

High tech: Technology mightier than sword in fighting piracy

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Pirates aren't just the stuff of movies.

Recent events off Somalia involving U.S. Navy SEALs dramatically illustrated that terrorism takes many forms, from relatively well organized groups like al Qaeda to opportunist pirates working in lawless regions of the world.

More to the point, that situation painfully highlighted that merchant shippers and private companies stand squarely on the front lines of this war and in larger numbers than military combatants.

Numbers don't lie

Case in point - Maersk Global Shipping Group, at the epicenter of that high seas hostage standoff in May, maintains a fleet of 1,000 vessels of various shapes and sizes at sea on any given day, more than three and a half times the number of active U.S. Navy warships. Factor in the rest of the world's commercial maritime assets, and it becomes abundantly clear the virtual impossibility of protecting all sea lanes of communications exclusively with military force.

Even if enough Navy assets were available, providing such protection and show of force could possibly do more harm than good. Tying up ships at the marshal point in a convoy

delays commerce, disrupts the supply chain economy, and in reality, still does not make a sizable dent against such insurgent and pirate activities.

Moreover, international law requires nations to recognize the waters within 12 nautical miles of a country's borders as their territory. Pirate attacks within this area can only be countered by U.S. or other nation's military forces on the expressed approval or request by the host nation. Securing such authorization through diplomatic channels may prove unachievable within a fashion sufficiently timely to thwart piracy.

Given those constraints, the current debates by government and commercial stakeholders on how to respond largely centers on whether to arm merchant vessels. Commercial shipping companies don't appear too keen on the idea for understandable reasons. Liability insurance and operational costs will most surely rise as a result, and the benefits to do this rather than pay the typical seven-figure ransom seem modest.

As an example of the challenges this approach can face, picture a commercial vessel being approached at high speed by a smaller vessel that does not respond to radio or

visual signals. Should the commercial vessel shoot before the smaller vessel comes within boarding range, wait until a threat is apparent, or only shoot if shot at first?

Although self defense is generally recognized as a reason to use appropriate defensive force, there are no set rules of engagement for armed merchant ships on the high seas, resulting in inevitable legal and liability costs that threaten to undermine the profits and core mission of the commercial shipping companies.

Technology as the primary weapon

A better solution most certainly exists. Commercial shipping companies should instead leverage real-time information to track the whereabouts of pirates and insurgent forces before entering an area of operation. While merchant ships possess a wide array of satellite navigation and communication equipment, few if any maintain systems that offer a geopolitical analysis of current activity. That's because most information of this kind resides in classified military networks, and therefore inaccessible by commercial seagoing assets.

That may soon no longer be the case, as U.S. military commanders, third-world allies and corporate entities are looking at the feasibility of implementing command and control systems that leverage the power of available Internet technologies. Such a platform can offer an effective information sharing and communications environment in which all stakeholders - including merchant and military ships - can exchange data on activities that have direct relevance to their mutual interests.

This type of system would operate in a non-classified, but sensitive, environment that can alert commercial traffic about areas to avoid long before they find themselves in extremis.

An effective platform like this must embody the following features and functions:

- Operate on the Internet
- Integrate existing and emerging technologies
- Use as much open source technology as possible
- Allow for controlled inclusion of a wide coalition population
- Be protected by rules, processes, encryption, and other applicable security measures to ensure fidelity of information.

With this system, merchant ships and their companies will be able to reduce disruptions in operations and revenue without the need to arm their vessels and grapple with the potential consequences from such actions.

Enhances both trade and national security

Outfitting commercial vessels with such a command and control platform can not only preserve ocean-going commerce, but also enhance U.S. and global national

security interests. The sharing of information would expand the nation's Maritime Domain Awareness, and directly support the U.S. Navy's 1,000-ship concept of combining international resources in a cohesive strategy to stop or prevent the movement of threats along the high seas.

In short, commercial vessels could provide far reaching "eyes and ears" of regional insurgent activities before they become catastrophic. This does not mean that maritime companies are now intelligence officers.

However, passing information acquired from the casual observance of events and circumstances committed in open areas could prove invaluable to coalition partners and host nations as well as the United States. The benefits of such a technology platform are, without question, numerous and mutually advantageous.



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