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2409
1899

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Diag. Cht No. 1242-2

U. S. COAST AND GEODETIC SURVEY.

Henry S. Pritchett, Superintendent

State, *Ga.*

U. S. C. & G. SURVEY.
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DESCRIPTIVE REPORT.

Hydrographic Sheet No. 2409

LOCALITY:

Brunswick Outer Bar

1899

CHIEF OF PARTY

Henry L. Wainman

2409

10.530 feet above M. H. Water

Bench on Outer Ber. Plat. (new Sept 1899)

No. 1. Lower edge of Str. string piece on which the flooring of the platform rests is .4.6 feet above M. H. Water.

No. 2. Four iron nails driven in line in a pile even with the 12 foot-mark of Tidal Staff. These nails are 2.24 feet above M. H. Water plane of reference.
These Bench Marks were established on Sept 13. 1899.

The observing stations having shifted and the Outer station having been destroyed by storms it became necessary to rebuild the "outer station". A pile driver was engaged and a trial made which was not successful - at second trial a station was secured on three piles driven in about 20 feet of water.

The Geog. Positions of the stations were obtained from Δ stations on shore - viz. July 21 Δ Pt. (1899) and Shore Δ Pt. (1899)

as determined by party of Asst. F. W. Perkins

The position of steam white sounding was determined by horizontal angles (Theodolite) station at each of the observing platforms.

The Inner station is much out of plumb at an angle of about 30° to 35° but the cap block on which the Theodolite was set - was the point redetermined.

Geog. Positions of Observing Stations on Bar.

Inner Sta. Sept 1899.

Lat. 31 05 49.56 Long. 81 20 18.10

Outer Station (new) Sept 1899

Lat. 31 05 27.94 Long 81 19 26.43

Distance between Stations = 1522.4 meters

The above Determination is based on the length of the base line measured in 1891 by the U.S. Engineers. Assistant T. W. Perkins finds that the length of this base is too short by about 0.7 meter.

If Asst Perkins length of base line be accepted as the true one then the Geographical Positions of the observing stations are as follows:

Inner Bar Sta 1899. Lat. 31 05 49.48 Long 81 20 18.06

Outer Bar Sta (new) " 31 05 27.81 " 81 19 26.40

Results shown on sheet.

This is a navigable channel 24 feet deep at average high tide with a minimum width of 256 feet and a mean width of 464 feet.

This is a navigable channel 25 feet deep at average high tide with a minimum width of 150.5 feet at Buoy 201 and a mean width of 305 feet.

(over)

There is no continuous channel 26 feet deep at average high tide of any width. The approximate distance between the 26-foot contour on the seaward face of the bar and the same depth on the shore end of the bar is 5165 feet; within this distance there are 7 depressions with depths greater than 26 feet aggregating 2530 feet in length which if deducted from the total length between the 26-foot contours outside and inside of the bar, leaves a length of 2635 feet with depths between 25 and 26 feet at mean high tide.

The seaward movement of the face of the bar, already recognized in previous survey, has continued in the same direction, the 25-foot contour showing a shift of about 70 feet since April 1899.

Respectfully submitted
Fry L. Marindin
Assistant