



# *Acoustic Hailing Devices (AHD) Fact Sheet*



## **What Is It?**

An Acoustic Hailing Device (AHD) is a non-lethal, counter-personnel, long range hailing and warning device. The AHDs are capable of producing highly directional sound beams, allowing users to project warning tones and intelligible voice commands beyond small arms engagement range. The capability enables U.S. forces to more effectively determine the intent of a person, crowd, vessel, or vehicle, at a safe distance and potentially deter them prior to escalating to lethal force.

## **How Does It Work?**

Acoustic Hailing Devices produce focused sound waves optimized at various frequencies in the audible range. The sound waves are generated from an electric power source coupled to a focused array of transducer elements. Either voice or tone can be generated at high decibel levels that are below Occupational Safety and Health Administration hearing limits for prolonged exposure to the target. Optional features may include integration of devices for pre-programmed foreign phrase commands. The AHDs can be used for force protection, peacekeeping, humanitarian missions, and other situations where there is a need to communicate at long range and to determine the intent of individuals or crowds is necessary. The AHDs can be mounted on a variety of platforms, such as tripods, High Mobility Multi-purpose Wheeled Vehicles, trucks, ships and other vessels, and on stationary platforms such as guard towers.

## **Human Effects Testing**

In 2006, the Joint Non-Lethal Weapons Directorate (JNLWD) sponsored a multi-service AHD evaluation. The evaluation assessed the human effects on the operator and identified and implemented operational safety guidelines for AHD use. As the acoustic energy is non-kinetic, there is minimal collateral damage from its use.



**Vehicle mounted Acoustic Hailing Device**  
*Official Department of Defense Photos*

## **Program Evolution**

Since the bombing of the Marine compound in Beirut in 1983, communicating with and determining the intent of an individual, crowd, or approaching vessel or vehicle at long range has become a priority for U.S. forces. After the U.S.S. Cole attack in 2000, this priority was addressed by operational units directly purchasing and utilizing several of the Commercial Off the Shelf (COTS) AHD products available on the market.

In fiscal year 2006, the JNLWD sought to quantify and baseline the performance and capabilities of current COTS AHD products. To accomplish this, the JNLWD sponsored an extensive evaluation of current COTS AHD products in order to assess their capabilities and compare those results to the current operational needs of the U.S. Forces. The fiscal year 2006 AHD evaluation included a Limited Military User Assessment which involved both maritime and land-based operations.

*Today's complex missions highlight the need to equip our troops with non-lethal weapons.*

# *Acoustic Hailing Devices*

As a result of the fiscal year 2006 AHD evaluation, deficiencies were identified which formed the basis for the fiscal year 2007 AHD Acquisition Program. The current program intends to meet the current needs of U.S. Forces. On May 17, 2007 a contract was awarded, based on a full and open competition, to American Technology Corporation to design, develop and build four modified COTS Acoustic Hailing Devices for the U.S. Army, U.S. Navy and U.S. Coast Guard.

## **Organizations Involved**

The following organizations are participating in the AHD effort:

- Department of Defense
  - U.S. Army (Lead Service)
  - U.S. Navy
- Department of Homeland Security
  - U.S. Coast Guard

*Non-lethal weapons are intended to minimize fatalities, protect the innocent and limit collateral damage.*



For further information, contact the JNLWD at: 703-432-0905

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