Rheinmetall Submits BAFO to Australia

(jh) Rheinmetall has submitted the company's LYNX Infantry Fighting Vehicle (IFV) Best And Final Offer (BAFO) for the Australian Department of Defence LAND 400 Phase 3 Mounted Close Combat Capability tender. Rheinmetall is one of two contenders for this procurement project, the other being Hanwha Defense Australia, offering the REDBACK IFV.

Photo: euro-sd.com

Rheinmetall Defence Australia Managing Director, Gary Stewart said the LYNX is a next generation tracked, digitised and highly protected IFV offering a step-change in Army's capabilities. The company has developed the LYNX with a growth path to meet continually evolving military needs throughout its anticipated 40 year life, the company writes.

Submitting the BAFO represents the final deliverable of the two year Risk Management Activity (RMA) undertaken by the Department of Defence.

KATALYST – New Electronic Architecture for Combat Vehicles

(gwh) At the AUSA Annual Meeting, General Dynamics Landsystems (GDLS) unveiled its Next Generation Electronic Architecture (NGEA) designated KATALYST. The NGEA was presented integrated with a heavy unmanned combat vehicle serving as a demonstrator.

Image: GDLS

The increasing number of electronic and electrical devices for reconnaissance, communication, fire control, weapon systems and electronic warfare is constantly placing new and higher demands on the management of data and energy flows in combat vehicles. NATO has set a standard for this with the NATO Generic Vehicle Architecture (NGVA). The KATALYST Next Generation Electronic Architecture is based on the same Modular Open Systems Approach (MOSA) and is designed to meet NATO standards, GDLS said, pointing out that the KATALYST architecture offers scaleable and modular hardware and software for next generation capabilities on all future platforms and can serve as a basis for continuous modernisation to optimise performance, size, weight, power and cost (SWaP-C).

GDLS explained the concept of KATALYST by analogy with a mobile phone. KATALYST provides the electronic components and the operating system on the basis of which new applications for future capabilities can be implemented at any time with almost unlimited capacity. The hardware includes sensors, computer processors, standard I/O interfaces, Ethernet and CAN bus data exchange, and crew display. KATALYST is also capable of integrating other vehicle subsystems, such as active protection or defence from UAS, according to the company.

For the AUSA Annual Meeting, GDLS had presented a technology demonstrator with KATALYST architecture showing capability gains in all categories. The company stressed that mobility (obstacle avoidance, path planning), lethality (object detection, object identification/recognition, automatic target prioritisation) and survivability/reconnaissance (360-degree situational awareness, see-through armour, terrain analysis) were significantly improved.

KATALYST was developed with the OMFV programme in mind, with which the US Army intends to replace the BRADLEY infantry fighting vehicle. General Dynamics Land Systems has been selected for Phase II of the OMFV programme and is working with the US Army to develop the overall system requirements. In the next phase of the programme, from 2022, the company plans to build a prototype for the OMFV programme. Elements of the KATALYST NGEA are already integrated with several US Army and US Marine Corps prototype vehicles, GDLS said.

Product 305E – New Russian Airborne Missile

(yl) Recently procured Mil and Kamov combat helicopters are to be equipped with the new 305E multipurpose missile developed by the Kolomna-based KBM Design Bureau. The missile has been earmarked positioned as a main armament element for the Mi-28NM and Ka-52M aircraft. During the ARMY-2021 exhibition, the Russian MoD signed a contract with the Russian Helicopters (RH) holding for the delivery of 30

Photo: Laguk

modernised Ka-52M helicopters between 2022 and 2023. Simultaneously, Rostvertol was awarded a contract for 98 Mi-28NM helicopters by 2027.

The missile was advertised as combat proven and approved for export, which explains the letter «E» in the designation. It is designed according to the aerodynamic "duck" scheme, the rudders are located at the warhead, and the foldable wings at the tail part of the body.

According to data published by the manufacturer, the 305E missile has a weight of 105 kg, a length of 1945 mm, and a body diameter of 200 mm. The weight of the blast-fragmentation warhead is 25 kg. The solid-propellant engine provides a top speed of 250 m s, the flight range is said to be in excess of 14,500 m. During flight, the missile operates at altitudes between 100 and 600 m. Accordig to the company, the modular configuration allows for the use of different warheads.

For guidance, inertial guidance is combined with satellite navigation autonomous guidance controlled by the seeker with the option to involve a man-in-the-loop for the terminal phase of the trajectory. The missile is fired from the APU-305 launchers, designed for one or two missiles.

MANTIS Weapon Station Wins GOLDEN IDET 2021

(jh) Czech electro-optical systems developer EVPÚ Defence a.s. has announced that the company was awarded the GOLDEN IDET 2021 for the MANTIS RCWS, its new remote controlled weapon station for up to 12.7 mm calibre machine guns. The GOLDEN IDET is awarded by BVV Trade Fairs Brno, the organiser of the bi-annual IDET defence exhibition in Brno, Czech Republic, for the best

Photo: EVPÚ

exhibits presented at the trade fair. Competition categories cover military and security equipment, military and security communication and information technologies, military and security logistics and services, and training and preparation of military and police professionals.

MANTIS is a compact RCWS designed for machine guns up to 12.7 mm calibre. It is primarily intended for installation on armoured vehicles but, according to the company, its light weight and robust stabilisation allow installation on a variety of platforms including naval vessels. MANTIS enables 24/7 target detection, high precision firing and perimeter protection through the use of its electro-optical container with a full HD day camera, HD thermal imager, laser rangefinder and an optional aiming camera, the company says emphasising the system's stabilised design with four (2+2) axes in azimuth and elevation as the probably most significant element of innovation.

New Member of the LYNX Vehicle Family

(gwh) At Rheinmetall's Australian Military Vehicle Centre of Excellence (MILVEHCOE), the company has unveiled a new variant of the LYNX KF41 tracked vehicle. The LYNX Combat Support Vehicle (CSV) has been developed in Australia with the support of more than 100 industry partners.

The LYNX CSV is based on the LYNX IFV infantry fighting vehicle. The modular design of the basic vehicle was exploited to allow for the integration of components from a wide range of suppliers, as well as reconfiguration of the vehicle hull.

The CSV has been designed for combat vehicle recovery and repair tasks as well as mobility and logistics support. A five-tonne crane is mounted on the rear cover, which can be used for the recovery of vehicles or to move heavy loads. An auxiliary tank enables the supply of fuel to external consumers (field filling station). A clearing blade is mounted on the front that can be equipped with ripper teeth. For self-defence, the vehicle features a remote-controlled weapon station for machine guns up to 12.5 mm and a 40 mm grenade machine launcher.

Image: Rheinmetall

With the LYNX IFV, Rheinmetall is a contender in the Australian LAND 400 Phase 3 programme. A procurement decision for some 450 IFVs is expected in 2022. The Australian Army aims to achieve Initial Operating Capability (IOC) in 2024/25 and Full Operating Capability (FOC) by 2030/31.

Plasan Unveils ATeMM

(jh) At this year's AUSA Annual Meeting in Washington DC, Plasan unveiled the All-Terrain electric Mission Module (ATeMM) as a modular electric vehicle that can link to a legacy 4×4, providing 2,500 lbs of additional payload. Alternatively, two ATeMMs can be coupled forming a standalone 4×4 electric vehicle with 5,000lbs of mission payload capacity powered by a 74kWh battery pack and operated via remote control. Besides, the ATeMM-T is ready for autonomous control integration, the company says.

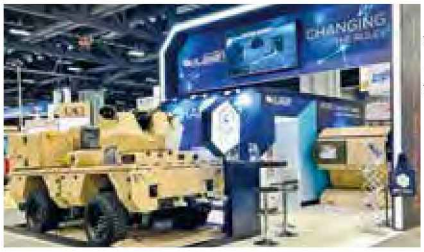

Photo: Plasan

Telerob to Supply Latvia with UGVs

(gwh) Telerob, which recently became a wholly owned subsidiary of AeroVironment, has been contracted by the Latvian Ministry of Defence to supply TELEMAX EVO HYBRID and tEODo EVO UGVs as well as technical support for the Latvian Armed Forces, AeroVironment announced at the end of September 2021. The multi-million euro order was placed in July 2021, and the agreed deliveries are to be completed this year.

Image: Telerob

AeroVironment describes the key features of the two UGVs as follows. The tEODor EVO is purpose-built for explosive ordnance disposal and disarming improvised explosive devices. The UGV features a 6-axis manipulator with telescopic reach, is heavy-lift capable (220 pounds/100 kilograms) and can precisely handle hazardous materials with a 12-inch (300 millimeter) gripper that features an integrated laser rangefinder, video input and data interface.

TELEMAX EVO HYBRID is a versatile UGV featuring compact dimensions and a strong lift capacity up to 82 pounds (37 kgs). It comes with a six axis precision manipulator with Tool Center Point Control to give operators humanlike control and a four track drive system with auto-levelling to easily handle multiple gradients, gaps and terrains.