PCVM
VisionMaster Emulator

BCG
Buffalo Computer Graphics

The PCVM ARPA Radar Display Emulator models the Northrup Grumman VisionMaster FT TM Radar Display and is a product in the Buffalo Computer Graphics' (BCG) family of successful PC-based radar simulators. It is a powerful, low-cost training tool to familiarize a student with the use of a real ARPA radar for ship navigation.

The 3D radar imagery incorporates realistic simulation of landmass, moving targets, precipitation returns, sea clutter, and other effects seen on a real radar display. The radar operational features include radar video controls, dual EBL & VRM, multiple presentation modes, graphics capabilities and range scaling. For ARPA support, PCVM provides target acquisition & tracking, leading vectors & history trails, trial maneuvers, and navigation points.

The PCVM user interface models the real VisionMaster FT currently used by both military and commercial vessels as a surface search radar. PCVM was developed using BCG's industry standard radar simulation engine, is compatible with our Maritime Simulation Tool (MaST), and can be controlled through a simple network interface. PCVM is available in a software only package ready for installation on a customer's PC or BCG also offers "turn key" systems packaged in multiple configurations including a rack mounted chassis, a desktop PC, or a laptop PC, and even a deck stand console for more of a shipboard presentation.
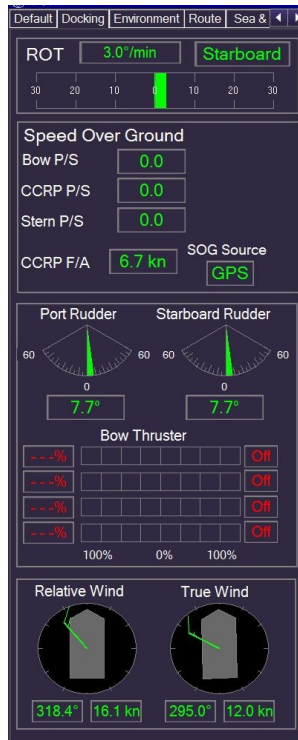
PCVM can be coupled with the real VisionMaster ECDIS for a more complete navigation system.
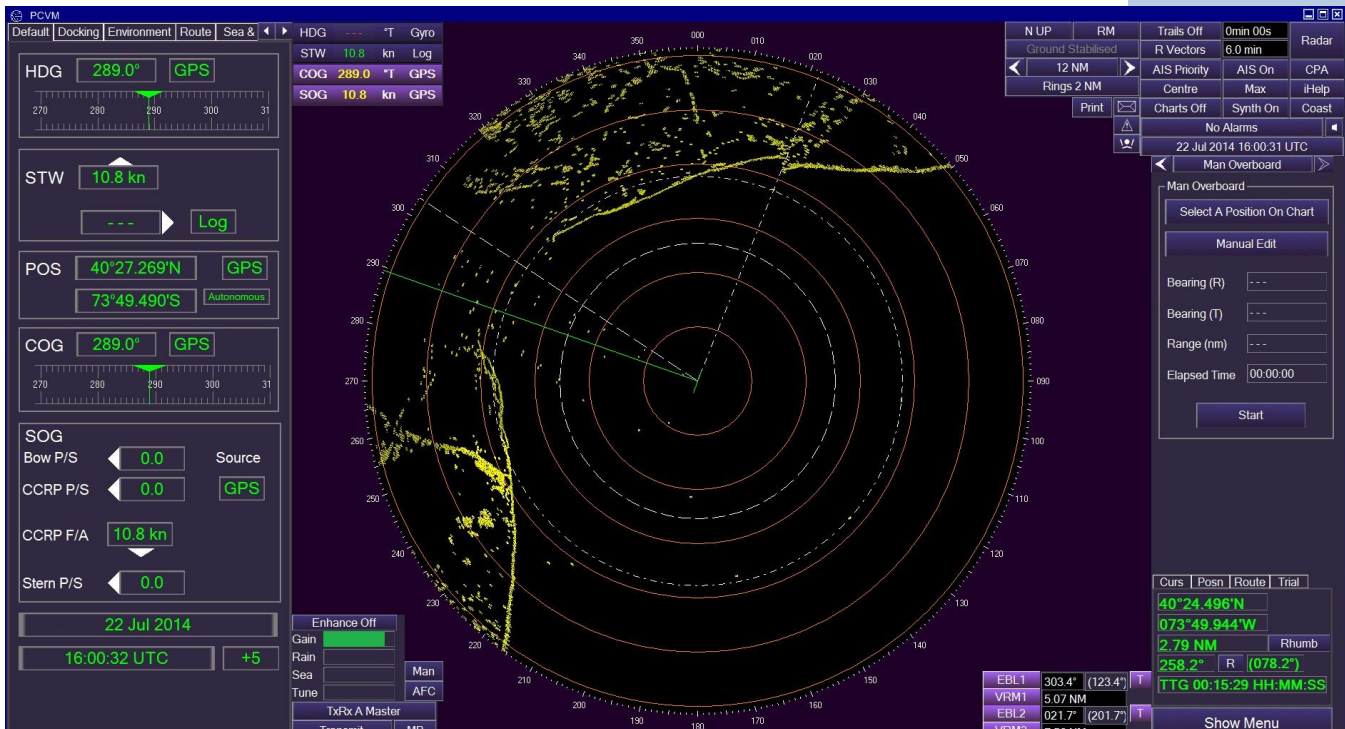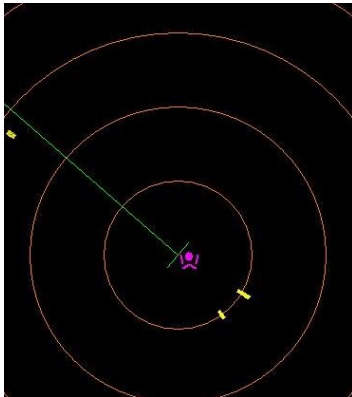
PCVM RADAR IMAGES
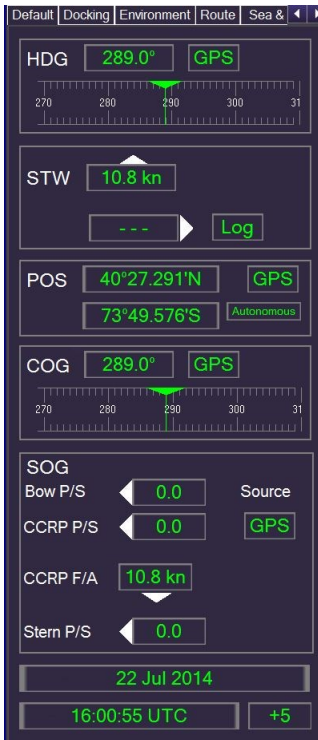
Default Conning Window

Docking Window

OSCAR Icon on Radar

MOB Panel

Actual Radar Attributes:

The PCVM supports the primary operating features and modes of the real radar display. These include:

- STC, FTC, and Gain Control
- Heads Up, Course Up, North Up Display Modes
- Two Variable Range Markers
- Two Electronic Bearing Lines
- Target Acquisition and Tracking w/ Auto Acquire Zones
- Ownship and Target Data Windows
- Radar Image Offset
- System Alerts
- Track Histories
- True or Relative Vectors
- Navigation Marks
- Trial Maneuvers

Specific PCVM Features:

- Conning Display
- Sensor Data Display
- Ability to Print the Screen
- Man Overboard (MOB) Alarm Functionality
- AIS Navigation Symbols for ATON, SAR units, or Base Stations

PC Requirements:

- Windows WIN7 or WIN10
- Multi-core processor, >2GHz
- 2GB memory
- 500MB disk
- 100/1000 NIC
- USB for Trackball or Touch Screen Monitor
- Requires Wide Screen Monitors for most accurate emulation

BCG also offers PC-based radar simulation of the Furuno RDP-149 (PCRDP), and FAR 21x7 (PC21x7), the Raytheon SPS-73 (PCRadar) , and the Northrup Grumman BridgeMaster (PCBME) displays. These four emulators provide the same level of radar fidelity as the PCVM, as well as the full ARPA capabilities found with these radars.

Contact BCG for information and pricing on our full line of Maritime Simulation products.