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

DESCRIPTIVE REPORT

Topographic

Hydrographic

State

South Carolina

Locality

North & South Santee Rivers

Vicinity of Atchison Creek

193 5

Chief of Party

[Signature]

U.S. GOVERNMENT PRINTING OFFICE: 1934
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. R2

REGISTER NO. T6296a

State: South Carolina

General locality: North & South Santee Rivers

Locality: Vicinity of Atchison Creek

Scale: 1:10,000 Date of survey: November 19, 1934

Vessel: Party No. 19

Chief of party: Benjamin H. Riggs

Surveyed by: Addison S. Hall

Inked by: Addison S. Hall

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated: October 19, 1933.

Remarks: Geographic Names had been inked on sheet before it was discovered that they should have been left in pencil.
OUTLINE

1. INSTRUCTIONS.

2. PURPOSE OF SURVEY.
   A. Hydrographic Control.
   B. Establishment of Permanent Stations.
   C. Location of Topographic Detail.

3. LIMITS OF SHEET.

4. DESCRIPTION OF TERRITORY.

5. CONTROL.

6. SURVEYING METHODS USED.

7. PERMANENT STATIONS.
   A. U.S.E.D. Reference Marks.
   B. Other Permanent Stations

8. AIDS TO NAVIGATION.

9. LANDMARKS AND NAMES.

10. TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR-PHOTO COMPILATION.
INSTRUCTIONS

The survey was carried out under instructions dated October 10, 1933, also Director's Letters 22 Mg 1990 (19), 26 - AHJ 293, and circular letter No. 30.

PURPOSE OF SURVEY

The purpose of the survey was to establish control for hydrography, to establish permanent stations, and to locate topographic detail.

LIMITS OF SHEET

Sheet RR includes the North Santee River from Lat. 33° 11.2', Long. 79° 21.0' southeastward to its junction with the Intracoastal Waterway at Lat. 33° 10', Long. 79° 18'. It also includes the South Santee River from Lat. 33° 10', Long. 79° 22', southeastward to its junction with the Intracoastal Waterway at Lat. 33° 08.5', Long. 79° 19.5'.

DESCRIPTION OF TERRITORY

The territory included by sheet RR consists mainly of abandoned rice fields overgrown with scattered trees, bushes, and cane grass ten feet high. Both the North and South Santee Rivers, which wind through this region, are lined with a dense growth of tall trees extending in most cases, to the very water's edge, and frequently actually overhanging the banks. The region is owned by several shooting clubs.

CONTROL

The following triangulation stations were used as control on sheet RR:

Bear 1934
Santee 1932

Additional control was established by locating permanently marked hydrographic stations by means of the theodolite. For a discussion of methods used in establishing these stations see paragraph five, Control, in the descriptive report on sheet PP.
The following permanently marked hydrographic stations were located and used for control on sheet RR:

Bella
Swan
San
Brown
Teal

These stations have been designated on the control sheet with the letter D. A description of these stations on form 524 accompanies the sheet.

SURVEYING METHODS USED

Because of the extreme difficulty of traversing along the winding, tree bordered North Santee River, it was decided to carry on the survey above the tops of the trees. Flags were placed in the tree tops to serve as hydrographic signals.

These flags were located by cuts from towers on triangulation stations, and from platforms built in the tops of large cypress trees at the sharp bends in the river. The procedure used was as follows: First, cuts were taken to the tree platforms and the flags from set-ups on control stations BEAR, SWAN, and BELLA on the North Santee River and from SAN on the South Santee. Second, cuts were taken from set-ups on the tree platforms TOM, PLAT, HIT, and HAL. Because of the location of these stations, at sharp bends in the river, good angles of intersection were obtained between cuts to the flags. Shoreline was rodded in from set-ups on the platforms, correcting rod readings in accordance with the deviation of the line of sight from the horizontal.

The platforms were about six feet square, railed, braced, and fitted into the sawed-off top of the tree. The lower branches of the trees were cut off wherever necessary to facilitate hoisting the instruments. They were built at a small fraction of the cost of erecting towers, and gave accurate results in calm weather. They could not be used, of course, if more than a very slight breeze was blowing.
All of the signals on sheet RR were located by graphic triangulation.

PERMANENT STATIONS ESTABLISHED

A. U.S.E.D. Stations -- There were no U. S. Engineers' Stations located on sheet RR. While several of the stations fell on the southern edge of the sheet, they were located on sheet PP. and NN which overlap sheet RR.

B. Other Permanent Stations. -- For a discussion of permanent hydrographic stations located on the sheet, see paragraph five, Control, of this report.

AIDS TO NAVIGATION

No Aids to Navigation fell within the limits of sheet RR.

LANDMARKS AND NAMES

No landmarks of charting importance fell within the limits of sheet RR.

Atcheson Creek is a small creek branching off to the right of the North Santee River about 1/4 mile northwest of the Inland Waterway.

Six Mile Creek is a navigable stream connecting the North and South Santee Rivers about halfway between the Intracoastal Waterway and the highway bridge.

Pleasant Creek is a small creek branching off from Six Mile Creek to the south, about 1 1/2 miles N.W. from the junction of Six Mile Creek and the North Santee River. Garfish Creek branches off Six Mile Creek. (Cont.) See last sheet.

TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR PHOTO COMPILATION

Shoreline was obtained at each important bend in the North Santee River for comparison with the Air Photo Compilation. Rod readings are shown in all cases by dots in breaks in the shoreline. No discrepancies of more than five meters were found between the control sheet and the compilation. The discrepancies occurred at places where trees overhung the banks, and the compilation was adjusted to meet the control sheet.
Four and five tenths miles of shoreline were located on sheet RR.

NEW NAMES (Cont.)

to the N.E., about \( \frac{3}{4} \) mile north of the confluence of Pleasant and Six Mile Creeks. The Authority for these names is an old Coast and Geodetic Survey Chart.

Respectfully submitted,

[Signature]

Addison S. Hall,
Surveyor

Forwarded by,

[Signature]

Lt. Benjamin A. Rigg,
Chief of Party.
DESRIPTIVE REPORT

Topographic

Hydrographic

State  South Carolina

Locality

North & South Santee Rivers

Upper Part

1935

Chief of Party

[Signature]

U.S. GOVERNMENT PRINTING OFFICE: 1934
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. SS

REGISTER NO. T6296b

State South Carolina

General locality North & South Santee Rivers

Locality Upper Part

Scale 1:10,000 Date of survey November 1935

Vessel Party No. 19

Chief of party Benjamin H. Rigg

Surveyed by Addison S. Hall

Inked by Addison S. Hall

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated October 10 1935

Remarks Geographic Names had been inked on sheet before it was discovered that they should have been left in pencil.
OUTLINE

1. INSTRUCTIONS.

2. PURPOSE OF SURVEY.
   A. Hydrographic Control.
   B. Establishment of Permanent Stations.
   C. Location of Topographic Detail.

3. LIMITS OF SHEET.

4. DESCRIPTION OF TERRITORY.

5. CONTROL.

6. SURVEYING METHODS USED.

7. PERMANENT STATIONS.
   A. U.S.E.D. Reference Marks.
   B. OTHER PERMANENT STATIONS.

8. AIDS TO NAVIGATION.

9. LANDMARKS AND NAMES.

10. TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR-PHOTO COMPILATION.
INSTRUCTIONS

The survey was carried out under instructions dated October 10, 1933, also Director's Letters 22 Mg 1930 (19), 26 - AHM 293, and circular letter No. 30.

PURPOSE OF SURVEY

The purpose of the survey was to establish control for hydrography, to establish permanent stations, and to locate topographic detail.

LIMITS OF SHEET

The topography covered by sheet SS includes the North Santee River from about half a mile north of the Highway Bridge, Lat. 33° 12' 6" N, Long. 79° 23' 7" W, southeastward to triangulation station BEAR, Lat. 33° 11' 2", Long. 79° 20' 9" W. It also includes the South Santee River from triangulation station SAINT, Lat. 33° 12', Long. 79° 25' 2" about a mile above the highway bridge, southeastward to the Santee Gun Club Buildings, Lat. 33° 09' 3" N, Long. 79° 21' 9" W.

DESCRIPTION OF TERRITORY

The territory included by sheet SS consists mainly of abandoned rice fields overgrown with scattered trees and bushes, and cane grass ten feet high. Both the North and South Santee Rivers which flow through this region, are lined with tall trees and underbrush extending, in most cases, to the very water's edge, and frequently overhanging the banks.

CONTROL

The following triangulation stations were used as control on sheet SS:

<table>
<thead>
<tr>
<th>Station</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saint</td>
<td>1934</td>
</tr>
<tr>
<td>Bear</td>
<td>&quot;</td>
</tr>
<tr>
<td>Wedge</td>
<td>1934</td>
</tr>
<tr>
<td>Santee</td>
<td>1932</td>
</tr>
</tbody>
</table>
Additional control was established by locating permanently marked hydrographic stations by means of the theodolite. For a discussion of methods used in establishing the stations see paragraph 5, Control, in the Descriptive Report on sheet FP. The following stations were located, permanently marked with a standard hydrographic station disk, and designated with the letter D on the graphic control sheet.

Bet
San
Rim (Wedge R.M. No. 1)

Fred
Fair

Descriptions of these stations on form 524 accompany the sheet.

SURVEYING METHODS USED

The work along the North Santee River on sheet SS was carried on in a similar manner to the work on sheet RR. Most of the signals were flags nailed in the tops of trees. A 75 foot tower was built on station BET, from which cuts were taken to most of the signals on both rivers. Cuts were also taken to as many signals as possible from a 60 foot tower still standing on triangulation station BEAR. Set-ups were also made on a 16 foot platform at station TOP, and on a platform in a tall tree at station DUE. Station ILL was located by cuts from DUE and control station FAIR. Signals MAT, NOR, QUE, and PINE were located by two cuts only. Signals WIN, VAT, ULM, RAZ, and ORE above the highway on the N. Santee were located by cuts and checked by rod readings. Stations SAL, RIL, PIE, QUIT, and OAK above the highway bridge were located by cuts from triangulation station FAIR and from a set-up several hundred meters north along the bridge. They were not checked. The remaining signals along the South Santee River were located by the intersection of at least three strong cuts. No traverses were run.
PERMANENT STATIONS

A. U.S.E.D. Stations -- No U.S.E.D. Stations fell within the limits of sheet SS.

B. Other Permanent Stations. -- For a discussion of permanent hydrographic stations, see paragraph 5, Control, of this report.

AIDS TO NAVIGATION

No Aids to Navigation fell within the limits of sheet SS. For clearances of the highway bridge on the North and South Santee Rivers, see the graphic control sheet.

LANDMARKS AND NAMES

No landmarks of charting importance fell within the limits of sheet SS.

For information about new names on sheets RR and SS, see paragraph 9, Landmarks and Names in the Descriptive Report on sheet RR.

TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR-PHOTO COMPILATION.

Shoreline was obtained at intervals along the North and South Santee Rivers for comparison with the Air Photo Compilation. Rod readings are shown in all cases by dots in breaks in the shoreline. The highway bridge between the two rivers, including the spans crossing them, was also located. No discrepancies of more than five meters were found between the control sheet and the compilation. The discrepancies occurred at places where trees overhung the banks, and the compilation was adjusted to meet the shoreline on the control sheet. Seven and seven tenths statute miles of shoreline were run in.

Respectfully submitted,

Addison S. Hall,
Surveyor.

Forwarded by:

Lt. Colonel [Signature], Chief of Party.