

# **Maritime Safety**

## **Superyachts**

In response to the to the deadly October 2000 attack on the USS Cole, Genasys created the acoustic hailing device (AHD) market by developing and launching its proprietary LRAD® technology. LRAD systems enable ship-to-ship communication with vessels not responding to radio calls and enlarge vessel standoff zones out to 3,000 meters. By extending a ship's security perimeter, LRAD systems provide captain and crew more time and distance to determine intent, assess the situation, and scale a response commensurate to the threat.



In 2005, LRAD gained worldwide attention for its use in preventing pirates from boarding the luxury cruise liner, Seabourn Spirit, off the coast of Somalia and taking 151 passengers and crew hostage. Since successfully defending the Seabourn Spirit, LRAD systems have been used many times around to protect ships, crews, passengers, and maritime assets.

Every U.S. Navy surface combatant, 31 international Navies and Coast Guads, and many superyachts, cruise liners, and commercial maritime ships deploy LRAD systems to hail and warn, alert and notify, determine intent, establish large standoff zones, resolve uncertain situations, initiate and scale the use of force, and save lives.

## The LRAD Advantage

Genasys' proprietary driver and waveguide technology eliminates the shortcomings of other audible maritime communication systems by maintaining a smooth frequency response with an intensity variation of less than 5dB, which prevents audio fading and produces clear, unambiguous communication across all broadcast frequencies.

Optimized to the primary range of human hearing (1 - 5 kHz), LRAD



ensures every voice broadcast is clearly heard and understood over wind, engine and background noise.

LRAD systems are unique in their ability to broadcast live or recorded voice messages in any language with exceptional intelligibility and tonal clarity.

LRAD is the most thoroughly tested AHD available having successfully passed approximately 40 separate U.S government tests including all MILSPEC testing for heat, humidity and shock.

LRAD's unmatched acoustic technology is enclosed in a rugged housing and operates reliably and effectively in the harshest maritime conditions.

Interfaces include a weatherized microphone and rugged MP3 player / controller designed for ease of use and operation.







#### **LRAD 950NXT**

#### Remotely Operated Communication System

Utilizing technology developed and patented by Genasys, the LRAD 950NXT's ability to identify and interact with targets from a distance provides maritime security personnel the additional time and information necessary to accurately assess situations and appropriately scale responses.

Featuring an integrated HD camera, high-intensity searchlight (optional), and robust, IP-addressable full pan & tilt drive, when integrated with radar or motion sensors the LRAD 950NXT provides automated intruder alerts and becomes a fully functional, unmanned ship perimeter security and first response system.

Because of its automated 24/7 surveillance capabilities, the LRAD 950NXT reduces manpower and false alarms, resolves uncertain situations, and provides a highly effective, cost efficient maritime security solution.

### **LRAD Maritime Safety Capabilities**

- Clearly communicate and establish security perimeters and standoff distances from other vessels
- Initiate an effective, appropriate and scalable response to potential vessel intrusions
- Avoid confrontations and deter unintentional intrusions into ship security zone
- Establish intent of vessels not responding to radio calls by broadcasting attention-commanding warning tones and live or recorded voice messages in any language
- Ensure warnings, commands and instructions are clearly heard and understood over wind, engine and background noise
- LRAD's 30° directional broadcasts direct communications only to the intended target
- The only acoustic hailing device to meet stringent U.S. Navy / U.S. Army / JIFCO requirements





#### Global Provider of Protective Communications Solutions

Protecting people and saving lives for over 40 years, Genasys Protect covers more than 100 Million people in over 100 countries worldwide, including more than 500 U.S. cities, counties and state



