Marine Corps Releases Solicitation for New Lightweight Hard Armor Plate

MARINE CORPS BASE QUANTICO, Va. – The Marine Corps has released a request for proposal for a lightweight hard armor plate to lighten the load for Marines and allow commanders to adapt to the environment, mission and level of threat on the battlefield.

In August, Marine Corps Systems Command (MSCS) assessed industry's capability to make a plate that would supplement the Enhanced Small Arms Protective Insert, or ESAPI plates, and provide sufficient protection for the majority of combat environments. MCSC's Program Manager Infantry Combat Equipment (PM ICE) held Industry Days on Oct. 17-18 and met with 12 companies to receive feedback on the draft solicitation documents.

Now MCSC is seeking proposals from industry for procurement of a maximum of 680,706 and a minimum of 60,000 lightweight plates. The lighter plates will give commanders more options to tailor Marines' ballistic protection to the environment, mission and threat.

"These new plates will be fielded in addition to the existing ESAPI plates," said Nick Pierce, Individual Armor Team lead in MCSC's PM ICE. "We expect the plates to be at least 38 percent lighter than the ESAPI which will significantly increase the mobility of Marines on the battlefield."

All proposals are due in March, and a contract is expected to be awarded in July. Priorities have not yet been set, but initial fielding would likely go to combat units and could take place as early as fiscal 2020.

“This along with other recent initiatives such as the Plate Carrier Gen III are part of a holistic effort to modernize the personal protective equipment set to give Marines better, lighter, more effective gear,” said Pierce.

Marine Corps’ Sea Dragon Effort Turning Focus to Information Operations

STAFFORD, Va. – After two years focusing on increasing the lethality of the small ground units and providing logistical support in the contested littorals, the Marine Corps Warfighting Laboratory (MCWL) is moving into intensive trials on information operations and ways to more fully integrate the naval forces to fight the maritime campaign, which will include a search for Marine-operated anti-ship weapons.

The focus of the Sea Dragon force development effort in the current fiscal year will be on “a handful of select, high-value capabilities” that will enable Marine expeditionary forces to maintain their “battle networks in the most highly contested environments,” providing a “high degree of domain awareness” through experimental technologies for sensing the environment and feeding that “into networks we can fire and fight from,” Brig. Gen. Christian F. Wortman, the MCWL commander, said Nov. 27.

They also will be testing capabilities to disrupt an enemy’s ability to sense the environment and target Marine units, Wortman told reporters at an office near Marine Corps Base Quantico.

Then, the gains from the first three years of the re-energized Sea Dragon will culminate in fiscal 2020 experiments to address Marine "contributions to a maritime expeditionary campaign," with close cooperation with the Navy, Wortman said.

Those efforts will be in direct support of Marine Corps Commandant Gen. Robert B. Neller's commitment to an integrated naval force, he added.

"We know that fleet and Marine forces are far more lethal, survivable and effective when they fight as an integrated team. So we're approaching naval and Marine Corps development as an integrated team, to the maximum extent possible."

As a key part of Neller's commitment to the integrated naval campaign and the Corps' effort "to support the sea fight in contested maritime domains," Marine elements will conduct, in partnership with the Navy staff, the research establishment and industry, a series of "fight the naval forces forward" advanced naval technology exercises (ANTX) in 2020, Wortman said.

The ANTX series will focus on "naval fires, technology to close the kill chain in highly contested environments and to deny the enemy the ability to target our forces."

A key part of that will be a search for land-based, long-range, anti-ship missiles that Marines could employ from advanced expeditionary bases within an enemy's defensive shield to support the Navy's fight for sea control.

"The commandant is determined to provide a capability to strike a killing blow against advanced surface ships from our tac [tactical] air assets or land-based locations," Wortman said.

Where the first year of the new Sea Dragon campaign resulted in major changes to enhance the lethality of the infantry squad and other small ground combat elements, 2018 focused on

the logistical and sustainment challenges of distributed operations in contested areas. Those experiments identified unmanned and autonomous logistics distribution assets “as high value. We are working aggressively” on unmanned underwater, surface, air and ground vehicles “to support our logistics distribution requirements,” the general said.

The goal is to sustain the expeditionary forces in high-tempo operations “while dramatically reducing the risk to our Marines and frustrating the ability of potential adversaries to interrupt our sustainment operations.”

In response to a question on the possible role of underwater vehicles, Wortman said “anything that offers us the ability to move bulk liquids, ordnance or other consumables over extended range in a manner that is hard for an enemy to target is really attractive to us.”

They also see the potential of those systems in the sea-control fight by “employing unmanned underwater systems from expeditionary advanced bases with a wide range of payloads that will challenge or destroy adversary capabilities in some of these contested environments.”

Wortman said the 2018 experiments also introduced the new “experimental opposing force,” a cadre of eight to 10 civilian experts who will challenge the MCWL experimenting units and the technologies and concepts they are testing.

Sikorsky Awarded Contract to

Sustain Navy, Marine Super Stallion, Sea Dragon Helicopters

STRATFORD, Conn. – Sikorsky, a Lockheed Martin company, was awarded a performance-based logistics contract with a value of $717 million to provide supply and logistics support to the entire fleet of in-service CH-53E Super Stallions and MH-53E Sea Dragon helicopters, the company said in a Nov. 5 release.

The H-53E is a battle-proven heavy-lift helicopter continuing to support the U.S. Marine Corps and Navy in missions at home and around the world.

The scope of the contract includes repairs, overhauls, spares, obsolescence mitigation and asset management services over four years. Contract performance is based on material availability metrics with additional incentives added for demand reductions, maintainability enhancements and aircraft readiness contributions.

The expanded comprehensive arrangement will cover additional readiness-critical components, including main and tail rotor blades, main gearbox, main rotor head and flight control components, as well as accessories such as refueling probe and cargo system components.

“We expect the expanded performance-based logistics to measurably improve material availability and reduce support cost while increasing overall aircraft readiness,” said Pierre Garant, Sikorsky senior program manager, Marine Corps In-Service Programs. “Our support infrastructure and past performance-based logistics successes will result in Sikorsky continuing to reliably provide mission support critical to the warfighter.”

As the Marine Corps' heavy lift-helicopter designed for the transportation of heavy material and supplies, the CH-53E Super Stallion is compatible with most amphibious class ships. With four-and-one-half hours' endurance, the helicopter can move heavy equipment over rugged terrain in bad weather and at night. The MH-53E Sea Dragon fills the Navy's need for long-range minesweeping missions, in addition to heavy-lift duties. The H-53E has consistently proven its worth to the fleet commanders with its versatility and range.

The contract will provide the vital and affordable support to the entire fleet – expanding a reliable base of long-term sustainment as the aircraft continue to fully operate until the introduction of the replacement aircraft, the Sikorsky CH-53K King Stallion.

Marine Squadron to Return from EA-6B's Last Deployment

ARLINGTON, Va. – The Marine Corps' last squadron flying the EA-6B Prowler electronic attack aircraft is scheduled to return home in early November, marking the last operational deployment for the aircraft.

Marine Tactical Electronic Warfare Squadron Two (VMAQ-2) is returning from its final deployment to its home base, Marine Corps Air Station Cherry Point, North Carolina, from a base in the Central Command area of responsibility, the Marine Corps said in an Oct. 31 release.

VMAQ-2 is scheduled to be deactivated in March, the last of four VMAQ squadrons to operate the Prowler. The other three squadrons – VMAQ-1, VMAQ-3 and VMAQ-4, two of which were

formed from detachments of VMAQ-2 and one of which became a fleet replacement training squadron (VMAQT-1) until it was no longer needed – have been deactivated – one each year – over the past three years.

The VMAQ squadrons have deployed their EA-6Bs to numerous bases and aircraft carriers over their service, providing electronic jamming and attack in support of joint forces, including participation in combat operations in Libya, Kuwait, Iraq, Syria, Bosnia, Serbia, Kosovo and Afghanistan.

The Marine Corps is not fielding a direct replacement for the EA-6B, instead relying on other platforms like the F-35B and the Navy's electronic attack squadrons.

The Navy retired its last EA-6B squadron in 2015. The service now flies the EA-18G Growler electronic attack aircraft from aircraft carriers and in expeditionary roles from land bases to support joint forces.

Armor Express Wins Marine Corps Soft Armor Contract Award

CENTRAL LAKE, Mich. – Central Lake Armor Express Inc., a leading manufacturer and distributor of high-performance armor solutions, announced Oct. 30 that it has been awarded a multiyear, firm-fixed-price, indefinite-delivery/indefinite-quantity contract from the Marine Corps Systems Command.

The contract was competitively procured as a total small business set-aside, with a potential value of $59.4 million.

Under the terms of the award, the Company will provide up to 65,469 Plate Carrier Generation III-Soft Armor Inserts and data reports, with production expected to be completed by October 2023.

Jim Henderson, CEO of the holding company that owns both Armor Express and KDH Defense Systems said, “It is our extreme honor to be chosen by the U.S. Marine Corps for this prestigious award, and we thank them for the trust they have placed in us. We also commend ongoing efforts by the U.S. armed forces to develop lighter body armor systems, while improving the modularity and flexibility of plate carriers deployed in the field. It is the servicemen and women who ultimately benefit, and all of us at Armor Express and KDH Defense Systems, stand ready to deliver.”

Henderson added, “With the recent contract extensions KDH received for the Modular Scalable Vest and Blast Pelvic Protection, along with this most recent ballistic protection award for Armor Express, we have secured over $140.0 million of potential business with the U.S. armed forces over the past two months. Working in tandem with our supply chain and technology partners, it remains our goal to provide all customers with the most advanced, lightweight and comfortable protection, supported by unparalleled delivery and service.”

The company intends to leverage the manufacturing capabilities of KDH Defense Systems and will produce the ballistic armor at KDH’s state-of-the-art manufacturing facility in Eden, North Carolina.

Marine Commandant: 2018 Recruiting Goal Met, but Dearth of Qualified Youth 'Should Scare You'

WASHINGTON – The Marine Corps met its recruiting goal in fiscal 2018, said the service's commandant, Gen. Robert B. Neller, despite a more challenging recruiting environment.

"We've made our recruiting goal every year," Neller told reporters Oc. 10 at a Defense Writers Group breakfast.

The Marine Corps met 100 percent of its goal in 2018, while the Army failed to meet its goal for the first time since 2005.

The improving U.S. economy, with the lowest unemployment rate since 1969, is adding to the stress of military recruiters.

Neller said the Corps achieved its goal without lowering standards.

"If anything, we've raised our standards," he said.

Neller pointed out that today less than 30 percent of the nation's youth are qualified – physically and otherwise – for military service.

"That should scare you," he said.

He said that in the Marine Corps, 62 percent of the force – about 120,000 of 186,000 Marines – is 25 years old or less. The average age of Marines is the youngest of the U.S. armed forces.

"We're getting good folks," he said.

As a manpower-intensive service, the Marine Corps spends 65 percent of its budget on personnel costs.

Marine Corps Awards Contract for Lighter Body Armor System

MARINE CORPS BASE QUANTICO, Va.– Marine Corps Systems Command (MCSC) has awarded a contract to produce Plate Carrier Generation IIIs (PC Gen IIIs) – a move that will help Marines increase their mobility and keep them safe through training and deployments.

Vertical Protective Apparel, LLC, of Shrewsbury, New Jersey, was awarded a $62.6 million firm-fixed-price, indefinite-delivery/indefinite-quantity contract to produce and deliver the PC Gen IIIs. A maximum quantity of 225,886 will be delivered, and the work will be completed by September 2023.

The PC Gen III is a body armor system that provides increased mobility, improved fit, lighter weight and additional modularity to support various types of missions. Compared to the legacy system, the PC Gen III offers increased ballistic protection and will be available in eight sizes to allow for a more customized fit across the Marine Corps.

“The legacy carrier fit the span of the Marine Corps, but this new system is more tailorable to fit Marines of various sizes with three new smaller-stature options,” said Flora “Mackie” Jordan, body armor engineer for the Infantry Combat Equipment Team at MCSC. “We wanted to give as much mobility back to Marines as possible by reducing the weight and bulk of the vest without decreasing ballistic protection. We were able to reduce the weight of the vest by 25 percent.”

The goal was to lighten the load Marines carry to reduce fatigue and improve their operational capability in the field. A few new features of the PC Gen III contributed to the weight reduction.

Excess material was removed from the shoulders and about an inch-and-a-half was taken from the bottom, which provides better integration with the USMC Pack. The team also chose a laminated laser cut material that only absorbs seven percent of water compared to 70 percent with the legacy system.

“We made sure to get the best system for our Marines, which included choosing the best lightweight soft armor and the best quality when it comes to the cut and sew of the carrier,” said Mackie.

While conducting research, MCSC discovered Marines are eight percent faster when the PC Gen III systems were combined with prototype lightweight plates, compared to the Enhanced Small Arms Protective Inserts. They also found Marines could remove and reassemble the vest in less than three seconds.

“With the old system, it took about seven seconds to take it off, and 10 minutes to reassemble,” said project officer Capt. Frank Coppola, who helped test the vests. “The new quick release works a hundred times better. It has a vastly improved quick detach system for Marines to act fast while on missions.”

The PC Gen III is less bulky and easier for Marines to move in, especially when working in tight spaces. An inner vest was also added to increase modularity of the system. Marines can adjust it to meet the requirements and environment of their particular mission.

“Our vests have come a long way over the past 15 years, and the reduced weight and increased mobility is huge,” Coppola said. “The fact that we can decrease the size of the vest and still be protected is the key.”

Infantry, school house, and Reconnaissance Marines, along with vehicle crewmen and combat engineers will receive the vests when fielding begins in the third quarter of fiscal year 2019.

Rising Accident Rates Taking Toll on Navy, Marine Aircraft Availability

RENO, Nev. – The accident rate for the major Class A mishaps in naval aviation is "trending up" and there has been a "major increase" in the more minor Class C accidents, which is aggravating the lack of aircraft availability the Navy and Marine Corps have been struggling to overcome, the Naval Safety Center commander reported.

The naval services are taking a series of steps to reverse the jump in Class C mishaps and aggressively working to develop better analytical tools to help prevent the major accidents, which result in the loss of aircraft or personnel or multi-million dollars in damage, Rear Adm. Mark Leavitt said Sept. 8.

Also, following a year-plus of multiple studies and corrective actions, naval aviation has made "good progress" in stopping the surprising increase in physiological episodes, or apparent shortage of oxygen in flight. "But it does remain our No. 1 safety concern," Rear Adm. F. R. "Lucky" Luchtman, the head of the recently created Physiological Episode Action Team, said at the same forum during the annual Tailhook Convention of aircraft carrier aviators.

Leavitt said the Class A accidents in naval aviation this year

have “exceeded last year’s numbers,” with 14 mishaps. “The rate is trending up.”

The Marines, however, “are doing much better this year, down to five” Class As, compared to 12 last year, he said.

Although some members of Congress have blamed the higher Class A rates to the age of aircraft and poor maintenance due to the budget reductions, Leavitt said the accident investigations are “still finding between 60 to 70 percent causal factors are human errors. We’ve not seen a spike of material problems.”

In the Class C mishaps, “this is not a good news story,” Leavitt said, but did not provide numbers for what he called a “major increases.”

Although the C mishaps inflict damages costing a comparatively low $50,000 to $500,000, they can take an aircraft out of service for months, which is aggravating the problems of too few available planes, he said.

Service studies have attributed the increase in the aviation version of fender benders to violations of established procedures by squadron maintenance personnel, which may reflect a lack of experience in the midgrade enlisted maintainers because of faster advancement in rank during a drive to keep more Sailors in service, he said.

The studies also indicate a “breakdown in team work,” which has led to efforts to get more “khaki leadership out on flight line, the flight deck,” Leavitt said, referring to chief petty officers and commissioned officers.

In an effort to reduce the major mishaps, Leavitt said the Safety Center has created a new office focusing on developing analytic tools to provide more data on causes and related factors, which can be shared with squadron commanders to help avoid accidents, he said.

The physiological episode team Luchtman leads is attacking the alarming number of incidents in which pilots in the F/A-18 Hornets and Super Hornets, EF-18G Growlers and the T-45 and T-6 training aircraft have reported in-flight conditions similar to hypoxia or oxygen shortage.

Luchtman said intensive studies by the Safety Center, NASA and others led to some modifications to the aircraft oxygen supply systems and indications that poorly fitted pilot's equipment cause some of the incidents.

They also are adding systems to the aircraft that can measure the quality of oxygen being provided to the pilots, he said and are seeking even better devices to monitor the oxygen flow. They are working with the Air Force and allies who fly similar aircraft and have had some of the same problems.

Marines Stage on Expeditionary Mobile Base Ship USS Puller for Real-World Operation

ARLINGTON, Va. — A Marine Air-Ground Task Force-Crisis Response (MAGTF-CR) has used a Navy expeditionary mobile base ship (ESB) for a quick-reaction movement in the Persian Gulf, the task force commander said.

Speaking June 8 to the Potomac Institute, Col. Christopher Gideons, commander of SPMAGTF-CR-Central Command from August 2017 to April, said that elements of the task force were called upon to stage to the United Arab Emirates in

preparation for a maritime intercept operation (MIO) in the region.

After arrival, the task elements staged to the USS Lewis B. Puller, a newly commissioned ESB assigned to the U.S. Fifth Fleet that supports a variety of forces including mine countermeasures forces, special operations forces, patrol boats and other units.

Gideons said MV-22B Osprey tiltrotor transport aircraft were staged to the flight deck of Puller along with an infantry contingent of about 200 Marines. The MIO of an unspecified nature was planned and rehearsed, he said, but ultimately the force was told to stand down when the MIO was canceled by higher authority.

“The team did a great job,” Gideons said.

He praised the capabilities of the ESB, with its large flight deck, spacious hangar deck and rotorcraft refueling capability.

One challenge of the operation was getting needed gear on the ship and sustaining the force, he noted.

The use of an alternate platform – the ESB – in this case was necessitated by the lack of an amphibious ready group (ARG) with an embarked Marine Expeditionary Unit (MEU), as pointed out during the presentation by retired Marine Corps Commandant Gen. Alfred M. Gray Jr., who also highlighted the shortage of amphibious warfare ships that necessitates the existence of SPMAGTFs.

There was a 100-day gap in the presence of an ARG/MEU when Gideons’ SPMAGTF was in theater, Gideons said.

The SPMAGTF also operated from the French Navy helicopter carrier FS Tonnere during the deployment.

The SPMAGTFs were created in 2014 in response to the 2012

attack on the U.S. government facilities in Benghazi, Libya, in which four Americans were killed in a siege with no ARG/MEU available in the Mediterranean Sea to rescue them.

Marine Corps to Award Orders for Cold Weather Boots and Socks

MARINE CORPS BASE QUANTICO, Va. – Marines will stay warm during ambient cold weather operations with new boots and socks. Marine Corps Systems Command (MCSC) intends to award sole source purchase orders for two types of Intense Cold Weather Boots (ICWBs) and Intense Cold Weather Socks (ICWSs) to improve Marines' performance in cold weather environments. A total of 2,000 boots and 50,000 pairs of socks will be delivered from four vendors by Sept. 28.

"Based on market research, industry days and events such as Modern Day Marine, we narrowed our decision for the orders down to two companies for cold weather boots and two for socks," said Todd Towles, program analyst for the Clothing and Equipment Team at MCSC.

There are currently no Marine Corps issue boots designed for use in the -20 to 20 degrees Fahrenheit range. The Temperate Weather Marine Corps Combat Boot was designed for a temperature range between 20 to 60 degrees Fahrenheit, and the Extreme Cold Weather Vapor Barrier Boot was designed for a range between -65 to -20 degrees Fahrenheit.

This effort to acquire the cold weather boots and socks will help MCSC evaluate commercial, off-the-shelf solutions and

offer the potential to reduce or eliminate the current environmental protection gap, said Towles. The socks will have much higher wool content than the polypropylene wool socks Marines currently use. Additionally, the Clothing and Equipment Team is hopeful the new gear will offer increased water repellency, comfort and insulation in extreme cold weather environments.

MCSC's Program Manager Infantry Combat Equipment will conduct a field user evaluation December through March. The team will gather input from Marines as they wear the ICWB and ICWS prototypes at the Mountain Warfare Training Center, Fort McCoy and Norway.

Feedback regarding fit, form and function will be collected along with how well both prototypes of the ICWB and ICWS perform in sub-zero temperatures.

"The Army is conducting evaluations with similar boots and socks, so there is potential to have some consistency with our results and products," said Lt. Col. Chris Madeline, program manager for ICE. "Marines will keep the prototype boots through the duration of testing. Once data is collected, it will inform future acquisition decisions and allow the Corps to purchase boots and socks that bridge the gap between the existing cold weather boots."

The Clothing and Equipment Team falls under Program Manager Infantry Combat Equipment at MCSC.