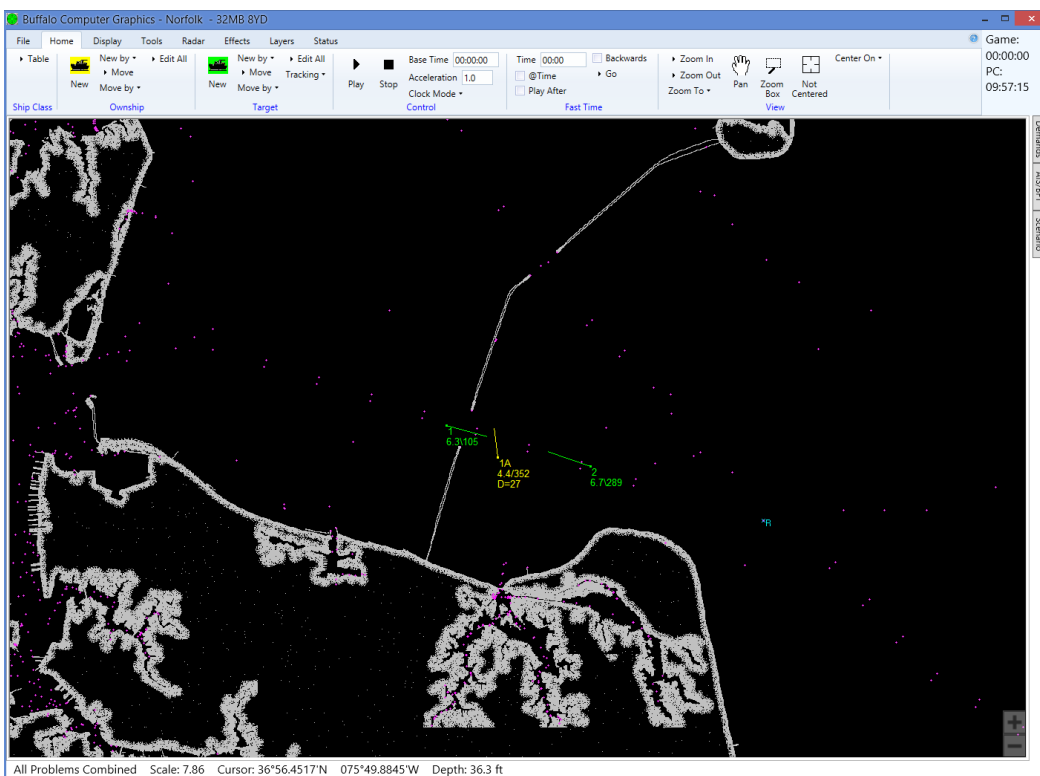


Maritime Simulation Tool (MaST)



Features

- > Control of up to 32 ownships
- > Controls up to 1,000 targets
- > Programmable dynamics and dimensions of all vessels
- > A single graphics window displays an overview of exercise area
- > Simple controls for vessel movement
- > Zoom, pan & centering tools
- > Save, edit, replay, & review capability for scenarios

Control of Buffalo Computer Graphics' (BCG) radar simulators is through our instructor software called the Maritime Simulation Tool (MaST). Our MaST application provides full control over all training elements utilizing a simple, modern and powerful user interface.

The MaST application utilizes BCG's 30+ years of experience in maritime simulation to provide the operator with an easy to use yet extremely thorough interface for controlling a training scenario. The MaST can control up to 32 ownships and 1,000 targets in up to 8 separate problems. In addition to controlling the ownships and targets, the software allows control of environmental conditions, radar parameters, vessel handling characteristics, scenario timeline, and geographic location for all entities. MaST may be used by itself for NMEA and AIS simulation, with the BCG PCS-2xx, & PCS-3xx units, BCG's Network Radar Simulators, and all BCG radar emulators.

MaST is available as a software-only package to be installed on a customer's Windows 7 or 10 computer, or as a turnkey work station with the software installed and tested on a computer.

MaST may also be configured to function as a slave to a third party simulation system, allowing an existing system to control BCG radar products through either our proprietary network interface (BCGUDP), HLA, or DIS packets.

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Available Options:

- ◆ Encrypted AIS (EAIS) support
- ◆ NMEA2000 output
- ◆ Simulated VHF radio and controls
- ◆ Slave operation for external control of radar system
- ◆ Learning Management System (LMS)

MaST Features:

The MaST allows the operator to control or modify the following elements in any given scenario:

- * Ownship speed, heading, location, and radar parameters
- * Target speed, heading, location, and other parameters for up to 1,000 target ships
- * Vessel characteristics including: dimensions, rudder response time, acceleration and deceleration rates, maximum turn rate, and other handling parameters.
- * Unlimited number of scenarios
- * Environmental conditions including: wind direction and speed, sea state, precipitation level and intensity, and set and drift.
- * Built-in Automatic Identification System (AIS) capability
- * NMEA-0183 sensor data generation
- * Dual VRMs and EBLs
- * Five customizable Demand Windows including details such as CPA/TCPA, Position, Range/Bearing, and Bow Crossing Range/Time for any active ownship or target
- * Instant Demand Panel to quickly see critical vessel information
- * Simulation of equipment failures or induced errors

Ownship Window

The Ownship Window interface includes a heading scale from 030 to 330 degrees. Key parameters shown are: Current Heading: 352.35, Current Mag Hdg: 352.35, Last Cmd Hdg: 352.35. Heading Mode is set to Commanded. Control is set to Instructor, Class is WPB110. Latitude is 36.576963,N and Longitude is 076.055978,W. Designation is USSAMERICA 143424444. Problems: 1. Other settings include Ahead: 33.0 kn, Current Speed: 4.4, Last Cmd Speed: 4.4, Speed Mode: Commanded, Astern: 5.0 kn, % Load: 0, and SART checkbox. A grid of buttons for various settings like Waypoints, Sector Blanking, Yaw/Pitch/Roll, Proximity Alarm, Radar Effects, Sensor Settings, AIS, Speed Settings, Heading Settings, Graph Heading, and Graph Speed is also visible.

Instant Demand Pop-up

Instant Demand
Track: T1
Speed: 2.4 kn
Heading: 19.0°
Course: 19.0°
Lat: 36°52.751'N
Lon: 076°20.181'W
Range: 0.9216 NM
Bearing: 342.8°
AIS Name/MMSI:
USSAMERICA
143424444
Sea: 000°/0.0/0
Wind: 000°/0.0
Class: Patrol Boat

Home Ribbon

The Home Ribbon contains controls for Ship Class, Ownship, and Target. It includes buttons for New by, Edit All, Move, and Move by. Playback controls include Pause, Stop, Base Time (00:00:00), Acceleration (1.0), Clock Mode, Time (00:00), Backwards, Go, and Play After. View controls include Zoom In, Zoom Out, Zoom To, Pan, Zoom Box, and Not Centered. Center On is also available.

Display Ribbon

The Display Ribbon shows settings for Markers (IDs, AIS Names, Spd/Hdg, Depth, Font Size 16), Trails (Show, Large Points, Time Period 3:00), Vectors (Show, Vector Mode, Length 10:00), Map Graphics (Reset View, Refresh View, Shipping Lanes, Ship Outlines, Lat/Lon lines, Waypoints), and Problem (Show).

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

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