

4454

(See 4450)  
for inshore work

4454

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

State: N. Carolina

11-5613

DESCRIPTIVE REPORT.

Hydrog. Sheet No. 4454

LOCALITY:

C. Fear

W. of C. Fear to Mad Inlet

19<sup>24</sup>

CHIEF OF PARTY:

H. A. Cotton

DATE	LETTER	VOL	POSITIONS	SOUNDINGS	MILRS (Stat)	VESSEL LYDONIA
Oct. 23	A	1	161	797	53	LYDONIA.
" 24	B	1	142	900	53.7	"
" 25	C	1	12	80	4.8	"
Nov. 6	D	142	97	377	31.7	"
" 7	E	2	153	694	47.3	"
" 8	F	243	741	752	54.3	"
" 12	G	3	59	422	23.2	"
" 13	H	3	122	881	48.9	"
" 18	J	3	51	297	18.7	"
" 19	K	4	52	280	21.4	"
" 20	L	4	105	678	44.6	"
" 21	M	4	104	691	45.5	"
" 26	N	5	105	728	48.2	"
Dec. 2	P	5	133	871	53.3	"
" 3	Q	546	91	643	43.4	"
" 5	R	6	100	691	39.4	"
" 6	S	6	23	155	8.2	"
" 8	T	7	54	463	24.2	"
" 9	U	7	35	247	12.7	"
" 10	V	7	73	453	29.7	"
" 11	W	748	111	723	45.3	"
" 15	X	8	78	472	34.5	"
" 16	Y	8	145	809	56.5	"
" 17	Z	8	36	253	18.4	"
Total-			2188	13357	813.2	

Unit for soundings in feet.

Plane of Reference is Mean low water.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON August 14, 1925.

SECTION OF FIELD RECORDS

Report on Verification of Hydrographic Sheet No. 4454

West of Cape Fear to Mad Inlet, North Carolina

Date: October 15th - December 17th, 1924

Chief of Party: Harold A. Cotton

Scale, 1:40,000

1. Character and completeness of records and notes:

The records and notes were clear and complete with the following exception:

(a) In the sounding records topographic signal Cod occurs frequently but an investigation showed it to be signal Cot

2. Accuracy of Protracting

The protracting was exceptionally accurate

3. Plotting of Soundings:

(a) Only every fifth position was numbered and lettered; the ones in between were not numbered as they should have been. (General Instructions, Paragraph 326).

(b) The time intervals were carefully adhered to.

4. Sufficiency of Development

The development seems sufficient as the bottom appears to be gradually sloping and smooth.

There are no shoal spots in the area or apparent dangers.

5. Cleanliness

The sheet was clean and legible and the drafting conforms to the General Instructions for the Field Work.

6. The work of the entire party on this sheet was very commendable.

*John C. Macdonald*  
Cartographic Draftsman

Unit for soundings -- feet

Plane of Reference -- Mean low water

Plane of Reference Reading on Gauge -- 5 feet

Lowest Tide observed Reading on Gauge - - 4.4 feet

Highest Tide observed Reading on Gauge - - 10<sup>1</sup>/<sub>7</sub> feet

Location of Ft. Caswell Tide Gauge -- Lat. 33°-54' Long. 78°-01'

A portable tide gauge was installed in Lockwoods Folly Inlet and Tibbs Inlet and a tide staff at Shallotte Inlet in order to get a comparison with the Automatic Tide Gauge at Ft. Caswell.

An allowance of 30 minutes in time was made, assuming that the tide to the Westward of Ft. Caswell occurs earlier than at the latter place, and the range was taken as one tenth greater; as approved in your letter of February 21, 1925.

The marigrams for Ft. Caswell and subordinate stations have been forwarded.

June 9, 1925

~~Division of Hydrography and Oceanography:~~

Division of Charts:

Tide reducers are approved in  
volumes of sounding records for

HYDROGRAPHIC SHEET 4454

Locality: East Coast of North Carolina west of Cape Fear.

Chief of Party: H. 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.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 5, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4454

West of Cape Fear to Mad Inlet, North Carolina

Surveyed in 1924

Instructions dated April 21, 1924

Chief of Party, H. A. Cotton.

Surveyed by Party of Steamer LYDONIA.

Protracted by H. J. Petersen, S. B. Grenell and W. M. Gibson.

Soundings plotted by W. M. Gibson.

Verified and inked by J. C. MacNab.

1. The records conform to the requirements of the General Instructions. The only criticism is the frequent use of the name Cod for signal Cot.
2. The plan and character of the work conform to the requirements of the General Instructions.
3. The plan and extent of the work satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was done by the field party. The only departure from the regulations was in numbering each fifth position only instead of every position.
7. The junctions with the adjoining sheets are satisfactory. There are differences of 2 or 3 feet which cause irregularity in the 30-foot curve.
8. The area is well developed and no further surveying is required.
9. An inferior paper was used for the smooth sheet.
10. The character and scope of both the surveying and field drafting are excellent.
11. Reviewed by E. P. Ellis, November, 1925.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

4454  
C & G SURVEY  
L & A  
JUN 1 1925  
Acc. No.

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4454

State . . . North Carolina . . . . .

General locality . Cape Fear  
~~East Coast of North Carolina.~~ . . . . .

Locality . West of Cape Fear. to Mad. Inlet. . . . . .

Chief of party . Harold A. Cotton. . . . . .

Surveyed by . . Harold A. Cotton. . . . . .

Date of survey . October 15--December 17, 1924. . . . . .

Scale . . . . . 1:40,000 . . . . .

Soundings in . . feet . . . . .

Plane of reference . Mean low water . . . . .

Protracted by S. B. G. & W. M. G. Soundings in pencil by W. M. Gibson

Inked by . . . . . renell . . . . . Verified by . . . . .

Records accompanying sheet (check those forwarded):

Des. report, \_\_\_\_\_ Tide books, \_\_\_\_\_ Marigrams, 2 Boat sheets,  
8 Sounding books, \_\_\_\_\_ Wire-drag books, \_\_\_\_\_ Photographs.

Data from other sources affecting sheet . . . . .  
Letter from Director dated February 21, 1925. Ref. No. 41/WHM.

Remarks:  
Marigrams forwarded to office February 27.