5689

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, *Director*

State: Georgia

DESCRIPTIVE REPORT

~~*Topographic*~~
Hydrographic } *Sheet No.* 6

LOCALITY

Satilla River
Bailey Cut to Ceylon

1935

CHIEF OF PARTY

Hubert A. Paton.

U. S. GOVERNMENT PRINTING OFFICE: 1928

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

Field No. 6

REGISTER NO. 5689

State Georgia

General locality Satilla River

Locality Bailey Cut to Ceylon

Scale 1:10,000 Date of survey May 3, 1934-Jan. 29, 1935.

Vessel Party No. 26

Chief of Party Hubert A. Paton

Surveyed by George W. Lovesee

Protracted by A. H. Beasley

Soundings penciled by A. H. Beasley

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by Ben Schlechman, Sidney Rosen

Verified by L. Michaelson, Ben Schlechman

Instructions dated November 17, and December 5, 1933.

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1931

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. 6
SATILLA RIVER, GEORGIA.
PARTY NO. 26 - PROJECT NO. H. T. 168

February, 1935.

INSTRUCTIONS:

The work on this sheet was done in accordance with instructions dated November 17 and December 5, 1933. Directors Letter dated May 9, 1934, Reference No. 22-RS, 1990(26) placed the Western limits of the work in the vicinity of Bailey Cut. However, the principal part of the field work had been completed prior to that date, so it was decided to complete the smaller streams when the shoreline was received.

LIMITS:

The area covered by this sheet extends from the eastern end of Bailey Cut to a point one mile west of Ceylon. It includes a major portion of Todd Creek, all of Bailey Cut, Noyes Cut, Sparkman Creek, the upper portion of Dover Creek, and the lower portion of White Oak Creek. This sheet joins Sheet 2 on the north east, Sheet 5 on the east and Sheet 18 on the Northwest and west. The junctions were satisfactory in all cases.

DATUM:

The projection on this sheet is on North American 1927 Datum. All of the triangulation stations except TODD 1932 had been computed on North American Datum, using as a base the line Col-Brunswick S. E. Base. The following corrections were obtained by comparison of the adjusted first-order stations in the vicinity and applied to the geographic positions to reduce the values to the desired datum:

Latitude	+ 0.1 meters.
Longitude	+ 1.3 meters.

The topographic signals and the photo-topographic shoreline were on the correct datum and could be transferred without corrections.

SIGNALS:

The topographic signals were located on Sheet H. The hydrographic signals on the Satilla River, above Ceylon, were located by means of one cut taken with an alidade at Station More and a taped distance from the shoreline as traced from the photo-topographic sheet compiled by Lieut. (j.g.) S. B. Grenell.

In White Oak Creek, an attempt was made to locate signals by means of cuts to tangents, streams, etc. These locations were slightly in error because when an attempt was made to locate the sounding lines, by means of three-point fixes, the positions would not plot correctly with respect to the shoreline. It was then decided to run the lines without fixed positions and to locate the soundings by reference to the shoreline. A few of the signals were transferred from the boatsheet because of references made to them in the sounding records.

SHORELINE:

For a description of the character of the shoreline, see descriptive report for Sheet H. The major portion of the shore line shown on this sheet was transferred from photo-topographic sheets mentioned above. Small portions had been located by the topographer and this did not check very well with the lines traced from the photographs. In most cases, this was due to the presence of a "drift line" behind the "edge of grass line" which was more prominent on the photographs. The pencilled dash line is an approximate location of the edge of grass line where not furnished by the topographers. In the northeast portion of the sheet, the two methods failed to join and it was necessary to return to the vicinity and locate considerable more shoreline. The photographs were very poor in this area and it was hardly possible to determine any shoreline with accuracy. After some portions had been located by plane-table, the photo-topographic sheet was revised and in every case the error was one of judgment as to character of terrain and not an error of plot.

shore line made to agree with Air photo comp

It is recommended that in the areas where there are both an "edge of grass line" and a "Drift line", that both lines be used in the compilation of the charts, one as the limits of the marsh grass and the other as the storm high water line.

SURVEY METHODS:

All soundings were taken with a hand-lead-line, marked in fathoms and feet. The weight of the lead was ten pounds. The sounding launch was the "Harvey M" which has a draft of about 2 feet. All positions in the Satilla River, Bailey Cut and Dover Creek were located by three-point fixes.

The streams were developped by a system of sounding lines run parallel to the banks. In the Satilla River, cross lines were run every half mile.

CHANNELS:

In the Satilla River, the controlling depth on this sheet is 10 feet. This sounding occurs slightly southeast of mid-stream, opposite the east end of Bailey Cut. The channel in the Satilla is not well defined and is adjacent to many shoals. These shoals make out from each point in a down-stream direction, and present a danger to the smallest crafts.

To proceed up the river, from the black can buoy #7, about one-half mile east of the eastern end of Bailey Cut, set a course of 214°(true) and proceed 1.3 miles until the point on the north bank bears 293°(true). Change Course to 288°(true) and proceed about 0.6 mile until the point is abeam to starboard about 100 yards. Favor the right bank, keeping about 150 yards off-shore, for 0.9 mile until the west end of Bailey Cut has been passed and then change to 246° (true) and proceed about 1.0 mile clearing the point on the left bank by 150 yards. When the point on the right bank bears 312° (true) change course to 297°(true) and proceed 0.4 mile until the point is abeam. Proceed northward keeping within 150 yards of the right bank for one mile until Crow Harbor Reach is open to the west. Steer a mid-channel course for 1.0 mile until Crow Harbor Island (a clump of trees in the marsh) is abeam to starboard. Favor the starboard bank until White Oak Creek is passed and then follow mid-channel courses. The dock at Ceylon is delapidated but tugs moor there occassionally in stormy weather.

The portion of White Oak Creek shown on this sheet is free of dangers. The least depth is 18 feet.

To enter Bailey Cut, from the east, a least depth of 9 feet will be encountered on the shoal to the east of the entrance. The western entrance is deeper as 15 feet can be carried up to the mouth of Noyes Cut.

Noyes Cut has numerous openings leading off to shoal water, but with care a depth of 7 feet can be carried through it into Dover Creek. A depth of 9 feet can be carried eastward through the section of Dover Creek shown on this sheet by keeping in mid-channel. Shallow draft boats drawing not more than two feet can proceed 1½ miles up Sparkman Creek.

In Todd Creek, a depth of 9 or more feet can be carried up the section shown on this sheet for 3.2 miles to Longitude 81° 34'. From this point the stream shoals gradually to a depth of one foot about one mile upstream.

The intracoastal water way does not touch this sheet. The western one of the two recommended routes crosses the Satilla River from the mouth of Dover Creek to the mouth of Todd Creek. In bad weather, this crossing is difficult for small boats, being exposed to St. Andrew Sound to the east. If a cut $\frac{1}{8}$ mile long could be dug between Todd Creek and the Satilla River, a third route through Dover Creek, Noyes Cut, and Bailey Cut would be available, which would be protected from northeast gales.

COMPARISON WITH PREVIOUS SURVEYS:

The previous survey of the Satilla River was made by the U. S. Engineers in 1909, and there have been a few slight changes. The Channel in Latitude 30° 58.4', Longitude 81° 33.1' is about the same but the shoal to the west now bares at Mean Low Water where it was three feet before. There is another shoal in Latitude 30° 58.5', Longitude 81° 34.9' with $\frac{1}{2}$ foot of water where 3 feet was shown before. In Latitude 30° 58.7', Longitude 81° 36', there is now three feet where six feet was before.

In Latitude 30° 59.3', Longitude 81° 36.5', there is $\frac{1}{2}$ foot in place of 4 feet.

The least depth in Crow Harbor Reach is now ~~12~~ 12½ feet instead of 13 as shown on the charts. The shoal to the south of the mouth of White Oak Creek has built up about two feet and has a least depth of 16 feet.

The east entrance to Bailey Cut is now 3 feet less than in 1909. White Oak Creek has shoaled very little since the last survey. For the other streams, no comparison can be made because this is probably the original survey of them.

GEOGRAPHIC NAMES:

Little information could be obtained in the field because very seldom were any of the local inhabitants encountered. The following names are shown on Geological Maps and are recommended to be retained on the charts: Sparkman Creek, Bailey Cut, Ceylon, Dover Creek, Noyes Cut, and Todd Creek. The following names have not been used on our charts previously but are shown on Geological maps and are in common local use: White Oak Creek, Pine Island.

On Chart #450, the name Crow Harbor appears. The Geological Map has a Clews Harbor Island for this feature. No local information was obtained for the name of this clump of trees, so no recommendations, to change these names, can be made. Likewise, no information was obtained for Crow Harbor Reach and Pull and Be Damn Reach.

Chart No. 450 shows two creeks south of Ceylon both named Lang Creek. On the Geological Map, this name is applied only to the western one and as it is the larger of the two, it is recommended that it be used in like manner on the charts.

neither name shown on this survey VDB

MISCELLANEOUS:

There are no non-floating Aids to Navigation in this area. There is one floating aid--a black can buoy No. 7 (See Signal SEN). For List of Landmarks see descriptive report for Sheet H.

In the marshy area west of Noyes Cut, there are numerous clumps of grass which were not traced from the photographs. The sounding lines should be made to curve around these spots if their location can be obtained.

very shoal unimportant area.

A small portion of the shoreline in Todd Creek fell off the sheet. This section of the creek is shown in a small insert exactly one minute to the west of its true position.

Signal DEC, at the mouth of Sparkman Creek, is on the tip of a narrow neck of grass. The shoreline should be extended as shown by the pencilled line. — This has been done in agreement with Air photo Comp.

It is believed that this survey is adequate, considering the commercial importance of the streams at present. No further surveys are recommended.

STATISTICS:

Total number of positions	1,743
Total number of soundings	9,310
Statute miles of sounding lines	233

Respectfully submitted,

George W. Lovesee

George W. Lovesee,
Lieut. (j.g.) U.S.C.&.G.S.
Hydrographer.

APPROVAL SHEET
TO ACCOMPANY SHEET 6

This sheet and accompanying records have been inspected. It is believed this survey is adequate for all purposes at present.

In Latitude 30° 58.5', Longitude 81° 33.3', a "split" should have been run to determine the limits of shoal water; however, the channel here is quite wide and deep and the draft of most of the vessels using this stream is less than five feet, so it was not considered important enough to send a party back for this one line.

Approved and forwarded,

Hubert A. Paton

Hubert A. Paton,
Lieut., C. & G. S.,
Chief of Party.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5689

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	1743
Number of positions checked	50
Number of positions revised	1
Number of soundings recorded	9310
Number of soundings revised	60
Number of signals erroneously plotted or transferred	0

Date:

Verification by IRVIN MICHAELSON
Ben Schlachman
Time: {29 hrs / 44 hrs

Review by V.D. BEHN
R.J. Christman
Time: 12½ hrs
1¾ "

Survey No. 5689

GEOGRAPHIC NAMES

GEORGIA

Date. March 19, 1935

Chart No. [redacted] - 450

Diagram No. 1242-2

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

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

Under investigation. Q

MAY 8. 1935.
Names underlined in red approved H. Woods

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
-	White Oak Creek (~~Whiteoak~~ one word)	white oak Cr	USGS Quad	Bladen	175
-	Dover Creek	Same			200
-	Noyes Cut				140
-	Sparkman Creek				140
-	Bailey Cut				175
	~~Crow Harbor~~				
	Crow Harbor Reach				140
	Pine Island				175
-	Ceylon				140
	Satilla Bluff				120
	Lang Creek				
	Satilla River	Same			240
do not chart CKG →	Pull and Be Damn Reach				140
-	Todd Creek				175

APPROVED NAMES UNDERLINED IN RED

HJW.

(M-136)

Lac

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Ed. Feb. 1935

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 6, 1935.

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5689

Locality Bailey Cut to Ceylon, Satilla River, Ga.

Chief of Party: H. A. Paton in 1934-1935
Plane of reference is mean low water reading
1.8 ft. on tide staff at Dover
15.4 ft. below B.M. 1
3.4 ft. on tide staff at Todd Creek
10.8 ft. below B.M. 1
2.4 ft. on tide staff at Baileys Cut
8.6 ft. below B.M. 1
2.7 ft. on tide staff at Ceylon
17.9 ft. below B. M. 1
2.8 ft. on tide staff at Floyd Creek
14.5 ft. below B.M. 1

Height of mean high water above plane of reference is 7.0 feet at Dover; 6.7 feet at Todd Creek; 6.9 feet at Baileys Cut; 6.6 feet at Ceylon; 7.1 feet at Floyd Creek.
Condition of records satisfactory except as noted below:

Paul P. Whitney

Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE

Section of Field Records

Report on H-5689
Chief of Party - Hubert A. Paton
Protracted by A. H. Beasley
Verified by { I. Michaelson, B. Schlachman
Inked by { B. Schlachman, S. Rosen

Surveyed in May 1934 - Jan. 1935
Surveyed by George W. Lovesee
Soundings plotted by A. H. Beasley

1- The records are legible, neat, and complete, conforming to the general requirements of the Hydrographic Manual. However, a note relative to a black buoy was omitted near position 93M, but was referred to in the descriptive report. The location was gotten from sheet H-5698. ✓

2- The usual depth curves can be completely drawn. ✓

3- Soundings were correctly plotted. Only 0.6% of the total soundings needed revision. The protracting was excellent. Only one position was found to be incorrect. 86E was plotted with a wrong signal, and was 90 meters off. In this survey, crossings were few, but good. ✓

4- The drafting done in the field was good. The curves were put in lightly with pencil which made it easier to erase. The lettering of day letters and positions were good. ✓

5- The sheet was compared with the air-photo compilations T-5127, T-5128. A portion of the shore line was revised. A grass line and "drift" line was shown, (see boat sheet and descriptive report) but this was changed to follow the shore line of T-5127. The revision was made by proportional dividers. No low water line was shown. ✓

6- Junctions:

On the East by H-5698
On the West by H-5691
On the North-East by H-5686

Overlap from sheet H-5691 was made. Overlaps from the remaining sheets were not made since these have not yet been verified. ✓

Respectfully submitted,
B. Schlachman

July 10, 1935

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5689 (1934-35) FIELD NO. 6

Bailey Cut to Ceylon, Satilla River, Georgia
Surveyed in May 1934 - January 1935
Instructions dated November 17 and December 5, 1933 (H. A. Paton)

Hand Lead Soundings

3 Point Fixes on Shore Signals. Positions in White Oak Creek spotted in reference to the shore

Chief of Party - H. A. Paton.
Surveyed by - G. W. Lovesee.
Protracted and soundings plotted by - A. H. Beasley.
Verified by - I. Michaelson and B. Schlachman.
Inked by - B. Schlachman and S. Rosen.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

The Descriptive Report is clear and comprehensive and adequately covers all matters of importance.

2. Compliance with Instructions for the Project.

This survey complies with the instructions for the project.

3. Sounding Line Crossings.

Cross lines, as well as adjacent parallel lines, are in good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves can be satisfactorily shown.

5. Junctions with Contemporary Surveys.

a. The junction with H-5691 (1935) on the north and west is satisfactory.

b. The junctions on the east with H-5698 (1934-35) and H-5686 (1934-35) will be considered in the reviews of those sheets.

6. Comparison with Prior Surveys.

There are no prior surveys by this Bureau within this area.

7. Comparison with Chart No. 450 and No. 1242.

a. Hydrography.

(1) Within the area of the present survey Chart No. 450 is based on surveys made by the U. S. Engineers in 1909-10 (Bp's. 13827 and 13828). These surveys are in fair agreement with the present survey. However, in view of the closer development on the new survey, it should supersede these Engineers' surveys for future charting.

(2) Within the area of the present survey Chart No. 1242 is based on the U. S. Engineers Surveys of 1909-10 discussed in paragraph 7a of this review, together with their surveys (Bp's. 25833 and 25834) made in 1932. These latter surveys are in fair agreement with the present survey. However in view of the completeness and more recent date of the present survey it should supersede the U. S. Engineers surveys for future charting.

b. Aids to Navigation.

Within the limits of the survey the only aid to navigation is a black can buoy No. 7, in latitude 30° 59.4' longitude 81°32.7', near the eastern end of Bailey Cut. The position of this buoy as shown on the new survey is approximately 350 m. north and 225 m. east of its charted position. The origin of the charted position could not be determined.

c. Controlling depths.

The controlling depth of Satilla River to Owens Ferry is charted as 9 feet by authority of chart letter No. 390/12 (1930). Within the limits of this survey the controlling depth is 10 feet, which is found near the eastern limits of the survey.

8. Field Plotting.

The field plotting and protracting are satisfactory and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete and no additional work is required.

10. Superseding Old Surveys.

There are no prior surveys of this bureau within the area of this survey.

11. Reviewed by - V. D. Behn, July 25, 1935
and R. J. Christman, July 25, 1935.

Inspected by - R. L. Johnston.

Examined and approved:

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

L. O. Colbert
Chief, Division of Charts.

F S Borden
Chief, Section of Field Work.

G Rude
Chief, Division of H. & T.

25 Jan 6, 1936

applied to chart 448 Sept. 1937 JSH.

" to extension of chart 448 and March 1938

applied to Chart 1242 Mar. 16, 1938 G.H.S.