

5691

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic } Sheet No. 18
Hydrographic }

State Georgia

LOCALITY

Vicinity St Andrew Sound
White Oak Creek and Satilla

River (upper part)

193

CHIEF OF PARTY

Hubert A. Paton.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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MAR 16 1935
Act. No. _____

REG. NO.

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. 18

REGISTER NO. 5891

State Georgia

General locality Vicinity St. Andrew Sound
~~White Oak Creek and Satilla River~~

Locality White Oak Creek & Satilla River (upper part)

Scale 1:10,000 Date of survey January 5 - 16, 1935.

Vessel _____ Party No. 26

Chief of Party Hubert A. Paton

Surveyed by George W. Lovesee

Protracted by Owen E. Fang

Soundings penciled by Owen E. Fang

Soundings in ~~fathoms~~-feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by _____

Inked by A. Stiles

Verified by " " _____

Instructions dated November 17 and December 5, 1933.

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET No. 18
WHITE OAK CREEK AND SATILLA RIVER, GEORGIA.
PARTY No. 26 - PROJECT No. H. T. 168

February 5, 1935.

INSTRUCTIONS:

The work on this sheet was done in accordance ✓
with instructions dated November 17 and December 5, 1933.

LIMITS:

This sheet is a survey of the following streams:
(1) A portion of the Satilla River from the bridge on Federal
Highway No. 17 down stream to Satilla Bluff. ✓
(2) White Oak Creek from the bridge on the same highway to a
point about $2\frac{1}{2}$ miles (by water) above its mouth, ✓
(3) Waverly Creek, Quarterman Creek and minor tributaries.

The work joins Sheet No. 6 on the east, where
satisfactory junctions were obtained.

The entire sheet is outside of the limits set by
the Office. See Director's letter dated May 9, 1934, reference ✓
No. 20-RS, 1990 (26). The work was undertaken because a portion
of it was covered by Chart No. 450, published by this Bureau,
and because the field work could be done very economically at
this time. The hydrographic survey required the equivalent of
only 3 days and the shoreline had been traced.

DATUM:

The datum used on this sheet is "North American,
1927". The reference station "George" is the only one which ✓
falls within the area of the large section of the smooth sheet.
No attempt was made to recover this station.

SIGNALS:

The usual Coast Survey methods were not followed ✓
on this sheet.

Signals Gab, Old, Fob, End, Art, May, Jay, Lad, and ✓
Pat were located with the plane table equipment by taking cuts
from triangulation Station MORE, plotted temporarily on boat-
sheet in correct relationship with shoreline.

The distance from the signal to shoreline was measured with a steel tape and this distance plotted on the cut to each signal. These cuts were transferred from the boat sheet and the signals plotted the correct distance from shore. All other signals shown on the boat sheet served only as a guide for the hydrographer, and only Signal Ink was transferred. Sextant angles taken to these signals would not plot accurately as they were located only with reference to shoreline.

SHORELINE:

All the shore line on this sheet was traced from a topo-photographic sheet compiled by Lieut. (j.g.) S. B. Grenell.

SURVEY METHODS:

All soundings were taken with the hand lead line. The sounding vessel was a small launch drawing $2\frac{1}{2}$ feet. The sounding lines were run parallel to the shoreline.

The positions marked in the record book "S.B.S.", (see boat sheet), were spotted on the boat sheet in relation to the shoreline, mouths of small streams, points, etc. The accuracy of these locations can readily be seen by an examination of the boat sheet as follows: All fixes taken opposite and east of signal Lad are sextant fixes and are, therefore, fixed positions. All fixes taken west of signal Lad are determined by the judgement of the hydrographer. As the launch was traveling with the same rate of speed on each sounding line, it can be seen that the spacing of soundings between fixes is the same both above and below signal Lad. Also the lines are spaced with the same degree of accuracy.

CHANNELS:

The channels in the large streams shown on this sheet are unusually deep and broad. In the Satilla River, the controlling depth is 19 feet; found about $\frac{1}{2}$ mile down stream from Halifax.

20

In White Oak Creek, ~~22~~ feet can be carried upstream to Latitude $31^{\circ} 02.4$, Longitude $81^{\circ} 40.3$. Twelve feet can then be carried $\frac{3}{4}$ of a mile farther to the junction with Waverly Creek. Above this point, White Oak Creek shoals gradually, with a least depth of 4 feet near the bridges.

In Waverly Creek, a depth of six feet or more will be found for $2\frac{1}{2}$ miles above its mouth. The bottom characteristic in all these streams are generally hard sand in the channels and sticky mud near the banks.

DANGERS:

There are no dangers on this sheet except the old piling near the shoreline on both banks of the Satilla River and near the heads of all branches of White Oak Creek. In former years there were many docks in both of these streams, and the rotten piling remain, many of which are broken off below low water. Any vessel navigating near the banks of these streams should proceed with caution. There are no bars or shoals in the two principal streams on this sheet that would interfere with any vessel able to navigate to this vicinity.

COMPARISON WITH PREVIOUS SURVEYS:

There has been very little change in the Satilla River since the last surveys, (U. S. Engineers 1910). The shoal on the south side of the stream just below the bridges has changed in shape. The channel below Halifax has deepened about one foot.

There are no previous surveys of the other streams available-probably this is the original hydrographic survey of them.

DISCREPANCIES:

No discrepancies were found in the course of the survey in either depths or positions. No discrepancies in location of signals were found except as mentioned under a previous heading.

GEOGRAPHIC NAMES:

During the progress of the field work on this sheet, no local inhabitants were encountered; so there was little opportunity to obtain information in regard to the names. On the Satilla River, all of the names shown were taken from Chart No. 450. There is one error on this Chart however. In the vicinity of Piney Island Creek, two Piney Islands are shown. The north easterly one is in error. On the blue prints of the original surveys, the U. S. Engineers show a signal at this point names "Piney Island". This was probably mistaken for an island.

The following names, shown in the vicinity of White Oak Creek, are all taken from U. S. Geological Survey Maps: Canoe Swamp, Goat Island, White Oak (town), Red Bluff, Quarterman Creek, and Waverly Creek. It is recommended that these names be adopted for use on the charts. There are two names shown on the above maps which were not placed on this sheet: Heads Creek and Bearskull Creek. These streams are now too small to require names.

STATISTICS:

Total number of Positions.....409
Total number of Soundings.....3628
Statute miles of sounding lines..... 86.9

MISCELLANEOUS:

There were no objects of sufficient prominence to be listed as land marks. No recoverable stations were established. There are no aids to navigation on this sheet.

These streams have little commercial importance at present. It is believed the survey is sufficient for all purposes and no further work is recommended.

Respectfully submitted,

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

TO ACCOMPANY SHEET 18

This sheet and accompanying records have been ✓
inspected and are approved.

Hubert A. Paton
Hubert A. Paton,
Chief of Party.

April 29, 1935

Division of Hydrography and Topography:

EE

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

Tide Reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 5691

Locality White Oak Creek and Satilla River (Upper part), Georgia

Chief of Party: H. A. Paton in 1935
Plane of reference is mean low water, reading
2.7 ft. on tide staff at Ceylon
17.9 ft. below B.M. 1

Height of mean high water above plane of reference is 6.6 feet

Condition of records satisfactory except as noted below:



Acting Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. ..5691

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

Number of positions on sheet	409
Number of positions checked	91
Number of positions revised	0
Number of soundings recorded	3628
Number of soundings revised	20
Number of signals erroneously plotted or transferred	0

Date: MAY 17 (1935)

Verification by A Stiles

Time: 49 hours

Review by


Leah Brown

Time: 5 hr.

Verification Report H 5691 (1934)

- 1 The records conform to General Instructions ✓
- 2 Generally the depth curves were completely drawn. only in cases of congestion were curves curtailed or partly omitted
- 3 The smooth sheet was checked with the boat-sheet and all positions showing possibility of error were checked
No errors in positions were found -
- 4 A number of soundings were changed to conform with sounding record.
- 5 The junction with H 5689 - (1934 - 5) the only adjoining sheet was not made the sheet not having been completely verified

Comparison with this sheet and T 5127 also
T 5128 has been made and found to be correct ✓

Respectfully submitted by ✓
A Stiles. 

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5691 (1935) FIELD NO. 18

White Oak Creek and Satilla River (upper part)

Vicinity of St. Andrew Sound

Surveyed in 1935

Instructions dated Nov. 17 - Dec. 5, 1933 (H.A.Paton)

Hand Lead Soundings - 3 Point Fixes on Shore Signals and positions spotted
on boat sheet in relation to shoreline.

Chief of Party - H. A. Paton.

Surveyed by - G. W. Lovesee.

Protracted and plotted by - O. E. Fang.

Verified and inked by - A. Stiles.

1. Condition of Records.

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

No list of landmarks for charts on form 567 was submitted. The Descriptive Report states that there are no landmarks of prominence within the area of the sheet.

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

2. Compliance with Instructions for the Project.

This survey complies with the instructions as intended for minor waterways. The control for the hydrography can only be considered approximate as there is no control other than the shoreline. Because of the numerous side creeks to aid in the control and because the main creeks are not over 200 meters wide, it is considered that the survey is satisfactory in this particular case.

3. Sounding Line Crossings.

No system of cross lines were run, however, the agreement of soundings on adjacent parallel lines is satisfactory.

4. Depth Curves.

The usual depth curves can be drawn except where the slope is steep, in these places the most representative curve or curves have been shown.

5. Junctions with Contemporary Surveys.

The junction on the south and east with H-5689 (1934-35) will be considered in the review of that survey.

6. Comparison with Prior Surveys.

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

7. Comparison with Chart No. 450.

The chart is based on surveys made by the U. S. Army Engineers in 1909-10 (B. P. #13828 and B. P. 13829). There is good general agreement between these surveys and the present survey. Because of the closer development on the present survey together with the fact that there are no important shoals on these blue prints not shown on the present survey, the latter should supersede B. P. #13828 and B. P. 13829 for charting purposes.

The Old Wharf and piling (charted) in the vicinity of Satilla Bluff (Lat. $30^{\circ}57.2'$, Long. $81^{\circ}40.94'$) also originated with the above engineers survey, but are not shown on the present survey. Since the sounding line 43 and 44D (red) runs practically over the charted positions of the piling and very close to the "Old Wharf" and no mention of these features was made in the remarks column, it is probable that they no longer exist. It is also noted that the old wharf and piling are not shown on the Air Photo Compilation sheet T-5128. They should be disregarded in future charting.

8. Field Plotting.

The field plotting is satisfactory.

9. Additional Field Work Recommended.

No additional field work is required.

10. Superseding Old Surveys.

There are no surveys by this bureau within the limits of the present survey.

11. Reviewed by - L. S. Straw, June 13, 1935.

Supervised by - A. L. Shalowitz.

Examined and Approved:

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

A. L. Shalowitz
Chief, Section of Field Work.

L. O. Dolbert
Chief, Division of Charts.

G. H. de
Chief, Division of H. & T.

25 Jan 6, 1936
E.H.L.

applied to chart 448 (extension) April 1938, J.G.L.