



SPAWAR
Systems Center
San Diego

Digital Chart Navigation

The Marine Navigation Division of SSC San Diego is leading the way into the 21st-century world of paperless navigation. In a joint-service effort with the U.S. Coast Guard, we have developed an electronic navigation system that uses Digital Nautical Charts generated as Vector Products by the National Imagery and Mapping Agency (NIMA). The system is also capable of using Raster Nautical Charts and the International Hydrographic Office's S-57 Digital Charts.

THE DIGITAL CHART NAVIGATION SYSTEM

- Provides integrated vessel navigation and voyage management
- Supports way-point navigation, route planning, and route monitoring
- Supports collision avoidance by using Coast Guard approved algorithms, graphical aids, and audible alarms
- Accepts GPS, navigation radar, inertial navigation system, Loran, speed log, gyrocompass, fathometer, wind, and magnetic compass inputs
- Displays time, position, velocity, and other navigation-related data
- Supports networked distribution of electronic charts and navigation data
- Designed to meet the IMO/IHO requirements for the Electronic Chart Display and Information System (ECDIS)
- Supports reduced manning initiatives through automation
- Provides multiple color palettes to support operations under various lighting conditions without ruining night vision
- Minimizes cost and impact of accommodating future upgrades
- Supported by established logistics and training programs
- Supports electronic chart updating when available from NIMA
- Compliant with Defense Information Infrastructure Common Operating Environment (COE) Level 6
- Provides man-overboard localization function



ECDIS Workspace



Radar Overlay

SPECIFICATIONS

- Fully LAN-capable
- Embedded Mil-Spec GPS printed circuit card available
- Customization of software to meet user requirements

For additional information, contact:

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This technology may be the subject of one or more invention disclosures assignable to the U.S. Government.

Licensing inquiries may be directed to

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