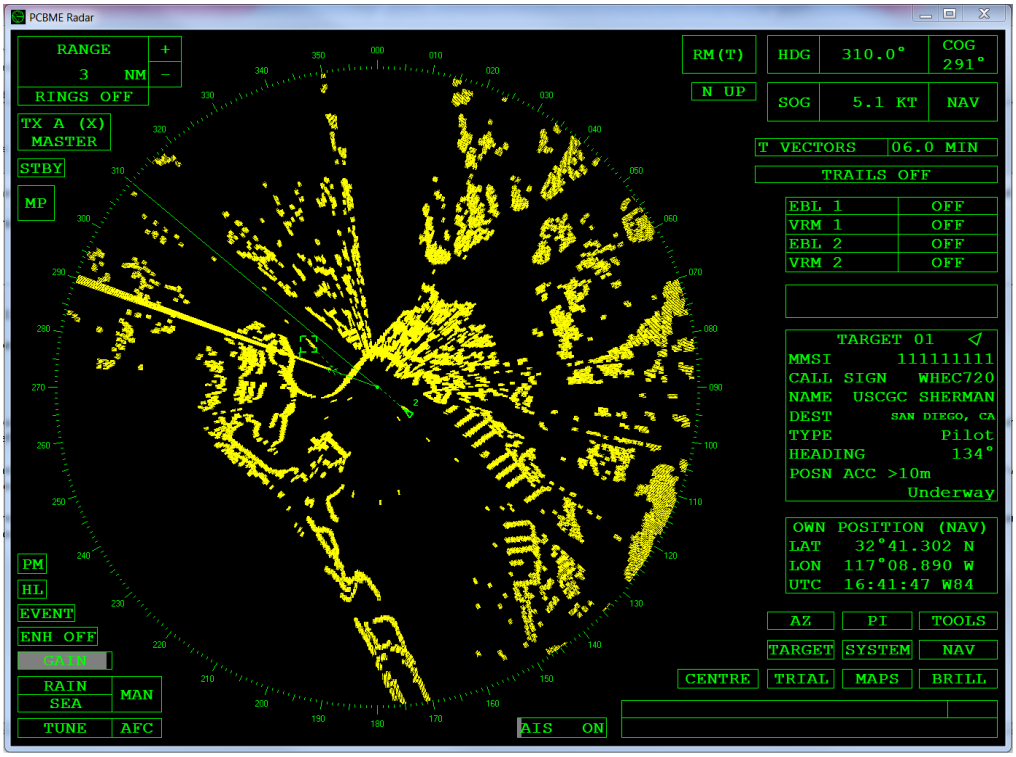
Buffalo Computer Graphics

PCBME

BridgeMaster-E Emulator



The PCBME ARPA Radar Emulator models the Sperry BridgeMaster-E[1] Radar Display and is one of many radar products in the Buffalo Computer Graphics' (BCG) family of successful PC-based simulators. It is a powerful, low-cost training tool to familiarize a student with the use of a real ARPA radar for ship navigation and collision avoidance.

Features

- Windows-based radar emulation software
- Simulates user interface of the Sperry BridgeMaster-E Radar
- Realistic 3D radar imagery
- Full radar graphics support
- User interface operates from trackball or touch monitor
- IMO Compliant AIS Support

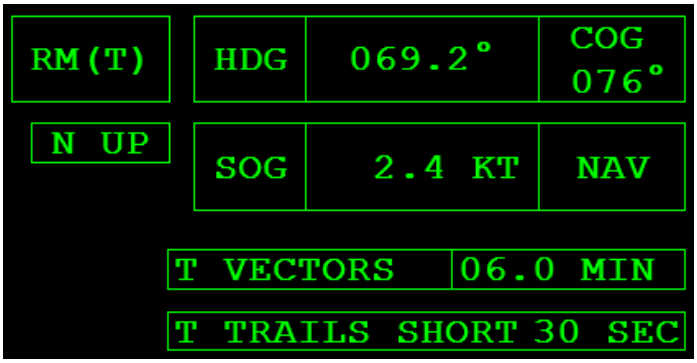
The 3D radar imagery incorporates realistic simulation of landmass, moving targets, precipitation returns, sea clutter, and other effects seen on a real radar display. The radar operational features include radar video controls, dual EBL & VRM, multiple presentation modes, graphics capabilities and range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

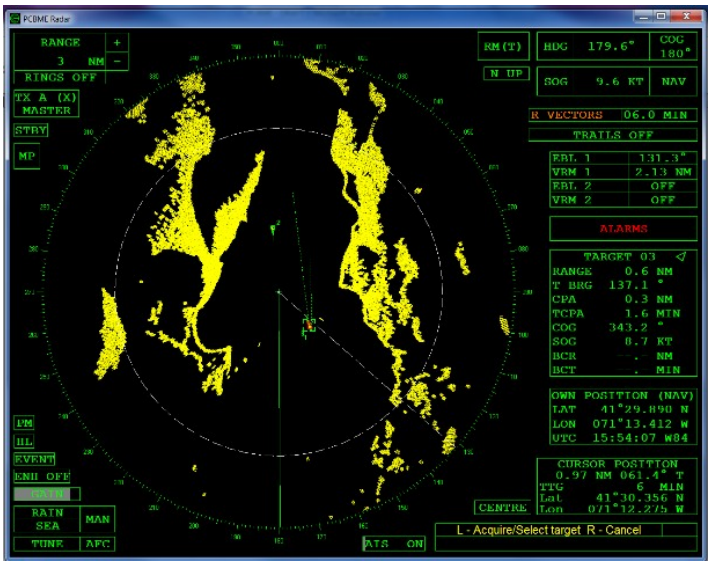
The PCBME user interface models the real BridgeMaster-E for use by the US Navy, US Coast Guard, and commercial schools for shore-based training applications. PCBME was developed using BCG's industry standard radar simulation engine, is compatible with our Maritime Simulation Tool (MaST), may be used in conjunction with our PCS-400 radar simulators, or can be controlled through a simple network interface. PCBME 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 for classroom use, and even a deck stand console for more of a shipboard presentation.

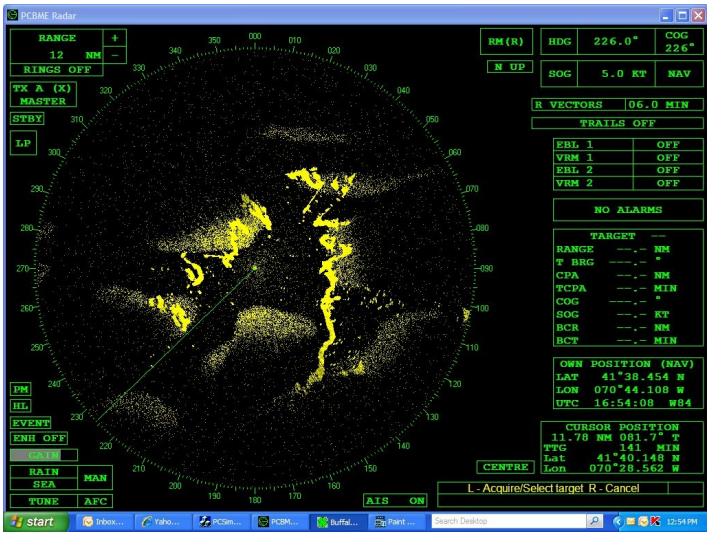
4185 Bayview Road ~ Blasdell ~ New York ~ 14219 ~ 716-822-8668 ~ www.bcgeng.com

[1] BridgeMaster-E Radar is trademarked to Northrop Grumman Sperry Marine

SIMULATED RADAR IMAGES







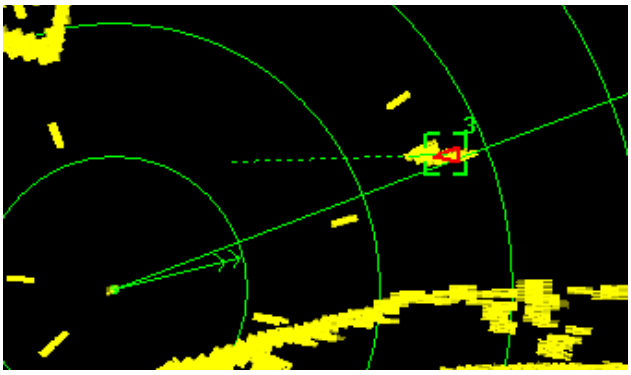
PCBME Features:

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

STC, FTC, and Gain Control
Heads Up, Course Up, and North Up Display Modes
Relative or True Presentation
Two Variable Range Markers (VRM)
Two Electronic Bearing Lines (EBL)
Manual Target Acquisition and Tracking
Graphic Auto Acquisition Zones
Ownship and Target Data Windows
Radar Image Offset
Track Histories
True or Relative Vectors
System Alerts
Trial Maneuvers
Daytime / nighttime color modes
Continuous Cursor position display
NMEA-0183 TTM output message support
Control using the GUI2, BCGUDP, HLA, or DIS Interface
Receives and displays IEC Automatic Identification System (AIS) sentences
Available as software-only or turn-key system
Multiple PCRadar units may be controlled by a single instructor for individual or team training
Scenario & Radar Databases are compatible with all BCG radar products

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





AIS TARGET SYMBOLS

Compliant with the International Maritime Organization Guidelines for the Presentation of Navigation Related Symbols SN/Circ.243, the AIS Target Symbols enhance the recognition of other vessels on the PCBME display. The AIS Target Symbols are not masked by other ships or land masses, nor are they obscured by sea or rain clutter. By referencing the ROT flag at the tip of the heading vector, the user can quickly identify if a target is turning. Dangerous and lost targets are also easily detected with their bold, red symbols.

PC Requirements:

Windows WIN10 or WIN11
Multi-core processor, >2GHz
8GB memory
500MB disk
100/1000 NIC
USB for Trackball or Touch Screen Monitor
RS232 Serial Port (for NMEA output)

To further enhance the training experience BCG offers several different products which allow the student to control the motion of the Ownship. These conning solutions integrate seamlessly with PCBME and can be either software add-ons or full steering consoles. Contact BCG for additional information.

LOW COST ALTERNATIVE TRAINING

Training which utilizes standard desktop PCs running Windows software is an economical path for many training facilities. PCBME is offered as a pre-installed 'turn-key' radar trainer including all computer hardware and software; or may be purchased as software-only ready to install and License on your own computers. Multiple PCBME stations can be networked together in a classroom setting. Each student may be configured to operate as a single radar platform (all students see the same radar image) or as independent radar platforms (students see each other on the radar) operating in a common training environment. With both configurations, the student maintains independent control of his or her radar display and the operating settings. As with all BCG simulators, the instructor has full control of the simulated radar environment and what the student experiences.

BCG also offers other PC-based radar emulators with operational training.

See our website for our complete offering of maritime simulation products.