

RECORD VERSION

STATEMENT BY

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**TACTICAL AIR AND LAND FORCES SUBCOMMITTEE
HOUSE ARMED SERVICES COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES**

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Chairman Bartlett, Congressman Reyes and distinguished members of the Subcommittee: On behalf of the Army, I want to thank you for giving me the opportunity to appear before you today so that I can discuss what we are doing to support our Soldiers. I also want to thank you for your continued support as the Army and specifically PEO Soldier strive to ensure that all of our Soldiers are lethal, survivable and can operate in any environment. The well being of our Soldiers is our Army's number one priority, as I know it is your number one priority.

SSG Giunta

Less than two months ago, Staff Sergeant (SSG) Salvatore Giunta stood before you to receive the Congressional Medal of Honor. As you are aware, SSG Giunta was awarded the Medal of Honor for his selfless actions on October 25, 2007 while operating with his squad, an element of the 173rd Airborne Brigade, in the Korengal Valley of Afghanistan. Prior to SSG Giunta's deployment, the PEO Soldier team fielded SSG Giunta and his unit with equipment. I submit to you that SSG Giunta was able to stand before you on that day because of our combined efforts to ensure he was prepared to fight in Afghanistan.

In November of 2006, SSG Giunta and his fellow Soldiers received numerous pieces of designated equipment to ensure that they were lethal, survivable and able to operate in the environments of Afghanistan. Their lethality gear included the M4 carbine, 40mm grenade launchers, and rifle optics, to name a few. Their survivability gear included the Army Combat Uniform, the Army Combat Helmet, Outer Tactical Vest (OTV) soft body

armor with Enhanced Small Arms Protective Inserts (ESAPI) hard plates, and ballistic eye protection. We know that SSG Giunta's body armor worked as intended, since his body armor stopped enemy bullets twice, allowing him to continue his mission. His unit also had equipment that included the AN/PVS-14 Night Vision Device, a rucksack, climbing gear, cold weather gear and a variety of other items to assist them in accomplishing the mission in the Afghanistan operating environment.

If SSG Giunta were to deploy to Afghanistan today, he would barely recognize some of the equipment we are providing. Currently, a Soldier going into Afghanistan will still deploy with the M4, but now he takes ammo designed for better performance and less visual signature, the M855A1. We have also deployed lighter body armor in the Improved OTV (IOTV) which is not only weighs less but provides a better fit through side adjustments.; in addition, we designed and deployed a hard body armor plate carrier that weighs about 15 pounds less than what SSG Giunta wore during his deployment. This lighter weight system provides field commanders with the ability to select the level of body armor needed to support the specific mission. Soldiers going to Afghanistan are now deployed with fire resistant combat uniforms and combat shirts, pre-treated with insect repellent, and in an appropriate camouflage pattern for Afghanistan; two pairs of mountain combat boots; and a machine gun that is 9 pounds lighter, just to name a few items. Many of these improvements were made because of Soldiers like SSG Giunta providing us feedback on what needed to be improved to be able to conduct their mission -- to ensure that they are lethal, survivable and can operate in any environment.

When I talk about the equipment we have provided to SSG Giunta and the many improvements we have made since then, I am talking about some pretty high tech capabilities. Some do not believe that the Army is high tech – they look at the Air Force fighters or the Navy’s nuclear submarines and they think that the Army just does not measure up. But I am here to tell you that our Army IS high tech. Take our body armor for example, some think it is just your grandmother’s china wrapped in Kevlar, but it isn’t. Body armor is developed to provide the best protection for the least weight. It is specifically designed with the optimum set of ballistic materials and layering structures to ensure our Soldiers are survivable from threats on today’s and future battlefields. Our night vision and precision targeting devices are providing unparalleled capability for our Soldiers to see in low-light and no-light conditions with accuracy and at greater ranges. The Army has now integrated and fused the functions of the Thermal Weapon Sight and an Image Intensifier to provide increased capabilities in a small profile system called the Enhanced Night Vision Goggles. We continue to improve the Soldier’s situational awareness to help ensure his dominance on the battlefield. To this end, we have developed a gunfire detection system that uses acoustic sensors to help locate the enemy -- we start fielding these devices in Afghanistan this month. We are developing a Sense Through The Wall (STTW) system that uses Doppler radar to sense people inside of structures before Soldiers enter, a potential game changer for units clearing buildings. We are also working to replace the magnetic compass on our laser designator rangefinder with a much more accurate device that will allow our dismounted Soldiers to utilize our Nation’s most accurate laser guided munitions like Excalibur and the Joint Direct Attack Munition (JDAM).

But high tech doesn't stop there – it extends into the Soldier's weapons as we provide our Soldiers with solutions that enable affordable precision lethality. Sometimes our first steps are not as affordable as we would like, but the capability warrants the extra initial cost. The XM25 is a definite example of where the cost is worth the capability. We have deployed a number of XM25, Counter Defilade Target Engagement Systems to Afghanistan. This is a system that breaks parity in the direct fire engagement and clearly provides us with overmatch. Warfighter feedback illustrates the game changing nature of these systems and their ability to significantly dominate during engagement. The Soldiers are calling it "The Punisher" and they absolutely praise its effectiveness. It defeats the enemy while providing better protection for our Soldiers. This system is a direct-fire, semi-automatic, shoulder-fired, man-portable system that provides a 25mm air bursting capability and enables small units and individual Soldiers to engage targets in defilade. With "The Punisher," the enemy can no longer hide behind a wall, shoot at our Soldiers and be protected against our counter fire. The Army is committed to continuous improvement in all of its weapon systems. To this end, we are modifying the M4 Carbine through the M4 Carbine Product Improvement Program (PIP) which will pursue a multi-path strategy to enhance the current carbines durability, reliability, maintainability, accessory integration, sustained rate of fire and overall ergonomics. We are also pursuing an Individual Carbine competition to ensure that the M4, a world-class weapon that has been battle-proven in thousands of firefights in the past ten years, is still the best capability that can be provided to our Soldiers. This competition will result in the selection of a weapon that

will be assessed for performance and value against the existing carbine capability – ensuring the best value for the Army.

At PEO Soldier we work hard each day to ensure that every Soldier is provided the best capability possible. We strive to give our Soldiers a decisive edge and to ensure they are dominant on the battlefield. I believe that the combination of our equipment improvements as well as our increased collaboration with our Sister Services, our industry partners and academia will ensure that our Soldiers are dominant on the battlefield. However, I believe that there is one area that needs more focus. GEN Casey spoke of it in his testimony of March 2nd to this committee and I quote: “...*No matter where our Soldiers are operating, they need to know where they are, they need to know where their buddies are, they need to know where the enemy is and when they shoot at the enemy, they need to strike them with precision.*”

We are working hard to provide our Soldiers with this capability while at the same time not burdening them with its added weight - weight that in the Afghanistan environment impacts their physical and cognitive abilities. The need to have this capability is made clear by looking at SSG Giunta's situation in October 2007. When SSG Giunta was on his mission, he wanted to know where he was, where his friends were, and where the enemy was. Reviewing that operation as recounted by SSG Giunta, we see that SSG Giunta tried to find his best friend Sergeant (SGT) Brennan during the battle and had to look several different places before he was able to determine that the Taliban was trying to separate SGT Brennan from the unit and

capture him. If SSG Giunta had this capability on that day, he would have known immediately where both SGT Brennan and the enemy were located.

We have this capability today in limited quantities in Afghanistan – we call it Land Warrior. It provides unprecedented tactical awareness as well as significant improvements in lethality, survivability, and sustainability of these dismounted Soldiers. Land Warrior equipped Soldiers are able to see their location, the location of friendly forces in real time, and exchange critical tactical information with both ground forces and close air support aircraft. This allows our Soldiers to have a decisive advantage over enemy forces. Knowing where your friends and enemies are helps us to dominate the battlefield. However, this capability comes with a weight penalty to the Soldier.

Our next increment of the Land Warrior capability is called Nett Warrior (named after COL Robert Nett, who received the Medal of Honor as a Lieutenant in World War II). Although the Nett Warrior weight is only 12 pounds (three pounds less than that of Land Warrior), we have not removed 12 pounds worth of other equipment when we provide this capability to our dismounted Soldiers. It is fair to say that we are currently challenged to claim that a Nett Warrior equipped Soldier is “high tech” when compared to the capability and weight of commercially available smart devices, but it is the Army’s first essential step along the path to getting the Soldier into the network. Nett Warrior is setting the stage for the Army to facilitate the technology, security and capability trades that are essential to getting us to that lightweight network capability. The next versions of Nett Warrior will adopt the advances made by commercial industry in creating smart

devices, so we will see a significant reduction in size and weight while capabilities continue to increase.

Systems Engineering – Soldier as a System

I often remind my team that we do not build anything within PEO Soldier, but instead we rely on the hard work and efforts of our industry partners - many of them located in your districts. Last fiscal year alone, we fielded over 230,000 Active, Army National Guard and Army Reserve Soldiers with over 17.8 million pieces of kit. This equipment included everything from socks to thermal sights. When we fielded these 17.8 million pieces of Soldier kit, we tried to do the systems engineering to ensure that we saw the Soldier as a System. We don't want to continue to treat a Soldier like a Christmas tree - where we just hang more things on them. Instead, we have been making a deliberate effort to integrate these technologies together to provide a capability that we put onto the Soldier. With a systems approach, PEO Soldier is doing a better job of looking at the Soldiers' operating environment and trying to ensure they have the right equipment to be decisive. For example, we are focusing many efforts on the weight that our Soldiers carry. We understand that there is a need to lighten their load and we continue to partner with government, academia and industry to work initiatives that could potentially help reduce the weight burden of our equipment – much of which is due to Soldier protective equipment. To that end, in the next fiscal year, we will have two new Research and Development lines to fund Soldier protective equipment research. These funding lines will support efforts such as research into new lighter weight materials for

our hard ballistic plates, which, on average, weigh 25 pounds per Soldier, new fire resistant materials and more effective ballistic eyewear.

We are also thinking of the Soldier as an integral part of a Tactical Small Unit (TSU). We have learned over these past ten years of sustained combat operations that we fight not as individual Soldiers, but as members of a team, a squad – or Tactical Small Unit, with SSG Giunta's testimony just one great example. This realization has provided a new way to look at how to outfit our Soldiers and opens up possibilities to lighten the weight of the individual by looking at its distribution among the members of these TSUs. Our doctrinal fighting load consists of 48 pounds; however it can range up to 120 pounds depending on the mission of the Soldier. The average load for our Soldiers operating in Afghanistan is 63 pounds, with many Soldiers carrying up to 130 pounds. The ability to distribute the individual Soldier's load across the TSU may be key to reducing their burden and ensuring overall physical and cognitive dominance.

Process Improvement

We continue to make great strides in our processes to ensure a Soldier portfolio second to none. In February 2009, we made several changes within the PEO, to include standing up a Task Force focused on Soldier Protection, as well as creating a permanent internal audit team. The combination of the Task Force and the audit team greatly strengthened the oversight of our of body armor testing. Furthermore, we have taken to heart the input from the various audit agencies like the Government Accountability Office, the DoD Inspector General, as well as many others who made

recommendations for improvements to our processes. A total of 61 recommendations have been made by the various audit organizations and all but four recommendations have been addressed and implemented, with the remaining four recommendations expected to be closed this summer. Because of this assistance, our body armor testing methodology has transitioned from good to great, our tests are rigorous, our standards of quality are high and our management controls are second to none. As SSG Giunta can attest, the quality of our products should never be questioned, but I freely admit that there were some challenges in our old processes.

Another process improvement which serves to underscore our commitment to the Soldier is the development and fielding of a number of Nondestructive Test Equipment units that x-ray hard body armor plates when Soldiers are out on rest and relaxation (R&R) leave. The NDTE looks for cracks and/or any sign of damage to the plates. As a result, Soldiers are issued freshly tested armor plates upon their return from R&R. We confirm this commitment through our extremely rigorous surveillance of our body armor – doing routine inspections on a regular basis from the unit level up to ensure that the Soldier has the best protection available.

All Together

I once heard someone mention that we had many “Cylinders of Excellence” within the Army and the Department of Defense (DoD). This has been true in the past but we are beginning to see a change in this behavior. PEO Soldier is striving to better communicate and collaborate across these “Cylinders of Excellence” – something that

is critically important when one realizes that in the end, everything touches and/or impacts the Soldier.

One of the benefits we have seen over these past six years since PEO Soldier was stood up, is the value of our increased emphasis on how we field the kit to our Soldiers. Within the PEO, we established and maintain integrated fielding schedule so that at the unit level we minimize impacts to Soldiers' schedule and training, while at the same time maximizing their available dwell time. We are also working with other Program Executive Offices to synchronize our efforts and to provide a truly integrated product. Additionally, we have been working with our sister Services as well as the Special Operations Command to create efficiencies in the Soldier as a System concept, in lightening our Soldiers' load and in looking for revolutionary advances in equipment solutions that would meet our Soldiers' challenges. We do this through hosting meetings to specifically address capability development, thus potentially increasing our efficiencies as well as reducing redundancies across DoD. It was through this type of communication and collaboration with the Special Operations Command that we discovered and then fielded our Soldiers with a machine gun that is nine pounds lighter than the current Army system.

An example of this emerging spirit of collaboration would be a recent conference that PEO Soldier sponsored on Head Protection. This conference was open to members of the DoD, the Veteran's Administration, academia, and professional sports participants. Our goal in sponsoring this event was to ensure that all of these "Cylinders of Excellence" were aware of each other's efforts in an area of great importance to the

Warfighter. This collaborative approach focused on the causes, effects and potential mitigation of head injury in the areas of blast, ballistic and blunt impact to our Soldiers.

Another example of collaboration is our on-going efforts with the U.S. Marine Corps with regard to the development and procurement of an Enhanced Combat Helmet (ECH). The ECH will have the same form, fit, and function as the current Advanced Combat Helmet (ACH) design, but with increased ballistic protection over that provided by the ACH – potentially at either equal or lighter weight. Testing continues, but the results look extremely promising and are exceeding our expectations. The results of this effort are being closely monitored by other Services and organizations.

It was through our collaboration with our sister Services that we realized the benefit of a female combat uniform. Recognizing that the Army is comprised of 14% women, we are currently evaluating a Women's Army Combat Uniform to better meet their needs. The female combat uniform is designed to better fit a woman's body. A Human Factors study conducted on our new female uniform last year at Fort Polk, Louisiana found that issues of restriction and discomfort were few in number and the uniform has been well received by its participants.

Whenever possible, we conduct our development, testing or procurement efforts in collaboration with the other military Services and organizations to increase efficiencies across DoD. Whether we are discussing the camouflage uniform, helmet improvements, night vision devices or even our weapons systems, we are collaborating across the DoD. For example, we are providing members of the U.S. Air Force with our

new camouflage uniform specific for Afghanistan - Operation Enduring Freedom (OEF) Camouflage Pattern (OCP) - as they deploy to Afghanistan. This was based on the decision by the U.S. Air Force leadership to leverage the Army's research into effective camouflage specific to the OEF environment, as well as utilizing our uniform production contracts to outfit their personnel - a great example of DoD efficiencies. We manage the development and production of night vision goggles for the USMC and thermal weapons sights for all Services. In addition, we have shared a very effective capability, the Common Remotely Operated Weapon Station (CROWS), with the Air Force and SOCOM to increase MRAP survivability and lethality. These are just a few examples of collaboration.

In our October 2009 report to Congress concerning our camouflage uniform efforts, we highlighted that we had a multi-phased strategy to ensure our Soldiers have the appropriate uniform camouflage regardless of their location. Our lessons learned in developing OCP is supporting the last phase of our efforts. We have an initiative underway to develop a potential family of uniform patterns that could be used by an expeditionary Army in multiple environments worldwide. Perhaps more importantly, we are seeking a pattern that would work in concert with the family of uniform patterns and be applicable to our Organizational Clothing & Individual Equipment (OCIE) (the largest expense for which we would have to maintain multiple patterns). We are working with our sister Services on this initiative which has the potential for their application and could be another efficiency if implemented across DoD. Across the DoD, we continue to

look for ways to save resources while we give our Soldiers the best capabilities possible.

Summary

Just because the Army has made great strides in improving our equipment from what we issued to SSG Giunta in 2006, we are not sitting back and resting on our laurels – more still needs to be done. I challenge this Committee and this Nation to not lose focus on our Soldier equipment as future difficult fiscal decisions are debated and implemented. The centerpiece of the Army is its Soldiers. My basic branch in the Army was Armor and I thought the tank and other combat equipment was the main purpose of the Army. I soon realized that our Soldiers are the strength of our Army, not the big ticket platforms. I learned that the purpose for those big ticket programs and platforms was for the Soldier – the Soldier is not an accessory of a platform, but the purpose for that platform. The tanks I operated in did not operate without me or my crew – we were the purpose for the tank.

The Soldier represents the heart of our Army. We need to care for them and their families. They are indeed our greatest source of strength and pave the way for the freedom our Nation enjoys.

Chairman Bartlett, Congressman Reyes and distinguished members of the subcommittee, I want to take a moment to thank you for your strong support of our Army. I want to express that appreciation sincerely on behalf of the men and women in uniform. It is an honor to serve with such professional Soldiers and it has been an

honor for me to have been able to represent them in appearing before you. As my tenure as PEO Soldier comes to a close, this will likely be the last time I testify in front of the Subcommittee in my current capacity. I will soon be wearing the equipment that we field to Soldiers and have complete confidence in its ability to keep me protected, lethal and able to operate in the OEF environment. I am deploying to Afghanistan to serve on GEN Petraeus's staff this June. It is with my sincerest thanks that I commend you on your unwavering support for our Soldiers. I would also like to commend your professional staff for their constant support, guidance and professionalism to me and my organization over the past two and a half years."