

4153

Dir. Chart No. 1240-2

4153

Form 504 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
State: <i>South Carolina</i>
21-5813 DESCRIPTIVE REPORT.
<i>Hyd.</i> Sheet No. <i>4153</i>
LOCALITY: <i>Port Royal Sound</i> <i>From Entrance</i> <i>To Fripp's Inlet</i>
<i>1920</i>
CHIEF OF PARTY: <i>R. F. Luce</i>

Descriptive Report to Accompany
Hydrographic Sheets No. 4152 and 4153.
Instructions Dated July 9, 1920.

General Description of Coast.

The coast line covered in these sheets extends from Port Royal Sound eastward to Framptons Inlet. It is a lowlying coast without distinctive, outstanding features consisting in the main in sand beaches backed by a thin fringe of oaks, pines, and palmettos. Back of the trees and on the banks of the creeks and slues the country is largely swamp land.

Outlying Dangers and Islands.

There are no islands off this coast and no new outlying dangers were discovered.

Inshore Dangers, Bars, and Channels.

The only inshore dangers consist of the bars and shoals at the mouths of the channels and inlets. Port Royal Sound is amply buoyed and lighted. St. Helena Sound is buoyed ~~but~~ but can not be entered at night because none of the buoys are lighted. There is a channel for boats of less than 5' draft into Trenchards Inlet and for boats of 10' draft into the South Edisto River but neither of these channels is ~~buoyed~~ buoyed and would be difficult for the stranger to find. In fact most boats would have nothing to gain by using these channels. All the other inlets are blocked by bars on which the sea breaks in any but calm weather and therefore are no use to boats at all.

Changes of Coastline or Depth.

There have been many changes in the coastline but these are taken up in detail in the descriptive report covering the topographic sheets. Many changes in depths and shiftings of shoals were discovered also, perhaps the most noticeable one being the finding of 16 to 18 feet of water where breakers were shown on previous charts. This was on the northeast bank of St. Helena Channel about opposite the second nun buoy from the outside entrance.

Survey Methods.

The usual methods of hydrographic surveying were employed, both the Mikawa and a 24 foot motor sailer being used to advantage. The control consisted of numerous signals located by planstable traverse which was tied in frequently to triangulation

thus insuring the accuracy. In the vicinity of the South Edisto River it was found necessary to locate several of the signals by triangulation. All the covered was completed and should require no further examination. A section of the work in St. Helena Sound, off Hunting Island, was not taken up owing to the weather conditions and will be done in the 1921 season.

TABLE OF STATISTICS.
 To Accompany Hydrographic Sheets No. 4152 & 4153.

Date 1920	Letter	Vol.	Positions	Soundings	Miles Stat.	Vessel	Sheet
Sept. 2,	A	1	29	161	8.4	Mikawe	4153
" 8	B	1	90	404	22.3	"	"
" 9	C	1	111	566	30.5	"	"
" 14	D	1&2	67	354	17.3	"	"
" 28	E	2	123	613	33.2	"	"
Sept. 21	a	1	61	189	7.2	Launch	4153
" 22	b	1	137	347	13.7	"	"
" 23	c	1& 2	211	894	33.6	"	"
" 24	d	2	43	176	6.5	"	"
" 29	e	2	59	187	6.5	"	"
Oct. 4	f	2	51	200	8.1	"	"
" 5	g	3	196	801	30.1	"	"
" 25	h	3	14	42	1.6	"	"
" 26	j	3	102	531	22.8	"	"
Oct. 21	a	1	37	166	7.2	Launch	4153
" 22	b	1	125	448	17.9	"	"
" 25	c	1	34	129	4.5	"	"
Nov. 1	d	1	63	290	11.6	"	"
" 5	e	1& 2	155	737	31.7	"	4152
" 8	f	2	90	396	15.6	"	"
" 9	g	3	170	727	30.3	"	"
" 10	h	3	100	450	17.9	"	"
" 22	j	3	111	433	16.9	"	"
" 24	k	4	56	220	9.0	"	"
Dec. 1	m	4	95	366	16.8	"	"
" 2	n	4	18	64	3.6	"	"
" 3	p	4	135	686	32.8	"	"
" 6	r	5	126	568	27.2	"	"
" 7	s	5	11	40	1.9	"	"
" 9	t	5	130	598	31.3	"	"
" 10	u	6	11	43	2.0	"	"
" 13	v	6	63	299	16.2	"	"
Dec. 7	A	1	12	47	2.3	Mikawe	4152
" 15	B	1	26	107	6.2	"	"
TOTALS			1553	6488	283.0		4153
			1308	5801	260.7		4152

ADDRESS THE SUPERINTENDENT
U. S. COAST AND GEODETIC SURVEY

D U P L I C A T E

AND REFER TO NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON February 2, 1921.

Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4153

Port Royal Sound to Fripp's Inlet, S. C.
St. Helena Sound, S. C.
R. F. Luce in 1920

Plane of reference is
Mean low water, reading

4.3 ft. on tide staff at Fort Freemont Wharf
4.2 ft. " " " " Fripp's Inlet
3.6 ft. " " " " Peters Point

Condition of records: Satisfactory.



Chief, Division of Tides and Currents.

Section of Field Records.

Report on Hydrographic Sheet - 4153.

1. No difficulty was experienced either in verifying or inking this sheet.
2. The sounding records are legible and complete - except that no mention is made of testing lead line at close of the day, and the beginnings + endings of lines are not fully described.
3. The plan and character of the development fulfill the requirements of the general instruction.
4. The sounding line crossings are adequate.
5. The development is sufficient to permit the usual depth curves to be drawn.
6. The character of the protracting and plotting was good.
7. The sheet was legible and clean and none of the work of the field draftsman had to be done over by the office draftsman.

E. M. Vincent.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

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SECTION OF FIELD RECORDS.

REPORT on HYDROGRAPHIC SHEET No. 4153.

Surveyed in 1920.

Chief of Party: R. F. Luce.

Surveyed by R. F. Luce.

Protracted by R. F. Luce, P.A.Perrin, and R.D.Horne.

Soundings plotted by R.D.Horne.

Verified and inked by E. M. Vincent.

1. The records conform to the General Instructions with the following exceptions:
 - Bottom characteristics should be given more often.
 - Boats' courses generally omitted, changes of 180° occurring without notation.
 - Apparent changes in boats' speed are without notation.
 - Locations of beginnings and endings of sounding lines are not described.
 - The lead pencil used is too soft.
2. The plan and character of development fulfills the requirements of the General Instructions and the extent satisfies specific instructions.
3. The sounding line crossings are generally adequate, except angles 75 to 100 j day which had to be rejected.
4. The development is sufficient to permit the usual depth curves to be drawn.
5. The field plotting was completed to the extent proscribed in General Instructions and none of it had to be done over again by the office draftsman.
6. Between the eastern limits of this sheet and St. Helens Sound there is a deficient area which should be surveyed.
7. The character and scope of the surveying and the field drafting are good.
8. Reviewed by E. P. Ellis, May 3, 1921 and two copies of this report to be sent to Division of Hydrography and Topography.

DIRECTOR
ADDRESS IN THE SUPPLEMENTARY
U. S. COAST AND GEODETIC SURVEY

DUPLICATE.

AND REFER TO No. 41/VFB

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON February 2, 1921.



Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 4153

Port Royal Sound to Fripp's Inlet, S.C.
St. Helena Sound, S. C.
R. F. Luce in 1920

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Mean low water, reading

4.3 ft. on tide staff at Fort Freemont Wharf
4.2 ft. " " " " Fripp's Inlet
3.6 ft. " " " " Peters Point

Condition of records: Satisfactory.

A handwritten signature in cursive script, appearing to read "G. V. Rude".

Chief, Division of Tides and Currents.

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. 4153

State South Carolina

General locality Port Royal Sound

Locality From Entrance to Fripps Inlet

Chief of party R. F. Luce

Surveyed by R. F. Luce

Date of survey Aug. - to Oct. 1920

Scale 1:20000

Soundings in Feet

Plane of reference M.S.L. M.R.W.

Protracted by R. F. Luce
P. A. Perrin . Soundings in pencil by R. D. H.
R. D. Horne

Inked by Verified by

Records accompanying sheet (check those forwarded):

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

Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks:

Applied to Chart 793 May 1, 1936

H. Mee Swan