09'$} .

(e) T-6163(a), Buttermilk Sound Range, $333^{\circ}28'$ from ~~south~~ ^{north}, determined by locating a point on the range. Scales $333^{\circ}35'$ from ~~south~~ ^{north}.

A great number of temporary topographic stations used for control of the hydrography plot outside the highwater line of the compilation. All these points on the photographs were examined under the stereoscope but some of them could be picked up with the exception of the three beacons noted above. They are possibly stakes or banners placed in the marsh just offshore in shallow water.

Altamaha Sound Beacon No. 3 was not located by the plane table parties and cannot be definitely picked up from the photographs; it is not shown on the compilation.

2- In comparing the compilation with hydrographic sheets H-5581 and H-5631 the only discrepancies noted were differences in shorelines at latitude $31^{\circ}18'$, longitude $81^{\circ}24'$, and latitude $31^{\circ}17'$, longitude $81^{\circ}20'$. As the shorelines were supposedly traced from the compilation the error must have been in tracing.

3- Comparison of the compilation with charts 1242 and 575 show no major changes except (1) that the island at the northern entrance of Buttermilk Sound ~~is now a single island whereas it~~ was formerly two islands and (2) that the larger island at latitude $31^{\circ}19'$, longitude $81^{\circ}21'$ ~~is now a single island where it~~ was formerly two islands, the southeastern island having now joined with the northern one.

(a) Projection. There is a 2 meter shortage in projection between parallels $31^{\circ}15'$ and $31^{\circ}16'$ from meridian $81^{\circ}24'$ to $81^{\circ}26'$.

Douglas H. Benson
J. B. Jones

Approved
K.T. Adams

Survey No. T-5222

GEOGRAPHIC NAMES

Date. Feb. 21, 1935

Chart No. 1242

Diagram No. _____

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

Ø, Not Approved by the Division of Geographic Names, Department of Interior.

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

[illegible]

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CHECK LIST FOR AIR PHOTO SHEET NO. T-5222

1. Sheet indexed.
2. Datum note correct and degrees and minutes correctly marked. *unadjusted*
3. Names compared with charts or G.S. quadrangle sheets and list of new names and conflicting names prepared. *#111 #1242 575*
- ✓ 4. List of names prepared for stick up.
- ✓ 5. Symbols and detail clear for printing.
- ✓ 6. Station points marked by fine black dots. *will have to be retouched on plate*
- ✓ 7. Described 0. stations marked by (d). *Three stations*
8. Junctions with other sheets correct. *not checked in office will be checked when proof comes thru*
9. Compared with other surveys and with charts.
- ✓ 10. Projection correct. *2 meter shortage between parallels 31°15' and 31°16' between meridians 81°24' and 81°25'*
11. Stick up and lettering complete
 - (a) Station names of proper size and type ✓
 - (b) Title block complete
 - (c) Type, clearance and span of bridges shown *no bridges on sheet*
 - (d) Datum note states whether adjusted, un-
adjusted control ✓
 - (e) Sufficient names to make sheet clear and
easy to read. ✓
 - (f) Numbers at upper left and lower right cor-
ners of sheet (Ex. T-5030)
12. Sent to printer.
13. Proof checked.
14. Review completed
 - (a) Title complete
 - (b) Statistics complete
 - (c) Job sheet

- ✓ (g) General description of country ✓
- ✓ (h) Time and date of photos ✓
- ✓ (i) Forces in control and strength of plot discussed ✓
- ✓ (j) Accuracy of location given (discuss in review if desirable) ✓

(k) New and conflicting names discussed *none*

(l) Bridge data complete *no bridges*

(m) Landmarks *no landmarks*

✓ (n) Descriptions on 924 filed in accordance with memo. to Chief, Field Records, of August 21, 1951. ✓

(o) Changes in important detail discussed ✓

(p) Effect of tide variation taken into account.

✓ (q) Only recoverable stations to be shown as on the copies printed for sale ✓

(r) Temporary 0 stations shown where necessary on the file copy with note in the report *none*

(s) Title revised to latest form in use

(t) Review list sheets compared

(u) Statement in review as to method of location of H. W. line on sand beaches. *no sand beaches*

(v) 25 footings, note in review date of additional ground surveys

15. Master's copy ordered.

16. Filed and chart copies ordered.

check junctions