

4435

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

E. Lester Jones, Director

C. & G. SURVEY

L. & A.

JUL 8 1929

Acc. No.

State: South Carolina

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. D 4435

LOCALITY

Cooper River

Vicinity of Charleston

Moreland to Seaboard A.L.R.R.

19 28

CHIEF OF PARTY

R.F.A. Studds

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC

SHEET

"D"

November, 1928.

Cooper River, Vicinity of Charleston, SC.

Launch ELSIE

R.F.A.Studds, In Charge.

Instructions dated December 17, 1927, June 20, 1928.

INTRODUCTION:

This is the second of three topographic sheets, on a scale of 1 : 10,000, covering a survey of the Cooper River. The sheets begin at a junction with original Topographic Sheet 2162 in Latitude $32^{\circ} 55'$ and extend to the Seaboard Air Line Railroad bridge in the West Branch of Cooper River and to Quimby Creek in the East Branch of the Cooper River.

This sheet covers the portion of the Cooper River lying north of Moreland in Latitude $33^{\circ} 00'$; the West Branch of the Cooper River as far as the Seaboard Air Line Railroad bridge, which marks the limit of the survey in that Branch; and the East Branch of the Cooper River from the Tee to Higgins Landing.

This sheet joins sheet C on the south limit and sheet E on the east limit. Topographic features bordering the river were included in the survey.

SURVEY METHODS:

Control was furnished by a scheme of triangulation extended up the Cooper River from the line Field - Goose Creek. Small signals for the control of the hydrographic survey were cut in by theodolite angles and plotted directly on the topographic and hydrographic sheets. A few natural objects which could not be cut in by theodolite were located by planetable and are given in an accompanying list of planetable positions.

Paragraph 6, Supplemental Instructions, 10-LE, dated June 20, 1928, suggested sketching in the shoreline from the hydrographic launch, between points located in the above manner. This did not prove practical, however, and the entire shoreline of the Cooper River was surveyed.

Inasmuch as there are no adequate surveys of this area, it was deemed advisable to sketch in roughly the limits of tree and marsh line bordering the river. This was done with very little loss in time by taking tangents and cuts from planetable setups along the river.

The shorelines of several sloughs were located by sketching them in from the hydrographic launch and ~~is~~^{are} shown on the smooth hydrographic sheet only.

The slough connecting the East Branch of the Cooper River at Higgins Landing, with the Cooper River in the vicinity of Station "Ruth", was surveyed by one of the rapid auxiliary methods. Distance was read by stadia, resting the alidade on a board supported by a stake driven in the bank or river bottom and azimuth was carried by sextant angles. Readings were recorded in a sketch book and the slough plotted from these notes. The upper and lower limits of the slough were fixed by three points and the intermediate portion, plotted from notes, fitted in perfectly between the fixed positions.

COMPARISON WITH PREVIOUS SURVEYS:

A survey of the area covered by this sheet was made by the Geological Survey in 1919 and is published on the Advance Sheet, subject to correction, of Cordesville Quadrangle. An attempt to verify the shoreline on this map, proved that it was of no value to the present survey and consequently it was disregarded.

The small scale and absence of topographic features on the Geological Survey Advance Sheet render it practically worthless for charting the topographic features bordering the river. For this reason, the features were sketched in by the topographer. These latter can be supplemented in some instances by information shown on the Geological Survey map.

GENERAL DESCRIPTION AND NAMES:

The various rivers, in spite of the numerous bends, are quite easily followed and with a map at hand, no difficulty is experienced at all.

Coatbah Plantation contains some houses that are fairly prominent and are shown on the Geological Survey map.

Dean Hall and Rice Hope are two private estates rendered conspicuous by the buildings on them.

Peach Tree Landing and Higgins Landing are not in use and contain nothing to identify them as a landing.

The Tee is the name given to the confluence of the East and West Branches of the Cooper River, and is well known as such.

All names were obtained from local inhabitants and can be relied upon, with the exception of "Coatbah". This spelling of this latter is somewhat doubtful.

The greater portion of the river is bordered by marshland. This marsh is covered with tall wire grass. In the upper portion

of the sheet, there are a number of duck ponds which were apparently converted from former rice fields.

The bridge crossing the West Branch of the Cooper River is a railroad drawbridge. The bridge, when closed, has an overhead clearance of 12' at low water. A tender is on hand between the hours of 7:00 AM and 7:00 PM during the months of November to March, inclusive. A flag station is on the railroad right of way about $\frac{1}{4}$ mile east of the bridge.

LANDMARKS FOR CHARTS:

A tank on the Dean Hall estate and a tank and flagpole on Rice Hope estate furnish the only landmarks on this sheet. These are listed on the attached form, Landmarks for charts. All of the objects are small and are valuable only because of the absence of any other possible landmarks.

Robert A. Earle
Robert A. Earle,
Deck Officer,
USC&G Survey.

Forwarded:

R. F. A. Studds
R. F. A. Studds,
Chief of Party,
USC&G Survey.

This survey complies with the instructions, the junctions with adjoining sheets are adequate and no further work is required.

E. P. Hill

April, 1930

TOPOGRAPHIC SHEET

"D"

STATEMENT OF CHIEF OF PARTY

This sheet has been inspected and is approved.

The purpose of the survey was to furnish information for charting the Cooper River. Consequently the survey was confined to the area bordering the river. Sufficient topographic features were sketched in to show the area on both sides of the river.

In the event additional topography is desired, some information can be obtained from the Geological Survey map, Cordesville Quadrangle, of which only the advance sheet has been published.



R.F.A. Studds,
Chief of Party,
USC&G Survey.

LIST OF PLANETABLE POSITIONS

to accompany

TOPOGRAPHIC SHEET "D"

Object	Latitude		D.M.	Longitude		D.P.	Remarks
	o	'	meters	o	'	meters	
Tank, Dean Hall	33	03	1375 (473)	79	56	536 (1020)	Top
Tank, Rice Hope	33	05	751 (1097)	79	55	1512 (44)	Top
Flagpole, Rice Hope	33	05	781 (1067)	79	56	23 (1533)	Top
Light, bridge	33	05	1087 (761)	79	56	801 (755)	Center

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D. C.

June 12, 1929.

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

J. A. ...
 Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED		
	Latitude		Longitude		Datum				
	' °	D. M. meters	' °	D. P. Meters					
Tank	33	03	1375	79	56	536	N.A.	planetble	No chart
Tank	33	05	751	79	55	1512	N.A.	"	No chart
Flagpole	33	05	781	79	56	23	N.A.	"	No chart

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance. The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstuffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4435

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. D

REGISTER NO. 4435

State SOUTH CAROLINA

General locality ~~VICINITY OF CHARLESTON~~

Locality COOPER RIVER, Moreland to Seaboard A.L.R.R.

Scale 1:10,000 Date of survey November, 1928.

Vessel Launch ELSIE

Chief of Party R.F.A. Studds

Surveyed by Robert A. Earle

Inked by Robert A. Earle

Heights in feet above -- to ground to tops of trees

Contour, Approximate contour, Form line interval -- feet

Instructions dated December 17, 1927; June 20, 1928.

Remarks: Sheet two of three sheets of the Cooper River.