

DIGITAL CHART BASICS

In the evolving world of digital charts, vector charts—those that are drawn directly on the display by the software—have been gaining favor rapidly. Chart files containing the drawing data are reasonably small and more easily stored. Vector charts present what appears to be one continuous chart that expands to show more data when the chart is zoomed in a particular region. The National Oceanic and Atmospheric Administration provides free vector charts for U.S. waters. To get started on vector charts, check out these websites:

- Basic information on NOAA vector charts:

<http://nauticalcharts.noaa.gov/mcd/ENC/Index.htm>

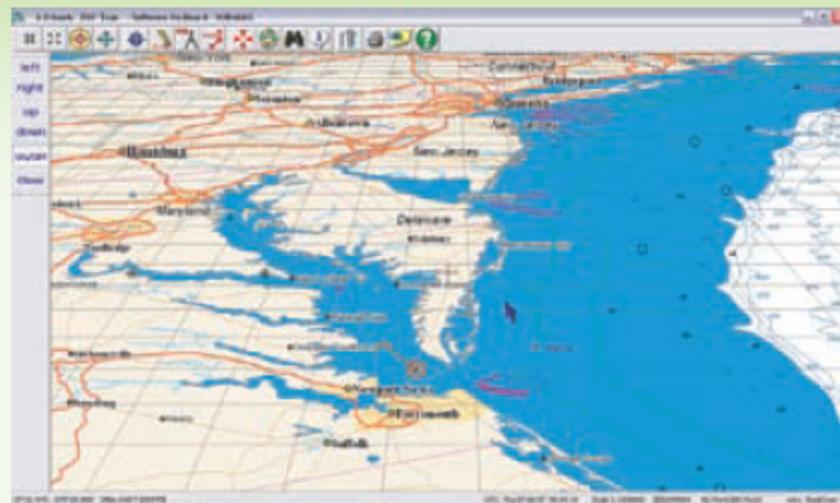
- Free downloads of vector charts:

<http://nauticalcharts.noaa.gov/mcd/enc/download.htm>

- Free chart viewer, Fugawi View ENC:

http://www.fugawi.com/web/products/fugawi_view_enc.htm

Raster charts are digitally scanned images of paper charts and the charting software must load a new chart anytime more or less detail is desired and each time the boundary or paper edge of the currently displayed chart is reached. To do this, the program usually creates a table of all available charts that is used to determine which chart will be loaded, based on the vessel's current position. Charting software designed to operate with raster charts usually includes a function to install these charts, so they can be added to the table. There are some variations in handling that include the ability to change to a larger scale chart anytime the border of one of these charts is crossed



SOBvMax uses C-Map vector charts, which allows the chart data to be presented in unique ways, such as this oblique view of Chesapeake Bay, looking north.

when a small scale chart is currently being displayed. High-end software may be capable of chart quilting, a process where charts of different scales are merged and displayed as a single chart. To get started on raster charts, check out these websites:

- Basic information on NOAA raster charts:

<http://nauticalcharts.noaa.gov/mcd/Raster/resources.htm>

- Free downloads of NOAA raster charts:

<http://nauticalcharts.noaa.gov/mcd/Raster/download.htm>

- Free viewer for NOAA raster (RNC) charts:

<http://www.maptech.com/support/doc.cfm?docid=123>, or
<http://www.globenav.com/downloads.html> as well as other sources.

- Free online viewer for NOAA raster (RNC) charts:

<http://ocsddata.ncd.noaa.gov/OnLineViewer/>