NetWatch® Intelligent Video Systems
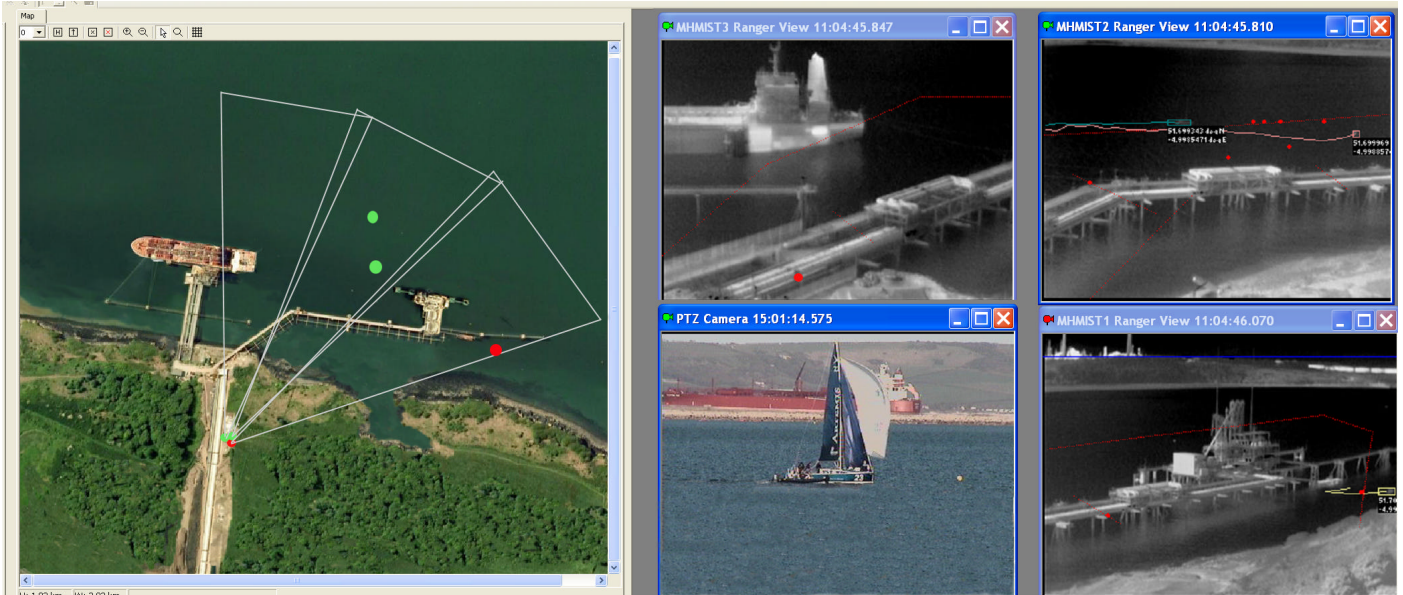

Advanced Research & Technology Ltd

MIST®Ranger Single Camera Ranging

Ranger is a post MIST analytic transform. It is a 3D geometry engine, it models the 3D real world and converts the 2D video target data provided by MIST. Ranger works in conjunction with NetWatch's mapping system.


Ranger generated information:-

- Range of target from camera
- Bearing of target from north
- Real world co-ordinates of Longitude and Latitude of target.
- Target icon position displayed in mapping system

All range data can be overlaid onto the video image. Target position is presented within the map view and by hovering the mouse pointer over the target, longitude and latitude information can be read off directly.

In the example above MIST has generated an Alert, shown by the red icon within the bottom right image header and the red target position marker in the map. The system is displaying Lon Lat information overlaid into the video image, which the operator can relay to the marine security response team.
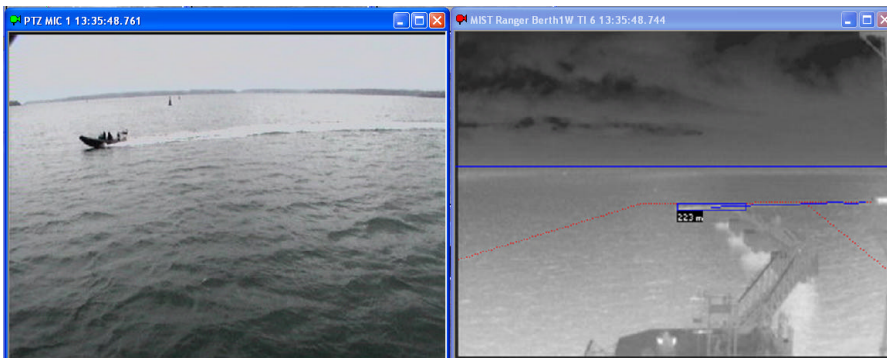
Using MIST's detection and tracking capability along with its flexible virtual sensors, ranger is able to provide the operator with up to date target position information as it moves through the field of view. All Ranger's geometry information is saved to disk along with the video data making it available for event review or for submission as evidence.

Range data accuracy depends upon the camera placement and resolution, the above example is accurate to + - 5 metres at the range of 223 metres. The more vertical pixels at any range the more accurate ranger becomes.