



PEO Perspective

The PEO Soldier organisation combines the latest technologies, in the largest volumes with smart thinking to equip the US Army soldier

Headed by Brigadier General Peter Fuller, Program Executive Office (PEO) Soldier procures and sustains virtually everything the US Army soldier wears or carries in the field, with an annual budget of \$3.2 billion. Its remit extends far beyond the single Service scope of the Army with the PEO also equipping other elements within the Department of Defense.

Gen. Fuller, outlining the organisation's essential goals said, "We are trying to increase our soldiers' lethality, survivability and making sure they can operate in any environment in the world."

The task at hand for the PEO, isn't 'simply' issuing new equipment. A number of recent efforts by the PEO have concentrated on ensuring that the process and subsequent

sustainment of that new equipment are better too. Specifically, these have seen the introduction of measures designed to ensure that the disruption that is inevitably created by the issue of each piece of new equipment is minimised. Gen. Fuller explained, "What we are trying to do is ensure that we don't 'touch' a brigade too many times [with new equipment]. We now have the PEO Soldier G4 office synchronising all that activity with the Rapid Fielding Initiative effort so we issue all new equipment at once."

Logistics issues in a rapidly changing environment have also been identified. Gen. Fuller said, "We are modernising so fast that it is sometimes hard to maintain sustainment of new products. I don't want soldiers to receive a brand new piece of kit and when it needs replacing, for the resupply location not to have a

replacement. That latest piece of kit is meant to be there for a reason."

Clothing

The transformational bow wave of technology, pushing through the Army's inventory of capabilities can sometimes obscure the fact that soldiers are also operators of every platform and their physical wellbeing is key to the overall performance of even the most advanced system. Gen. Fuller points to his own experience to reinforce this point, "I had the most modern tank in the Army in Germany but I had Korean War era cold and wet weather gear. It didn't matter how modern the tank was. I was always cold. [Consequently, I] simply wasn't using that vehicle to its full potential."



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▶ The same point applies equally, if not more so, to the dismounted soldier and further work is being done by the PEO. Gen. Fuller cited the example of new gear designed overcome both Afghanistan's cold weather and hostile terrain, while simultaneously reducing the weight and volume burden and doing so in a way that new gear reaches the soldier rapidly. "[The new] Modular Sleep System is a complete sleep set. It is not just that it is warmer, it is less bulky, it is more compact and it is easier to carry. We are also seeing that improved mountaineering equipment is needed in Afghanistan. We don't want to reinvent the wheel here. Instead, we went to the vendors that supply professional mountaineers. Why should we design something when there is already a lot of great capability out there?"

Power

Every time it modernises equipment, PEO Soldier's goal is to make the item lighter, give it more capability and improve its standardisation profile. In the case of batteries, Gen. Fuller outlined the PEO's strategy, "We are trying to get rid of all the unique batteries that soldiers

carry. We would like to have everyone use either AA, AAA or CR123 batteries. We are trying to get it so soldiers can swap batteries between different devices."

Some theatres, if anything, make the need for power management even more pressing. Citing recent Land Warrior experience, Gen. Fuller commented, "We had a battalion set, down in Operation Iraqi Freedom and a brigade set in Operation Enduring Freedom; two vastly different operating environments. The brigade in OEF has found that they are doing a lot more dismounted operations and are now having to figure out how to regenerate power when they are not near a Stryker vehicle."

Lethality

The issue of new weaponry inevitably and rightly permeates many discussions about the US Army soldier of today and tomorrow. General Fuller gave his view on this subject, one that emphasised the need for integrated thinking, "Everybody has a view on what the best weapon is. We are trying to re-educate everybody that the weapon is only a component along with optics, ammo and training. You might think that you have the absolute best weapon,

great training and great ammunition but still miss your target because you don't have a good pocket weld, because of your body armour. We are trying to integrate different equipment more effectively with the Soldier as a System concept."

Another lethality issue is maintaining current volumes of fire but at a lighter weapon weight. This has led PEO Soldier to look to Special Operations Command (SOCOM) and the Mk48 lightweight 7.62mm machine gun, which maintains reliability by the greater use of titanium. Gen. Fuller said, "There are 500 of those down range, giving options to commanders. We tell them what they have available and let them make informed decisions."

Lightening the load

There remains an urgent need to lighten the soldier's load, not just in terms of weaponry. The evidence is in the level of weight related injuries being suffered by deployed troops. Gen. Fuller said, "We are seeing lot of issues associated with stress fractures and issues associated with their lower back. We are overloading soldiers." This explained Gen. Fuller has become PEO Soldier's number one activity in the transition of forces from Iraq to Afghanistan. Evidence of this can be seen in differing experience of Land Warrior in the two theatres. Gen. Fuller said, "The [Land Warrior] Stryker brigade operated completely differently in Afghanistan to how it was operated in Iraq. Power is a challenge because they are not operating from a FOB via a vehicle to an operation, then back to a FOB in their vehicles. [In Afghanistan] they are leaving their FOB, they are leaving their vehicles and they are operating dismounted for several days. Carrying kit for Land Warrior for several days requires power; whether they be night vision devices, laser aiming devices or whatever it might be. The resupply of power is a challenge so we are focussing on how do we lighten the load and do this rapidly."

Last Summer, PEO Soldier, working with the Rapid Equipping Force looked at how to reduce weight at every level; weapons, body armour, uniform, personal items, even seeking to shave a few ounces off the total by using lighter watches.

Gen. Fuller said, "The challenge that we are having is that when we look at a soldier, we don't seem to have a standard configuration. When we were in Afghanistan, we took a squad to one side who were getting ready to do a three day mission and weighed everything that they had. Specialists such as medics were carrying about 140lbs of kit, not only their personal gear, but their survivability, lethality and operating gear too. A mortar man, just carrying couple of mortar rounds and all their other kit was about 125-130lbs. We are looking at anything we can



Last Summer, PEO Soldier, working with the Rapid Equipping Force looked at how to reduce weight at every level © DoD

▶ do to try to lighten the soldier's load, looking at different capabilities and then balancing it against operational requirements and we are still leaning an awful lot. We are working very closely with the British on what that environment is and what we need to focus on."

A more complex definition of protection is also emerging. General Fuller asked, "Is speed protection? If speed is protection, then is weight impacting our protection? And if weight is impacting our protection then we are probably going to need to build the science to get us past where we are with our current protection capabilities because that's built on weight."

Funding

Funding for PEO Soldier remains an issue. It is currently transitioning from a reliance on supplemental funding back to a base budget that covers the vast majority of spending. The high watermark for supplemental funding was 2008, when the ratio of base budget to supplemental funding was roughly 20:80. Today it is moving to a more even balance, roughly 60:40 and continuing shifts in that direction are planned.

Other considerations also affect funding. With 1.1 million personnel, even a one dollar item that is issued to every person, becomes a significant investment. Gen. Fuller said, "We have to make sure we don't lose lock on that." He adds that PEO Soldier has a lot of small suppliers who are being hit by the recession.

Uniformity?

"We are having a big discussion within the leadership of the Army on whether need 1.1million of everything anymore and should we have tailorable packages instead," explained, Gen. Fuller. "Do we want to have every brigade exactly the same? We are trying to think through this. I told senior leaders that we have got into the Big Army one-size-fits-all and we need to start adjusting that. We are going to do that in a time where we have limited funds available because there are so many things that need to be squeezed in at the same time."

How Special Operations Forces address similar issue shouldn't necessarily be a useful guide and for good reasons. Gen. Fuller said, "SOCOM are special operators. That is why they have big 'S' on the front. They have a lot higher level of training, experience, they are not young enlisted. They want a lot of things in their closet because they have specialised missions. If the Army operated that way think how big our supply systems would have to be." ■



Gen. Fuller was speaking at WBR's Soldier Technology US

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