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Contracts

Rheinmetall wins major contract for mortar ammunition

Rheinmetall Defence of Dusseldorf has booked an order to supply the Royal Dutch Armed Forces with 81 mm mortar ammunition.

Covered by a framework contract extending over a three-year period, the order is worth Euro51 million. The framework contract contains an option for extending the agreement twice by one year. For 2008, the Royal Dutch Armed Forces have already activated a first tranche worth Euro16.5 million.

This order further underscores Rheinmetall's role as Europe's foremost supplier of large- and medium-calibre weapons and ammunition.

Besides 81 mm mortar ammunition, the Dutch Army places its trust in many other Rheinmetall products.

The new contract thus builds on a longstanding relationship between the two parties.

In the long run, this order will serve to optimize procurement flows and product quality as well as fostering closer cooperation between Rheinmetall Defence and the Dutch Army in the development of new ammunition.

Defence Industry

Iran Starts Manufacture of Rapid Reaction Tanks

TEHRAN (FNA)- Iran has launched a production line for superior Rapid Reaction tanks as part of the country's campaign for self-sufficiency in defense.

Iran has successfully started the production of a Rapid Reaction tank named "Tosan", Head of the self-sufficiency unit of the Islamic Revolution Guards Corps (IRGC) ground forces, Colonel Nasser Arab-Beigi was quoted by press tv as saying.

"Military equipment needs to be upgraded in accordance with the latest developments in global technology," said Arab-Beigi, adding that the current situation calls for a significant enhancement of the country's defense capacity.

The self-sufficiency unit is also working on projects to enhance passive defense systems and secure the country's military sites, he said.

He also warned that every enemy move in the Persian Gulf and on Iranian borderlines is under the full surveillance of the IRGC forces.

The United States and its allies have accused Iran of trying to develop nuclear weapons under the cover of a civilian nuclear program. Iran has denied the charges, insisting that its nuclear program is for peaceful purposes only.

The administration of US President George W. Bush has said it will take "no option off the table."

Some observers believe it is possible that the United States and Israel would attack Iranian targets over Tehran's civilian nuclear program.

The New York Times has reported recently that US military believed a major military exercise by Israel in early June was a rehearsal for a potential bombing attack on Iran's nuclear sites.

Following the US National Intelligence Estimate (NIE) and similar reports by the IAEA head - one in November and the other one in February - which praised Iran's truthfulness about key aspects of its past nuclear activities and announced settlement of outstanding issues with Tehran, any effort to impose further sanctions or launch military attack on Iran seems to be completely irrational.

The February report by the UN nuclear watchdog, the International Atomic Energy Agency, praised Iran's cooperation in clearing up all of the past questions over its nuclear program, vindicating Iran's nuclear program and leaving no justification for any new UN sanctions.

Defence Industry

New J14 Million Contract For BvS10 VIKING Vehicles

ORNSKLDSVIK, Sweden -- BAE Systems has been awarded a J14 million contract from the U.K. Ministry of Defence for 14 BvS10 Viking amphibious armoured all-terrain vehicles, including nine repair recovery vehicles, one command vehicle and four troop carriers.

The vehicles will be used by the UK armed forces in Afghanistan beginning in July 2008.

"The BvS10 Viking has proven its worth while being used by British troops in Afghanistan," said Tommy Gustafsson-Rask, Marketing and Sales Director for BAE Systems. "The Afghan terrain can be quite varied and our

armoured all-terrain, quick-to-deploy vehicles provide troops with protection and the ability to move wherever and whenever they are required.

The BvS10 Viking consists of two tracked vehicle units linked by a steering mechanism. The vehicle can operate in temperatures from -46C to +49C, providing it with multi-role, worldwide, rapid deployment operational capabilities in jungle, desert and Arctic conditions. The vehicles are available in four variants-the repair recovery vehicle, the command vehicle, the troop carrier and the ambulance.

The UK's Royal Marines received the first delivery of the vehicles in July 2003. This delivery brings the total number of vehicles produced for UK MoD to 143. The total number of produced vehicles is well over 200.

The contract was awarded to the company's Swedish subsidiary, BAE Systems AB through their Hagglunds unit. The vehicles will be built, assembled and completed in Ţrnskldsvik, Sweden.

Defence Industry

Russia to sell six multi launch rocket systems to Turkmenistan

MOSCOW -- Turkmenistan has signed a $70 million contract with Russia to buy six Smertch multi launch rocket systems (MLRS).

Kommersant said that under the contract, the first major military-technical deal with Ashgabat in the past decade, the Smertch manufacturer, OAO Motovilikhinskiye Zavody, will deliver the first two systems before the end of this year and the other four next year.

The manufacturer said it would also complete deliveries of Smerch systems to India in July under a $300 million contract.

The plant previously supplied 30 Smertch systems to India, worth an estimated $450 million.

The 300mm Smertch rocket has an effective range of 70-90km. One rocket cluster contains 72 submunitions, each weighing 2 kg. Its impact angle is strictly vertical: 90 degrees.

A cone of such "meteorites" easily pierces the turrets and top shielding of armored personnel carriers, infantry fighting vehicles, self-propelled gun mounts, and even tank transmission compartments where the armor is not thick.

Defence Industry

BAE Systems Receives $226 Million for MRAP Upgrade Order

YORK, Pennsylvania -- BAE Systems has received four delivery orders totaling $226 million from the U.S. Marine Corp for engineering changes and spare parts to support Mine Resistant Ambush Protected (MRAP) vehicles.

BAE Systems manufactures three of the five MRAP variants: the Caiman, the RG31 and the RG33. The RG33 is manufactured in several configurations including the Category I 4x4, Category II 6x6, the Heavy Armored Ground Ambulance (HAGA) and the Special Operations Command (SOCOM) vehicle.

The first order is for engineering changes to 51 HAGA and 393 Category II 6x6 vehicles. This contract was awarded in March 2008 and is worth $162 million.

“These changes provide improved mobility and survivability capabilities that take the performance of the RG33 platform to a whole new level,” said Matt Riddle, vice president for Wheeled Vehicle Programs at BAE Systems. “These enhancements significantly extend the mission envelope and improve the war fighting capabilities of the vehicle.”

The remaining three additional orders provide spare parts for Category II 6x6 variants, SOCOM, and HAGA vehicles purchased fewer than three previous delivery orders. These awards total $64.3 million and were awarded over the course of the past three months.

Work under the contract will take place at BAE Systems facilities in York, Pennsylvania; Aiken, South Carolina; Anniston, Alabama; Fairfield, Ohio and Louisville, Kentucky; with assistance from Spartan Motors, Inc.'s Spartan Chassis subsidiary in Charlotte, Michigan and Demmer Corporation in Lansing, Michigan. Deliveries will be completed over the course of the year, ending in December 2008.

Defence Industry

German Armed Forces order up to 98 all-protected DINGO 2 vehicles and 420 remote controlled weapon stations

Krauss-Maffei Wegmann (KMW) won a large order for all-protected vehicles and remote controlled weapon stations from the Federal Office of Defence Technology and Procurement (BWB) in Koblenz.

The contract includes the manufacture and delivery of a total of 50 DINGO 2 patrol and backup vehicles, four

DINGO 2 GSI (battle damage repair) vehicles, 44 optional DINGO 2 GSI, plus 230 light and 190 heavy FLW weapons stations. The German Armed Forces will take a fast-track delivery of 54 DINGO 2 already by the end of this year.

"We are pleased that we can make a valuable contribution to the safety of our soldiers during their deployment abroad with the new delivery of our DINGO 2", said Frank Haun, President and CEO of KMW, after signing the contract at Koblenz.

DINGO 2

Dingo 2, a 12 ton, four-wheel drive, all-round protected vehicle, has been used for several years by the armed forces of Germany and other countries (i.e. Belgium, Austria and the Czech Republic) in their deployments to countries such as Afghanistan, Kosovo and Lebanon. Recently, Luxembourg has also placed an order for 48 DINGO 2. Despite the frequent terrorist attacks in recent years, the DINGO 2 has so far managed to save the lives of all vehicle occupants and protect them from serious injuries.

At the request of Germany's Defence Minister Franz Josef Jung, KMW has fast-tracked the delivery of 100 DINGO 2 within 2007.

Remote controlled weapon stations

Like all other new Armoured Command and Control Vehicles (German: Geschьtzte Fьhrungs- und Funktionsfahrzeuge =GFF) of the German Armed Forces under the GFF procurement programme for self-protection, the DINGO 2 is equipped with light and heavy weapon stations.

The armoured transport vehicle BOXER is also equipped with these weapon stations for self-defence, which can be remotely controlled and operated by the vehicle occupants from the vehicle's protected interior via a video screen with integrated day and night vision devices.

Another technical feature of the system is the so-called gyro stabilization, which allows very accurate and controlled weapon firing, even while moving through rough terrain at high speed. A digital sensor in the stations also automatically recognises the type of weapon - whether machine gun or automatic grenade launcher – that is installed at the adaptable attachment points.

In a comparative trial last year, KMW convinced the German Armed Forces of the superiority of its two modular weapons stations FLW 100 and FLW 200, prevailing over international competitors. Primarily, both systems are characterised by their low weight with the FLW 100 weighing less than 100 kilograms, and the FLW 200 less than 200 kilograms.

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Defence Industry

Northrop Grumman, Oshkosh JLTV Undergoes Successful Armor Testing

RESTON, Va. -- The Joint Light Tactical Vehicle (JLTV) family of vehicles offered by Northrop Grumman Corporation and Oshkosh Defense has undergone successful armor testing as the U.S. Department of Defense nears its selection of competing JLTV teams.

Oshkosh and Plasan USA, which was selected to design and engineer the vehicle's armor, conducted ballistic and mine-blast testing on the team's JLTV prototype. After the first round of testing, they found the armor passed all threshold capability and achieved several objective-level force-protection requirements. Plasan is using an advanced composite-technology armor system that maximizes crew protection while keeping weight impact minimal.

"Northrop Grumman and Oshkosh have designed a vehicle of unique performance and protection that can provide value to the warfighter today yet is flexible enough to meet the combat requirements of tomorrow," said Joe Gray Taylor, vice president of Ground Combat Systems at Northrop Grumman's Mission Systems sector. "We particularly took on the challenge of armor volume, applying some of our most innovative thinking to the balance of performance, protection and payload. The results of the armor testing validate our design and prove we are ready to move smartly to the next stage of the development process."

One advantage the team has in developing its JLTV armor is the incorporation of a diesel-electric drive system, which eliminates the need for a transmission and conventional drivetrain. This allows for the creation of improved blast protection for the crew.

"The innovative use of a diesel-electric system reduces the number of vehicle components and frees up space to allow for increased survivability for the soldiers in these vehicles," said John Stoddart, Oshkosh Corporation executive vice president and president of defense. "Our work with Plasan will provide, as it has in the past, the best crew protection possible."

The armor testing was conducted at a world-class testing facility in the United States, used U.S. Army research-laboratory standards and was based on government specifications for the JLTV.

The Defense Department is expected to decide soon which industry competitors will continue into the 27-month Technology Development phase for this $40 billion program.

Northrop Grumman and Oshkosh Corporation joined forces to compete for the JLTV program on Jan. 8. If selected, Northrop Grumman will be the prime contractor and systems integrator. Oshkosh Corporation's Defense Group will be responsible for designing, engineering and manufacturing the vehicle.

Northrop Grumman integrates a broad spectrum of critical joint combat and C4ISR platforms, including serving as the prime contractor for the Army's Command Post Platform, Force XXI Battle Command Brigade and Below (FBCB2)/Blue Force Tracking (BFT), and Command and Control Personal Computer (C2PC) programs.

Oshkosh has nine decades of proven experience developing advanced automotive systems, on/off-road capabilities, extreme-duty vehicle platforms, military vehicles and integrated armor solutions. Oshkosh has advanced on-board vehicle power capabilities on two prototype vehicles: the Marine Corps' Medium Tactical Vehicle Replacement (MTVR) and the U.S. Army's Heavy Expanded Mobility Tactical Truck (HEMTT).

Oshkosh Corporation is a leading designer, manufacturer and marketer of a broad range of specialty access equipment, commercial, fire and emergency and military vehicles and vehicle bodies. Oshkosh Corp. manufactures, distributes and services products under the brands of Oshkosh(r), JLG(r), Pierce(r), McNeilus(r), Medtec(r), Jerr-Dan(r), BAI, Oshkosh Specialty Vehicles, Frontline, SMIT, Geesink, Norba, Kiggen, CON-E-CO(r), London(r) and IMT(r).

Northrop Grumman Corporation is a global defense and technology company whose 120,000 employees provide innovative systems, products and solutions in information and services, electronics, aerospace and shipbuilding to government and commercial customers worldwide.

Defence Industry

General Dynamics Awarded $374 Million Light Armoured Vehicle Lifecycle Support Contract by the Government of Canada

LONDON, Ontario --- The Government of Canada has awarded a contract valued at $374 million (US $367 million) to General Dynamics Land Systems-Canada for a full range of lifecycle support services for the Canadian Forces fleet of Wheeled Light Armoured Vehicles. General Dynamics Land Systems, the Canadian company's parent corporation, is a business unit of General Dynamics.

Services provided under this contract include fleet management, supply support, repair and overhaul, major vehicle repair, obsolescence management, and engineering and technical services. The contract will cover a period of five years commencing on June 1, 2008, with additional option years to be exercised at the discretion of the government. This is the second phase of a lifecycle support contract originally awarded in April 2004 and successfully completed in May 2008.

Dr. Sridhar Sridharan, senior vice-president of General Dynamics Land Systems-Canada said, "This represents the continuation of a government-industry partnership that has been working effectively for over 30 years. With such a large installed fleet of our vehicles in Canada, it is important for us to provide effective and timely support to our Canadian customer." General Dynamics Land Systems-Canada is the original equipment manufacturer for the Bison, Coyote and LAV III vehicles supported by this contract.

Lifecycle support continues to be an important part of General Dynamics Land Systems-Canada's overall business and has grown significantly over the last several years. In addition to expanded facilities in London, the company has established a new facility in Edmonton and a fleet management team that supports the Department of National Defence on site in Ottawa. Additional support is also provided through a network of Canadian suppliers located from coast-to-coast.

General Dynamics Land Systems-Canada, located in London, Ontario, Canada is a business unit of General Dynamics Land Systems of Sterling Heights, Michigan. For over 30 years, more than 1,800 highly skilled technical employees have designed, manufactured, delivered and supported to global customers a unique family of light armoured vehicles (LAV).

General Dynamics, headquartered in Falls Church, Virginia, employs approximately 84,000 people worldwide and reported 2007 revenues of $27.2 billion. The company is a market leader in business aviation; land and expeditionary combat systems, armaments and munitions; shipbuilding and marine systems; and mission-critical information systems and technologies.

Defence Industry

GDELS Awarded Contract for First Batch of 25 EAGLE IV 4x4 Vehicles for Germany

VIENNA, Austria --- The MOWAG Operations of General Dynamics European Land Systems (GDELS) has entered a contract with the German Bundesamt fьr Wehrtechnik und Beschaffung (BWB) for the delivery of a first batch of 25 EAGLE IV protected Command and Function Vehicles.

This first delivery is part of an offer for total 198 EAGLE IV including the development of the logistic and service support organization with a total value of 92

Million Euros (approx. US$ 140 Million).

This offer includes also on option for the delivery of a further 474 vehicles. The EAGLE IV vehicles will be jointly manufactured in Kreuzlingen, Switzerland, and at General Dynamics European Land Systems-Germany in Kaiserslautern .

Within the framework of the GFF Klasse 2 program – protected Command and Function vehicles – unprotected carrier vehicles of the Bundeswehr will be replaced by the EAGLE IV to enhance the safety of the German soldiers wherever they may serve. Due to its high deployability, agility and tactical mobility, the EAGLE IV is suitable for the entire mission spectrum for this class of vehicles. It can be used for the most diversified missions as a Command and Function vehicle by applying modular add-on kits.

Furthermore, the substantial payload capability– which is significant, despite the high level of crew protection – supports the growth potential required to fulfill future requirements. For self-protection, the vehicle shall be equipped with a remotely controlled weapon station of the Krauss-Maffai FLW 100/200 type.

In addition to its crew-protection and mobility advantages, the EAGLE IV also enjoys low operation and training costs. Lifecycle costs of the vehicle fleet will be further minimized by the high degree of logistic commonality among the EAGLE IV and the DURO IIIP tactical truck, which has already been successfully introduced in the German Bundeswehr as the RLS "YAK." The vehicles share many essential components, such as the engine, transmission, axles, wheel drives, differentials and brakes, helping reduce costs.

Lutz Kampmann, vice president of Wheeled Vehicles for General Dynamics European Land Systems, said, "This order is proof of the correctness of the concept, the performance and reliability of our new EAGLE IV. It also proves the confidence of the German Bundeswehr in our products, particularly, in the DURO IIIP vehicles that have been purchased since 2003, which have proven themselves – among other places – in peace missions in Afghanistan."

"This order also is important for General Dynamics in Europe, enabling us to expand our relationships with a key customer – Germany – and sharing the cost advantage of a common EAGLE IV and DURO IIIP fleet previously enjoyed only by Denmark."

The in-house baseline development of the EAGLE IV was completed with the roll-out of the first prototype at the end of 2003. Just two years later, the first sales success was landed with 90 vehicles for the Danish Army. At the beginning of 2006, the BWB purchased two EAGLE IV demonstrator vehicles for intensive comparative tests. In these demanding tests, the EAGLE IV proved its superior mobility, a high level of armor protection for the crew, a large usable volume, and a high payload.

MOWAG GmbH, as a contractual partner of the BWB, will order substantial deliveries from the German industry and various work from German partner companies, thus securing workplaces and added value in Germany. Following the international breakthrough of the EAGLE IV, GDELS reckons to get further orders from EU/NATO countries in the near future, since this multi-purpose vehicle fulfills the rising need for highly protected transport capacity for international peace missions.

General Dynamics European Land Systems (GDELS), headquartered in Vienna , Austria , is a business unit of General Dynamics Corporation, and conducts its business through four European operating sites located in Spain , Germany , Austria and Switzerland . With more than 3,250 highly skilled technical employees, General Dynamics European Land Systems' companies design, manufacture and deliver land combat systems, including wheeled, tracked, and amphibious vehicles, armaments and munitions, to global customers.

MOWAG GmbH of Kreuzlingen develops, designs, and manufactures technologically advanced special vehicles for military use. More than 13,500 armoured and non-armoured wheeled vehicles of the MOWAG PIRANHA, MOWAG EAGLE, and MOWAG DURO series are in service worldwide. Since October of 2003, MOWAG is part of the General Dynamics European Land Systems group, and employs a qualified staff force of more than 700 at its Kreuzlingen site.

Defence Industry

Anniston Builds New Mine-Plowing Vehicle for the Marine Corps

ANNISTON ARMY DEPOT, Ala. -- Depot production of the Assault Breacher Vehicle revved up Monday when the first plow-equipped tank was shipped to the Marines.

Anniston is supporting the United States Marine Corps' effort to better protect its combat engineers in the minefields with this initial order of 28 ABVs, a job that started in late 2007.

The ABV, built new here by government civilians, is another example of the depot's capability to do more than just overhaul and repair worn legacy combat vehicles and artillery. Anniston is also able to build vehicles from scratch.

For instance, the Joint Assault Bridge is in production here, and the depot has partnered with General Dynamics to build all variants of the Stryker vehicle while Honeywell is manufacturing new AGT 1500 engines here for the Egyptian government.

Anniston first saw the ABV concept in 2002 after the

Marines designed it, said USMC ABV project officer J.F. Augustine. The Marines chose Anniston as their sole provider of ABVs for two reasons: cost and capability.

"By running this as a government integration, a government build, we (USMC) saved taxpayers millions of dollars. ANAD has the expertise to refurbish M1A1 hulls for our purposes, then grew the capability to fabricate the turret and do the final assembly," said Augustine.

The design and function of the ABV, with its M1 chassis, .50-caliber machine gun and front-mounted mine plow, is similar to the Army's Grizzly vehicle, a prototype developed in the 1990s that never made it to the production lines.

Five ABVs were built before Anniston was given the go-ahead in November 2007 to begin full-rate production on the current order. All five succeeded operational tests by February 2007. So far, two ABVs are in use by the Marines at the ABV Operator and Maintainer course at Fort Knox, Ky. Fielding to the Marines begins this month, said Augustine.

Members of the USMC 1st Combat Engineer Battalion at Camp Pendleton, Calif., were on depot this week to inspect three of Anniston's ABVs. Marine Corps Sgt. Earl Hewett said the vehicles will be used for training during the coming year before and if these particular ABVs are sent to the Middle East.

"We still need to train on them a lot before we deploy with them," said Hewett, who has trained on other ABVs alongside operators and mechanics in his mobile assault company.

Before the Marines had the ABV to breach minefields, some conditions forced them to follow alongside an amphibious tractor on foot to light the fuse and clear the path for thru-traffic.

"The ABV makes the combat engineering mission a hundred times easier as far as breaking minefields," said Hewett.

Fabrication of parts by depot machinists, mechanics and welders plays a large part in the manufacturing of these vehicles, said Dave Sok, the ABV production program analyst here employed by contractor NLCF, LLC.

Though the ABV is considered a newly built vehicle and not part of the depot's normal overhaul workload, workers here are disassembling the M1 Abrams main battle tank, overhauling the chassis and marrying it up to an Anniston-fabricated ABV turret to make an ABV for the Marines, said Sok.

The M1 chassis is the basic platform for the brand-new ABV. The tanks were once owned by the Army and given to the USMC for this program. "These are older configuration vehicles that are excess to the Army's needs," said Sok.

Sok and James Coley, the depot's program manager for the ABV, said the depot plans to start production on another ABV order next year for the Army's use.

"This is just the beginning of a healthy workload for the depot's out-years," said Coley.

US Marine Corps Orders 773 RG-31 Mk5E MRAP Vehicles

LONDON, Ontario -- U.S. Marine Corps Systems Command (MCSC) has awarded General Dynamics Land Systems-Canada a delivery order to produce 773 RG-31 Mk5E Category I vehicles for its Mine Resistant Ambush Protected (MRAP) vehicle program. The order has a total potential value of $552 million.

General Dynamics Land Systems, the Canadian company's parent corporation, is a business unit of General Dynamics.

Work will be performed by General Dynamics employees in Anniston, Ala., and by Demmer Corporation of Lansing, Mich. Additional production will come from BAE OMC of Benoni, South Africa, in order to meet the urgent production schedule. Deliveries will be completed by April 2009.

This contract is in addition to the 624 RG-31 Mk5 vehicles already supplied under the MRAP program. Separately, an additional 566 RG-31s have been previously ordered by the U.S. Army TACOM Life Cycle Management Command based on Operational Need Statements by the U.S. Army for route clearance vehicles.

"We are grateful for the opportunity to once again play a role in protecting the lives of U.S. soldiers," said Dr. Sridhar Sridharan, senior vice-president of General Dynamics Land Systems-Canada. "A repeat order such as this, in combination with the positive feedback we have received from soldiers in theater, is the best testament to the effectiveness of the RG-31 Mk5 vehicles."

The contract was signed through the Canadian Commercial Corporation, a Crown Agency of the Canadian Government.

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mission-critical information systems and technologies.

Defence Industry

Australia - M777A2 155mm Lightweight Howitzers

WASHINGTON -- The Defense Security Cooperation Agency notified Congress of a possible Foreign Military Sale to Australia of M777A2 155mm Light-Weight Howitzers as well as associated equipment and services.

The total value, if all options are exercised, could be as high as $248 million.

The Government of Australia has requested a possible sale of 57 M777A2 155mm Light-Weight Howitzers, 57 AN/VRC-91F Single Channel Ground and Airborne Radio Systems (SINCGARS), integration, spare and repair parts, support and test equipment, publications and technical documentation, maintenance, personnel training and training equipment, U.S. Government and contractor engineering and logistics support services, and other related elements of logistics support. The estimated cost is $248 million.

Australia is one of our most important allies in the Western Pacific. The strategic location of this political and economic power contributes significantly to ensuring peace and economic stability in the region. Australia's efforts in peacekeeping and humanitarian operations in Iraq and in Afghanistan have had a significant impact on regional political and economic stability and have served U.S. national security interests. This proposed sale is consistent with those objectives and facilitates burden-sharing with our allies.

This proposed sale would greatly contribute to Australia's military capability by making it a more sustainable coalition force to support the Global War on Terror. Australia will use these new M777A2 155mm Howitzers to protect its deployed troops, and give them the ability to operate in hazardous conditions. Australia currently operates the 100mm [actually 105mm—Ed.] Hamel Howitzer and the 155mm M198 Howitzer and will have no difficulty absorbing these howitzers into its armed forces.

The proposed sale of this equipment and support will not affect the basic military balance in the region.

The prime contractors will be: BAE Land Systems in Hattiesburg, Mississippi, and ITT in Fort Wayne, Indiana. There are no known offset agreements proposed in connection with this potential sale.

The proposed sale requires engineering technical support for approximately two U.S. government representatives and five contractor representatives for one year.

There will be no adverse impact on U.S. defense readiness as a result of this proposed sale. This notice of a potential sale is required by law; it does not mean that the sale has been concluded.

Defence Industry

Raytheon Tests Excalibur's Low-Cost Titanium Base Design and On-Board Recorder

SOCORRO, N.M. -- Raytheon Company tested a new low-cost titanium base (Ti) and on-board recorder (OBR) for the Excalibur precision-guided artillery projectile during a June 13 test firing.

The test firings are part of Raytheon Missile Systems' pre-contract preparation for the Excalibur Ib development award. The firings demonstrated the effectiveness of the low-cost Ti design and validated the use of an OBR and telemetry unit.

"The Ti base was a key element in the proposal Raytheon submitted to the U.S. Army on May 7 because it lowers the cost of gun-fired precision projectiles," said Steve Bennett, director of Raytheon's Excalibur program. "A Ti base offers increased reliability with fewer parts, simpler manufacturing, and compatibility with the Army's 155 mm Excalibur projectile."

Raytheon's Ti base design can accommodate base burn propellant. The propellant and the projectile's aerodynamic profile significantly increase Excalibur's range.

During the test fire, the projectiles flew stable flights, and the stowed fins successfully deployed after clearing the gun. The tests demonstrated the fins' structural integrity and ability to synchronously deploy and lock.

The test flight also validated the effectiveness of the OBR. The recorder tracked projectile acceleration and roll rates inside the gun tube, after the round exited the tube, and during flight.

"The OBR will enable Raytheon to move rapidly from design to successful test flights with minimal testing," said Bennett. "The Ti base and OBR will make compatibility assessments across a broad range of gun platforms and propellant charges faster and easier."

Excalibur recently received a Top 10 Army Greatest Inventions of the Year Award for 2007.

Defence Industry

French Army Takes Delivery of First Serial Production Caesar Artillery Cannon

The French General Delegation for Armaments (DGA) delivered on July 16 the first series production artillery cannon CAESAR (truck equipped with an artillery system) to the French Army.

Seven additional guns will be delivered before the end of 2008. The contract CAESAR notified in December 2004 to Nexter Systems, foresees the development, acquisition and support of 77 guns with deliveries spread until 2011.

The CAESAR is a new concept cannon mounted on a truck which positions itself between the towed guns and self-propelled tracked howitzers. It combines this way reach and mobility. This 155-mm gun has a range of fire of more than 40 km through a tube with a length of 52-caliber and enjoys the mobility of a 6x6 truck with the cab armored reaching speeds on the road more than 80 kph over distances greater than 600 km. Weighing less than 18 tonnes, it can be airlifted in C-130 Hercules military aircraft and A400M. CAESAR can be ready-to-fire in less than a minute by a five men crew and ready to go just as quickly, enabling him to avoid counter-battery fire. CAESAR is connected to the ATLAS system, the system of information and communication of artillery regiments.

CAESAR is already a success in the export market. Two contracts were signed, one with Thailand (6 systems), the other with an undisclosed Middle East country (80 systems).

Defence Industry

French Military Orders Buffalo Vehicles from Force Protection

Ladson, SC -- Force Protection, Inc. today announced that it will produce five Buffalo Category III vehicles for the French military under a contract modification to contract M67854-07-C-5039.

The order totals $3.5 million and is scheduled for completion by November 2008. Work is to be performed solely by Force Protection Industries.

"We are proud to provide these vehicles to the French government," said Michael Moody, Chief Executive Officer of Force Protection. "This represents another important step in the continued growth of our international customer base. Force Protection's battle proven vehicle platforms continue to be the choice of our allied fighting forces throughout the world."

Robots

iRobot Receives An Additional Order From the U.S. Army Totaling $17.5 Million

Bedford, Mass., July 23, 2008 – iRobot Corp. (Nasdaq: IRBT) today announced it received an additional order under its current contract with the U.S. Army Program Executive Office for Simulation, Training, and Instrumentation (PEO STRI) totaling $17.5 million.

This is the fourth order under the $286 million Indefinite Delivery/Indefinite Quantity (IDIQ) xBot contract, which will deliver more than 220 additional robots to the Army by December 31, 2008. Orders with PEO STRI now total $44.5 million.

"Robots will continue to support soldiers in theater as unmanned systems increase critical mission effectiveness," said Joe Dyer, president of iRobot Government and Industrial Robots. "The continued investment from the U.S. Army is a clear symbol of iRobot's growing position as a supplier of critical battlefield equipment."

The robot included in this contract is the PackBot 510 with FasTac Kit, which will help warfighters investigate suspicious objects, identify roadside bombs and other improvised explosive devices (IEDs), as well as uncover unexploded ordnance while keeping soldiers in theater at safe distances.

The PackBot 510 represents the next generation of PackBot technology that increases overall robot speed by 30 percent, accelerates travel over tough terrains of rocks and mud to speeds of up to 5.6 miles per hour, and supports climbing grades of up to 60 degrees. Light enough for deployment by one warfighter, but strong enough to carry 30 pounds the PackBot 510 leverages a

digital modular architecture to support interchangeable, modular payload capabilities that address specific missions.

iRobot has delivered more than 1,500 PackBot robots that make a difference everyday by conducting dangerous missions that keep warfighters out of harm's way.

Term of the day

Asymmetric Warfare

Asymmetric warfare originally referred to war between two or more actors or groups whose relative military power differs significantly. Contemporary military thinkers tend to broaden this to include asymmetry of strategy or tactics; today "asymmetric warfare" can describe a conflict in which the resources of two belligerents differ in essence and in the struggle, interact and attempt to exploit each other's characteristic weaknesses. Such struggles often involve strategies and tactics of unconventional warfare, the "weaker" combatants attempting to use strategy to offset deficiencies in quantity or quality.

Typically at least one of the parties involved may be referred to as partisans. One theory says "partisan" comes from the Tuscan word, "partigiano", meaning a member of a party of light or irregular troops engaged in harassing an enemy, especially a member of a guerrilla band engaged in fighting or sabotage against an occupying army. The other theory says the word comes from the Persian word Partisan; in Persian, san means similar and Part is a name of an Aryan tribe living in the northeast of Iran who are said to have invented and developed the first partisan war tactics.

The first known wide usage of asymmetric war was by Parthians, who freed Persia from Seleucid rule (remaining from Alexander's invasion) and continued the same techniques against Romans and other invaders from the north of the empire.

The tactical success of asymmetric warfare is dependent on at least some of the following assumptions:

- One side can have a technological advantage which outweighs the numerical advantage of the enemy; the decisive English Longbow at the Battle of Agincourt is an example. The advantage may also be the other way around. For example, the vast numerical superiority of the Chinese forces during their initial involvement in the Korean War overwhelmed the technological superiority of the United Nations forces.
- Training and tactics as well as technology can prove decisive and allow a smaller force to overcome a much larger one. For example, for several centuries the Greek hoplite's (heavy infantry) use of phalanx made them far superior to their enemies. The Battle of Thermopylae, which also involved good use of terrain, is a well known example.
- If the inferior power is in a position of self-defense; i.e., under attack or occupation, it may be possible to use unconventional tactics, such as hit-and-run and selective battles in which the superior power is weaker, as an effective means of harassment without violating the laws of war. Perhaps the classical historical examples of this doctrine may be found in the American Revolutionary War and movements in World War II, such as the French Resistance, and Soviet and Yugoslav partisans. Against democratic aggressor nations, this strategy can be used to play on the electorate's patience with the conflict (as in the Vietnam War, and others since) provoking protests, and consequent disputes among elected legislators.
- If the inferior power is in an aggressive position, however, and/or turns to tactics prohibited by the laws of war (jus in bello), its success depends on the superior power's refraining from like tactics. For example, the law of land warfare prohibits the use of a flag of truce or clearly-marked medical vehicles as cover for an attack or ambush, but an asymmetric combatant using this prohibited tactic to its advantage depends on the superior power's obedience to the corresponding law. Similarly, laws of warfare prohibit combatants from using civilian settlements, populations or facilities as military bases, but when an inferior power uses this tactic, it depends on the premise that the superior power will respect the law that the other is violating, and will not attack that civilian target, or if they do the propaganda advantage will outweigh the material loss. As seen in most conflicts of the 20th and 21st centuries, this is highly unlikely as the propaganda advantage has always outweighed adherence to international law, especially by dominating sides of any conflict.

Defence Industry

Korea Signs $400 Million Contract with Turkey on Transfer of Tank Technology

The Defense Acquisition Program Administration said Wednesday (July 30) that Korea has signed a $400 million deal with Turkey to help develop a new tank by 2015, using over 50 percent of Korea's indigenous technology on the armored vehicle.

The deal was signed between Korean tank manufacturer Hyundai Rotem and Turkish carmaker Otokar in a ceremony attended by Korean Defense Minister Lee Sang-hee and Turkish Prime Minister Recep Tayyip Erdogan in Ankara.

The contract also includes the transfer of technology owned by Korea's state developer, the Agency for Defense Development (ADD), according to the Korean defense procurement office.

The contract is very significant in that Korea is now exporting not only defense goods, but also defense technology, the defense procurement office said in a media release.

Korea competed against Germany for the $400 million project to help develop Turkey's new main battle tank, which will be the country's first-ever indigenous tank, according to the defense procurement office. Turkey plans to produce some 200 units of the next generation tank, provisionally named Turkey National Main Battle Tank, upon completion of its development.

Turkey is one of the largest purchasers of Korean defense articles and is set to buy some $100 million worth of weapons, including 155mm self-propelled artillery, from Korea this year alone, according to the defense procurement office.

Korea developed its first indigenous tank, the K-1, in 1988 and is set to replace the main battle tank with the next generation K-2 tanks starting 2010.

Seoul exported some $850 million worth of defense articles last year, with the export expected to grow to over $1 billion this year for the first time in history, the defense procurement office said in the media release.

Korean press reports say that South Korea will transfer key technologies regarding engine, gunnery and snorkeling systems to Turkey, which initially wants to build about 250 advanced main battle tanks, totaling about 60% of the technology required to build the Turkish tanks. Turkey will develop a fire control system on its own.

Korea’s $400 million technology transfer fee includes production costs for four prototype tanks and components, and expenses for about 20 Korean engineers seconded to Turkey for the program.