

4468

4468

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
State: <u>N. Carolina</u>	
11-9613	
DESCRIPTIVE REPORT.	
<i>Hydrographic</i>	Sheet No. <u>4468</u>
LOCALITY:	
<u>Cape Fear</u>	
<u>South of Frying Pan Shoals</u>	
1924	
CHIEF OF PARTY:	
<u>H. A. Cotton</u>	

Date	Day	Volume	Miles	Soundings	Position
Oct. 15-16	A	1	60.6	559	22
17-18	B	1	61.0	517	18
29-30	C&D	1	47.0	181 231	8 13
Total			168.6	1488	61

Unit of sounding is feet.

The tides were assumed to occur one hour earlier than at Fort Casswell and the range was taken as 1/10 greater. Director's letter dated November 20, 1924. Ref. # 41/HMA

The position of the buoy "End" was taken from Frying Pan Shoals Hydrographic Sheet and the buoy "Don" was located from "End" by Dead reckoning on C day.

Field Records.

July 20, 1925.

~~Division of Hydrography and Topography~~

Division of Charts:

Tide reducers are approved in
volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4468

Locality: **South of Frying Pan Shoals, East Coast of North Carolina.**

Chief of Party: **Harold A. Cotton in 1925.**

Plane of reference is **mean low water and is**
5.0 ft. on tide staff at **Fort Caswell, N. C.**

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 in 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 of Verifying and Linking H.4468 P.D.R.

1. The plotting of the sounding lines was not verified but the intermediate spacing of soundings was completely verified.
2. The records and notes are good. The field drafting is also good.
3. The boat sheet was of Whatman's paper while the smooth sheet was of "roll" paper.
4. The somewhat small scale, $\frac{1}{100,000}$, reduces the number of soundings that could have been plotted on a larger one.
5. If Whatman's paper had been used the survey could have gone on a standard sheet and on a scale of $\frac{1}{20,000}$ or $\frac{1}{80,000}$.
6. The soundings were reduced and plotted in feet and were scribed. This unit was acceptable to the chief of the drafting section.

F. M. Albert, Cartographer
Section of Field Records.

Aug 25, 1925.

The soundings from 11 to 15 B day did not cross well with 17 to 19 C day nor did they check with the inshore sheet (H. 4437). A replotting of the lines of B and C days agreed with the field plotting. Therefore it seems the soundings are incorrect and are rejected from 11 to 15 B.

Sept. 18, 1925

F. M. A.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

September 24, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4468

South of Frying Pan Shoals, N. C.

Surveyed in 1924.

Instructions dated April 21, 1924.

Chief of Party, H. A. Cotton.

Surveyed by H. A. C.

Protracted by R. D. Horne.

Soundings plotted by W. M. Gibson.

Verified and inked by F. M. Albert.

1. The records conform to the requirements of the General Instructions except that the soundings should have been reduced and plotted in fathoms as the area covered by the sheet lies outside of the 1:80,000 charts.
2. The plan and character of development conforms to the requirements of the General Instructions.
3. The plan and extent of the development satisfy the specific instructions except that an additional sounding line should have been run on longitude $77^{\circ} 23'$.
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 adverse criticism is that high grade paper prescribed for smooth sheets was not used.
7. The junction with H. 4437 is not very good, there being differences in crossings amounting to as much as 27 feet. If the soundings were correctly taken then shifts in position of several miles would be needed to make a correct adjustment. Line 11 to 16 B was rejected by Chiefs of Field Records and Field Work Sections because of disagreement with H. 4437.

8. This survey is based on signal End (Frying Pan Shoal whistling buoy), the location for which is none too good. The work is done in accordance with the directions for precise dead reckoning but, considering the conditions under which it was executed, a high degree of accuracy could not be expected.
9. The character and scope of the surveying and field drafting are good.
10. Reviewed by E. P. Ellis, August, 1925.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. ⁴⁴⁶⁸

Register No. 4468

State . . . NORTH CAROLINA

General locality . . . ~~FRYING PAN SHOALS~~ Cape Fear

Locality SOUTH OF FRYING PAN SHOALS

Chief of party H. A. COTTON

Surveyed by H. A. COTTON

Date of survey OCT. 15, 1924 -- OCT 30, 1924.

Scale 1 : 100,000

Soundings in FTEET

Plane of reference . . . MEAN LOW WATER

Protracted by R D Horne . . . Soundings in pencil by W. M. Gibson

Inked by . J. M. Albert Verified by J. M. Albert

Records accompanying sheet (check those forwarded):

Des. report, _____ Tide books, _____ Marigrams, 1 Boat sheets,

1 Sounding books, _____ Wire-drag books, _____ Photographs.

Data from other sources affecting sheet

1 cahier of Precise Dead Reckoning abstracts and originals;
current observations and graphs; accompanying the sheet.

Remarks: