C4i communication

EXPERIENCE THE DIFFERENCE
YOUR SECURITY & SAFETY PRODUCTS

SEASHIELD™
STATIC ACTIVE SONAR (SAS)

SeaShield™ is C4i's long range underwater coastal surveillance system.

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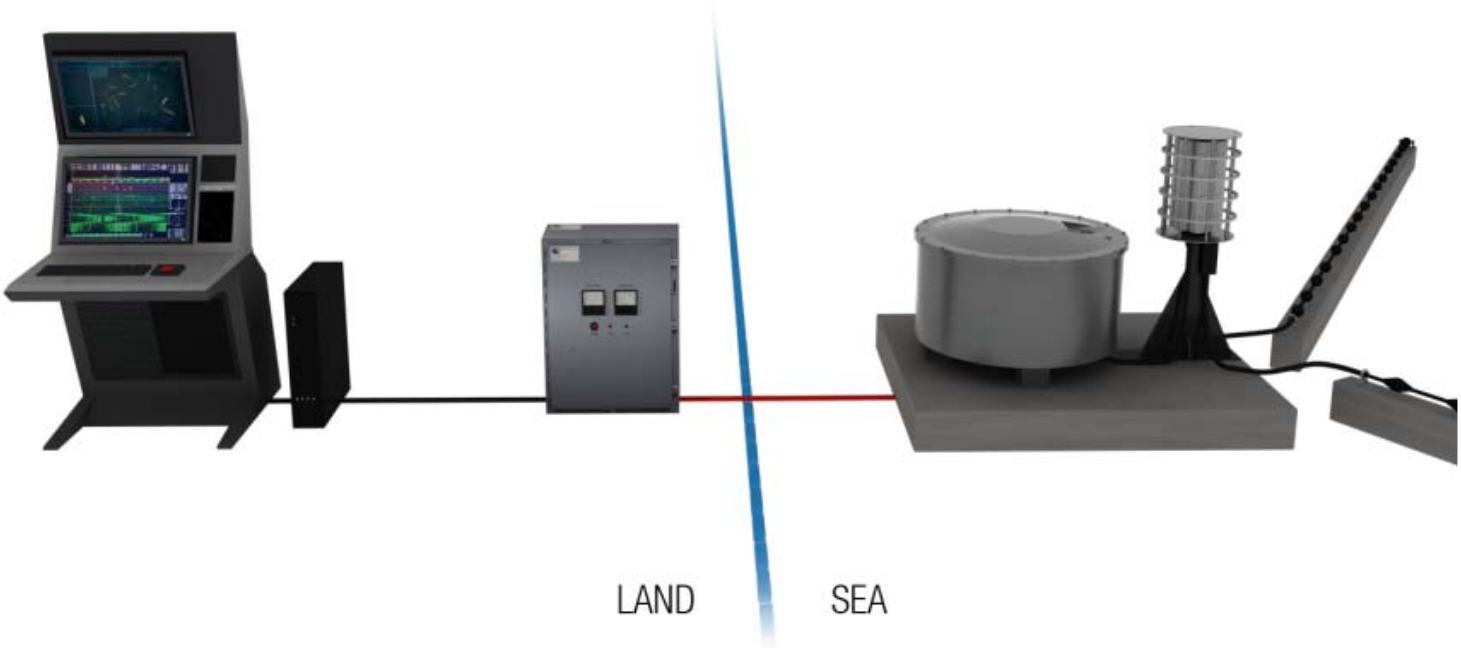
It is designed to monitor large coastal areas against various underwater threats such as submarines, mini submarines and other submersibles.

The system should be installed along critical coastlines, maritime borders and at harbor entrances to allow governments to guard their territorial waters as well as their Exclusive Economic Zone (EEZ).

The system provides better security for the navy's own ships and submarines, by making it very challenging for enemy's underwater vessel to enter the protected area without being detected by the system. In case of alert the navy is capable of sending its special Anti-Submarine Warfare (ASW) responders to the exact location of the unidentified submarine.

The SeaShield ™ is comprised of an active transmit sonar array and large passive receive arrays that are connected to an electronic unit. The SeaShield™ supports automatic detection, tracking and classification of targets of interest.

Several SeaShield ™ underwater units can be deployed in-line to operate together as a long anti-submarine barrier. Unlike traditional ASW operations that involve search patrols performed by ships, helicopters and Maritime Patrol Aircrafts (MPA), the SeaShield ™ is a fixed system that is constantly on the hunt for submarines.



Features

C4i's SeaShield™ System is offering the following main features:

Superior Performance

- Long range detection
- Covers the entire water column
- Provides sufficient time for ASW responders

Automatic Features

- Automatic Detection
- Automatic Tracking
- Automatic Classification
- Automatic Alert

Robust System for Long Term Operation

- Built to operate continuously in all weather and water conditions
- Built in redundancy

User Friendly Displays

- Windows based display and menus
- Multiple display formats
- Includes special zoom windows
- Supports exclusion zones

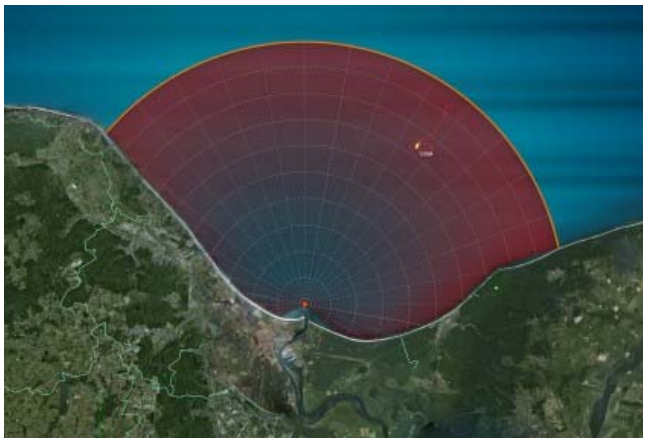
Additional Functions

- Range prediction – ray path and detection contours
- Built in Training Simulator (TS)
- Bit in Testing (BIT)

Performance

Transmit Array

- Cylindrical Array with 6 – 24 staves
- Power handling per stave – 1 KW



Receive Arrays

- Line array with 64 hydrophones spaced at half wavelength
- Transmit/Receive Parameters
- Source Level: Max 228dB
- Search Receiver: Energy Detector (ED) and Coherent Processor (CP)
- Audio, Active: Directional; Slaved to cursor; Slaved to auto tracker

Display Formats

- Active Search – Range vs. Bearing or PPI
- Active Classify – TDI (Doppler)
- Active Classify – A Scan
- Range Prediction – Sound Velocity Profile; Ray path, Detection Contours
- Active scan to scan integration
- Overlay of two active receivers ED + CP

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LEARN MORE: c4icommunication.com

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