

3842

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

State: *South Carolina*  
11-5013

DESCRIPTIVE REPORT.

*Topo* Sheet No. *3842*

LOCALITY:

*Vicinity of Charleston*  
*Charleston to*  
*Price Inlet*

*1924*

CHIEF OF PARTY:

*F. S. Borden*

2  
4  
00  
3

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEETS 3842

CHARLESTON TO PRICE INLET, S.C.  
( Field Sheet A )

AND

~~PRICE INLET TO RACCOON KEY, S.C.~~  
~~( Field Sheet B )~~

SURVEYED, JUNE-OCTOBER 1921.

LAUNCH ELSIE

F.S. BORDEN  
CHIEF OF PARTY

1.

**EXTENT.** This report covers the topographic work done by the party on the launch ELSIE from June to October, 1921. It comprises two sheets and covers the area from the east entrance point of Charleston Harbor to Raccoon Key. It is largely in the nature of revision work. The topography was carried back into each inlet and creek only as far as it was necessary to obtain an unquestionable junction with previous surveys. The linear distance of shoreline mapped, including tributaries and portions of the Inside Passage, is 107 statute miles.

**GENERAL DESCRIPTION OF THE COAST.** The outer shoreline with the exception of that in Bull Bay is sand beach. In general this sandy beach is backed by a strip of woods of varying depths and made up largely of pine palmetto and live oak. This strip of woods is backed by salt marsh having an average depth of about two miles. The marsh is cut by many creeks and sloughs and it is by utilizing these streams that the inside passage has been made possible. The shoreline in Bull Bay, which is protected from sea action is practically all marsh. Raccoon Key differs from the other islands that form the outer coast in that it has only a narrow strip of sand beach and hard ground between the ocean and the marsh. The only vegetation on Raccoon Key is grass and low bushes.

**HABITATION, LANDMARKS, ETC.** The portion of the coast covered by this survey, with the exception of that in the immediate vicinity of Charleston is very sparsely inhabited and furthermore shows few signs of developing. Sullivan's Island, which is somewhat of a resort, is fairly well built up. Somewhat to the northward on the Isle of Palms is another small resort. The only other habitation on the remainder of the coast consists of one or two families living at each of the four inlets, Dewees Capers, Price and Bull.

Landmarks are few on account of the sparse inhabitation and also on account of the low terrain. Aside from the tank on Sullivan's Island, now shown on the chart there are only three other prominent objects which should be charted as aids to navigation. These are (1) A tall observing tower at the east end of Sullivan's Island, O Ban; (2) A water tank at the Isle of Palms, O Gay; (3) A very prominent oyster packing house at Bull Bay, Δ Pack. Aside from these objects there are several other natural objects which will be of value to surveying parties but be of no material value as aids to navigation. These are listed under "Plane Table Positions"

**CHANGES SINCE LAST SURVEY AND RECOMMENDED CHART CORRECTIONS.** Many marked changes have taken place since the last survey, the shoreline having been washed back in some places while in others it has built out. As these changes, due to sea action, will be readily discerned by comparing the present survey with the older ones, they will not be given in detail. Other changes and recommendations which I believe will be of assistance in bringing the chart up to date are as follows:

1. New front range beacon on the main channel range for entering Charleston Harbor. This beacon was completed in June, 1921. It is shown on the sheet as O "NIG."

2. The old wharf at Fort Moultrie has been replaced by a new one and occupies a different position.
3. The spur dikes on each side of the wharf mentioned above should be shown.
4. The rock pile just inside of the west end of Sullivan's Island should be shown. This is now marked by a spindle.
5. The tall observing tower on the east end of Sullivan's Island should be charted. O BAN.
6. A new range for coming out of Hamlin Creek has recently been established in place of the old range which did not show the best water. The red beacon ( No. 32 ) in the same locality should be charted.
7. The small island shown on the present chart in Hamlin Creek about three fourths mile east of Breach Inlet is now gone.
8. The Perrie Wheel at the Isle of Palms is now gone but a water tank ( O GAY ) just southeast of it is prominent and should be charted.
9. Forty Beacons and ranges along the inside passage between Dewees Inlet and Five Fathom Creek have been carefully located on this survey and should be shown in their correct positions on the chart.
10. The houses shown on the east side of Capers Inlet have been destroyed with the exception of the one shown on Sheet "A" as signal MOON.
11. The house shown at Videt Landing in the inside passage between Capers and Price Inlet has been destroyed and the area overgrown.
12. The wharf in Bull Harbor should be shown.
13. The present chart is confusing at a point along the inside passage at the turn on half mile west of O PUP. ( Sheet B ). The passage turns to the right in going westward whereas the passage actually takes a ~~she~~ is shown as turning to the left on the chart.
14. The small island in Bull Narrows shown on the chart is now gone.
15. When going to the northward through Hickory Bay and approaching Beacon 29 an island is picked up in what appears to be the middle of the channel. This island is shown on the chart and is correctly located but the dredged cut is shown too far to the eastward with the result that the island is not shown as being in the vicinity of the passage. Sheet "B" shows the dredged cut in its proper relation to the island.
16. A wreck which bares at low water and exposes some treacherous looking drift bolts is located 100 meters off the east end of the small island in Bull Harbor. The wreck has caused a sand spit to build out from the island.
17. A narrow island partly covered with short grass and partly with marsh is located about one and one half miles north of the east end of Bull Island. This island has no name as it has built up since the last survey. Four other small islets have built up to the eastward of the larger one.
18. ~~25~~ Correction should be made to show the direction of the creek which comes into the inside passage abreast Beacon No. 4 in Graham Creek. It is shown too far to the northward on the present chart and is more or less confusing. The inside passage at the point where the dredged cut from Graham Creek enters Saltpond Creek is considerably in error and the passage hard to follow. The horseshoe bend shown on the chart at the upper end of Saltpond Creek is not a part of the inside passage and in fact since the cut was ~~was~~ dredged this loop has almost closed. This has been corrected on Sheet B.

20. A new marsh islet has built up near the mouth of Five Fathom Cr.
21. The creek shown on the chart running through the marsh from Five Fathom Creek to Bull Bay is now closed up.
22. The large Oyster Packing House on Owendaw Creek is a splendid land mark and should be charted. ( PAOK ).

METHODS EMPLOYED. The plane table was used for the greater part of this survey. In some places it was necessary on account of the soft marshes to use the sextant. On the straight away beaches from the Isle of Palms summer resort to Dewees Inlet and from Price Inlet to the southeast end of Bull Bay <sup>Island</sup> a 500 foot tape was used with the plane table in lieu of stadia rods. This was done in order to obtain a close check between triangulation stations which were necessarily several miles apart. It was found that the shoreline could be mapped much more rapidly by this method as it was not necessary to make as frequent set ups as it would have been if the traverse distance had been carried by the stadia method.

The shoreline in the inlets and wherever it was expected the survey would join with the old work was transferred to the topographic sheet from photostat copies of the original survey. In this way it was known when the topography had been carried far enough and much needless work was avoided.

In inking the sheet the topography from the old survey is shown dotted where it connects with the new survey which is shown in solid lines.

*Respectfully submitted,*  
*Frank S. Borden*  
 Frank S. Borden,  
 H. and C. Engineer.

*Nov. 26, 1921*

*Plane Table positions on following page*

# PLANE TABLE LOCATIONS OF PROMINENT OBJECTS.

NAME	LATITUDE			LONGITUDE			REMARKS.
	°	'	"	°	'	"	
NIG	32	44	1578	79	51	1251	✓ New Front Range Beacon Entrance to Charleston Harbor.
BAF	32	46	685	79	48	1295	✓ Observation Tower.
GAY	32	47	378	79	47	402	✓ Tank at the Isle of Pals
Moon	32	51	420	79	41	1411	Northwest Chimney of House at Capers Inlet.
DOG	32	53	1182	79	37	782	Prominent Tree near center of Bull Id.
UM	32	54	200	79	37	453	Umbrella shaped tree on Bull Island.
BOIL	32	59	865	79	35	330	Old boiler one mile south of entrance to Graham Creek.

AND REFER TO NO. 4-VEC

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON

SECTION OF FIELD RECORDS

Report on Topographic Sheets 3841 and 3842.

Surveyed in 1921.

Chief of Party: Frank S. Borden.

Surveyed by Frank S. Borden and Max Leff.

Inked by Max Leff and Frank S. Borden.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of the surveys fulfill the requirements of the General Instructions, except that the magnetic meridian was not shown on sheet 3842. Also the streets of Moultrieville should have been shown (see paragraphs 162 and 173 of General Instructions.)
3. The plan and extent of the surveys satisfy the specific instructions.
4. The field drafting was completed to the extent prescribed in General Instructions.
5. The junctions with both old and recent topography are satisfactory. except that the bridge at inner end of Sullivan I. should have been fully shown.
6. No further surveying is required within the limits of the sheet.
7. Several methods have been followed in making revisionary surveys. From the standpoint of the cartographer most of them have had serious faults. The methods used on sheets 3841 and 3842 have produced an ideal result and it is strongly recommended that the same method be followed in the future on revisionary surveys.
8. The descriptive report contains much information of cartographic value.
9. The character of the surveying and field drafting are excellent.
10. Reviewed by E. P. Ellis, February, 1922.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic 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. 3842 Field Letter "A"

State . . . SOUTH CAROLINA

General locality . . . VICINITY OF  
FROM CHARLESTON TO THE NORTHWARD.

Locality . . . Entrance  
CHARLESTON TO PRICE INLET

Chief of party . . . FRANK S. BORDEN.

Surveyed by . . . F.S. BORDEN, M. LEFF

Date of survey . . . JUNE AND JULY 1921.

Scale . . . 1: 20000

Heights in feet above . . . -----

Contour interval ----- feet.

Inked by . F.S. Borden . . . Lettered by . . . F.S. Borden . . . .

Records accompanying sheet (check those forwarded): Photographs,

✓ Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet . . . . .

NOTE. Descriptive Report covering this sheet also covers  
Remarks: Sheet "B"



Applied to New Compilation of Chart # 491. April 15, 1935  
g.H.S.