

CARGO CONTROL

Technology promises to help thwart thieves

by Margaret C. Roth

The United States' adaptive adversaries in Afghanistan, in addition to posing a direct threat to the country and allied troops, have also proved to be an indirect threat as they target supplies in transit that support the warfighter.

KEEPING IT MOVING

A Soldier drives a forklift to move a container box for loading onto a truck outside the Joint Combat Operating Base at Pul E Sayed, Parwan Province, Afghanistan. (U.S. Army photo by SSG Horace Murray.)





In response to the ever-evolving threat of thievery, the U.S. Armed Forces are harnessing new technology to prevent pilferage of cargo.

“The bad guys are getting smarter,” said Eric L. Mensing, President and Chief Executive Officer of the shipping company APL Maritime Ltd., and Vice President, Government Trade and Affairs of APL Ltd.

Existing tools are designed primarily for tagging and tracking cargo. They include the In-Transit Visibility (ITV) system, a fusion of logistics information and distribution technologies. ITV uses Radio Frequency Automatic Identification Technology to identify, locate, and track the movement of all classes of supply from source to user.

Tracking has come a long way, even from just five years ago, and has a ways to go, Mensing said at the Association of the United States Army Institute of Land Warfare’s Army Sustainment Symposium and Exposition May 10-12 in Richmond, VA.

“We reasonably should be tagging every box that goes through,” keeping the tags on the containers to be returned with them, Mensing said. As it is, a shipment may be signed for at a storage facility gate and then disappear. The shipping industry can provide security, but it should be a DOD responsibility, he said.

ITV has allowed for almost 100 percent tagging of containers to track them from node to node in the distribution network, said U.S. Marine Corps BGen William M. Faulkner, Vice Director for Logistics, J-4, on the Joint Staff. That supports a common operational picture across combatant commands and distribution networks, but the services’ ability to



GLOBAL LOGISTICS

SPC Vincent Valone, a motor transport driver with the 407th Brigade Support Battalion, 2nd Brigade Combat Team, guides the loading of storage containers filled with equipment and supplies onto a Heavy Expanded Mobility Tactical Truck-Load Handling System in Port-au-Prince, Haiti. (U.S. Army photo by SSG John S. Laughter, 2nd Brigade Combat Team Public Affairs Office.)

respond promptly to incidents of pilferage when they are identified is still limited by the sheer size of the area of operations, Faulkner said.

“Cargo needs real-time, in-transit visibility,” especially when we don’t control the route, said U.S. Navy VADM Mark D. Harnitchek, Deputy Commander, U.S. Transportation Command (TRANSCOM).

Among the technologies that promise to help reduce pilferage is a “smart container” that the Army is testing with a unit’s deployment to Afghanistan. The “smart container,” made of a lightweight polymer, integrates global satellite communication capabilities for monitoring its location. Sensors can detect tampering, environmental conditions, and jarring of the container. Tamper-proof locks, alarms, and internal security cameras provide additional security.

The Army is also working with TRANSCOM to develop next-generation wireless capability for near-real-time tracking of materiel throughout its distribution chain. The U.S. Army Materiel Command and the Army’s Logistics Innovation Agency

have conducted a successful proof-of-principle demonstration of the new capability in Kuwait, as a possible replacement for radio-frequency identification.

On a related note, the Defense Logistics Agency (DLA) is looking at breakthrough technologies, such as DNA markers, to prevent counterfeiting of spare parts, especially microelectronics, said U.S. Navy VADM Alan Thompson, DLA Director. These technologies could also be useful to the services in controlling theft, he said.

“We’re very, very close to [being] able to deliver real-time, actionable intelligence” on pilferage in progress, said MG Kevin A. Leonard, Commanding General, U.S. Military Surface Deployment and Distribution Command. In the meantime, “Cargo at rest equals cargo at risk.”

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