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Contracts

Australian Army Orders 214 Additional Thales Bushmaster Vehicles

Thales Australia has welcomed the Australian Government's announcement Jul. 3 that it will purchase an additional 214 Bushmaster vehicles for the Australian Army.

Thales Australia CEO Chris Jenkins said the announcement was a tremendous expression of confidence in the vehicle, and in the ability of Australian industry to deliver life-saving capability to the Australian Defence Force.

"Bushmaster vehicles are proving their worth every day in Afghanistan under some of the harshest conditions imaginable. The vehicle's life-saving design, off road mobility and reliability have made it a mainstay of Australian operations", said Chris Jenkins.

Facts about the Bushmaster vehicle:

- Over 800 vehicles on order and in-service with the Australian and Netherlands Armies
- A highly mobile, ballistics, mine and improvised explosive device (IED) blast resistant Protected Mobility Vehicle.
- Fully supportive, energy absorbing seating provided for up to 10 soldiers including the driver in full air-conditioned comfort.
- 4x4 family of vehicles including patrol, command, ambulance, assault pioneer, direct fire support weapons and mortar vehicle variants and providing solutions for a wide variety of mission roles and applications.
- An additional variant: the Bushmaster Single Cab Utility to provide combat logistics support capability in a cab chassis type variant.
- Protection levels can be increased with upgrade kits and can be configured with various weapon systems, sighting and vision systems as well electronic architectures to aid to the vehicle mission performance.
- Deployed to Timor, Afghanistan and Iraq; in service with the Australian and Netherlands Armies

Defence Industry

Thales to Supply Solutions for the Norwegian Armed Forces' CV90 Vehicle Upgrade

Oslo -- Thales Norway will deliver communication, security and soldier integration solutions for the CV90 upgrade programme as part of a Norwegian team lead by Kongsberg.

The team, including Kongsberg, Thales Norway and Vinghшg, will supply combat systems for military vehicles to BAE Systems. BAE Systems, Sweden, is the main supplier to the Norwegian Army's upgrade programme of the CV90 infantry fighting vehicle.

Norwegian industry has a key role in the modernization of the CV90. Kongsberg Defence & Aerospace, Thales Norway and Vinghшg are major subcontractors in areas such as computers, communications and armaments. "We have agreed to structure the industrial cooperation in such a way that it strengthens the capacity of Norwegian industry to both develop and manufacture systems within key technology sectors that remain important to the Norwegian Armed Forces", concludes State Secretary Ingebrigtsen in a Ministry of Defence press release.

Thales will deliver communication solutions based on the well proven communication node, SOTAS, enabling on-board voice communication (intercom) and easy access to external communication networks.

Thales will act as a Trusted Security Advisor for BAE Systems with a holistic approach to security. Security solutions feature the TCE 621/M new mobile IP encryption device for the tactical domain as well as a Trusted Security Filter for separation of networks operating at different security levels.

Thales will support in integration of the NORMANS future soldier system with the CV90 vehicle systems, allowing quick and seamless change between mounted and dismounted operations.

"Providing information, communication and security systems and solutions for vehicle installations has been a focus area for Thales for years. We are proud to be part of the CV 90 upgrade programme, and we are looking forward to continuing the close collaboration with BAE Systems, Kongsberg, Vinghшg and other Norwegian industrial players in order to provide solutions that improves operational effectiveness", says CEO of Thales Norway, Glenn Pedersen.

Defence Industry

TenCate Advanced Armour supplies armour to QinetiQ for another 100 Foxhounds

TenCate Advanced Armour has been selected by QinetiQ as the supplier of armour for the Foxhound LPPV 4x4 military vehicle. Initial production of 200 vehicles has been followed by an order of a further 100 vehicles to be delivered by General Dynamics

European Land Systems, Force Protection Europe, to the UK Ministry of Defence. No financial details will be published.

The Foxhound has been designed to provide unprecedented levels of blast protection for a vehicle of its size, and will be able to carry up to six military people. It provides the highest levels of survivability available anywhere in the world for this size and class of vehicle by protecting both the occupants and key automotive components, providing enhanced mobility and blast survivability to troops operating in urban environments.

Mr. Ian Dunbavand, Commercial Director Military Sales, TenCate Advanced Armour states: "For TenCate, this order underlines our dedicated capability to supply and support the prime contractors as a high-capacity, high-quality supplier. We understand the importance of quality and on-time deliveries, and we are pleased to be selected by QinetiQ for this vehicle, thereby providing protection for British troops in Afghanistan".

TenCate has worked closely with QinetiQ to ensure that the lightweight, high-performance yet cost effective armour design generated by QinetiQ is manufactured to the highest standards and hence represents value for money for this highly significant MoD programme. TenCate Advanced Armour is a global provider of customised, lightweight ballistic protection solutions for the complete range of requirements, from personal protection through all vehicle, helicopter and aircraft applications up to and including principal warships.

Defence Industry

Armoured SISU 8x8 Fire Truck brings extinguishing operations to new level

Finnish Defence Forces have recently introduced a new flagship for fire extinguishing and rescue operations, an armoured SISU 8x8 fire fighting vehicle.

The design for the new extinguishing concept started five years ago. The result, an impressive thirty-ton vehicle is now undergoing field tests, during which the performance of the vehicle is demonstrated in connection with e.g. live firing exercises. The field tests of the new extinguishing concept are scheduled to be succeeded by serial production from 2013 onwards.

The vehicle carries a 10-ton extinguisher container, which can be quickly decoupled from its eight-wheel carrier. Further to the comprehensive decoupling feature, the essential properties of the new fire-fighting vehicle include remote control system for the extinguisher, and high protection level for the crew.

- A video camera, and a thermal camera located on cabin roof of the vehicle transmit an image to the control panel screen inside the cabin. Water cannon can thus be remote controlled from the cabin. The crew does not need to leave the vehicle cabin, but all the operations can be carried out with protection against smoke, fire and explosions comment rescue chiefs Jukka Ндмдlдinen and Raimo Toppi from the Finnish Defence Forces in article published earlier on Forces' web page.

Cabin of the SISU 8x8 fire-fighting truck is NBC protected, providing protection against the potentially dangerous aerosols on the field during the operations. The SISU 8x8 military truck has also advanced mine- and ballistic protection features. The mine- and ballistic protection of the vehicle meets with the criteria of STANAG 4569 standard, and the related properties have been tested and proven in live tests in co-operation with the Finnish Defence Forces.

In addition to the newly introduced fire extinguisher variant, the versatile SISU 8x8 military truck currently is in service also, for example, as missile launcher vehicles, radar carrier vehicles and recovery vehicles. The generous available payload and the advanced armouring solutions in connection with the outstanding off-road mobility together make the SISU 8x8 as a preferred answer to various performance requirements in the field of military logistics.

Contracts

Denel Signs R3.5 Billion Manufacturing Deal With Malaysia

Denel has signed a Euro 340 million (R3.5 billion) contract with Malaysia to supply a range of turret and integrated weapon systems to be fitted onto 8X8 armoured vehicles.

Zwelakhe Ntshepe, the Group Executive Business Development and Corporate Affairs of Denel, says this is the largest export contract in the company's history and will result in a significant cash injection and job creation in the local industry.

The turrets will be exported to Malaysia over a seven year period – with the first consignment ready for delivery in January 2013.

Mr Ntshepe says the final negotiations with Malaysia were concluded at the recent Defence Services Asia Exhibition held in Kuala Lumpur, together with our local partners DRB-Hicom (Deftech), our partner in Malaysia.

The CEO of Denel Land Systems (DLS), Stephan Burger, says his company will be responsible for a number of strategic components that have been designed and developed at its campus in Lyttelton:

- 69 x two man turrets fitted with the South African GI30 30mm main gun.
- 54 x missile turrets equipped with the GI30 30mm gun and South African Ingwe anti-tank missile system. The order also includes the supply of 216 laser-guided Ingwe missiles manufactured by Denel Dynamics.
- 54 x Remote control weapons systems.

Mr Burger says the production of the first consignment of turrets is on schedule and will be

delivered in January 2013 for trials by the Malaysian Army.

The turrets and weapon systems will be integrated on the Malaysian Army's 8 X 8 vehicles which are based on the Pars armoured vehicle platforms from the Turkish company, FNSS.

Through the contract Denel is participating in the Malaysian Economic Enhancement programme which entails the production and assembly of the turrets in Malaysia. The agreement provides a platform to transfer weapon system integration technology to Deftech in order to create a sustainable capability in Malaysia.

Mr Burger says the contract opens the door to future industry cooperation between the two countries including on-going maintenance and future upgrades of the turrets.

Mr Ntshepe says the manufacturing of the turret systems grew out of DLS's development of the Badger infantry combat vehicle on behalf of the South African Army. The Badger meets the requirements of a modern army involved in both high-intensity warfare and peacekeeping operations and will replace the 30-year old Ratel as the mainstay of the mechanised infantry force.

The Malaysian contract strengthens DLS's reputation as a strategic hub of innovation and advanced manufacturing capabilities on the African continent. It will enable the company to retain skilled and highly-skilled engineers and artisans and attract a new generations of innovators.

Denel Land Systems, a company in the Denel SOC group is a defence system house for landward mobility and firepower solutions. Its primary focus is to provide products to the SANDF but it also serves international customers as a technology partner, system integrator and subsystem supplier.

DLS is best known for its development of the G5 (towed) and G6 (self-propelled) guns, the world's leading 155 mm artillery systems. The G5 is currently in service in Malaysia.

Mr Burger says DLS "has a unique balance of technologies and engineering capabilities," to take complex systems or products through their entire lifecycle, from conceptualisation to production.

Riaz Saloojee, the Group Chief Executive says "I am excited by this contract as it confirms Denel's position as a global player in the defence manufacturing industry and will lead to a growing interest from the international community in the quality and range of products and services produced by us."

Defence Industry

AT Portable Data Terminal Arabic Version (PDTA) and Portable Tactical Printer (PTP)

AT Electronic and Communication International Ltd., announces the availability of the AT PDTA Arabic Version Portable Data Terminal.

The AT PDTA Arabic Version Portable Data Terminal is a messaging terminal that provides error free transmission of Arabic text based messages using HF/VHF/UHF radios or by or via field cable or phone network. The PDTA is suited to tactical applications where secure text messaging is required in an easy to use point to point format. The PDTA has a fully integrated software and radio modem and does not require a PC or modem with complex wiring and software.

The PDTA can be upgraded with a GPS receiver to send and receive GPS position. The PDTA is enclosed in a rugged, waterproof cast aluminium case designed to withstand harsh environments. The PDTA can be complemented wih a (PTP) Portable Tactical Printer.

For further information on the AT Portable Data Terminal Arabic Version – please visit this link

http://encryption-product.at-communication.com/en/at/at_portable_data_terminal_arabic_version.html

Robots

iRobot Receives $7.7 M Order from the US Navy

iRobot Corp., a leader in delivering robotic technology-based solutions, has received a $7.7 million order from the Naval Sea Systems Command (NAVSEA) for robot upgrades.

The order calls for iRobot Aware® 2 software upgrades and the delivery of advanced sensor suites for 248 fielded Man Transportable Robotic System (MTRS) MK 1 MOD 1 robots. MTRS MK 1 MOD 1 is modeled after the iRobot 510 PackBot®. The company expects to complete these deliveries by November 2012.

Sensor suites include the iWARVVS (iRobot Wide-Angle Robot Vehicle Vision System) camera,

thermal camera and iRobot's User Assist Package (UAP). The cameras provide greater situational awareness through increased fields of view and imaging in low light environments. iRobot's UAP adds improvements to the operator control unit, GPS mapping and critical semi-autonomous features to 510 PackBot, including self-righting, retro-traverse and heading hold. These capabilities speed up operations and reduce workload for the operator, letting them focus on successful completion of the mission.

"iRobot is pleased the Navy is continuing to invest in its current fleet of robots. These upgrades will provide our troops with some of the most advanced, life-saving robotic technologies available today," said Tim Trainer, interim general manager of iRobot's Defense & Security business unit. "iRobot's UAP improves mission effectiveness while reducing workload and further minimizing operator exposure to dangerous environments."

iRobot has delivered more than 4,500 robots to military and civil defense forces worldwide. They are used to perform search, reconnaissance, bomb disposal and other dangerous missions.

Defence Industry

Stryker units in Afghanistan now equipped with precision mortars

PICATINNY ARSENAL, N.J. -- The first-ever Accelerated Precision Mortar Initiative round fired from a Stryker vehicle in Afghanistan accomplished what few conventional 120mm high-explosive mortars can achieve: a direct hit on a target with the first round fired.

But when firing the Army's new precision-guided cartridges, this is the standard.

First fielded to dismounted troops in Afghanistan last April, Picatinny's Program Executive Office for Ammunition is now fielding the 120 mm precision rounds to Stryker Brigade Combat Teams.

While Accelerated Precision Mortar Initiative, or APMI, will not replace standard 120 mm mortars, its accuracy will allow a commander the ability to defeat a target with precision if there is danger of collateral damage.

APMI will be fired from the Army's new Stryker Double-V Hull Mortar Carrier Vehicle, or MCVV. The Stryker MCVV is used to provide high-angle mortar fire to support operations in complex terrain and urban environments. It now can fire APMI precision-guided mortars as well as conventional 120mm rounds.

"Integration of APMI into the Stryker platform gives the troops greater flexibility and increased maneuverability," explained Ted Hom, APMI product director.

The dismounted 120 mm mortar systems in Afghanistan are often kept at mortar positions in Forward Operation Bases and Combat Outposts throughout the country. Now that APMI has been integrated with a mobile platform, the battle space where the APMI round can be used has increased.

Hom said that when fired from Stryker, APMI will "have the same precision, but on a platform that can easily go wherever needed."

With APMI's pinpoint accuracy and the Stryker MCVV's survivability against improvised explosive devices,known as IEDs, maneuver commanders now have a very accurate weapon against insurgents.

The APMI cartridge has a requirement of 10 meters CEP, or Circular Error Probable. APMI combat rounds fired in Afghanistan are exceeding the requirement, Hom said.

Ten meters CEP means that if you drew a circle around a target at 10 meters radius, the rounds have to fall inside the circle 50 percent of the time.

TRAINING THE SOLDIERS

PEO Ammunition's Product Manager for Guided Precision Munitions and Mortar Systems, or PdM GPM2S, conducted the first Stryker MCVV combined training and live-fire exercise in June with an infantry division of the 3-2 Stryker Brigade Combat Team, higher headquarters 5-20 Infantry and B Troop 1-14 Cavalry, who are currently supporting an Airborne Brigade Combat Team in Afghanistan.

"The biggest thing for us is that this is the first time maneuver commanders will have an incredibly accurate munition that is perfect for the targets we see in our area of operation, such as IED emplacers, historic Taliban fighting positions, and enemies close to troops in the open," explained 1st Lt. Eric Birdsley.

"Our responsiveness to threats is greatly increased because commanders can approve the use of this capability," Birdsley added. "Also, due to the small battle space in our AO (Area of Operation) the ability to shoot APMI at closer ranges than the Excalibur gives us a close-range precision capability we did not previously have."

Many Soldiers who attended the initial training said they were impressed by the performance of the round, especially since many of them had never seen a direct hit on a target.

"After today's successful live fire, we are really impressed with the APMI system," said Platoon Leader 1st Lt. Brian McGillivray.

"The first round effect it brings alleviates any concerns with accuracy of mortars," McGillivary said. "As long as we follow proper procedures, we can pretty much hit anything. Now that this live fire has demonstrated APMI's ability to get a first-round effects of the target, our brigade can start relying on the round."

The research, development and integration of APMI onto Stryker is a collaboration of PEO Ammunition, the Armament Research, Development and Engineering Center, Joint Munitions Command and Project Manager Stryker Brigade Combat Team.

By Audra Calloway and Breanna Merenda

Contracts

United Arab Emirates Orders MRAP All-Terrain Vehicles from Oshkosh Corporation

Oshkosh, Wis. -- Oshkosh Corporation announced today that the Company's Defense segment has been awarded a contract to provide the United Arab Emirates (UAE) Armed Forces with 750 Mine Resistant Ambush Protected All-Terrain Vehicles (M-ATVs).

The Oshkosh M-ATVs will enhance the UAE's ground operations by providing greater off-road mobility and crew protection to support national security, as well as critical missions related to the security of the Middle East and the broader community of nations.

The contract awarded to Oshkosh Corporation allows for additional vehicles to be ordered at the discretion of the customer. Oshkosh is scheduled to deliver M-ATVs to the UAE between January and August 2013, pending standard regulatory requirements.

"The UAE continues to expand its role, in partnership with its allies including the United States, in regional security and peace-keeping operations," said John Urias, executive vice president, Oshkosh Corporation and president, Oshkosh Defense. "The UAE is central to our international growth strategy, and we are honored that they have selected the Oshkosh M-ATV to support their missions."

"The M-ATV provides the industry's highest levels of protection and performance," said Serge Buchakjian, senior vice president and general manager of International Programs, Oshkosh Defense. "No vehicle has been more effective in supporting ground operations – from urban security patrols to combat in harsh desert and mountainous terrain. As we produce and deliver this exceptional vehicle to the UAE Armed Forces, we are equally committed to providing long-term service and to supporting those who rely on our M-ATVs to achieve their missions."

To date, Oshkosh has received delivery orders for more than 9,500 M-ATVs.

Prior to this M-ATV order, the Company also produced the Oshkosh Global Heavy Equipment Transporter (HET) and Oshkosh Heavy Expanded Mobility Tactical Truck (HEMTT) A4 for international customers. The Global HET features a powerful 700-horsepower engine and is able to transport a main battle tank, armored vehicles, construction equipment and more, reducing the wear on equipment and crew fatigue that typically occurs over long distances. The Oshkosh HEMTT A4 variants including the Patriot tractor, wrecker, and guided missile transporter are also part of the Patriot Advanced Capability (PAC)-3 missile system.

Contracts

Navistar Defence Canada To Support Royal Canadian Mounted Police With Armoured Vehicles

OTTAWA, Ontario -- Navistar Defence Canada, Inc., a wholly owned subsidiary of Navistar Defense, LLC, today announced that it delivered on a USD $14 million contract from the Government of Canada to supply the Royal Canadian Mounted Police (RCMP) with International® MXT™ Armoured Personnel Carriers (APCs).

The new vehicles will provide increased protection and rescue capabilities for RCMP officers and members of the public during high-risk situations. The contract to support the RCMP is the company's first MXT vehicle sale to the police and security sector.

"The RCMP is well regarded throughout the world as a top police service and we are honored to have been selected to provide MXT vehicles," said Dan Webster, president, Navistar Defence Canada. "Navistar proudly supports allied military forces overseas and now we are taking steps to help security forces serve and protect here at home. In addition, this award supports the product diversification goals of our parent company."

The RCMP is unique as it serves as a national, federal, provincial and municipal policing body. The RCMP provides policing services to three territories, eight provinces (except Ontario and Quebec), more than 150 municipalities and more than 600 Aboriginal communities. In addition, the RCMP provides federal policing services to all Canadians.

Navistar has used its manufacturing and engineering flexibility to customize MXT APC units to meet the RCMP's specialized needs. The proven MXT platform is currently in operation in Afghanistan with the British

Army. The vehicle has demonstrated exceptional survivability and off road performance in theater in all environmental conditions.

Vehicles were produced in West Point, Miss., which is home to the MXT assembly line, and have been delivered. Navistar will also offer fleet support through its extensive Canadian dealer network.

Navistar International Corporation is a holding company whose subsidiaries and affiliates produce International® brand commercial and military trucks, MaxxForce® brand diesel engines, IC Bus™ brand school and commercial buses, Monaco® RV brands of recreational vehicles, and Workhorse® brand chassis for motor homes and step vans. It also is a private-label designer and manufacturer of diesel engines for the pickup truck, van and SUV markets. The company also provides truck and diesel engine service parts. Another affiliate offers financing services.

Defence Industry

Codan Partner Award

Codan Partner AwardAT Electronic and Communication International Ltd (AT) is pleased to have received the prestigious "Codan Partner Award" 2012 for outstanding contribution.

2012 has been an outstanding year for AT with recent contract awards of a $20m+ for Border Security Government Agencies in Central Asia.

Defence Industry

BTR-4E: Ukraine Takes Leading Positions in Modern Light Armor Vehicles Market

KYIV, Ukraine -- The Ukrainian Armed Forces have put into service the modern Ukrainian armored personnel carrier BTR-4E under the Order of the Ukrainian Defense Minister Dmytro Salamatin.

Kharkiv Morozov Machine Building Design Bureau in cooperation with national defense enterprises has designed and manufactured BTR-4E.

The Ukrainian Armed Forces got a new up-to-date weapon system technically comparable with its foreign analogues, while its fire potential is even better.

Mass production of this vehicle will help Ukraine to take the leading positions in the world market of light armor wheeled vehicles.

"Our national designers and Ministry of Defense specialists did a lot of job. We have developed a completely new system, breaking classical traditions of tank building. It's a basis for future development of different modifications of this armament," Andriy Artyushenko, Director of Department of Development and Acquisition of Armament and Military Equipment, commented.

He mentioned that BTR-4E armament included 30-mm automatic gun ZTM-1, antitank missile, grenade launcher KBA-117, machine-gun, and other armament manufactured by Ukrainian enterprises. This armament is integrated in a single system of fire control.

"This vehicle proves capabilities of Ukraine to be a manufacturer of high technological and knowledge-based product and ensures possibility to activate defense industries, as well as create additional employment," Dmytro Salamatin said.

According to the Ukrainian Defense Minister, thanks to BTR-4E Ukraine shall not import these vehicles and even may export them to world markets augmenting the state budget.

Defence Industry

3G ALE Codan 2110M Military HF Radio

AT Electronic and Communication International Pty Ltd is pleased to announce 3G ALE Waveform for 2110M Military High Frequency Radios.

Codan 2110M 3G ALE WaveformThe waveform is

based on the Standard NATO Agreement (STANAG 4538) and is available as an option for the Codan's 2110M series HF man pack radio. The (3G) automatic link establishment (ALE) supports enhanced data throughput and linking performance over noisy HF Skywave channels. Integration of the ALE linking protocol and the data transport mechanism provides effective increased data throughput and shorter linking times in difficult HF conditions.

The Codan 2110M manpack is still the lightest HF manpack available, and features the longest battery life. It already offers embedded MIL-STD high-speed data, second generation automatic link establishment, frequency hopping, encryption, and GPS. The addition of 3G ALE capability makes it best value HF manpack available today.

To fully exploit the capabilities of 3G ALE waveform, AT Electronic and Communication International Ltd will offer a software applications suite enabling end user benefits such as email, messaging and situational awareness, enhanced by the benefits of the high performance low-latency waveform.

For further information, please don't hesitate to contact AT Electronic and Communication International Ltd.

Defence Industry

Sagem And Thales Create Optronics Joint Venture, OPTROLEAD

Sagem (Safran group) and Thales have announced the creation of OPTROLEAD, an equally-owned joint venture for optronics. The official signature creating the new company follows the original Memorandum of Understanding signed on December 20, 2011.

OPTROLEAD will be responsible for the sale of future optronic systems, especially for defense applications.

The new company is staking out a position in several major programs, including the optronic payload for the planned upgrade of the French navy's Atlantique 2 (ATL2) maritime patrol aircraft, the imaging system for the future French-British MALE (medium-altitude, long-endurance) drone, modular optronic systems for army combat vehicles, and optronics for tomorrow's helicopters.

The legal documents for the new entity were signed on July 18 by Philippe Petitcolin, Chairman and CEO of Sagem, and Serge Adrian, Chairman and CEO of Thales Optronique SA.

"We have taken an important step forward in consolidating and enhancing synergies within the French optronics industry," said Serge Adrian. "Our new company OPTROLEAD will effectively combine the leading areas of expertise of its two parent companies."

"OPTROLEAD is already capable of coordinating contracts directly with customers of Sagem and Thales," added Philippe Petitcolin. "For example, the ATL2 upgrade program could well be the first concrete application for this new entity."

Emmanuel de Roquefeuil of Thales was named Chairman of the new company, with Albert Levionnois of Sagem as Chief Executive Officer.

Army

US Army plans major Stryker upgrades

Army engineers are designing and implementing important Stryker vehicles upgrades. The efforts are focused on technologies that will provide the platform a stronger engine, improved suspension, more on-board electrical power and next-generation networking and computing technology.

The Army's more than 4,187 Stryker fleet includes 10 variants of the flat-bottom platform and an additional seven variants of the double V-hull design. The Stryker fleet continues to maintain an overall readiness availability rate of more than 96 percent in Afghanistan and throughout that region, Army officials said.

"We're taking a leap forward to bring this platform to where it will benefit the Army for years to come," said Steven Campbell, Army systems coordinator, Stryker.

Phase 1 of the Stryker ECPs, or engineering change proposal, will lead to a preliminary design review and the construction of a demonstrator vehicle sometime next summer. Phase 1 includes a series of key improvements to the platform designed to, among other things, improve the overall performance of the Stryker, computing and on-board electronics capabilities.

The thrust of Phase 1 includes an electrical power upgrade designed to replace the current Stryker's 570 amp alternator with a more powerful 910 amp alternator and an engine upgrade replacing the existing 350 horsepower engine with a stronger, 450 horsepower engine. The new engine is a commercial-off-the-shelf item.

"We're using a Caterpillar C9 engine, a mature technology already in use. We will package this to fit inside the engine compartment and provide enough cooling for it to operate effectively," said Lt. Col. Jim Schirmer, product manager, Stryker.

The Stryker ECP also includes a stronger suspension that will improve vehicle mobility at higher weights and an in-vehicle network, giving the platform a "digital backbone" able to improve data and video sharing between crew stations in the vehicle, Schirmer said.

The in-vehicle network will include a managed switch, intelligent software, display screens, and processing units, which will allow secure and reliable data-sharing between the systems on-board the vehicle. This will also

reduce the size, weight, and power consumption requirements of the future systems integration of the components on the vehicle platform.

"For example, data and video from the driver's thermal viewer, odometer readings, Blue Force Tracker, One-System-Remote Video Terminals and screens which show weapons and targeting-related information will all be shared seamlessly across the various workstations," Schirmer explained. "We have already started some of the early software development for this."

The in-vehicle network approach is grounded in "open architecture," meaning that information technology systems and electronics will all be built to a common set of technical standards ensuring maximum interoperability. This set of standards, referred to as VICTORY, will enable a single computer or system to run a host of interoperable applications and functions. With the VICTORY architecture, the vehicle will be able to streamline and more easily exchange and transmit information while ensuring that the maximum number of programs and applications are possible on any given computer or display screen.

These areas of improvement for the Stryker are now being examined as part of an ongoing cost-benefit analysis slated for completion later this year.

"The Army's cost-benefit analysis will look closely at these four technology areas and determine the best way to get the most efficiency out of the dollars available to improve the platform. We want to make sure that we capture what we need to do, and do so within fiscal reality and other Army priorities," said Norman Stuckey, Army systems coordinator, Stryker.

The Strykers receiving the ECPs will be better equipped to receive a host of new networking gear already being outfitted on vehicle platforms, including Warfighter Information Network - Tactical, a mobile Satcom and radio network and a next-generation force tracking application called Joint Battle Command - Platform, among other things.