RAREBK
VK
982
.J3
B3
1861
Chart W

No. 12

NOTE

The soundings are expressed in feet to 18 feet, or within the dotted surfaces, beyond them in fathoms, and show the depth at mean low water, the plane of reference. The dotted surfaces beyond low-water mark represent the bottom within the respective depths of 6, 12, and 18 feet. The characteristic soundings only are given on the map, they are selected from the numerous soundings taken in the survey, so as to represent the figure of the bottom.

Latitude of Smith station	38° 04' 13"
Longitude of do west from Greenwich Obsy. in arc	76° 55' 06"
Longitude of do do do in time	5h 07m 40s
Variation of the Magnetic Needle (approx. in Dec. 1856	1° 15' W.

The Triangulation was executed in	*1854*
The Topography do in	*1855*
The Hydrography do in	*1855*

TIDES

Corrected Establishment Saunders' Wharf	IIIh IIm
Rise of Highest Tide observed above the plane of reference	2.8 Ft.
Fall of Lowest Tide do below do	1.9 "
Mean Rise and Fall of Tides	1.5 "
Mean Duration of Rise, Reckoning from the middle of one	5h 17m
Mean do of Fall, stand to the middle of the next	7h 12m
Mean do of Stand	0h 37m

Abbreviations used in the bottoms.

M. for Mud	*hrd. for hard*
S. " Sand	*sft. " soft*

PRELIMINARY CHART
OF
RAPPAHANNOCK RIVER
VIRGINIA
FROM SAUNDERS' WHARF TO OCCUPACIA CREEK

From a Trigonometrical Survey
under the direction of A.D. BACHE Superintendent of the
SURVEY OF THE COAST OF THE UNITED STATES
Triangulation by Capt. W.R. PALMER Topl. Engrs. U.S.A. Assistant
Topography by JOHN SEIB Assistant
Hydrography by the party
under the command of Lieut. R. WAINWRIGHT U.S.N. Assist.

Scale $\frac{1}{20,000}$

1856

Statute Miles.
Nautical Miles.