

4179

Diag. Cht. No. 1239-2

4179

Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: <i>S. Carolina</i>
11-5613
DESCRIPTIVE REPORT.
<i>Hydro</i> Sheet No. <i>4179</i>
LOCALITY:
<i>Bull Bay -</i>
<i>Raccoon Key to</i>
<i>Price Inlet</i>
<i>21</i> 190
CHIEF OF PARTY:
<i>F. S. Borden</i>

Duplicate

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEETS

~~Sheet~~ "B"

~~CHARLESTON ENTRANCE~~ RACON KEY, S. C. TO PRICE INLET

LAUNCH ELSIE
JUNE-OCTOBER 1921

F. S. BORDEN
CHIEF OF PARTY

1.

EXTENT. This report covers the hydrographic work done by the party on the launch ELSIE between Charleston S.C. and Racoon Key. The work adjoins the off-shore survey of the Str. Bachs to the eastward and the work of the Launch MIKAWA to the southward. It includes surveys in all of the inlets on this section of the coast.

CHANGES SINCE THE LAST SURVEY. The principal changes are those in the inlets and over the bars at the entrance to the inlets. The more important changes are described in detail as follows:

(1) Rattlesnake shoal now has a least depth of nine feet. In addition to the lines run over this shoal which are shown on the sheet, considerable sounding was done without recording to find the least depth. Nothing less than nine feet was found.

(2) Breach Inlet is practically closed up. The draw in the bridge is now untended. Only row boats ever go out over the bar.

(3) There is now a least depth of about six feet at low water over the bar at Dewees Inlet. This inlet is by far the best of the inlets between Charleston and Bull Bay. It is very little used however except by local fishermen. The party on the Launch ELSIE worked considerably from this inlet.

(4) There is about six feet of water over the Caper's Inlet bar but the entrance is narrow and there are many shoals spots inside the the bar which are dangerous because the seas do not break over them. The channel inside the bar is very narrow and is very close to the breaker line. In addition to the lines shown on the sheet a sounding line was run very close to the breakers in what is the only channel. There is nine feet on this line along side the breakers out as far as the bar where it drops to six feet.

(5) There is also six feet over the Price Inlet bar. The channel here parallels the breaker line. The entrance however is very narrow.

(6) Bull Harbor entrance has changed considerably. There is now about 10 1/2 feet over the bar instead of 15 as shown on the present chart. A shoal has built up off the east end of Bull Island. This shoal is about a quarter of a mile from the point and has a depth of two feet over it. It is very close to the channel but can always be identified by the breakers. A more direct passage into Bull Harbor and one that has the same amount of water is to enter on a west course with the east entrance point of Bull Island dead ahead. It is believed that the sea buoy should be moved from its present position to a point three miles west of the east end of Bull Island. A direct course from the buoy to the point would take a vessel in the best water obtainable over the bar.

(7) Bull Bay proper has shoaled up considerably since the last survey. Several small islands have built up in the middle of the Bay. Back of these islands only a half a foot of water can be carried from Bull Harbor to Harbor River. At high tide however boat drawing three and four feet can cross here. Many boats take advantage of the tides and cross Bull Bay to avoid the long trip through the inside passage.

(8) There is now a depth of 7 feet over the bar and into Five Fathom Creek. This has deepened from the three feet shown on the present charts.

See page 4180
D. D.

ANCHORAGES. From observation made during the season the best anchorages in the area covered by this sheet are as follow:

1. In Bull Creek 300 meters west of Harrison's Wharf and just south of the small island which occupies the middle of the channel
2. Price Inlet. In Price Creek just south of where the inside passage crosses the creek.
3. Dewees Inlet. In Dewees Creek at the mouth of the small creek which divides Dewees Island from the marsh island to the westward.

These anchorages apply to small vessels only. For larger vessel good anchorage ground can be found in Bull Harbor just off the entrance to Jack's Creek.

INSIDE ROUTE. The inside passage from Charleston to the limit of the work covered by this survey is supposed to have a minimum depth of four feet. Except in a few places this depth is being maintained at the present time. The most difficult places in the inside passage at the present time are as follows:

1. Saltpond Creek. The upper part of the Creek is very tortuous and has several places in it where it has shoaled to less than four feet.
2. Santee Pass. At the third bend from Price Creek and at the point where the passage approaches Mark Bay the passage has shoaled to three feet. The bottom here however is extremely soft and boats drawing four feet have no difficulty in going through.
3. Bullyard Sound. Abreast beacons Nos. 24 and 26 the dredged out has shoaled to 3 1/2 feet.
4. Sullivan's Narrows. Although there is four feet through Sullivan's Narrows the passage is difficult on account of the mud banks which have built out and which are covered at half tide. In going through Sullivan's Narrows the ebb tide bend should be very closely followed.

METHODS EMPLOYED. All sounding in this area was done by the launch ELSIE and the 24 foot motor sailing launch. Soundings as a rule were taken every fifteen seconds in water up to three fathoms and every twenty seconds up to five fathoms. The average speed was six miles an hour.

Respectfully Submitted,

F. S. Borden
F. S. Borden.

STATISTIC SHEET TO ACCOMPANY
SHEET "B"
PRICE INLET TO RACON KEY, S C.

DATE	LETTER	VOLUME	POSITIONS	SOUNDINGS	MILES STATUTE	VESSELS
1921 AUG. 27	A	1	75	633	28.1	ELSIE
30	B	1	100	983	35.5	"
31	C	1-2	75	666	25.5	"
Sept. 2	D	2	79	755	26.5	"
6	E	2	51	477	15.5	"
8	F	3	68	584	24.4	"
16	G	3	61	580	19.8	"
22	H	3-4	98	995	34.1	"
23	J	4	69	642	21.8	"
Aug 19	a	1	26	250	6.9	Motor Sailer
Sept. 7	b	1	74	635	20.7	" "
9	c	1	51	452	11.7	" "
20	d	1	36	278	8.1	" "
21	e	2	88	909	24.4	" "
26	f	2	46	420	11.4	" "
Oct. 4	h	2-3	58	535	16.0	" "
Sept 27	g	3	35	320	8.5	" "
Oct 5	i	3	85	947	24.4	" "
6	k	3-4	102	1125	30.1	" "
7	l	4	76	830	21.8	" "
18	m	4-5	52	486	12.5	" "
19	n	5	110	948	26.4	" "
20	p.	5-6	90	774	20.6	" "
TOTALS			1605	15224	474.7	

COPY TO FIELD RECORDS.

Dec. 21, 1921.

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
volumes of sounding records for
10

HYDROGRAPHIC SHEET **4179**

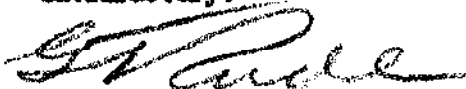
Locality: **Bull Bay, South Carolina.**

Chief of Party: **F. S. Borden in 1921**

Plane of reference is **mean low water, reading**

	ft. on tide staff at	
2.2	" " " " "	Dewees Inlet, off Dewees Island.
4.9	" " " " "	Harrison's Wharf, Bull Island.

Condition of records: **Satisfactory.**



Chief, Division of Tides and Currents.

Verification Report of Hyd. 4179.

The records for this shaft were kept in excellent order - attention being paid to all details necessary for good plotting.

The plotting and plotting of soundings was also well done.

All shoals, bars and entrances & rivers appear to be fully developed.

Respectfully submitted,

Alois Beer

Craftsman.

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

SECTION OF FIELD RECORDS

REPORT ON HYDROGRAPHIC SHEET No. 4179.

Surveyed in 1921.

Chief of Party: F. S. Borden Soundings plotted by G. H. Everett

Surveyed by F. S. Borden and R. D. Horne. Verified and inked by A. Baer.

Protracted by G. H. Everett and Wm F. Malnate.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions. It should be noted, however, that line 65 to 66 P day containing soundings of 13 feet, the accuracy of which are confirmed by a 13 foot sounding on 3761, indicate the probability of shoaler water and the shoal should have been developed.
4. The sounding line crossings are adequate.
5. Considerable difficulty was experienced in drawing the curves owing to the sparse development. With the exception of the spot noted in par. 3 it is believed that all the essentials are shown.
6. The field plotting was completed to the extent prescribed in General Instructions.
7. The low water line, which is the dominating feature of Bull Bay, was transferred from the boat sheet and inked in without regard to the soundings on the smooth sheet. Nearly all of it had to be erased and changed to conform to the soundings.
8. The junctions with adjacent sheets are satisfactory.
9. No further surveying is required within the limits of the sheet except possibly the shoal noted in par. 3 (which is one-half mile west of H. S. nun buoy.)
10. The character and scope of the surveying are excellent. The field drafting is excellent except for the poor judgment shown in inking the low water line in Bull Bay.
11. Reviewed by E. P. Ellis, February, 1922.

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.

Register No. 4179 Field Letter "B"

State . . . South Carolina

General locality . . . Coast Bull Bay

Locality . . . Raccoon Key to Price Inlet to East Entrance Point Bull Bay

Chief of party F.S. Borden

Surveyed by . . . F.S. Borden and M. Leff R.D. Horne

Date of survey . . August - October, 1921

Scale 1 : 20000

Soundings in . . . Feet

Plane of reference . . M.L.W.

Protracted by Wm. Malnate . Soundings in pencil by

Inked by . A. Baer Verified by A. Baer

Records accompanying sheet (check those forwarded):

Des. report, 1 Tide books, 4 *Marigrams, 1 Boat sheets,

10 Sounding books, --- Wire-drag books, --- Photographs.

Data from other sources affecting sheet

Remarks:

- * Descriptive Report also covers Sheet "A"
- Four tide books also cover Sheet "A"