Guns and Missiles Systems Conference
23 April 2008
Emergence of Asymmetric/Unconventional Threats Requires Different Capabilities to Counter/Thwart

- Suicide Bomber/Israeli Navy
- Small Attack Boat Threat
- High Value Asset Threat
- Homeland Threat
- USS COLE Bombing
Clear Operational Need

Asymmetric/Unconventional Threats Drive Need for:

- Fixed/Mobile High Value Asset Security
- Harbor and Port Security
- Maritime Intercept Operations
- Surveillance and Reconnaissance
- Riverine Operations
What’s Needed?

Capability to Detect and Respond Rapidly to Potential and Emergent Threats in Military and Public Environments

- Protect Waterways and Oceans
- Persistently Survey Wide Maritime Areas
- Remove or Distance Humans from Hazards
- Detect Hostile Intent via Remote or Automated Means
- Operate Continuously: 24/7, All Weather
- Remain Affordable
Why An Unmanned Surface Vehicle?

- Dramatically Reduces Risk To Personnel And High Value Assets
- Optimally Performs The Hazardous Missions - Day And Night
- Provides Mission Flexibility With Reconfigurable Mission Modules
- Can Provide Real-time Input To Wider Tactical Picture
- Proportionate And Scalable Response
Why PROTECTOR?

Proven in real world operations

PROTECTOR is an unmanned, integrated Combat System for Force Protection/ Anti Terror Missions

Ready for Deployment Now
Protector Is:

**Control**
- Sea or Shore-based Control Unit with ability to hand-off unit control

**Platform**
- Length: 9-11 m.
- Propulsion: Water Jet
- Engine: Diesel
- Payload: 1000 Kg.

**Security Payload**
- Spotlight
- Public Address

**Communication**
- Data Link
- Video Link
- Audio Link

**Mission Modules**
- Anti-Terror/Force Protection
- Modular Design supports other missions
  - SOF
  - Anti-Surface Warfare
  - Electronic Warfare

**Navigation**
- Radar
- GPS
- Nav. Lights
- Nav. Camera
Advanced Electro-Optical System - Toplite

Multi-Sensor Electro-Optical payload

**CAPABILITY**
- Day & Night Surveillance
- Highly stabilized mount
- Automated Target Tracking

**SENSORS**
- FLIR
- Low Light TV
- Laser Range Finder

In U.S. Inventory
Naval Stabilized Gun - Mini Typhoon MK49 MOD0

Lightweight, Remote Controlled, Stabilized Machine Gun System

Day & Night Sight

In U.S. Inventory

Ammunition Box
Robust, Proven NLOS Communications Link

Controlled from Sea or Shore with ‘hand off’ capability
“During its time in theatre, Resolution was tasked with assisting the protection of the Al-Basrah Oil Terminal from terrorist attacks, according to MINDEF”

“Protector had ‘proven to be highly effective’ … vessels challenged by the USV had turned away immediately”

“Singapore...acknowledged purchase of ...Protector to support maritime security and interdiction operations ... in the northern Arabian Gulf”

“Manning constraints and the desire to reduce the vulnerability of its personnel have seen the RSN emerge as a keen advocate for the potential offered by unmanned vehicles”
• Protector Actively Being Used with Weapon for High Value Asset Protection and Area Surveillance

• Protector Bought by 3 Navies and counting

• Product Improved with 360 Viewer

• Protector Asset is Available for User Operational Evaluation Now