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Rec'd June 21, 1934

U. S. COAST & GEODETIC SURVEY  
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Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State South Carolina

DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. J

6057

LOCALITY

Charleston

Stono River, New Cut to Rantowles

Creek.

1934.

CHIEF OF PARTY

Lt. Benjamin H. Rigg

U. S. GOVERNMENT PRINTING OFFICE: 1929

6057

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 6057

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. J

REGISTER NO. 6057

State South Carolina

General locality Charleston, S.C.

Locality Stono River, New Cut to Rantowles Creek

Scale 1-10,000 Date of survey March, 1934

Vessel Shore Party No. 19

Chief of party Lt. Benjamin H. Rigg

Surveyed by W. H. Martin

Inked by W. H. Martin

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated October 10, 1933

Remarks: Aluminum mounted graphical control sheet.

Descriptive Report to Accompany Aluminum  
Mounted Graphical Control Sheet J

Outline of Report

1. Date of Instructions.
2. Scope of Survey.
3. Limits of Sheet.
4. General Description of Territory.
5. Landmarks
6. Character of Control Used.
7. Surveying Methods Used.
8. Discrepancies.
9. New Names
10. Changes in Shoreline.
11. Character of Marshes.
12. Permanent Hydrographic Stations.
13. Field Inspection.
14. Graphical Control for Air-Photo Compilation.
15. Azimuths of Navigating Ranges.
16. Location of Fixes for L.H.S.
17. Shoreline Located

Descriptive Report to Accompany  
Graphical Control Sheet J

1. DATE OF INSTRUCTIONS - Work on this sheet was executed under instructions dated October 10, 1933.
2. SCOPE OF SURVEY - The purpose of the sheet is to furnish control for photo-compilation sheets, to locate topography not clear on the photographs, to locate and re-mark stations of other bureaus, notably the U. S. Engineers' Department, to establish permanent stations for future topographic or hydrographic work, to locate the beacons, navigating ranges, and other aids to navigation, to locate natural objects for fixes for use of U. S. L. E. S. in locating floating aids to navigation, and to locate signals for presnet hydrographic work.
3. LIMITS OF SHEET - This sheet extends from N. Lat.  $32^{\circ} 43' 00''$  to N. Lat.  $32^{\circ} 47' 03''$  and W. Long.  $80^{\circ} 06' 38''$  to W. Long.  $80^{\circ} 10' 22''$  and includes the Stono River from the entrance to Rantowles Creek to the N. end of New Cut.
4. GENERAL DESCRIPTION OF TERRITORY - The River is bordered by marsh with woods in the background except for a stretch of solid bank between Hyd. Sta. Prom and sta. E. Gable White House, 1933. There are a few houses at intervals, visible from the river and also one railroad bridge. The Stono river is fairly narrow throughout the sheet.
5. LANDMARKS - The most important landmarks are the two beacons in Church Flats. The E. semaphore on the S.A.L.R.R. bridge, 41' high, is prominent as is the chimney on S.W. gable of red roofed house. Jenkins boat house is in poor repair and is visible for about one mile from both directions. A prominent landmark just west of the limits of the sheet at Church Flats is Williams' Tank.

6. CHARACTER OF CONTROL USED - Control was furnished by triangulation established in 1933, and traverse established in 1924.
7. SURVEYING METHODS USED - Either setups on triangulation stations, strong three point fixes or strong resections were used in all cases, no traverse being necessary. All signals and objects for future control were located by three strong cuts or by two cuts and a check rod reading. The sheet was tied in on the N.E. with sheet I by Hyd. signals Bat and Bird.
8. DISCREPANCIES - It was found after some work had been done in the field that the triangulation control had not been plotted correctly because the scale used, No. 843, threw a large error in short distances instead of at a uniform rate. The triangulation was replotted with scale 5 and the setups reoccupied. This accounts for parallel cuts at many stations, the final cuts being used.
9. NEW NAMES - Nothing.
10. CHANGES IN SHORELINE - Nothing
11. CHARACTER OF MARSHES - The marsh grass on this sheet is much thinner than on sheet I, especially in Church Flats. The ground is lower and there are many small creeks. The ground proper floods at M. H. W. and there is more water visible on the Flats than marsh grass. There is still a definite shoreline, however, caused by the marsh grass extending above the water. This line is shown on the graphical control and celluloid sheets by a heavy line. The inner limit of the marsh, the high ground, is shown by a very fine line.
12. PERMANENT HYDROGRAPHIC STATIONS -
  - (a) All data possible was obtained from the U.S. Engineers' Department to help in locating their stations. Co-ordinates and descriptions were obtained for a few stations and these were

## 12 PERMANENT HYDROGRAPHIC STATIONS - (Cont)

reduced to geodetic positions and plotted upon the sheets before field work was started to aid in recovering them. The approximate location of other stations was obtained by transferring them from Engineers' map to a C.S. chart. These stations were sought for in the field in the course of operations. Some U.S.E.D. stations were permanently marked by 5" C.I. pipe filled with concrete. Others were 6"x6" posts driven in the ground, or 6"x6" wooden blocks supported by a timber tripod. These wooden stations were re-marked by standard Hyd. disks set in concrete blocks.

(b) Cases where U.S.E.D. stations were located and the correct name was indefinite were:

U.S.E.D. XI  
" XII  
" XIII

(c) U.S.E.D. stations recovered, re-marked with std. hyd. disks set in concrete and described on form 524:

U.S.E.D. 2A  
" XI  
" XII  
" XIII  
" XVII  
" XVIII  
" XIX  
" XXIV  
" XXV  
" XX  
" XXI (See recovery card for last two)

13. FIELD INSPECTION - A peculiarity of the region is the definition of the H.W.L., L.W.L. and storm H.W.L, explained in Par. 2. Photographs were carried by the photo party and data was obtained over the period the party was in the field for the use of the compilers. Also points located by topography and triangulation points inaccessible to the regular field inspection party were located on the photographs.

14. GRAPHICAL CONTROL FOR AIR-PHOTO COMPILATION - Nothing.
15. AZIMUTHS OF NAVIGATING RANGES - Nothing.
16. LOCATION OF FIXES FOR L.H.S. - Nothing.
17. SHORELINE LOCATED - Miles of shoreline located and compared with celluloid sheet, 6 3/4.

Respectfully submitted by,

*W. N. Martin*  
W. N. Martin

Forwarded by,

*Benjamin F. Ring*  
Lt. Benjamin F. Ring  
Chief of Party  
H. & G. Engineer.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

## LANDMARKS FOR CHARTS

Charleston, S. C.

March 19, 1934

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.

Benjamin H. Rigg,

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	°	'	°	'			
2nd. S.A.L.Ry. Bridge							
E. Semaphore--41' high	32	45	16	08	132.1	1927	1239, 3256
Flats							
White Bn. No.1 Church	32	44	83	10	124.3	"	" "
" " " 2 " "	32	44	109	09	1494.8	"	" "
S. Gable Bt. Hse., Jenkins	32	43	111	09	1531.2	"	" "
Chy. S.W. Gable red roof <sup>ed Hse.</sup>	32	43	171	09	1389.8	"	" "
Tank, Williams	32	44	537.7	80 10	552.3	"	" "
Aids to Navigation as listed above are all under 2.							

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, 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 an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.