

4438

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Form 504  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

State: N. Carolina

11-5613

DESCRIPTIVE REPORT.

Hydro. Sheet No. 4438

LOCALITY:

C. Fear River

Corncake Inlet

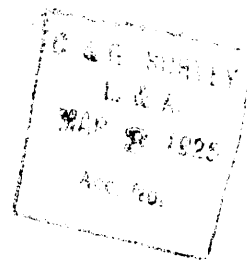
1924

CHIEF OF PARTY:

H. A. Cotton

D E S C R I P T I V E R E P O R T

to accompany  
HYDROGRAPHIC SHEET No. 4438  
of  
CORNCAKE INLET, North Carolina.



Changes in the Coastline:

The coastline at Corncake Inlet has changed from that as shown in the survey of 1923, but information from the Captain of the Oak Island Life Saving Station would show that frequent changes may be expected here. He said that the channel had changed both in depth and location between August 1923 and August 1924.

Survey method:

The work at Corncake Inlet was the developing of the inside of the Inlet to ascertain if there was a channel through to the Cape Fear River for small boats. This work had been done the previous year, but additional soundings were required. This necessitated accurate work both in sounding and in locating the soundings. The lines were short and the depth shoal, so it was decided to use a whaleboat for the sounding and to sound with a pole instead of a leadline. Ranges were set on shore so that the boat could be kept on a straight course across the current of the channel. The positions of the ends of the lines were fixed by planetable stadia shots. A planetable was set up on the beach and its position located by the three point method, and checking it by shots on the numerous light houses, range lights and wanks at Southport. The stadia rod was held at the boat on the ends of each of the lines. This work was done right on the boat sheet. Only two planetable stations were necessary.

Angles were also taken to topographic signals erected and cut in by the planetable at the time of the work, but these were only considered as checks on the stadia cuts.

The soundings shown on the boat sheet are reduced with reducers taken from the tide tables, but those on the smooth sheet are reduced from readings of the tide at Fort Caswell with reducers furnished from the office. The sounding lines on the smooth sheet were traced from the boat sheet which should be considered as an original topographic sheet.

February 25, 1925.

Respectfully submitted.

*Roland D. Horne*

Roland D. Horne,  
H. & G. Engineer.

April 4, 1925.

Section of Field Records  
~~Division of Hydrography and Topography~~

Division of Charts:

Tide reducers are approved in  
1 volume of sounding records for

HYDROGRAPHIC SHEET 4438

Locality: East coast of North Carolina

Chief of Party: Harold A. Cotton in 1924

Plane of reference is mean low water and is  
5.0 ft. on tide staff at Fort Caswell, North Carolina

For reduction of soundings, condition of records satisfactory  
except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks



Chief, Division of Tides and Currents.

Report on Verification and  
Inking Hydrographic Sheet No. 4438.

Records well kept and easily  
read.

Field plotting neatly and  
accurately done.

Information sufficient for  
developing the usual  
depth curves—

C. Brooks.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON April 25, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4438

Corncake Inlet, North Carolina

Surveyed in 1924

Instructions dated July 16, 1924.

Chief of Party, H. A. Cotton.

Surveyed, protracted and soundings plotted by R. D. Horne.

Verified and inked by C.B. Brooks.

1. The records as well as the plan and character of development conform to the requirements of the General Instructions.
2. The plan and extent of development satisfy the specific instructions.
3. The sounding line crossings are adequate and the information is sufficient for drawing the usual depth curves.
4. The usual field plotting was done by the field party.
5. The junction with the previous survey is satisfactory.
6. A comparison with the 1923 survey shows that both the shoreline and channels at the inlet are subject to constant change.
7. No further surveying is required.
8. The character and scope of the surveying and field drafting are excellent.
9. Reviewed by E. P. Ellis, April, 1925.