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3256

C. & G. SURVEY,  
LIBRARY AND ARCHIVES  
JUL 22 1912  
Sec. No

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

Superintendent.

State: *Va*

DESCRIPTIVE REPORT.

*Top* Sheet No. *3256*

LOCALITY:

*Mattaponi River, Scotland  
Landing to Run Kirk*

1912

CHIEF OF PARTY:

*O. A. Ferguson*

11-4645

*Recommend for approval with exceptions of contours  
Relief uncertain different intervals of elevations shown  
by contour system*

*R.B.D.*

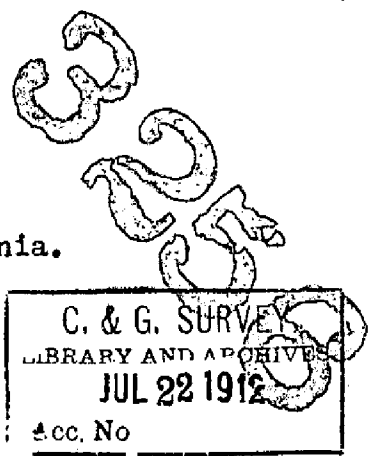
3256

DEPARTMENT OF COMMERCE AND LABOR.

COAST AND GEODETIC SURVEY.

O.H.TITTMANN, Superintendent.

Survey of the Mattaponi River, Virginia.



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 DESCRIPTIVE REPORT.  
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For Topographic Sheet "E".

Extending from one mile above Sandy Point, to Dunkirk Va.

between

Latitude 37° 41' and 37° 49'

Longitude 76° 57' and 77° 07'

Scale 1/20,000.

From April 2. to June 10, 1912.

Schooner "MATCHLESS".

O.W.FERGUSON, Assistant; C.&G.S., in command.

OBSERVERS.

O.W.FERGUSON, Assistant; James E. Marsh, Mate.

Frank S. Borden, and M.Steinberg, Aids.

This river has not before been surveyed and charted. This sheet extends from a mile above Sandy Point, where a Railroad bridge is projected, to Dunkirk, the head of all present navigation, a distance of 16 miles and therefore of 40.6 miles from Westpoint Va.

The width of the river on this sheet for about two thirds of its length will average 280 m., then from about a mile above "Beudley" it narrows down to 100 m. while at Aylett it is about 45 m. and at Dunkirk about 35 m. It winds up a low belt of land of from 1400 m. in width, to 300 m. at three places where the high

ground seems to have constricted the width of the ancient river.

This river shows marked tides, the range at Walkerton, of about 3.6 feet, being the greatest, gradually increasing at every succeeding place, after passing TUES POINT LIGHT on the Bay, and diminishing rapidly above Walkerton. The river over this sheet furnishes good navigation and is used by Schooners, Barges, Tug-Boats, Flat-boats, and Gasoline Boats.

#### CONTROL.

The control of this sheet clear up to "Bewdley" is furnished by the new triangulation with many stations just preceding, and from "Bewdley" to Dunkirk it is furnished by an excellent meander line carrying azimuth, run by theodolite #214, a loop of  $10 \frac{1}{4}$  miles, checking to one minute in azimuth and about a meter in distance.

#### EXTENT.

The survey covers all ground and topography in view from the river, going to high ground of 10 or 20 feet and in places to the height of 120 feet and from  $\frac{2}{5}$  to  $1 \frac{1}{2}$  miles from the ~~xx~~ river.

#### SHORES.

The shores for two thirds of this sheet are two thirds marshy covered with a rather short growth of wild grass, flags and calamus, about at the elevation of high water. Some sandy stretches are found. A marked feature of this portion of the river is the many mud islands occupying about the middle of the stream; this being near the high ground where heavy rains bring down large quantities of sediment that the river must digest. Only the upper third of this sheet, from about Bewdley the character of the shores change greatly being now close to high ground or to a swamp on which is a heavy growth of timber.

## SURFACE.

There is about 2 1/2 square miles of marsh on this sheet. The upland on the lower benches is light and sandy and higher up, more clay and heavier land is found.

The surface is rolling, ridged up a good deal and interspersed with cleared fields on the smoother spots with wooded belts covering the rougher but more fertile ground.

## WATER.

The water of the river all over this sheet is fresh and quite clean. Artesian water is found wherever drilled for. At Walkerton there is quite a great flow. At Aylett is a large spring of excellent water flowing from the point of a hill about six feet above mean stage of the river.

## OCCUPATION.

This is an old settled country though not at all enjoying convenient Railroad accommodations, the nearest depot being from 10 to 18 miles, but an era of Railroad construction seems about ready to open now on this eastern shore section that will bring about great improvements.

The land is fairly productive and generally farmed, though ~~about~~ nearly half of it is not cultivated being given over for timber and to swamps.

The Mattaponi River gives a fair reward to the fisherman. Lumbering is extensively carried on furnishing ready money for the many small and large dealers engaged. Peas are extensively raised by the farmers, this being a good money crop and also beneficial for the land.

## TOWNS.

Wakerton and Aylett are the only places on this sheet that could be called towns, and both especially Walkerton, are quite

well equiped country centers, each with general stores and others, two hotels, telephones and livery, churches and stage routes, Walkerton has about 250 and Aylett about 150 inhabitants.

LANDINGS AND DISTANCES BY CHANNEL, FROM WESTPOINT VA.

Scotland Landing	-----	23.8	miles.
White Oak	" -----	24.2	"
Rickahock	"-----	25.4	"
Horse	" -----	26.5	"
Locust Grove	" -----	27.9	"
x Walkerton	" -----	28.7	"
Endfield	" -----	29.0	"
White Bank	" -----	29.4	"
x Roanes	" -----	33.0	"
Pointers	" -----	33.5	"
Rosespout	" -----	33.8	"
Poplar	" -----	34.7	"
x Jones	" -----	36.2	"
x Aylett	" -----	38.2	"
Old Hall	" -----	39.2	"
Dunkirk	" -----	<del>39.2</del> 40.6	"

Marked by "x" where packet stops.

These landings marked by a cross are where the steamer making trips every two days stops. All excepting Walkerton and Aylett are very small, marked generally by a small wharf where boats load with lumber and other commodities.

5.

Survey of the Mattaponi River  
GEOGRAPHIC POSITIONS  
For Topographic sheet E.

	37	41	498.4	76	56	1269.2
△ BEN			✓			
△ HOOK	"	41	834.6	"	57	198.0
Lone Pine	"	41	926.0	"	57	164.5
△ LUM	"	41	596.5	"	58	21.2
△ RAIN	"	41	1067.9	"	57	1092.96
Tree on Point	"	41	894.2	"	58	155.0
Whf. House	"	41	880.0	"	58	337.0
△ FERRY	"	41	1482.4	"	58	547.9
△ YOU	"	42	24.6	"	58	266.8
Lone chy.	"	42	535.6	"	58	358.4
Barn	"	42	960.5	"	58	667.1
△ HOCK	"	42	567.2	"	58	894.0
△ RICK	"	42	1002.4	"	58	747.0
Whf.	"	42	983.8	"	58	780.5
△ MACGEORGE	"	42	548.6	"	59	261.1
△ HILLSBORO	"	42	1039.3	"	59	37.8
△ HORSE	"	42	719.0	"	59	992.2
△ WOODBURY	"	42	1099.3	"	59	1232.6
△ GREG	"	42	1282.3	77	00	630.7
△ LOG	"	42	1402.8	"	00	286.3
High Chy.	"	42	1690.0	"	00	460.5
△ ORANGE	37	42	1713.3	"	00	956.8
△ GROVE	"	43	159.7	"	00	115.0
△ PEA	"	43	515.4	"	01	2.7
△ VINE	"	43	933.3	"	00	1406.3
Smoke stack of canning Factory	"	43	858.0	"	01	682.0
△ DRAW	"	43	589.1	"	01	888.5
△ BRIDGE	"	43	790.6	"	01	729.4

33  
 22  
 11  
 00

Upper Chy. of Ho. at white bank	37	43	380.0 ✓	77	02	192.0 ✓
△ CAMP	"	43	583.7 ✓	"	02	339.3 ✓
△ BELL	"	43	889.3 ✓	"	02	10.7 ✓
△ NORTH	"	43	1058.8 ✓	"	02	685.7 ✓
△ HOUSE	"	43	1262.5 ✓	"	02	395.7 ✓
Upper chy. of big Ho.	"	44	19.0 ✓	"	02	908.0 ✓
△ PAT	"	43	1486.9 ✓	"	02	1104.1 ✓
△ WHITE	"	44	2.8 ✓	"	02	939.5 ✓
△ SYC	"	44	119.7 ✓	"	03	161.8 ✓
△ BASE	"	44	183.8 ✓	"	02	1172.3 ✓
△ OUT	"	44	162.5 ✓	"	02	1215.7 ✓
△ BURY	"	44	703.8 ✓	"	03	66.5 ✓
△ MORE	"	44	1052.6 ✓	"	03	547.4 ✓
△ GOFF	"	44	1095.9 ✓	"	03	278.2 ✓
△ ULTRA	"	45	133.6 ✓	"	03	1347.5 ✓

3256

C. & G. SURVEY,  
LIBRARY AND ARCHIVES  
JUL 22 1912  
Acc. No.



(1) Sta	(2) From	(3) To	Angle	(1) Azimuth	(2) Dist.	Lat.	Long.	(S Cos +)	(S Sin +)	Lat.	Long.	Back sight
Ultra	Croft	A	203 52 50	153 34 03 333 34 00.3	1707.7	37° 45' 13.36"	77° 03' 134.15"	+1529.16	+760.19	37° 45' 16.6276"	77° 04' 638.77"	
A	Ultra	B	123 18 18	96 52 18	89.0	45-1662.76	04-638.77	+ 10.65	+ 88.36	" 1673.41	" 727.13	
B	A	C	173 03 48	89 56 06	174.5			- 00.20	+ 174.50	" 1673.21	" 901.63	
	A	D	182 24 12	99 16 30	615.0			+ 99.12	+ 606.96	" 1772.53	" 1334.09	
D	B	E	205 49 53	125 04 23	435.5			+ 250.45	+ 356.28	46' 173.16	05' 221.47	
E	D	F	251 15 21	196 21 44	380.2			+ 364.8	- 107.11	" 537.96	" 114.36	
F	E	G	152 26 02	168 47 46	527.9			+ 517.84	+ 102.57	" 1055.8	" 216.93	
G	F	H	261 33 23	250 21 09	241.5			+ 81.20	- 227.44	" 1137.0	04' 1458.39	
	F	I	163 31 10	152 18 56	390.9			+ 346.15	+ 181.61	" 1401.95	05' 398.54	
I	G	J	217 54 43	190 13 39	158.0			+ 155.49	- 28.05	" 1557.44	" 570.49	
	G	K	206 29 12	178 48 08	308.7			+ 308.63	+ 6.45	" 1710.58	" 404.99	
	G	L	254 08 34	226 27 30	226.5			+ 156.03	- 164.18	" 1557.98	" 234.36	
	G	M	124 17 35	96 36 31	157.2			+ 18.09	+ 156.16	" 1420.04	" 554.70	
M	I	N	206 49 54	123 26 25	168.5			+ 92.85	+ 140.61	" 1512.89	" 625.31	
N	M	O	176 43 45	120 10 10	56.3			+ 28.29	+ 46.67	" 1541.18	" 741.98	
O	N	P	148 58 59	89 09 09	57.3			- .85	+ 57.29	" 1540.33	" 744.27	
P	O	Q	149 26 17	58 35 26	37.3			- 19.44	+ 31.83	" 1520.89	" 831.1	
Q	P	R	218 12 38	96 48 04	148.7			+ 17.61	+ 147.65	" 1538.50	" 978.75	
R	Q	S	234 39 28	151 27 32	82.3			+ 72.30	+ 39.32	" 1610.80	" 1018.07	
	Q	T	176 20 32	93 08 36	421.7			+ 23.12	+ 421.07	" 1561.62	" 1377.32	
T	R	U	218 14 34	131 23 10	470.0			+ 310.73	+ 352.63	47' 22.53 06'	283.55	
U	T	V	197 11 31	148 34 41	200.5			+ 171.10	+ 104.53	" 193.63	" 388.08	
V	U	W	285 20 37	253 55 18	77.3			+ 21.41	- 74.28	" 215.04	" 313.8	
	U	X	183 56 50	152 31 31	394.5			+ 350.01	+ 182.01	" 543.64	" 570.09	
X	V	Y	184 53 30	157 25 01	279.3			+ 257.88	+ 107.26	" 801.52	" 677.85	
Y	X	Z	191 46 30	169 11 31	551.8			+ 542.01	+ 103.47	" 1343.53	" 780.72	
Z	Y	&	221 56 52	211 8 23	200.3			+ 171.44	+ 103.58	" 1514.97	" 677.14	
&	Z	A'	152 35 32	183 43 55	353.5			+ 352.75	- 23.01	48' 1790	" 654.13	
A'	&	B'	222 10 54	225 54 47	489.1			+ 340.29	- 351.32	" 358.19	" 302.81	
B'	A'	C'	182 19 35	228 14 24	698.3			+ 465.08	- 520.89	" 823.27 05'	1250.82	
C'	B'	D'	109 29 29	157 43 53	378.2			+ 350.0	+ 143.32	" 1173.27	" 1394.14	
	B'	F'	135 12 17	183 26 41								no dist. taken.
	B'	G'	105 36 56	153 51 20	277.0			+ 248.66	+ 122.06	" 1071.93	" 1372.88	
G'	C'	H'	238 20 46	212 12 06	439.0			+ 371.47	- 233.94	" 1443.4	" 1138.94	
H'	G'	F'	91 37 27	123 49 33	82.0			+ 45.65	+ 68.12	" 1489.05	" 1207.06	
	G'	I'	195 56 53	228 8 59	206.5			+ 137.77	- 138.68	" 1581.17	" 1000.26	
I'	H'	J'	204 46 27	252 55 26	89.5			+ 26.28	- 85.55	" 1607.45	" 914.71	
J'	I'	K'	144 00 24	216 55 50	68.1			+ 54.44	- 40.92	" 1661.89	" 873.79	
K'	J'	L'	125 28 03	162 23 53	59.0			+ 56.24	+ 17.84	" 1718.13	" 891.23	
L'	K'	M'	227 22 32	209 46 25	120.2			+ 104.33	- 59.69	" 1822.46	" 831.94	
M'	L'	N'	214 26 06	244 12 31	131.5			+ 57.21	- 118.40	49' 29.85	" 713.54	
W	V	O'	93 40 05	167 35 23	60.0			+ 58.6	+ 12.89	47' 273.64 06'	326.69	
O'	W	P'	224 22 06	211 57 29	78.5			+ 66.6	- 41.55	" 340.24	" 285.14	
P'	O'	Q'	121 27 28	153 24 57	94.5			+ 84.51	+ 42.29	" 424.75	" 327.43	
Q'	P'	R'	215 33 33	188 58 30	91.7			+ 90.58	- 14.31	" 515.33	" 313.12	
R'	Q'	S'	208 52 07	217 50 37	121.1			+ 95.63	- 74.30	" 610.96	" 238.82	
S'	R'	T'	227 23 44	265 14 21	39.0			+ 2.41	- 28.9	" 613.37	" 209.22	
T'	S'	U'	160 12 02	245 26 23	218.5			+ 90.82	- 198.73	" 704.19	" 11.19	
U'	T'	V'	179 14 35	244 40 58	148.1			+ 63.33	- 133.88	" 767.52 05'	1346.21	

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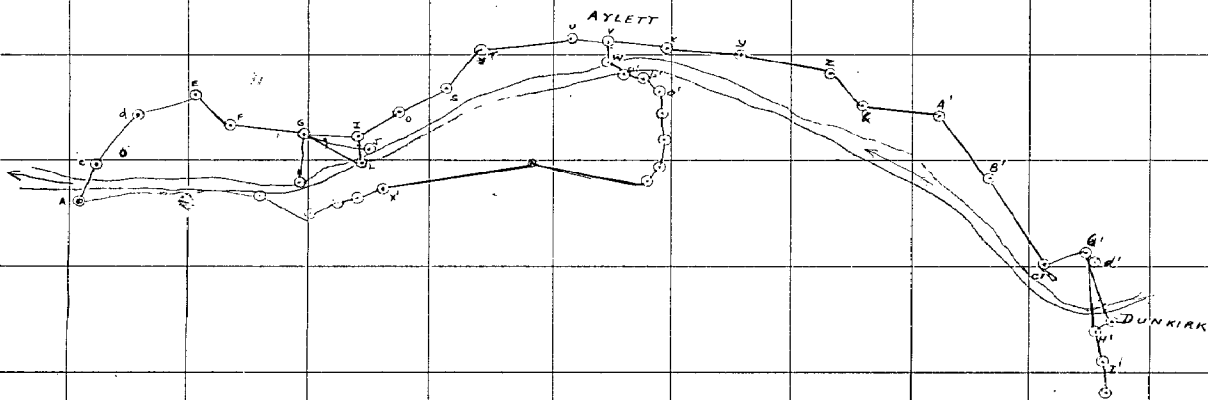


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Sta.	From	To	Angle	Azimuth.	Dist.	$\Delta \phi$	$\Delta \lambda$	Lat'	Long'	
V'	U'	W'	167 54 50	232 35 48	103.5	+ 62.87	- 82.22	47'	830.39 05'	1263.99
W'	V'	X'	258 07 34	310 43 22	128.7	- 83.96	- 97.54	"	746.73 "	1166.45
X'	W'	Y'	210 06 18	340 49 40	454.2	- 429.01	- 149.16	"	317.42 "	1017.29
Y'	X'	Z'	138 32 37	299 22 17	739.6	- 362.75	- 644.53	46'	1804.49 "	372.76
Z'	Y'	&'	133 57 41	253 19 58	82.7	+ 23.72	- 79.23	"	1828.21 "	293.53
&'	Z'	A''	202 45 35	276 05 33	46.8	- 4.97	- 46.53	"	1823.24 "	247.0
A''	&'	B''	169 11 37	265 17 10	37.6	+ 3.09	- 37.47	"	1826.33 "	209.53
B''	A''	C''	205 36 35	290 53 45	39.9	- 14.23	- 37.28	"	1812.10 "	172.25
C''	B''	D''	191 12 51	302 06 36	29.0	- 15.41	- 24.56	"	1796.69 "	147.69
D''	C''	E''	159 13 21	281 19 57	36.8	- 7.23	- 36.08	"	1789.46 "	111.61
E''	D''	F''	158 50 49	260 10 46	72.2	+ 12.31	- 71.14	"	1801.77 "	40.47
F''	E''	G''	198 01 56	278 12 42	110.6	- 15.80	- 109.47	"	1785.97 04'	1399.90
G''	F''	H''	167 24 00	265 36 42	87.6	+ 6.70	- 83.34	"	1792.67 "	1316.56
H''	G''	I''	234 26 58	320 03 40	52.6	- 40.33	- 33.77	"	1752.34 "	1282.79
I''	H''	J''	149 32 58	289 36 38	38.3	- 12.85	- 36.08	"	1739.49 "	1246.71
J''	I''	K''	290 38 46	40 15 24	49.5	- 37.78	+ 31.99	"	1701.71 "	1278.7
	I''	L''	143 36 50	253 13 28	60.0	+ 17.32	- 57.45	"	1756.81 "	1189.26
L''	J''	M''	204 23 29	277 36 57	55.7	- 7.38	- 55.21	"	1749.43 "	1134.05
M''	L''	N''	174 07 24	271 44 21	75.0	- 2.28	- 74.97	"	1747.15 "	1059.08
N''	M''	O''	140 20 23	232 04 44	63.0	+ 38.72	- 49.70	"	1785.87 "	1009.38
O''	N''	P''	195 04 07	247 18 51	90.0	+ 34.71	- 83.04	"	1820.58 "	926.34
P''	O''	Q''	286 33 33	353 52 24	172.5	- 171.52	- 18.41	"	1649.06 "	907.93
Q''	P''	R''	159 04 20	332 56 44	85.8	- 76.41	- 37.03	"	1572.65 "	868.90
R''	Q''	S''	186 27 57	339 24 41	78.2	- 73.20	- 27.50	"	1499.45 "	841.4
S''	R''	T''	171 51 22	331 16 03	272.4	- 238.86	- 130.95	"	1260.59 "	710.45
T''	S''	U''	182 54 09	334 10 12	183.0	- 164.72	- 79.73	"	1095.87 "	630.72
U''	T''	V''	166 05 39	320 15 51	121.6	- 93.51	- 77.73	"	1002.36 "	553.00
V''	U''	W''	206 10 26	346 26 17	361.3	- 351.23	- 84.72	"	651.13 "	468.28
W''	V''	X''	189 28 52	355 55 09	196.0	- 195.50	- 13.95	"	455.63 "	454.33
X''	W''	Y''	171 37 16	347 32 25	570.7	- 557.26	- 123.13	45'	1748.14 "	331.2
Y''	X''	Z''	308 54 10	116 26 35	313.5	+ 139.60	+ 280.70	46'	37.97 "	611.9
	X''	A	266 47 28	74 19 53	318.0	- 85.88	+ 306.18	45'	1662.31 "	637.38
A	Y''	Ultra.	79 15 12	333 35 05		-	-			

Computation of the Meander Line on the Mattaponi River.

After carrying the triangulation as far as practicable, the river becoming narrow and hedged in by woods, a meander line was run on up to Dunkirk for control. This was carefully done, and the loop shown closed in Azimuth, 1° 5'. in long. 1.39 m. in lat. 0.45 meters.



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DEPARTMENT OF COMMERCE AND LABOR.

COAST AND GEODETIC SURVEY.

O.H. TITTMANN, Superintendent.

Survey of the Mattaponi River, Virginia.

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TITLE SHEET

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For Topographic Sheet "E". 3256.

Extending from a mile above Sandy Point Va. to Dunkirk.

*between*  
between

Latitude  $37^{\circ} 41'$  and  $37^{\circ} 49'$

Longitude  $76^{\circ} 57'$  and  $77^{\circ} 07'$

Scale 1/20,000.

From April 2. to June 10, 1912.

SCHOONER "MATCHLESS".

O.W. FERGUSON, Assistant, C.&G.S., In command.

OBSERVERS.

O.W. FERGUSON, Assistant; James E Marsh, Mate.

Frank S. Borden, and M. Steinberg, Aids.

