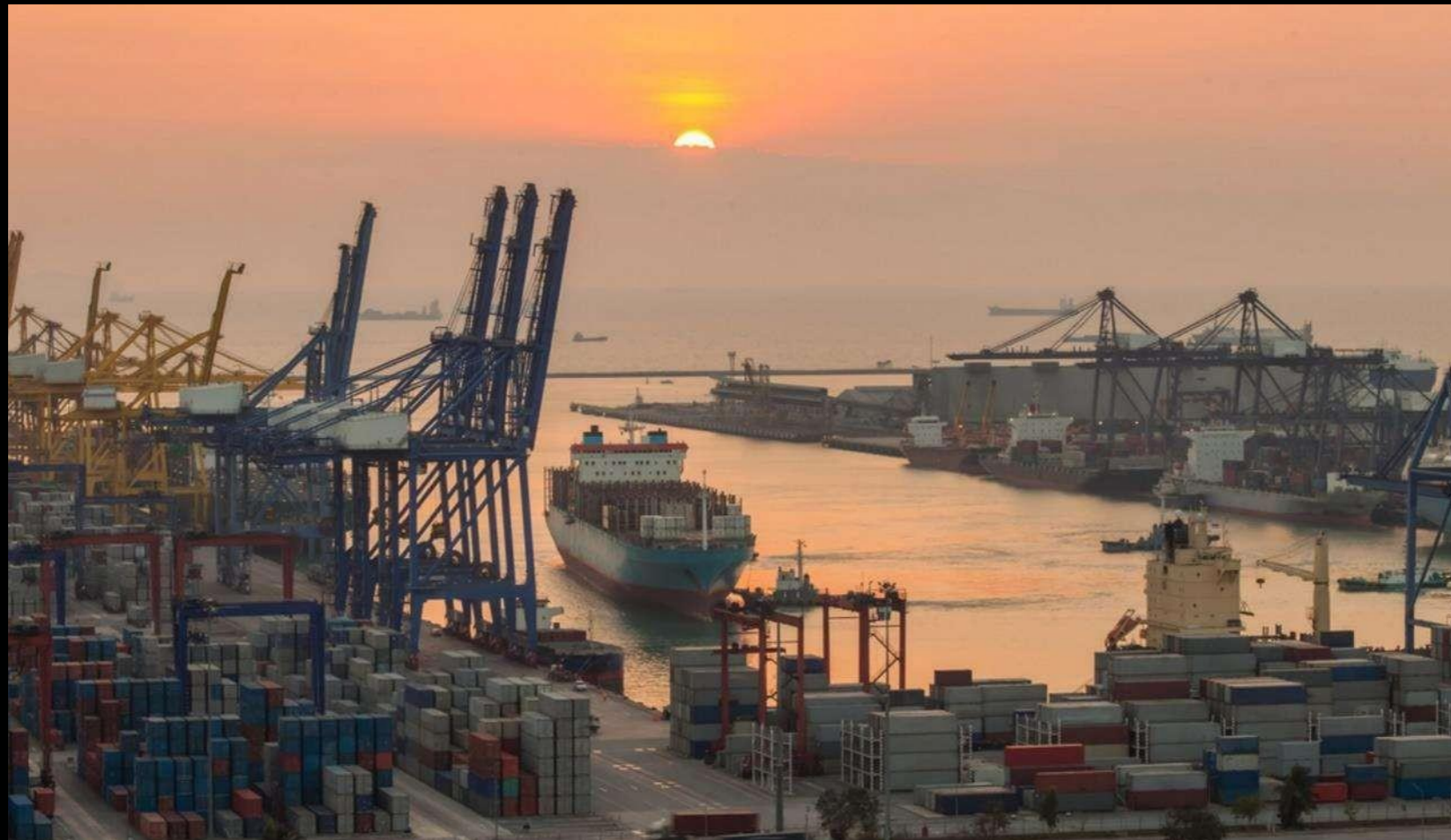


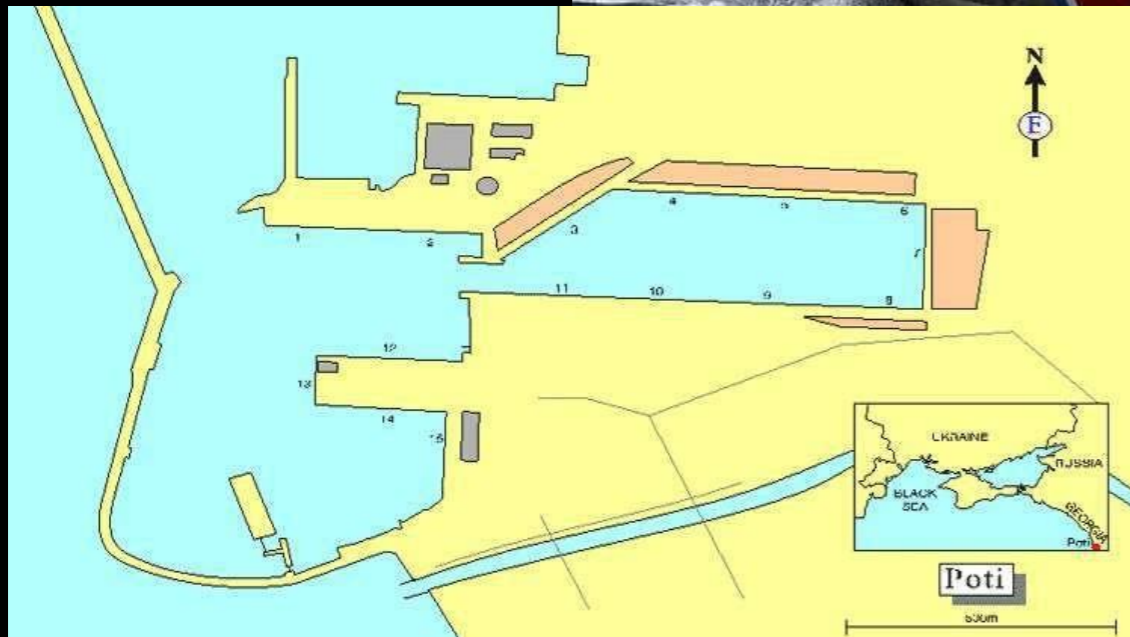


Galaxite solutions

Sea Port Security Solutions



Cost Guard – Protecting your assets



The Mission

- **Ready Today...Preparing for Tomorrow**
- **The Coast Guard** - a paramilitary, multimission, maritime service within the Department of Homeland Security.
- **Core roles** - protecting the public, the environment, and economic and security interests in any maritime region
- **Scope of Operation** - International waters, coasts, ports, and inland waterways.
- **Benefits** – A distinctive blend of military, humanitarian, and civilian law-enforcement capabilities.

Rigid-Inflatable Fast Combat Boat

Rigid Inflatable Boats (RIB) for Special Naval missions and Homeland Security purposes, **capable to operate in all sea conditions.**

Adopting stealth thermal technology systems resulting in extremely low radar signature trace, constructed to provide enhanced stability and maximum operating speed. The Boats can be customized to meet the customer's requirements.



Objectives - Coast Guard has five fundamental roles:

- **Maritime Safety:** Eliminate deaths, injuries, and property damage associated with maritime transportation, fishing, and recreational boating. The Coast Guard's motto is Always Ready and the service is always ready to respond to calls for help at sea
- **Maritime Security:** Protect country maritime borders from all intrusions by: (a) halting the flow of illegal drugs, aliens, and contraband into the country through maritime routes; (b) preventing illegal fishing; and (c) suppressing violations of federal law in the maritime arena
- **National Defense:** Defend the nation as one of the armed services. Enhance regional stability in support of the National Security Strategy, utilizing the Coast Guard's unique and relevant maritime capabilities.
- **Protection of Natural Resources:** Eliminate environmental damage and the degradation of natural resources associated with maritime transportation, fishing, and recreational boating.

Key Elements of Maritime defense

- Sea - shore- port- command & control
- Patrol boats
- Fast response boats
- Boarding unit
- Diving Unit



Integrated Border Protection System

Configured To Put You In Control
Of Your Border And Coastal Scenario



Advanced Coastal Surveillance Radar

- Optimized to detect small targets in rough sea.
- Used to prevent illegal immigration and penetration of smugglers and terrorists
- Protection of homeland borders
- Detect, locate and target terror, contraband, smuggling, illegal immigration and other threats.
- 24 /7 Operation, even in bad weather and low visibility conditions.
- Command & Control Center gathers information from a variety of sensors creating a tactical situation awareness
- Maximize the use of your law enforcement units
- Create a powerful deterrent and threat eliminator.



The Coast Guard Patrol Boat Unit able to take immediate action to eliminate any threat

PATROL BOATS

24 Hours at sea

Speed-35 Kn

Crew- 6

Length-42-52 Ft

250 -500 Nm

2 Machine guns

C 4 I-Radar & navigation system



The C.G Fast Boat Unit

real time, any threat

The RB-S (Response Boat, Security) "Defender" Class is the perfect boat to combat terrorism threats, and help keep your country's borders safe and secure

10 Hours at sea-150-350 Nm

Speed-40 Kn

Crew- 4

Length-25 Ft

2 Machine guns

Radar & navigation system



USV Advantages

- Unmanned Surface Vehicles (USV) or Autonomous Surface Vehicles (ASV) are vessels that operate on the water surface without any crew.
- They are remotely controlled and can be controlled by an operator located on land or on board of another vessel. Thereby maintaining a first line of defense or performing inspections of other ships, etc... while manned boats are kept at a safe distance, avoiding unnecessary risks.
- The USV are usually resistant, stable, stealthy, fast and highly maneuverable; they have a wide variety of applications such as protection forces, anti-piracy forces, anti-terrorism forces, surveillance and reconnaissance, electronic warfare and mining.
- In these additional applications, USV offer greater capacity for surveillance, identification and interception compared to traditional systems.
- It can be equipped with stabilized weapons systems, with surveillance systems and electro optical tracking systems capable of monitoring both day and night by using infrared vision.

Potential Missions

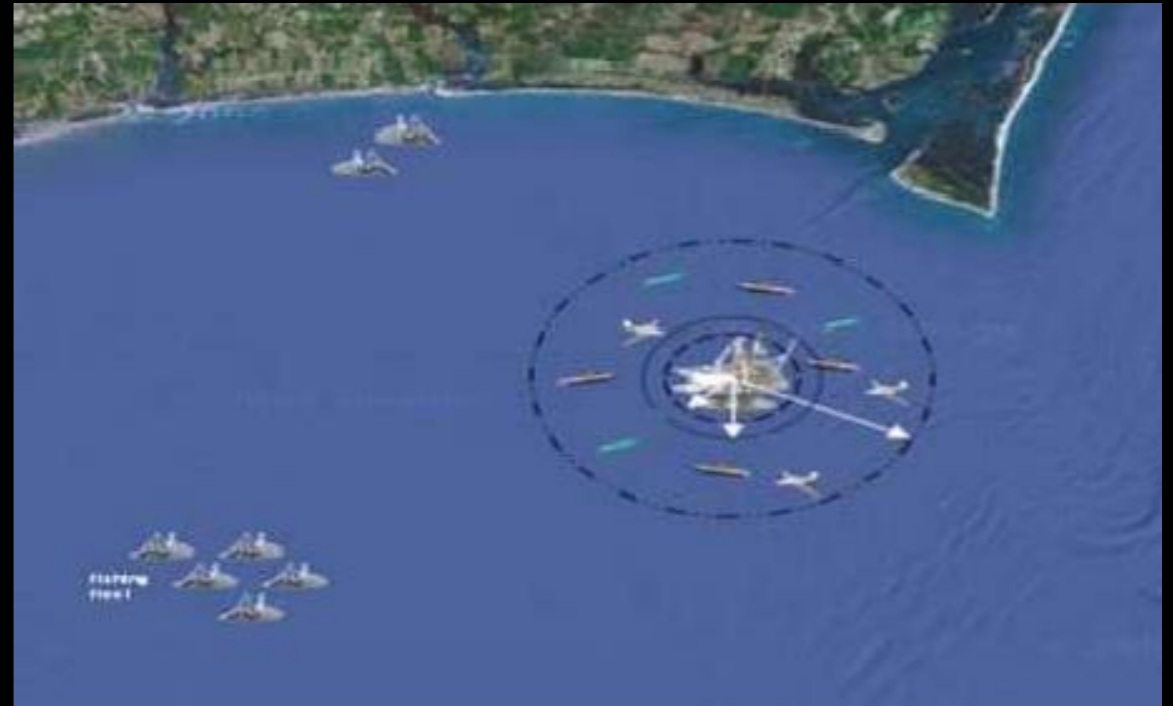
- **Applicability:**

- Fixed Asset Protection
- High Value Unit Escort
- Patrol/Search
- Track/Trail of another vessel



- **Overcoming Challenges to Adoption (S&T Perspective):**

- Key is human's trust in system
- Focus on achievable autonomous functions such as perception and route-planning
 - Many others are needed as well
- Use autonomous USVs for missions and in environments appropriate to the technical capability



USV Capabilities Available

- Autonomy software transferrable to other UxV platforms
- Multi-agent robotic control can support a variety of Army missions including:
 - Demonstrate control methodologies of unmanned ground assets from distant, remote locations to increase stand-off to reduce risk to Soldiers
 - Deploy/operate a long-range, multi-mission capable unmanned system to extend the Soldiers' reach
 - Demonstrate unmanned convoy operations to support global logistical resupply operations to reduce Soldiers' burdens
 - Develop autonomous systems with a high degree of inherent mobility to augment Soldiers' mission capability



USV Capabilities Available

High Speed Security Patrol USV is a multi-task unmanned surface vessel which can achieve GPS navigation, autonomous and obstacle avoidance. With the equipped optoelectronic device and underwater sonar, USV is able to realize security patrol, target monitoring, identifying and tracking, evidence collection and intercept suspecting.



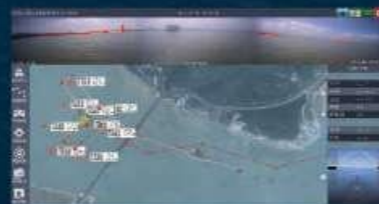
1 USV Condition Monitoring

Rotate speed, oil mass, oil temperature, electric quantity, voltage, rudder angle and other performance index



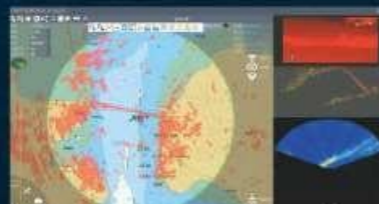
2 Video and Mission

Real-time video from left, right and front camera; Trajectory and mission status; Navigation info, depth, longitude, latitude and speed



3 Environment Sensing

Electronic chart, LIDAR, infrared imagery and side-scan sonar



Boarding Units - locate, target & eliminate terror, contraband & smuggling, activities



Boat Boarding Assault tools

- Telescopic Poles
- Titanium Hooks
- Tactical Ladders



Diving Unit

smuggling, illegal immigration and other threats to public safety



Equipment



Computerized-maritime navigation systems

From Fast Patrol Boat to Frigates & Submarines It is an advanced street-lamp which includes:

- Based on Kearfott Accurate INS/GPS
- Navigation Data & Synchro Re-transmission Concept
- In operational use in the Israeli Navy (SAAR Frigates & Dolphine Submarine)



Underwater Communication & Navigation

- Diver navigation system with an intuitive user interface and a variety of integrated sensors.
- Hand-held underwater sonar offering coverage for all ranges, includes underwater data collection and location out to 500-foot range.
- Diver Navigation System
- Full tactical underwater command and control providing divers and commanders with full underwater situational awareness.



Navy Commandos Underwater Tactical Communications

- The world's first and only 20 meter submersible bone conduction tactical headset.
- The amphibious assault headset features no speaker hardware in, on or over the ear(s) - rather, radio comms are received thru the temporal bones of the face - leaving both ears unobstructed providing critical situational and directional awareness.
- The headset's design provides the operator the ability to add some form of in the ear hearing pro if desired.
- Features a horizontal stainless steel headframe and adjustable velcro vertical head strap.
- The push-to-talk housing is ergonomically designed to allow for ease of location by feel rather than sight.
- The ptt housing body was patterned to fit the human hand, gloved or otherwise.
- The positioning of the ptt actuation switch is such that it can easily be located , depressed and released with the thumb.
- The microphone element is mounted on an articulated boom arm for ease of positioning. All components of the mh180v-aa are rated to survive exposure in up to 20 meters (66 2/3 feet) or fresh or saltwater.
- The headset is also available in a single comm version.



MARINE Body Armor

Specialized Ballistic vests and gear for underwater commandos



Boat Stopping Systems

The Buccaneer KIS delivers projectiles designed to deter and disable small fast sea craft at extended range.

With a range of up to 200 meters the Buccaneer uses specialized payloads to lay buoyant netting / line for interdiction operations. The Buccaneer is extremely flexible having a 360 degree rotation and depression and elevation of 45 degrees from the horizontal.

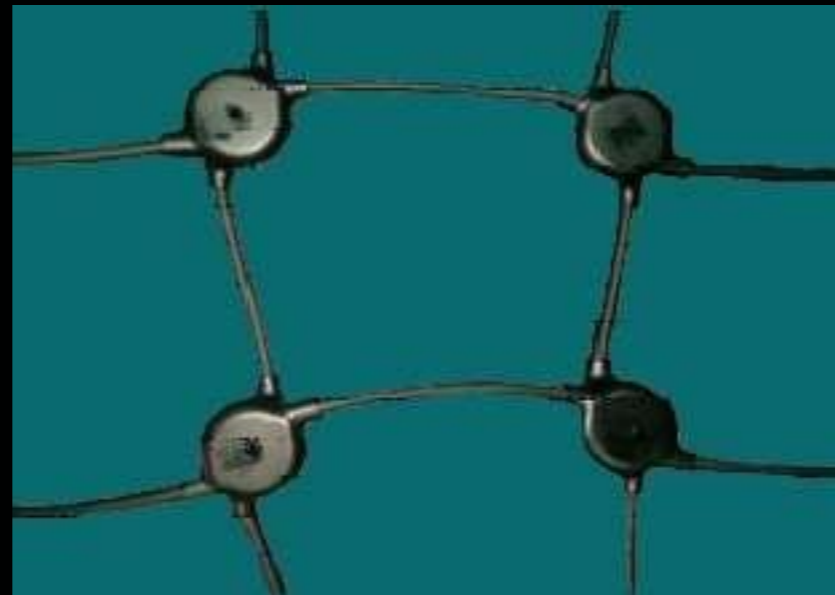
It can be operated remotely from the bridge or control room quickly and safely and uses no explosive or pyrotechnics parts in its use.

The Buccaneer can be loaded with alternative projectiles such as high density smoke, flares, or buoyancy aids.



Port Protection

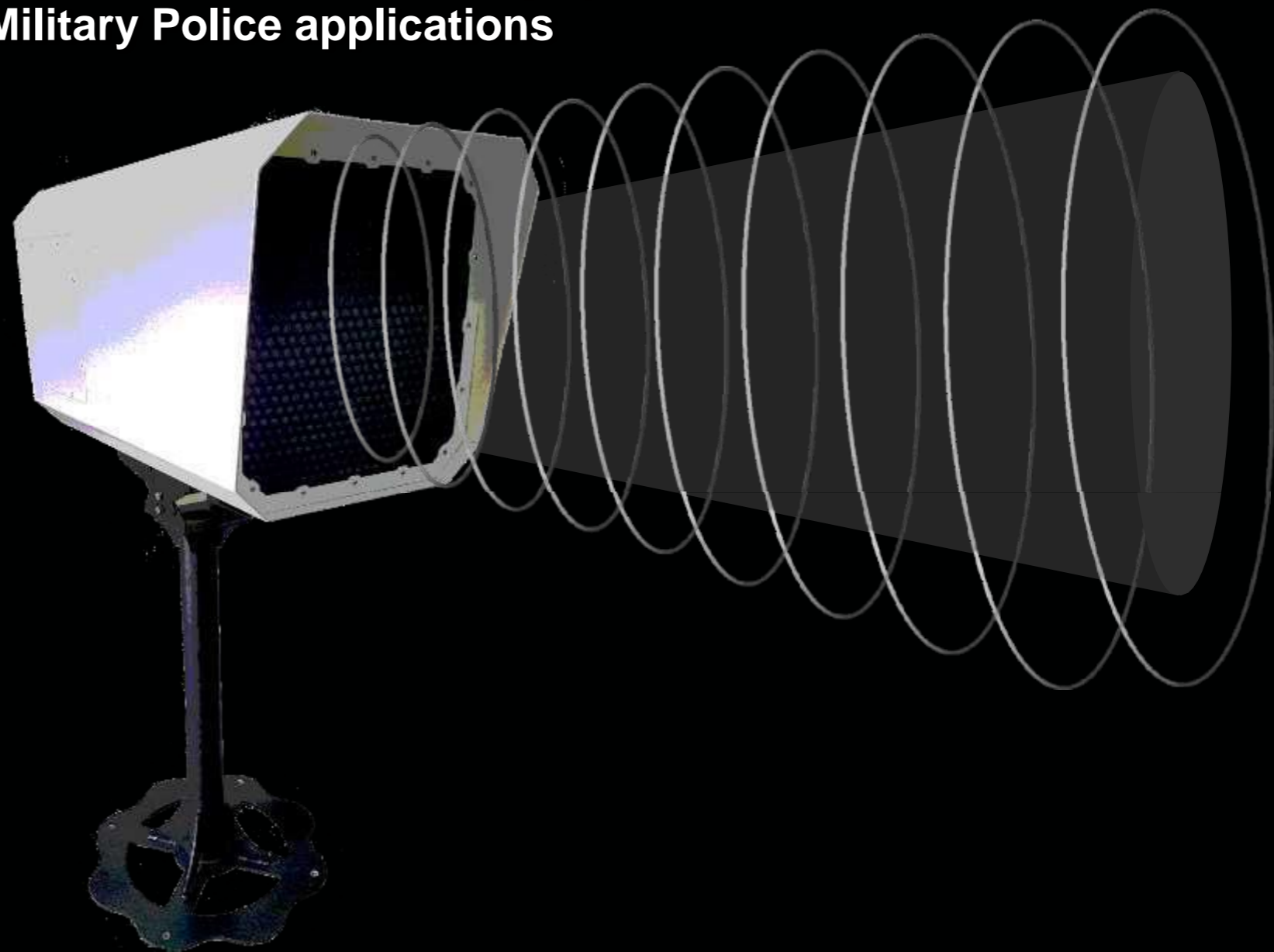
- Marine Protection Barriers
- Underwater Security Systems
- Hostile Divers Detection & Protection



Long Range Acoustic Device (LRAD)

LRAD-2000LS - LRAD's dual use systems have proven highly effective for Ground Forces and Military Police applications including:

- High sound power : 156dB
- High directional : +/-15 degree
- Clear voice message : around 5km
- Long range hailing : around 6km
- Irritating crowd control tone
- Maximum Volume(SPL) 156dB @ 1m front(Peak)
- Voice : around 80dB @ 2Km
- Frequency Range : 200Hz - 6kHz
- Amplifier Output : 2000 Watt
- Acoustic "beam" Width : +/- 15 degree (@1kHz/-3dB)
- Power Input : 100-240VAC
- Dimension of Acoustic part : 48cm(W) X 50cm(H) X 94.5cm(D)
- Weight : 48 kg (Amp is excluded)



Long Range Acoustic Device (LRAD)

AP-1200SR - New designed device as a series of Shockwave for crowd-control and hailing device. This is made for more comfortable and practical installation on the vehicles and ships.

- Using the same power wattage of amplifier on LRAD-1200LR, the design of LRAD-1200SR is more compact size.

- Features

- High sound power : 146dB
- High directional : +/-15 degree
- Clear voice message : Over 2km
- Long range hailing : Over 2km
- Long range notification : Over 2km
- Sound attack : Under 100m



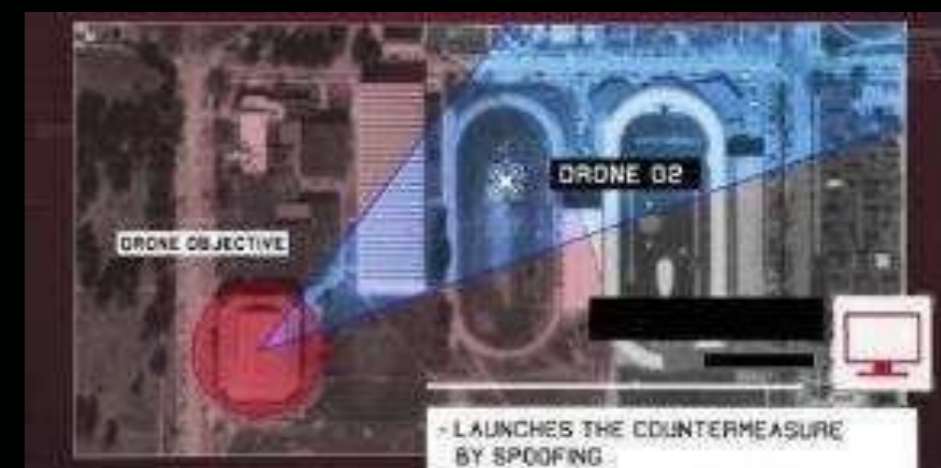
Anti Drone Systems

Drone Control – a multi-band inhibition of the drone control system, interfering both in the manual remote control and in the autonomous operation of the GPS signal of the drones.

Equipped with algorithm and signal intelligence that allows, through GPS spoofing techniques, take control of the drone and guide it to safe areas to proceed with its capture.

Command & Control system that integrates the different modules and provides intelligence to the joint operation of the system.

Rifle format portable system - allows to take control of a drone with natural movements of aiming at the drone.



Wall of Sound (WoS) - High Power Horn Speaker System

The **WoS** system is specifically designed for Border Protection and psychological warfare.

It delivers the sound over 20 Km at night time when 24 sets of horn speakers are operated .

Specification

- Power Rating : 300W
- Frequency Range : 180 ~ 3,300Hz
- Impedance : 8 ohms
- Voice : Over 70dB @ 2Km



Night Optics – Thermal & Image Intensified

- We offer the highest quality US manufactured night vision binoculars, monoculars, weapon sights, night vision parts and service. Both Thermal and Image Intensified



Contact us

and let our experts
protect your
success.



Galaxite solutions

Tell us **your needs.**
we will implement **the solution!**