



Technology Could Combat Pirates Terrorizing The High Seas



U.S. Navy SEALs have recently received international attention for their counter-piracy operations.

Undeterred by the daring U.S. and French hostage rescues that killed five bandits, Somali pirates brazenly hijacked four more ships in the Gulf of Aden in mid-April, vowing to retaliate for the deaths of their criminal cohorts. The International Maritime Bureau's piracy reporting center reports seventy-seven pirate attacks this year, with sixteen of those vessels and 285 crew members still in bandits' hands.

One of the world's busiest and most important shipping lanes, the Gulf of Aden links the Suez Canal and the Red Sea to the Indian Ocean; this vital waterway is crossed by over twenty thousand ships each year and has become the center of the world's fight against piracy. With each boat passing through carrying precious lives and cargo, along with potential multi-million dollar ransoms, how can new technology help protect the high seas?

"As more of these incidents take place, the Navy, international agencies, and private companies are looking for technology that can curtail the piracy problem," says Dr. Nelson Ludlow, CEO of Intellicheck Mobilisa, Inc., a leading technology company developing and marketing wireless and identity systems for maritime communications and security. "High-speed wireless communications using the Floating Area Network (FAN) technology and security buoys can help provide a universal maritime security net. These technologies eliminate awkward satellite delay, aid communication between crews and rescue teams, and provide live, real-time video logs of events as they occur on board ships, which can prove to be invaluable training aids for future missions."

Intellicheck Mobilisa's Wireless Over Water (WOW) technologies allow Wi-Fi to work in-motion over water and over great distances. The company provided the Washington State and British Columbia Ferry systems with a continuous Internet connection while customers traveled on board those vessels. Similarly, the company's Floating Area Network (FAN) technology allows ships within line of sight to communicate with each other wirelessly at speeds faster than current—and overtaxed—satellite communications. The U.S. Navy's SPARTAN unmanned surface vehicles use Intellicheck Mobilisa's WOW technology to transmit high-speed video in real time over several miles.

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Recently Intellicheck Mobilisa began pilot testing a multi-purpose security buoy project with the U.S. Department of Defense, and the University of Washington Applied Physics Lab. These buoys provide real-time queuing of potential waterborne threats. Coupled with Intellicheck Mobilisa's shore side hand held identity scanners, the total security package can be realized. In theory, ports would position two mobile readers at each land entry point, place buoys at the waterside entry points, and roving patrols would use handheld scanning for both on- and off-shore perimeter security, thereby extending port security zones by miles.



“This system would allow for the onboard placement of covert devices—such as motion detectors, cameras, and infrared night sensors—that the military typically use, but requires high bandwidth to enable communications,” explains Dr. Ludlow. “The buoy would provide high bandwidth and communications link directly to the pirated ship, with all communications controlled by the rescue ship.”

This advance would allow for direct audio and video feed from the Navy or rescue ship to the boarding team without satellite delays. Linguists could use the technology to translate commands and orders given to the crew from the boarding party to facilitate in safety and conduct security operations. (Oftentimes, one does not know the languages spoken on the ship until boarding.)

“Pirates have terrorized the seas since ancient times,” says Dr. Ludlow, “thankfully, modern technology now exists that can help foil their plans.”