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Defence Industry

First Patria APC in Hands of Slovenian Military

The Slovenian Armed Forces presented Tuesday the first of the 135 armoured personnel carriers that it has bought from Finnish contractor Patria. The vehicle will undergo a four-week validation test before the military will officially take over the vehicle.

Colonel Dragan Bavcar, who chaired the commission deciding on the contract for 8-wheeled armoured personnel carriers, told the press that Defence Minister Karl Erjavec appointed a group of experts for the validation.

The head of the 72-member validation group, Miroslav Galun, said the goal was to confirm that the vehicles met the contract demands.

During the first week of validation, the group will inspect the APC's maintenance characteristics, a week later it will focus on endurance, followed by a tactics check, including shooting, said Galun.

Bavcar said that during the validation period, the APC would be in military's service, however the ministry would take over the carriers only after they were validated.

Bavcar also said that so far some eight APCs had been produced, however the ministry did not start the validation because the preliminary verification tests were unsatisfactory.

The first vehicle, which the army took over on Monday, is nearly five months late and the Defence Ministry has said that it would penalise Patria for the late delivery in accordance with the contract.

The APCs were originally equipped with an overhead remote controlled weapon stations produced by Israeli contractor Elbit, but the system failed a test and was replaced with one made by the Norwegian company Kongsberg.

The Patria APCs were acquired in a deal that had been investigated by a parliamentary inquiry commission, which however failed to adopt a final report over partisan divisions.

The scandal culminated only two weeks before Slovenian general election, after Finnish public broadcaster YLE ran a TV report which accused the outgoing Slovenian Prime Minister Janez Jansa of accepting a bribe from Patria.

Defence Industry

Oshkosh Defense Awarded $180 Million Contract for 1,500 Reducible-Height Armor Kits

OSHKOSH, Wis. -- Oshkosh Defense, a division of Oshkosh Corporation, has been awarded a new contract valued at more than $180 million from the U.S. Marine Corps Systems Command. The contract includes more than 1,500 reducible-height armor kits to be supplied to the Marine Corps for aftermarket support of the Oshkosh Medium Tactical Vehicle Replacement (MTVR) fleet.

The kits are designed to meet military requirements of transporting armored MTVRs at a reduced height. This allows the protected vehicles to be transported in previously inaccessible decks aboard prepositioning ships. The Oshkosh armored kits add in-theater protection to the Marine Corps' MTVR fleet, which totals more than 10,000 MTVRs in four unique variants: cargo trucks, tractors, dump trucks and wreckers.

"The reducible-height armor kits provide maximum crew protection in the field, while also improving transportability of the armored MTVR," said John Stoddart, Oshkosh Corporation executive vice president and president, Defense. "The MTVR has successfully served the Marine Corps and Navy for years, and Oshkosh is committed to adapting the vehicle to continually meet their needs."

The work will be carried out through Oshkosh Defense Aftermarket, which provides aftermarket services, repairs and parts distribution to customers in every corner of the globe. With factory-trained technicians, Web-based parts support and service centers worldwide, customers are covered 24/7 whether their vehicles are in the field or in garrison.

The Oshkosh MTVR is an all-terrain, multipurpose logistics vehicle used by the Marines and Navy Seabees. It comes in several variants for the transportation of troops, materials or equipment. The vehicle features an off-road 7.1-ton payload capacity and an on-road 15-ton payload capacity. Oshkosh also offers an MTVR with on-board vehicle power, which produces 120 kW of power when stationary and 21 kW of power when mobile.

Since the start of Operation Iraqi Freedom, Oshkosh has repaired and armored vehicles in the Southwest Asia theater of operations, and Oshkosh field service representatives are currently deployed throughout the Middle East.

Oshkosh Defense, a division of Oshkosh Corporation, is an industry-leading global designer and manufacturer of tactical military trucks and armored wheeled vehicles,

delivering a full product line of conventional and hybrid vehicles, advanced armor options, proprietary suspensions and vehicles with payloads that can exceed 70 tons. Oshkosh Defense provides a global service and supply network including full life-cycle support and remanufacturing, and its vehicles are recognized the world over for superior performance, reliability and protection.

Defence Industry

U.S. Army Awards ICx Technologies a Contract for Future Nuclear, Biological and Chemical Reconnaissance System with an Estimated Value of Up to $711 Million

WASHINGTON -- ICx Technologies, a developer of advanced sensor technologies for homeland security, force protection and commercial applications, announced today that it has been awarded a system-engineering, analysis and integration contract by the U.S. Army Research and Development Engineering Command Acquisition Center.

The award, with an estimated value of up to $711 million over seven years, was presented as a single contract for the Joint Nuclear, Biological, Chemical Reconnaissance System Increment II (JNBCRS 2) program.

"JNBCRS 2 is a vital program, and we've assembled a highly qualified team of experienced subcontractors," said Hans Kobler, CEO of ICx. "This system will be a critical tool for our troops as they face terrorist attacks and new kinds of warfare all over the world."

The contract begins in Q4 2008 with an initial two-year, $20 million product-development effort. It is projected that the production phase will have an estimated value of $711 million.

Kobler added, "This significant award is strong validation of ICx Technologies' innovation and technology leadership in the CBRNE community."

ICx Technologies is a leader in the development and integration of advanced sensor technologies for homeland security, force protection and commercial applications. Our proprietary sensors detect and identify chemical, biological, radiological, nuclear and explosive threats, and deliver superior awareness and actionable intelligence for wide-area surveillance, intrusion detection and facility security.

Defence Industry

Navistar Defense Begins Producing MaxxPro Dash; To Reach Full Production by Mid-October

WARRENVILLE, Ill. -- Navistar International Corporation Navistar Defense has begun to produce the International MaxxPro Dash at the company's West Point, Miss., plant with delivery of 822 units to be completed by February 2009. Full production is scheduled to begin by mid-October.

Designed for the unique conditions in Afghanistan, the Dash is a smaller and more mobile variant of the MaxxPro Mine Resistant Ambush Protected (MRAP) advanced armored vehicle. The Dash maintains the survivability system used on all MaxxPro MRAP variants while also allowing for greater mobility in a smaller, lighter weight vehicle optimized for Afghanistan operations. A smaller turning radius and higher torque-to-weight ratio are among the improvements to its mobility. MaxxPro Dash is also capable of accommodating additional up-armoring. Supportability and maintainability are maximized with a high-degree of commonality of parts among all MaxxPro variants.

"Navistar is dedicated to the overall sustainability of its defense business with ongoing revenue of at least $2 billion a year," said Archie Massicotte, president, Navistar Defense. "In addition to our ongoing U.S. military contracts and our efforts to compete for the upcoming Joint Light Tactical Vehicle program, Navistar Defense is actively pursuing new business with multiple U.S. allies."

The MaxxPro Dash is the sixth variant in 12 months from Navistar's MaxxPro MRAP vehicle platform. Since the initial contract in May 2007, Navistar has won more than $3 billion in contracts to produce a total of more than 6,044 MRAP vehicles. Navistar's MRAP platform includes the MaxxPro, MaxxPro Plus, MaxxPro ambulance, MaxxPro MEAP, MaxxPro Air Force and MaxxPro Dash.

In May, the U.S. Army awarded Navistar Defense a three-year $1.3 billion contract for 7,072 Medium Tactical Vehicles (MTV) for use in Afghanistan and Iraq, which are built at the West Point facility. Approximately half of the order will be delivered during the first year of the contract with nearly 1,000 units expected to be deliv

The plant is also transitioning production from the MaxxPro to the smaller, lighter MaxxPro Dash. The plant will continue to build a reduced number of MaxxPro vehicles as required to meet continued replacement demand. Total West Point production with MaxxPro Dash and MTVs will be approximately 500 units a month.

Navistar Defense is an affiliate of Navistar International Corporation, a holding company whose subsidiaries and affiliates produce International brand commercial and military vehicles, MaxxForce brand diesel engines, IC brand school and commercial buses, and Workhorse brand chassis for motor homes and step vans.

Leopard on the lurk

Krauss-Maffei Wegmann's Leopard 2 has set world standards in combat tanks. A total of sixteen countries, mostly in Europe, have opted for this amazing combination of fire power, armour and mobility. No other western combat tank on the world market is used by so many armies – Scandinavia, the Alps, or Afghanistan, a KMW Leopard 2 is up to any deployment setting.

The Canadian decision to deploy the Leopard 2A6M in Afghanistan army is one example, a model that currently represents to the latest version of the Leopard 2, the A6 version, additionally equipped with added armour against mines and booby traps.

This armour proved its worth in November, 2007, when the Taliban attacked a Canadian Leopard 2A6M-CAN with a large booby trap. The tank did sustain damage, but the entire crew survived. The Canadians had purchased the tank from the German federal army's inventory. The Canadian commander wrote a letter of thanks to the German ministry of defence, emphasising that survivors would have been highly unlikely in any other vehicle. Canadian Chief of Staff General Rick Hillier also pointed out that the Leopard 2A6M had not been destroyed, but was indeed back in operation after repairs.

Denmark is another country that has opted for the Leopard 2 to support its troops in the UN ISAF mission. Their Leopard 2A5-DK models proved their worth in January this year while supporting British troops in armed conflicts against the Taliban.

Leopards taking the world

In its role as a general contractor, Krauss-Maffei Wegmann (KMW) has already delivered more than three and a half thousand combat tanks. While the tank's final assembly takes place in Munich, specialists mount and assemble the turrets from a variety of parts in Kassel, and the tank's chassis is assembled at KMW's Hamburg welding facilities. Originally designed in the 60s, strategists speculated that a conflict between NATO and the Warsaw Pact could result in tank battles on European territory; the German Bundeswehr needed a heavily armoured combat tank superior to those built in the Eastern Bloc, one that could also be deployed together with other vehicles.

The first Leopard 2 prototypes had been developed by 1972, and the first trial deployments with troops were performed at the tank training facilities in Mьnster, Lower Saxony, from 1973 onwards. Then still known as Krauss-Maffei, the company and general contractor received orders for 1.8 thousand Leopard 2 combat tanks in 1977, the first of which were delivered to the German army at the manufacturing facilities in Munich Allach on October 24, 1979, with a ceremony to mark the event. The following thirteen years were to see KMW and MaK/Rheinmetall manufacture 2,125 Leopard 2 tanks for Germany and the Netherlands for delivery by Krauss-Maffei Wegmann as the general contractor. Most of these tanks have since been revamped to A5 or A6 versions.

This variety in version names demonstrates how the modular Leopard 2 design has been continuously modernised and revamped over time. As an example, the 2 A5 includes reinforced turret armour, while the hydraulic weapon stabilisation has been replaced by an electrical system (Kampfwertsteigerung combat strength improvement I). The A6 versions are based on the enhanced KMW Leopard 2 A5, where a longer 120 mm Rheinmetall smooth-tube main gun was installed as part of the combat strength enhancement I strategy – a substantial improvement in the tank's fire power.

There has been an additional version of the Leopard 2, the Leopard 2 PSO (Peace Support Operations) specifically developed for street-level combat in UrbOp (urban operations) deployment and asymmetrical threat such as in Afghanistan. This version was developed by KMW in close consultation with the German army and other customers. The German army has expressed its great interest in the Leopard 2 PSO, which boasts features such as reinforced all-round armour, additional mine protection, and a special communication platform to ease coordination with the infantry.

The Leopard 2's superior combat qualities have not only persuaded Germany's Bundeswehr, but also other national armies from the very beginning. The Netherlands opted for the Leopard 2 as a combat tank as early as on March 2, 1979, for the Koninklijke Landmacht. KMW has delivered a total of 445 vehicles to its European neighbours in Dutch NL specification, some of which have since been sold to Austria and Portugal. The remaining tanks, like those in the German army, have been revamped to A6 combat strength. Switzerland has deployed the tank under the Panzer 87 name; differences include holders for additional snow grips to act as "snow chains."

The "Euro-Leopard"

The STRIDSVAGN 122 is another export model ordered and deployed by the Swedish army. Like the Swiss PANZER 87, this model was partly manufactured locally with KMW acting as the general contractor. Spain has ordered two hundred new Leopard 2E models from KMW licensee company Santa Barbara Sistemas in addition to 108 used Leopard 2 A4 models from the Federal Republic of Germany; the new 2E models are roughly equivalent to the Leopard 2A5. Greece has ordered 170 Leopard 2 HEL tanks – a version of the Leopard 2A6 modified to customer specification – from KMW in 2003, which are currently being delivered. Apart from Germany, the Netherlands, Switzerland, Austria, Sweden and Denmark, the Finnish, Norwegian,

Spanish, Portuguese, Greek, Turkish and Polish armies have opted for the Leopard 2. A total of sixteen countries have deployed the combat tank from Munich Allach; the Leopard 2 is the last word in European combat tanks. Outside Europe, the Leopard 2 has been deployed by the national armies of Canada and Singapore, and as of last autumn, Chile. Chile is an important reference market for the Latin-American market, also demonstrating the leading technological position of KMW's weapon system.

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Defence Industry

Navistar Exhibits Future Vehicles and Existing Components at AUSA

WASHINGTON, D.C. -- Attendees of the Association of the United States Army (AUSA) Annual Meeting and Exposition will have the opportunity to see an impressive range of vehicle and engine products from Navistar Defense, LLC.

The company is displaying its all-new MaxxProTM Dash, a durable MaxxForceTM engine for defense applications and the Joint Light Tactical Vehicle (JLTV)—a joint project between Navistar and BAE Systems.

"The men and women of Navistar are proud to produce vehicles and components that will save American lives in the field," said Archie Massicotte, president of Navistar Defense. "We're continuing to develop new applications for the military, while constantly refining our existing line-up. Showing these items to the Army community is an honor."

The MaxxPro Dash is a lighter, smaller and more mobile variant of the MaxxPro Mine Resistant Ambush Protected (MRAP) family of vehicles. The Dash maintains the survivability system used on all MaxxPro MRAP vehicles while also allowing for greater mobility in a smaller, lighter weight vehicle optimized for relevant operations. Navistar was recently awarded a contract to build 822 Dash units valued at $752 million to be completed by February 2009.

Trusted MaxxForce engines have powered International® brand trucks for more than 75 years and are available to militaries as a stand-alone application. The company is showing off its MaxxForce D 9.3L engine, the same type used in the MaxxPro Dash.

Also on display is the JLTV, a multi-service initiative for a family of future light tactical vehicles being developed as a joint system between the U.S. Army and the Marine Corps. Navistar has teamed with BAE Systems on this project to achieve excellence in vehicle design, production and support capability from concept to combat.

Navistar Defense has been awarded more than $4 billion worth of contracts from the U.S. armed forces to build a range of current and future military vehicles, and also supplies necessary parts, service and support to keep these vehicles mission-ready.

The Association of the United States Army Annual Meeting and Exposition is the world's largest land power forum, and is also the leading defense-related exposition in the nation. This year's show features new technologies that will equip the next generation of military vehicles protecting troops in harm's way.

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Future Technologies

BAE Syatems Unveils Simpler, More Capable Hybrid Ppropupsion System

SAN DIEGO, California — BAE Systems today introduced an improved version of its hybrid propulsion system that can be used on multiple bus platforms, is mechanically simpler, reduces maintenance costs, and makes possible the use of electric accessories.

The company unveiled its latest HybriDrive® propulsion system at the American Public Transportation Association's Annual Meeting and Exposition in San Diego.

The new system, based on the company's series diesel-electric hybrid technology already in use by transit agencies across North America, can be configured with the diesel engine and generator arranged inline or transversely to make it adaptable to a wider range of bus models. It also can generate power for electrically operated systems such as air conditioning, power steering, engine cooling, and lighting, serving these electrical loads without belt-driven alternators.

"We built upon the most proven heavy-duty hybrid technology to increase functionality, reduce maintenance costs, and provide more options to our customers," said Rich Hopf, general manager of transport systems for BAE Systems in Johnson City, New York. "These improvements offer significant advantages and savings to transit agencies facing ever-increasing energy, environmental, and economic challenges."

HybriDrive technology reduces emissions and increases fuel economy while meeting the durability requirements of demanding urban transit operations. The system consists of a generator, an electric motor, and an energy storage system managed by computerized controls. A diesel engine that turns the generator operates independent of the electric drive motor, allowing it to run at nearly consistent speed for optimum efficiency. The system also uses no mechanical transmission, a major maintenance item on traditional diesel buses.

The optional accessory power system in the new configuration can further improve efficiency and reduce maintenance by eliminating alternators and their associated pulleys and belts. The system can produce up to 27 kilowatts of electricity to run vehicle accessories and to enable the bus to be operated for brief periods in zero-emission mode, with the engine off. It also combines the starter and generator to eliminate the starter motor and flywheel, making the system simpler and lighter and further reducing maintenance requirements.

Buses equipped with the new hybrid system also will use a lithium-ion energy storage system that increases

battery life and reduces vehicle weight, improving fuel economy and reducing emissions. The battery system is self-monitoring and easy to service for further savings in maintenance costs.

More than 1,500 buses powered by the HybriDrive system transport more than a million passengers daily in cities such as New York, San Francisco, Toronto, and London. To date, these buses have logged more than 70 million miles of revenue service, saved nearly 5 million gallons of diesel fuel and prevented more than 50,000 tons of carbon emissions. BAE Systems provides the systems for buses built by Alexander Dennis Limited, Daimler Buses North America, and New Flyer Industries.

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Future Technologies

Lightweight .50-Caliber: Lethality At Half The Weight

FORT BELVOIR, Va. -- As Soldiers training for combat look to lighten their load, they can look forward to the Lightweight .50-Caliber Machine Gun.

The LW50, an addition to the Army's arsenal of machine guns at one-half the weight of the M2 .50-Caliber Machine Gun and with 60 percent less recoil, does not require the setting of headspace and timing. The LW50 provides Soldiers with the punch of a .50-caliber machine gun in the footprint of a 7.62mm weapon system, allowing them to bring .50 caliber lethality to the fight in situations where using a light to medium machine gun is the only available option.

The LW50 is still in the early stages of system design and development and officials at the Program Executive Office Soldier at Fort Belvoir said they expect the weapon to be fielded in 2011. They said a limited two-part Early User Assessment for the weapon was conducted with Special Operations Command personnel in March and May.

The LW50, a technological spinout from the 25mm XM307 Advanced Crew Served Weapon program, is capable of firing all current .50-caliber ammunition in the inventory, including the standard M33 ball; the M8 armor-piercing incendiary; the M903 saboted light armor penetrator; and the MK211 multipurpose round that combines armor-piercing, explosive, and incendiary effects.

"A major benefit of the LW50 is the weight and recoil savings and no requirement to adjust the headspace and timing," said Shailesh Parmar, a product director for Product Manager Crew Served Weapons in the office of Project Manager Soldier Weapons. "The LW50 is expected to weigh less than 65 pounds, including tripod and traversing and elevation mechanism, compared with the M2 system's weight of 128 pounds, a savings of 63 pounds or more," said Parmar. He also noted that the LW50 can be set up faster than an M2 because it does not need ballast to weigh down the tripod due to less recoil.

The LW50's greatly reduced recoil enables Soldiers to use weapon-magnified optics and maintain sight picture of the target, which was unthinkable and potentially painful with the M2. "Lower recoil also means less dispersion of rounds and better accuracy," Parmar said. "That, in turn, makes it easier to qualify with the LW50, allows Soldiers to use rounds more economically, and reduces the logistical burden."

Staff Sgt. James Tyus of the 1st Battalion, 82nd Field Artillery was quick to notice the improvements while training on the weapon at Fort Hood, Texas. "It absorbs more recoil now. Given that, it makes the weapon more accurate. I like it for its accuracy," Tyus said.

The LW50's weight savings, reduced recoil, and increased accuracy allow for its use in places that were not feasible for an M2, such as in light infantry operations.

Once the LW50 is deployed, all vehicles that mount the M2 will be able to mount the new system. Tests have been successfully conducted mounting the system to the Stryker Combat Vehicle and the Common Remotely Operated Weapon Station.

Other benefits of the LW50 include safety and training applications. The LW50 eliminates the need for the operator to adjust the headspace and timing and for any special maintenance tools, reducing the amount of training required. The current LW50 has 131 parts, compared with 244 for the M2.

"It's a very unique weapon. You don't have to worry about timing," said Pvt. Michael Zinns with 1-82 Field Artillery, who, like Tyus, was introduced to the LW50 at Fort Hood. The teardown, too, "is actually a lot easier, and the barrels are much more easily interchangeable," Zinns said.

The Army recently issued a requirement for a lightweight .50 caliber machine gun. Furthermore, Special Operations Command (SOCOM) is developing lightweight vehicles that will need armament. SOCOM recognizes that a lightweight, low-recoil weapon suitable for these vehicles could see expanded use within dismounted units. The LW50 has the potential to satisfy those three needs in one package.

According to the current program cycle, the LW50 could be fielded at the end of FY11. Light units, such as the 82nd Airborne Division, the 101st Airborne Division (Air Assault), 10th Mountain Division, 25th Infantry Division, and SOCOM forces, are expected to benefit most from the new weapon.

"I think that's what a lot of us look for, a lighter weapon," said Tyus. "I'm really excited about it."

Seeing what PEO-Soldier is bringing to bear in the Global War on Terrorism "inspires and sustains our young Soldiers" as they prepare to deploy to Operation Iraqi Freedom and Operation Enduring Freedom, said Command Sgt. Maj. Neil Ciotola of III Corps, Fort Hood, Texas. "Many of our first-term troopers and even our veterans who have one tour can look at that and go: 'That's what's waiting for me.' "

Defence Industry

Ukrainian Army to Purchase New Oplot MBTs

Kharkov, Ukraine – According to an announcement made by the Ministry of Defence of Ukraine, the Ukrainian Armed Forces are ready to place an order for ten Oplot main battle tanks (MBT), three Atlet Armoured Repair and Recovery Vehicles (ARRV) and ten BTR-4 Armoured Personnel Carriers (APC).

Kharkov, Ukraine – According to an announcement made by the Ministry of Defence of Ukraine, the Ukrainian Armed Forces are ready to place an order for ten Oplot main battle tanks (MBT), three Atlet Armoured Repair and Recovery Vehicles (ARRV) and 10 BTR-4 Armoured Personnel Carriers (APC).

This was announced by the Chief of General Staff and Commander-in-Chief of the Armed Forces of Ukraine General Sergey Kirichenko during his visit to the State-owned Enterprise Kharkov Morozov Machine Building Design Bureau (KMDB).

The task of accepting for service the new vehicles developed by KMDB and commencing purchasing them was given to the Army by the President of Ukraine Victor Yushchenko. Meanwhile, procurement of the upgraded Bulat MBTs will continue.

While visiting KMDB, General Sergey Kirichenko familiarized himself with the latest Ukrainian-designed armoured vehickes, including the upgraded Oplot MBT, Atlet ARRV, BTR-4 and Dozor-B APCs as well as the simulators for the BMP-2 infantry fighting vehicle crew.

The upgraded Oplot MBT differs in many aspects from its previous version that was demonstrated during the parade in Kiev in 2001. According to some media reports, this tank is the most protected MBT in the world, as it is immune to all existing and newest-generation anti-tank projectiles (with a slight increase of weight in comparison with the previous version). No detailed information about this tank has been unveiled, but the vehicle seems to be considerably lighter and smaller than any European or American tank. The pictures of the upgraded Oplot show some innovations into its traditional design, including a panoramic sight and remote-controlled anti-aircraft machine gun system positioned next to it (this feature was recently also adopted to the design of the German Leopard MBT and French Leclerc MBT).

Defence Industry

German-American Cooperation for a New Armored Vehicle Family

Washington -- Europe's leading manufacturer of highly protected wheeled and tracked vehicles, Krauss-Maffei Wegmann (KMW), and the United States prime technology developer, L-3 Communications Corporation, announced today a teaming on the world's first scalable armored vehicle platform F2US.

The vehicle is being displayed at the exhibition of the Association of the US Army (AUSA) in Washington, D.C.

In view of the increasingly rapid changes in military environments, it is the intent of both partners to jointly develop and market a US version (F2US) of KMW's new F2 vehicle family specifically to meet the challenging requirements of the US forces for a future tactical armored vehicle.

A scalable vehicle architecture and system design of the F2US allows production of a family of variants in weight classes from 10 to 24 tons. The basic F2 vehicle powered by two independent engines was developed by KMW and will be equipped in the US version with high technology subsystems from L-3 Communications.

"This cooperation between L-3 Communications and Krauss-Maffei Wegmann ideally unites the core competencies of both system houses," says Frank Haun, CEO and President of KMW. "On the basis of the F2 platform, together with the systems from L-3 Communications, we are in a leading position to meet the future needs for new vehicles on the US market."

"We are looking forward to working with KMW to develop this new technology for the Army," said Charles J. Schafer, president of L-3's Products Group.

F2US: A family of vehicles for the most varied needs

The F2US vehicle family is scalable in size and can easily be configured to meet different mission requirements due to its modular design. Two independent drive trains for the front and rear axles permit an undivided compartment space with greater versatility.

A new dimension in modularity

The F2US family of vehicles offers the same capabilities in all versions, because the main components

and subsystems are identical for the 4x4 patrol vehicle version with a crew of 3, as well as the 6x6 vehicle version with space for up to 11 crew members. This permits simple swapping of components, and reduces the logistic footprint for the entire family of vehicles to a minimum. In addition, the use of commercial off-the-shelf components guarantees fast availability of the components all around the globe.

Highest survivability

The F2US vehicle is equipped with the latest proven protection technology to withstand modern ballistic, mine and IED threats. In addition, the F2 family has a very low silhouette as well as an extraordinarily low infrared and radar signature.

Greatest mobility

The propulsion is achieved at more than 20 kW per tonne of vehicle weight. A mobility concept derived from the proven, reliable and unique mobility of KMW's FENNEK scout car permits the F2US to negotiate gradients of 60 percent and side slopes of up to 30 percent without difficulty at a range of over 1000 kilometers. The vehicles are air-transportable, so they can be moved quickly and easily to distant deployment areas.

Defence Industry

General Dynamics Awarded $66 Million by U.S. Army to Produce MK19 Grenade Machine Guns

CHARLOTTE, N.C. -- General Dynamics Armament and Technical Products, a business unit of General Dynamics, has been awarded two contracts valued at $66 million by U.S. Army TACOM-ARDEC for the production of MK19 grenade machine guns. Deliveries are expected to begin in 2009 and extend through late 2012.

According to General Dynamics Armament and Technical Products gun systems senior program manager, Dean Gagnon, "The MK19 is capable of firing up to 400 grenades per minute and can provide increased accuracy against a variety of targets, including lightly armored vehicles and dismounted infantry. The weapon's versatility makes it a prime choice of the U.S. Armed Forces as an essential weapon in both offensive and defensive operations."

Program management will be shared between the company's Burlington, Vt., and Saco, Maine, facilities. Production work will be performed at the company's Saco site, which has produced more than 36,000 MK19 systems for the U.S. government and its allies since 1984.

General Dynamics Armament and Technical Products' Saco facility is the company's core production facility for single- and multi-barrel aircraft and crew-served weapon systems. The site provides complete production capabilities, from design and development to manufacturing, testing and integration. Products manufactured at the facility include the MK47 40mm Grenade Weapon System and the M2HB 12.7 mm (caliber .50) machine gun.

The Burlington Technology Center, located in Burlington, Vt., is General Dynamics Armament and Technical Products' Engineering Center of Excellence. By consolidating the company's engineering development and leadership functions, and investing more than $55 million in major systems upgrades, infrastructure, and training, the Burlington Technology Center is a key component of the company's success. The Technology Center encompasses five sites: the Lakeside office building; the newly expanded, 13,500-square-foot Engineering Development Lab; the Systems Modernization Initiative office; the Burlington manufacturing site; and an expansive test facility.

General Dynamics Armament and Technical Products, located in Charlotte, N.C., provides a broad range of system solutions for military and commercial applications. The company designs, develops and produces high-performance armament systems, defensive armor solutions, aerospace components, and mobile shelter systems, and is a leading U.S. producer of biological and chemical detection systems.

General Dynamics, headquartered in Falls Church, Va., employs approximately 84,600 people worldwide and anticipates 2008 revenue of approximately $29.5 billion. The company is a market leader in business aviation; land and expeditionary combat systems, armaments and munitions; shipbuilding and marine systems; and information systems and technologies.

Exhibitions

BAE Systems Unveils "Caiman Light" Prototype MRAP During AUSA

WASHINGTON -- BAE Systems has unveiled its new Caiman Light vehicle at the 2008 Association of the United States Army Annual Meeting & Exposition in Washington, D.C. The "Caiman Light" or CLT is a five-man, 4X 4 version of the 6X6 Caiman Mine Resistant Ambush Protected Vehicle.

Caiman Light is a member of the Family of Medium Tactical Vehicles (FMTV). The Caiman Light offers protection comparable to the 18 ton Caiman at two-thirds

the weight. Caiman Light comes standard with electronic stability controls and can be built with rear steering, which gives it a less-than 20-foot turning radius.

The BAE Systems facility in Fairfield, Ohio, manufactures the Caiman Light. The facility designed and fabricated the 4X4 light hull using the proven 6X6's hull as a guide. The armored hull has transparent armor, a door assist systems and a turret.

The armored hulls are shipped to the BAE Systems facility in Sealy, Texas, where they are mounted on the drive trains and chassis. Seats, dashboard equipment, and other interior and exterior equipment are added on the final assembly line.

The Caiman Light's final assembly is on the same assembly line as the FMTV in Sealy. A full 85 percent of the parts are common to CLT, the Caiman and the FMTV. This high percentage of common parts significantly reduces the logistics burden and operating and support costs for the U.S. Army. Common parts between the Caiman, CLT and the FMTV include major components such as engines, transmissions, power trains, tires and cabs.

BAE Systems employs more than 2,400 people in Sealy, Texas and has nearly 900,000 square feet of manufacturing and office space on approximately 200 acres. The location has a long history with wheeled vehicle products. It has established itself as a world-class designer, volume manufacturer and through-life supporter of high-quality, best value, military tactical trucks and wheeled vehicle systems with payload capacities from 2.5 to 18 tons. Today, BAE Systems is the exclusive manufacturer of FMTVs and the producer of three Mine Resistant Ambush Protected (MRAP) variants, the Caiman, the RG33 and the RG31. The Caiman is manufactured in Sealy.

In Cincinnati, Ohio, BAE Systems employs more than 2,000 people and has about 900,000 square feet of manufacturing and office space. The Cincinnati operations has played a vital role in both the Caiman and RG33 MRAP programs by providing armor systems for both vehicles, as well as the FMTV. Other products include up-armored vehicles, commercial armored vehicles, integrated armor kits and accessories for a full range of tactical wheeled vehicles, combat vehicles and construction equipment. The Cincinnati operations also include a state-of-the art ballistic glass plant.

BAE Systems is the premier global defense and aerospace company delivering a full range of products and services for air, land and naval forces, as well as advanced electronics, information technology solutions and customer support services. With approximately 100,000 employees worldwide, BAE Systems' sales exceeded J15.7 billion (US $31.4 billion) in 2007.

Future Technologies

Raytheon Completes Successful Intercept Tests for Future Combat Systems Active Protection System

MCKINNEY -- Raytheon Company, working in partnership with the Army, the Future Combat Systems Lead Systems Integration team of Boeing and Science Applications International, and BAE Systems, has passed a major milestone by completing successful stationary and moving target intercept tests for the FCS Active Protection System (APS).

The tests represent a significant step in design verification testing for the system, which includes defeating multiple incoming projectiles simultaneously and while on the move - a unique capability of the APS.

"The successful testing of this system is a top priority for Raytheon and our FCS One Team partners," said Glynn Raymer, vice president of Raytheon's Network Centric Systems Combat Systems business. "It will provide a powerful force protection capability to our warfighters."

The APS will provide active protection for FCS manned ground vehicles.

We are looking forward to completing validation testing of this system for the Army and getting it to our soldiers as soon as possible," said Raymer. "This vertically-launched system is the FCS solution that will meet current and future force requirements."

FCS is a joint networked family of manned and unmanned ground and air platforms and sensors that enables ground combat forces to conduct their missions safely and more effectively.

Boeing and partner Science Applications International function as the lead systems integrator for the program, managing a best-of-industry team of more than 500 partners and suppliers.

Raytheon Company, with 2007 sales of $21.3 billion, is a technology leader specializing in defense, homeland security and other government markets throughout the world. With a history of innovation spanning 86 years, Raytheon provides state-of-the-art electronics, mission systems integration and other capabilities in the areas of sensing; effects; and command, control, communications and intelligence systems, as well as a broad range of mission support services. With headquarters in Waltham, Mass., Raytheon employs 72,000 people worldwide.

Defence Industry

Delivery of 12 Leopard 2 HEL Armoured Recovery Vehicles to Hellenic Army Completed

Rheinmetall Defence's Land Systems division, one of the world's leaders in the development and production of armoured recovery vehicles, was awarded a contract in July 2004 to supply the Greek Army with 12 armoured recovery vehicles (ARVs).

The vehicles are based on a Leopard 2 tank chassis equipped with a crane, winches, dozer blade and recovery systems.

Featuring high towing and winch performance, the ARV Leopard 2 HEL is designed to recover main battle tanks and other heavy tracked vehicles; moreover, its powerful crane system is perfect for sensitive positioning of heavy loads.

This high performance equipment gives the ARV an extensive range of capabilities, including towing, shunting, recovery, dozing, crane operations, power pack transportation and installation as well as fuelling and de-fuelling. The vehicle can be used in both combat and peacekeeping missions thanks to its high speed, multiple capabilities and its ability to operate in practically every type of terrain.

Under an offset benefit programme, 70% of the vehicle – including the hull, welding parts, tracks, recovery components, electric and electronic systems, cables and hydraulic systems – were produced by several Greek defence contractors. Final assembly of the vehicles took place in Germany at the Rheinmetall plant in Kassel, followed by extensive Rheinmetall Quality Control testing.

By March 2007, the 12 ARVs had been delivered to the Greek military right on schedule. Following the required quantitative and qualitative checks and function tests, the ARVs have now been successfully integrated into the Greek Army, whose rigorous acceptance tests left no doubt as to the reliability and perfect construction of the vehicles. Initial reports indicate that the new ARVs are performing extremely well.

In addition to the ARVs, Rheinmetall also supplied the Greek Army with the necessary special tools, measuring and testing equipment and technical documen-tation. During the delivery process, Rheinmetall's experienced team also supported the Greek Army staff with theoretical, operational and maintenance training.

Defence Industry

Defence Forces to Sell 20 APC Weapon Systems to Patria

The Army Materiel Command is selling 20 units of XA-360-APC Kongsberg Protector weapon systems.

It is also renting 20 APCs to Patria for an approximate period of 7 months.

The APC weapon systems will be used as part of Patria's operation regarding Slovenia. Patria will deliver new similar weapon systems for the Finnish Defence Forces.

The reason behind this provisional arrangement requested by Patria, has to do with the company's aim to uphold the agreed time frame regarding deliveries. Slovenia has settled on the same weapons system as Finland.

Defence Industry

Ceradyne, Inc. Receives $73 Million XSAPI Body Armor Order

COSTA MESA, Calif.-- Ceradyne, Inc. announced that it has received a delivery order for $73 million for XSAPI body armor plates.

This order is the first production delivery order against the $2.37 billion ID/IQ (Indefinite Delivery/Indefinite Quantity) contract announced on October 6, 2008. This production order is scheduled to be completed within the next twelve months. Delivery commencement is subject to approval of the First Article Testing (FAT) order which was placed simultaneously with the large ID/IQ contract.

David P. Reed, Ceradyne President North American Operations, commented: “We are pleased to have received this initial volume production delivery order against the large five year procurement ID/IQ contract announced earlier this week. We believe that this will be the first of a series of volume production delivery orders to be issued against the ID/IQ five-year contract.”

Ceradyne develops, manufactures and markets advanced technical ceramic products and components for defense, industrial, automotive/diesel and commercial applications. Additional information about the Company can be found at www.ceradyne.com.

Except for the historical information contained herein, this press release contains forward-looking statements regarding future events and the future performance of Ceradyne that involve risks and uncertainties that could cause actual results to differ materially from those projected. Words such as “anticipates,” “believes,” “plans,” “expects,” “intends,” “future,” and similar expressions are intended to identify forward-looking statements. These risks and uncertainties are described in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2007, and its Quarterly Reports on Form 10-Q, as filed with the U.S. Securities and Exchange Commission.

Defence Industry

Force Protection Receives Service and Support Orders

LADSON, S.C. -- Force Protection, Inc.announced

that it has received a new definitized firm fixed price contract modification for service and support, including spare parts, of its Mine Resistant Ambush Protected Vehicles with a value of approximately $41.8 million.

This order modifies the M67854-07-D-5031 MRAP contract with Marine Corps Systems Command and deliverables under the modification are expected to run through 2009. A portion of the work under this contract modification may be performed by General Dynamics Land Systems pursuant to the terms of the workshare allocation set forth in the agreement between the parties dated December 15, 2006.

Michael Moody, Chairman and Chief Executive Officer of Force Protection, commented, “As the MRAP program enters into a more robust support and sustainment phase, we are pleased that the United States Marine Corps continues to look to us to perform this important service work on our fleet of vehicles.”

Robots

iRobot Receives a $3.75 Million Contract From TARDEC For iRobot Warrior 700

iRobot Corp. announced that the company has received a $3.75 million research and development contract from the U.S. Army Tank-Automotive Research, Development and Engineering Center (TARDEC), the nation's laboratory for advanced military automotive technology.

Work under this contract will result in the delivery of two iRobot Warrior 700 platforms.

A powerful and rugged robot, the iRobot Warrior can perform a variety of critical missions such as evaluating danger zones and inaccessible areas, providing real-time video, audio and sensor readings to warfighters and SWAT teams. The robot will feature an advanced digital architecture and a multi-mission chassis that supports up to 150-pound (68 kg) payloads.

"We are confident that the iRobot Warrior will secure a strong foothold within infantry, first responders and combat engineers," - said Joe Dyer, president of iRobot Government and Industrial Robots. “The Warrior is another example of iRobot’s product line expansion, which continues to evolve as the need for unmanned ground vehicles grows worldwide."

iRobot Warrior’s unique payload positioning system allows radical changes in the robot’s center of gravity for unprecedented mobility in rough terrain, while still suitable for use in an urban environment. The first production units of iRobot Warrior will be available for purchase in the third quarter of 2009.

iRobot has delivered more than 1,900 PackBot robots that make a difference everyday by conducting dangerous missions that keep first responders and warfighters out of harm's way.

Future Technologies

At the AUSA Annual Meeting 2008 Rafael will present the SpotLite Mk2

SpotLite Mk 2 is an electro-optical system for detecting, locating, investigating and neutralizing small-arms fire sources. The system has been designed for the platoon, company and battalion level, for patrol and reconnaissance units as well as for sniper forces, for stationary situations and for combat on the move.

The system was originally built in cooperation with an "operational client" in order to facilitate combatants to deal with enemy spotting and efficient and agile management of own forces fire with the aim of attaining fast neutralization of target without causing collateral damage. The system facilitates spotting the fire sources with a high level of precision, investigating them and relaying these targets to sniper forces or other shooters in order to swiftly and efficiently close the sensor-to-shooter circuit, all within the low tactical level.

David Shtemer, Corporate Vice President and General Manager Missile Division emphasized that the system is the result of a joint project financed by the Israeli Ministry of Defense and the USA TSWG. RAFAEL has implemented in this system its world-class missile image processing capabilities. The system has been operational for the last two years and has been repeatedly praised by the above mentioned "operational client".

In light of the lessons learnt from this system, SpotLite Mk 2 is smaller in size and weight, consumes less power and may be carried by two combatants. The system has undergone several tests and exercises to the full satisfaction of the TSWG and the Israel Ministry of Defense.

The SpotLite Mk2 maintains high performance, compatible with operational requirements such as: Electro-optical Unit (EOU) includes a FLIR camera (Field of view: 48 x 24), a CCD camera with continuous zoom, LASER range finder, LASER pointer, GPS, light tripod, PTU (pan and tilt unit) and a data processing unit.

The unit enables Spotting fire sources at 1000 meters and above ,High probability of detection and low level of false alarms and Spotting and recording of a large number of targets shooting simultaneously.

The system allows also to Investigating of the detection point in order to incriminate it by means of automatic pan and tilt unit and performing zoom on the point and Turning the detection point into a target in an automatic and fast mode by extracting coordinates and range to the target.

Defence Industry

New Infrared Laser for operation in urban environments

The tactical TwinBeam is an additional development in the TwinBeam product family. It is designated for use with night vision equipment in urban or similar areas with limited fields of view and indoor use in buildings or tunnel structures.

For such tasks the classical TwinBeam is often used fitted with two infrared Lasers. One of the lasers was adjusted with an open beam to illuminate the immediate surrounding of the target. Because two laser where used, they are usually required to be adjusted to eye safe power settings. In some conditions the narrow beams shape somewhat limits the area of illumination.

The beam width of the illuminator can be increased but the light intensity especially of a class 1 laser is then strongly diminished. However if the system power is increased it is possible that the reflections on a short range target are so strong that they can be disturbing.

The tactical TwinBeam fitted with one infrared laser and a high power infrared illumination module offers a real alternative for such typically urban environments. In indoor areas and tunnel like structures a much better field of view reaches otherwise dark corners and edges. Due to the high power performance of the module the same is true outdoors for a field of view in excess of 100 meters. The use of safe laser power setting is hardly limited as the illuminator module is designed for use with eye safe lasers.

Future Technologies

SAIC Awarded $18 Million Contract by Defense Advanced Research Projects Agency

Company to Design and Develop Sensor Based on Canine Sense of Smell For Use in Chemical Detection System.

Science Applications International Corporation today announced it has been awarded a contract by the Defense Advanced Research Projects Agency (DARPA) Defense Sciences Office to design and develop a sensor inspired by a canine's olfactory system, or sense of smell. The new contract has a fifteen month base period of performance, one six month option, a single one-year option, and a total contract value of $18 million if all options are exercised. The effort is part of DARPA's RealNose Program. Work will be performed primarily in San Diego and is expected to be completed by December of 2010.

The goal of DARPA's RealNose program is to build an artificial "nose" to create a breakthrough detection system with capabilities beyond that of the dog. Under the contract, SAIC will model, design, and develop this sensor, which will include subsystems for air/odor intake, detection using olfactory receptors, signal transduction, and pattern recognition to identify odors. The sensor could help protect U.S. forces in war zones by detecting explosives and chemical or biological weapons. By faithfully simulating all components of the canine sense of smell, a revolutionary detection capability could be created that detects and identifies thousands of chemicals with precision and high sensitivity.

"There is a critical need for sensitive detection and accurate identification of chemicals and mixtures of chemicals, such as explosives and chemical weapons that threaten our deployed troops," said John Fratamico, SAIC senior vice president and business unit general manager. "This is a challenging project at the interface between biology and chemistry, and we look forward to working with DARPA make this dramatic new technology a reality."

Defence Industry

More Automatic Ammunition-Handling on Stryker for Meggitt

Meggitt Defence Systems has won another 80 automatic 105 mm ammunition replenisher systems for the M1128 Stryker Mobile Gun System (MGS) worth around $11.5 million. Developed under contract to General Dynamics Land Systems, over 100 systems including spares, support, and reset have been delivered since 2004.

The Stryker MGS replenisher, which holds ten 105 mm rounds in the vehicle's hull and automatically transfers ammunition into the ready magazine in the turret, has seen extensive combat duty in Iraq since its deployment in 2006.

Greg Hill, Director of Meggitt's ammunition handling system business area team, said, "We are proud to be part

of GDLS' Stryker team and the combat record we have helped build with our system."

The equipment will be manufactured at Meggitt's facility in Irvine, California.

Meggitt Defence Systems, a Meggitt group company, specialises in the design, development and production of ammunition-handling, environmental control and training systems. Its products are found on many of the world's leading military platforms including the Abrams main battle tank, Stryker Mobile Gun System, the F-16 Falcon, the F/A-18 Hornet, AC-130 Spectre Gunship, and the AH-64D Apache Attack Helicopter.

The Meggitt group, headquartered in the UK, designs and makes high performance components and systems for aerospace and defence. The group employs c. 8,000 people across 34 operating companies.

Defence Industry

AM General Wins $179M for Humvee Production

AM General LLC, South Bend, Ind., was awarded Oct. 21, 2008, a $179,586,188 firm/ fixed price contract for High Mobility Multi-Purpose Wheeled vehicles to contract.

Work will be performed in Mishawaka, Ind., with an estimated and completion date of Dec. 31, 2009. Bids solicited were via Broad Agency Announcement and nine bids were received.

TACOM, Warren, Mich., is the contracting activity (DAAE07-01-C-S-001).

Defence Industry

Saab Wins 296 Million SEK Orders

Saab has won orders for delivering components to the multi-purpose system Carl-Gustaf, worth 296 million SEK.

The two orders are worth, respectively, 116 and 180 million SEK and are a continuation of a cooperation agreement earlier signed.

Saab serves the global market with world-leading products, services and solutions ranging from military defence to civil security. Saab has operations and employees on all continents and constantly develops, adopts and improves new technology to meet customers' changing needs.

Contracts

BAE Systems to Supply Bradley Protection Kits for Combat Vehicles

ARLINGTON, Va. -- BAE Systems has been awarded two new contracts to fit additional protection kits to more than 800 Bradley fighting vehicles at military bases in the United States and deployed in combat.

The contracts, initially worth $27.6 million, have the potential to increase to over $55 million.

The order will apply urban survivability kits – which include advanced survivability seats, hot box restraint kits and fire suppression kits – to 328 Bradleys and heat abatement kits to an additional 476 Bradleys.

"Urban combat poses a host of new challenges, but these kits – with seats designed to resist blasts from roadside bombs, improvements in internal stowage and features to suppress vehicle fires – can help save lives," said Andy Hove, vice president of Combat Systems Programs. "BAE Systems will continue to engineer the Bradley to offer maximum protection and we are already working on the next series of modifications to protect the soldiers serving in harm's way."

Delivery of the kits is anticipated to begin in November 2008 and be completed by May 2009.

Bradley Combat Systems continues to provide outstanding survivability, mobility and lethality to U.S. soldiers in close-combat urban situations as well as in open-combat. The Bradley fulfils five critical mission roles – infantry fighting vehicle, cavalry fighting vehicle, fire support vehicle, battle command vehicle and engineer squad vehicle – for the Army's Heavy Brigade Combat Teams.

Defence Industry

Wegmann USA Inc. Opens New Office for Training and Simulation in Florida

ORLANDO, FL -- Wegmann USA Inc., Lynchburg, Virginia, a 100% subsidiary of Krauss-Maffei Wegmann (KMW), Munich, Germany, opens a new office in Orlando, Florida, for the military and civil training and simulation line of business.

The new location will concentrate on the support of the US armed forces and other government offices, as well as industry. Expansion is planned. With this new line of business, Wegmann USA intend to enter the American market for military and civil training and simulation.

In Wegmann USA Inc., Krauss-Maffei Wegmann GmbH has an important channel of access to the US market. Based in Lynchburg, Virginia, the approved supplier Wegmann USA manufactures and markets a large number of armoured components for products of

the American armed forces.

Krauss-Maffei Wegmann GmbH & Co. KG leads the European market for armoured wheeled and tracked vehicles. At locations in Germany, Greece, the Netherlands and the USA, some 3200 employees manufacture and support a product portfolio ranging from air-transportable, heavily armoured wheeled vehicles through reconnaissance, anti-aircraft and artillery systems to heavy battle tanks, armoured personnel carriers and bridge-laying systems.

In addition, KMW has wide-ranging system competence in the area of civil and military simulation, as well as in command and information systems and remote-controlled gun-carriages with reconnaissance and observation equipment for day and night missions. The armed forces of more than 30 nations worldwide rely on the operational systems by KMW.

Defence Industry

Raytheon Receives $12 Million for Development of Excalibur 1b

TUCSON, Ariz. -- The U.S. Army awarded Raytheon Company a $12 million contract for the initial design and maturation phase of the 155 mm, precision-guided Excalibur 1b projectile.

Excalibur 1b is the next increment in the development of the combat-proven Excalibur 1a munition. The new Excalibur design uses fewer parts and is easier to manufacture than the 1a round. The result is a more affordable projectile with enhanced reliability.

Capt. Victor Scharstein, assigned to the U.S. Army's 1st Cavalry Division, commanded a firing battery that employed Excalibur in Iraq. According to Scharstein, the Excalibur round was "amazingly accurate," and its fires produced a 92 percent success rate.

Excalibur 1a is an all-weather, precision munition that has repeatedly demonstrated better than 10 meter (32 feet) accuracy in combat. This accuracy enables U.S. warfighters to employ Excalibur within 70 meters (229 feet) of their own position, saving lives and limiting collateral damage.

"The Excalibur 1b combines the incredible success and reliability of the Excalibur 1a with a lower unit production cost," said Steve Bennett, Raytheon Missile Systems' Excalibur program director. "We are committed to providing the U.S. Army with this precision projectile, because we know it is a game-changer for soldiers deployed to Iraq and Afghanistan."

The contract award begins an 18-month design and maturation demonstration phase. It will be followed by a "downselect" for the 18- to 30-month system qualification phase and three years of low rate initial production.

Raytheon Company, with 2007 sales of $21.3 billion, is a technology leader specializing in defense, homeland security and other government markets throughout the world. With headquarters in Waltham, Mass., Raytheon employs 72,000 people worldwide.

Contracts

Force Protection Receives Additional Buffalo Vehicle Orders

LADSON, S.C. -- Force Protection, Inc. today announced that it has received an additional order under contract W56HZV-08-C-0028 for the delivery of 27 Buffalo A2 route-clearance vehicles.

The undefinitized contract modification carries a dollar value not to exceed $26.2 million and fulfills an urgent operational need. These vehicles are to be delivered prior to June 2009.

Michael Moody, Chairman and Chief Executive Officer of Force Protection, commented, “We are very pleased to be in a position to respond to incremental needs for the vitally important Buffalo route clearance vehicle. We believe that the unique nature of the vehicle and the importance of the missions it performs will enable us to continue at current rates of production well into the future.”

Force Protection, Inc. is a leading American designer, developer and manufacturer of life saving survivability solutions and equipment, predominantly ballistic- and blast-protected wheeled vehicles currently deployed by the U.S. military and its allies to support armed forces and security personnel in conflict zones. The Company also is the developer and manufacturer of ForceArmor an armor package providing superior protection against explosively formed projectiles (EFPs) now available for a wide range of tactical-wheeled vehicles.

The Company is one of the original developers and primary providers of vehicles for the U.S. military’s Mine Resistant Ambush Protected, or MRAP, vehicle program.

Defence Industry

Arotech Announces $2 Million Rechargeable Battery Order to Asian Military with Option for Additional $2 Million

Arotech Corporation, a provider of quality defense and security products for the military, law enforcement and security markets, announced today that its battery and power systems division has received $2.0 million in new primary and rechargeable battery orders from an unnamed Asian military for various portable military applications.

The orders include a combination of Lithium Ion, Zinc Air and Nickel Metal Hydride batteries that will be used to power such devices as communications systems, tactical computers and night vision equipment for military personnel. Initial delivery is expected to commence this year and is scheduled to be completed by January 2010.

"We are pleased our batteries and rechargeable products continue to gain world-wide acceptance from numerous militaries and are excited about new opportunities both in military and commercial and industrial applications," stated Robert S. Ehrlich, Arotech Chairman and CEO. "We believe our pioneering technology is at the forefront of battery demand around the globe," concluded Ehrlich.

Arotech's Battery and Power Systems Division is a leading provider of primary and rechargeable batteries and chargers for defense and other military applications. Arotech develops and produces high power zinc-air batteries and is believed to be the sole supplier of this technology to the US military. In addition, Arotech develops high-end primary and secondary batteries and associated chargers and has vast experience in working with government agencies, the military and large corporations.

The Battery and Power Systems Division consists of Electric Fuel Battery Corporation, Electric Fuel Ltd., and Epsilor Electronic Industries Ltd.

About Arotech Corporation

Arotech Corporation is a leading provider of quality defense and security products for the military, law enforcement and homeland security markets, including multimedia interactive simulators/trainers, lightweight armoring and advanced zinc-air and lithium batteries and chargers.

Arotech operates through three major business divisions: Armor, Training and Simulation and Battery and Power Systems.

Arotech is incorporated in Delaware, with corporate offices in Ann Arbor, Michigan, and research, development and production subsidiaries in Alabama, Michigan and Israel.

Defence Industry

BAE Systems Selects AAR For Military Shelters

Wood Dale, Illinois -- AAR announced today that it has received an order from BAE Systems to manufacture mobile shelters for the U.S. Army's Family of Medium Tactical Vehicles (FMTV) program.

The one-year agreement has a one-year renewal option with a combined total value of $115 million. Work is scheduled to begin November 2008.

The AAR shelters include an expansible van for a 5-ton truck and a non-expansible shop van for a 2.5-ton truck that are equipped with heaters, air conditioners and basic electrical and lighting systems. The shelters are used as maintenance shops, parts warehouses, command and control centers, and mobile offices to support and sustain operations in the field.

"We are proud to be selected by BAE Systems to provide mobility products that are now an integral part of the U.S. Army's ground operations," said David P. Storch, Chairman and Chief Executive Officer of AAR CORP. "AAR shelters play an important role in the Army's ongoing efforts to execute and support ground activity, improve mobility and employ a more flexible deployment strategy."

The shelters will be built by AAR's Mobility Systems division, which designs, builds, integrates and supports rapid deployment equipment, expeditionary systems and command and control systems for defense customers and prime contractors.

BAE Systems' Mobility and Protection Systems (M&PS) produces the FMTV at its facility in Sealy Texas. The FMTV is the Army's main medium tactical in the Army's 2.5- and 5-ton cargo vehicle class. More than 40,000 FMTVs have been produced in 21 variants during the vehicle's 18-year production run.

About AAR

AAR is a leading provider of products and value-added services to the worldwide aerospace and defense industry. With facilities and sales locations around the world, AAR uses its close-to-the-customer business model to serve aviation and defense customers through four operating segments: Aviation Supply Chain; Maintenance, Repair and Overhaul; Structures and Systems; and Aircraft Sales and Leasing.

Defence Industry

Metal Storm Conducts Successful Automatic Firing Of High Explosive Warheads

Brisbane, Australia -- Defence technology Company Metal Storm Limited has reached another milestone in its weapons testing program with successful rapid automatic firing of high explosive warheads.

Metal Storm is in the process of completing the development of its next generation 40mm high explosive grenade ammunition for its Metal Storm 40mm weapon systems.

As a part of this process, Metal Storm is conducting a series of pre-qualification tests to ensure the ammunition can perform in a variety of conditions and firing circumstances before it undertakes formal qualification.

Metal Storm CEO, Dr Lee Finniear, said today the latest tests, which involved rapid automatic firing of high explosive warheads, had been successful.

Dr Finniear said the test results show the progress being made toward completing the development of ammunition qualified for battlefield use.

"Much of our earlier testing with this ammunition design has focused on firing semi-automatically, i.e. one shot at a time," he said.

"This test, by contrast, clearly demonstrates we can

fire 40mm high explosive ammunition at high burst fire rates. This characteristic is particularly important for our multi-barrel weapon systems that are designed to be able to deliver a swarm of high explosive ammunition instantaneously to a target for maximum effect".

Dr Finniear said the specific test plan was to fire stacks of three rounds of ammunition from special test weapons equipped with muzzle velocity and internal pressure sensors.

"Most of the firings in the test were of safe-arm warheads, which include fuses but no high explosive material," he said.

"Safe-arm warheads provide the most effective post-firing data analysis as the warhead is not destroyed. However, stacks of high explosive warheads were also used as the ultimate proof of the success of the tests."

Test firings included stacks of three safe-arm warheads and three HE warheads at an automatic burst fire rate of 380 rounds per minute, plus stacks of three safe-arm warheads at 1800 rounds per minute.

Metal Storm has previously reported successful firings at extreme high and low temperatures and the completion of a variety of successful electromagnetic interference tests.

The Company is nearing the completion of its pre-qualification testing and intends to commence formal limited qualification testing for transportation and man-firing as soon as pre-qualification testing is complete.

Metal Storm is exhibiting its weapon systems at The National Guard Show, Modern Day Marine Show and the Association of the US Army (AUSA) Exhibition in the USA.

Defence Industry

Contract Signed For Additional Bushmasters

The Minister for Defence, the Hon Joel Fitzgibbon MP, today announced that a contract has been signed with Thales Australia for an additional 293 Bushmaster vehicles.

"The Bushmaster has demonstrated its ability to provide a high level of protection for our soldiers," Mr Fitzgibbon said.

"This protection, coupled with exceptional mobility at speed and in desert conditions, provides a capability that is unparalleled by any comparable vehicle in operation in the world."

First deployed to the Middle East in 2005, the Bushmaster has acquitted itself well in Iraq and Afghanistan, proving to be a highly relevant and capable vehicle that has captured the attention of coalition armed forces. Bushmasters have been exported to the Netherlands and United Kingdom, and a number of other countries have also shown a keen interest in the Protected Mobility Vehicles.

The Australian Defence Force (ADF) is providing protected mobility to Australian troops with the acquisition of a further 293 Bushmasters to meet Protected Mobility Medium requirements for Land 121 Project Overlander Phase 3.

These vehicles will provide protection by replacing trucks where troops are required to travel in the rear of the vehicle.

The Overlander Phase 3 requirement also includes additional vehicles to enable the Enhanced Land Force.

"An enhanced acquisition process and close cooperation between the Australian Government and Australian industry has resulted in a world class product for Australia, and has received international interest," Mr Fitzgibbon said.

These additional Bushmasters will increase the total number of vehicles being acquired under Land 116 Project Bushmaster Phase 3 to 737.

Defence Industry

GTV, Navistar-BAE Systems and Lockheed Martin will develop JLTV

The U.S. Army narrowed the list of potential JLTV bidders to three, awarding development contracts for each of the three teams, to continue the 27 month technology development of the proposed Joint Light Tactical Vehicle.

The finalist to be selected at the end of this phase could win orders to deliver more than 60,000 armored vehicles over an eight year span augmenting and replacing part of the 160,000 HMMWVs currently in service with U.S. armed services.

General Tactical Vehicles, Sterling Heights, Mich., was awarded Oct. 29, 2008 a $45,061,720 cost share contract for Joint Light Tactical Vehicle Family of Vehicles technology development phase. Work will be performed in Livonia, Mich., Sterling Heights, Mich., Muskegon, Mich., and South Bend, Ind., with an estimated completion date of Jan. 31, 2011. Bids were solicited via the Web with seven bids received.Tank &

Automotive Command, Warren, Mich., is the contracting activity ((W56HZV-08-C-0430).

General Tactical Vehicles is a joint venture between AM General and General Dynamics Land Systems, a business unit of General Dynamics (NYSE: GD), formed to provide the U.S. Army and U.S. Marine Corps a low-risk, affordable, technically advanced and economically sustainable solution to their Joint Light Tactical Vehicle requirements.

The GTV JLTV solution will provide the U.S. Army and Marine Corps with a family of more survivable vehicles with greater protection, payload and mobility than the High Mobility Multipurpose Wheeled Vehicle (HMMWV). The innovative GTV JLTV design features a robust light-weight hybrid hull, semi-active suspension system, digital cockpit, and over 95 percent common components across the entire JLTV family of vehicles.

Key deliverables under the JLTV TD contract include seven vehicles and four trailers representing the three mission role variants (infantry, general purpose, utility) comprising the JLTV Family of Vehicles; designs for each of 10 sub-configurations; and ballistic hulls and sample armor components for government testing.

“The GTV solution meets or exceeds the JLTV protection, payload and performance requirements, offering a low-risk, innovative, adaptable family of vehicles and trailers with commonality of components exceeding 95 percent, resulting in speed to production and low life-cycle cost,” said Don Howe, GTV senior program director.

“The GTV JLTV design ensures capability growth opportunities and planned product improvements and the GTV Team’s significant experience with deployed global forces provides a unique and valuable insight to the needs of the warfighter. The GTV Team offers our customer the optimum combination of survivability, innovation, performance, reliability, supportability and affordability,” said Howe.

“The GTV Team is very appreciative of the confidence that the Army and Marines have shown in our JLTV solution and joint capabilities. GTV offers a full-spectrum combat and tactical platform capable team, with the strength of more than 120 years of combined experience in the design, production and global support of over one million combat and tactical vehicles,” Howe said.

BAE Systems Land & Armaments-Grounds System Division, Santa Clara, Calif., was awarded Oct. 29, 2008 a $40,493,203 cost share contract for Joint Light Tactical Vehicle (JLTV) Family of Vehicles technology development phase. Work will be performed in Santa Clara, Calif., Warrenville, Ill., Johnson City, N.Y., and Troy, Mich., with an estimated completion date of Jan. 31, 2011. Bids were solicited via the Web with seven bids received. Tank & Automotive Command, Warren, Mich., is the contracting activity ((W56HZV-08-C-0426).

The BAE Systems-Navistar JLTV proposal is named the Valanx. Valanx is a family of v-hulled, blast-resistant vehicles that optimize what's referred to as the "iron triangle" – payload, protection and performance – to meet all requirements of the JLTV program. There are several variations of the Valanx designed to meet scouting, general mobility, infantry carrying, ambulatory and other needs for combat troops.

Vehicle models for the various Valanx variations will be designed and fabricated during 2009 and tested in 2010, leading to the selection of two teams for a JLTV system development and demonstration (SDD, Milestone B) in 2011.

"We believe the Valanx provides the foundation for a family of vehicles that will offer unmatched strength, protection and support for the Warfighter for decades to come," said Kevin Thomas, director, product creation for Navistar Defense, an affiliate of Navistar International Corporation. "Our team is eager to move forward and continue our partnership with the Joint Services as they determine the best tactical vehicle solution for our men and women in uniform.”

The Valanx design incorporates lessons learned from the U.S. Department of Defense's Mine Resistant Ambush Protected (MRAP) vehicle program and features the latest in lightweight, advanced armor and a v-shaped hull design to provide unmatched crew protection. The vehicle will out-perform existing tactical systems by providing exportable power that exceeds JLTV requirements and existing MRAP capabilities. Its modular design maximizes commonality across JLTV variants and enables the seamless integration of future technologies.

The team unveiled its first Valanx prototype in February 2008.

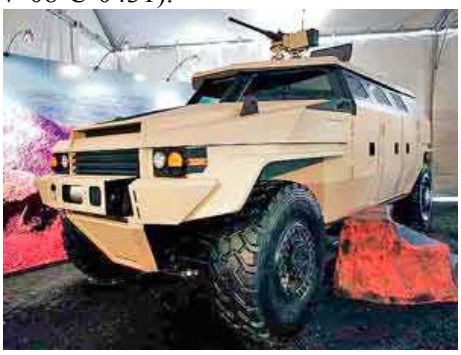
The BAE Systems Ground Systems-Navistar team builds off the two company’s current leadership in armored and tactical vehicle development and support, which includes the team working together for the benefit of the joint U.S. customer on programs like MRAP. Combined, the BAE Systems Ground Systems-Navistar team maximizes JLTV program value through proven capabilities, lean manufacturing and extensive worldwide logistics support.

The team also includes Arvin Meritor to manufacture the lightweight independent suspension and drivetrain solutions for the Valanx. The company is a leading designer and manufacturer of automotive advanced mobility systems and is the largest axle supplier to the U.S. military.

The BAE Systems-Navistar team draws on top talent from across the country. Sites participating in the

development include: York, Pennsylvania; Ontario, San Diego and Santa Clara, California; Dearborn Heights, Sterling Heights and Troy, Michigan; Minneapolis, Minnesota; Johnson City, New York; Austin, Texas; Nashua, Hew Hampshire; Reston, Virginia; Melrose Park and Warrenville, Illinois; Fort Wayne, Indiana; West Point, Mississippi; Huntsville, Alabama; and Laurinberg and York, South Carolina.

Lockheed Martin Systems Integration, Owego, N.Y., was awarded Oct. 29, 2008, a $35,942,059 cost plus fixed fee contract. The contract is for Joint Light Tactical Vehicle (JLTV) Family of Vehicles technology development phase. Work will be performed in Owego, N.Y., and Sealy, Texas with an estimated completion date of Jan. 31, 2011. Bids were solicited via the Web with seven bids received.Tank & Automotive Command, Warren, Mich., is the contracting activity (W56HZV-08-C-0431).



"We are honored that trust has been placed in Lockheed Martin and our JLTV Team to continue development of this vital program," said Louis DeSantis, vice president and general manager of Ground Vehicle Systems at Lockheed Martin. "We are committed to meeting the demanding program requirements and providing the lowest-risk, most technically innovative vehicle that serves our Soldiers and Marines."

The technology development contract will be 27 months in duration. The first 15 months require competitors to develop and deliver seven JLTV variants, four trailers, four blast hulls, and ballistic panels that will be used for testing. The remaining 12 months are scheduled for government testing. The Technology Development phase will then be followed by a Systems Design and Development phase and, later, by a production contract.

Lockheed Martin currently has three operational prototypes: the JLTV Category B model, which is designed as an infantry carrier and was unveiled in October 2007; the Utility Vehicle Light Category C model, which is designed with a focus on payload and was introduced in February 2008; and the General Purpose Mobility Category A model, which was unveiled earlier this month at the Association of the United States Army's Annual Meeting and Exhibition.

Lockheed Martin is currently in the process of building its fourth JLTV prototype, an additional variant of the Infantry Carrier, and anticipates completing production in November.

The Lockheed Martin-led JLTV Team includes:

- BAE Systems Mobility & Protection Systems, providing advanced armor solutions and production facilities for high volume assembly;
- Alcoa Defense, supplying materials experience, design services and aluminum components that give the vehicle its structural strength at reduced weight; and
- JWF – Defense Systems, offering state-of-the-art machining and cost-effective fabrication.

Lockheed Martin serves as the prime contractor and design agent, providing systems engineering, platform integration, design expertise, and program and supply chain management.