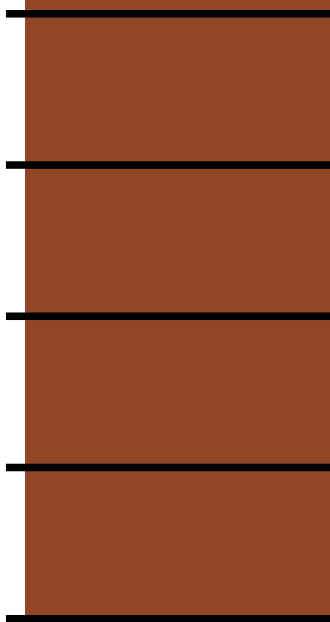


# Army Guide monthly



## # 6 (33) June 2007

- General Dynamics Awarded \$19 M Contract to Establish National Corps of Language Professionals
- U.S. Marine Corps Awards Force Protection \$11.9 M For MRAP Vehicles
- Armor Holdings, Inc. Receives \$112 M Award for Improved Outer Tactical Vest
- Patria Received an Order for Patria Nemo Concept Study from the Finnish Navy
- Ceradyne's Lightweight Armor Selected by U.S. Army for Advanced Evaluation
- Fuel Cell Products Development Partnership
- Dragoon
- KMW Develops New Vehicle



## Army

## General Dynamics Awarded \$19 M Contract to Establish National Corps of Language Professionals

General Dynamics Information Technology, a business unit of General Dynamics, has been awarded a contract by the Department of Defense (DoD) National Security Education Program (NSEP) to develop a national volunteer civilian "Language Corps" whose members will be available for federal activation during times of international crisis, national emergency or to fulfill other national needs.

The contract was awarded through the GSA's MOBIS vehicle and has a potential value of \$19 million over three years if all options are exercised.

Under the contract, General Dynamics will develop, implement and test a pilot Language Corps of certified experts in languages deemed important to the security and well-being of the nation. The company will create a continuously operated Language Training and Communications Center, recruit pilot and charter Language Corps members, provide personnel support and run activation exercises.

The Language Corps will offer language professionals an opportunity to provide a vital service to the nation in times of emergency. General Dynamics is dedicated to the development and success of this significant national security program.



## Contracts

## U.S. Marine Corps Awards Force Protection \$11.9 M For MRAP Vehicles



Force Protection, Inc. announced it has received an order for 14 Mine Resistant Ambush Protected (MRAP) Category III Buffalo vehicles from the Marine Corps Systems Command. The contract is worth an approximate \$11.9 million and is scheduled for completion by spring 2008.

The Buffalo is a mine clearance vehicle that has been deployed in support of military engineers' convoy operations in Iraq and Afghanistan since 2003.

Field-proven, battle-tested Buffalo vehicles that protect and save lives, has logged more than one million hours of heavy combat operations while maintaining an unmatched record for troop safety. Force Protection is gratified to note that the Buffalo is a sole source solution for the MRAP Category III vehicle requirement.



## Army

## Armor Holdings, Inc. Receives \$112 M Award for Improved Outer Tactical Vest



Armor Holdings, a leading manufacturer and distributor of military vehicles, vehicle armor systems and life safety and survivability systems serving military, law enforcement, homeland security and commercial markets, announced the receipt of a new contract award for \$112 million to provide the Improved Outer Tactical Vest to the U.S. Army.

The Company stated that this new generation of vest was selected by the Army from competing designs and will become the standard for the integrated body armor ensemble. Work will be performed in 2007 and 2008 by the Armor Holdings Aerospace and Defense Group at its facilities located in Tennessee and Pennsylvania.

The Company responded to the U.S. Army's effort to field test an ensemble that provides greater user comfort, more sizes and greater range of adjustment, enhanced ballistic coverage area, reduced weight, and an emergency quick-release system. Most significantly, this contract enables Armor Holdings to begin immediately to field vests required to outfit US Soldiers deployed in Iraq and Afghanistan. Armor Holdings expects to participate in replacing all current systems in use today.



## Defence Industry

## Patria Received an Order for Patria Nemo Concept Study from the Finnish Navy



Patria has received an order from the Finnish Navy for a concept study concerning a combination of Patria Nemo mortar system and WATERCAT M12,

developed by Marine Alutech Oy.

The project targets a possible prototype testing and serial production after the concept study. This project aims to create a new, mobile fire support system with high firepower for the coastal jaeger battalions enhancing their performance in coastal protection. The concept is believed to raise also wide international interest as a new mortar system application.

Patria Nemo mortar system represents Patria's own product development as part of the 120 mm mortar system product family. Patria Nemo is a single-barrel, unmanned turret system for indirect fire support, but due to its direct fire capability, it can also be used for self-defence. The light and compact turret is possible to be mounted on vessel, light tracked platform as well as on 6x6 and 8x8 wheeled vehicles.



## Defence Industry

### Ceradyne's Lightweight Armor Selected by U.S. Army for Advanced Evaluation



Ceradyne, Inc. has been notified by the U.S. Army Tank-Automotive Command (TACOM) that Ceradyne's alternate lightweight armor materials -- submitted in response to the Army's Long Term Armor Strategy (LTAS) requirements for advanced armor solutions for application on the tactical wheel vehicle fleet -- have been accepted for formal evaluation by TACOM's LTAS team.

It is the culmination of an 18-month run-up of development, testing and data collection necessary to meet the Army's stringent performance requirements and start a process that will clearly demonstrate that Ceradyne's advanced armor materials can perform on a par with metal armor solutions, and at a significant savings in weight. Following what is expected to be the successful conclusion of a comprehensive test and evaluation program, Ceradyne's advanced armoring materials will be made available to OEM truck manufacturers on a pre-approved basis whereby they can be incorporated into existing production and future vehicle cab designs.

Success with the ongoing LTAS evaluations will support other requirements for advanced armor materials for other programs, including the Joint Light Tactical Vehicle (JLTV), which will also incorporate an "A" and "B" Kit armor application design philosophy much like the current requirements of LTAS.

Ceradyne develops, manufactures and markets advanced technical ceramic products and components for defense, industrial, automotive/diesel and commercial applications.

Ceradyne has developed a new vehicle armoring

system that encompasses the latest protective products for tactical wheel and logistical support vehicles. The system is ultimately flexible and responsive to local threat requirements allowing fast and effective adjustments to armor protection levels and consequent survivability.

Ceradyne Vehicle Armor Systems meet or exceed the threat protection level requirements specified in the US Army's Long Term Armor Strategy (LTAS).



## Future Technologies

### Fuel Cell Products Development Partnership

UltraCell is pleased to announce that it has entered into a partnership agreement with ABSL Power Solutions.

Under this agreement ABSL will lead commercialisation of our fuel cell products in Europe. This unites two strong power solutions companies in a union that will benefit you and other European customers.

I'm pleased to introduce Tom Liddell, ABSL Business Development Manager, who will be leading ABSL's efforts.

Also, Tom will be at the Soldier Technology Conference in London on June 25, 26 and 27. If you are attending, it will be an ideal opportunity to meet.



## Term of the day

### Dragoon

Dragoon is the traditional name for a soldier trained to fight on foot but transport himself on horseback, in use especially during the 17th and early 18th centuries.

The name derives probably from the dragoon's primary weapon, a carbine or short musket called the dragon. Dragon carbines are said to have been so-called because they "breathed fire" — a reference to the flames carbines emitted when fired. According to another theory, the name originated from the title of Dragon given to Guillaume de Gomiŕcourt, an 11th century French lord, by King Henry I of France, and from his son Raoul Dragon de Gomiŕcourt, who trained a group of soldiers to fight both from horse and foot.

The creation of dragoons, although still not bearing that name, is now generally credited to Piero Strozzi, an Italian condottiero who fought for the King of France in the early 16th century.

Dragoons were organized not in squadrons or troops like the cavalry, but in companies like the foot soldier, and their officers and non-commissioned officers bore infantry ranks. The flexibility of mounted infantry made dragoons a useful arm, especially when employed for

what would now be termed "internal security work" against smugglers or civil unrest. The dragoon regiments were also cheaper to recruit and maintain than the notoriously expensive regiments of cavalry. When in the 17th century Gustav II Adolf introduced dragoons into the Swedish Army, he provided them with a sabre, an axe and a matchlock musket (flintlocks from 1635): many of the European armies henceforth imitated this all-purpose set of weaponry.

However, dragoons were at a disadvantage when engaged against true cavalry, and constantly sought to raise their horsemanship, armament and social status to the levels of the latter. In most European armies "Dragoon" came to refer to medium cavalry by the time of the early wars of Frederick the Great, in the 1740s. Exceptionally the 30 regiments of Russian dragoons in existence by the Seven Years War were still trained to fight as both dismounted musketeers and cavalry capable of engaging a mounted enemy in a melee. They also retained responsibilities for scouting and piquet duty which in the Prussian, French and other armies was passing to hussars and other light corps.

The term "to dragoon" dates from the earlier mounted infantry period. Dragoons were the most efficient and economical form of cavalry for police work and counter guerrilla warfare.

From the late 18th century, some regiments started to be designated as Light Dragoons, who rode faster and lighter horses and carried lighter sabres. They were trained in reconnaissance, skirmishing and other work requiring speed. In the early 19th century, the British Light Dragoon regiments converted to lancers and hussars. Between 1881 and 1910 all Russian cavalry other than Cossacks and Imperial Guard units were designated as dragoons, reflecting an emphasis on dismounted action in their training.

In 1914 there were still dragoon regiments in the British, French, German, Russian, Austro-Hungarian, Swedish, Danish and Spanish armies. Their uniforms varied greatly, lacking the characteristic features of hussar or lancer regiments. There were occasional reminders of the mounted infantry origins of this class of soldier. Thus the dragoon regiments of the Imperial German Army wore the pickelhaube (spiked helmet) of the same design as those of the infantry and the British dragoons wore scarlet tunics (hussars and all but one of the lancer regiments wore dark blue). In other respects however dragoons had adopted the same tactics, roles and equipment as other branches of the cavalry and the distinction had become simply one of traditional titles.

order from Bundesamt für Wehrtechnik und Beschaffung (BWB) (Federal Office for Defence Technology and Procurement) to deliver an innovative, highly protected vehicle.



The vehicle designated "GRIZZLY" affords its crew optimum protection, especially against explosive devices, mines and direct fire. The innovative concept fully meets the schedule of requirements of the German Army, and the increasing needs of NATO and UN forces for peacekeeping missions worldwide as well.

The "GRIZZLY" is to be tested as part of the current procurement project of the German Army covering Class 4 protected command and role-specific vehicles in (highly protected vehicles) with a gross vehicle weight of 25 tons. It thus closes an existing gap in the German Army's vehicle programme between the DINGO 2 (12.5 tons) and the 33-ton BOXER. The first vehicle will be delivered as early as November 2007.

### High payload and flexibility

The GRIZZLY offers space for 10 fully equipped soldiers. With its payload, it therefore exceeds by more than 50% the 3 tons required in the RFP. As against conventional vehicles, it also stands out for an innovative protection concept for the vehicle crew. Driver's station and crew compartment form an integral safety cell which, in addition to ballistic threats, projectiles, missiles and mines, above all affords optimum protection against homemade explosive devices (Improvised Explosive Devices). Special stiffening elements developed by KMW protect the crew from injuries even in a rollover accident. Moreover, engine and transmission are ballistically protected.

A further plus is the flexibility of KMW's vehicle concept. Its dimensions make the GRIZZLY air portable on A 400 M transport aircraft.

### Modular system permits different versions at reasonable cost

Following the successful completion of the trials, the GRIZZLY will be available in a large number of versions. In addition to the highly protected transport versions, they will also include ambulance and command post variants. The KMW-developed intelligent modular system, in addition to the 6x6 version to be delivered under the production contract, also permits the construction of a smaller 4x4 model as well as an 8x8 type of correspondingly higher payload.

The engine output of 331 kW accelerates the GRIZZLY up to 90 kph with a radius of action of more

## Defence Industry

### KMW Develops New Vehicle

Krauss-Maffei Wegmann (KMW) has received an

than 700 km. The vehicle thus sets new standards in the GFF 4 class.

The GRIZZLY concept optimally meets the currently increased requirements established by land forces in terms of technical performance capability, mission flexibility and above all crew protection.

