

944

Diag. Cont. Nos. 1240-1 & 1241-1

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	<i>Hydrographic</i>
Field No.	Office No. <i>944</i>
LOCALITY	
State	<i>Georgia</i>
General locality	<i>Savannah</i>
Locality	<i>River &amp; Tyler Roads.</i>
<u>1894</u>	
CHIEF OF PARTY	
<i>J. M. Ganett U.S.N.</i>	
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DATE .....	

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U. S. COAST AND GEODETIC SURVEY.

*T. C. Mendenhall*, Superintendent.

State: *Georgia.*

DESCRIPTIVE REPORT.

*Tracing with  
Hydrographic Sheet No. 944.*

LOCALITY:

*Savannah River  
and  
Tybee Roads.  
(Additional Soundings.)*

*1894.*

CHIEF OF PARTY:

*Lieut. L. M. Garrett, U.S.N.*

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Write me at: Narragansett, N.C.  
Telegraph me at: \_\_\_\_\_  
My Express Office is: JUN. 27. 1894. 008187

Archives U. S. Coast and Geodetic Survey, The Endeavour,  
Savannah, Georgia  
April 14, 1894.

2-107

Dr. J. C. Mendenhall,  
Superintendent C. & G. Survey,  
Washington, D.C.



Sir:

I have the honor to submit the following descriptive report of the examination of the aids to navigation in the Savannah River and Tybee Roads, Georgia, by the hydrographic party under my charge, during the month of April 1894, in obedience to your instructions of March 14 1894.

The search for triangulation points was begun on the 2<sup>nd</sup> inst., a sufficient number being easily recovered to cut in all bearings from the city down to the sea. Notes appended to the description of  $\Delta$  and  $\odot$  show such as were recovered and descriptions are added of a number of points named as triangulation points on the projections but of which

no descriptions could be found at the office.

In a number of cases these points are tall brick chimneys standing by themselves and very prominent objects. They are likely to stand many years and are admirably adapted for use as signals.

A very extensive system of jetties, wing-dams, training walls, &c., is still in process of construction by the Engineer Corps U.S.A. covering the entire distance from Savannah to the Sea. In the prosecution of this work the officer in charge, Capt. C. M. Carter, U.S.A., has established a chain of triangulation stations at frequent intervals. This triangulation depends upon a measured base in close proximity to the C. & G. S. base and the system, this officer assumes one, is connected with the C. & G. S. triangulation near or at the base line and again at Tyber Light. Notwithstanding this I have thought it advisable to cut in and put on our sheets a goodly number of these theodolite stations so that in future less trouble may be found in using

surveys made by the Engineer Officers at this place. These stations are simply marked (O Signal) on the shore with the letters U.S.E.

Capt. Carter is now making a complete and careful survey of the river, including all improvements so far made, so that I considered a repetition of the work unnecessary on our part and had time permitted us to make it. I think that points of the different surveys may sometimes be confused at the office in this way. For instance each has stations on Fort Jackson and on Fort Pulaski but in neither case are they coincident.

Information obtained at the pilots office indicates a least depth of about 14 1/2 feet in the river at mean low water, the shallowest place being on the Long Is. flats. This is probably a conservative estimate as the pilots do not seem inclined to favor the "improvements". The Engineers however claim somewhat more than this depth of water.

Our triangulation was carried down the river by Engineer Blandin and Messrs. Reed, et al.

theodolite and sextant and completed on the 12<sup>th</sup> inst. On the following day I ran a few lines across the bar off Tybee with the view of ascertaining what changes had taken place there since former surveys and also the advisability of a resurvey. These lines are plotted on chart 440 which forms a part of the records. The reduction for tide is from the staff of the U.S. Eng's self registering gauge on the wharf near Fort Pulaski which is set with the zero at M.L.W. I allowed 15 minutes difference in time to reduce on the bar.

It will be seen that remarkably little change is shown on the bar except in the South channel. The bumps so far as determined were not correctly located on the chart, two of them being quite one mile out.

The signals used in fixing positions on these lines were  $\odot$  Front (Bloody Pt. front range),  $\odot$  Light (Tybee Lt.) and  $\odot$  Water (Long staff on cap. of Tybee shore). They were plotted by cuts from triangulation points and transferred from the 1:0000 sheet to the chart by azimuth and

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distance from Taylor Light, so that their relative  
positions from that point is correct on a scale  
of 1/40000 while other points on the chart  
being affected by the shrinkage of the paper  
will not agree with those.

Regarding the amount of traffic in  
the river above Savannah I learned that there  
are two good sized, stern wheel, light draught  
steam boats making two trips per week each  
way between Savannah and Augusta - two round  
trips between them - not two each. The amount  
of freight is considerable. They frequently get  
stuck in the river.

Very respectfully  
L. M. Garrett,  
Lieutenant US Navy Comdg