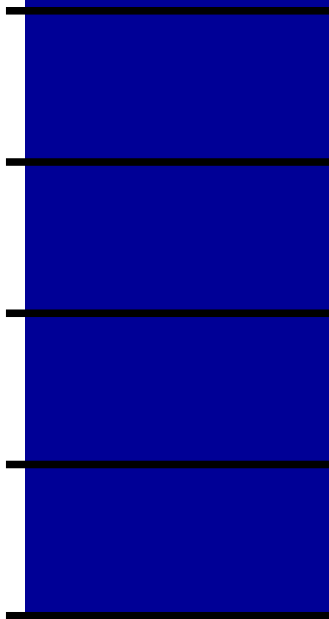


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Defence Industry

Oshkosh Defense Canada Delivers MSVS SMP Bid with Next-Generation Capabilities for Canadian Armed Forces



OTTAWA, Ontario -- The Canadian Government is taking important steps in modernizing its logistics vehicle fleet by advancing the Standard Military Pattern (SMP) component of the Medium Support Vehicle System (MSVS) project. Oshkosh Defense Canada, Inc., a subsidiary of Oshkosh Corporation, responded to the Government of Canada's MSVS SMP Request for Proposal (RFP), offering a high performance, low risk solution to meet the Canadian Department of National Defence's (DND) mission requirements and protect Canadian Soldiers for decades to come.

“Working closely with our Canadian industry partners and a growing network of Canadian suppliers, our Oshkosh MSVS SMP offering provides superior vehicle performance, sustainment across six continents, and ultimately, the best overall value for Canada,” said John Urias, Oshkosh Corporation executive vice president and president of Oshkosh Defense. “The Oshkosh MSVS SMP family of vehicles is the next generation of the world’s most trusted, battle-proven military platform in the field today. We are proud to present the Government of Canada with our MSVS SMP bid that meets or exceeds all project requirements, and most importantly, provides Canadian Soldiers with the modern logistics vehicles they need to perform their missions.”

The Best Value for Canada

Oshkosh, in collaboration with its Canadian team members and suppliers, will return 100 percent or more of the MSVS SMP contract value to the Canadian economy. Oshkosh’s strategic team members for the project include DEW Engineering and Development, General Dynamics Land Systems – Canada, and Link Suspensions of Canada – Raydan Division.

“Our MSVS SMP team aligns core Oshkosh design, production and sustainment strengths with Canada’s finest technology, manufacturing and services capabilities,” said John Lazar, senior director of Global Strategic Initiatives for Oshkosh Defense. “We are committed to supporting MSVS SMP and future Canadian vehicle modernization programs by working with companies across Canada and creating new economic value in the process.”

Exceptional Performance, Without the Risk

Oshkosh designed, extensively tested and built its MSVS SMP solution to bring the latest ground vehicle technologies to the Canadian Armed Forces. The Oshkosh MSVS SMP vehicles and trailers are built to

serve a full range of logistics missions from disaster recovery at home to major conflicts abroad. Key vehicle subsystems, including a high-performance drive train, advanced suspension and braking systems, and a state-of-the-art armour protection system, allow the Oshkosh MSVS SMP to achieve a 70 percent off-road mission profile and a 98 percent mission reliability rate – both of which will enable Canada’s ground forces to more safely operate in a vast array of threat levels, climates and terrains.

The Oshkosh MSVS SMP builds upon decades of in-theatre experience around the globe and more than one billion real-world operational kilometres accumulated on the Oshkosh Heavy Expanded Mobility Tactical Truck (HEMTT) platform. The acclaimed HEMTT platform is a purpose-built military vehicle that has been chosen by the United States Department of Defense and more than 20 allies worldwide – consistently outperforming commercial vehicle derivatives in competitive scenarios.

Canada’s MSVS SMP RFP also includes five years of In-Service Support (ISS). With Canadian troops more frequently mobilized around the world for defence and humanitarian missions, complete life cycle sustainment is increasingly important to ensure mission readiness.

The Oshkosh team’s ISS offering leverages decades of performance based contracting and major repair/overhaul programs experience to minimize MSVS SMP life cycle costs while maximizing reliability and readiness rates. “Our ISS plan is based on a robust global supply chain and a mature logistics system that spans six continents,” added Lazar. “By applying our logistics supportability analysis methodology to manage fleet health, Oshkosh has helped reduced military vehicle fleet life cycle costs as much as 70 percent.”



Defence Industry

KONGSBERG to deliver PROTECTOR RWS to the Irish Defence Forces



KONGSBERG has signed a contract for the delivery of PROTECTOR Remote Weapon Stations (RWS) for the Piranha III upgrade program in Ireland.

The Irish Defence Force is expected to upgrade its entire Piranha III fleet with PROTECTOR M151 systems over the next five years. This contract supports the first set of these upgrade and deliveries of the PROTECTOR are planned in September 2014.

The PROTECTOR RWS is designed for small and medium caliber weapons and can be installed on any type of platform. It is a fully stabilized and is a combat

proven system qualified for global operations. The PROTECTOR RWS protects military troops by allowing the vehicle's weapons to be operated from a protected position inside the vehicle. As of 2013 the PROTECTOR has been chosen by 17 nations and KONGSBERG continues to be the world's leading provider of Remote Weapon Stations.



Army

US, Canada partner to upgrade Canadian howitzer



The Canadian Royal Army has enlisted the help of Picatinny engineers to evaluate the life-span of their World War II-era C3 Howitzer.

"We are looking for engineering data that, unfortunately, we're missing right now," said Canadian Army Maj. David Lebel, Equipment Management team leader for Field Artillery Systems.

The C3 Howitzer is a 1950's technology that the Canadian Army is trying to keep in service for ten or 11 more years.

"The fleet is now about 60 years old, and after it was modified to fit Canadian needs, we didn't think at that time to have the contractor provide engineering data -- to check the rail forces or validate the forces that are applied to the structure, either while it's firing or while it's being towed," Lebel explained.

"Now that it's been around for 60 years, we're starting to experience a few cracks here and there, but we can't explain how these cracks are being made. We need to be able to find solutions without having to ground the fleet for a long amount of time."

The Canadian Army uses the C3 howitzers for training, although they use the 155 mm M777 in combat. The operation procedures for towed howitzers are similar, but 105 mm ammunition is cheaper than 155 mm ammunition.

"We take a lot of time to train before going into operations, so this reduces cost," Lebel said.

AVALANCHE CONTROL

In addition to training purposes, the C3 is also used for avalanche control in the snow-covered Canadian mountains.

"There's a stretch of highway in the (Canadian) Rockies called Rogers Pass, which is in Glacier National Park," Lebel explained.

"Because of the mountains' elevation, there's about 300 inches of snow during winter, and it's very prone to avalanches," Lebel said. "We've got a detachment from

the Royal Canadian Artillery with [C3 Howitzers] ready to support Parks Canada in managing the dangers on the main road of Roger's pass. Once Parks Canada gives us the go ahead, we shoot to stabilize the area, which means sometimes we do create an avalanche so that we can shovel the snow out."

DISCOVERING DEFICIENCIES

Picatinny's Program Executive Office Ammunition, known as PEO Ammo, employees, with help from Armament Research, Development and Engineering Center, or ARDEC, engineers, is conducting an analysis of the stresses of the C3 Howitzer in order to support the howitzer's life cycle, said Luke Helsel, ARDEC's C3 Evaluation team lead.

The team will conduct a series of tests over the next year to determine potential problems that could occur throughout the system.

"We're going to do analysis to help the Canadian Army find those problems in advance," said Helsel. "It helps them better predict areas to target for inspections or to perform upgrades. Sometimes that can be a challenge when looking at a design that was done years ago, and has no support from the original contractor."

The data packages for the howitzer are from the 1940s, and they have been updated through the 1980s, but there's no subject matter expert to refer to for questions.

"It's fascinating to look at the older style of design, and to see what we can do to support them maintain their fleet for the next couple of years," said Helsel. "Some of these slick things they did back then are good to look at now. The old design can inspire us for modern work and working on this project we can discover new analysis techniques that we can use here for the M119 or M777."

A gun was recently shipped to Aberdeen Proving Ground, Md., for mobility trials. In April, it will be transferred to Yuma Proving Ground, Ariz., for firing trials.

At Aberdeen, engineers will instrument the gun with strain gauges to measure the amount the metal is being pulled while towing the gun. The gun will also be towed around a series of courses over hills and other terrain while recording data from the gauges.

"Then, using that data, we can predict virtually what the strain is throughout the whole carriage," said Helsel. "After that, we can come back and figure out where we think the other high strain areas are and perform another test to confirm our analysis."

At Yuma, engineers will do similar testing while firing the howitzers at different elevations and azimuths.

"This will give us the engineering technical argument to pursue the direction we need to," Lebel said. "Hopefully, we'll be able to find a few simple, small fixes to extend the lifecycle without having to re-engineering big assemblies on the gun."

The Canadian Army currently has almost 100 deployed across Canada, and the process for replacing the howitzers with newer models could take up to two decades.

"We can't stop every unit from training six months

while we're scratching our heads trying to decide how to solve the problem. So by giving us the technical data that we're looking for, ARDEC is really making our job that much more easy either to do preventive maintenance that's much more accurate on potential failure locations. And should there be a failure, they'll be enough engineering data to put together a solution that won't take us four or five months to get to."

"At this point, we know there are problems, but I don't think there's going to be one solution to fix them all. We're gonna have to choose the problem that's the most risky and go about it in a deliberate fashion. But there could be many conclusions," Lebel said.

FRIENDLY RELATIONS

"The reason Canada came to us is that we have a great working relationship," said David Wong, Foreign Military Sales manager for PEO Ammo's Project Manager Towed Artillery Systems.

"Canada purchased 37 of our M777 155mm howitzers, so they know us and the capabilities and resources we have. This project extends the good working relationship we've had for seven years," Wong said.

In addition, the Department of National Defence, especially the Director of Armament Sustainment Program Management, has benefited on several aspects of howitzer maintenance and support from both Project Manager Towed Artillery Systems expertise and Picatinny's resources, Lebel added.

Picatinny also recently updated their M119 Howitzer fleet, which required similar data collection and engineering processes.

and will support them as they undergo rigorous government testing through this summer," said John Bryant, senior vice president of Defense Programs for Oshkosh Defense. "The Oshkosh P-19R will replace the fleet of Oshkosh P-19A ARFF vehicles, which were first fielded with the Marine Corps in 1984 and are reaching the end of their service lives. With this vehicle, we've rolled into one platform our decades of experience producing military and ARFF vehicles to give Marines more advanced firefighting capabilities."

The next-generation Oshkosh P-19R is based on the proven Oshkosh Logistics Vehicle System Replacement (LVSr) platform. It incorporates the latest tactical wheeled vehicle technologies to support fire emergency missions at military bases and expeditionary airfields.

The Oshkosh TAK-4® independent suspension system – today's gold standard for heavy, medium and light tactical wheeled vehicles that are required to operate off-road – gives Marines greater all-terrain performance for off-runway emergencies. The Oshkosh Command Zone™ integrated diagnostics and automation system helps crews carry out firefighting missions with increased situational awareness.

Oshkosh Defense leveraged the expertise of the Oshkosh Airport Products Group, the industry-leading ARFF vehicle producer, to equip the Oshkosh P-19R with the advanced Striker® firefighting systems. The P-19R also meets the modern requirements of the NFPA 414 standard, which sets the design, performance and acceptance criteria for ARFF vehicles.

Oshkosh Defense leadership will be available to discuss the P-19R and the company's broad portfolio of vehicles, technologies and services at Marine West at booth #8.

Defence Industry

U.S. Marine Corps Begins Testing Oshkosh Defense P-19R



Oshkosh exhibiting Marine Corps' new firefighting vehicle this week at Marine West

OSHKOSH, Wis. -- Oshkosh Defense, a division of Oshkosh Corporation, has delivered three Oshkosh P-19 Replacement Aircraft Rescue and Fire Fighting (ARFF) vehicle prototypes to the U.S. Marine Corps to undergo testing.

The Marine Corps selected the Oshkosh P-19R in May 2013 to serve as the Marines' off-road firefighting vehicle of the future. Oshkosh will display the P-19R at Marine West, Jan. 29-30, at Marine Corps Base Camp Pendleton, Calif.

"We delivered three P-19R prototypes in December

Exhibitions

Izhevsk Electromechanical Plant "Kupol" will take part in the International Exhibition DEFEKSPO INDIA-2014



JSC Izhevsk Electromechanical Plant Kupol (Izhevsk) being a part of Air Defence Concern Almaz-Antey will present on International land and naval security system exhibition DEFEXPO INDIA-2014 unique exhibit - full-scale specimen of modular SAMS TOR-M2KM on motor chassis TATA.

Video film which show the process of the combat use of SAMS Tor-M2KM on motor chassis TATA in the day and night time and video frames of group tests of SAMS on special motor running roads will be also presented.

International land and naval security system exhibition DEFEXPO INDIA-2014 will be held at Pragati Maidan exhibition complex in New Delhi, India from 6th to 9th of February 2014.

JSC IEMP Kupol will present full-scale specimen of modular SAMS TOR-M2KM on motor chassis TATA and independent training simulator for a commander and operator of combat vehicle.

SAMS TOR-M2KM with modular version of combat and technical facilities is the latest development of JSC Almaz-Antey Air Defence Concern and JSC Izhevsk Electromechanical Plant Kupol. It provides high reliability and effectiveness against active maneuvering air targets, gliding and guided aerial bombs, cruise, guided and antiradar missiles, unmanned aerial vehicles, aircrafts and helicopters. This system is equipped with computer facilities and modern radio stations that allow to detect and process up to 48 targets, simultaneously track up to 10 targets with the highest level of threat and provide simultaneous engagement of four targets. There is possibility to mount the ICM on roofs of buildings and constructions, on difficult to access areas, on trailers and semitrailers, on railway platforms and even on low-tonnage vessels, which can carry a load of more than 20 tonnes. Design of the module makes possible the transportation on external load of the helicopter MI-26T and its analogs.

The independent training simulator for a commander and operator is intended for training and exercising of the CV's crew how to detect, lock-on, track and hit the targets under jamming and non-jamming conditions and for supervision of the crew's operation. The simulator can be mounted on motor chassis, semitrailer of the appropriate carrying capacity or it can be immobile.

Models of SAMS TOR-M2E, SAMS Osa-AKM and independent combat module of SAMS TOR-M2KM will be presented on the exhibition.

Exposition of JSC Almaz-Antey Air Defence Concern will be placed on the pavilion 12 A, on the stands 12, 36. We invite you to visit this exhibition from 6th to 9th of February 2014, to get acquainted with new models of AD equipment, to see unique video frames of combat use of SAMS Tor-M2KM and to get consultation of our experts.

