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# HaMMER Advanced Technology Demonstration

*By Sergeant First Class Scott Newell (Retired)*

The Hazard Mitigation, Materiel, and Equipment Restoration (HaMMER) Program is an Advanced Technology Demonstration (ATD) sponsored by the Defense Threat Reduction Agency Joint Science and Technology Office. That office also serves as the program manager, with additional management provided by the U.S. Army Pacific (operational manager); the Joint Project Manager–Protection (transition manager); and the Engineering Directorate, Edgewood Chemical Biological Center, U.S. Army Research, Development, and Engineering Command (technical manager). The HaMMER ATD aims to support the warfighter through the demonstration of an integrated family of systems for decontamination and the mitigation of current and emerging threats to operationally relevant levels.

The HaMMER Program, which is envisioned as a risk reduction and screening effort for the Joint Project Manager–Protection Decontamination Family of Systems Program, will also be used to identify—

- Potential technologies for transition to an acquisition program of record.
- Changes to existing concepts of operations; tactics, techniques, and procedures; and standing operating procedures that can be transitioned to the U.S. Army Chemical, Biological, Radiological, and Nuclear School to support future changes to doctrine.
- Measures of performance and effectiveness that will support the generation of Decontamination Family of Systems Program requirements.

The objective of the Decontamination Family of Systems Program is to provide the equipment needed to improve decontamination procedures for personnel, equipment, vehicles, terrain, and fixed facilities contaminated with chemical or biological warfare agents. To achieve this objective, the Decontamination Family of Systems Program makes use of mature technologies (general-purpose decontaminants, wipes, contamination indicators [agent disclosure], decontamination assurance sprays) and emergent technologies (coatings and sealants, custom decontamination solutions, effluent controls, niche decontamination).

The HaMMER ATD is being executed in four phases, spanning four years. The first phase, Risk Reduction, began in 2009. The objectives of this phase were to identify individual technologies that might be collectively applied in a family of systems to reduce or eliminate chemical and biological hazards and to define an initial set of technology systems to begin integration. The following year, the HaMMER ATD entered into the Integration Phase, in which the recommended family of systems was optimized through technical testing, tabletop exercises, and warfighter feedback. The Technical Demonstration Phase is underway this year. In this phase, laboratory data will be collected to support technology claims and the synergistic effects of the family of systems. Finally, the ATD will conclude with the Operational Demonstration Phase in 2012. The goal of this phase is to employ the technologies in an operational scenario using new or modified concepts of operations or tactics, techniques, and procedures. The results of the Operational Demonstration Phase will be used to determine military utility.

The benefits of the HaMMER ATD proposals include multiple transition points, new components and technologies that may supplement or replace existing decontamination equipment (in the near term), a new family of systems employed under new concepts of operations (in the midterm), flexible configurations to address specific problems and operational needs, and the capability for deployment at logistically and operationally appropriate levels.

According to Sergeant Major Luis Rivera, the senior enlisted leader for the operational manager, “The decontamination process has not been evaluated in years based on new technologies and current warfighter needs. HaMMER technologies have the potential of eliminating the chemical, biological, and radiological [CBR] threat to the warfighter as far forward as possible. This program has the potential of equipping the warfighters with tools that will give them the confidence that they will have a higher percentage surviving a CBR incident.”

For more information on HaMMER, contact Mr. Markham Smith (program manager) at (703) 767-3292 or Mr. Shawn Funk (technical manager) at (410) 436-5747. 

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*Sergeant First Class Newell (Retired) is a chemical, biological, radiological, and nuclear analyst/project manager with Concurrent Technologies Corporation, Fort Leonard Wood, Missouri. He holds a bachelor's degree in computer science from Hawaii Pacific University and has completed graduate work in environmental science at Jacksonville State University, Jacksonville, Alabama, and information technology management at Webster University.*