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.