PC22x8

FAR 22x8 Emulator

BCG — Buffalo Computer Graphics
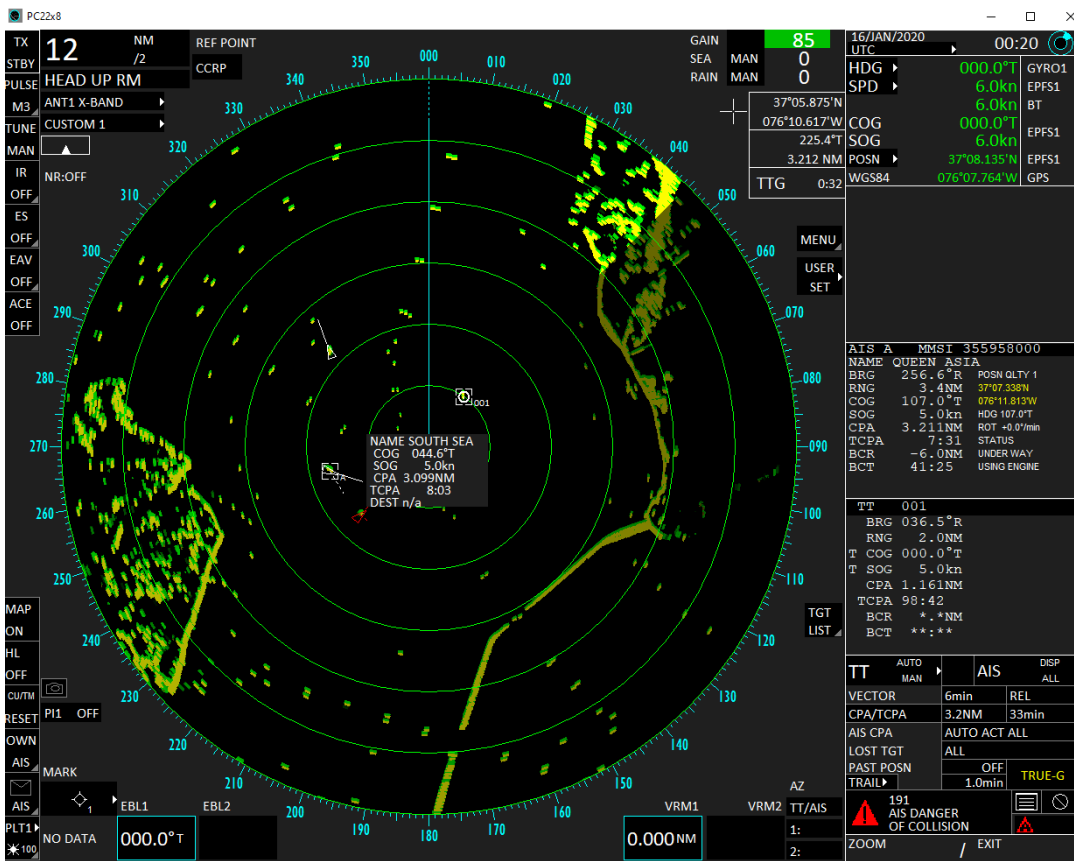
Buffalo Computer Graphics' newest radar emulation is PC22X8, based off of Furuno's FAR22x8 radar. PC22X8 joins a growing list of radar emulations that are offered by BCG and is compliant with international training standards for radar ARPA training. The PC22x8 user interface models the real FAR22x8 radar currently used by both military and commercial vessels as a surface search radar.

The operational features of the emulation include radar video controls, dual EBL & VRM, multiple presentation modes, graphics capabilities and range scaling. Our 3D radar imagery incorporates realistic simulation of landmass, moving targets, precipitation returns, sea clutter, and other effects seen on a real radar display. For ARPA support, PC22X8 provides target acquisition & tracking, leading vectors & history trails, trial maneuvers, and navigation marks.

PC22x8 was developed using BCG's standard radar simulation engine, is compatible with our Maritime Simulation Tool (MaST), and can be controlled by another simulation engine through a simple network interface. PC22x8 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 depending on your needs.

Features

> Windows-based radar emulation software

> Simulates user interface of the Furuno FAR22x8 Radar

> Target Track Message Output for ECDIS integration

> User Interface operates from Trackball or Mouse or real Control Panel

> Target Tracking features including acquisition zones and guard zones

> Supports AIS Features

> Simulates ACE (Automatic Clutter Elimination)

> Instant popup window displaying information about track near cursor

> Can be configured for fast acquiring of targets

PC22x8 SCREEN IMAGES

```
TT    006        007
 BRG 035.8°R    107.1°R
 RNG   5.3NM     5.6NM
T COG 000.0°T   000.0°T
T SOG   0.0kn     0.0kn
 CPA 3.088NM  5.690NM
TCPA 43:27     -17:06
 BCR   *.*NM     *.*NM
 BCT **:**     **:**

AIS A    MMSI 355958000
NAME  QUEEN ASIA
BRG  195.9°R   POSN QLTY 1
RNG    4.2NM   37°06.710'N
COG  107.0°T   076°09.249'W
SOG    5.0kn   HDG 107.0°T
CPA  4.159NM   ROT +0.0°/min
TCPA  -18:27   STATUS
BCR   -5.7NM   UNDER WAY
BCT   13:55    USING ENGINE

TT    001        005
 BRG 042.6°R    231.4°R
 RNG   1.6NM     7.8NM
T COG 000.0°T   000.0°T
T SOG   5.0kn     0.0kn
 CPA 1.105NM  7.752NM
TCPA 74:41     -50:32
 BCR   *.*NM     *.*NM
 BCT **:**     **:**
```

```
           AIS(1/2)
1 BACK
2 SLEEP ALL TARGETS
  NO/YES
3 AUTO DISP MESSAGE
  OFF/ON
4 SHOW RECEIVED MSGS
5 TRANSMIT MESSAGE
6 VOYAGE DATA
7 OWN SHIP DATA
8 AIS ALERT MESSAGES
9 CPA AUTO ACTIVATE
0 NEXT
MAX RANGE
  OFF   0NM
MIN SHIP SPEED
  OFF 1.0kn


EXCEPT BASE STATION
  OFF
EXCEPT PHYSICAL ATON
  OFF
EXCEPT VIRTUAL ATON
  OFF
```

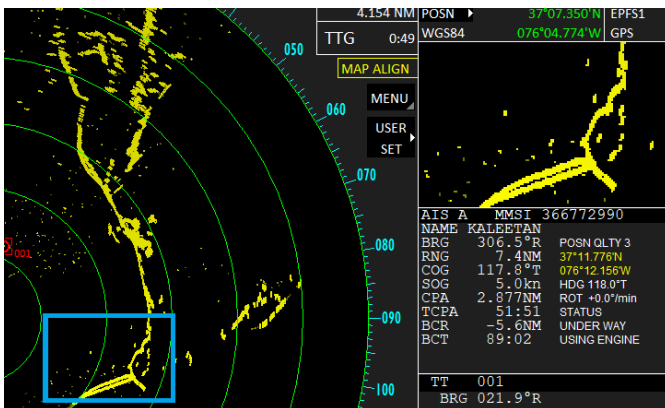**Target Information Panel**   **Example of Menu Panel**

Actual Radar Attributes:

The PC22x8 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 Displays
♦ Two Variable Range Markers (VRMs)
♦ Two Electronic Bearing Lines (EBLs)
♦ Target Acquisition and Tracking
♦ Auto Acquisition and Guard Zones
♦ Ownship and Target Data Windows
♦ Radar Image Offset
♦ System Alerts
♦ Track Histories
♦ True or Relative Vectors
♦ Navigation Marks
♦ Trial Maneuvers (Static or Dynamic)

PC Requirements:

♦ Windows WIN7, WIN8 or WIN10
♦ Multi-core processor, >2GHz
♦ 8GB memory
♦ 500MB disk
♦ 100/1000 NIC
♦ USB for Keyboard & Mouse

Specific PC22x8 Features:

♦ Instant Access buttons along left edge of window
♦ Panel display of information for up to 6 tracks and/or 3 AIS targets
♦ Parallel Index Lines
♦ Interference Rejection, Echo Stretching, Echo Averaging, Wiper and ACE support.
♦ Programmable Color Modes, including trail color
♦ Zoom Function to magnify a section of radar display
♦ AIS Navigation Symbols for ATON (real or virtual), SAR units, or Base Stations
♦ AIS Text messages can be sent between instructor and student in both directions.
♦ Menu Panel access for display control
♦ Depth histogram and graphic wind data display

Zoom Display Panel magnifies the boxed area

BCG also offers PC-based radar emulations for several other radars. All of our emulators provide the same level of radar fidelity as the PC22x8, as well as the full ARPA and AIS capabilities.

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