Using Flag Signals to Speed Combat Casualty Evacuation

Marking Technique Tried at the NTC Shows Who Needs Help First

by Major Joseph M. Nolan

There is an alarming trend at the NTC and throughout the Army, the lack of adequate force protection considerations in all operations. This trend is emerging at every CTC and is addressed by numerous tactics, techniques, and procedures. The Army Safety Center and the Center for Army Lessons Learned regularly publish articles about force protection; however, none of these articles discusses a proposed solution to a major cause of "KIAs" at the NTC, which is "soldiers dying of their wounds." The purpose of this article is to propose an interim solution to this problem and to encourage further discussion that might result in development of a permanent solution.

Maintaining task force strength is a difficult task at best during a rotation to the NTC. Normally, we lock in personnel in key positions, assign augmentees for the rotation, and try to send a 100% manned task force. In spite of careful planning, factors like illnesses, emergency leaves, and real world injuries drain away soldier strength before units "enter the box." The result is that most units enter "combat" at approximately 95% strength. Shortly after the first battle, they will have about 60 casualties, and about 48% of these are lost because they died of wounds (DOW).

In the July-August 1998 issue of *ARMOR*, CPT King discusses medic allocation for better casualty evacuation, better planning, and aggressive use of doctrine to reduce DOW casualties. While CPT King's suggestions will certainly reduce these casualties, I believe there is a more basic problem. Units do not have recognition signals for casualty triage that can be seen from a distance. The largest causes of DOW are "time" and "never evacuated from the battlefield." Clearly, task force commanders cannot afford this level of loss in soldiers' lives and still sustain sufficient combat power.

Units must have and display a recognition signal for casualty triage before help ever arrives at the flashing combat vehicle kill indicator (CVKI). Without such a signal, first sergeants and medics spend valuable time going to vehicles that may or may not have casualties requiring their attention. As a result, soldiers who need immediate attention are not receiving timely care or are "dying" without ever being evacuated from the battlefield. By

This Armored Medical Treatment Vehicle (AMTV), a variation on the MLRS chassis, is seen as a possible replacement for the M577A2 battalion aid station. This prototype at the NTC participated in one of the Advanced Warfighting Experiments.

The AMTV, like the prototype C2V vehicle that it resembles, shares many common parts with the Bradley Fighting Vehicle and the Multiple Launch Rocket System carrier.

Casualty evacuation times to include NBC are:				
PRECEDENCE	**Buddy Aid**	**Combat Lifesaver**	**Medic (91B)**	**BAS to FSB Medical Company**
Urgent	1 hour	1.5 hours	2 hours	2 hours
Priority	2 hours	3 hours	4 hours	4 hours
Routine	6 hours	8 hours	12 hours	12 hours

the end of a rotation, most units have improved their average DOW rate to 35%, an improvement from 48%. But, losing 18 soldiers after every battle quickly drains away combat power. Even the most lethal, technologically superior vehicle is useless without a crew.

The high rate of DOWs is not a medical problem but a leader problem. In today's Army, force protection is of paramount importance. There needs to be a solution to the DOW problem. Though there is extensive analysis from the Center for Army Lessons Learned and numerous CTC publications address force protection, no standard system has been proposed to identify, treat, and evacuate wounded soldiers from the battlefield in a timely, efficient, or effective manner.

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Casualty evacuation times at the National Training Center are listed in the table above. "Died of Wounds" occurs when one of four things takes place: improper medical treatment, improper transportation methods are used, evacuation times are not met, or the casualty arrives at the treatment facility without a MILES casualty card or DD Form 1380. As discussed earlier, the major reason for DOWs is not meeting the casualty evacuation time.

One clear reason time standards are not met is because leaders fail to establish a system to properly identify and treat casualties. To illustrate this point, consider this vignette.

"Stetson Six, this is Blue One. I am observing artillery at NK142356, time 1800, continuing mission, over." "Stetson Six, this is Green One, Runner 1, 3 BMPs and 1 T80 vicinity NK177300, over." "Green One, this is Stetson Six, engage the T80 and if possible fix the BMPs, break, White One action left. Out." "Stetson Five contact Seven and get some help to Green." "This is Seven, monitored and am moving to Green's location, Out."

You are Stetson Seven (1SG). Which of Green's tanks do you go to first? Moving in desert formation, there is 250 meters between each vehicle in the platoon. Three vehicle CVKI lights are flashing and more are likely to be flashing before you arrive. You need to know where the urgent, priority, and routine casualties are, and the clock is running according to the ROE. All you have to guide you to the vehicles with wounded soldiers is the standard bumper number marking system in 2-inch block letters. On top of all that, it will be dark in 30 minutes.

Unfortunately, medics going to the wrong vehicles, or getting to casualties after the "clock" has expired, is what happens during many fights at the NTC. This will probably happen to our soldiers in combat because leaders failed to provide a standard marking and identification system for casualty triage. Subordinate leaders have no technical means to visually tell combat service support personnel where they are most critically needed on the battlefield. The vehicle commanders do not have a method to visually tell the first sergeant or medics who needs attention first. While some units have developed recognition signals, most units do not have a system to prioritize which vehicle needs medical evacuation, during day or night operations.

Today the Army relies on more and more technology to detect the enemy, mass direct and indirect fires, maintain situational awareness, and deliver supplies. Yet with all the investments in technology, we have not developed an accurate, Army-wide system to triage casualties at a distance. Until the Army develops a standard marking system, here is a proposal. It is cost-effective, visually recognizable from a distance, and works day or night. It is the standard flag set (NSN 8345-00-357-0223) recommended for daylight operations, with a minor modification. Take a caliber .50 link and place it on the antenna. Insert a flag for the highest level casualty on board — red for urgent, yellow for priority, and green for routine. At night, the same caliber .50 link will hold a chem-light, using the same colors. (This will work provided the chem-lights are not already used as a marking system.) With these visual signals, the 1SG and the medics will know, as they approach, which vehicles contain urgent, priority, and routine casualties. Clearly, not every vehicle will contain urgent casualties. These signals will greatly reduce the "time" medics spend going vehicle to vehicle.

Commanders, from the Joint Task Force (JTF) to the troop/company/battery, are entrusted with their most valuable resource — soldiers. Losing soldiers by failing to adequately plan and rehearse casualty evacuation is unforgivable. A mural in Skidgel Hall states, "Let no man's soul cry out, had I been better trained!" Soldiers must be trained to survive on today and tomorrow's battlefield and Army systems must work to ensure their survival. Let us push for a system that will save more soldiers from those three dreaded words, DIED OF WOUNDS, and keep our task force strength at the highest possible level.

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