

WHAT EVERY INFANTRY LEADER SHOULD KNOW

CAPTAIN CRAIG W. BUKOWSKI

“Casualty evacuation requires extensive plans, preparations, battlefield initiative, and coordination. The effectiveness of casualty evacuation influences the unit’s morale and combat effectiveness.”

— **FM 7-20, The Infantry Battalion**

Successful medical and casualty evacuation at the National Training Center (NTC), other Combat Training Centers (CTC), and in combat scenarios largely depends on quality medical treatment and rapid evacuation to some type of definitive care. It sounds simple, but getting to that level of success depends upon comprehensive planning, systems, and training to standard. There have been three major negative trends affecting medical and casualty evacuation at the NTC in the past year.

Those three trends are:

- ✓ Lack of home station medical evacuation (MEDEVAC) and casualty evacuation (CASEVAC) training,
- ✓ Lack of established standing operating procedures (SOPs), and
- ✓ Inadequate medical planning.

Identifying and addressing these prior to any deployment will greatly enhance success on any battlefield. This article reviews those trends and offers a way to be successful concerning medical and casualty evacuation from the point of injury (POI) to a Level II medical treatment facility (MTF). The NTC, like the other Combat Training Centers, is not the place to learn how to conduct combat and support operations — it’s the place to learn how to do them better.

A task must first be understood and practiced to a baseline level of competency before it can be improved upon.

The first trend observed is a lack of home station medical training. Failure to adequately train prior to deployment is an issue faced by most battalion task forces (BN TF).

The TF usually conducts ranges, company lanes, and a BN field training exercise (FTX) prior to any deployment. Normally, medical platoon personnel provide range and lane coverage for



Sergeant First Class David Dismukes

Medics from Task Force 1-64 from the 3d Infantry Division (Mechanized), Fort Stewart, Ga. evacuate a simulated casualty during a combined live fire exercise.

real-world injuries only. During the BN FTX, the medical platoon establishes the battalion aid station (BAS) and practices sending ambulances or treatment teams forward if they are lucky. Rarely do they ever see any simulated casualties and almost never evacuate them to a Level II MTF. Enhanced first aid (provided by combat lifesavers), emergency medical treatment (provided by company/platoon medics/trauma specialists, MOS 91W) and evacuation from the POI seldom occurs. When a BN TF conducts its first few force-on-force battles at the NTC, the killed in action (KIA) rates are usually well above 70 percent .

The contributing factors to this excessive KIA rate are time and distance, poor land navigation, and communication. Most casualties are evacuated, but not in the appropriate time to save them based on their injuries.

Time and distance factors are especially real at the NTC and in combat theaters of operations like Afghanistan and Iraq. The hilltop just over the valley that appears a few kilometers away to the inexperienced is actually 10 or 12 kilometers away. The desert that appears flat is in fact riddled with hidden wadis/depressions and unseen washboards that slow vehicular travel to a crawl. Units are not accustomed to training for CASEVAC and MEDEVAC operations over such long distances. If land navigation skills are poor and driving with night vision goggles (NVGs) is not familiar, the ambulances and non-standard CASEVAC vehicles will get lost. Communications are also easily cut off by these long distances and mountains that loom up from the desert floor, adding to a loss of situational understanding.

Units able to identify the trend of ignoring medical and casualty evacuation training during home station training events, and that aggressively plan for the such operations tend to have higher success rates at the NTC. One way is to deliberately plan medical events.



Specialist Adam Nuelken

During training, Sergeant Crystal Hoon (left) tests Infantryman Private John Shuman (right) on clearing an obstructed airway.

Plan for exercises that require the use of combat lifesavers, company/platoon medics, and require casualty and/or medical evacuation from POI to the BAS using both standard and non-standard evacuation assets.

Incorporate the use of simulated casualties in realistic settings. Enforce proper treatment protocols and evacuation procedures creating realistic constraints and stress.

Incorporate night driving and mounted navigation into all training exercises. Test the communications systems over rough terrain and extended distances. Require the use of OE-254 antennas, proper radio procedures, and reporting.

These tactics, techniques, and procedures (TTPs) — when incorporated into CO/BN FTXs — will allow the medical platoon, companies, and combat trains to establish communications procedures.

The second major trend observed is the lack of SOPs. SOPs and/or Combat Service Support (CSS) and medical drills enable the modular medical concept to work effectively.

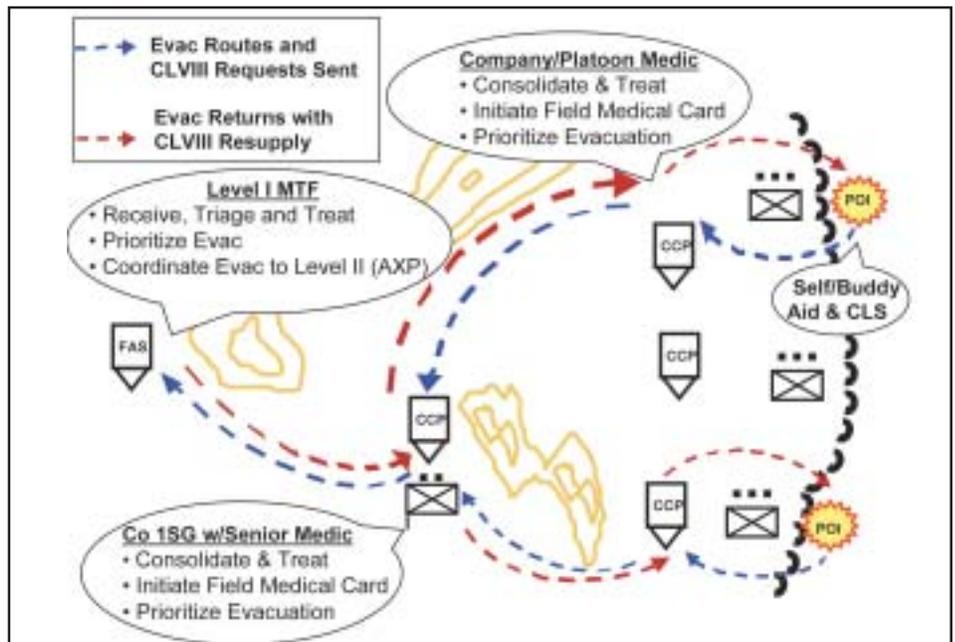
Procedures and/or drills might be simply defined as a standard way for completing common tasks occurring on the battlefield repetitively in the same basic manner that has been proven effective. As an observer controller at the NTC, it has occurred to me that there are three major groups of procedures/drills that must be established for evacuating the casualty from the POI to a Level II MTF or an ambulance exchange point (AXP) that affect the medical platoon/BAS operations. Those procedures/drills are required from the POI to the casualty collection point (CCP), from the CCP to the BAS, and from the BAS to the Level II MTF or an AXP.

Establishing a procedure or drill for POI to CCP rests mostly with the company/platoon medics and the first sergeant. Battle drills and tactical standing operating procedures (TSOPs) should be established on how they will get the casualty from the fighting position or vehicle to the CCP. This requires coordination for signals involving casualty marking, identification, repositioning of forces, and certain triggers requiring specific actions involving medical personnel and non-standard CASEVAC vehicles. The system concludes with a

proven method for triage at the CCP incorporating the use of delayed, immediate, minimal, and expectant (DIME) areas. Success is achieved if the system allows for quick evacuation from POI to CCP and rapid initial treatment is administered to the most severely injured first. If the marking system or triage method isn't synchronized, less critical casualties will inadvertently get treated before the most critical. Once an effective system is established, it must be understood by every Soldier and leader. Always incorporate combat lifesavers (CLS) and consider the use and placement of non-standard evacuation assets. Some units now have MGators, (modified all terrain vehicles) which the first sergeants usually controls (one per company). These MGators are especially useful to evacuate casualties from platoon CCPs to the company CCP and in some instances, to the BAS.

In figure 4.1, the company CCP is located in a covered and concealed position with the company trains. The platoon CCPs are located at the platoon's rear. All CCPs are identified with both day and night marking systems and contain a triage area. Non-standard CASEVAC vehicles are positioned forward with a M996 or M997 ground ambulance designated for litter casualties at the company CCP. The first sergeant coordinates patient flow between the platoon CCPs and the company CCP while the senior company medic conducts

figure 4.1



triage. Communication of 9 line MEDEVAC requests are conducted via the company trains assets or ambulances back to the BAS and S1 and S4.

“Arranging and superintending the march of trains of baggage, munitions, provisions, and ambulances, both with the columns and in their rear, in such manner that they will not interfere with the movements of troops and will still be near at hand.”

— **Baron Antoine Henri de Jomini**

The procedure/drill from CCP to BAS focuses largely on distance, routes and security, and operational procedures at the BAS. “Operational procedures” refers to the set up and functionality of the BAS with regards to patient flow, triage, treatment, and various other functions required for successful operation. In some cases, the BAS will split into two treatment teams: the main aid station (MAS) and a forward aid station (FAS). Often, the MAS and FAS will conduct echelonment (bounding) during an offensive operation to maintain doctrinal distance during the fight. Whether evacuation is from CCP to the MAS, FAS or BAS, the system essentially remains the same.

Doctrinal distance is considered to be 1 to 4 kilometers and/or 1 or 2 terrain features behind the unit supported, emphasizing mission, enemy, terrain, troops, time available and civilian considerations (METT-TC). Failure to maintain this is a common error. Usually, the distance becomes extended due to poor planning, failure to commit medical assets forward, lack of clearly defined triggers, or communications failures.

Movement of medical assets must be carefully planned during the military decision making process (MDMP), especially during the wargaming phase, and incorporated into task force synch matrices, decision support templates (DST), and execution checklists in order to ensure that the medical plan is well integrated and synchronized with the tactical plan. This is crucial in order

to strike a balance between minimizing evacuation times and distances, and protecting medical assets.

Routes and security must be clearly defined, reconnoitered, and rehearsed. Short concealed routes are optimal, but are not always an option. If concealment isn’t an option, then additional security is needed. Commanders are not usually willing to sacrifice combat power to secure medical assets. It’s definitely a calculated risk often overlooked during home station training due to the lack of OPFOR and minimal training time. The best solution seen in recent rotations at the NTC is to strategically place non-standard 5-ton cargo vehicles with mounted .50 caliber machine guns. This not only offers non-standard CASEVAC, but enhanced security as well.

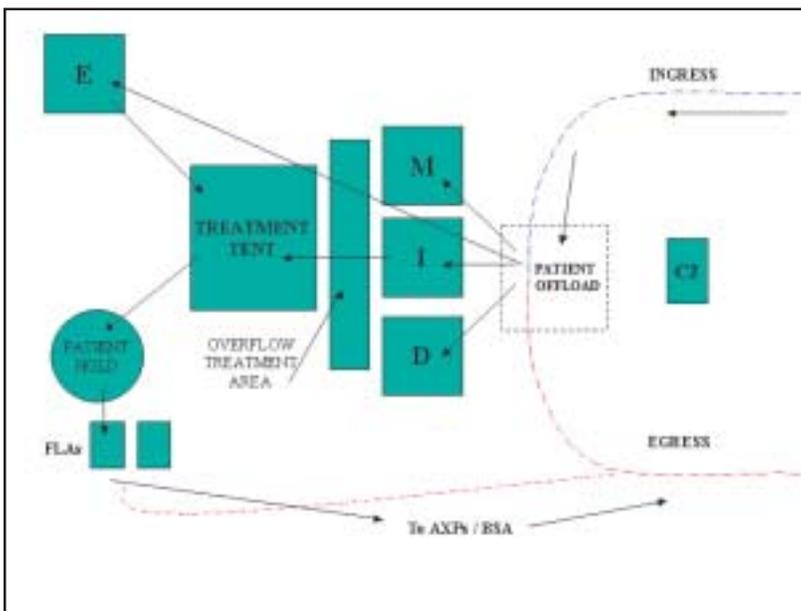
Finally, the BAS, MAS, or FAS must have a viable system of patient flow. This is where the operational procedures for the Level I MTF (BAS, MAS, FAS) are realized. There must be clearly marked entrance and exit routes for traffic, clearly marked patient download areas, and an established DIME casualty triage area. The patients should flow through treatment according to precedence and be organized into a holding/staging area for evacuation to an AXP or Level II MTF. One method for this is provided in Figure 5.1.

Not depicted are the landing zone for MEDEVAC and CASEVAC aircraft and a temporary morgue for KIAs and DOWs. The landing zone should be marked and placed according to METT-TC and specific aircraft requirements. The mortuary affairs collection point (MACP) should be placed nearby and out of view from the patients. If the BAS is colocated with the combat trains, the S4 should be consulted for placement. KIAs are not considered to be a medical responsibility and are not to be transported with casualties or in a medical evacuation vehicle. FLAs depicted in figure 5.1 is a non-doctrinal reference to an M997 or M996 ground ambulance.

The third system involves evacuation from the BAS, MAS, or FAS to an AXP or Level II MTF. A Level II MTF is established by the forward support medical company (FSMC) in the brigade support area (BSA) or a treatment team from the FSMC may locate with a forward logistics element (FLE) and establish a Level I MTF. The difference between Level I and Level II care is the addition of dental, lab, X-ray, and patient hold capabilities. Coordination must be done between the TF medical platoon leader, FSMC CDR and BDE medical planners for locations of AXPs, FSMC, treatment teams with Level I FLEs, and availability of air evacuation assets, both medical and non-standard. Distances should be as short as possible and triggers must be established. The FSMC is responsible for transporting casualties from the BAS to level II. Graphics, rehearsals, and land navigation are crucial to success. Communications are also critical for command and control (C2) of evacuation assets rearward. One way is shown in figure 6.1

The third trend observed is the lack of or inadequate medical planning. The best intentions and highest motivation still cannot solidify a poorly planned operation.

Figure 5.1 Operational Procedures at a Level I MTF (BAS, MAS, FAS)



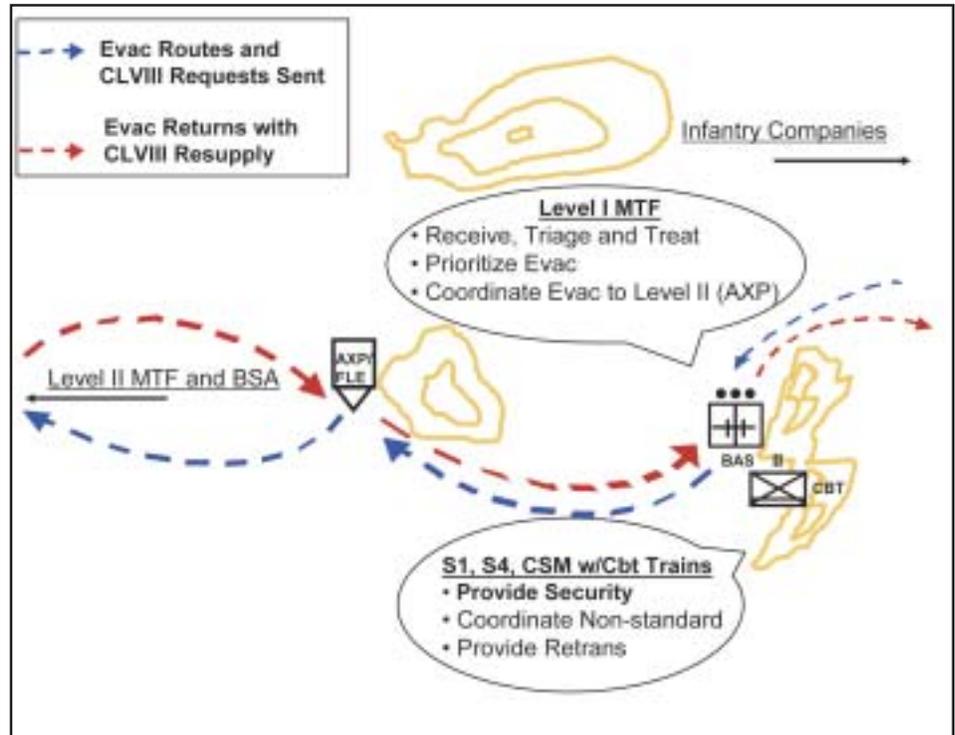
Field manual 4-02.4, *Medical Platoon Leader's Handbook*, provides definitive guidance on health service support (HSS) planning for medical platoon operations. The Medical Service Corps (MS) lieutenant, who is the acting platoon leader 90 percent of the time, oversees platoon operations for the surgeon and conducts most of the medical planning. The Professional Officer Filler System (PROFIS) physician and PA may assist the MS lieutenant with the HSS planning. The MS lieutenant needs to spearhead the medical planning for the TF, with the PA and BN surgeon as the medical technical experts.

When MDMP, mission analysis, and course of action (COA) development occur, the MS LT needs to be there. Too often, the MS LT is not involved and the BN S4 develops the medical plan. If they are lucky, the S4 and the MS LT have a good working relationship and information gets properly disseminated. Primary focus during the planning phase should be medical asset visibility, location during the phases of the operation, triggers, and security. Too often, planning is done on unfounded assumptions.

Rehearsals are critical to any operation and often affect its success or failure. The BDE combat service support (CSS) rehearsal is crucial for coordinating AXP and evacuation to the Level II MTF. Air evacuation is also briefed along with priority of support. At a minimum, the MS LT should attend. Many successful BN TFs use the BN CSM as a key element for CSS operations specifically focusing on CASEVAC. Often, the BN CSM will attend along with the PA and BN surgeon.

The TF CSS rehearsal is where medical support and CASEVAC really come together. The rehearsal should be well organized and attendance is the key to success. Usually run by the TF XO, every company 1SG, senior company medic, S1, S4 and TF CSM must run through their actions throughout the operation by phase. The MS LT should be allowed to brief the HSS overview, not the S4. If the BAS splits and conducts echelonment, (bounding) or moves independently, the medical platoon sergeant will assume responsibility of one aid station and should brief his actions accordingly during each phase of the operation. Triggers must be solidified with actions for each. Casualty collection points,

Figure 6.1



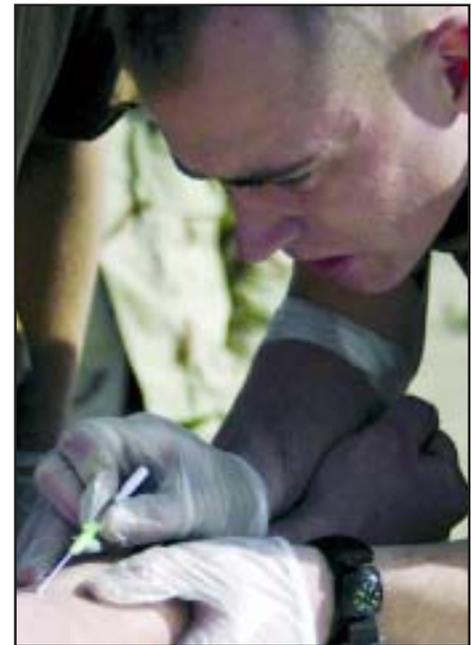
non-standard CASEVAC platforms, and security should be locked in. If conflicts arise, solutions should be devised immediately rather than later. Finally, graphics should be updated and, most importantly, disseminated down to the lowest level.

Medical and casualty evacuation training at home station with realistic constraints involving real world and simulated casualties is essential. Ensuring time and distance factors, AXP, and most importantly, evacuation from POI to Level I MTF and Level I MTF to Level II MTF must be visited. Without stressing the entire system prior to deployment, the unit cannot expect it to materialize during the heat of battle.

Establishing solid evacuation and treatment procedures or drills and involving the entire BN TF is the first step towards success. Improvements will be made along with adjustments based on the mission and METT-TC.

Finally, ensuring the right medical focus and involvement in the entire military planning process and rehearsals solidifies the execution.

Successful procedures or drills that are well planned and trained prior to execution save lives and bolster mission success.



Specialist Adam Nuelken

Private Shawn Stremmel, a Linebacker driver for Battery B, 1st Battalion, 3d Air Defense Artillery, performs an intravenous injection.

When this article was written, **Captain Craig W. Bukowski** was the Light Infantry Task Force Medical Trainer for the National Training Center at Fort Irwin, Calif.