

5786

U. S. COAST & GEODETIC SURVEY  
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5786

Form 504  
Rev. Dec. 1933

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. PATTON, Director

**DESCRIPTIVE REPORT**

Topographic }  
Hydrographic } Sheet No. 31

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State South Carolina

LOCALITY

Bull Bay

Southern Part & Vicinity

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193 5

CHIEF OF PARTY

*[Signature]*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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LIBRARY  
MAY 23 1935  
Acc. No. \_\_\_\_\_

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.

Field No. 31

REGISTER NO. 5786

State South Carolina

General locality Bull Bay  
Charleston, S.C.

Locality Bull Bay Southern Part & Vicinity

Scale 1:10,000 Date of survey Feb + March, 1935

Vessel Party No. 19

Chief of Party Benjamin H. Rigg

Surveyed by J. B. Kinghorn

Protracted by G.F. Ricker & C. J. Harryman

Soundings penciled by C. J. Harryman

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by L. B. BERES + GRUBB

Verified by L. B. BERES

Instructions dated October 10, 1933

Remarks: \_\_\_\_\_

DESCRIPTIVE REPORT TO  
ACCOMPANY HYDROGRAPHIC SHEET NO. 31

DATE OF INSTRUCTIONS - October 10, 1933.

SURVEY METHODS - The positions were taken by the standard three-point sextant fix on signals located by planetable and triangulation. The soundings were taken while the launch was underway, with a hand lead line. The leadline was graduated in fathoms and feet in accordance with the standard method. Sounding lines were run on ranges when possible. When no ranges were available, lines were run on compass courses. Shorelines and lines in small creeks were run by keeping a constant estimated distance from the shoreline. In Jack Creek only one center line was run in the center of the creek. This line was controlled by spotting the positions from the compiled shoreline.

PURPOSE OF SURVEY - The purpose of the survey was to obtain data for compiling a new Intracoastal Waterway chart. No attempt was made to do hydrography in the dredged canals because that would only be a duplication of the data furnished by the U. S. Engineer Department. An attempt was made to develop inlets out to the twelve foot curve.

DISCREPANCIES - Between positions 29 and 30 "m" day, 30 and 31 "m" day, and 9 and 10 "m" day, there is poor agreement of soundings. This is due to the steep bank. The shoal soundings are plotted; a selection of soundings was made. VDB

DANGERS - At Lat. 32° 56.25', Long. 79° 36.0' there is a small sand shoal which <sup>cov.</sup> bares  $\frac{1}{2}$  foot at M.L.W. This shoal is very close to the deepest water in the channel which runs through Bull Harbor from Sewee Creek. Special notice is made of this on the smooth sheet. From Bull Creek to Belvedere Creek along the shoreline there are high shell banks which are covered at high tide. These shell banks will not extend over 125 meters from the marsh line at any point.

The part of Bull Bay which appears on the sheet is very shoal with the exception of the channels developed. Lines were run far apart in the flat area due to its unimportance.. Along Bull Island Beach from signal SET to TREE, the beach has washed and the entire area is covered with stumps to low water line.

At Lat.  $32^{\circ} 55.9'$ , Long.  $79^{\circ} 35.8'$  there is a sand shoal. The east end of this shoal is marked by a black can buoy (No. 1).

A sand and mud shoal extends from the north point at the mouth of Bull Creek to Lat.  $32^{\circ} 56.0'$ , Long.  $79^{\circ} 35.5'$  on the north side of the channel. This shoal is bare at M.L.W.

All of Sewee Bay, with the exception of the dredged canal and two channels shown on the smooth sheet, is made up of high mud and shell banks and is not navigable at any stage of the tide.

CHANNELS - From Lat.  $32^{\circ} 58.5'$ , Long.  $79^{\circ} 36.8'$ , the north limits of the sheet in Belvedere Creek through Vanderhost Creek and Van Ross Creek to Sewee Wharf, the controlling depth is ~~three feet~~ <sup>5 FT</sup>. The shoalest point is in Vanderhost Creek, Lat.  $32^{\circ} 58.0'$ , Long.  $79^{\circ} 36.5'$ . This channel is used now only by a few local oyster boats. The Intracoastal Canal now serves as a connection between any important points which this channel once connected.

Bull Island Landing, Lat.  $32^{\circ} 54.8'$ , Long.  $79^{\circ} 36.9'$  is connected with the Intracoastal Waterway by two channels. One of these joins the waterway at Sewee Wharf, <sup>not on this survey</sup> The other through Price Inlet. Either of these channels has a controlling depth of four feet. The channel which joins the Intracoastal Waterway at Sewee Wharf may be very confusing to the stranger due to the crossing of flats where the channel is unmarked. The shoalest point <sup>(2 feet)</sup> is Lat.  $32^{\circ} 56.4$ , Long.  $79^{\circ} 39.9'$ . The other channel which is from Price Inlet through Bull Narrows is well defined all the way by high marsh on either bank. These channels are used only by the keepers of Bull Island and local Oyster Boats.

The channel from the Bull Island Landing through Bull Creek and Bull Harbor to the ocean has a controlling depth of twelve feet. This channel is often used by fishing vessels to come in for anchorage. - <sup>not sure of location of Bull landing</sup>

COMPARISON WITH PREVIOUS SURVEYS - The 12 foot curve on the east side of Bull Island shows very little change from the previous survey (Chart 1238). Bull Harbor from Lat.  $32^{\circ} 55.5'$ , Long.  $79^{\circ} 36.3'$  to Lat.  $32^{\circ} 56.1'$ , Long.  $79^{\circ} 34.3'$  has

a controlling depth of 22 feet rather than 17 feet as chart 1238 shows it. ✓

Bull Creek has shoaled to seven feet at Lat. 32° 55.2', Long. 79° 36.9'. The ✓

chart shows nine feet. At Lat. 32° 55.1', Long. 79° 37.9' the depth is fifteen ✓

instead of 23 feet. Sewee Bay with the exception of the Intracoastal Waterway ✓

canal and the four small channels surveyed (two of which end in the mud flats) ✓

consists only of high mud and shell flats.

ANCHORAGES - Attention was paid to any channels that lead from the Intracoastal ✓

Waterway to points where supplies may be obtained. Fishing vessels often come ✓

in through the channel at Bull Creek and Bull Harbor for anchorage.

TIDAL DATA - See attached report.

STATISTICS -

Vol. No.	Miles	Soundings	Positions
1	43.7	1414	442
2	43.2	1459	439
3	48.0	1269	393
4	73.8	1845	409
5	51.9	1535	382
	260.6	7522	2065

Respectfully submitted,

J. B. Kinghorn

*J. B. Kinghorn*

Forwarded by,

Lt. Benjamin H. FAYE,  
Chief of Party.

*Benjamin H. Faye*

HYDROGRAPHIC SURVEY NO. 5786

Smooth Sheet 1

Boat Sheet 1

Sounding Records 5 Vols. 1

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) See Letter #59 (1935)

Statistics Yes

Approved by Chief of Party B. H. Rigg

Recoverable Station Cards (Form 524) \_\_\_\_\_

Special Chart for Lighthouse Service \_\_\_\_\_  
(Circular Nov. 30, 1933)

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Field Records Section (Charts).

HYDROGRAPHIC SHEET NO. ...5786

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

Number of positions on sheet	2065
Number of positions checked	..247
Number of positions revised	....?
Number of soundings recorded	.7522
Number of soundings revised	....17+ 438 fractions to delineate curves
Number of signals erroneously plotted or transferred	....0

Date: JUNE 17, 1935

Verification by L. B. BERES

Time: 25 hrs

Review by V. D. Behn

Time: 16<sup>2</sup> hrs.

**GEOGRAPHIC NAMES  
S. CAROLINA**

Date. May 27, 1935

Survey No. H5786

Chart No. 1238

Diagram No. 1238-2

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
	<u>Belvedere Creek</u> ✓	Same			
	<u>Vanderhost Creek</u> ✓	"			
	<u>Yenning Creek</u> ✓	Van Ross Creek			
	<u>Intracoastal Waterway</u> ✓	-----			
	<u>Anderson <del>Nh</del> Creek</u> ✓	Sewee Creek <i>USGB decision</i>			
	<u>Blind Creek</u>	Same			
	<u>Bull Bay</u> ✓	"			
	<u>Bird Island Shoal</u> ✓	"			
	<u>Bird Island</u> ✓	"			
	<u>Bull Harbor</u> ✓	"			
	<u>Bull Creek</u> ✓	"			
	<u>Hickory Bay</u> ✓	"			
	<u>Sewee Bay</u> ✓	"			
	<u>Claiborne Creek</u> ✓	-----			
	<u>Price Creek</u> ✓	"			
	<u>Bull Narrows</u> ✓	"			
	<u>Black Creek</u>	<u>Back Creek</u> ✓			
	<u>Summerhouse Creek</u> ✓	Wharf Creek			
	<u>Bull Island</u> ✓	Same			
	<u>Jack Creek</u> ✓	"			

APPROVED NAMES  
UNDERCIRCLED IN RED  
H. L. Flermer.



## TIDE NOTE FOR HYDROGRAPHIC SHEET

June 5, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5786

Locality Bull Bay (Southern Part and Vicinity), South Carolina

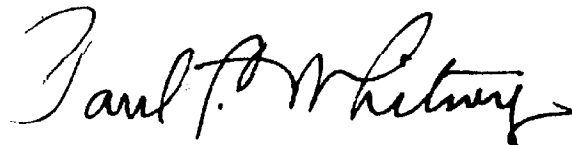
Chief of Party: B. H. Rigg in 1935  
Plane of reference is mean low water reading  
3.5 ft. on tide staff at Sewee Wharf (1st staff)  
11.2 ft. below B.M. 1

3.0 ft. on tide staff at Sewee Wharf (2nd staff)  
11.2 ft. below B.M. 1

4.0 ft. on tide staff at Bull Island  
6.8 ft. below B.M. 1

Height of mean high water above plane of reference is 5.0 feet  
at Sewee Wharf; 5.1 feet at Bull Island.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

VERIFIER'S REPORT H-5786

The records conform to the requirements of the General Instructions. ✓

Due to the nature of the survey the one and two fathom curves could not be completely drawn. ✓

The plotting was complete and satisfactory. ✓

The drafting was satisfactory.

Junctions with adjacent sheets not determined. ✓

Remarks: *junction with H-5811 and H-5804 satisfactory  
except for shoal in vicinity of H-5811* 193.

Positions 80 and 81 c were replotted. ✓

*This survey has been compared with the Air Photo Compilation*

Respectfully submitted

*L. B. Beres*  
L. B. Beres

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. H-5786 (1935) - FIELD NO. 31

Bull Bay, Southern Part, and Vicinity, South Carolina  
Surveyed in February - March 1935  
Instructions dated October 10, 1933 (B. H. Rigg)

Hand Lead Soundings.

3 Point Fixes on shore signals.

Chief of Party - B. H. Rigg.  
Surveyed by - J. B. Kinghorn.  
Protracted by - G. F. Ricker and C. J. Harryman.  
Soundings penciled by - C. J. Harryman.  
Verified by - L. B. Beres.  
Inked by - L. B. Beres and Frederick Grubb.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual.

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 cross lines as were run, as well as adjacent parallel lines, are in good agreement.

4. Depth Curves.

Within the limits of the survey the usual depth curves can be satisfactorily drawn with the exception of the low water line around several shoal areas which were not clearly defined. This is especially true in the vicinity of the junction with H-5811 (1935).

5. Junctions with Contemporary Surveys.

- a. The junction with H-5804 (1934) on the southwest is satisfactory.
- b. The junction with H-5811 (1935) on the north is satisfactory except that the outline and elevation of the shoal area east of Bird Island was not well determined.

6. Comparison with Prior Surveys.

- |    |                |                |
|----|----------------|----------------|
| a. | H 626 (1857)   | H-1277a (1875) |
|    | H 693 (1859)   | H-1674 (1886)  |
|    | H 1276b (1875) |                |

A comparison between the above surveys and the present survey reveals numerous changes in depths and locations of shoals as well as changes in shore line. Because of the time elapsed between the earlier surveys and the present survey and the general character of the area and the nature of the bottom, it is unnecessary to consider in detail, from the standpoint of information to be carried forward, the various changes noted. The present survey should supersede the above surveys for charting purposes.

b. H-4179 (1921).

A comparison between this survey and the new survey indicates that although the two surveys are in fair agreement some change has taken place in the area. In view of this and the larger scale of the present survey it should supersede this survey, H-4179 (1921), for future charting.

7. Comparison with Chart No. 1238.

a. Hydrography.

Within the area of this survey the chart is based on the surveys discussed in the foregoing paragraphs and contains no additional information that needs consideration in this review.

b. Aids to Navigation.

Buoy C1 in latitude  $32^{\circ} 55.85'$ , longitude  $79^{\circ} 33.55'$ , is located approximately 150 meters north and 60 meters west of its charted position. The charted position originates with Notice to Mariners No. 48, 1934, which locates the buoy with reference to the shoreline of Bull Island. The new position is, therefore, probably more accurate and it adequately marks the features intended.

c. Controlling Depths.

The channel in Sewee Bay, connecting Van Ross Creek (Venning Creek on this survey) and Price Creek, is charted as having a controlling depth of 4 feet. (See letter 460/11 1933). A portion of this channel is now a part of the Intracoastal Waterway and, is therefore in compliance with the instructions for the project, not included as part of this survey. The remaining portion of this channel has a controlling depth of 3 feet on the present survey at latitude  $32^{\circ} 57.3'$ , longitude  $79^{\circ} 38.3'$ .

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 work is required.

10. Superseding Old Surveys.

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

H 626 (1857)	in part
H 683 (1859)	" "
H 1276b (1875)	" "
H 1277a (1875)	" "
H 1674 (1888)	" "
H 4179 (1921)	" "

11. Reviewed by - V. D. Behn, August 16, 1935.

Inspected by - R. L. Johnston.

Examined and approved:

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

*F. S. Bordu*  
Chief, Section of Field Work.

*L. O. Solbut*  
Chief, Division of Charts.  
*act. R. R. Lukens*  
Chief, Division of H. & T.

Applied to chart 837 Dec. 17, 1935 H.L.

" " " 1239 Apr. 1937 J.M.A.

25 Jan 2, 1936

CAD

Applied to chart 1238 Oct. 28, 1937

J.H.S.