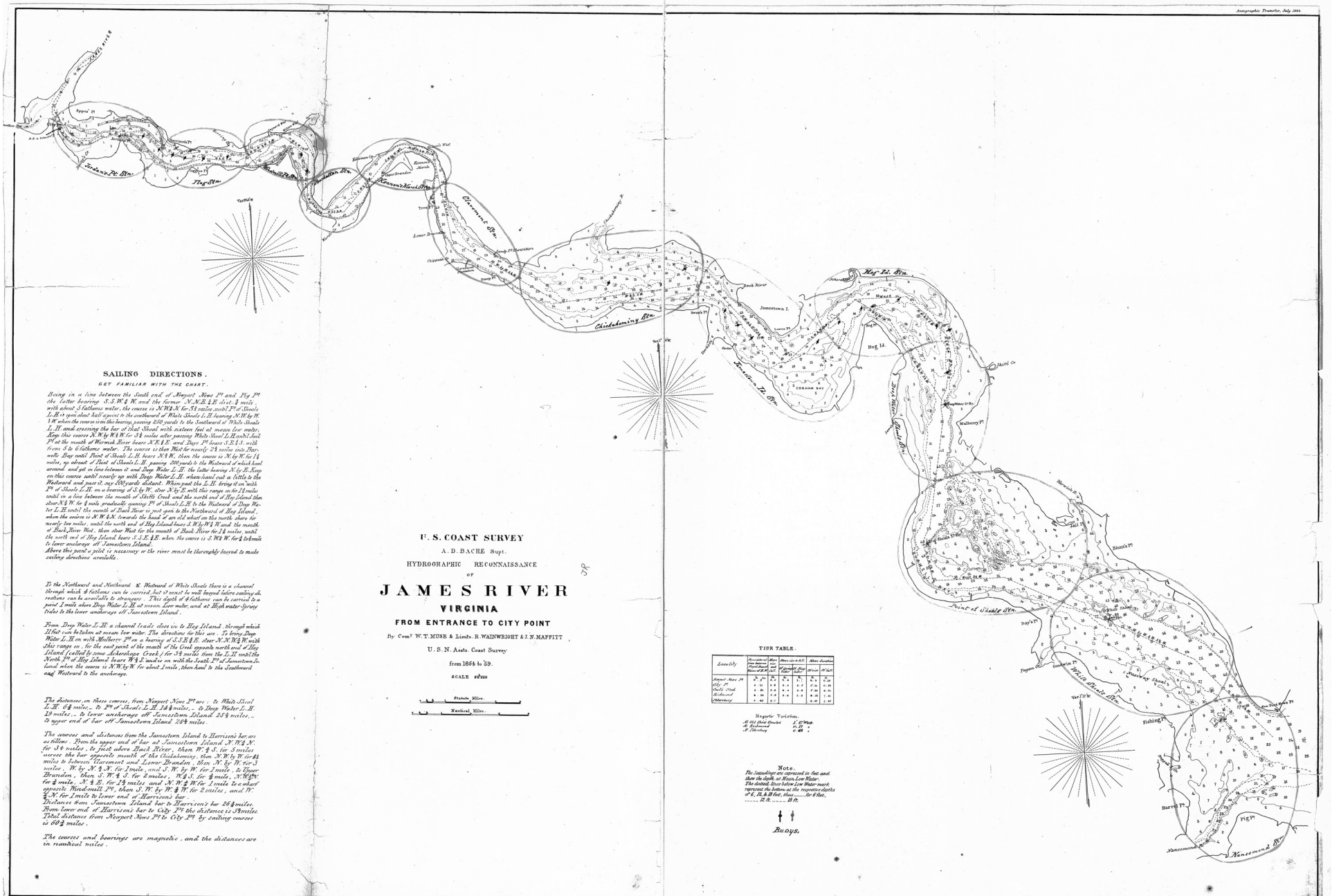

SAILING DIRECTIONS.

GET FAMILIAR WITH THE CHART.

Being in a line between the South end of Newport News Pt and Pig Pt the latter bearing S.S.W½ W and the former N.N.E½E distt 3 miles with about 5 fathoms water, the course is N.W½N for 3¾ miles until Pt of Shoals L.H. is seen about half a point to the southward of White Shoals L.H. bearing N.W by W ½ W when the course is on this bearing, passing 250 yards to the Southward of White Shoals L.H. and crossing the bar of that Shoal with sixteen feet at mean low water. Keep this course N.W by W½W for 3¾ miles after passing White Shoal L.H until Jail Pt at the mouth of Warwick River bears N.E½E and Pagan Pt bears S.E.½S. mid stream 5 to 6 fathoms water. The course is then West for nearly 2¼ miles into Starvelle Bay until Point of Shoals L.H. bears N½W, then the course is N. by W. for ¼ miles, up about a Point of Shoals L.H. passing 200 yards to the Westward of which haul around and get in line between it and Dogs Water L.H. the latter bearing N by E. Keep on this course until nearly up with Dogs Water L.H. when haul out a little to the Westward and pass it, say 200 yards distant. When past the L.H. bring it on with Pt of Shoals L.H. on a bearing of S. by W. steer N.E. with this range on for 2¼ miles until in a line between the mouth of Skiffs Creek and the north end of Hog Island then steer N½W for ¾ mile gradually opening Pt of Shoals L.H. to the Westward of Dogs Water L.H. until the mouth of Back River is just seen to the Northward of Hog Island, when the course is N.W½N. towards the head of an old wharf on the north shore for nearly two miles, until the north end of Hog Island bears S.W½W½W. and the mouth of Back River West, then steer West for the mouth of Back River for 1¾ miles, until the north end of Hog Island bears S.S.E.½E. when the course is S.W½W. for ¾ of a mile to lower anchorage off Jamestown Island.
Above this point a pilot is necessary or the river must be thoroughly learned to make sailing directions available.

To the Northward and Northward & Westward of White Shoals there is a channel through which 6 fathoms can be carried, but it must be well learned before sailing directions can be available to strangers. This depth of 6 fathoms can be carried to a point 1 mile above Dogs Water L.H. at common Low water, and at High water Spring tides to the lower anchorage off Jamestown Island.

From Dogs Water L.H. a channel leads close in to Hog Island, through which 11 feet can be taken at mean low water. The directions for this are. To bring Dogs Water L.H. on with Mulberry Pt on a bearing of S.S.E½E. steer N.N.W½W with these ranges on, for the east point of the mouth of the Creek opposite north end of Hog Island (called by some Archerhaven Creek) for 3½ miles from the L.H. until the North Pt of Hog Island bears W½S and so on with the South Pt of Jamestown Island when the course is N.W. by W. for about 1 mile, then haul to the Southward and Westward to the anchorage.

The distances on these courses, from Newport News Pt are: To White Shoal L.H. 6¾ miles, — To Pt of Shoals L.H. 14¼ miles, — To Dogs Water L.H. 19 miles, — To lower anchorage off Jamestown Island 25¼ miles, — To upper end of bar off Jamestown Island 29¾ miles.

The courses and distances from the Jamestown Island to Harrison's bar are as follows. From the upper end of bar at Jamestown Island N.W½N. for 3¾ miles, to just above Back River, then W.½S. for 5 miles across the bar opposite mouth of the Chuckatuck, then N.W. by W. for 2½ miles to between Claremont and Lower Brandon, then N. by W. for 3 miles, W. by N.½N. for 1 mile, and S.W. by W. for 1 mile, to Upper Brandon, then S.W.½S. for 2 miles, W.½S. for ¾ mile, N.W.½W. for ¾ mile, N.½E. for 1¾ miles and N.W.½W. for 1 mile to a wharf opposite Reed-smith Pt, then S.W. by W.½W. for 2 miles, and W.¼N. for 1 mile to lower end of Harrison's bar.
Distance from Jamestown Island bar to Harrison's bar 26¾ miles.
From lower end of Harrison's bar to City Pt the distance is 3 miles.
Total distance from Newport News Pt to City Pt by sailing courses is 60½ miles.

The courses and bearings are magnetic, and the distances are in nautical miles.

U. S. COAST SURVEY

A. D. BACHE Supt.

HYDROGRAPHIC RECONNAISSANCE

OF

JAMES RIVER

VIRGINIA

FROM ENTRANCE TO CITY POINT

By Comdr W. T. MUSE & Lieuts. R. WAINWRIGHT & J. N. MAFFITT

U. S. N. Assts. Coast Survey

from 1854 to 59.

SCALE 1/20000

Statute Miles.

Nautical Miles.

TIDE TABLE.

Locality	Mean interval of time between Moon's Transit and next High water	Mean rise & fall		Mean duration	
		Of Common Tides	Of Spring Tides	Of rise	Of fall
	h. m.	ft.	ft.	h. m.	h. m.
Newport News Pt	11 30	3.0	3.5	5 40	6 40
City Pt	1 22	2.5	3.2	5 50	6 10
Swift Point	1 45	2.5	3.2	5 50	6 10
Richmond	2 30	2.0	2.5	6 10	6 10
Osborne's	3 45	1.5		6 40	5 40

Magnetic Variation.

At the Head Grades	1° 45' West.
At Richmond	0° 27 "
At Newport News	0° 00 "

Note.

The Soundings are expressed in feet and show the depth at Mean Low Water. The dotted lines below Low Water mark represent the bottom at the respective depths of 6, 12, & 18 feet, thus ..... for 6 feet, ... 12 ft. ..... 18 ft.

Buoys.

G3882 .J3P5 1862 .U5 Vault