Task Equipping Body Armor

Captain WT Jacobs

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Report Documentation Page

Form Approved OMB No. 0704-0188 Right now, senior military commanders are hindering tactical-level operations in Iraq and Afghanistan. According to the Marine Corps Warfighting Publication on counterinsurgency operations, counterinsurgency operations are best conducted in a decentralized command structure with an emphasis on initiative and adaptation at the tactical level. However, at this time, several strategic and operational level commanders are restricting decentralized decision-making by mandating maximum levels of body armor employment to their tactical level subordinates. Centralized decisions mandating excessive body armor negatively affect mission accomplishment due to the negative effects that wearing body armor can have on Marines on the battlefield.

The Current State of Body Armor in the Marine Corps

The current forms of body armor in the Marine Corps are heavy and restrict personal mobility and agility. The Modular Tactical Vest (MTV) and the older Interceptor Body Armor (IBA) weigh more than thirty pounds with protective plates inserted. According to a Naval Research Advisory Committee report, the average Marine carries 97 to 135 pounds in combat loads – far above the recommended weight of 50 pounds. The bulk of the weight carried is protective equipment. Marines should be carrying a maximum of 50 pounds in their combat load to be

effective. The typical Marine is carrying more than double this amount in combat, and protective equipment comprises the largest portion of this excessive weight.

Marine Corps body armor ventilates poorly and can prevent a Marine from properly cooling down while conducting missions.

The flak jacket has a very adverse effect on the body's cooling system. Like his weapon, the Marine is air cooled. The air circulation around the body trunk is greatly diminished by the wearing of body armor; especially when properly worn. In effect, the body's cooling system is short circuited, resulting, at the minimum, in a greatly increased fatigue level and, at worse, heat stroke.⁴

A flak jacket fully covering a Marine's chest does not allow perspiration to evaporate quickly enough to allow normal cooling conditions. These factors can add up to preventing Marines from physically being able to operate effectively due to fatigue and overheating in demanding environments. In extreme cases, body armor can even contribute to Marines becoming heat casualties, putting their personal health and their unit's mission at risk.

Operational Need for Flexibility in Employing Body Armor

The additional weight and heat from wearing full body armor can negatively impact mission accomplishment of maneuver units by influencing what terrain becomes restrictive. In 1971, Capt. David Winecoff, a Marine officer who fought in Operation Dewey Canyon, wrote that he "observed that [his] patrols were much

more likely to use trails, reject flank security, violate good movement and camouflage technique, and otherwise abuse good patrolling procedures when wearing body armor." Steep hills and mountains that are passable to lightly outfitted insurgents may be considered slow or impassable terrain to Marines wearing full combat loads. Fully loaded units will tend to cede this advantageous terrain to the enemy while being forced into using disadvantageous low lying terrain for maneuver space.

In contrast to our heavily loaded Marines, the enemy insurgents will travel lightly. David Kilcullen states, "The enemy will carry a rifle or RPG, a shemagh [head scarf] and a water bottle if he is lucky. Unless you ruthlessly lighten your load and enforce a culture of speed and mobility, the insurgents will consistently out-run and out-maneuver you." ⁶ The unburdened enemy insurgents will be able to travel fast and occupy difficult terrain. They will use this to their advantage and attack without decisively engaging and then run away. The Marine response to this reality must be to lighten our own loads to increase the speed in the attack.

Wearing body armor around civilians can communicate the wrong message from an information operations (IO) perspective. If Marines are routinely faced with scenarios in which lighter insurgents are out-running heavily armored Marines, the

population will assume that Marines care more about protecting their own lives than accomplishing the mission of providing security. If the local populace believes that Marines are more interested in hiding behind their armor to safeguard their own lives than providing security for them and their families, it will become exceedingly hard to gain their trust.

Additionally, body armor can also threaten civilians. David Kilcullen writes, "Civilians find rifles, helmets, and body armor intimidating." Delivering advantageous information to a populace living with an insurgency is a difficult task under the best of circumstances. Trying to communicate such a message while implicitly scaring them with the appearance of personal equipment makes the successful delivery of these vital messages even more unlikely. In addition to intimidating indigenous civilians, body armor can also frighten third-party civilians. Frequently, Marines must work closely with organizations such as the State Department, United States Agency for International Development (USAID), the Red Cross, and Non-Governmental Organizations (NGOs). Developing working relationships with these vital partners is often hampered by cultural differences between Marines and civilians.

Intimidating these civilians further by wearing body armor can

stifle essential working relationships and become an obstacle to overall mission accomplishment.

Recommendations for Body Armor Employment

A commander must have the authority to equip his unit based on the potential risk to his Marines versus potential impact on mission success. Major Wendell Leimbach, a representative from the USMC body armor acquisition program writes:

Marine Corps leadership must be extremely careful in how IBA is used so that we do not force dismounted Marines to wear more body armor than is required to accomplish their mission. While it is always desirable to provide as much protection as possible to Marines, we are at risk of "killing them with kindness" when one considers the weight and reduced mobility that IBA currently inflicts. 8

To determine the risk for a given mission, the Marine commander should consider the likely size on the enemy force and nature of the weapons they will be using (i.e. small arms, mortars, etc.). The commander should then assess the impacts that wearing body armor can have on his ability to accomplish his mission. This consideration will factor in enemy, terrain, weather, and civilian considerations. Ultimately, the commander will choose a body armor stance that provides the best balance between maximizing his chances for mission success while mitigating risk to a practical extent.

One unused tool that tactical leaders should have in their arsenal while considering how to equip their force is the Armor Protection Level (APL) system. Regarding the APL system, Major Leimbach writes:

Leaders will have to consider the mission and threat, to include environmental considerations, to determine which APL is appropriate for which Marines, ensuring that Marines are not overburdened by their armor to the point that they are unable to accomplish assigned tasks.

The APL provides a planning tool and standardized method of matching body armor to mission requirements. The APL is based on a five-tiered approach to body armor employment ranging from helmet and flak jacket without SAPI plates at the lowest level to full employment of all body armor including a helmet, all plates, and all Kevlar components of the MTV or IBA. Within the APL template, commanders can match the body armor to be worn with a threat description, mobility impact, and approximate weight.

Counterargument: Safety, Physical Conditioning, and Political Impacts

There are three likely counterarguments to be made against allowing commanders to employ their Marines without some or all of their body armor. These arguments focus on keeping Marines safe in combat, that Marines can become physically fit enough to

operate normally even with the additional weight of body armor, and about the political implications of taking American casualties.

According to some critics, Marines have the best chance to survive in a combat environment by wearing maximum amounts of body armor. However, maximum body armor does not always correlate to maximum safety on the battlefield. Captain

Winecoff states, "The increased use of individual protective measures plus such personal traits as alertness, coordination, discipline and aggressiveness usually more than compensate for any alleged vulnerability due to the lack of close body protection." The safety that is potentially lost through allowing commanders to employ their units with full body armor can be replaced by enhanced unit effectiveness on the battlefield. Now instead of a unit that relies on the passive protection that body armor provides, that unit creates safety by employing with better active security measures from reducing the weight being carried by its Marines.

Some might argue that Marines can be trained to overcome the weight of body armor by increasing their physical fitness levels. However, Major Stephen Townsend wrote in a paper on soldiers' loads, "Our doctrine recognizes that a man's ability to carry a load can be improved 10-20% with proper training.

Beyond this point, no further gains are possible."¹¹ Given that 50 pounds is the maximum combat load that Marines should wear, this means that, at best, the ideal load could be increased to 60 pounds. This still falls far short of the typical load of 97 to 135 pounds that Marines currently carry into combat.¹² A kevlar vest with protective plates weighs 30 pounds, half of the maximum weight that a physically fit Marine can carry before severely degrading his performance. In addition to that vest, the Marine will have to carry his weapon, ammunition, water, helmet, first aid kit, and mission essential equipment. It simply isn't possible in most scenarios for Marines to carry an appropriate amount of weight and full body armor.

Many Marines believe the American public is unwilling to accept American casualties. If American casualties are taken that might have been prevented by wearing body armor, then the American public will become outraged and demand retribution against the decision-makers who allowed the employment of Marines without full body armor. The American public does want every American serviceman to return home safely. However, the military and government must communicate the nature of the fight that their sons and daughters are fighting in. The public can understand and tolerate military losses as long as they

understand the purpose behind the mission being accomplished and the needed method to accomplish that mission.

Conclusion

Body armor can both positively and negatively affect mission performance on the battlefield. Determining how much body armor is required needs to be done on a case-by-case basis. Tactical-level control over body armor requirements is necessary to achieve maximum effectiveness in accomplishing complex missions in varied warfare settings. Strategic and operational commanders can enhance Marine abilities during operations by providing tactical-level commanders with the necessary freedom to make these kinds of decisions.

¹ Marine Corps Warfighting Publication 3-33.5: Counterinsurgency, Quantico, VA: Headquarters, Marine Corps Combat Development Command, 15 December 2006, 1-26.

Wendell B. Leimbach Jr. "Beyond the Interceptor System," Marine Corps Gazette, September 2006, 82.

³ Kimberly Johnson, "Too Much Battle Rattle," Marine Corps Times, January 28, 2008, 8.

David F. Winecoff, "Body Armor or Mobility," Marine Corps Gazette, June 1971, 28.

⁵ Ibid.

⁶ David Kilcullen, "Twenty-Eight Articles: Fundamentals of Company-level Counterinsurgency," http://smallwarsjournal.com/documents/28articles.pdf, 3. ⁷ Ibid.

⁸ Leimbach, 81.

⁹ Ibid, 82.

Winecoff, 28.

Stephen J. Townsend, "The Factors of Soldier's Load," (Master of Military Art and Science dissertation, U. S. Army Command and General Staff College, Ft. Leavenworth, KS, 1994), 81.

¹² Johnson, 8.