

Army Guide monthly



4 (139) April 2016

- **BAE Awarded Contract to Refurbish CV90 Vehicles for Sweden**
- **Tata Motors bags additional order for 619 nos. of 6 X 6 HIGH-MOBILITY VEHICLES, from Indian Army**
- **BAE Systems to Produce Assault Amphibious Vehicles for Japan**
- **WFEL receives UK MoD contract**
- **AT Communication International establishes US Headquarters in Rochester, New York**
- **Optex Systems Receives \$841,000 in Initial Orders for Its Advanced Laser Protected Periscopes**
- **BAE Awarded \$109 M to Convert M88 Recovery Vehicles for US Army**



Contracts

BAE Awarded Contract to Refurbish CV90 Vehicles for Sweden



The Swedish government has awarded BAE Systems a contract to refurbish 262 Combat Vehicles 90 (CV90) for the Swedish Army. The company's work will include refurbishing the chassis and upgrading the vehicle's survivability and turrets, as well as enhancing combat system performance. Together, these efforts will help increase the vehicles' lifespan in support of Army capabilities.

"This is a very important program for BAE Systems and the Swedish Army," said Lena Gillström, managing director of BAE Systems Weapons Systems in Karlskoga, which builds the turrets. "With this refurbishment and the introduction of the new Battlefield Management System, these vehicles will take a step into the era of digitized defense to strengthen the Army's capability to meet future threats."

BAE Systems will work closely with the customer throughout the program. Work starts immediately with deliveries beginning in 2018 and running through 2020.

"For the Swedish Army, CV90 has proven its value and capability over the years," said Tommy Gustafsson-Rask, president of BAE Systems Högglunds AB in Gäddede. "CV90 is already in service in seven countries and now, with this refurbishment program, we'll further extend the CV90's contribution to Sweden's defense."

CV90 is a family of Swedish tracked combat vehicles designed by FMV, BAE Systems Högglunds, and BAE Systems Weapons Systems, with more than 4 million engineering hours contributing to the development of this advanced Infantry Fighting Vehicle (IFV). The Swedish version of the IFV is outfitted with a turret equipped with a 40 mm autocannon.

The Swedish Army has a fleet of 509 CV90s. Other countries currently using the vehicle are Norway, Denmark, Finland, Estonia, the Netherlands, and Switzerland.

The contract was awarded to HB Utveckling AB, a joint venture between BAE Systems Bofors AB, part of BAE Systems Weapons Systems, and BAE Systems Högglunds AB.

Contracts

Tata Motors bags additional order for 619 nos. of 6 X 6 HIGH-MOBILITY VEHICLES, from Indian Army

Tata Motors have signed a follow-on contract for the supply of an additional 619 units, of its high-mobility (HMV) 6X6 multi-axle truck, from the Indian Army. Being built with a material handling crane, the Tata 6X6 HMV is meant for the loading-unloading and transportation of ammunition pallets, spares and other operational equipment.



This is in conjunction, to an earlier order awarded to Tata Motors for 1239 units of its 6X6 High Mobility Vehicles, and is the single largest order awarded to an Indian private OEM (Original Equipment Manufacturers) in land systems by the Indian army, under the Indian Ministry of Defence DPP (Defence Procurement Procedure).

Developed indigenously, the Tata 6X6 high mobility all-terrain all-wheel drive vehicle, has demonstrated maximum performance in the most demanding conditions and is built on a capable platform for diverse tasks, utilizing Tata Motors state-of-the-art systems and aggregates. The vehicle has been designed to cope with extreme on or off-road loads and have gone through trials including deep water-fording, on cross country terrains and plains and put thru the VRDE's (Vehicle Research & Development Establishment) torture track.

Mr. Vernon Noronha, Vice President, Defence & Government Business, Tata Motors Limited said, "We at Tata Motors are extremely encouraged by the country's thrust towards 'indigenization', which not only helps strengthen the country's defence manufacturing base, but also emphasizes on cost effective maintenance, serviceability and upgradation of defence equipment. With this contract we are proud to have received an additional order for 619 units, of our indigenously developed Tata 6 X 6 high-mobility vehicle, having cleared rigorous trials and successfully competed against products from rival bidders, from top European and global defence companies, underlining the stringent requirements of the Indian army, and the global standards of our defence offerings. In line with the government's 'Make in India' initiative, we will continue to focus on further developing a comprehensive range of defence vehicles right here in India, including front line combat vehicles such as the FICV, to meet the evolving requirements of defence forces in India, and around the world."

The Tata 6X6 is designed for easy operability. The vehicle is easy to maintain, due to accessibility to its aggregates. The vehicles cabin is modular with HVAC (heating, ventilation, and air conditioning) and is fully-ready for up-armor.

High ground clearance enables the Tata 6X6 to better negotiate gradients, sand dunes, off-road terrains, and

trenches, with higher water & mud fording capabilities, whilst carrying designated military payloads. The vehicle is also fitted with a central tire inflation system (CTIS), allowing the driver to adjust the tyre pressure from his seat, for better traction on different surfaces, especially when carrying vital and heavy loads.

The vehicle is also capable of achieving sustained speeds of 40 kmph, on severe cross country terrains. The Self-Recovery Winch assists in extraction of the vehicle (including other vehicles in the convoy) during operations.

The Tata Motors 6X6 High-Mobility MAV can be customised for a wide range of applications such as –

- CGT (Common Gun Tower)
- MBRL (Multi Barrel Rocket Launcher)
- MFU (Missile Firing Unit)
- MSV (Missile Service Vehicle)
- FSV (Field Service Vehicle)
- SRSAM (Short Range Surface to Air Missile)
- QRSAM (Quick Reaction Surface to Air Missile) vehicle
- LLQRM (Low Level Quick Reaction Missile) vehicle
- MRV (Medium Recovery Vehicle)

The AAV7A1 RAM/RS variant provides a more powerful engine and drive train, as well as an upgraded suspension system, allowing the new vehicles to meet or exceed original AAV7A1 performance. The variant also provides improved mobility, command, control, and repair capabilities while transporting troops and cargo from ship to shore.

Work on the contract will take place at BAE Systems' York, Pennsylvania facility. Production is expected to begin in August with vehicle deliveries beginning one year later. Final delivery to Japan is expected to take place by the end of 2017.

Contracts

WFEL receives UK MoD contract



WFEL — manufacturer of rapidly-installed, mobile military bridges — has been awarded an initial contract by the UK MoD to undertake an Assessment Phase Programme, as part of the review to sustain the Heavy Forces Close Support Bridge (CSB) and General Support Bridge (GSB) capability, currently being provided by the BR90 system, to support UK forces out to 2040. A primary objective of this programme is to provide the Heavy Forces with an MLC 100 (Tracked) capability in order to support unrestricted crossing by UK Heavy Forces by 2022.

Under this two-year contract, WFEL — in conjunction with its parent company, KMW — will develop, determine and prove the capabilities of their mobile bridging systems against MoD user requirements. In addition to the already-proven system capabilities, extensive stress and fatigue testing will be carried out, to verify the MLC ratings and life expectancy of the different bridge types and allowing WFEL to incorporate current bridge fatigue and future Bridge Fatigue Management Systems.

The currently-available, off-the-shelf bridging solutions offered by WFEL include the DSB Dry Support Bridge (which can be fully deployed by just eight people and a single launch vehicle in under 90 minutes) which will be offered for the GSB requirement and also KMW's LEGUAN Bridge (whose fully-automatic, horizontal bridge-laying provides increased stealth with its low silhouette, during its five minute bridge launch), which will be adapted to be launched and recovered from the MoD's already in-service Titan armoured bridge launchers, to meet the CSB requirement.

Under this two year contract WFEL — in conjunction

Contracts

BAE Systems to Produce Assault Amphibious Vehicles for Japan



BAE Systems will produce Assault Amphibious Vehicles for the Japanese Ministry of Defense under a new \$149 million contract.

BAE Systems has been awarded a contract to produce new Assault Amphibious Vehicles (AAVs) for the Japanese Ministry of Defense.

This contract supports the ongoing development of an amphibious capability within the Japanese Ground Self Defense Force.

“We’re proud to support the Japanese military’s recapitalization by providing this enhanced amphibious capability,” said Dean Medland, vice president of programs at BAE Systems’ Combat Vehicles business. “As the original equipment manufacturer of the AAV fleet, we have a strong history of supporting this platform.”

BAE Systems will provide 30 new AAV7A1 Reliability, Availability, and Maintainability/Rebuild to Standard (RAM/RS) vehicles, plus supply tools and test equipment to support maintenance. The company will also provide training aids for the vehicles to the Japanese military.

with KMW — will demonstrate the capabilities of their mobile bridging systems against MoD user requirements, with particular emphasis on the systems' load carrying capability and overall durability. Enhancements to their existing bridge fatigue monitoring system, which help to determine the condition of the bridges, will also be evaluated.

Ian Wilson, WFEL's Managing Director, said, "Our Dry Support Bridge is one of the world's most technically-advanced, rapidly-deployable military bridges of its type. Over 130 systems have already been sold and it is in use with the US, Swiss and Turkish armed forces, having also been used as temporary infrastructure in Iraq and Afghanistan. The bridge has been designed and proven for use in both Military and Disaster Relief situations by loads of up to 120 tonnes.

"The DSB launch vehicle is available on the user's choice of chassis and its adoption by the Australian Defence Force this year onto Rheinmetall MAN Military Vehicles (RMMV) 10 x 10 fully-armoured chassis, further strengthens the DSB's market dominance and enhances the system's compatibility with the UK MOD's current fleet of RMMV vehicles, including the HX77 variant, which is already capable of carrying WFEL's bridge system without modification. This significant installed base of equipment, allied to a fully-operational production line, ensures that our customers have a high level of confidence in continued through-life support and spares availability."

Already adopted by 16 armed forces, the LEGUAN bridge system is outstanding in terms of modularity, interoperability and load-carrying capacity and is well suited to meet the UK's CSB requirement. Beyond its core ability to launch a bridge under any condition within minutes, the LEGUAN system provides additional features to enhance its tactical value, including night vision systems, laser range finder, an auxiliary power unit and crew compartment cooling system.

The LEGUAN can be used in Military or Disaster Relief operations and, for both MLC80 and MLC100 bridge types at either 26m or 14m length, a life-cycle monitor system and a civilian-use kit (consisting of centre cover plates and hand rails) is available.

Ian Wilson continued: "With the large user base of both of these bridging systems, and a growing demand for each, we believe that we offer a near off-the-shelf, low-risk solution to the UK's requirement, which will help to support the unrestricted movement of our Army and broaden its interoperability with other nations. This Assessment Programme allows the MoD to de-risk any future system procurement or upgrade route and to determine which bridging systems offer the most cost-effective solutions. We look forward to presenting our findings in due course."

Defence Industry

AT Communication International establishes US Headquarters in Rochester, New York

www.army-guide.com

Rochester, NY -- AT Communication International (AT Comm) today announced that it has expanded its global operations and has established its United States headquarters in Rochester, New York. The new headquarters and company, AT Communication US, Inc. enables closer support and assistance to the US Government and its other US customers to deliver critical military and security technology requirements to coalition partners.



"Based on our rapid market growth and expansion into the North American market, we made the decision to establish our US headquarters in Rochester, New York. Rochester is an excellent technology hub for the telecommunications industry and enables AT Comm to better serve its customers", said Alexander Teimurazov, chief executive officer, AT Communication International. "AT Comm is looking forward to establishing itself in Rochester and contributing to the local economy for many years to come."

The new U.S Headquarters contact details are as follows:

AT Communication US, Inc. 1173 Pittsford Victor Road, Pittsford, NY 14534

Phone: +1 585 348 9402

Mail: info@at-communication.com

About AT Communication US, Inc.

AT Communication US, Inc. is part of the AT Communication International group of companies and is an integrated solutions provider and manufacturer of products and systems for the commercial, defense and security markets. AT Comm's mission is to deliver award-winning solutions in infrastructure, communications, information technology and security systems.

AT Comm is a global corporation with operations in Europe, Asia, Africa, CIS, North America, South America and Asia-Pacific. Headquartered in Lucerne, Switzerland, AT Comm is backed by a direct sales and distribution network comprising resellers, distributors and agents. In addition, our extensive network and international service centers provide direct in-country and on-site technical support to our customers.

Defence Industry

Optex Systems Receives \$841,000 in Initial Orders for Its Advanced Laser Protected Periscopes

RICHARDSON, TX -- Optex Systems, Inc., a wholly owned subsidiary of Optex Systems Holdings, Inc., a leading manufacturer of optical sighting systems and assemblies for domestic and foreign militaries, today announced that it has received \$841,000 in

orders for its laser protected periscopes with an option for an additional \$841,000 from the U.S. Army Contracting Command.



Optex's periscopes will be installed in the Abrams U.S. military land vehicles, which are main battle tanks used by the U.S. Army. The Company's laser periscopes come with optional laser protection in both glass and plastic, to protect soldiers' eyes during battle.

"Optex is a market leader in military-grade optical products and this order further cements our relationship with the U.S. Army representing several compelling value propositions for the Company," said Danny Schoening, Optex's CEO. "This demonstrates the superiority of our military periscopes as a best value solution with world-class field performance. Through this established customer, we are able to expand our order base to provide a recurring revenue stream while strengthening our foothold in the market. We take pride in providing great optics solutions for our soldiers who are utilizing and maintaining the current Abrams fleet. We remain committed to our focus on development and innovation and anticipate many forthcoming purchase orders."

ABOUT OPTEX SYSTEMS

Optex, which was founded in 1987, is a Richardson, Texas based ISO 9001:2008 certified concern, which manufactures optical sighting systems and assemblies, primarily for Department of Defense (DOD) applications. Its products are installed on various types of U.S. military land vehicles, such as the Abrams and Bradley fighting vehicles, Light Armored and Armored Security Vehicles, and have been selected for installation on the Stryker family of vehicles. Optex also manufactures and delivers numerous periscope configurations, rifle and surveillance sights and night vision optical assemblies. Optex delivers its products both directly to the military services and to prime contractors.

The U.S. Army has awarded BAE Systems a contract modification worth \$109.7 million to convert 36 M88A1 recovery vehicles to the M88A2 Heavy Equipment Recovery Combat Utility Lift Evacuation Systems (HERCULES) configuration.

The conversions allow the M88A2s to recover the Army's heaviest vehicles, such as tanks, without the assistance of another vehicle.

"The HERCULES is an integral part of the Army's Armored Brigade Combat Team and is essential to its recovery missions," said John Tile, director of Recovery Programs at BAE Systems. "The ability to provide single-vehicle recovery for even the heaviest vehicles in today's fleet increases troop safety and provides significant cost savings to the Army."

The HERCULES, which provides recovery support to soldiers in the field, is the only vehicle able to recover the M1 Abrams tank and all of the vehicles required to maneuver with the Armored Brigade Combat Team in a combat environment.

The M88 also plays a critical role in the company's efforts to maintain the Combat Vehicle Industrial Base by supporting a team of highly skilled professionals and protecting the affordability of the Army's combat vehicles. The support of Congress and the Army to protect these vital capabilities through M88 conversions helps sustain the workforce at BAE Systems' facilities and its suppliers, and ensures they will be available to support essential future programs. As the M1 Abrams tank and other combat vehicles become heavier, further modernization of the M88 will be required to continue to provide single-vehicle recovery capability.

Work on the contract is expected to begin in August by the existing workforce and will take place primarily at the company's York, Pennsylvania, and Aiken, South Carolina, facilities. Deliveries will begin in November 2017 and continue through August 2018.

Contracts

BAE Awarded \$109 M to Convert M88 Recovery Vehicles for US Army

