

Managing Life-Saving Military Equipment

Camcode Global Helps UK MoD Track and Maintain Critical Osprey Body Armour

Background

As part of Operation HERRICK, the United Kingdom Ministry of Defence (UK MoD) mandated that all combat soldiers must wear lifesaving Osprey Body Armour while deployed.

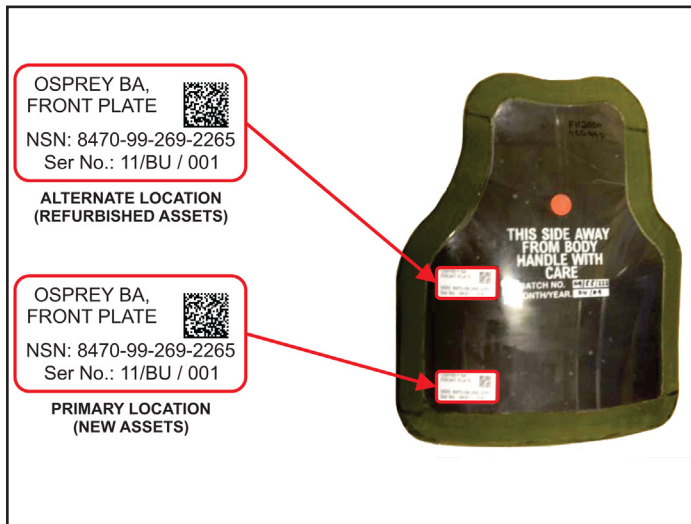
The body armour system is made up of three fundamental parts: the outer garment, the liner and the projectile protection plates. These body armour sets go through extensive work cycles which degrade the materials. It is easy to see the wear on the outer garment and the liner. However, to determine the amount of degradation on the lifesaving plates, x-rays and non-destructive testing is required.

The moral and legal issues surrounding military protective equipment caused the MoD to establish an auditable system of checking the body armour plates.

Objective

In 2012, the UK MoD wanted to mark all existing Osprey Body Armour, as well as new Osprey Body Armour passing through the refurbishment process and production line at the contractor's facility. In total, 80,000 legacy Osprey Body Armour and 20,000 new Osprey Body Armour were to be identified and marked.

As the UK MoD's Unique Identification (UID) Enabling Contract holder, Camcode Global was tasked with helping the UK MoD implement a method to identify, track and manage its entire new and legacy inventory of Osprey Body Armour.



Challenges

The projectile protection plates are subjected to six-month checks before they are rotated through to the next fighting units. This six month rotation and the subsequent receiving and re-issuing action required was labour intensive, time consuming and ultimately plagued by data errors. This led to the mismanagement of the plates, which in turn could have meant the needless purchase of more plates or worse, injury and death.

The Army HQ looked at many different methods to track the plates through the inspection process, back into service and then while issued to the soldier. The data for each plate had to be managed through three separate systems: the testing facility's internal IT, MoD Equipment management system (JAMES(L)), and the Logistic Information system (MJDI).

There were also challenges in marking new Osprey Body Armour. The biggest challenge was that the body armour contractor wanted the ability to install and record the UID marks themselves.

Solutions

Other local solutions for data management and item tracking were considered, however, these solutions were not coherent across the enterprise nor were they robust enough. Working with Camcode Global, the Army HQ discovered the only way body armour plate data could be managed efficiently and accurately was to adopt the Camcode Global's systems for UID, including data management and quality assurance production methods.

Camcode Global Engineers assessed the body armour and tested various materials to determine the proper label material for item tracking. Labels must be durable enough to survive in hostile conditions, yet must also survive explosive conditions and x-ray testing. For these reasons, Camcode Global Engineers selected a polyester label with an over laminate. Engineers then worked with Army HQ members to determine the proper placement of the label to achieve proper scanning and remain durable.

Camcode Global also devised a method so that new items could be marked at the manufacturer's location. A Camcode Global UID data specialist created a lookup table of all Osprey Body Armour pieces produced to date, which allowed the UK MoD to reserve all items in their UID registry. In addition, the

lookup table linked to Camcode Global production software and created a UID label, which the contractor could then install.

A Camcode Global marking cart manager then installed the marking system at the contractor's facilities and trained the local staff on the label production and proper installation process. Camcode Global conducts a regular review and inspection process on the equipment provided and ensures that the process remains consistent.

Results

"The Camcode Global Team's attention to detail and quality assurance processes provided me with the required level of confidence in the data for tens of thousands of individual plates," said Major Roberts, Army HQ.

As of September 2014, Camcode Global has marked approximately 60,000 legacy Osprey Body Armour plates. The team also continually monitors ongoing production of polyester UID labels by the original equipment manufacturer for each new Osprey Body Armour it manufactures.

Not only has this project demonstrated the feasibility of accurate asset management, but it has also led to a better understanding of how unique identification of critical protective equipment can reduce unnecessary risks to soldiers. Due to this project's success, the UK MoD is now looking to mark all critical safety equipment with UID labels and marks, relying on Camcode Global to manage the process.



Camcode Global is a subsidiary of Horizons Incorporated.

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