



CJTF-HOA Pre-positioned Expeditionary Assistance Kits (PEAK)

Phase One: Limited Field Demonstration

December
2010



“The Prepositioned Expeditionary Assistance Kit (PEAK) is an excellent step forward in building both partnership capacity and independent field operations within the Horn of Africa. This capability will enhance our current and future engagements with our Host Nation partners and bring a vital capability in response to Humanitarian Assistance and Disaster Relief events.”

—Captain Stephen A. LeBlanc, U.S. Africa Command, CJTF-HOA J4

Mission Overview

The Pre-positioned Expeditionary Assistance Kits (PEAK), U.S. Africa Command's first Joint Capability Technology Demonstration (JCTD), was developed to assist African nations with improving capabilities for essential services, including potable water, renewable power, and communications. The demonstration provided by the Office of the Secretary of Defense Research and Engineering (DDR&E).

PEAK Phases

The PEAK JCTD conducted the first part of a three-phase program at CJTF-HOA, Djibouti, November 15-18, 2010 during which the team demonstrated and trained the water purification and filtration portion of the PEAK capability.

The three phases of the PEAK JCTD (build, test, and demonstrate) program include the following:

- **Phase one** focused on rapidly producing purified water through a filtration and desalination process of non-potable water sources.
- **Phase two** is aimed at demonstrating all four component capabilities (water, generator power and renewable solar energy, communications and situational awareness) to CJTF-HOA personnel.
- **Phase three** is intended to deliver the integrated PEAK kits to CJTF-HOA to utilize and assist in improving services in water, power, and communications in support of humanitarian assistance / disaster relief (HA/DR) activities in African nations.

The Team

A nine-person team from U.S. Africa Command, OSD DDR&E, and Combined Joint Task Force - Horn of Africa participated in the first phase of the demonstration.



The Bottom Line

A U.S. Department of Defense team conducted the first part of a three-phase Joint Capability Technology Demonstration to assist African partner nations with improving capabilities for essential services, such as potable water, renewable power, and communications.

Objectives

The PEAK JCTD aims to:

- Demonstrate and transition an array of capabilities for field distributed essential services including potable water, renewable power, communications and situational awareness.
- Provide effective, low-cost and sustainable crisis services that CJTF-HOA and the host partner nations can utilize and build a key capacity of available essential services in support of a wide variety of missions, to include support for humanitarian assistance / disaster relief activities.

Outcome

During the first phase of the PEAK JCTD, the team succeeded in “training the trainer” and demonstrating the capability to produce clean water up to 100 gallons/hour using the kits. CJTF-HOA participants learned the end-to-end water purification process, set-up, operations, cleaning and maintenance, storing, and deploying of the PEAK kits.

The PEAK kits will be showcased and demonstrated for representatives from 11 East African countries at the January 2011 CJTF-HOA East African Coalition Logistics Conference (EACLC), at the Hotel Kempinski in Djibouti.

Future engagements are being planned for Uganda, Ethiopia, and Kenya to demonstrate a low-cost, easily sustainable capability that improves African nations' ability to provide essential services, including potable water, renewable power, and communications during humanitarian assistance / disaster relief events.