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Diaght. No. 1210-2

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

State: *R.I.*

11-5813

DESCRIPTIVE REPORT.

Sheet No. *3995*  
*3996*

LOCALITY:  
*Sakonnet River*

*1917*

CHIEF OF PARTY:  
*R. P. Strough*

3995-6

DEPARTMENT OF COMMERCE

U.S. COAST AND GEODETIC SURVEY

E. LESTER JONES, SUPERINTENDENT.

R H O D E I S L A N D

Sakonnet River, Narragansett Bay.

A Descriptive Report to Accompany

Hydrographic Sheets 1 and 2--

Scale 1-10,000

1917

Wire Drag Party No. 2

R. P. Strough, Jr. R. & G. Engineer,

Chief of Party.

Observers

R. L. Schoppe

Cardinal Luce

Robt. J. Hole

Descriptive Report to Accompany  
Hydrographic Sheets No.s 1 and 2, Sakonnet River

RHODE ISLAND

I have the honor to submit the following report on hydrography in Sakonnet River, done by Wire Drag Party No.2. This revision was carried on from May 30th to Sept.4th on such days as it was impracticable on account of weather conditions to carry on the wire drag work.

Limits-

The work began with a line running west from the breakwater at Sakonnet Harbor, and extended northward up the river to Common Fence Point, where Sakonnet River joins Mt. Hope Bay. It includes also soundings in Narragansett Pond, which empties into the River just South of Tiverton; R.I.; and soundings in The Cove, a small bay in the Northern end of Rhode Island having an opening into the river.

Methods-

Soundings were made by the ordinary method of hand ~~led~~ and line. The Edna M., a 32 foot gasoline launch, tender for the wire drag party, was used for the work. A general system of Easterly and Westerly lines, normal to the shore and spaced about 200 m. apart was followed. Development lines and channel lines were run as required, the former being in some cases as close as 25m. On the faces of the docks and wharves, which were especially numerous on the Tiverton shore, soundings were taken without sextant location, the name of the dock or wharf being recorded and the soundings plotted by means of the topographic location of said dock or wharf.

#### Control-

The survey was controlled by a scheme of triangulation based on a line between recovered stations, East Rock, and Telegraph 2, and connecting with old stations, Windmill 2 and Anthonys Rock up the river. Most of the signals used in the hydrography were located by triangulation with a few exceptions which were located by the plane table and sextant. A list of signals used and the methods used in their location is attached to and forms a part of this report

#### General Description-

Sakonnet River has in general rocky shores, more rocky in the lower portion than in the upper, with considerable stretches of sand beach, as at McCurrys Point, though the shore is for the most part of a pebbly nature. The bottom is hard and rocky with occasional soft or sticky areas. In Mannaquacket Pond and in The Cove there is a growth of eel grass which necessitated doing the hydrography there at high water. There are several projecting ledges and rocks awash along the coast. All of such as are menaces to navigation are mentioned below. The present location of floating fish traps moored near Sakonnet Harbor are noted on the boat sheet. These locations, however, may not be permanent. Lighted dories are moored at the outer end of these traps and vessels entering the river should keep to the Westward of them until West of the outer end of the breakwater, when they can head for the harbor without obstruction.

Special Features-

A sounding of 1 foot M.L.W. was obtained on a boulder known locally as "The Old Bull", which is 800 m. S.X W. (true) from Church's Point and surrounded by 13 feet of water. A bell and spar buoy mark the southerly limit of this rocky point. The smallest sea continually breaks over this boulder.

A sounding of 7 feet M.L.W. was obtained 1100 m. S.E. (true) of Woods Castle and 150 m. E.X S. (true) of the present sounding of 10 feet shown on Chart 353 as Flint Point Ledge. This ledge has a depth of 7 to 10 feet over an area extending N.W.ly for 30 m. and 15 m. wide. It drops off gradually into 17 to 24 feet of water.

A sounding of 0.6 feet was obtained on the rock south of Fogland Point shown on Chart 353 as Almy Rock, and known locally as the Haystack Rock. A rocky point makes out to this boulder from Fogland Point. \*

A close examination of the shoal shown on Chart 353 S.W. (true) of Fogland Point revealed a least depth of 10 feet M.L.W.. The bottom was soft and muddy with a few small rocks near the bell buoy

The shoal off McCurrys Point, extending northward from the spar buoy was found to have a least depth of 10.4 M .L.W.

The shoal W. of Gould Island was found to have a least depth of 5.2 feet M.L.W. The Eastern edge of this shoal extends in a general southerly direction from the beach at Island Park

In approaching Power House Dock from the South, after passing the spar buoy S.54, the course should be continued N, about 300 yards before swinging in and running on a course N.W. 1/2 <sup>(True)</sup> W. ↑ to the dock.

\* Range to clear: Keep West of a line from high water mark on Fogland Point, to Baptist Spire, Tiverton

Special Features, continued-

At Tiverton, R.I., there are two draw bridges crossing the river. One, known as the Stone Bridge, the most Southerly of the two, is the roadway and trolley bridge. The other is the property of the N.Y.N.H. and H. R.R. The former has an opening of 100 feet and is 7 feet 6 inches in the clear at high tide. The latter has an opening of 100 feet and is 9 feet 6 inches in the clear at high tide.

The opening into Nannaquacket Pond is partially obstructed by a stone causeway with an opening of about 25 feet. This opening is spanned by a bridge which has 9 feet clearance at Low water. There is a strong current through this opening on the flood and ebb tide.

Table of Statistics

Hydrographic Sheet Number (1) 3995

Day	Miles	Soundings	Positions
A	21.8	481	115
B	16.5	456	82
C	30.1	964	145
D	16.0	515	90
E	8.0	260	47
F	8.0	173	47
G	1.2	46	8
H	17.5	664	135
J	15.0	568	93
K	8.0	260	55
L	6.0	121	32
M	5.5	275	55
N	4.2	203	39
<i>Total</i>	<i>157.8</i>	<i>4986</i>	<i>948</i>

Table of Statistics

Hydrographic Sheet Number (2) 3996

Day	Miles	Soundings	Positions
A	11.5	367	63
B	6.8	224	35
C	15.2	483	69
D	16.0	589	79
E	16.0	630	91
F	4.8	175	32
G	8.5	289	68
H	12.1	455	102
J	12.8	658	131
K	4.8	152	37
L	19.2	652	114
M	2.2	105	20
N	4.8	270	54
Total	157.7	5049	895
(Sheet 1,) Total	157.8	4986	948
Total both sheets	292.5	10,035	1843

Respectfully Submitted

*W. P. Strough*  
 Jr. H. & C. Engineer, Chief of Party.

To the Superintendent,  
 Coast and Geodetic Survey  
 Saunderstown, R.I.

Dec. 3, 1917.

List of Signals and Method of Location

Sheet No. 1

Signal	Description	Method of Location
Cor.	Cormorant Rock	Triangulation
Silo	N. Silo, Sachuest Neck	"
Ditch	Dutch Windmill near Wards Castle	Topography
Red	Cup. Yellow Square roofed House	Triangulation
Ho.	E. Chimney on Black Point House	"
Black	Flutter Flag Signal	"
Der.	Boulder on beach N. of Black Point	"
Tow	Large shingle tower Vanderbilt Estate	"
Bilt	S. Gable Vanderbilts Barn	"
Grov	S. Chim. Yellow Ho. in grove	Topography
Sak	Sakonnet L.H.	Triangulation
Doc	Chimney large red tile roofed ho. Sakonnet	"
Hit	Cup. White Barn, Warrens Point	"
Tank	Water tank E. of Harbor	Sextant
Flag	Flag staff at Golf Club	Topography
Rock	Large boulder on Shore	Sextant
Cup	N. Cupola Youngs Barn	Triangulation
Church	Flag Signal	"
Yel	Chim yellow shack on shore	Topography
Spire	Little Compton Church Spire	Triangulation
Red	N. Chim. Red roof ed Ho.	"
Chim	Chim. Gray Ho. on Hill	"
Hill	Tripod on High Hill Point	"
Shack	Westerly shack on Fogland Point	"
Mill	Flutter Flag Signal	"

List of Signals and Method of Location

Sheet No.2

Signal	Description	Method of Location
Der	Large boulder on shore	Triangulation
Hill	Tripod Signal	"
Tow	Gray tower, Vanderbilt Estate	"
Bilt	So. Gable Vanderbilts Estate Barn	"
Shack	W. Gable W. shack	"
Grov	Group of 3 S. chim. yellow ho. in grove	Topography Topography
Mac	Flutter flag signal <i>Main Scheme Station</i>	Triangulation
Cot	E. Gable green ho.	"
Brown	Flutter flag signal	"
<del>White</del>	↑ (Main scheme station)	"
White	White silo	"
Stack	Portsmouth power ho. stack	"
Gray	Gray tower, Chase Estate	"
Yell.	Yellow tower, Church Estate	"
Brick	Red brick chimney built on ground	Topography
Point	Tower white ho.	"
East	Chimney white ho.	"
South	Chimney yellow ho.	"
Wind	Windmill on gray tank	"
Lone	Lone tree	"
Tree	Tree at corner of wall	"

List of Signals and Method of Location

Sheet No.2 ( continued)

Signal	Description	Method of Location
Barn	Cupola Brown Barn	Triangulation
Go	Cupola Merry-go-round, Island Park	"
Et	S. gable West ho. on stone bridge	"
Tiv	Main scheme station Tiverton	"
Pole	Flag pole on Point	"
Spire	Baptist Church Spire	"
Shed	Cupola long yellow shed Sisson Farm	"
Hum	Main scheme station	"
Fish	Fish Factory Stack	"
Ant	Anthony's Rock, main scheme station	"

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

STATISTICS SHEET NO. (2) 3996

Date 1917	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
June 30	A	1	63	367	11.5	Edna M.
July 2	B	1	35	224	6.75	"
" 9	C	1	69	483	15.25	"
" 16	D	1	79	589	16.0	"
" 18	E	1	3	24	0.4	"
" 18	E	2	88	606	15.0	"
" 19	F	2	32	175	4.8	"
" 20	G	2	68	289	8.5	"
Aug. 1	H	2	102	455	12.1	"
" 2	J	2	15	74	1.5	"
" 2	J	3	116	584	11.3	"
" 20	K	3	37	152	4.8	"
" 21	L	3	114	652	19.2	"
" 23	M	3	20	105	2.2	"
Sept. 4	N	3	14	80	1.8	"
" 4	N	4	40	190	4.0	"
Total			895	5049	1357	

ADDRESS  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON, D. C.

REFER TO NO.

5-EMK

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

LIBRARY

Place with descriptive report  
of hydrographic sheet No. 3995

Drawing Section. X

May 23, 1918.

Division of Hydrography and Topography:

Division of Charts:

CHARTS (H) ✓

Tidal reductions have been approved in  
4 volumes of Sounding Records for

HYDROGRAPHIC SHEET 3995

Sakonnet River, Southern Part, Rhode Island  
R. P. Strough in 1917.

Plane of reference is  
Mean low water, reading

0.70 ft. on staff at Sakonnet Harbor,  
Rhode Island.

*L. P. Shidy*

Acting Chief, Section of  
Tides and Currents.

ADDRESS  
U. S. COAST AND GEODETIC SURVEY  
WASHINGTON, D. C.

REFER TO NO.  
5-EMK

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

LIBRARY

Place with descriptive report  
of hydrographic sheet No. 3996

Drawing Section *X*

May 23, 1918.

CHARTS (H)

Division of Hydrography and Topography:

Division of Charts:

Tidal reductions have been approved in  
4 volumes of Sounding Records for

HYDROGRAPHIC SHEET 3996

Sakonnet River, Rhode Island  
R. P. Strough in 1917.

Plane of reference is  
Mean low water, reading

0.70 ft. on staff at Sakonnet Harbor,  
Rhode Island.

*L. P. Shidy*

Acting Chief, Section of  
Tides and Currents.

Hyd. Sheets 3995 & 3996.

These surveys were, as a whole, good. The area was sufficiently covered, most of the crossings were good, and the records were well kept.

The location of rocks near shore was not inadequate. 100 or 50 meters from a sdy. or position is not as definite as the location of a rock should be. In at least one case, (a rock near 10 B) the distance was found to be over 150 meters and not 100 meters as recorded.

On sheet 3996, the sdy. of A day were generally from 1 to 2 1/2 feet deeper than north and south sounding lines; and sdy. from positions 111 to 114 L were deeper by than the cross lines by as much as ten feet in places. This may be due to a sharp north and South depression or it may be an error in reading the leadline.

S. L. Rosenberg.  
April 10, 1919.