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Special Operations Technology

Quiet Professional

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23rd Air Force
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Please scroll down two pages to read article about new UCOM double pole battery switch.

Maintaining the C-130 Fleet ☆ Caseless Munitions ☆ PSYOP Technologies
Handheld Navigation/Communication

Compiled by KMI Media Group staff

BLACK WATCH

What's Hot in Special Operations Gear

Pashto and Dari Language iPhone Application Now Available

To help bridge the cultural gap, soldiers should be able to use the conversational basics of the language. It is an operational imperative that they know the critical words of command required to bring a situation under control and to avoid misunderstanding.

Even a basic understanding of local languages has an enormous impact on mission success; whether for humanitarian support, routine patrol or on the tactical battlefield.

Specifically designed by Curzon Institute to meet the needs of military personnel for deployment in Afghanistan, AppPashto and AppDari are exciting developments in effective and affordable self-learning technologies to achieve operational competency in the two main Afghan languages. AppPashto and AppDari give military personnel the specific language and cultural edge to succeed on tour in Afghanistan.

The apps feature mission-specific terminology and phrases and extensive vocabulary that is easy to use with the automatic play through system.

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New Threat Detection Capabilities Ready to Test

A new system being developed to give helicopter crews a heads up when they're being attacked, as well as the shooter's location, is slated to ship to Afghanistan in October to see how it stands up under combat conditions.

The helicopter alert and threat termination system, being developed by the Defense Advanced Research Projects Agency, promises to warn aircrews of incoming small-arms or machine-gun fire with enough time to take evasive action and launch a counterattack, said Karen Wood, the program manager. It works by using advanced sensors able to detect the supersonic shock wave or "crack" produced by a bullet in flight and pinpointing its source, she explained. The program, known as HALTT, taps into technology that Wood's DARPA team already developed for ground vehicles. The initial result, a prototype HALTT system, showed great promise when it was put through testing at Fort Rucker, Ala., and Aberdeen Proving Ground, Md., Wood reported. The initial tests were conducted aboard an Army UH-60L Black Hawk, but the testing then extended to a USSOCOM MH-47 Chinook to gauge how HALTT technology translates to different air platforms. During four flight tests at Fort Rucker, "the systems just kept getting better and better," Wood said. HALTT performed so well, in fact, that the military pressed to get Phase 1 prototypes into the combat theater even as DARPA further refines the program.

Beginning in October, helicopter crews in Afghanistan will get the capability HALTT provides, as well as a chance to weigh in on its development.

Light Armored Vehicle Enters the Marketplace

Granite Tactical Vehicles announced its intentions to market its light armored vehicle, known as the Rock, in the United States. After more than six years and millions of logged miles of service in both Iraq and Afghanistan, the Rock is ready to meet the apparent and increasing needs that threaten the U.S. borders. These current threats to Homeland Security have created high interest in the Rock's abilities and performance.

Its design and capabilities meet current and future law enforcement needs with its ability to adapt to new threats. With the current drawdown of U.S. military forces in Iraq and the administration's plan to double the number of private contractors, interest in the Rock armored vehicle has grown exponentially. Chris Berman, president and founder of Granite Tactical Vehicles, has been approached and is currently entertaining the idea of partnering with larger defense contractors with greater proven production history, though to date, the right partnership has not presented itself. Granite Tactical Vehicles produced the Rock in both the United States and Kuwait through late 2008, when all operations were relocated to their current facility in Mt. Airy, N.C. However, the current climate and conditions in the Middle East are causing the company to revaluate opening another facility in that region.

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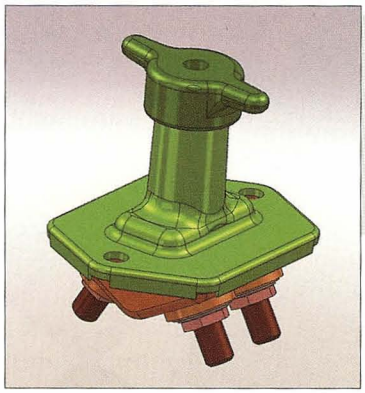
New Battery Switch

Ucom Inc., established in 1994, is a designer and manufacturer of electromechanical components and assemblies for military and commercial vehicles.

Ucom is currently tooling for its most recently designed single pull, double pole, battery disconnect switch. The purpose of this switch is to cut off all battery power from the vehicle. The single pole version of this switch is currently used on many military vehicles and is a component of the Hubble Space Telescope.

Having the amperage capacity of 300 amps continuous with a 450 amp overload at 24 VDC, the switch eliminates the need for additional electrical components and helps lower overall cost of the vehicle.



This newly engineered switch promises to be innovative in various applications such as heavy duty trucks, construction equipment, off road, agricultural, marine and green energy power applications.

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Combat Survival Tin

This essential kit for combat survival originally designed for the British SAS (Special Air Service) is tightly packed in a useful metal tin. Contents include compass, whistle, candle, fishing kit, waterproof survival instructions, wind and waterproof matches, pencil, sewing kit, multiuse flexible wire saw with split rings that can be used as a bow saw or snare wire, water tablets, safety pins, fire lighting flint and striker, and multifunctional knife with foldout scissors.

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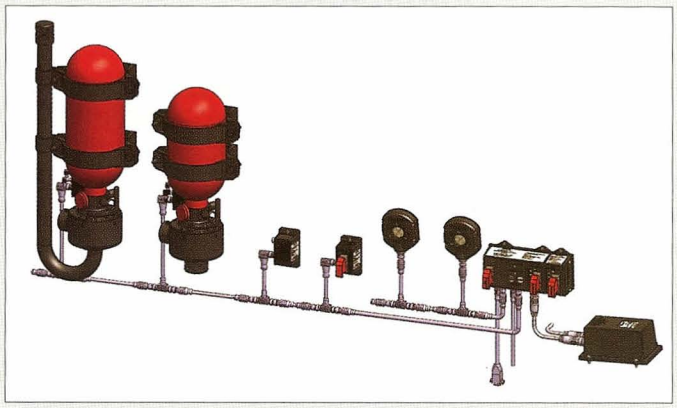
Fire Suppression Enters Military Vehicle System Market



Ansul, a brand of Tyco fire suppression & building products and a leader in commercial fire suppression, is now launching an automatic fire extinguishing system (AFES) developed specifically for military vehicles. The Ansul AFES is a lightweight, compact system engineered for weight, size and ease of integration. Within milliseconds of a slow-growth or rapid-spread explosive/ballistic event, fire is detected and contained with a field-proven agent, activated either automatically or manually, depending on the severity. "With the introduction of the Ansul AFES, Tyco fire suppression & building products is providing armed forces with a choice in fire extinguishment solutions," said Dave Seikel, manager, government sales. "The Ansul AFES offers a step forward in military fire extinguishment engineering, by lightening system weight and increasing response time to exceed military specs. We're proud to say the Ansul AFES will advance the market, with the greater goal of protecting U.S. soldiers and the military assets they command."

The Ansul AFES has a flexible, modular design that will integrate with multiple vehicle platforms including HMMWVs, FMTVs, MPVs, MRAPs, GCVs and more. The system's CANbus capability allows for easy AFES interface with vehicle systems.

Fire detection is conducted with quad infrared optical sensors, unique to military applications. The system instantly differentiates between open flames and hydrocarbon signatures from non-threatening sources—such as cigarettes and engine heat—eliminating false positives and preserving protection for when it's actually needed. When fire does break out in a crew area, the quad infrared optical sensors notify an electronic control module (ECM). The ECM in turn activates both visual and audible alarms, and is capable of automatically or manually initiating discharge of the extinguishing agent from one of eight separate zones. In engine and cargo bays, wheel wells and other non-occupied areas, linear detection wire and spot thermal detection sends information to the ECM, again allowing for manual or automatic extinguishment. The Ansul AFES is military-specification compliant at MIL-STD-810, MIL-DTL-7905H, and DOT 3AA Non-Shat Cylinder. Electronic control features include battery backup and M12-style plug and play connections. The AFES uses a field proven extinguishing agent but can be readily adapted to clean agent or dry chemical extinguishment options. Production is slated to begin in 2011.

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