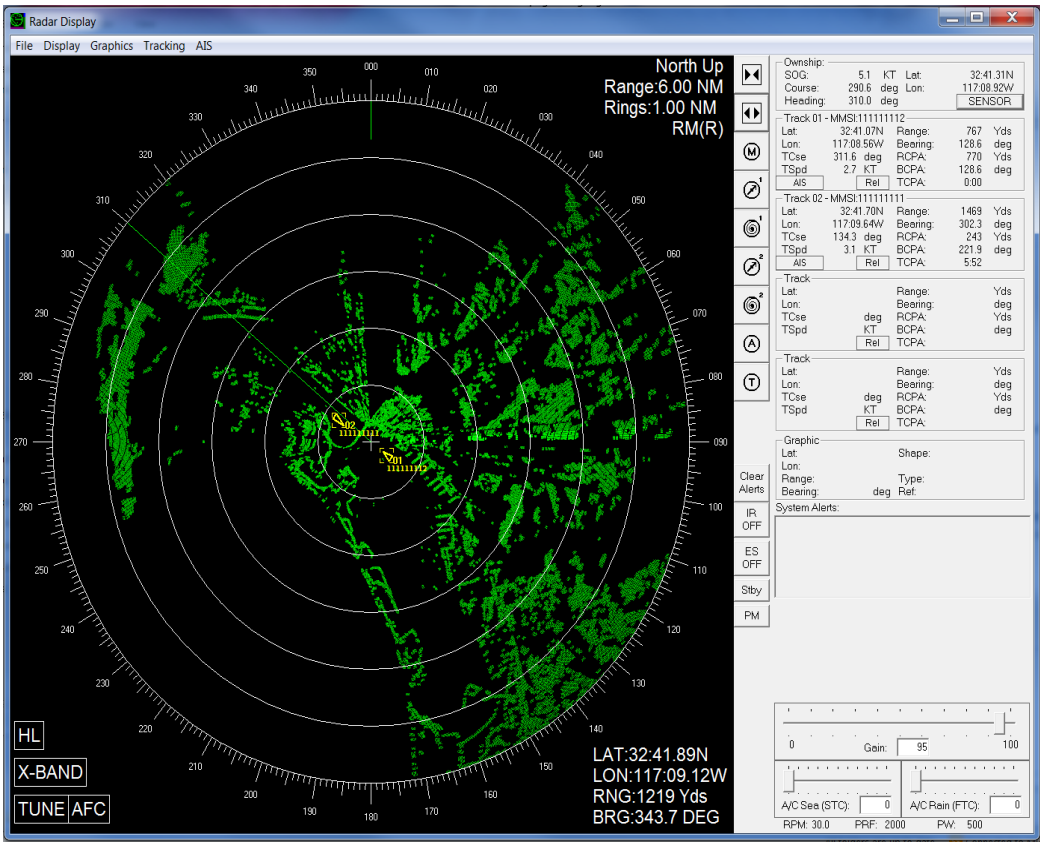
Buffalo Computer Graphics

PCRadar

ARPA Radar Display Emulator



Features

- Windows-based radar emulation software
- Simulates user interface of the SPS-73 Radar Display
- 3D Realistic radar imagery
- Full radar graphics support
- User interface operates from trackball or touch monitor
- IMO Compliant AIS support

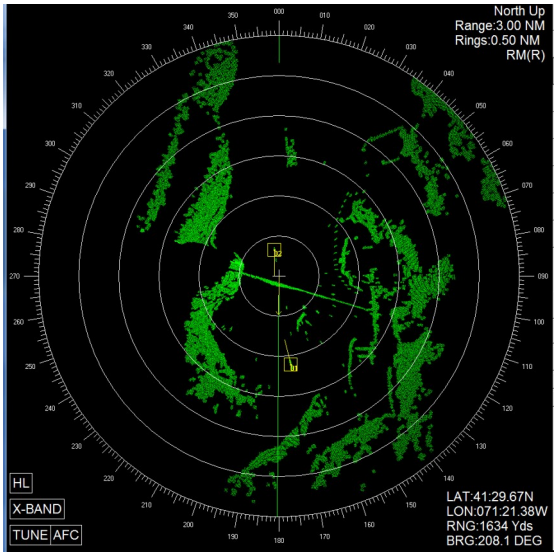
The PCRadar is an established product in the Buffalo Computer Graphics' (BCG) family of successful PC-based radar emulators. PCRadar is a Windows-based application which emulates a generic ARPA radar display on a PC monitor. It is a powerful training tool to familiarize a student with the use of radar for ship navigation and collision avoidance.

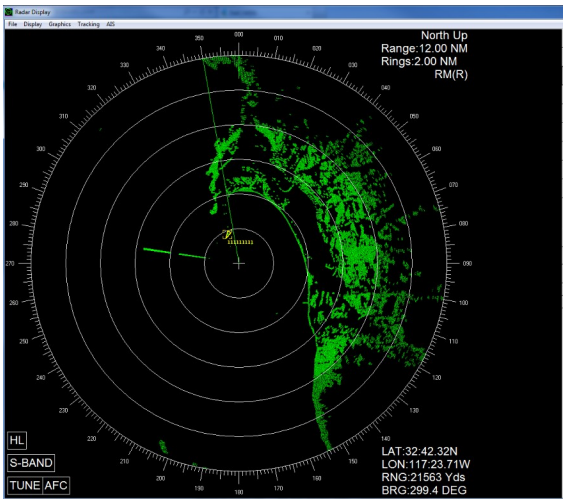
The 3D radar image incorporates realistic simulation of land, targets, precipitation returns, sea clutter, and other effects seen on a real radar display. The radar's operational features include video controls (Gain, FTC, and STC), dual EBL & VRM, multiple presentation modes, graphics capabilities and range scaling. For ARPA support, PCRadar provides target acquisition & tracking, leading vectors & history trails, trial maneuvers and navigation points. PCRadar supports output for standard NMEA-0183 TTM & TLL messages.

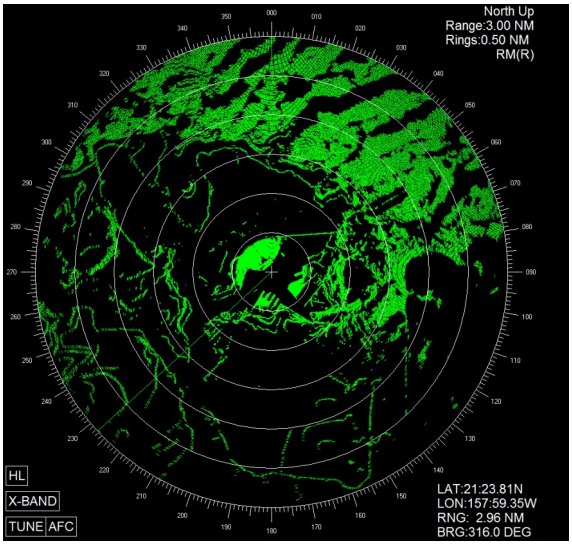
The PCRadar user interface models the SPS-73 Radar Display, and was designed specifically for use by the US Navy and US Army in shipboard and shore-based training applications. PCRadar was developed using BCG's standard radar simulation engine, is compatible with our Maritime Simulation Tool (MaST), may be used in conjunction with our other radar simulators, and can be controlled through a simple network interface. PCRadar is available in a software-only package for installation on a customer's PC, or BCG offers Turn-key systems packaged in multiple configurations. These include a rack mounted chassis, a desktop computer, a laptop PC, or a deck stand console for a shipboard presentation.

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SIMULATED RADAR IMAGES







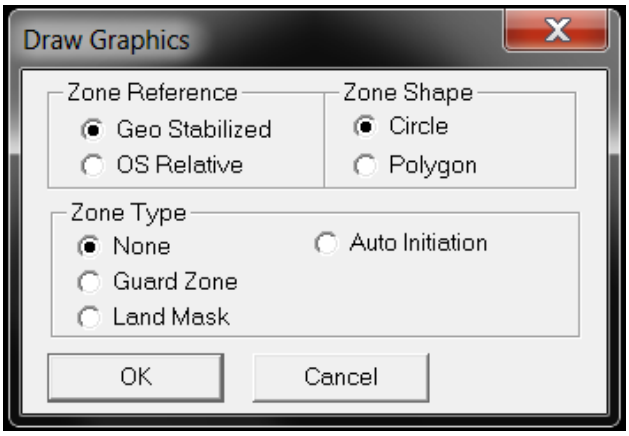
PCRadar Features:

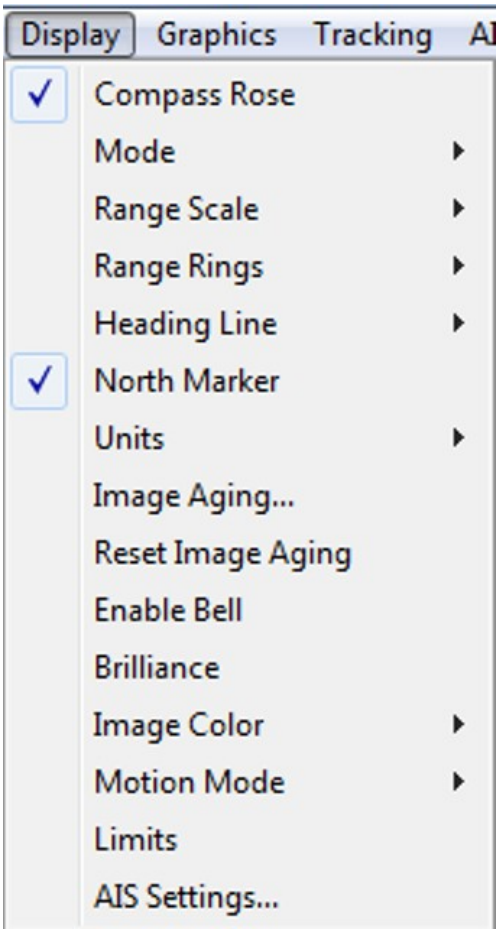
The PCRadar supports the primary operating features and modes of a real radar display. These include:

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
Land Mask Zones
Navigation Marks
Trial Maneuvers
Image Aging
Daytime / nighttime color modes
Continuous Cursor position display
Simple Toolbar for accessing common features
NMEA-0183 TTM output message support
Control using the MaST, 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

RADAR CONTROLS







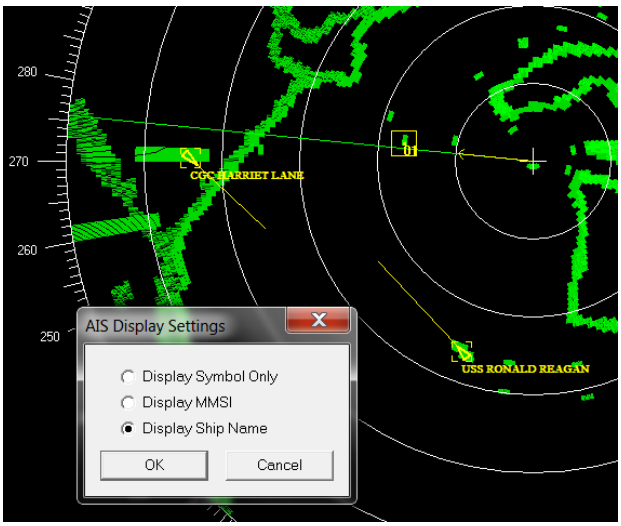


QUICK ACCESS TOOLBAR

PCRadar offers a quick access toolbar (shown to the left) that provides the student operator with easy access to commonly used features. These features include:
Zoom In / Zoom Out
Display Mode (Heads UP, Course Up, North Up)
Control of both EBLs and both VRMs
Target Acquisition
Trial Maneuvers
The Toolbar allows the user to more quickly learn the operation of the radar by simplifying the user interface.

LOW COST ALTERNATIVE TRAINING

Training which utilizes standard desktop PCs running Windows software is an economical path for many training facilities. PCRadar is offered as a preinstalled 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 computer. Multiple PCRadar 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.

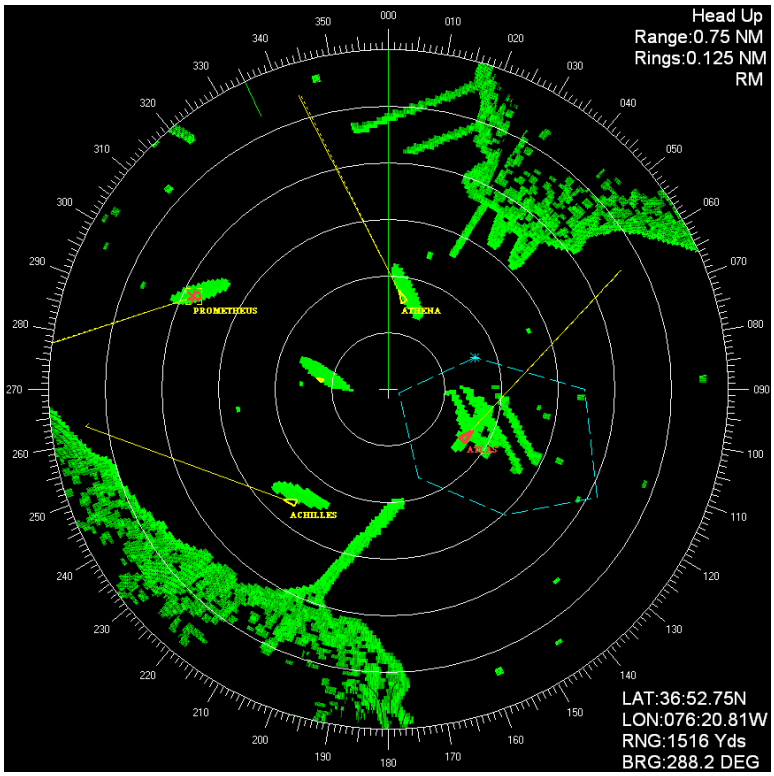


AIS Target Symbols

PCRadar supports the Automatic Identification System (AIS) Target Symbols package (shown at left). 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 vessels on the PCRadar 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 bold and red symbols.

AIS - MMSI:111111112

Name:	USS BARRY		
Call Sign:	DDG-52		
Status:	Under way using engine		
Lat:	32°41.1197' N		
Lon:	117°08.6275' W		
COG:	311.0°	SOG:	4.1 KT
Hdg:	311.0°	ROT:	0.0°/min
Brg:	113.7°	Rng:	803 Yds
RCPA:	602 Yds	TCPA:	156:05
Length:	228 m	Beam:	22 m
Destination:	PEARL HARBOR		
ETA:			
Draft:	10.7 m		
IMO Num:	0		
Ant. Pos:	F114 A114 P22 S0 m		
Type:	Vessel / Engaged in military		
Sensor:	GPS		
Last seen:	14 DEC 19:04:02 Zulu		
Accuracy:	Low > 10m		



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 PCRadar can be either software add-ons or full steering consoles. Contact BCG for additional information on Ownship steering controls as well as our other radar emulators.

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

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