5657

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Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

~~Topographic~~ Hydrographic } Sheet No. 26

State North Carolina

LOCALITY

Vicinity of Cape Fear

U.S.G.B. Decision

~~Lockwoods~~ Folly Inlet & River and

Lockwoods (DGN Decision May 1935)

Shallotte Inlet & River

1934

CHIEF OF PARTY

Benjamin H. Rigg

U. S. GOVERNMENT PRINTING OFFICE: 1934

Form 537
Ed. Dec., 1930

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

5657-1231

Field No. 26 5657

REGISTER NO.

State North Carolina

General locality ~~Coastal Area of Brunswick Co., N.C.~~ Vicinity of Cape Fear

Locality ~~Lockwood~~ Lockwoods Folly Inlet + River & Shallotte Inlet + River

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

Vessel Shore Party No. 19

Chief of Party Lt. Benjamin H. Rigg

Surveyed by Ensign Edward B. Brown, Jr.

Protracted by A. A. Lockerbie

Soundings penciled by C. J. Harryman

Soundings in ~~fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by

Inked by Mina D. Olsen

Verified by James M. McGuan Jr.

Instructions dated October 10, 1933

Remarks: Sounding Vol. applying to upper half of sheet, number 1-A; Lower half of sheet, Vol. 2 & 1.

U. S. GOVERNMENT PRINTING OFFICE. 1933

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SHEET NUMBER 26

DATE OF INSTRUCTIONS - ~~October 10, 1933.~~ Sept 22 1934

SURVEY METHODS - The soundings were taken with a hand lead line, graduated in fathoms and feet, while the launch was under way.

In the more open waters, sounding lines were run on ranges and compass courses. Positions were taken by thre e point fixes on signals located by planetable and triangulation.

In the narrow rivers and creeks, lines were run by following the ebb-tide channel (or best water line) and controlled by bearings and range finder distances to points recognisable from the compiled shoreline.

Signal JIG was located by single sextant fix and checked by a distance measured to the high water line. The position of signal KIT was spotted on the boat sheet on the point of a small grass island using the compiled shore line as a criterion.

DISCREPANCIES - Shallotte Inlet - On position 33 "c" day, lat. 33° 53.3', long 78° 23.3', the right angle was rejected and the position plotted with the left angle, compass course & time. On position 52c, lat 33° 53.6', long. 79° 22.8', the position was recorded one sounding earlier than it was actually taken. The position was plotted on the smooth sheet as being on time - 3 : 41 : 20. Soundings preceeding position 8c, lat. 33° 53.9', long. 79°23', do not agree well with the soundings between pos. 89 and 90 d day. The slope of the bottom is very steep at this point and a small horizontal displacement of the line would cause such a discrepancy. The soundings between pos. 89 and 90 "d" day were plotted in stead of the soundings preceeding pos. 8c. Verifier made a selection of the sdgs on the 2 lines

At approx lat. 33° 54.1', long. 79° 22.6', soundings on the cross lines, pos. 68 to 84d, are generally 2' shoaler than the soundings taken on c day. This condition is due partially to tides and partially to the fact that hydrography was done in fairly rough weather.

The tide gauge was located about two miles from the bar and the difference in time between the tides at the two places would vary somewhat. On Nov. 8 (c day) the outside work was being run at the time when it was low tide at the gauge; hence the tide outside had already begun to rise. On Nov. 9 (d day) the tide was approximately half way down at the gauge and possibly lower on the outside coast. This difference could account for at least one foot of the discrepancy.

As the inlet is so small and is never used by other than local fishermen, no change has been made in the reducers as obtained from the gauge, for it is assumed that the information as shown on the smooth sheet is adequate.

DANGERS - At lat. 33° 54.4', long. 78° 22.7', a middle ground was found that lies near the western shore of Shallotte River. The controlling depth on the shoal is 3 ft. as was found between pos. 143 & 144 "d" day.

At lat. 33° 54.7', long. 78° 14.3', two wrecks were located on the western side of the entrance of Lockwoods Folly Inlet. These wrecks both lie inside the zero foot curve and are generally inside the line of breakers. The S.E.'ly wreck was located by the hydrographic party on pos. 8 "b" day. The N.W.'ly wreck was located by planetable cuts on sheet AF.

CHANNELS - The controlling depth over the Shallotte Inlet bar is 5'. While the hydrographic party was working in this area, the breakers extended entirely across the bar. However, with a northly or northwesterly wind, this bar would be smooth and easily entered. A 5' depth may be carried up the river as far as the line connecting signals Wet and Can. A three foot depth may be carried up to signal ERA by following the ebb tide channel. Bars extend on the down stream side of all points . The controlling depth at signal ERA is 2'. This depth may be carried to the upper limit of the sheet. From signal ERA to signal A the channel is very narrow and is bordered on either side by oyster bars that are covered at high tide. This channel is not marked and could be followed by a stranger only at half tide or less. From signal A to the upper limit of the sheet the channel can be easily followed due to the fact that marsh grass lines both banks of the channel.

Little Shallotte Creek is of very little use due to the fact that it opens up into a large bay that is thickly covered with oyster bars. No channel could be found by the hydrographic party.

Lockwoods Folly Inlet is of very little use as it is closed by breakers at practically all stages of the tide and wind. The controlling depth over the bar is three feet. The controlling depth of The Lockwoods Folly River is two feet, found on pos. 29 "a" day. From pos. 33a up to pos. 5a the channel is narrow and is bounded on either side by oyster bars that are covered at high tide. This part of the channel is well marked with brush markers and can easily be followed.

COMPARISON WITH CHART NO. 1236 - The eastern channel at Shallotte Inlet bar has closed entirely and the area is bare at low tide. The western channel, however, has changed very little except the controlling depth is now 5' instead of 6'.

No comparison can be made on Lockwoods Folly Inlet due to the fact that no photostats of previous surveys are available, and the scale of the present chart (No. 1236) is so small that very little information can be obtained.

The traffic over these two bars is very light. They are used only by a few local fishermen. The traffic up the rivers is practically negligable.

STATISTICS -

Vol. No.	Miles	Soundings	Positions
1-A	28.2	1016	229
1	34.9	1424	298
2	6.4	293	77
	69.5	2733	604

TIDAL DATA - A portable automatic gauge was installed in Shallotte River at lat. 33° 54.9', long 78° 22.4' to controll the soundings in that vicinity. Mean Low Water was found to be 2.7'

A fixed staff was installed at Lockwoods ~~USGB~~ Folly Inlet at Lat. 33° 55.3', long. 78° 14.2' to controll the soundings in that vicinity. Mean Low Water was found tobe 3.9'.

Respectfully,

Ensign Edward B. Brown, Jr.

Forwarded by,

Benjamin H Rigg

Lt. Benjamin H. Rigg
Chief of Party.

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5657

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	604
Number of positions checked	41
Number of positions revised	0
Number of soundings recorded	2733
Number of soundings revised	6
Number of signals erroneously plotted or transferred	0

Date: June 1, 1935

Verification by James M. McDuell Jr. Time: Ver. 204 hrs. INK. 29 hrs } 494 hrs

Review by V D Belm Time: 12 3/4 hrs

Survey No. H 5657

GEOGRAPHIC NAMES
N.C.

Date. Feb. 25, 1935

Chart No. 1236

Names underlined in red approved Mar. 18, 1935
Harlow Bacon

Diagram No. 1236-2

Examination by N.J.N.

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	Lockwoods Folly River	~~Lockwood Folly River~~ *			
✓	Howell Point	same			
✓	Sheep Island	"			
✓	Lockwoods Folly Inlet *	~~Lockwood Folly Inlet~~ *	Leave space for possible future "S"		
✓	Shallotte River	same			
✓	Little Shallotte Creek	"			
✓	Bowen Point	"			
✓	Long Point	"			
✓	Shallotte Inlet	"			
	Intracoastal Waterway				

*Authority; Lockwood Folly Inlet and River ; according to the U.S.G.B. Sixth Report, 1932.
Intracoastal Waterway ; continuation of waterway indicated on Military Blue Prints.

Decision of D.G.N. (May 28, 1935) changes decision of U.S.G.B from Lockwood Folly to Lockwoods Folly

APPROVED NAMES UNDERLINED IN RED
H.L. Fleming

LCC

April 26, 1935

Division of Hydrography and Topography: FD

✓ Division of Charts: Attention: Mr. E. P. Ellis

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5657

Locality Lockwoods Folly Inlet and River, and Shallotte Inlet and River, N. C.

Chief of Party: B. H. Rigg in 1934
Plane of reference is mean low water reading
2.7 ft. on tide staff at Shallotte Pt.
13.2 ft. below B.M. 1

3.8 ft. on tide staff at Beacon #26
9.7 ft. below B. M. 1

Height of mean high water above plane of reference is 4.6 feet at Shallotte Pt; 4.3 feet at Beacon #26.

Condition of records satisfactory except as noted below:

Paul C. Whitney
Chief, Division of Tides and Currents.

Verification Report H. 5657.

June 1, 1935

1. The soundings recorded were neat and legible and conformed to the instructions given in the Hydrographic Manual except that there were only four bottom samples taken for the entire sheet. Geographic positions were also omitted at the beginning of new lines. Position given at start of each day

2. The one, two, three and four fathom curves could be completely drawn with occasionally pieces of the zero curve.

3. Field plotting was very complete with few mistakes or omissions. Only six soundings were revised and no positions were changed.

4. The low water line and much additional shore line was added by the verifier from T-5242, an air-photo sheet.

5. There were no contemporary adjoining sheets.

6. Good crossings were obtained at all places. except outside and east of Shallotte Inlet

James M. McQueen Jr.

Submitted by - James M. McQueen, Jr.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5657 (1934) - FIELD NO. 26

Lockwoods Folly Inlet and River and Shallotte Inlet and River,
Vicinity of Cape Fear, North Carolina
Surveyed in November, 1934
Instructions dated September 22, 1934 (B. H. Rigg)

Hand Lead Soundings.

3 Point Fixes on Shore Signals.

Positions in minor creeks spotted in reference to shoreline.

Chief of Party - B. H. Rigg.
Surveyed by - E. B. Brown, Jr.
Protracted by - A. A. Lockerbie.
Soundings penciled by - C. J. Harryman.
Verified by - J. M. McQueen, Jr.
Inked by - M. D. Olsen.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

a. No copy of Landmarks for Charts on Form 567 accompanied this particular sheet.

b. Very few bottom characteristics were taken.

The Descriptive Report is clear and comprehensive and adequately covers all matters of importance.

2. Compliance with Instructions for the Project.

This survey complies with the instructions for the project.

3. Sounding Line Crossings.

Such crosslines as were run are in general in good agreement except as follows:

a. Those lines running outside and parallel to the breakers east of Shallotte Inlet are in general from 1 to 4 feet deeper than the crosslines. As explained on page 2 of the "Descriptive Report," this difference may be due partly to the fact that the tide gauge was located some 2 miles away and no time correction was applied to the reducers. Another explanation given is the roughness of the sea. Because of the relative unimportance of the area, no adjustments were attempted.

4. Depth Curves.

Within the limits of the survey the usual depth curves can be satisfactorily drawn.

5. Junctions with Contemporary Surveys.

There are no contemporary adjoining surveys.

6. Comparison with Prior Surveys.

a. H-685 (1859).

This survey covers portions of both of the areas covered by the new survey. A comparison with this survey reveals that some change has taken place in the common areas. In view of this, the elapsed time between the two surveys and the comparatively large distances between soundings on this survey, it should be superseded by the new survey for future charting.

b. H-4450 (1924).

This survey covers portions of both of the areas covered by the new survey. A comparison between the above survey and the present survey reveals numerous changes, both natural and artificial. In view of this, the present survey should supersede the above survey for charting purposes.

7. Comparison with Chart No. 1236.

a. Hydrography.

Within the area of the present survey this chart is based on surveys discussed in the foregoing paragraphs and on surveys by the U. S. Engineers in 1929 (Bp's. 22353, 22354, and 22355). These U. S. Engineers Surveys consist in general of only 1 line of soundings in the various creeks. A comparison between these surveys and the new survey reveals a considerable number of differences. The new survey in general also having only 1 line of soundings in these creeks. These differences are probably due to the practical impossibility of accurately comparing two surveys of a creek, each survey having only one line of soundings, and to changes in the area, especially due to the dredging of the Intracoastal Waterway. In view of the above, the Engineers surveys should be superseded by the present surveys.

b. Aids to Navigation.

Inasmuch as the Intracoastal Waterway was not included in the area surveyed, the majority of the charted beacons on this waterway are not shown on this survey. Those that are shown are only in fair agreement with their charted positions.

8. Field Plotting.

The field plotting and protracting are satisfactory and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

This survey is complete and no additional field work is required.

10. Superseding Old Survey.

Within the area covered the present survey supersedes the following surveys for charting purposes:

H- 685 (1859) in part.
H-4450 (1924) " "

11. Reviewed by - V. D. Behn, June 28, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

K. T. Adams
K. T. Adams,
Asst. Chief, Division of Charts.

L. O. Colbert.
Chief, Division of Charts.

Chief, Section of Field Work.

Chief, Division of H. & T.

25 Jan 7, 1936
EWD.