NEWSLETTER

OPERATIONS IN THE DECISIVE ACTION TRAINING ENVIRONMENT AT THE JRTC VOL. V:

BATTALION AND COMPANY WARFIGHTING

Lessons and Best Practices

Operations in the Decisive Action Training Environment at the JRTC, Volume V: Battalion and Company Warfighting

DIGITAL VERSION AVAILABLE

A digital version of this CALL publication is available to view, download, or reproduce from the CALL restricted website, <http://call.army.mil>. Reproduction of this publication is welcomed and highly encouraged.

Common Access Card (CAC) or Army Knowledge Online (AKO) login is required to access the digital version.

Operations in the Decisive Action Training Environment at the JRTC, Volume V: Batttalion and Company Warfighting	
Table of Contents	
Introduction	**1**
Chapter 1. Can Successful Units at the NTC Use the Same Armor Tactics, Techniques, and Procedures to be Successful in the DATE Scenario at the JRTC? *CPT Jason Wolfe*	**3**
Chapter 2. Mission Command of a Composite Fires Battalion *MAJ Michael F. Coerper*	**9**
Chapter 3. Combined Arms Breaching: A Lost Art or a Work in Progress? *MAJ Arlo J. Reese*	**15**
Chapter 4. The Company Intelligence Support Team in the Decisive Action Training Environment: It's Only Dumb if You're Not Using It *CPT Brandon Chase and CPT Carl Danko*	**23**
Chapter 5. Company Intelligence Support Team in a Decisive Action Training Environment *Task Force 1, Joint Readiness Training Center, Operations Group*	**31**
Chapter 6. Employing an Unmanned Aircraft System as a Reconnaisance, Surveillance, and Target Acquisition Platform: The Importance of Integration *CPT Ariel M. Schuetz*	**37**
Chapter 7. Explosive Ordnance Disposal Integration, Capabilities, and Evidence Collection in a Decisive Action Training Environment Rotation at the Joint Readiness Training Center *CPT Adam J. Daino*	**41**
Chapter 8. The Company Supply Point *CPT Sung Min Kim*	**49**

The Secretary of the Army has determined that the publication of this periodical is necessary in the transaction of the public business as required by law of the Department.

Unless otherwise stated, whenever the masculine or feminine gender is used, both are intended.

Note: Any publications (other than CALL publications) referenced in this product, such as ARs, FMs, and TMs, must be obtained through your pinpoint distribution system.

Introduction

The Emerging Art of the Decisive Action Training Environment

Mr. Thomas Odom
Center for Army Lessons Learned
Liaison Officer, Joint Readiness Training Center

Rotation 13-09 marked the third time since 2010 that an airborne brigade combat team (BCT) entered the box at the Joint Readiness Training Center (JRTC). The 3rd BCT, 82nd Airborne Division (3/82), Task Force Panthers, were the rotational training unit (RTU) for the first such rotation (11-01) and this last one. Rotation 11-01 was a full-spectrum operations rotation exercising decisive action (DA). Rotation 13-09, like Rotation 13-01 just nine months earlier, was a Decisive Action Training Environment (DATE) rotation using the DATE to drive the scenario. In terms of warfighting and DA, all three rotations were both similar and therefore comparable.

This newsletter serves as a further milestone for such comparisons. The Center for Army Lessons Learned (CALL) and the JRTC have teamed after each rotation to complete a series of newsletters. JRTC Rotation 11-01 resulted in CALL Newsletters 11-24 and 11-32. JRTC Rotation 13-09 produced three CALL newsletters 13-13, 13-15, and 13-17 that covered the DATE rotation from BCT to company level. We will do the same for Rotation 13-09. This is the second newsletter for 13-09 (the first newsletter targeted BCT warfighting). This volume looks at the battalion and company levels of warfighting.

Rotation 13-09 was the third DA and the second DATE rotation; our team felt it was time to begin addressing the art emerging from the science of warfighting in unified land operations (ULO). Thus far, the following triad of common issues have surfaced to challenge commanders and staffs in DA rotations:

- The doctrinal challenges of ULO.

- The challenge in bridging digital to analog communications.

- The organizational challenges of modularity.

This newsletter like those before addresses those areas. In past rotations, the RTUs dealt with the issues as matters of military science. In this third DA rotation we saw the emergence of military art based on that science. Art in military operations comes from the experienced-based application of judgment and intuition, taking science to the next level. This newsletter addresses such art as it touches on the common issues above. MAJ Arlo Reese examines the challenge of the breach, correctly highlighting it as an issue that challenged units before "9-11" and still challenges them today. CSM Chip E. Mezzaline tracks the continuing issue of Soldier loads as a doctrinal and leader challenge, one that the 3/82 Panthers met quite well during the rotation. Two articles discuss the continued utility, manning, and communications requirements for company intelligence support teams in ULO. Task Force 2 noncommissioned officers dissected the organizational and doctrinal challenges inherent in casualty evacuation.

Other articles look at the art and science of integrating, synchronizing, and sustaining battalions and companies in a DATE rotation.

Chapter 1

Can Successful Units at the NTC Use the Same Armor Tactics, Techniques, and Procedures to be Successful in the DATE Scenario at the JRTC?

CPT Jason Wolfe, 30 Team Senior, Task Force 3, JRTC Operations Group

After a decade of mission rehearsal exercises (MRE) at the nation's two most notable combat training centers (CTC), the Army recently decided to train units for unified land operations (ULO) within the decisive action training environment (DATE). The DATE framework for ULO recognizes the current and future global threat. Both the National Training Center (NTC) and the Joint Readiness Training Center (JRTC) have run at least two rotations using DATE.

Figure 1-1. An M1 in the woods is a wonderful thing when a BMP shows itself.

Proper use of armor is a major factor for success at the NTC. Indeed the NTC has traditionally been looked at as the heavy dirt CTC while the JRTC has always been the light or special operations forces (SOF CTC). That simplistic division is more fairy tale than truth. The JRTC was in decades past, home to a heavy division, one that routinely trained across the Fort Polk reservation in what is now seen as "the box" for the JRTC. The truth is that similar Armor tactics, techniques, and procedures (TTPs) that are adequately trained will succeed at both CTCs. Whereas rotational units at the NTC before "9-11" were heavy brigades with perhaps a light infantry company or battalion attached, those at the JRTC were almost always a light infantry brigade with an attached heavy team. In 2002, the JRTC Operations Group and the Center for Army Lessons Learned (CALL) produced CALL Handbook 02-14, *Heavy Team*

Handbook: Integration With The Light Brigade Combat Team, as a guide for heavy team commanders coming to a rotation. Many of the same TTPs and certainly all of the considerations addressed remain crucial to success and are applicable in any mission set. As a former Company Commander of D/3-8 CAV who recently executed a DATE Rotation at the NTC (DA 13-03) and currently serving as an observer controller/trainer (OC/T) at the JRTC, I can offer a unique perspective from both CTCs. This article shares Armor TTPs and discusses them in terms of movement and maneuver (M2), sustainment, and fires warfighting functions (WfF). Success through these WfFs may facilitate similar achievements for armored and mechanized units at both training centers within this scenario.

Movement and Maneuver

The observed trend for armored and mechanized units during DATE rotations at the JRTC is that tanks and Bradley Fighting Vehicles (BFVs), in some cases, are under-utilized. Many leaders have not used heavy elements in a maneuver fight and don't expect to use them here at the JRTC. They don't employ many of the same TTPs that are used successfully at the NTC. At times a tank company/team at the JRTC is simply relegated to airfield defense or used as a show of force at checkpoints as seen in Figure 1-2, which depicts the array of forces in the brigade after expansion of the lodgment. In Figure 1-2, the red icons represent the locations of enemy vehicles and personnel. In this figure, tanks and BFVs are stagnant and situated in the rear of the brigade footprint and not positioned forward. A forward disposition would allow a tank or mechanized company/team to employ their optics (the best in the brigade) to observe fires and potential enemy maneuver in zone. Furthermore, the forward disposition also provides mobile armored protection (the best in the brigade) for dismounted infantrymen.
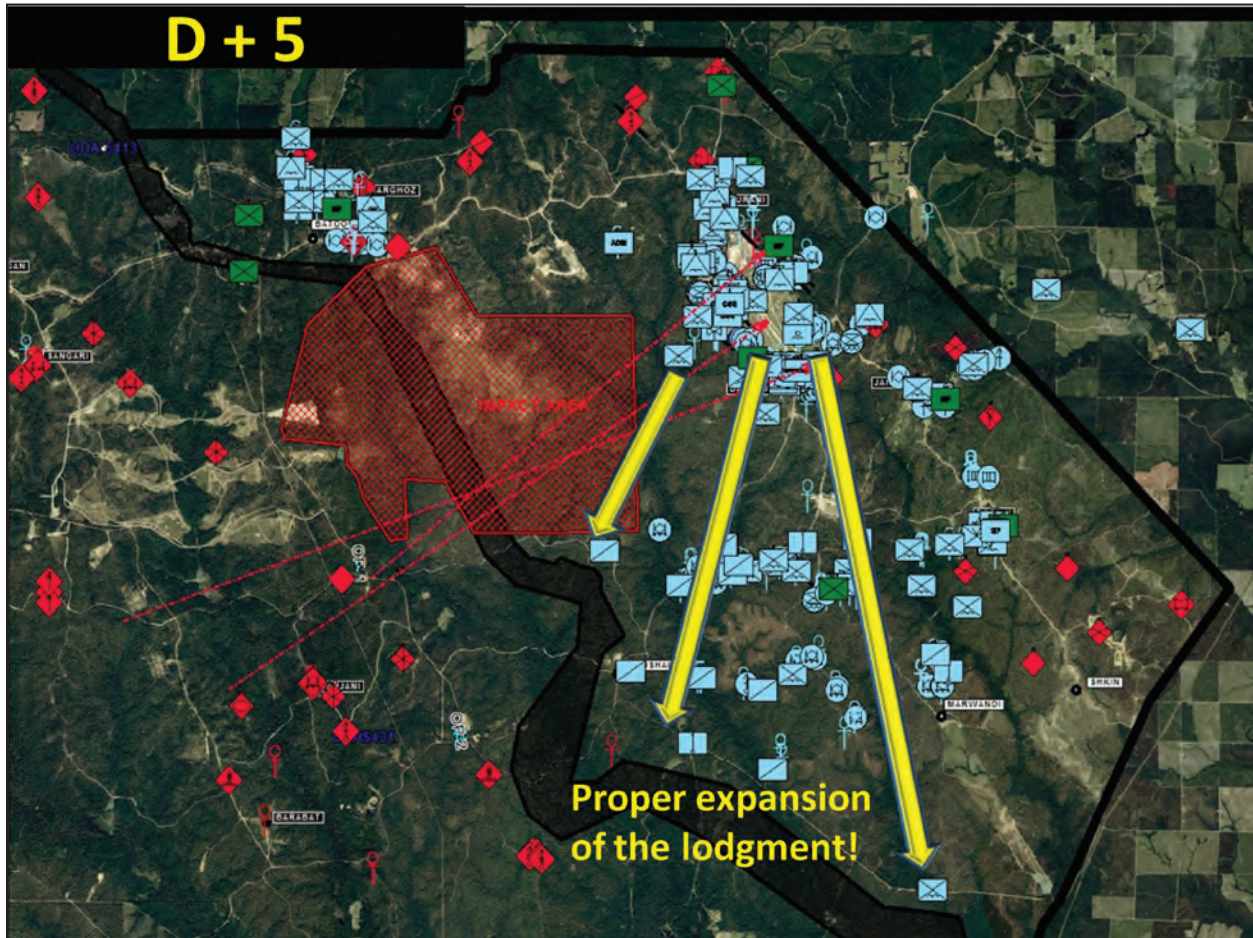
Figure 1-2. A display that shows the need for the brigade to conduct roving patrols in order to eliminate enemy observers (notice the lack of enemy in the South due to area reconnaissance). Tank company teams then could be effectively used to seize and/or retain the initiative by mutually supporting reconnaissance units as they maneuver to expand the brigade's lodgment.

As units transition from the lodgment into the next phase of the operation, tank company/teams have the ability to seize, isolate, or retain key terrain through speed and tempo associated with movement and maneuver. Although the NTC provides more maneuver space and greater overall freedom of maneuver, mechanized and armored platforms have the ability to execute doctrinal movement formations and techniques at the JRTC. Much like the NTC, the JRTC training area has restricted and severely restricted terrain but doesn't hinder a unit's overall ability to conduct movement and maneuver. The terrain, with all of its spider trails, is advantageous even for a TF level movement to contact or attack. Field Manual (FM) 3-90.1 states that "the purpose of tactical movement is to position units on the battlefield and to ensure protection and gain advantage over the enemy prior to contact." Before doing so, the "company/team commander must assess METT-TC factors to determine which techniques and formations will allow the unit to maintain the correct balance of speed and security to best accomplish his mission." Applying this analysis will lead the company/team commander to conclude that all movement formations and techniques can be adequately utilized to set conditions for his unit.

Figure 1-3. A tank gives you a nice edge.

Once a tank company/team gains contact, the unit commander, whether at the NTC or the JRTC, can be assured that the unit can sharpen its skills and train on battle drills (specifically action, contact, defile and dynamite drills along with survivability moves). In accordance with FM 3-90.1 and 3-20.15, and ARTEP 7-247-11-DRILL, "battle drills provide virtually automatic responses to contact situations." D/3-8 CAV conducted these drills when necessary and utilized them as TTPs while training at the NTC, and they are just as applicable at the JRTC. Actions on contact for direct and indirect fires, as well as react to an NBC attack, can adequately be assessed at the JRTC for armored and mechanized units. One of the most difficult battle drills to effectively train to standard, but is vital for tactical success as a company/team, is conducting a breach. Although the obstacles themselves are not nearly as expansive as those typically found at the NTC, the ones the OPFOR emplace at the JRTC are effectively tied to terrain and seemingly almost always over-watched. It is crucial that armored and mechanized units come to the JRTC prepared to adequately and effectively reduce obstacles. A successful breaching operation will allow follow-on units the ability to pass through the obstacle and establish the necessary stronghold for future mission success.

Unit commanders should also keep in mind that as the Army transitions away from MREs at the CTCs and focuses on the DATE, the utilization of forward operating bases (FOBs) will also fade away, thus necessitating the use of assembly areas (AAs). A highly successful TTP for a rotational training unit (RTU) at the NTC during the DATE scenario is the utilization of the quartering party and subsequently AA procedures. The concept is sound, when executed correctly. A unit's quartering party, which usually consists of the number 2 tank or BFV from each platoon sent out to verify an impending location for the AA through multiple tasks, can

help to ensure the safety of the unit as a whole as they transition. This TTP is paramount at the NTC, but is very rarely used at the JRTC although it can be effectively trained here. The JRTC is not only a dismounted training area; units should be encouraged to explore the benefits of incorporating this battle drill into unit SOPs.

Fires

There are no limits in the utilization of all direct and indirect fires from armored and mechanized platforms in conjunction with close air support and close combat attack (CAS and CCA) at the JRTC. At the NTC the focus and mission of fire support officers (FSOs) and FS team (FIST) members were defined as clearly as possible. As a maneuver element at the NTC, many of the successes or failures were due in large part to the availability and accuracy of the indirect fires massed on the enemy. The physical employments of the FIST as well as combat observation and lasing teams (COLTs) were crucial to the achievements the tank company/team and battalion/ task force enjoyed. Similarly, employments of FS assets are essential for unit success at the JRTC although observations posts, due to terrain, at the JRTC make it a more difficult for the fire support elements to gain adequate standoff while performing their duties. Additional observations made from both CTCs are that units are not so much reluctant to utilize air assets such as CCA and CAS, but have troubles coordinating their use while simultaneously de-conflicting air space. As a result, some units lose precious time while in contact coordinating and synchronizing the use of a particular asset instead of actually employing it to destroy the enemy. FM 3-90.1 offers the following considerations for the tank or mechanized company/ team commander to help with the integration of aviation assets, assuming the unit is positioned forward and able to use them on enemy targets:

- Terrain model and radio rehearsals.

- Location of air corridors and air control points (ACPs).

- Location of aerial attack by fire/support by fire/battle positions (ABF/SBF/BP).

- Aircraft weapons configuration.

- Fire coordination measures.

- Location and marking of landing and pick up zones (LZs and PZs) for casualty evacuation (CASEVAC) and aerial resupply.

An additional TTP executed by maneuver elements during deliberately planned operations at both training centers and employed to support planned targets was the use of the DD Form 1972s, better known as the joint tactical air strike request. Some units have used airspace coordination areas (ACAs), broken down by altitude, lateral, and time separation, as the primary tool for deconflicting and integrating air with ground fires. This TTP assists commanders as they conduct mission analysis and allows them freedom to engage and destroy enemy assets in a calculated environment.

Sustainment

Logistics packages (LOGPACs) operations are complex and crucial for the success of a unit while conducting operations at either CTC. While part of an RTU deployed to the NTC, 3-8 CAV

was a "T" in LOGPAC operations. Systems were in place and the battalion trained extensively throughout several home station training events in order to meet the unit's needs for sustainment. Although not perfect, those systems ensured the unit was sustained and helped to facilitate the destruction of enemy forces, especially during offensive operations. According to FM 3-90.1, "in the offense, logistics functions are performed as far forward as the tactical situation allows. Team trains remain one terrain feature behind the combat formations." This is certainly a planning factor for successful operations at the NTC for both mechanized and armored platforms as well as at the JRTC where the terrain offers adequate cover and concealment for logistical platforms. These additional LOGPAC TTPs, which 3-8 CAV utilized during its decisive action (DA) rotation at the NTC, are just "a way," but can easily be employed at the JRTC. Some of those TTPs were the following:

- Utilizing meetings (called LRP or LOGPAC meetings) to turn in updated Orange 2 reports as well as 5988-Es to the battalion (S-4).

- Distribution platoon sergeant (distro PSG) escorts LOGPAC vehicles and company supply sergeants (SGTs) to LRP meetings to link-up with company first sergeant (1SG) or executive officer (XO) then returns to field trains command post (FTCP). 1SGs or XOs then take positive control of their supply SGTs and LOGPAC vehicles and escort them to the company AA for supply distribution and sustainment. Once complete, LOGPAC vehicles and supply reps are escorted back to the LRP for link-up with the distro PSG.

- All sustainment operation communications take place on the battalion administrative and logistics (A&L) net.

- Conduct refuel on the move (ROM) appropriately for all mechanized and armored platforms when needed as well as Class V upload (prepared to conduct while under fire).

There were many more sustainment TTPs employed, but these were the centerpieces for the battalion's success as a whole. These TTPs or similar ones may be deliberately planned and used successfully at the JRTC in order to ensure mission success for armored and mechanized platforms who train here.

Conclusion

Unfortunately, the perception of the RTU when it deploys to the JRTC is that the unit cannot employ the tank or mechanized company/team in the same manner that it would at the NTC. The belief is that movement and maneuver is hindered at the JRTC, making a tank or mechanized company/team ineffective in its ability to achieve necessary effects on the enemy. The reality is that there are no insurmountable constraints, and tank and mechanized company/teams would most likely eviscerate the enemy with devastating effects if utilized properly at the JRTC, just as they do at the NTC when utilized properly.

The NTC and the JRTC offer rotational units, namely armored and mechanized platforms, the ability to conduct and train a wide array of operational tasks. Many, if not most, of the same tactics, techniques, and procedures employed by company/team and task force maneuver elements at the NTC can and should be emphasized at the JRTC as the Army transitions out of MREs to DATE rotations.

Chapter 2

Mission Command of a Composite Fires Battalion

MAJ Michael F. Coerper
Fires Division, JRTC Operations Group

Mission command (MC) of a fires battalion will become more complex in the next fiscal year (FY). In FY14, the fires battalion of each infantry brigade combat team (IBCT) will gain an M777 battery and revert to three batteries with six howitzers (3x6). This will place additional complexity as the entire battalion expands to incorporate the additional battery and the additional assets the forward support company (FSC) needs to support it. Additionally, units deploying typically as a global response force (GRF) or contingency operation package could include anything from a section of high mobility artillery rocket system (HIMARS) to a reinforcing fires battalion. It is imperative that field artillery leaders follow the six principles of MC to ensure that these additional resources are quickly and efficiently integrated:

- Build cohesive teams through mutual trust.

- Create shared understanding.

- Provide a clear commander's intent.

- Exercise disciplined initiative.

- Use mission orders.

- Accept prudent risk.

Figure 2-1. Towed 155s on the firing line at the JRTC.

The field artillery community already has a vehicle for accomplishing this task, that of writing a field artillery support plan (FASP) instead of a simple concept of the operations (CONOPS) to ensure we can successfully achieve our mission of delivering timely and accurate fires.

Build Cohesive Teams Through Mutual Trust

Once a composite battalion receives a new organic battery, a HIMARS section, or a reinforcing battalion, the first step is building a cohesive team through mutual trust. The new battery or section is going to come with questions and hesitations. They will bring their own tactical standing operating procedures (TACSOP) for incorporation into the composite battalion TACSOP, but if they were already using a FASP formation for their orders process the command relationship transition will be less traumatic. They will know exactly where to find information, and doing those routine things will start building that cohesive team. It is a commander's specific task to create teams, both within their own organization and with unified actions partners (see Army Doctrine Reference Publication [ADRP] 6-0, *Mission Command*, Figure 1-1). As field artillery leaders, we can proactively reduce this transition friction by use of a FASP to be the adhesive in our new cohesive team.

Create Shared Understanding

The cohesion that commanders start gains reinforcement with a shared understanding of the problems the unit faces. An addition of a different kind of weapon system (from an M777 battery to an M119 battalion, or the addition of HIMARS to a cannon battalion) possesses different problems and different solutions to now common problems. An updated TACSOP that includes the new M777 and integration planning factors for HIMARS or a reinforcing battalion is the first phase of a shared understanding. The TACSOP can allow the prior planning of an additional combat prescribed load list (PLL) for the new weapon system, and it can enables the unit to anticipate what HIMARS or a reinforcing battalion requires. The updated TACSOP would predetermine the time difference in dig assets needed to build a firebase for the M777s versus M119s.

Figure 2-2. HIMARS adds capability and complexity.

However, a TACSOP doesn't allow commanders to do anything other than prepare. It does not make the plan. Using the military decisionmaking process (MDMP) to formulate a FASP will allow the unit to have a shared understanding of the common problem. The situation briefed by the S-2 determines what the current threat capabilities are, and helps answer the decision to use position area for artillery (PAA) versus firebases. A FASP service support specifies that an FSC draw an exact number of shells and their correct fuzes to allow the battalion to emplace a family of scatterable mine (FASCAM) field of a predetermined size. The FASP allows the fires battalion to fully synchronize field artillery tasks (FATs) to support the fire support tasks (FSTs) from the brigade commander's plan, and it serves as the document to record the transition from the annex D and fire support execution matrix to a schedule of fires. The FASP is the one place where the shared understanding is referenced for the entire battalion, and it serves as the data center for all of the technical and tactical rehearsals that the unit will conduct.

Provide a Clear Commander's Intent

The shared understanding of the problem provides the foundation for the commander's intent. It allows everyone to have a common operating picture (COP) that the commander guides with his experience and intuition. The commander can give guidance on exactly what he wants his command and support relationships to be. While receiving attachments for GRF/contingency operations, he specifies a command relationship to subordinate units. This ensures that subordinate commander's understand the responsibility that they have for these attachments. A FASP task organization will help subordinate commander's indentify specified tasks. A specified

task is much harder to inadvertently miss due to lack of analysis capability at the battery level. Support relationships are similar; the FASP takes from the BCT order and Annex D what the support relationship is for clear understanding across the entire formation. This prevents confusion and mitigates desynchronization. The fires battalion and its reinforcing battalion know their respective roles to one another because it is clearly laid out on the definition of the supporting relationship. Finally, a FASP that allows the S-3 and fire direction officer (FDO) to fight the battalion in regards to tactical movement of firing batteries and technical facilitation of targets. A commander gives his intent and then allows his subordinates to execute within his intent.

Exercise Disciplined Initiative

Without a FASP to clearly record the commander's intent, it is very difficult for the subordinate commander's to exercise disciplined initiative. An example is a FSC commander's ability to execute missions within the battalion commander's intent. A composite battalion and/or attached HIMARS posses a significant challenge for the G FSC. Initially, there are an increased number of shell/fuze combinations that G FSC must track and understand, the addition of MACs, and added assets to haul larger munitions. The attachment of HIMARs brings a new set of problems with completely new munitions types without bringing additional transportation assets. A reinforcing battalion brings the challenges of working with a peer FSC and the command relationship between the two. While the G FSC can and often does perform emergency resupply, the FSC along with battalion logistics section must plan and synchronize the plan to conserve the manpower of Soldiers. The FASP serves as the basis for the FSC commander to use disciplined initiative to achieve the logistical support the commander needs. Without a FASP to record all of this information, the G FSC commander has a greater challenge in achieving his commander's intent and doing the logistical portion of solving the problem.

Use Mission Orders

The FASP serves not only to record the commander's intent for disciplined initiative, but it records the specific mission orders for each subordinate element. Mission orders, combined with disciplined initiative, allow subordinate commanders to adjust and adapt a current plan. This does not suggest a lack of planning, but rather an ability to react to specific time sensitive situations that deviate from the plan. Commander's guidance for fires is an example of mission orders for it assigned tasks, allocated resources, issued (broad) guidance, and enables subordinate commanders and FSOs/FDOs to "adapt to the circumstances under which it will be received and executed." (ADRP 6-0, pages 2-4) FASP mission orders, with a complete staff analysis, empower subordinate commanders adjust while ensuring the adjustment fulfills their commander's intent. An example is battery commanders adjusting non-tenable firing points. Firing battery commanders need to understand their commander's intent with regard to the tactical/technical control; this allows them to adjust non-tenable firing points. Map reconnaissance and imagery is not always accurate, and commanders need to identify additional firing points that the battalion did not provide that fulfills the commander's guidance for fires. The FASP serves as the location of information required for subordinate commanders to make disciplined initiative as opposed to reactive decisions.

Accept Prudent Risk

The FASP does more than record the commander's intent and issue empowering mission orders to subordinated commanders, it also allows commanders and subordinates at all levels to identify, mitigate, and accept prudent risk. Successful accomplishment of the first five principles of MC serves as an umbrella that mitigates risk for subordinate elements. It allows commanders who have a greater understanding and experience to emplace systems that backstop subordinates decisionmaking. The FASP provides systemic safety that underwrites subordinates and allows them to take the necessary tactical risk to accomplish the mission. An example is the FASP specifying to either conduct fire-base operations or use PAAs. The commander must have an accurate threat assessment to determine which is most advantageous for each asset type. HIMARS works typically best out of PAAs, but a rear-area threat with great freedom of maneuver might preclude them from using PAAs. Conversely, towed howitzers can defend easiest from firebases, but a significant counter-fire threat could increase their survivability move criteria. Once this decision is made, the battalion could request engineer assets, additional intelligence surveillance and reconnaissance support on named areas of interest, or secure terrain that supports artillery occupation. These risk mitigations reinforce the battery commander's individual techniques and support the overall mission.

Figure 2-3. The Fires battalion will be more capable and survivable.

Conclusion

The FASP is the backbone of a fires battalion; it ensures successful and timely delivery of accurate fires. The principles of MC, each interrelated to one another, show that only by executing a full MDMP can fires battalions synchronize and integrate all resources to solve the problem. A simple CONOP lacks enough detail; only the FASP ensures that every field artillery-specific problem is addressed and anticipated in such a way that subordinate commanders can execute disciplined initiative and accomplish the commander's intent. As fires battalions gain an M777 battery, revert to 3x6 howitzers, and prepare for decisive action missions and attachments, field artillery leaders need to return to using the FASP — a combat proven method of synchronizing fires to enable maneuver commanders to dominate in unified land operations.

Chapter 3

Combined Arms Breaching: A Lost Art or a Work In Progress?

MAJ Arlo J. Reese
Brigade Mission Command, JRTC Operations Group

Rotation 13-09 at the Joint Readiness Training Center (JRTC) was the second Decisive Action Training Environment (DATE) rotation at the combat training center (CTC). The rotation training unit (RTU) was the 3rd Brigade, 82nd Airborne Division (3/82), configured as a brigade combat team (BCT) as Task Force (TF) Panther. Rotation 13-01 in October 2012 was the Panthers' teammate — 2nd Brigade, 82nd Airborne Division, configured as TF Falcon. Combined arms breaching challenged both the Falcons and the Panthers; they struggled to plan, synchronize, and execute the complicated operation of combined arms breaching. The BCTs struggled with synchronization across all warfighting functions (WfF) to complete a successful breach operation. After 10-plus years of stability operations and counterinsurgency (COIN), these challenges were to be expected. And some have repeatedly used the phrase "a lost art" to describe the loss of full-scale combat skills such as the combined arms breach or massing and synchronizing indirect fires.

Figure 3-1. Breach is a challenge at any level.

In looking at this issue, I wanted to go deeper. What were the challenges to units before "9-11" when it came to combined arms breaching? Trends from the JRTC in 2001 were published in the Center for Army Lessons Learned (CALL) Newsletter 01-04. The JRTC leadership

training program observations document stated that breaching, especially in urban operations, was a challenge. That same year CALL published Newsletter 01-19, *Trend Reversal Combined Arms Obstacle Breaching*. The newsletter documented a nearly two-year effort led by the U.S. Army Engineer Center and School, the Infantry School, other proponents, and the National Training Center. The effort began with the promulgation of the new Field Manual (FM) 3-34.2, *Combined-Arms Breaching Operations in 2000,* to replace FM 90-13-1, *Combined Arms Breaching Operations,* 1993. The training team worked with the designated RTU that would go to the National Training Center (NTC) for a "focused rotation" on breaching. That home station train-up lasted for some six months and then the RTU conducted its NTC rotation with the training team observing.

CALL Newsletter 01-19 summarized its findings as follows:

- **Doctrine (Green).** The new doctrine appeared sound and incorporated changes that mitigate ongoing deficiencies.

- **Training (Red).** Soldiers and units typically know their individual parts, but fail at synchronization. Consistent and rigorous combined arms training, including rehearsals, at home station is the key to successful breaching operations. Training is the primary focus of this newsletter.

- **Leader Development (Amber).** Breaching doctrine is taught to our leaders, but more time needs to be devoted to tactics, techniques, and procedures (TTPs) at all branch schools (Forts Benning, Knox, Sill, and Leonard Wood). In addition, we need to emphasize combined arms breaching operations at higher levels such as the Leader Training Program (LTP) at the CTCs, Command and General Staff College, and pre-command courses. We must take every opportunity to train our leaders on current and emerging doctrine, organizations, and techniques.

- **Organization (Amber).** With the reduction of maneuver companies within the task force, we must look at additional ways to organize our forces for the breach. This newsletter addresses both traditional forms of organization as well as some newer methods.

- **Materiel (Amber).** Although we currently have methods and systems capable of breaching, procurement efforts are underway to develop and field new systems that will improve reduction capabilities within the breach force. "Grizzly" and "Wolverine" remain high on the priority list for procurement to fill an existing gap in breaching capability.

- **Soldiers (Green).** Squad- and crew-level proficiency in breach drills remains a strength. We need to continue to train the individual and collective tasks so that Soldiers remain proficient.

In other words, combined arms breaching operations was not an established "art" in 2001. Rather, it was most definitely a work in progress that merited close and near constant attention.

Some 12 years later, those findings remain very close to the mark. Success in the complexity of a DATE rotation at any of the CTCs must begin with the basics at the RTU's home station. The DATE hybrid threat at the JRTC forces units to defeat both conventional and unconventional

obstacles consisting of improved explosive devices, hasty obstacles, mines, and wire and earth obstacles. In both cases, the utilization of the breaching tenants applies with regards to conducting planning, synchronization, and execution of reducing the hazard.

Doctrine in 2001 stated, "Breaching is a combined arms operation designed to project combat forces to the far side of an obstacle with the least degradation in maneuver and loss to personnel and equipment. Breaching operations are perhaps the most difficult combat operations a force may encounter. While the techniques for breaching various types of obstacles may vary, the characteristics of the breaching operation will not."

The Army ran three DATE rotations in 2013 and combined arms breaching remained one of the most complicated operations a unit can face. During these DATE rotations, observer-controller/trainers (O/CTs) consistently reported the following three focus areas for units to address to improve breaching operations:

- Leadership.

- Intelligence.

- Synchronization.

Leader Development and Training

There are a number of reasons why we as an Army do not train well on breaching operations, to include the following:

- In training, units do not respect the effects of obstacles unless they are covered by OC/Ts or have a real versus simulated effect (i.e., wire obstacles and anti-tank ditches versus training mines). Minefields (both conventional and scatterable) are especially ignored because forces can drive through them knowing they aren't real. This stems because of two reasons.

    - First, is the fact that most units place the emphasis of the training on the objective and an obstacle is seen as a hindrance to accomplishing that mission.

    - Second, they don't respect mines unless they are "live."

- One of the principles that we teach is to bypass obstacles where possible. Units will bypass obstacles instead of breaching to maintain the momentum, but this does not force the synchronization to take place. In addition, the bypass may have an unintended consequence of moving forces directly into an enemy action.

- It takes too long to breach. Units have an unrealistic expectation as to the time involved to set conditions, breach, proof, and mark. It commonly takes 45 minutes to an hour to successfully breach a complex obstacle at the task force level. Too often, the training plan is sound, but because there are problems with the breaching operation, maneuver forces ignore the obstacle and move on to the objective. If the breach operation is taking too long, there is a problem that needs to be addressed, not just ignored and bypassed. (CALL Newsletter 01-19.)

A wise command sergeant major once told me, "the hardest thing we do in the Army is communication." That holds true for effectively communicating engineer capabilities to supported commanders. The past 10 years have shaped our engineer junior leaders understanding of engineer capabilities and the supported commander's expectations. This often revolves around route clearance as an engineer effort with little maneuver commander focus on how this operation was conducted. But, if we look at ourselves in the light of the discussions in 2001, our challenges are not just centered on a new generation that has never seen a combined arms breach. Leader development therefore includes leader self-development. We all have to relook those fundamentals.

One such fundamental is the engineer running estimate. The importance of a relevant engineer running estimate can assist the staff engineer to provide accurate input into the decision cycle. As noted in JRTC rotations 13-01 and 13-09, this engineer estimate is often neglected by the proponent on the BCT staff, who was also serving as the BCT planner or chief of operaitons. The engineer estimate is developed and maintained to ensure the integration of engineer assets are in the correct position to support the brigade's operations. As observed during 13-09, engineering assets were pushed down to the battalion level for integration and only provided a broad scheme of engineer operations to detail how this asset should be implemented. This didn't help the TF engineer gain a voice as the majority of the engineers were not organic to the BCT.

The engineer planners at the battalion task force level have little experience integrating into maneuver planning processes to influence and shape the commander's decisions. The breaching tenets are often overlooked during the military decisionmaking process (MDMP); as a result, the required breaching assets are not positioned properly with the maneuver formation. During the 13-09 JRTC rotation, engineer equipment was moved from one side of the battlefield to another, causing major delays and the maneuver element losing any momentum it gained during the offense. This dynamic re-tasking resulted in a lack of synchronization.

The majority of engineers in the BCT have little to no experience in conducting traditional combined arms breaching operations. Often they are capable at the individual skill level, but lack an understanding of how to synchronize their efforts within the maneuver scheme. During the 13-01 and 13-09 rotations the newly integrated companies struggled to integrate within the BCT. When possible home station training can provide a forum for relationship building and improve integration of enablers. During 13-09, a conscious effort was done to build these relationships at the BCT level and during the initial phase, the engineer effort was better synchronized than during the offensive operation. The tendency to change task organization constantly resulted in engineers being unsynchronized and unrehearsed with the supported command.

The tendency to consider every breach as a hasty breach resulted in lack of implantation of the breaching fundamentals. The maneuver commander's seemed to visualize the breach as an engineer function and not as a combined arms effort, similar to the struggles with incorporating route clearance patrol functions. With recent focus on COIN operations, units seem to be unfamiliar with working in a combined arms formation.

Intelligence

> Proper terrain analysis is as essential to success on the battlefield today as it was when Frederick the Great ruled Prussia over 200 years ago. It is especially relevant when a force must attack an enemy which has had time to prepare a well-organized defense. This is exactly the situation most units training at U.S. Army Combat Training Centers (CTCs) must confront. Recent CTC trends indicate that units are having difficulty conducting successful combined arms breaching operations. Staff planners can help reverse that trend by mastering categories of terrain analysis tasks which foster mobility and breach operation planning. Today's planners use modern automated tools and equipment to achieve very detailed analyses of the terrain and weather. The utility and availability of these tools continues to increase, and they provide timely support to time-strapped planners.
>
> — CALL Newsletter 01-19

This is arguably the most important breaching tenant. Intelligence plays a critical role to feed information on enemy location, composition, and orientation of obstacles. In the initial stages of MDMP, the BCT staff must conduct a thorough intelligence preparation of the battlefield (IPB) providing an understanding of the enemy obstacle effort. This is the starting point for focusing reconnaissance efforts.

Figure 3-2. Developing an accurate intelligence picture on the fly is high risk.

During the 13-09 rotation, the BCT collection plan failed to confirm or deny enemy location, composition, and the orientation of their obstacles. This prevented the BCT in adjusting engineer assets until they were already committed with other battalion TFs.

A section that is often underutilized during IPB is the engineer terrain team. Often the modified combined obstacle overlay (MCOO) is not complete or only contains basic aspects of the terrain. Detailed terrain analysis could provide friendly forces the ability to maximize the terrain effects during their operation. Often planners are unfamiliar with the capabilities the BCT terrain team provides and they become just a print shop for BCT maps and graphic overlays.

Some of the required products that all terrain teams should be providing to IPB are broken into three categories.

- **Template analysis.** This includes products that template enemy locations, battlefield positions, weapon fans, and line of sight.

- **Maneuver analysis.** This includes products that help determine traffic ability, rate of march, route composition, space available for forces to transition, cover and concealment along routes, and natural and manmade obstacles.

- **Breach analysis.** This includes detailed breach analysis of the breach site.

Synchronization

According to FM 3-34.2, "Breaching operations require precise synchronization of the breaching fundamentals (SOSRA) by support, breach, and assault forces." The majority of the problems identified with unsuccessful breach operations relate to the following three areas:

- An inability to display tactical patience and allow "the conditions" of SOSRA to be established prior to committing the breach force.

- A lack of synchronization of effects and maneuver at the point of breach.

- A lack of understanding and use of the reverse breach planning process.

A lack of synchronization generally results in loss of combat power and mission failure. In this chapter, we will discuss the key activities that must take place to ensure synchronization, focusing primarily on the reverse breach planning process.

— CALL Newsletter 01-19

Figure 3-3. If it's not combined arms, it's not synchronized.

Army Tactics Techniques and Procedures (ATTP) 3-90.4, *Combined Arms Mobility Operations*, defines the following four fundamentals to achieve synchronization of breaching operations:

- Detailed reverse planning.

- Clear sub-unit instructions.

- Effective command and control.

- Well-rehearsed forces.

Reverse breach planning is also outlined in ATTP 3-90.4 and provides the planners with initial guidelines to be implemented in conjunction with the MDMP. The following TTPs taught at the engineer officer captain career course provide the framework to discuss all elements that must be address in breaching planning:

- Step 1: Identify available breach assets.

- Step 2: Doctrinally template enemy obstacles.

- Step 3: Understand scheme of maneuver.

- Step 4: Identify type of breach and required lanes from objective to line of duty.

- Step 5: Identify assets required to breach/proof/mark.

- Step 6: Identify task organization.

All of these steps are part of the MDMP, except Steps 4 and 5. Steps 4 and 5 usually fall on the staff engineer to support the scheme of maneuver. During 13-09, the lack of detailed analysis during the reverse breach planning resulted in the BCT staff spreading the engineer effort over three maneuver elements, which reduced the engineer's capabilities at point of breach. This cookie-cutter approach led to limited breaching capability and ultimately limited the mobility of all forces. The lack of intelligence on obstacle location, during the initial reconnaissance fight, handcuffed the maneuver planners and the BCT never clearly defined the location they would breach.

Throughout the offensive operation, the BCT struggled with mission command of subordinate battalions. The sequencing of the breaching fundamentals—suppress, obscure, secure, reduce and assault (SOSRA)—was not clearly defined. During the actual breach, the command and control of the triggers was lost and the operation was de-synchronized with the breach force moving forward before suppression and obscuration was achieved.

We also observed significant challenges in the constantly changing task organization of engineers throughout the rotation. This impacted planning and preparations for the offense as some engineers did not arrive to the supported maneuver commanders until just before initiating movements.

One of the tendencies identified in the last JRTC rotation was the lack of deliberate combined arms rehearsal at all levels of command. One of the most effective synchronization tools available is a combined arms rehearsal. The complexity of breaching operations makes rehearsals important to allow all participants to visualize actions. This will allow commanders to visualize in time and space decision points that will set the conditions for the breach. Has suppression of direct and indirect assets been achieved, has obscuration been achieved to name a few decision point? At all levels a detailed rehearsal of the breaching operations is critical to synchronize and validate the breach elements task organization, task, purpose, and triggers to initiate movement.

Conclusion

> Combined arms training at home station provides the best opportunity to reverse the negative trend associated with combined arms breaching operations. Realistic combined arms training for TOE units at home station remains our greatest challenge.
>
> —CALL Newsletter 01-19

Conscious effort must be applied during the training cycle to maximize combined arms opportunities to ensure a shared understanding of capabilities and expand coordination to key enablers. To get to the art of combined arms breaching, units will have to make a concerted effort to invest in detailed planning, synchronize the effort, and rehearse to ensure all the fundamentals of breaching are followed. At the brigade level, the utilization of the reverse breach planning process will ensure engineer assets are properly positioned to advance the assault force onto the objective. Then at all levels conduct a combined arms rehearsal to synchronize all elements and spread the shared understanding of the operation.

Chapter 4

The Company Intelligence Support Team in the Decisive Action Training Environment: It's Only Dumb if You're Not Using It

CPT Brandon Chase and CPT Carl Danko
Task Force 3, JRTC Operations Group

The complexity of operations, the ability to collect information and provide it at the lowest level at almost real time, and our increased expectations of junior leaders have reinforced the requirement for CoIST in the current fight. As we prepare our company commanders for future conflicts, they must continue to have an enhanced intelligence capability at the small unit level.

In conventional operations, intelligence is passed from higher to lower headquarters. The higher headquarters is resourced with intelligence gathering capabilities and sufficiently staffed with the analytical personnel necessary to collect, analyze, and disseminate pertinent information. In COIN or other decentralized operations, information generally flows in the opposite direction. Small units provide ground truth and raw information, without the assistance, analysis, and filtering of higher level intelligence staff support. In either centralized or decentralized conditions, the unit's CoIST enables the company to maintain situational awareness, develop situational understanding, and produce intelligence to drive operations.

CoISTs, whether called by that name or troop intelligence support team or the company S-2 sections, support decentralized operations, whether they involve COIN or decisive action. We will use CoIST as the standard theme in this handbook. This is a re-write of the first CoIST handbook based off lessons learned and tactics, techniques, and procedures of CoIST.

— Center for Army Lessons Learned (CALL) Handbook 13-09, May 2013, CoIST

The shift from mission rehearsal exercises (MRE) no doubt led many company and troop fire support officers (FSOs) across the Army to breathe a collective sigh of relief. The new focus on the decisive action training environment (DATE) preparing units for a wide array of contingencies across the world, means an end to the CoIST thing, right? Wrong. Look again at the introductory quote from CALL Handbook 13-09, which was signed by the commanding general of the Joint Readiness Training Center (JRTC).

That's right; don't pack up your "whiz wheels" and "baseball cards" just yet. You still have a job to do. It may no longer revolve around a foreign country's legal system and warrant based targeting, but neither is it "gone back to the good old days." The DATE is not returning to the pre-9/11 or the Cold War era. It is not a nostalgic time when the term intelligence warfighting function or I-WfF had not even been coined, let alone something that commanders worried about integrating at the company or troop levels.

Why CoIST Continues to be Relevant: DATE Entails Decentralized Operations

If anything has been learned over the last decade of combat experience in Iraq and Afghanistan, it should be that the modern battlefield is a complex and variable environment. It is a comforting delusion to think that the DATE is less complex, and that we can, as noted in the text earlier,

return to "conventional operations, [where] intelligence is passed from higher to lower headquarters…" The reality is that the DATE is, if anything, more complex and more variable than the counterinsurgency (COIN) fight. It includes all the familiar opposition and components, from terrorist and extremist cells, organized crime to local civic leaders. It is everything that we have become accustomed to with the addition of a near-peer adversary.

What does this mean for the company/troop commander? It means that nothing has become easier. The need for a strong command post (CP) to assist the commander in managing the area of operations and reporting requirements across all the warfighting functions has increased. The CoIST concept was created to assist the company/troop commander with information and intelligence requirements. Previously the commander was typically required to conduct any analysis or intelligence preparation of the battlefield (IPB) on his own or with minimal assistance from the executive officer (XO) or FSO. During operations in Iraq and Afghanistan, the need for personality targeting and eventually warrant-based targeting necessitated a specialized element at the company/troop level that could not only interface directly with the battalion/squadron S-2 and facilitate a flow of information up the chain, but also directly exchange intelligence with adjacent units. Additionally, the proliferation of higher-echelon intelligence, surveillance, and reconnaissance (ISR) platforms requires a dedicated effort to request, manage, and leverage these assets to support the company or troop's operations. These requirements remain in the DATE; though the emphasis on personality targeting is less pronounced, these actors are out there, actively seeking to influence the populace, attack US or Allied Forces, and otherwise interfere with the accomplishment of the mission. Regardless of type, unified land operations and decisive action remain decentralized. The commander can only benefit by the understanding of this aspect of the environment. Wouldn't it be great if he had a small trained group of Soldiers to assist? However, the traditional role of the CoIST is not enough to ensure mission success. A myriad of other tasks will be heaped upon the commander and the unit. Units must be prepared for these tasks to succeed in combat in the contingency, action, or war of the future.

Figure 4-1. Analog can be basic and very useful.

Considerations for the Company or Troop CP

The role of the CP has continually expanded. With the transition to the DATE, it has expanded again, to encompass both the new realities of modern conflict as well as the old problems that would be recognized by our forebearers in World War II. If a commander chooses to call some portion of the CP a CoIST or not, the commander must consider how he will process intelligence along with other related tasks requiring skills that may have atrophied during the last decade of conflict.

A commander needs to consider what individuals and processes may assist with all the WfFs before arriving at a combat training center (CTC) such as the JRTC. Accurate battle tracking is a task that will once again become critical to mission success in the DATE. Previously, units needed only to track the front line trace of patrols and significant activities (SIGACTS) as they occurred. In the DATE, units must keep track of enemy vehicle and formation locations, battle damage assessments (BDA), and constantly changing friendly positions. For all units, being able to conduct initial analysis of data as it is collected remains immensely important. Subordinate units and commanders may not have the time for information to go up the chain for analysis and then wait for intelligence to filter back down. One of the great strengths of the CoIST is its connection not only to the battalion or squadron S-2, but to its adjacent companies and troops. The ability to share information and intelligence horizontally as well as vertically allows for increased reaction time and the ability to get inside the enemy's decision cycle. Lethal targeting, long the purview of the company/troop FSO, once again takes center stage as the timely and accurate employment of fires figures prominently in the DATE. However, non-lethal targeting

cannot be left behind; the political, military, economic, social, information, and infrastructure (PMESII) elements of the environment in which the unit operates will continue to play an important role in mission success in the DATE. This is particularly true as operations move up and down the spectrum of conflict. A unit may find itself engaged with an enemy armored element one day, then engaged with local leaders to assess the needs of the population and other consequences of the battle the next. The modern company and troop commander has a number of ISR assets that can help to increase situational understanding. Being able to effectively employ organic assets such as the Raven, as well as requesting higher echelon platforms are areas in which the company or troop CP must be trained.

These are just a few of the things that a commander must take into account while preparing the CP and headquarters element for operations during DATE. How a commander achieves this will depend on unit organization and equipment it and will vary from one company to the next. Regardless of whether the decision is made to use a CoIST or some other method of handling intelligence, units that do it well will be better able to react to the fluid environment of the DATE.

Implementation of CoIST at the Troop/Company/Battery Level and the Limitations in a DATE

In our current contemporary operational environment (COE), the Army had to decentralize to succeed. By doing this, a lot of strain and responsibility has been subsequently tasked down to the troop/company/battery (T/C/B) level. Intelligence is now the driving force that can either make units at the lowest level successful or else lead them to failure during daily operations. How do we harness that intelligence, analyze it, and ensure that it is disseminated properly not only to the platoon level, but to the adjacent units that could influence the area of operations (AO)?

According to the CALL CoIST Handbook 13-09, the recommended CoIST organization manning chart will consist of six personnel: one CoIST NCOIC, one analyst, and four Soldiers. Clearly those numbers are for a best case scenario and will rarely occur. How then does the T/C/B replicate the COIST at that echelon? If the lower units are fortunate enough, perhaps only one analyst will be tasked down to the T/C/B, and in a best case scenario, two. Once down at the T/C/B level, an inordinate amount of pressure and expectations are placed on those Soldiers. It is imperative that those Soldiers train and share their knowledge with Soldiers that are routinely in the T/C/B CP like the XO, FSO, and radio operators (RO). That combination then becomes the CoIST. The main questions then become how do we organize the CoIST and how do we implement it during operations on the move (OTM) or at the halt (ATH).

The commander has too many critical tasks during combat operations to strictly focus on intelligence to support missions. The start point is looking at who is available in the CP. We, as an organization, need to get back to utilizing XOs at the T/C/B level as more than just managers of maintenance and property; XOs are capable of much more. The term "fighting XO" has gone by the wayside since the wars in Iraq and Afghanistan turned into an ongoing counterinsurgency. We need to focus on getting that term and more importantly that mentality back. The XO needs to be the last stop of information before it gets sent to the commander; not only is the XO the main battle tracker inside the CP, but he is also your CoIST OIC. The headquarters platoon sergeant can be the CoIST NCOIC if need be and if operations allow it as such. The FSO can still focus on non-lethal targeting as done in the past; but with a CoIST team at the T/C/B level,

the FSO can then focus more on his primary job – fire support. The augmented intelligence analyst (35F) is the keystone in the COIST. The 35F will collect, analyze, produce products, and most importantly train other Soldiers who are routinely in the CP such as ROs. All Soldiers are perfectly capable of receiving intelligence; the trick is how to analyze it and put it into a product that can be disseminated properly and in a timely manner. Now that we know how we can create a CoIST at the T/C/B level, the next step is knowing how to maximize the use of the CoIST while conducting OTM and ATH operations.

ATH Operations

There are two main differences when looking at OTM and ATH operations: one is the communication assets/resources that are available to the commander and CP, and the other is the products that get pushed/sent (digital vs. analog). Those assets or lack thereof will then drive what tools are to be used. While conducting ATH operations, the analyst must have the ability to go completely digital to gain more capabilities, resources, and products. When the CP is established, not only the analyst but the entire CoIST must be able to gain "hard-line" communication utilizing a SIPR/NIPR access point (SNAP) terminal. Once communication has been established, the analyst has access to systems such as TiGR, OSRVT, JABBER, and CIDNE just to name a few. The commander must then decide how to prioritize all of these capabilities to get the best intelligence picture without overloading the analyst and the CoIST that has been established. The BFT or JCR should be set up as well, as this serves as one of the main means of sharing intelligence down to the platoon level (if on a mounted platform). All of these resources benefit the analyst, as this is the easiest way for the T/C/B to receive intelligence from either higher or adjacent elements. Using these systems allows not only the analyst, but the entire CoIST to paint a clear and concise picture to the commander which aids course of action (COA) development.

Figure 4-2. No PPT slides required.

OTM Operations

Now let's look at OTM operations and how the challenges that they present differ. During a recent DATE rotation at the JRTC, several of the cavalry troops had difficulties with establishing a CoIST, collecting intelligence, and disseminating the information down to the lowest level. While it may seem that is at the fault of the unit, let's look at the resources available and the fact that there were no available hard-line communications. Before the brigade started to conduct operations, each troop already had its analyst on the ground. The commander of one troop decided to place the XO, FSO, and analyst in the XO's vehicle to have a combined OTM CoIST to support operations. This is a great example of how to combine and form a mobile CoIST. However, the main issue that arises with this technique is that the analyst does not have any way to receive direct information since there are no hard-line communication assets directly available. The CoIST simply had its FM radios and a BFT that was located in front of the vehicle commander. Due to the intelligence assets available while on the move, sometimes the only way a commander could receive up-to-date intelligence was by going to the squadron tactical operations center (TOC) and receiving intelligence updates directly from the S-2.

Figure 4-3. Analog MCOO — no batteries required.

When time allowed, the commander established the CoIST in the middle of the formation with the rest of the headquarters element. The analyst then could to move to where the 35F could be in front of the BFT. While the analyst did that, the rest of the headquarters then started developing analog tools to help the commander in future operations. Those analog tools included a hard 1:50,000 map, non-stick acetate, markers, and an easel. They then created their situation template, modified combined obstacle overlay, most likely and most dangerous enemy courses of action, and fires overlay to support as necessary. Once all these products were completed, the true challenge is dissemination. Ideally they are disseminated so that the subordinates had one common operational picture. Doing overlays on BFT can be extremely time intensive and a receiving unit may not get them until the operation has already started or worst-case when the operation is over. How then can we leverage the assets available to share the intelligence? Using the troop FM net can make it difficult since there is no picture to go with what is disseminated out and bringing all PLs to the CP may not be possible due to mission requirements. These kinds of decisions will have to be turned into TTPs and standard operating procedures at the T/C/B level. In the end, that commander was able to make it work.

Conclusion

In conclusion, the CoIST is a necessary element at the T/C/B level, but ensuring that it is used correctly and effectively is the true task at hand. Receiving the actual intelligence analyst down to the T/C/B level early in the training cycle ensures that all Soldiers who will become part of the CoIST are trained or at least familiar with what they will be doing. Even though we are in a digital Army, hard-line communication abilities and assets may not be available. The basics need to be maintained with analog tools and the products that come with them. Commanders at all levels need to stress the importance of a CoIST, the success that can derive from it, and how a unit or T/C/B may be most effective during all portions of operations.

Chapter 5

Company Intelligence Support Team
in a Decisive Action Training Environment

Task Force 1, JRTC Operations Group

Company intelligence support teams (CoISTs) are integral to 21st century warfare, and have become an invaluable asset in intelligence gathering. COISTs provide collection, analysis, processing, and coordination of intelligence at the company level. The CoIST mission is to serve as the primary source of information and intelligence that the company commander needs to make timely, accurate decisions. CoIST operations were developed in response to the asymmetric warfare the military experienced over the past ten years in support of Operation Iraqi Freedom and Operation Enduring Freedom. Counterinsurgency operations (COIN) differ from conventional warfare and so do their intelligence demands. CoISTs filled that need for bottom up intelligence gathering and analysis to support higher S-2s. When properly employed conduct the following:

- Collect and analyze patrol debriefs.

- Collect data from handheld interagency identity detection equipment systems for exploitation.

- Track and analyze significant activities.

- Generate analytical, assessment, and mission summary products (Intelligence Summaries) for the company commander.

- Conduct local intelligence analysis, forecast enemy actions, and prepare the threat situation template (SITEMP).

- Develop a company level most likely enemy course of action (MLCOA) and enemy most dangerous course of action (MDCOA).

- Develop enemy patterns of tactics, techniques, and procedures (TTPs).

- Provide situational awareness (SA) and situational understanding (SU) for the company commander.

- Develop target packets.

- Develop be on the lookout (BOLO) vehicle lists.

- Develop company level priority intelligence requirements (PIRs).

- Brief the company commander on the current enemy situation and provide analysis/ recommendations for future operations.

The U.S. Army faces a dilemma of transforming CoIST designed for COIN, and effectively implementing it for Unified Land Operations (ULO) and decisive action (DA). Decisive Action Training Environment (DATE) rotations are used to train units for the DA fight. The following DATE rotation observations will explain that CoISTs used for DATE.

Observations and Recommendations for CoIST Duties and Responsibilities

TASK: Collect and Analyze Patrol Briefs

Observation: Prior to arriving at the intermediate staging base (ISB), the S-2 back-briefed the battalion plan based on a standing operating procedure (SOP) for the companies to hold daily COIST meetings with the battalion S-2 at 1130 hours for exchange of information. Only one COIST meeting occurred at the ISB where the battalion S-2 gave each company an initial intelligence packet containing a SITEMP, Weather Data, MLCOA/MDCOA, and a seven-line report format for the companies to report information. The initial meeting was the only interaction that occurred while at the ISB. The battalion S-2 and the COISTs did not communicate. Upon back briefing the COISTs, we found COISTs were collecting and analyzing information, but had no way to effectively report it to the battalion S-2. Additionally, the COIST did not report their findings to the company commanders. Challenges included the lack of a SOP to guide collecting and reporting intelligence.

Recommendation: A concrete primary, alternate, contingency, and emergency (PACE) plan (with set hard times) has to be implemented for proper synchronization of intelligence. The battalion S-2's main headache was the lack of a synchronized PACE plan. When the CoISTs were unable to meet the battalion S-2 at the battalion TOC, there was no alternative means to share intelligence between the battalion S-2 and CoISTs and/or between the CoISTs and company commanders. An example of a PACE plan is where the primary would be face-to-face meetings; alternate would be FM; contingency would be SVOIP; while emergency would be TRANSVERSE. Analog systems (i.e., FM) should be stressed in DATE due to the rapid operations tempo (OPTEMPO). Units should consider allocating an operations and intelligence (O&I) radio network for transmitting intelligence data, analysis, and updated reports. This should also be ratified in the unit's battle rhythm.

TASK: Collect Data from Electronic Exploitation Systems for Analysis/Exploitation

Observation: Each CoIST team was directed to receive intelligence trackers and databases in the form of the Tactical Ground Reporting System (TiGR), Distributed Common Ground System (DCGS), and the Biometrics Automated Tool Set (BATS) to facilitate electronic analysis and exploitation. Company commanders decided to not use these systems due to the limited access to connectivity during field operations and pain involved in moving tactical CPs (TACs). Due to this lack of connectivity, CoISTs had greater difficulty in relaying information to higher (battalion/brigade). Battalion/brigade experienced a communication gap due to their overreliance on the same electronic systems that were unavailable to the CoISTs.

Recommendation: The TiGR and BATS should be fielded to the CoISTs. TiGR was specifically designed for austere environments, and it is highly adaptable for use when it's not connected to a network. BATS should also used because it can operate without connectivity. Consider fielding the next generation of BATS called the Secure Electronic Enrollment Kit (SEEK). SEEK vastly improves a unit's ability to capture and transmit biometric data. When CoISTs implement these

two systems, there will still be interoperability with mission command systems (CPOF, DCGS) that upper echelons will continue to use.

TASK: Track and Analyze Significant Activities (SIGACTS)

Observation: Companies had limited tracking system for significant activities (SIGACTS). Companies were unaware of events outside of their area of operations. CoIST personnel were tasked to conduct security operations due to personnel shortages, which decreased their effectiveness in conducting CoIST operations.

Recommendation: Units should consider when and where to employ their CoISTs. When employed, Battalions must dictate how the companies will man, equip, and support CoIST operations. At a minimum, there should always be one CoIST member tracking SIGACTs for subsequent exploitation/analysis when the situation permits.

TASK: Generate Intelligence Summaries (INTSUMS) for the Company Commander

Observation: One CoIST provided simple INTSUMs to the company commander when time permitted in simple SALUTE format. This gave the company commander updated intelligence to conduct company operations. Unfortunately, the INTSUM did not get to the battalion S-2 due to insufficient systems to relay the information.

Recommendation: Units should implement SOPs to standardize INTSUMS. Synchronization with the battalion S-2 is paramount in maintaining a common operational picture (COP) and ensuring CoISTs understand their AO and their area of interest (AI).

TASK: Develop SITEMP from Intelligence Analysis

Observation: Few CoIST developed products that portrayed the current enemy situation. Intelligence products were not refined or produced for company AOs.

Recommendation: Units should create a SOP that defines the SITEMP. Taking into account the analog nature of DATE operations, it will be crucial that CoISTs know how to create effective analog acetate overlays that can easily be transposed on to a map. A SITEMP should include the following for effective intelligence:

- Known and suspected enemy locations.

- Suspected enemy boundaries.

- Enemy avenues of approach for the main body with time phase lines (TPLs).

- Likely enemy reconnaissance and infiltration routes with TPLs.

- Likely enemy observation posts and patrols.

- Enemy artillery range fans.

- Known and templated obstacles.

TASK: Develop Enemy TTPs

Observation: CoIST were not employed to effectively analyze enemy TTPs. The companies as a whole were reactive to enemy operations instead of being proactive in anticipating enemy actions.

Recommendation: Classes for CoIST teams covering intelligence preparation of the battlefield (IPB) are beneficial. A key component in understanding enemy TTPs is to understand the basic principles of IPB. As stated in FM 3-60, *The Targeting Process*, "IPB can be best described as the process of understanding the battlefield, the enemy, and the options presented. The objective of IPB is the early identification of probable enemy COA. It is a continuous and systematic method for analyzing the enemy, weather, and terrain in a geographical area. The IPB provides much of the information for the intelligence estimate."

By understanding the IPB process, the CoISTs can brief critical intelligence summaries and rely on their own analysis to brief commanders with little to no visual aids regarding the current enemy situation while including the most up to date enemy TTPs.

TASK: Develop BOLO Lists

Observation: BOLO lists were not distributed throughout subordinate units.

Recommendation: Create and maintain a BOLO list. As the CoIST receives reports from patrols and other documents, the CoISTs must ensure at a minimum the 5Ws (Who, What, When, Where, Why) are recorded in an analog tracker (i.e., butcher block, notebook log) for historical reference. Once recorded, these reports can be compared with battalion S-2 reports in order to create a more effective BOLO list.

TASK: Develop PIRs

Observation: There were no significant refinements to PIRs at battalion or company level as updated information was discovered.

Recommendation: Units using a decision support matrix (DSM) to provide guidance to the CoISTs concerning the current PIRs and the criteria needed to change them historically succeed. The battalion and companies must synchronize. A useful tool in implementing this synchronization is the DSM. A DSM is a staff product initially used in wargaming to represent decision points and project situation, indicating when, where, and under what conditions a decision is most likely required to initiate a specific activity (such as a branch or sequel) or event (such as lifting or shifting of fire). With this planning tool, a DSM tailored for company operations would help dictate when PIRs need refinement for future operations.

Conclusion

Even as CoISTs evolve in the 21st century, the CoIST primary mission in knowing the enemy, predicting their activity, and providing tangible intelligence in support of future operations will never change. Whether in COIN or DA, intelligence will always shape the outcome of any mission. Two keys to success must be remembered. First, PACE synchronization is essential. Any unit from squad to corps needs a definitive PACE plan that takes into account digital and analog forms of communication if one should fail. Second, the basic principles of IPB (who is the enemy, where is the enemy, and what will the enemy do) need to be taught. If CoISTs don't understand how to do IPB properly, no intelligence analysis will ever be completed. If these basic principles are followed, CoISTs will continue to serve as the primary source of information and intelligence that the company commander needs in order to make timely, accurate decisions.

Chapter 6

Employing an Unmanned Aircraft System as a Reconnaissance, Surveillance, and Target Acquisition Platform: The Importance of Integration

CPT Ariel M. Schuetz
Aviation Division, JRTC Operations Group

In the last 10 years of combat, a paradigm shift has occurred in the unmanned aircraft system (UAS) doctrine and practice. The UAS has evolved from a passive intelligence, surveillance, and reconnaissance (ISR) sensor into a more robust and dynamic reconnaissance, surveillance, and target acquisition (RSTA) platform. The current Army manual for UAS operations, FM 3-04.155, *Army Unmanned Aircraft System Operations*, clearly defines this in its opening pages stating that "UAS significantly increase situational awareness (SA) and the ability to decisively influence current and future operations when employed as a tactical RSTA platform. UAS provide near real time battlefield information, precision engagement, and increased C2 capability to prosecute the fight and shape the battlefield for future operations. UAS capabilities are maximized when employed as part of an integrated and synchronized effort."

Figure 6-1. The UAS is a central platform with multiple capabilities.

Successful use of sensors and platforms requires that commanders put in place a framework to support Joint interoperability, use Joint communications, and maintain a Joint common operational picture (COP). Mission command (MC) through task organization is a way to control UAS assets. UAS often have complex command and support relationships integrating multiple warfighting functions across a brigade combat team (BCT). Organizational tables (or the modified table of organization and equipment) may eventually assign Shadow UAS under the combat aviation brigades (CABs). In the meantime many leaders are task organizing now as suggested in FM 3-04.155 (page 2-11): "Recent operations have led to the consolidation of TUAS platoons under CAB C2. This task organization has resulted in increased efficiencies in mission support, maintenance, and safety."

Task Organization Enhances MC

During the Decisive Action Training Environment (DATE) Rotation 13-09, the 3rd Brigade Combat Team, 82nd Airborne Division (3/82), task organized their Shadow platoon and military intelligence company (MICO) headquarters section underneath Task Force (TF) Wolf Pack, an aviation battalion TF composed of lift, attack, observation, and MEDEVAC assets. The TF Wolf Pack commander gave clear guidance on UAS in his key tasks and commander's intent stating that he wanted to "find, fix, and destroy…through aggressive, continuous and echeloned reconnaissance" as well as to "synchronize multi-MDS aviation and UAS support to conduct air assault, attack, reconnaissance, security, PR, movement/resupply, and MEDEVAC operations." He specifically stated that UAS coverage was to be requested for all Cherry/Ice calls and that manned unmanned teaming (MUMT) would be implemented between airframes. The task organization for the Shadow platoon eventually evolved into an attached command relationship providing general support (GS) to the BCT and direct support (DS) upon request to 5th Special Forces Group (5th SFG).

This task organization was intended to ensure unity of command and inclusion into the aviation scheme of maneuver. In actuality, the platoon still received its missions directly from the BCT collection manager. In any case the UAS site was geographically separated from the aviation tactical command post (TAC) complicating control for the aviation TF. The unit recognized this constraint and correctly chose to task organize equipment and personnel based on geographic separation. First, they requested and emplaced a one system remote video terminal (OSRVT) at both the TAC and the rear CP. Second, the unit planned to co-locate the UAS platoon with their air traffic control (ATC) personnel to enhance communications and decrease risk for all aviation assets. Third, the unit ensured that the UAS site would have connectivity initially through a global rapid response information package (GRRIP) and later via a command post node (CPN). The unit did not however consider the processing, exploitation, and dissemination of the UAS feed. Initially products were printed at the CP then hand delivered to the end user thus rarely making it by latest time of value (LTOV). The UAS platoon solved this issue by moving a ground control station (GCS) as suggested in FM 3-04.155 to the BCT CP to both ensure quality of feed and allow for immediate exploitation by the BCT staff. This increase in SA resulted in the BCT staff observing enemy tanks over the UAS feed and attempting to direct fires onto that location to destroy the forces.

Communications is the Key to Successful MUMT

The BCT intended to rely on the Shadow UAS as a RSTA asset and planned to fly it in front of scouts, attack aircraft, and ground convoys. UAS was to conduct all of the key tasks associated with "find," then pass pertinent information to follow on assets to "fix" and "destroy."

For example, during the defense phase the Shadow platoon was tasked to conduct a zone reconnaissance near the intended engagement areas to identify the enemy main body to allow TF Wolf Pack to destroy the main body. This plan had two issues. First, the lack of reliable connectivity at the UAS site crippled the receipt of mission products prior to execution. Second, the lack of clearly defined priority intelligence requirements (PIR) and essential elements of information (EEI) meant the operators could not discern the enemy main body. As a result, the operators did not understand the overall ground scheme of maneuver, did not have access to the COP or mission products utilized by the BCT or TF Wolf Pack, and thus were unable to conduct MUMT with the other aviation assets or relay useful intelligence to the TAC or main.

The Importance of a COP in Shared Understanding

RSTA assets must be able to shoot, move and communicate with other members of the combined arms team in order to seize, retain, or exploit initiative. It is critical that a common operational framework be established to support maneuver that contains positive and procedural controls such as fire support coordination measures (FSCMs), airspace coordination measures (ACMs), phase lines (PL), engagement areas (EA), movement corridors, and lines of communication that can be utilized by all players. UAS is not employed on a linear battlefield but rather in the multi-dimensions of airspace, signal networks, radio communications, the electromagnetic spectrum, and lastly by humans working in geographically separated locations. A key tenet of Unified Land Operations (ULO) is integration that "requires creating shared understanding and purpose through collaboration with all elements of the friendly force" (Army Doctrine Publication 3-0, *Unified Land Operations*, page 7). The UAS platoon struggled with integration, never receiving the operational framework that the BCT used and thus being unable to effectively "move" or "communicate" in the battle space. They often had no reference to where operations were occurring or what tasks other enablers were supporting. They were frequently unable to contact their supported units or other aviation assets due to an untenable SINCGARS primary alternate contingency and emergency (PACE) plan disrupted by frequent communications security (COMSEC) changes. Because of these issues, UAS was unable to successfully conduct base aircrew training manual (ATM) tasks from Training Circular 1-600, such as battle handovers with other platforms due to communications infrastructure weaknesses or call for fire as they had no information on locations of EAs, PLs, or other FSCMs. The movement and communication issues inhibited the UAS's ability to shoot targets by hindering their ability to laser designate for other platforms, call for fire against a target themselves, or relay critical information to the supported unit and other enablers.

Train Early, Train Often, Train Collectively at Home Station

According to the UAS Leader Development, Education, and Training Strategy published by the DOTD, "Shadow platoons…must train with the battalions of the BCT to gain maximum synergy of combat power to support the scheme of maneuver." This training must be integrated with the CAB's training to truly be synergistic. Twenty-three percent of available UAS coverage was lost on Rotation 13-09 due to the lack of operations synchronization and overall asset integration. If the unit had been task organized far enough prior to arrival at the JRTC to synchronize standing operating procedures (SOPs), conduct communications exercises (COMEX), and conduct collective training at home station on level 2 MUM equipment, these missed opportunities could have been greatly diminished. Classroom training on radio phraseology, training with manned pilots on shared ATM tasks, and synchronization of MUM tasks in a tactical SOP would greatly enhance interoperability between platforms during mission execution. Planning COMEXs

integrating UAS into BCT training operations would highlight mission needs so that signal resources and level 2 MUM equipment could be allocated accordingly. Having the brigade aviation element (BAE) establish ACMs conducive to both rotary wing and UAS at home stations and integrate air-to-ground training opportunities across the BCT would assist with providing a common operational framework conducive to training both individual and collective tasks. For UAS to successfully integrate into ULO, commanders must task organize to support their objectives and intergrate training with units of the BCT. Most importantly, UAS must be treated as a system of personnel, equipment, and communications architecture that together support the commander's scheme of maneuver and intelligence requirements.

Chapter 7

Explosive Ordnance Disposal Integration, Capabilities, and Evidence Collection in a Decisive Action Training Environment Rotation at the Joint Readiness Training Center

CPT Adam J. Daino, EOD Senior Observer Controller/Trainer, Task Force 4, JRTC Operations Group

With the conclusion of Rotation 13-09, several notable EOD trends had emerged from this and previous DATE (and full spectrum operations) rotations. Since 2010, the JRTC has hosted three decisive action (DA) rotations, the first was 11-01 with 3rd Brigade, 82d Airborne Division (3/82), Task Force (TF) Panthers. Rotation 13-01 was the second and the first in the DATE with 2nd Brigade, 82nd Airborne (2/82), TF Falcons. Rotation 13-09 was the third DA rotation, and the Panthers of 3/82 returned. All three were in support of a global response force (GRF) mission. The following trends and observations emerged from that series of rotations:

- Understanding EOD mission command (MC).

- EOD integration and MC relationships.

- Establishing an EOD command post.

- EOD company capabilities.

- Evidence collection.

- Support to clearance operations.

Understanding EOD Mission Command (MC)

The EOD team is the tip of the spear for an EOD company. A modular EOD company contains nine EOD teams. Each team is comprised of three Soldiers; one EOD team leader (TL) with overall responsibility for the team, and two EOD team members to assist the TL in executing the mission. The EOD team is the smallest element for EOD operations as the team members are not yet authorized to conduct independent EOD missions. For planning purposes, maneuver leaders at company and battalion must understand an EOD team is not an independent unit. A team of three personnel with one vehicle cannot simply move around the battlefield. When task organization is changed, EOD teams may shift to support different units. The fragmentary order (FRAGO) from the brigade should identify the unit responsible for movement. If this information is looked upon as an implied task, it can create confusion, especially during a DATE rotation and ultimately may lead to EOD assets not able to provide support to a crucial area of the fight. This occurred during the 13-09 rotation; EOD forces were not located properly on the battlefield, resulting in a lack of explosive hazard support to maneuver units during several phases.

Figure 7-1. EOD is a critical enabler and vital partner.

Maneuver leaders need to be aware that EOD teams are an extremely limited brigade resource, and do not "belong" to the maneuver company. EOD teams are typically in a general support (GS) role to battalions and their EOD-specific procedures are still directed by EOD-qualified leaders: the EOD platoon and company leadership. With a maximum of only nine teams units must treat this asset with the importance it deserves. For example, placing the only EOD team in a blocking position deep into the wood line to receive the brunt of an attack that wipes it out is not advised. EOD teams can, and do, assist with any and all patrol base activities; however, placing a limited asset closer to the CP is an alternative that allows the team to still assist with security; making it less likely that a unit loses a critical brigade asset due to poor planning.

EOD Integration and MC Relationships

EOD leaders at all levels must integrate into all aspects of supported unit operations, beginning with the maneuver company. The team leader should be present for any planning at the company level to incorporate EOD capabilities into company planning and offer guidance on enemy capabilities. Providing guidance to Army leaders with respect to chemical, biological, nuclear and explosive threats (CBRNE) are all within an EOD team leader's knowledge base, and their subject matter expertise should be leveraged whenever possible to enhance awareness of enemy capabilities and weapons in the operating environment.

EOD platoon leadership will be involved with battalion targeting, intelligence and operations to gain overall situational awareness (SA) and to help better understand the common operating picture (COP) as well as providing subject matter expertise when needed.

The EOD company commander should take part in the brigade targeting cycle, the brigade update brief, commander update briefs (when requested), and the brigade counter-improvised explosive device (C-IED) working group. The EOD commander and EOD operations officer should also interact with the BCT S-2 shop, the electronic warfare officer (EWO) and the S-3 shop. This allows EOD to provide C-IED analysis and discuss the proper alignment of EOD forces directly with brigade primary staff. Given that EOD supports multiple battalions, the EOD commander and EOD operations must be collocated with the brigade staff to provide support, and guidance as rapidly as possible.

Brigade S-3s and EOD commanders often discuss current and future EOD team lay-downs to best meet the brigade commander's intent. For this rotation the EOD company was originally under the operational control (OPCON) of the brigade special troops battalion (BSTB). It then moved under the brigade sustainment battalion (BSB) only to return to the BSTB upon arrival at the JRTC. Current doctrine offers little assistance in integrating EOD forces into supported units. Field Manual (FM) 3-90.61, *The Brigade Special Troops Battalion*, states "The BSTB is usually responsible for attached CS units, if not directly assigned to another battalion within the BCT. These units include, but are not limited to, engineer, civil affairs (CA), psychological operations (PSYOP), explosive ordnance disposal (EOD), chemical combat support, and additional military police units. The attachment of units, however, is based on their availability and METT-TC factors."

This does not accurately reflect, in detail, the current MC in operational theaters. TF Paladin (and in Iraq, TF Troy) provides an EOD battalion that integrates at the division level to ensure that EOD support is effective. EOD companies are currently NATO tactical control (TACON) to the supported BCT; the company is direct support (DS) to the brigade and platoons and teams are general support (GS) to the battalions. Current EOD MC relationships that have been effective place the EOD command post (CP) to include the EOD operations cell at the brigade, while receiving logistic support from the BSTB. As observed in the last DATE rotation, when EOD is integrated into the BSTB there is a significant loss of SA and COP, especially with respect to EOD integration with the brigade S-2 shop. It also further complicates the ability of the EOD commander to advise the brigade on the proper array of EOD teams across the battalions. The decisions affecting support to each TF is a brigade decision that consistently involves multiple battalion commanders. It must be handled and balanced at the brigade level with direct input from the EOD commander to provide the best possible brigade support with limited EOD assets.

The most effective current method for the GRF mission without a higher echelon of EOD MC supporting this mission is for EOD to be OPCON to the BCT, with logistic and administrative support accomplished through the BSTB, and administrative control (ADCON) being retained by the parent unit. As per Army Doctrine Reference Publication (ADRP) 5-0, *The Operations Process* (Table 2-1), "gaining units may pass OPCON to lower HQ" although this has not proven to be ideal in effectively integrating EOD forces into the command and control structure of a BCT. The ideal command relationship would include the addition of an EOD MC element to compliment the GRF mission; ensuring that the proper oversight is directly maintained with respect to the mitigation of high-visibility and potentially catastrophic effects of CBRNE hazards. The EOD company would then be TACON to the BCT, which still allows for the "sufficient authority for controlling and directing the application of force or tactical use of combat support assets within the assigned mission or task" (ADRP 5-0, page 2-81) and preventing the passing of OPCON to a lower headquarters within the BCT.

Establishing an EOD Command Post

The EOD company's communication plan for Rotation 13-09 was to rely upon the BSB for communication support. Upon arrival at the JRTC, the TASKORG was changed to make EOD OPCON to the BSTB. As a result, all previously coordinated automations were no longer available to EOD. The EOD company headquarters and operations cell attempted to use alternative methods of communication available in the BSTB tactical operations center (TOC), but did not have a dedicated means to communicate with the teams dispersed throughout the brigade. For the duration of the exercise the EOD headquarters and operations cell were not able to contact their teams for timely C-IED reporting. The EOD company could not effectively report IEDs and explosive hazard incidents to the brigade; ultimately resulting in an inaccurate COP. This highlights the importance of establishing a communication primary, alternate, contingency and emergency (PACE) plan. Further limiting the ability of EOD communications is the lack of available MTOE authorized equipment for the GRF mission. In OIF and OEF deployments EOD companies and teams have access to theater provided equipment (TPE) to include V-SAT, Blue Force Tracker (BFT), Distributed Tactical Communications System (DTCS) radios and iridium communications. This ensures that EOD has direct MC over their respective teams and enables the operations cell to effectively and rapidly report and analyze crucial IED and explosive hazard data, without relying on outside assistance. This rotation reinforced the need for rapid and accurate EOD reporting, and highlighted the difficulties encountered when relying on communications equipment outside of the formation. It is recommended that EOD leadership conducts proper analysis to provide EOD forces with the necessary equipment to support the GRF mission. FM communications alone are not sufficient in meeting an EOD company's needs.

EOD Company Capabilities

A common friction point from the platoon to the brigade is a lack in understanding an EOD company's capabilities. EOD companies provide a wide range of value-added information and guidance to the brigade. This includes subject matter expertise in the areas of chemical, biological, nuclear and explosive threats (CBRNE) on the battlefield. Many Army leaders only identify EOD Soldiers with IEDs and UXOs and do not realize the full breadth of capabilities that EOD units can bring to the fight. Relevant to current threats that have been widely reported by the media in certain areas of the globe, EOD teams are trained and equipped to mitigate chemical military munitions as well as other CBRNE hazards.

The gap in understanding makes it difficult to get EOD support in the right place and at the right time on the battlefield. The responsibility for educating supported units rests squarely on the EOD commander; he or she must effectively communicate what the unit brings to the fight. This is accomplished through capability briefs and "face-to-face" meetings provided to the brigade command team, the S-3 and assistant S-3, the S-2, battalion command teams, battalion S-3s and battalion S-2s. Prior to the EOD commander providing this information, there must be more involvement, from the EOD company's chain of command, to effectively communicate the unique ad-hoc command and control relationships that have been the most effective in delivering the best EOD support possible. The EOD battalion command team should meet with brigade leadership to discuss support and clarify on how to maximize EOD effectiveness. After this meeting, the EOD battalion S-3 should meet independently with the brigade S-3 to discuss the best integration of EOD into the brigade's TASKORG to maximize EOD capabilities and minimize friction from cumbersome and ineffective MC relationships. These interactions should be completed prior to the EOD commander capabilities brief to the brigade and battalion

leadership. Typically, EOD commanders brief their supported unit's leadership for the first time at the leaders training program (LTP), just prior to the combat training center (CTC) rotation. This is "too little, too late"; the brigade and battalion staffs are overwhelmed in LTP. Throwing EOD capabilities onto the pile as an afterthought is not an effective means for brigade and battalion leadership to receive and retain this critical information. By interacting early and often, at all levels of leadership, EOD units can achieve proper integration and avoid friction points that detract value from training and hinder mission execution.

Evidence Collection

EOD teams are also trained and equipped to mitigate explosive hazards safely and conduct Level 1 exploitation of evidence recovered from incident sites. Team and company execution of Level 1 exploitation includes the processing, initial analysis and reporting of gathered evidence. A common report identified with Level 1 exploitation is the EOD storyboard. Higher echelons conduct Level 2 analysis in a triage and laboratory environment and include expert analysis of IED device profiles, homemade explosive (HME) and IED manufacturing analysis and biometric exploitation and analysis. Only EOD can execute many aspects of Level 1 analysis. Many wrongly believe that Soldiers with weapons technical intelligence training or sensitive site exploitation/tactical site exploitation (SSE/TSE) can exploit IED post blasts, HME laboratories or other hazardous incident sites. That is not only wrong; it is incredibly dangerous. Learning to properly "bag and tag" evidence primarily teaches an individual to prevent contaminating evidence and properly process it. In no way does it authorize Soldiers to handle highly sensitive HME in an unknown state of sensitivity to heat, shock, and friction. Nor does it authorize Soldiers to handle or exploit remnants of an IED blast, once again, in an unknown state of sensitivity to heat, shock, and friction. These are situations where only EOD personnel are authorized, trained, and equipped to safely handle and exploit evidence.

Explosive ordnance clearance agents (EOCA) and blow in place (BIP) certified engineers are authorized, per current Afghanistan policies, to safely exploit what they have blown in place. They are not authorized to exploit an enemy IED that has been successfully used in an attack. An IED post blast differs from a BIP that is properly identified and executed by engineers. The IED may contain IED or explosive hazards that the EOCA and BIP-certified Soldiers were not able to identify prior to the attack. That is beyond the training and capabilities resident within these additional engineer training programs. EOD bridges the gap from "simple" IEDs, to the ability of EOD to mitigate "complex" IEDs, caches, and large amounts of enemy explosives. This is why it is of paramount importance to understand critical differences in capabilities, as well as ensuring that EOD and engineer forces train together and properly integrate into the overall brigade C-IED effort.

Figure 7-2. The complex can appear deceptively simple and extraordinarily dangerous.

Leader emphasis on adequately trained and certified EOD or EOCA/BIP personnel enhances a unit's ability to properly handle IED and other enemy ordnance. Reports from operations in Afghanistan have many examples of where Soldiers improperly handled explosive hazards. Units, especially at the platoon and company levels, must ensure their Soldiers are properly instructed on how to mitigate these dangers. This includes instructions to not manually interrogate IED post blasts or take unnecessary pictures (already accomplished in EOD reporting and not required for spot reports). Focusing here has helped prevent Soldiers from moving munitions in an unknown state and potentially saves lives.

Figure 7-3. EOD supports critical route clearing.

Support to Clearance Operations

During the initial clearance of the flight landing strip (FLS) during JRTC Rotation 13-09, EOD was originally tasked to support engineers with mitigating explosive hazards. However, the EOD team was diverted to a different unit just prior to air insertion operations. It appears this was either a commander's deliberate acceptance of risk, decision to re-prioritize limited EOD assets, or a misunderstanding at the BSTB regarding the capabilities of engineer assets. This change resulted in the engineers without critical support in the event that explosive hazards were encountered outside the capabilities of sapper, EOCA, or BIP-certified Soldiers. Of note, vehicle-borne IED (VBIED) and munitions not positively identified in the EOCA identification manuals were potential hazards that would have required EOD support to mitigate.

In concurrence with CALL Newsletter 13-15, *Operations in the Decisive Action Training Environment at the JRTC*, June 2013, it is again suggested that the EOD Team that was tasked to support FLS clearance operations should be in a general support (GS) role during this phase of the operation. This allows the EOD team to remain flexible and properly align with other TFs, as necessary, without the requirement of a FRAGO. The TASKORG can be adjusted in a subsequent phase in order to maximize EOD support to maneuver battalions.

Conclusion

EOD provides a unique capability as an enabler available to the brigade. Proper integration is critical and can be accomplished through interactions among leaders at multiple echelons prior to (and during) planning efforts and mission execution. Furthering awareness of EOD capabilities to supported units can only improve safety and effectiveness of mitigating CBRNE hazards encountered in the operating environment. EOD units must continue to conduct effective training that focuses on successfully integrating into BCT operations and must avoid focusing only on internal EOD operations. EOD leadership must conduct analysis, in coordination with the companies that have supported DATE rotations, to ensure the proper equipment is provided in order to accomplish the mission. EOD leadership should conduct analysis and review the command and control structure in order to best support the GRF mission.

Chapter 8

The Company Supply Point

CPT Sung Min Kim, Sustainment Division, JRTC

"Logistics must be simple — everyone thinks they're an expert." — Anonymous

When a Soldier is engaged in combat, the last thing he wants to worry about is not having enough ammunition or where the next meal will come from. A Soldier needs to be able to focus on the fight. Careful management of the a company supply point (CSP) will help to ensure that logistics is not a hindering factor. For many companies that are co-located with their support element, a CSP is often redundant. These companies are able to obtain supplies needed from their support element without waiting for delivery or forecasting. However, for other companies that are located without their support element, the CSP is crucial in managing supplies needed to fight. The 3rd Brigade Combat Team (BCT), 82nd Airborne Division (3/82), participated in the Decisive Action Training Environment (DATE) Rotation 13-09 to prepare for their global response force mission. During this rotation all of the brigade sustainers were located in the brigade support area (BSA) in Objective Desoto and many maneuver companies in the brigade were pushed out on the front lines, separated from their support element by many miles. These companies had to manage their CSPs carefully as resupply from their support elements were not readily available and had to be coordinated. A CSP succeeds through careful forecasting of supply requirements and synchronization with higher.

Figure 8-1. Company supply point.

Company Supply Point

CSPs are used to hold and distribute the company's extra supplies. The headquarters section led by either the company executive officer, company supply sergeant, or the company first sergeant usually manages the CSP. The forward support companies (FSCs) in a BCT are the primary support for the companies and resupply the CSPs via unit distribution. The CSPs then further distribute their supplies down to the individual Soldier utilizing supply point distribution. With limited storage and distribution capabilities, the CSP only holds the minimum of necessary supplies for the company to continue operations. The CSP must be readily mobile especially during offensive operations as forces may move quickly throughout the battlefield.

Forecasting Supply Requirements

The key to managing a successful CSP is to forecast company requirements based on current and future operations. Take meals ready to eat (MREs) for example. Knowing that the meal plan is M-M-M, a company of 120 Soldiers will require 30 cases of MREs per day to support their company. Depending on the next resupply schedule, the company may need to hold two to three days of supply of MREs on hand to ensure there is adequate Class (CL) I for their Soldiers. That's at least 60-90 cases of MREs. The company must then ensure that it has adequate storage capabilities and also movement capabilities especially if future operations will move them around the battlefield. Any limitation or inability to store or move those classes of supply will require additional assistance from the supporting unit and will need to be requested in advance. Forecasting doesn't stop at just CL I MREs. Water, CL III, CL V, and others classes of supply must be forecasted and sent up to the higher to ensure the company's needs are nested with the battalion concept of support. Even though battalion will do their own analysis and forecasting on logistics, the onus is on the company to push its own forecasted logistical requirements up to its higher and supporting unit, because no one knows more about company requirements and operational needs than the company itself.

Synchronizing with Higher Headquarters

It is crucial for the company to continuously synchronize its logistical status with the higher headquarters. The logistics status report (LOGSTAT) must be sent up to higher, usually the battalion S4, in some form or manner. The LOGSTAT will be used to determine the logistical needs of that company. Some crucial information that may be included in the LOGSTAT are CL I, CL III, CL V, and maintenance status. LOGSTAT is used to build the logistical common operating picture (LCOP). The LCOP is used to synchronize the logistical status of the battalion and develop a common shared understanding between the companies and battalion as well as other elements on all logistical status. All these help to get the right supplies in the right quantities to the company at the right time. Without synchronizing properly with higher, the company will get supplies that are not needed, too little of the supply needed, or get them at the wrong time.

Figure 8-2. Soldiers will find a way to move MREs.

The company must also know how the battalion plans to resupply the company and synchronize those plans to ensure proper delivery of supplies. During offensive operations, a logistic release point (LRP) might be needed to ensure that the supply lines are not threatened by the enemy and the company can receive supplies without issues. Without proper synchronization with higher, the company will have an extremely difficult time meeting up with its support element to receive supplies and may delay crucial supplies needed for the company.

During Rotation 13-09 several infantry companies failed to synchronize their logistics with battalion. The battalion had the FSC push supplies it thought the companies needed. This ended in the infantry companies not receiving the supplies they needed and the FSC making multiple runs to resupply them. Had these infantry companies synchronized their logistics with higher, they would have received the correct supplies.

Conclusion

Companies need to ensure they are adequately supplied to be able to continue on with their mission. Careful management of the CSP helps ensure that a company never has any logistical issues. Successful companies take ownership of managing their own supplies, synchronize with higher on their status, and communicate their forecasted logistical needs to higher.

Chapter 9

Joint Readiness Training Center Rotation 13-09, Casualty Evacuation at the Platoon and Company Level in a Decisive Action Training Environment

CPT John Mabes, 1SG David Cox, 1SG Randy McCoin, 1SG Ronald Toomey, and 1SG Paul Thorman Task Force 2, JRTC

The importance of combat medicine in the contemporary operating environment cannot be overemphasized, especially the skill set of evacuating the wounded from the battlefield. The buzzwords "CASEVAC" and "MEDEVAC" are thrown around a lot today. Most units that deploy to the JRTC assume that they are a "T" (Trained) simply because they have a deployment history.[1] In fact, most units are not trained to standard on this task nor have they tested any solid standing operating procedures (SOP).

During the JRTC Rotation 13-09, the brigade combat team (BCT) was tasked to conduct an airfield seizure, expand the lodgment, and conduct follow-up operations in its area of operations (AO) to defeat the enemy forces while setting the conditions for the restoration of the host nation government's authority. Whether the unit is in the process of assuming responsibility as the global response force (GRF), preparing to conduct an airfield seizure during a DATE exercise like Rotation 13-09, or training to conduct any mission that it may be called upon to execute, casualty evacuation needs to be one of the unit's most critical training objectives.

CASEVAC or MEDEVAC

CASEVAC and MEDEVAC are commonly interchangeable in today's military slang. In truth they are quite different. The difference simply is who is doing the evacuation.

Medical evacuation or MEDEVAC is the timely and efficient movement of the wounded, injured, or ill persons from the battlefield with dedicated medical personnel to provide enroute care. This provision for enroute medical care by dedicated personnel via both ground vehicles or aircraft enhances the patient's potential for recovery and may reduce long-term disability by maintaining the patient's medical condition in a more stable manner.

Casualty evacuation or CASEVAC is used to describe the movement of wounded, injured, or ill persons from the battlefield to the initial treatment facilities by non-medical personnel aboard non-standard, non-medical vehicles or aircraft. Additionally, CASEVAC operations do not include enroute care by dedicated, medical personnel.

Over the last decade due to the peculiarities of the operating environments, we have come to associate the evacuation of casualties via ground vehicles as CASEVACs and the evacuation of casualties via aircraft as MEDEVACs. In the past these categories were accurate. Not so, today.

When possible, CASEVAC vehicles or aircraft being utilized to evacuate the wounded should be augmented with a combat medic or combat lifesaver to provide additional medical treatment during transportation.

The Rotation

The 3rd Brigade Combat, 82nd Airborne Division (3/82) conducts airfield seizure of Objective (OBJ) DESOTO, no later than 18 2100 AUG 13, expands the lodgment and conducts follow-on operations in AO BEAR to defeat PDA, SAPA and Faqih forces to set the conditions for the restoration of ROA authority.

Figure 9-1. The best casualty evacuation system is avoidance; paratrooper loads are a great starting point.

Risk Mitigation: Balancing Soldier Loads and Soldier Needs

Previous DATE rotations had demonstrated that excessive Soldier loads produced casualties. 3/82 sought to limit that factor by setting maximum Soldier loads for the airborne operation at 40 pounds. The units involved in the airborne assault and airfield seizure of OBJ Grant were held to a strict weight limitation of 40 pounds per rucksack or assault pack. Additionally the weight limitation was imposed to prevent any parachute malfunctions or mechanical injuries during the airborne operation.

This restriction was a double-edged sword for the BCT. It allowed the BCT to swiftly assemble, achieve minimum force, and move swiftly to its objectives. The cost of this speed, however, was the reduced capacity for food, water, and casualty aid items. Unit leaders and jumpmasters understood they were not to exceed the 40-pound weight restriction; but a standardized packing list was not disseminated. For example, some platoons conducted the airfield seizure with six quarts of water, while others did so with only two quarts.

The risk mitigation process within the company is most often applied to reduce threats that arise due to enemy activity while ignoring risks that occur as a result of the unit's own failure to plan. Normally, a lighter Soldier load is viewed favorably as an effective tactic, technique, and procedure (TTP). Reducing Soldier loads to the barest essentials can help ensure speed and lethality in the critical first hours of lodgment expansion. A standard, prioritized packing list derived from risk analysis and mission analysis can help ensure Soldiers have the right items needed to be successful. Basic prioritization should include ammunition, mission essential equipment, water, food, etc. Guidance not to exceed a certain maximum weight is very broad and relies on the experience of the individual Soldier or his chain of command. They may not be the most informed on the situation or on the mission details to make the packing list decision.

Packing Lists: Checking Everything Twice

With limited experience Soldiers and junior leaders often resorted to the "mainstays" of packing lists that had been used in the past. Standardized packing lists can be useful, but in a tactical operation, they should always be tailored to the mission. As such, items such as food and water usually will be prioritized ahead of socks and T-shirts. In at least one case, a Soldier was told that during the weigh-in prior to boarding the aircraft that if his assault pack exceeded 40 pounds he was to "dump water from the Camelbak in order to make weight." The end result was that Soldiers reported a "BLACK"[2] status on water two hours after the airfield was seized and "BLACK" on food 12 hours after the airfield had been seized.

Paratroopers are renowned for their ability to overcome and adapt to a chaotic and hostile environment. This unit was no different. The Soldiers quickly tapped into a local water source (used for role play civilians) at their first objective and were able to replenish their water supply soon after arriving. Unfortunately, this TTP could only be successful in a training environment. Without water purification tablets, which the unit did not carry, there was no guarantee that, in a real-world scenario, there would be a water source available or that it would be suitable for drinking. Most units use the MOLLE canteen pouch to act as a night vision goggle (NVG) pouch. By simply requiring Soldiers to carry their canteen cup, which can still house their NVGs, the unit overcomes the obstacle of being unable to treat water for consumption via boiling water. Additionally, the small pocket on the canteen pouch is the perfect size to house water purification tablets.

Without a standardized packing list or prioritization of equipment to be included during the operation Soldiers were left to pack items that they thought would be most useful. Rain ponchos were included in the assault packing list and the Soldiers were given classes as to how to modify these ponchos to create field expedient litters but no such litters were built after securing their objectives. A field expedient litter can take up to 15 minutes to build assuming that there are suitable materials available. Combat lifesaver bags were packed as part of a series of door bundles with the intent that these items would reach the Soldiers on the ground by D+1. These critical items did not reach the unit until five days after the airfield had been seized. The unit overestimated its ability to secure the airfield, expand the lodgment, and open its supply lines. The plan was to conduct a parachute assault with less than one day of rations and water. A reasonable planning factor for airfield seizures is for the unit to be able to sustain itself for 72 hours without resupply. Simply put, a prioritized packing list that had been reviewed by an experienced NCO would have reduced the potential risk of heat casualties while meeting the 40 pound weight requirement and sustained the force for a much longer period.

Company and Platoon CASEVAC

A weakness that had been observed throughout Rotation 13-09 occurred at the company level in regards to planning for CASEVAC operations. Aside from the medics, who are typically very proficient, the combat lifesavers (CLS) and members of the aid and litter teams usually perform effective triage and treatment of casualties at the JRTC. However, at the company and battalion level there is still a problem with realistically planning for CASEVAC operations. Several of the CASEVACs that have been conducted were ad hoc. Much of the planning and rehearsals are focused on the kinetic aspects of the mission rather than sustainment or recovery.

In combat operations, the majority of deaths occur on the battlefield before the evacuation can take place. Tragically 80 percent of these deaths occur within the first hour after the initial injury. As of D+2 or 48 hours after the initial airborne operation, there was a rate of 62 percent died of wounds (DOW) for casualties whose point of injury was less than one hour away from the next higher level of medical care. For the most part, these casualties were waiting on an aviation element to arrive when the unit had vehicles that could have driven the casualties to a nearby aid station. The majority of DOW casualties resulted due to a failure to evacuate the casualty in a timely manner. Due to the last decade of continuous combat operations in inhospitable locales, such as the mountains of Afghanistan, U.S. forces have had to rely heavily on the evacuation of wounded personnel via rotary lift aircraft. During decisive action operations, units must remain flexible and use all available assets in the best way. If ground evacuation is available and time-distance factors support ground evacuation, they should use it. Apply the factors of METT-TC to the decisionmaking process.

At the JRTC there are typically three events that contribute to the died-of-wounds rate:

- The improper treatment of casualties by another Soldier with a lack of CLS training or unfamiliarity with individual first aid supplies.

- Lack of a transportation plan for casualties involving either the ineffective use of litters, carry techniques, or vehicles that are not suitable for casualty evacuation.

- The inability to evacuate casualties within a timely manner that results in the objective assessment of an OC/T that the wounds of a casualty have exceeded the capability of the casualty collection point (CCP) and should be escalated in accordance with the exercise rules of engagement and real-world experience.

Successful CASEVAC Operations Begin During the Troop Leading Procedures

Preparation

Preparation begins at home station during training events and should at the minimum be conducted at the platoon and company, but should strive for the squad level of participation. Leaders should incessantly press to have combat lifesaver courses trained and refreshed at the unit level with the goal of having every Soldier in a rifle company qualify as CLS with the ability to administer IV fluids. Additionally, unit's should try to ensure that at least two such qualified Soldiers per rifle squad are trained as first responders or advanced CLS and are diffused throughout the formation during mission execution. Equally important, is the inclusion of at least one, preferably two, medically trained and CLS bag equipped Soldier per squad-sized element on every mission, no matter how routine.

Figure 9-2. Casualty care must be trained.

Once the operations order (OPORD) has been given leaders need to ensure that all necessary equipment is taken on the mission, having a detailed precombat check (PCC) and precombat inspection (PCI) checklist will ensure that all equipment is prepared and brought on the mission. The establishment of SOPs about unit specific peculiarities for the CCP, such as standardized marking and separation procedures, will greatly assist in the rapid identification, treatment, and evacuation of the wounded with injuries requiring time-sensitive treatment. The generally accepted method of CCP setup that is most commonly used at the JRTC involves an easily identifiable marking system that identifies Soldiers categorized as delay, minimal, immediate, or expectant. Each category of injury is separated with enough area so that additional casualties can be brought in and still allows enough room for medical personnel to continue treatment. It is important to separate these casualties from view of one category to the next, yet not so far as to hamper the oversight of the medics on-hand. There are many techniques that can be used based upon the unit SOP and available resources. All have the potential to succeed as long as every member of the casualty collection team understands his role in the process and has been able to adequately rehearse.

Planning

Planning starts with the warning order (WARNO) followed by the OPORD. As the sustainment section of an OPORD is prepared, paragraph four list all levels of care and their locations for the treatment of casualties, the Class VIII medical supplies to be carried, and where they are located whether mounted or dismounted. It should list primary medic and CLS-qualified Soldiers that will be going on the mission. It should include grids to primary and alternate helicopter landing

zones (HLZ) that are along the route or near any stationary position. The OPORD should specify types of vehicles that can be used as an evacuation platform and number of patients that each can carry. Rehearsing is the most critical part of executing evacuation operations. Without every Soldier knowing how the procedures are to be executed, valuable time for injured Soldiers will be lost.

Planning to move wounded or injured Soldiers off the battlefield is a no fail mission for anyone who is tasked to do so. The lack of proper planning can result in the unnecessary loss of life, unnecessary suffering, or further injuring of Soldiers. Developing a plan, rehearsing and refining the plan is a good starting point. As you develop your plan you should consider what mission specific equipment that will be needed based upon the operational requirements, what the pre-mission training will consist of, the size of element involved, the dispersion of said equipment, and the method of travel (mounted or dismounted).

Figure 9-3. If there is no plan for CASEVAC, then CASEVAC will not be rehearsed.

Reconnaissance of evacuation routes prior to mission execution will assist in the rapid evacuation of casualties. It is essential that the company first sergeant (1SG) and executive officer (XO) have a close working relationship with the battalion medical platoon leader. Each side must be familiar with the tactical plan, expectations, and capabilities of the other. Both parties should work together to template potential ambulance exchange points (AXP) and methods of communication. These AXPs are usually plotted near an operational boundary with terrain recognizable to both elements. These points are critical during operations where massive numbers of casualties are sustained, quickly overloading the sustainable workload of the company CCP.

Figure 9-4. Train to specific platforms.

Planning also involves the employment of available intelligence, surveillance, and reconnaissance (ISR) assets, such as unmanned aircraft systems (UAS), aerial photographs, satellite imagery, TIGR net, or even topographic map reconnaissance to identify suitable terrain for possible HLZs or AXPs. Thinking through the entire evacuation will make the process easier to execute and will help better prepare the unit to execute during combat operations.

Identify where the platoon and company CCP will be placed, what makes those locations ideal for the expected scenario, and whether all Soldiers are familiar enough with the area to locate those CCPs while under extreme duress and during both day and low-light conditions. Consider routes to the CCP, obstacles on the battlefield, and the enemy situation template (SITTEMP) when preparing the CASEVAC plan. How will aid and litter teams be chosen? How will those Soldiers be easily identifiable at night? Where will CASEVAC vehicles be positioned and how will the equipment inside be distributed to facilitate treatment and safe movement?

Execution

During the reconsolidation phase of the mission, accounting for personnel and equipment can be especially time-consuming and difficult, especially at night, in thick vegetation, or with higher casualties. This process can take between several minutes to an hour to locate every wounded Soldier while simultaneously clearing the objective during a company mission. The treatment of casualties is based upon the overall atmospherics, enemy activity, and threat decides the security posture adopted by the unit. Remember in combat operations, the first priority is always security to include "fighting the fight" before shifting the main priority to the casualties. The use of a

designated CCP has to be practiced and rehearsed with the company senior medic "directing" the triage of incoming casualties with platoon medics and CLS supporting the entire operation. When used properly these Soldiers will save more lives on the battlefield as they can treat casualties in the critical first minutes after the injury.

After a Soldier has become a casualty and the situation allows, usually the senior noncommissioned officer (NCO) will establish a CCP. The CCP should have been predetermined but still may need to be marked. The leader that is in charge of the CCP will direct casualties by type to their predetermined place within the CCP. Marking of the pickup site, each Soldier needs to know how and what to use to mark the pickup site whether mounted or dismounted, day or night. Security is a number one priority during all combat operations but especially imperative to ensuring the wounded can safely be evacuated from the battlefield.

Once an objective has been secured, the redistribution of ammunition and accounting of Soldiers are conducted simultaneously and within the existing CASEVAC SOP. The 1SG in close coordination with the company senior medic, is responsible for the planning and establishment of the company CCP as well as the movement and cooperative effort between the various platoon CCPs, medics, and aid and litter teams. The aid and litter team under the control of each PSG must clear their platoon sector with an eye toward area security and accounting for personnel and equipment. The identification and treatment of the wounded, to include enemy personnel, must receive the highest priority in the reconsolidation and reorganization phase of the operation. Soldiers who can no longer participate in combat operations due to the severity of their wounds can have their ammunition and other critical equipment redistributed to the element to help bolster security under the direction of the unit leadership.

The most critical elements in the CASEVAC process begin at the company level. Once casualties are in the medical evacuation channel the rate of survivability is significantly increased. The company and platoon medics who will conduct the triage, treatment, and evacuation to the AXP or battalion aid station (BAS) can ensure the efficient operation of the CCP. Security at the AXP or HLZ must be established and the site must be cleared before any aircraft or vehicles can safely retrieve the wounded.

Maximize the number of nonstandard vehicles that will be available for use during CASEVAC operations. Every vehicle that is not already dedicated to a more critical tactical task should be allocated to the senior NCO on the ground and CASEVAC team. These vehicles can be used to reduce the fatigue of the Soldiers transporting casualties and lessen the requirement for standardized ambulances from the BAS. Ensure that the medical platoon is aware of the company tactical plan, execution checklist, Soldiers with pre-existing medical conditions (such as allergies), so that they are better prepared to support the company as it takes casualties.

After over a decade of continuous combat operations, the ubiquitous 9-Line CASEVAC and MEDEVAC request has become almost second nature to anyone whom has led Soldiers in combat. However, often times those with experience have forgotten to pass down the knowledge they've earned in blood. Most assume that all 9-lines of the request must be completed before any request can be sent. Experience shows that is not always realistic under duress. Based mainly on common sense, but with great input from the senior medic on-hand, leaders can use bare-bones essentials to get a request initiated based on the specific number of casualties by precedence (Line 3), if any special equipment will be required (Line 4), the number of casualties by type (Line 5), and the casualty's nationality or status (Line 8). When possible, Class VIII medical supplies that have been depleted and are in need of replenishment should be requested

at the end of the 9-Line CASEVAC and MEDEVAC request so that the evacuation vehicle can resupply the unit and allow it to better continue its combat operation.

Supervise and Refine

Leaders must supervise the unit's preparation for and during the execution of combat operations followed by refining both the plan and any unit SOPs which need updating after the mission. Leaders should supervise preparations for combat by conducting confirmation briefs, rehearsals, and both PCIs and PCCs.

Confirmation briefs should be conducted after the OPORD has been issued to ensure everyone knows and understands the mission, their commander's intent, the concept of the operation, and specifically their assigned tasks. Preferably confirmation briefs are conducted face to face, depending on the situation, because the leadership together can resolve any questions and contingencies. It further ensures that every leader knows what the adjacent unit is doing.

Rehearsals are integral to TLPs. They are an absolute must before each mission regardless of how many times it has been rehearsed in the past. The tactical casualty treatment and evacuation rehearsals allow the platoon to rehearse several battle drills that are mission essential to any combat operation and help ensure mission success. The rehearsals are conducted from a prioritized rehearsals list established during the planning process. Casualty evacuation drills should be integrated into all training events at the company level and below. The importance of rehearsal occurring under realistic combat conditions cannot be underscored enough and are critical to mission success and performance at a CTC or in combat. Plan to conduct combat medicine rehearsals as an essential part of any operation. Assume that it will be conducted as a matter of course, just like any other mission essential task of a tactical plan.

After action reviews (AAR) should be conducted to help refine your plan to maximize the time a Soldier has to prepare for the battlefield. When done properly AARs should assist the leader in identifying deficiencies in any plan. Leaders should include the entire element into the discussion to determine the best course of action (COA).

A Suggested Corrective COA

In today's ever-evolving battlefield, it's no longer enough to give Soldiers just a doctrinally sound task and purpose. Uncertainty and risk are inherent in tactical operations and cannot be eliminated. Instead we as leaders need to strive to give them a sound mission with as much crucial pertinent information even under crunched time constraints to include various possible contingencies. Treating the wounded must be incorporated in that training. Leaders must recognize that casualty handling will severely strain their ability to reconsolidate and carry on the operation. Therefore, they must plan accordingly. Soldiers must recognize the tactical and physical difficulty of carrying a casualty several hundred meters to a CCP. The technical proficiency of the unit's combat medics will greatly be tested by the stress of treating multiple casualties under the most arduous conditions.

For many units at the JRTC, combat medical operations, especially tactical casualty evacuation, is often the least trained and poorly executed events that occur. These issues arise because units do not pay sufficient attention to combat medical operations at home station. Platoons struggle greatly getting all Soldiers CLS training to help prevent the medic from being overwhelmed by multiple casualties. The main difficulty at the company level is moving casualties from the

company CCP to the next higher level of medical care. The extent and diffusion of the objective area will create time and distance complications for tactical casualty evacuation planning. This is reflected at the training center by the overwhelming percentage of Soldiers whose training "injuries" categorize them as DOW.

Much of this should be incorporated into the unit tactical SOP (TACSOP) before coming to the JRTC. The company TACSOP should address the following with regards to CASEVAC:

- Who will be responsible for the CASEVAC?

- Identifying markings of personnel and vehicles involved with CASEVAC.

- Additional assets dedicated to the process.

- Radio net used.

While there is no "magic bullet" that will fit every potential scenario faced on the battlefield, the following are generalized tips that will increase the odds of successfully treating and evacuating casualties at JRTC and potentially save the lives of Soldiers on the battlefield in a real-world engagement.

- **Combat Medicine at the Squad Level.** All Soldiers should be CLS qualified to include administering IV fluids and must be recertified every 12 months. Soldiers should have an easily accessible tourniquet based upon unit SOP, one such TTP is to have them secured via rubber-band to their load carrying equipment. Individual IFAKs should be augmented to include coagulants, chest decompression needles, and painkillers prior to any combat operation. At least two Soldiers per squad should seek advanced CLS training, such as First Responder. Squads should carry at least one CLS bag that is equipped with a pole-less litter. Aid and litter teams should be used as the dedicated effort to locate casualties.

- **9-Line CASEVAC/MEDEVAC Request.** All Soldiers should be able to call for a "bare-bones request" based on the specific number of casualties by precedence, if any special equipment will be required, the number of casualties by type, and the casualty's nationality or status. Leaders should be trained to accurately answer MIST and the additional patient information. All Soldiers should have laminated combat smartcards, especially the 9-Line CASEVAC/MEDEVAC Request.

- **Rehearse, Rehearse, Rehearse.** As the old adage goes, "practice makes perfect." Units need to rehearse loading wounded into various ground evacuation vehicles both with dedicated support and nonstandard support. Ambulance exchange points should be rehearsed, specifically the establishment with security and transfer of wounded. Helicopter landing sites should be constructed at a variety of locations per unit SOPs and to practice loading wounded onto the aircraft engineer tape can be utilized to provide the basic outline of various aircraft types.

- **Preparatory Planning.** Successful CASEVAC/MEDEVAC are planned in detail. This includes coordinating with higher headquarters to assist with support when unit is conducting a major operation. AXPs and HLZs should be planned at a minimum.

Successful units use 9-line cards for format and to report requests quickly, accurately, and efficiently.

- **Leader Initiative.** Senior NCOs are responsible and should not only be encouraged to plan then brief Sustainment operations but should be responsible for it. Leaders at all levels need to encourage and enforce personnel accountability in order to properly track personnel especially once casualties have been taken. As combat leaders, we owe it to our Soldiers to remain calm, cool, and collected while under duress so that tactically sound orders can be given.

- **Back to Basics.** Units that don't do the basics like pre-planned HLZs enroute usually forget to plan other mission essentials and fail to complete their overall mission. Most units have a great deal of combat operational experience and sometimes fall into the trap of relying on previous operating guidance and parameters for current operations. This can be a recipe for disaster. Just because that's the way things have always been conducted, does not mean that they do not need to be updated or should plan for the various points of friction which most units cover in their basic SOPs.

Conclusion

The tactical evacuation of casualties from the battlefield is one of the most demanding and resource-intensive missions that will challenge every unit. Many units coming to the JRTC find themselves unprepared for the multiple casualties units typically experience during such an exhaustive training event. Combat medicine with an emphasis on CASEVAC drills and exercises must be integrated into all training actions at the platoon and company level. Incorporate the non-standard evacuation of casualties into the prioritized rehearsals that are conducted in advance of every mission. Leaders must place a strong emphasis on this critical task so that its importance will be understood at all levels. Each mission should be approached with the mentality that it is quite possible that casualties will be taken during the course of the mission and will have to be treated before being transported to the next level of medical care. It could be argued that the most important aspect of any successful CASEVAC operation is the preparation, notably the equipment inspections and rehearsals that occur before the mission is ever begun. The execution of CASEVAC should be incorporated so that they are a fluid result of the after-action contact that will occur once the objective has been secured or the enemy attack has been defeated.

Endnotes

1. In FM 7-0, *Training the Force*, units are assessed as either "T" for 'Trained,' "P" for 'needs Practice,' or "U" for 'Untrained' based off their Mission Essential Task List. Units are only rated as "T" when the unit is trained and has demonstrated its proficiency in accomplishing the task to wartime standards.

2. In ADRP 1-02, *Units, Individuals, & Organizations,* and FM 1-02, *Operational Terms & Graphics*, color codes are established to illustrate the combat effectiveness of a designated unit. Green indicates that the unit is at 85 percent or greater strength and is fully combat operational. Amber indicates that the unit is at 70 to 84 percent strength and is substantially combat operational with minor deficiencies. Red indicates that the unit is at 50 to 69 percent strength and is marginally operational or combat ineffective, or unit has major losses or deficiencies. Black indicates that the unit is at less than 50 percent strength and is not operational or requires reconstitution before next mission.

Chapter 10

The Role of the Noncommissioned Officer in the Command Post

SFC James Bertram and SFC Marcus Camp, Aviation Division, JRTC Operations Group

In the United States Army, no one influences Soldiers the way noncommissioned officers (NCOs) do. This is why NCOs are key components to every aspect of military operations. In Army Tactics, Techniques, and Procedures (ATTP) 5-0.1, *Commander and Staff Officer Guide*, chapter 3, paragraph 3-2, the command post (CP) is defined as a unit headquarters where the commander and staff perform their activities.

Figure 10-1. NCOs play key roles in the aviation CP.

Each CP has specific functions by design as well as tasks the commander assigns. Activities common in all CPs include the following:

- Maintaining running estimates and the common operational picture.

- Controlling operations.

- Assessing operations.

- Developing and disseminating orders.

- Coordinating with higher, lower, and adjacent units.

- Conducting knowledge management and information management. (See FM 6-01.1, *Knowledge Management Operations.*)

- Performing CP administration.

In the first activity of a CP, you must maintain running estimates and the common operational picture in order to stay synchronized with higher, lower and adjacent units. Running estimates include personnel, fuel and vehicle/aircraft status, location of known friendly and enemy locations, fire support locations, and operational graphics. A running estimate is a staff technique that supports commander's visualization and decision making. Staffs continuously update their conclusions and recommendations based on the impact of new facts. Staff sections provide the commander these updated conclusions and recommendations as required by the situation or the commander. Normally, the coordinating staff provides running estimates during the conduct of operations using the personnel estimate, the intelligence estimate, the operations estimate, and the logistics estimate. Effective running estimates facilitate decisions for specific missions.

In the Decisive Action Training Environment (DATE), the operations sergeant/battle NCO must understand what his commander deems to be of importance and relay that information back to the brigade. As radio calls are received by the radio operator (RO), the battle NCO must ensure the accuracy of the reporting. In a high operations tempo (OPTEMPO) as fuel dwindles, ammunition runs out, and casualties reduce mission effectiveness, the battle NCO must force all staff sections as well as subordinate and attached companies to report regularly and accurately. In a recent DATE rotation, two OH-58D(R) were destroyed in a surface-to-air engagement. All four crew were killed in action (KIA). The troop lost a quarter of its combat power in crews and aircraft. Worse still the casualties and downed aircraft were not recovered for over 48 hours and the unit did not properly requisition replacements for another 24 hours. For a total of over 72 hours, due to a lack of running estimates, the task force was limited on the reconnaissance they could conduct.

The role of the battle NCO is a critical component to achieve mission success in a combat environment. Non-commissioned officers selected to work in the CP must be able to perform multiple roles and functions in the tactical CP (TAC) and CPs. They are, in all essences, the principle managers of daily operations, battle tracking and information management. Within numerous CPs we note these trends regarding NCOs:

- NCOs do not understand their roles and responsibilities in the TAC/CP.

- Ineffective battle tracking and information processing due to situational awareness.

- Lack of clear guidance from the operations process (WARNOS, OPORDS, FRAGOS).

- Understanding of the COMMANDER'S INTENT (higher, adjacent and lower).

Battle tracking includes monitoring the current location activity and combat power of task force elements; monitoring the progress of adjacent and supporting units; and updating information. With the aid of the ROs, the NCOs process all reports and information entering the CP to maintain and monitor, such as the following:

- Situation maps.

- Adjacent and joint units, interagency, intergovernmental, and multinational activities.

- Status charts.

- Emerging enemy TTPs.

Information management includes defining the tactical problems; understanding requirements, capabilities and shortfalls, both current and future; providing feasible options; and recognizing the time for decision(s). The eight steps to managing information are as follows:

- Receive information.

- Record and post information.

- Understand the information.

- Process the information.

- Analyze information.

- Disseminate information.

- Safeguard information.

- Follow up.

Command Posts and Battle Drills

ATTP 5-01.1 breaks a CP into three separate entities. We will discuss two: the main CP (also known as the tactical operations center or TOC) and the tactical CP (TAC). We will also relate those two types of CPs through the use of battle drills.

The Main (TOC)

The main CP (also referred to as the tactical operations center or TOC) contains most of the staff. It is designed to control current operations, conduct detailed analysis and plan future operations. The main CP is the unit's principal CP. It includes representatives of all staff sections and a full suite of information systems to plan, prepare, execute and assess operations. It is larger in size and in staffing and less mobile than the tactical CP. The chief of staff (COS) or executive officer (XO) leads and provides staff supervision of the main CP.

Functions of the main CP include, but are not limited to, the following:

- Controlling and synchronizing current operations.

- Monitoring and assessing current operations (including higher and adjacent units) for their impact on future operations.

- Planning operations, including branches and sequels.

- Assessing the overall progress of operations.

- Preparing reports required by higher headquarters and receiving reports for subordinate units.

- Providing a facility for the commander to control operations, issue orders, and conduct rehearsals.

More NCO involvement was needed in the main CP in Rotation 13-09. Without the NCOs, the task force was unable to provide a solid common operational picture nested with the brigade, and therefore did not provide adequate information to the task force commander to make informed decisions. The operations sergeant has to be in the CP at decisive operations to influence the ROs. The ROs in an aviation task force (ATF) are generally the youngest members of the CP with little to no experience. The operations sergeant and battle NCOs are needed when inexperienced ROs are present to prevent delays in information that could be detrimental to aircrews. In several instances aircrews would depart the intermediate staging base (ISB) without getting an update on friendly unit locations or an intelligence update. As a result, multiple aircraft were shot down in the same location on the same day. The NCO must be fully aware of what is taking place on the battlefield at all times in order to allow the battle captains to make the best decision for the commander.

The TAC

The TAC contains a tailored portion of a unit headquarters designed to control portions of an operation for a limited time. Commanders employ a TAC as an extension of the main CP to help control the execution of an operation or a specific task, such as a gap crossing, a passage of lines, or an air assault operation. Commanders may employ the TAC to direct the operations of units close to each other, such as during a relief in place. The TAC may also control special task force or a complex task, such as reception, staging, onward movement, and integration. The TAC is fully mobile and includes only essential Soldiers and equipment. The TAC relies on the main CP for planning, detailed analysis, and coordination. A deputy commander or operations officer leads the TAC.

When employed, TAC functions include the following:

- Monitoring and controlling current operations.

- Providing information to the common operational picture.

- Assessing the progress of operations.

- Monitoring and assessing the progress of higher and adjacent units.

- Performing short-range planning.

- Providing input to targeting and future operations planning.

- Providing a facility for the commander to control operations, issue orders and conduct rehearsals.

In 13-09 no NCOs were sent forward to the objective to facilitate any of the functions of the TAC. The ROs lacked direction and the overall awareness of current operations. A strong NCO in the TAC could have affected operations. On one occasion, the TAC was ordered to displace and return to the ISB. Like most Soldiers on the order to move, they packed tents, equipment, loaded vehicles and prepared the move; however, no load plans, convoy briefs, precombat checks or inspections (PCCs/PCIs) were conducted. This caused individuals to be awake for 20+ hours with the intent to move a convoy through hostile territory with no prior planning. As NCOs we are responsible for the health and welfare of our Soldiers and without a competent and available leader present the task force increased risk. On an entirely different occasion, aircrews asking for an update to the battle space and airspace within the objective area during an attack did not get current airspace control measures. The ROs on duty at the time were unfamiliar with what to brief and there was no solid battle NCO or operations sergeant to guide them.

Battle Drills

At the Joint Readiness Training Center (JRTC), we encourage rotational training units to develop, practice, and employ battle drills. An RTU that executes battle drills can react more quickly to a greater variety of situations. We recommend the following drills as the baseline for RTUs:

- React to an air, ground, or chemical attack.

- React to indirect fire.

- React to jamming or suspected communications compromise.

- Execute time-sensitive targets.

- Execute a close air support (CAS) or joint fires mission.

- React to a mass casualty incident.

- React to significant collateral damage.

- React to a civil riot or incident.

- React to a misinformation incident

In 13-09 the ATF rarely ran a battle drill in the TOC or the TAC. While tedious and sometimes unrealistic, the battle NCO or operations sergeant should run the battle drill process during a slowdown in activity. During the air assault planning for the night of the airborne operations,

the ATF ran no battle drills. At P+2:30 an AH-64 was engaged by insurgent forces and the unit was completely unprepared for aircraft recovery. The AH-64 remained unsecured for around six hours before the initial security element of pathfinders arrived to secure the site. Once on ground, the pathfinders remained with the aircraft for an additional 24 hours and ran out of water and food.

Development of the battle drills would include multiple contingencies for recovery of the aircraft. If the pathfinder company had known that they would be on the ground for more than 24 hours, they could have coordinated resupply much faster. The battle NCO must think outside of the initial series of events and think of second- and third-order effects of his and the battle captain's decisions. At a minimum, battle drills should be run daily to make sure the task force is prepared to execute a real mission.

Conclusion

NCOs have important roles in the CP, whether a TOC or a TAC. Trends at the JRTC show that the battle captain is usually a junior lieutenant with no battle staff experience, usually untrained and just placed into the position by happenstance. The NCO usually has at least one combat deployment as a battle NCO. Typically the NCO is the only individual other than the S-3/XO who understands the requirements of running a fully operational CP. NCOs must be carefully selected to man the CPs. Placing all your strong ROs on a certain shift, or sending them all to the TAC means that an untrained RO will make errors that affect missions. In 13-09, the strong ROs were sent to the TAC without an NCO and the TOC (which lacked NCO involvement) was always trying to gather information secondhand. NCOs have a significant impact on all operations that take place in all operational environments. Good leaders take the lead to fix problems within their CP; the NCO has to be present and willing to speak up.

Chapter 11

Initial Entry Capabilities Considerations Across the Warfighting Functions

1SG Ashley O. Jackson and SFC Wilfred R. Cunningham
Task Force 1, JRTC Operations Group

Generating and maintaining combat power throughout an operation is essential to success. Factors contributing to the generation of combat power include employing reserves, rotating committed forces, and focusing joint support. Commanders who balance the ability to mass lethal and nonlethal effects with the need to deploy and sustain the units produce those effects. In short, they balance the ability of accomplishing the mission with the ability to project and sustain the force.

The infantry company normally conducts offensive operations as part of a larger force. Offensive operations let the commander seize the initiative (choose when and where to fight), retain the initiative, and effectively exploit his company's strengths. The warfighting functions (WfFs) are critical tactical activities that the commander can use to review planning, preparation, and execution. Synchronization and coordination among the WfFs are critical for success.

Commanders use the WfFs to help them exercise command and to help them and their staffs exercise control.

> A WfF is a group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives.

All WfFs possess capabilities to mass lethal and nonlethal effects. The Army's WfFs link directly to the joint functions and include the following:

- Intelligence.

- Movement and maneuver (M2).

- Fires support.

- Protection.

- Sustainment.

- Mission command.

Intelligence. The company commander will not have complete information about enemy intentions. Therefore, he must obtain or develop the best possible information, intelligence preparation of the battlefield (IPB) products, and conduct continuous intelligence, surveillance, and reconnaissance (ISR) collection throughout the operation. He may also need to request information from the battalion staff to answer priority intelligence requirements (PIR).

ISR assets serve to help study terrain in order to determine the enemy's best area for his main defense and routes he may use for counterattacks (both enemy and own observation and fields of fire, avenues of approach, key terrain, obstacles and movement, and cover and concealment); in addition, it can confirm or deny strengths, dispositions, and likely intentions, especially where and in what strength the enemy will defend.

Movement and Maneuver (M2). The battalion commander may task-organize the company with engineers as part of a breaching operation in the offense. The company commander may receive additional mobility assets such as an engineer platoon. (FM 3-34.2 discusses breaching operations in detail.)

Fires Support. As part of the top-down fires planning system, the company commander must refine the fires plan from higher headquarters to meet his mission requirements and ensure that these refinements are incorporated into the higher headquarters plan. He incorporates the results of his mission, enemy, time, troops, terrain and civilians on the battlefield (METT-TC) analysis and designates key observer locations and targets from the fires plan as an integral part of the company rehearsal. In addition, he works with the fire support officer (FSO) to develop a corresponding observation plan and establishes triggers for initiating, ceasing, or shifting fires; the commander may assign responsibility for the firing of certain targets to subordinate leaders. The company commander and the FSO must have a thorough understanding of organic fires support elements (FSEs), traditional artillery, and mortar support assets; the majority of the company's fires support is from mortar systems organic to the infantry battalion and company. The commander employs supporting fires in the offense to achieve a variety of purposes such as:

- To suppress enemy weapons systems that inhibits movement.

- To fix or neutralize bypassed enemy elements.

- To prepare enemy positions for an assault; preparatory fires are normally used during a deliberate attack, with fires placed on key targets before the assault begins. These indirect fires are integrated and synchronized with the company's direct fire systems to provide constant pressure on the enemy position and prevent him from reacting to, or repositioning against, the company's assaulting elements. The commander must weigh the benefits of preparatory fires against the potential loss of surprise.

- To obscure enemy observation or screen friendly maneuver; the company can take advantage of smoke in various maneuver situations, such as during a bypass or in deception operations.

- To support breaching operations; fires are employed to obscure and suppress enemy elements that are over watching reinforcing obstacles.

- To illuminate enemy positions; illumination fires are always included in contingency plans for night attacks.

Protection. Stinger sections, with organic vehicle support, are seldom attached to the company. However, they may travel with the company for additional security. Their security must be a consideration in planning for offensive operations. The company commander must plan for and rehearse internal air security and active air defense measures. The commander must anticipate possible contact with enemy air assets by templating enemy helicopter and fixed-wing air

corridors and assembly areas (AA). In addition, unit standard operating procedures (SOPs) should dictate internal air security measures and active air defense measures.

Sustainment. The main purpose of sustainment in the offense is to assist maneuver elements in maintaining the momentum of the attack. Sustainment functions are performed as far forward as the tactical situation allows. Company trains normally remain one terrain feature out of direct fire range of the enemy, behind the location of the company. The commander must consider the enemy situation and how it relates to the security of the company trains. If the company is conducting decentralized operations, the company trains locate where they can best support the platoons in the accomplishment of the company's mission.

Mission Command. Though the company's assigned mission and objective may be the decisive or shaping operation for the battalion, the commander may decide to translate, develop, and assign both decisive and shaping tasks for the platoons; sequencing his operation by "find, fix, finish, follow through" concepts. Typically, he will plan to make contact with the smallest element possible, deceive the enemy as to whether they have engaged the company main effort or decisive operation, employ timely and synchronized fire support, and maneuver platoons to destroy the enemy and seize the company objective.

The commander will locate where he can maintain a current and accurate picture, and best control his elements as the attack progresses; this is usually with the decisive element. He is prepared to exploit unforeseen advantages and anticipates the need or requirement to shift his effort due to success or to preserve his freedom of maneuver.

Observations From Previous Rotations

There are common trends that have been observed as a rotational training unit (RTU) rotates through the JRTC; these trends often deal with a lack of planning considerations or the incorrect use of the WfFs. In addition, we have noticed leader complacency across the board. This may stem from an attitude that the unit is in a training phase and that the leaders are not taking their training seriously; it could also imply that the leader is overwhelmed with meeting his higher headquarters' intent. As a result, leaders may overlook certain facets of planning and considerations for the WfF. Use of the acronym AGADAP (analyze relative combat power, generate options, array forces, develop concept of the operation, assign responsibilities, prepare concept of the operation brief and sketch) will help ensure the enemy is depicted in briefs and sketches.

Considerations for 360-degree security are often overlooked when considering all the external attachments within the company or platoon formations. Attachments such as indigenous troops, enablers, or anyone accompanying the company element should be considered for the potential risk they bring to the formation. The commander must ensure that the attachments are properly trained, armed, and equipped and will not become a liability when conditions worsen; these considerations fall under principles of the Protection WfF.

Incorporation of enablers into offensive and defensive planning is another critical task that could lead to a reduction in unit performance or failure to accomplish the mission set if left unaddressed. For example, units often do not consult the tenets of the Fires WfF or review the battalion fires plan when planning their mission, resulting in a lack of established final protective lines (FPLs) and final protective fires (FPFs); this ultimately results in a weak defensive strategy.

Each rotation brings with it lessons to be learned from leadership successes and limitations. Leaders have to enforce proper priorities of work within their own element. Consequently, leaders have to troop their lines throughout the entirety of the rotation to prevent their own Soldiers from becoming complacent when set in security. Ensure that interlocking sectors of fire are properly assigned when planning company-sized patrol bases or assembly areas. In addition, leaders must consider all of the WfFs during their planning. The Sustainment WfF is often overlooked or planned with insufficient detail; this often impedes the ability of elements to recover after continuous operations and establish the conditions for future operations. If there are any shortcomings, JRTC is the place to identify these problems; a reset can be done as much as needed, train to standards – not time. Deployments should not be the time to identify shortcomings, because a Soldier's life can not be reset.

Chapter 12

Priorities of Work: Individual Soldier Discipline and the Effects on Operations

CPT Tyler F. Vest, 1SG Stephen P. Eldred, SFC Andrew D. Schmith, SFC Kirby R. Wilcox, SFC Michael D. Campbell, and SSG Alan J. Longmore Task Force 1, JRTC Operations Group

The failure of a few key standards in priorities of work can degrade a unit significantly. Murphy's Law implies that such problems occur at the worst time. Non-battle injuries, inoperable weapons and equipment, and broken vehicles can cripple your unit. Commanders and noncommissioned officers must set priorities of work based on the situation, enforce proper field hygiene, and ensure that all essential equipment is clean and serviceable.

The Basics

The Ranger Handbook (2011) states the leader establishes or modifies defensive work priorities to establish the defense for the patrol base. Priorities of work are not a laundry list of tasks to be completed; to be effective, priorities of work must consist of a task, a given time, and a measurable performance standard.

Over the past 12 years, we have conditioned an Army to operate intuitively and instinctively. "Speed is Security," is the mantra we often chant. This habit of operating by intuition has allowed many leaders to neglect doctrine. Speed for speed's sake often sacrifices genuine security, as critical steps are either overlooked or neglected that could have otherwise ensured a contiguous defense. Defensive planning is both an art and a science. Intuition is the art, but tried and proven procedural steps comprise the science. While not a "laundry list," defensive planning priorities of work ensures accomplishment and completion of key tasks (see Table 12-1).

No.	EVENT	SQD1 (A)	SQD1 (B)	SQD2 (A)	SQD2 (B)	SQD3 (A)	SQD3 (B)	WPNS (1)	WPNS (2)	PLT HQ
	Table 12-1. Priorities of Work Checklist (Example-Incomplete)									
1	Establish Local Security									
2	Setup OPs (Brief Soldiers of Location)									
3	Conduct Local Recon Patrols									
4	ID Enemy Avenues of Approach									
5	Determine Enemy Scheme of Maneuver									
6	Determine Where to Kill the Enemy									
7	Emplace Hasty Protective Obstacle									
8	Develop Passage Plans									
9	Emplace Tactical Obstacles and Mines									
10	Emplace and Integrate DF									

Leaders still need to ensure that they are prioritizing what needs to be accomplished on that checklist and issue that guidance to their subordinate leaders with clear task, condition, and standards on the accomplishment of those prioritized tasks in accordance with the commander's guidance. Additionally, Soldiers must be trained on what their individual responsibilities are once they begin priorities of work to ensure that their leaders have the maximum amount of time available to emplace and confirm security, spot-check, and conduct troop leading procedures for the next operation.

Non-Battle Injuries

The Achilles' heel of priorities of work is personal hygiene. The Ranger Handbook (2011) states "All Soldiers will brush teeth, wash hands, groin, and feet daily" (page 7-22). Hygiene is often either placed second to all other priorities, or, at times, neglected altogether. One such unit lost

an entire squad's worth of combat power to cellulites due to not planning for and enforcing proper field hygiene in their priorities of work. Leaders must incorporate their field sanitation team and then plan for field hygiene in their priorities of work in order to prevent unnecessary loss of combat power. Regardless of the restriction placed on units to reduce Soldier load, certain basic and fundamental hygienic products should be maintained by each Soldier at all times — toothbrush, razor, shaving cream, soap, towel, foot powder. Units should be allowed leeway in determining what is required, as long as the intent of maintaining hygiene is achieved. Additionally, Soldiers and leaders were also unable to identify poisonous plants within their area of operation. This only exacerbated the issue and made the Soldiers more susceptible to infection. On several occasions, riflemen, team leaders and machine gunners were removed from the fight due to rashes and infections from poison oak, poison ivy and poison sumac. Educating Soldiers regarding dangerous flora and fauna within their AO may have reduced the unnecessary number of Soldiers put out of the fight. Units must ensure that they take the time to educate both their Soldiers and their leaders on the basics of field hygiene and the identification of poisonous and harmful plants. Conducting this training and ensuring that the proper preventive measures are taken on a daily basis will prevent units from losing Soldiers from the fight due to non-battle injuries.

Figure 12-1. Commander issuing guidance to his platoon leaders.

Planning Maintenance

While the vast majority of Soldiers during the last two DATE rotations were observed conducting daily weapons maintenance there was no plan on when and who should conduct weapons maintenance, especially with crew-served weapons. Commanders must dictate when and where key items of equipment should come out of action based on the current situation. This

has to be a deliberate process to avoid situations where Soldiers take it upon themselves to clean their crew-served weapon not knowing that another crew-served weapon is also currently out of action for maintenance. The same standard holds for communications equipment. There has to be a plan to cover down when a radio is going out of action for maintenance to cover down on the net that radio was covering. The lack of a deliberate planning process for maintenance increases the potential of having two or more crew-served weapons out of action or a critical net not being monitored when OPFOR chooses to attack.

Figure 12-2: Soldier with a clean and serviceable M240B after a week of patrol-base activities and missions.

Leaders that issue clear task, condition, and standard for each priority of work; commanders that prioritize what needs to be accomplished based on METT-TC factors; and units that teach individual Soldier discipline have been successful. Units that have not done this have suffered unnecessarily and not been successful at their follow-on operations. Leading Soldiers in combat is both an art and a science. Operating solely by intuition allows for unnecessary set-backs, haphazardly and poorly planned missions. Operating strictly by a set of procedural tasks and lists of tasks is just as ineffective. Effective units operate using a closely knit combination of sound tactical doctrine in concert with combat experience and leaders' intuition. If commanders and noncommissioned officers take the time to conduct priories of work to standard they will be able to successfully resist, defeat, or destroy an enemy attack and gain the initiative to resume offensive operations.

Chapter 13

Achieving Balance: The Soldier's Load

CSM Chip E. Mezzaline
Brigade Mission Command, JRTC Operations Group

The 82nd Airborne Division has deployed brigade combat teams to the Joint Readiness Training Center (JRTC) to participate in the last two Decisive Action Training Environment (DATE) rotations. The 2nd Brigade (Task Force [TF] Falcons) came for Rotation 13-01. Nine months later the 3rd Brigade (TF Panthers) jumped into Rotation 13-09. The brigades used home station training and shared lessons learned at the JRTC to build upon their success. The Soldier's load is an area that every leader focuses; none look harder at a Soldier's load than a paratrooper. Having gathered data from Rotation 13-01 and Rotation 13-09 this article will compare and contrast the Soldier's load with respect to the DATE.

Figure 13-1. Panthers rigged and ready.

The Panther brigade departed home station and arrived at the intermediate staging base (ISB)[1] where it prepared to go to the JRTC in a forced entry into a semi-permissible environment. Upon arrival at the ISB, the teams, squads, and platoons began pre-combat inspections (PCIs), pre-combat checks (PCCs), and rehearsals for the upcoming airborne, air assault, and ground tactical convoy movements. The brigade commander's guidance was that paratroopers would enter the area of operation (AO) with an assault pack that weighed no more than 40 pounds. Junior leaders adapted to the commanders guidance and began to identify mission essential equipment and

sustainment requirements for the first 24 hours of operations. The brigade commander's guidance required leaders at all levels in the brigade to be agile. The ability of paratroopers to sustain themselves for the first 24 hours of operations would rest on their physical conditioning, creative thinking, field craft, and a detailed resupply plan by the sustainment warfighting function (WfF).

Understanding Load Categories

To really understand the brigade commander's guidance in this situation, we first must re-examine the types of loads that a Soldier will carry on any given mission. The types of loads are:

- Combat load.

- Fighting load.

- Approach march load.

- Sustainment load.

- Contingency load.

Combat Loads

A combat load consists of the minimum mission-essential equipment, as determined by the mission commander. This includes only what is needed to fight and survive immediate combat operations. The two levels of combat load include the following:

- Fighting loads carried on dynamic operations where contact with the enemy is expected.

- Approach march loads carried when transportation cannot be provided for equipment over and above fighting loads.

Fighting loads. A fighting load is what the Soldier carries once contact has been made with the enemy. It consists only of essential items the Soldier needs to accomplish his task during the engagement. For close combat and operations requiring stealth, any load at all is a disadvantage. Cross loading of machine-gun ammunition, mortar rounds, antitank weapons, and radio equipment causes most combat loads to exceed 48 pounds. This is where risk analysis is critical. Excessive combat loads of assaulting troops must be configured so that the excess can be redistributed or shed (leaving only the fighting load) before or upon contact with the enemy.

Approach march loads. An approach march load is the load that the Soldier carries in addition to his fighting load. These items are dropped in an assault position, objective rally point (ORP), or other rally point before or upon contact with the enemy. On long dynamic operations, Soldiers must carry enough equipment and munitions to fight and exist until a planned resupply can take place. These loads vary and may exceed the goal of 72 pounds.

Sustainment Loads

A sustainment load consists of the equipment required for sustained operations. This equipment is usually stored by the company supply section in the brigade support area (BSA) and brought forward when needed. A sustaining load can include rucksacks, squad duffel bags, and sleeping bags. In combat, protective items for specific threats, such as joint-service lightweight integrated suit technology (JSLIST) might be stored in preconfigured unit loads. Commanders coordinate with the battalion S-4 to ensure that all sustainment load items are available.

Contingency Loads

A contingency load includes all other items that are not necessary for ongoing operations, such as extra clothing, personal items, or even Javelins in a threat environment where the enemy lacks an armored capability. Contingency loads might be stored in duffel bags or palletized. Army research shows that a Soldier can carry 30 percent of their body weight and maintain much of their agility, stamina, alertness, and mobility. The Soldier's weight times 0.3 will give you that 30 percent of the Soldiers body weight you need for planning purposes (SW x 0.3 = 30% of Soldiers weight). There will be times when your Soldiers must carry the maximum load. When the load exceeds 45 percent of the Soldier's body weight, the Soldier loses function. When this load is exceeded, the Soldier becomes more at risk of becoming a casualty.

Balancing Mission and Loads

Commanders get paid to look at recommendations for balancing mission and Soldiers. In the case of Soldier's load that means balancing mission requirements and the weights carried by the Soldiers. After reviewing the commander's guidance and the types of Soldier loads, it is obvious that the troopers that took part in this training exercise would enter the AO with a combat load. The sustainment WfF's ability to rapidly deliver those classes of supply necessary to the paratrooper on the ground would be critical to sustaining the trooper in the fight. A solid plan rapidly executed would be the key to success. The platoon sergeant for 3rd Platoon, Alpha Company, 2-505 PIR, demonstrated critical thinking and was able to adapt to his environment. His paratroopers were "black" on water as they entered the city of Dara Lam. After securing the U.S. Consulate, he tapped into the local water system to resupply his paratroopers bringing them back to a "green" status on water for the remainder of the training exercise.

Figure 13-2 reflects the Soldier's load for the DATE 13-01. The unit Soldier load average was 113 pounds — everything with which the trooper jumped into the training environment.
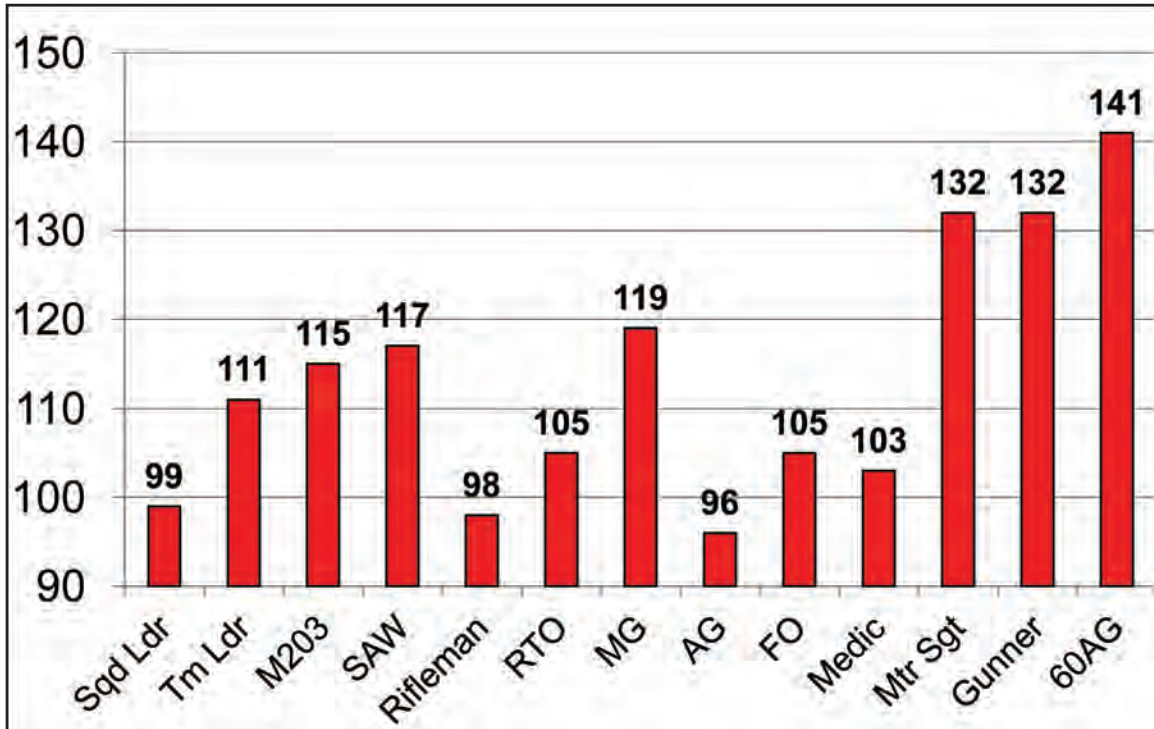
Figure 13-2. This chart shows the Soldier's load for the DATE 13-01.

Figure 13-3. This paratrooper is loaded and standing tall.

Figure 13-4 shows the Soldier's load from DATE rotation 13-09. The unit Soldier load average was 62 pounds. This average included everything with which the Soldier jumped into the training environment. Of note, the average assault pack weighed 38 pounds, which met the Panther brigade commander's intent.
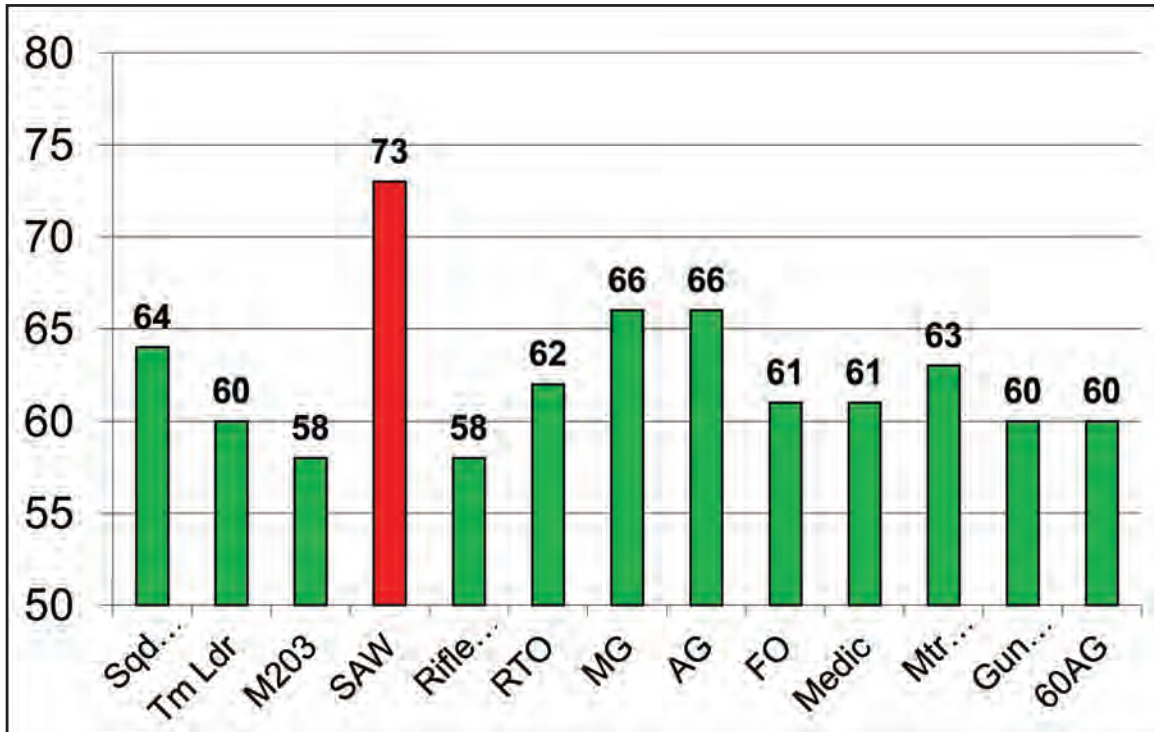

Figure 13-4. This chart shows the Soldier's load from DATE 13-09.

The following are three samples of packing lists that can be used when planning:

Packing List One

MOLLE/ALICE PACK:

☐	Army Combat Shirt	1
☐	Assault Pack, ACU	1
☐	Bag, Waterproof	1
☐	ACU Cap	1
☐	ACU, Cap Boonie	1
☐	Bivy Bag, ACU (Gortex Cover)	1
☐	Camel Back	1
☐	Canteen, 2 Quart with cover and strap	1
☐	Cap, Fleece	1
☐	Entrenching tool with carrier	1
☐	Gator, Neck	1
☐	Foot Powder	1
☐	Protective eye wear (APEL)	1
☐	Goggles	1
☐	Hygiene Articles	1 week
☐	JSLIST, overshoes and gloves	1
☐	Weapons cleaning kit	1
☐	Taps	1
☐	Liner, Poncho	1
☐	Parka, rain suit	1
☐	Protective Mask	1
☐	IR Flag	1
☐	Poncho	1
☐	Socks	5 pair
☐	Undershirt, Tan	2
☐	Undershirt, Lightweight	1
☐	Wet wipes	1
☐	Sewing Kit	1

Packing List Two

ASSAULT PACK:

- [ ] JSLIST, overshoes and gloves   1
- [ ] Protective mask   1
- [ ] MRE's   9
- [ ] Canteen, 2 Quart with cover and strap   1
- [ ] Camel Back   1
- [ ] Hygiene kit   1
- [ ] Tan T-shirts   4
- [ ] Socks   6 pair
- [ ] E-tool per fire team   1
- [ ] Weapons cleaning kit per team   1

Packing List Three

ASSAULT PACK W/WAIST PACK:

- [ ] 2QT Canteen w/Cover and Sling w/water   1
- [ ] Liner, Poncho   1
- [ ] Poncho   1
- [ ] JSLIST, overshoes and gloves   1
- [ ] Protective Mask   1
- [ ] Neck Gaiter   1
- [ ] Meal Ready To Eat 1 ea (1.50/0.68 kg)   1
- [ ] Undershirt moisture wicking   1
- [ ] Socks   4 pair
- [ ] Weapon Cleaning Kit   1
- [ ] Flex Cuffs (4 large per soldier)   1
- [ ] Chem light (2per)   1
- [ ] Water purification tablets   1
- [ ] VS-17 Panel (small)   1

Other equipment available at the battalion and company level that was used is the John Deere Gator. This piece of equipment can assist in relieving some of the burden on the Soldier and should be used when practical.

> "Initially, the Gator was our casualty evacuation (CASEVAC) platform and it also carried in enough food and water for three days for my Charlie Company. Had we not used this piece of equipment on the initial insertion, resupply would have been an issue. We would have had to go in with more water. Some Troopers had special equipment (i.e., mechanical breaching tools), but not much. We knew resupply would be difficult so we went in with a three day supply of Class I. The Brigade Sustainment Battalion prepared CDS Bundles that came in with the first stick of jumpers. These bundles paid huge dividends after the first twenty four hours of operations. The low cost low altitude (LC/LA) delivery system is a cost effective way to get resupply to troops on the ground in a cost effective manner. The Joint Parachute Airdrop Delivery System (JPADS) has the ability to pin point supplies however, the system comes in at a more substantial cost. The introduction of the T-11 Advanced Tactical Parachute System (ATPS) allows for a much heavier load to be jumped in by the Paratrooper. The system is designed to be jumped with IOTV being worn by the Paratrooper which provides the commander another option for force protection."
>
> —CSM Cliff Burgoyne, 1st Battalion, 505th PIR
> (After the 13-09 DATE Rotation.)

Leaders must consider the factors that will have the greatest effect on what the Soldier carries into combat. The enemy threat and capabilities coupled with environmental considerations are areas that are in the planning process. The improved outer tactical vest (IOTV) and joint service lightweight integrated suit technology (JSLIST) are two systems that must be on the Soldier for force protection and survivability. The IOTV will add a significant amount of weight to the Soldier's load. The interceptor body armor, E-SAPI plates weigh (10.9 pounds), ESBIs (7.75 pounds), DAPS (5.03 pounds), and with the neck, throat, and groin protectors installed, the IOTV weighs in at 33.1 pounds. The JSLIST has been designed to replace the battledress overgarment. It is lighter and durable for up to 45 days; it provides 24 hours of protection against liquid and vapor chemical challenges. The total weight is 5.8 pounds per overgarment.

After reviewing these two pieces of mission critical equipment we can add 38.9 pounds to the Soldier's load. Leaders must determine at what point in an operation Soldiers will need force protection equipment. Units at the company level must identify and place these special items of equipment IOTV, JSLIST, and cold weather gear in unit packages that can be moved forward through the sustainment warfighting function at a moment's notice. The commander's involvement in analyzing the situation and the level of risk involved is the key to balancing the Soldier's load.

Endnote

1. The Panthers also benefited from their experiences in the full spectrum operations Rotation 11-01.

PROVIDE US YOUR INPUT

To help you access information quickly and efficiently, the Center for Army Lessons Learned (CALL) posts all publications, along with numerous other useful products, on the CALL website. The CALL website is restricted to U.S. government and allied personnel.

PROVIDE FEEDBACK OR REQUEST INFORMATION

<http://call.army.mil>

If you have any comments, suggestions, or requests for information (RFIs), use the following links on the CALL home page: "RFI or CALL Product" or "Contact CALL."

PROVIDE LESSONS AND BEST PRACTICES OR SUBMIT AN AFTER ACTION REVIEW (AAR)

If your unit has identified lessons or best practices or would like to submit an AAR, please contact CALL using the following information:

Telephone: DSN 552-9569/9533; Commercial 913-684-9569/9533

Fax: DSN 552-4387; Commercial 913-684-4387

NIPR e-mail address: call.rfimanager@conus.army.mil

SIPR e-mail address: call.rfiagent@conus.army.smil.mil

Mailing Address: **Center for Army Lessons Learned**
                          ATTN: OCC, 10 Meade Ave., Bldg. 50
                          Fort Leavenworth, KS 66027-1350

TO REQUEST COPIES OF THIS PUBLICATION

If you would like copies of this publication, please submit your request at: <http://call.army.mil>. Use the "RFI or CALL Product" link. Please fill in all the information, including your unit name and official military address. Please include building number and street for military posts.

PRODUCTS AVAILABLE "ONLINE"

CENTER FOR ARMY LESSONS LEARNED

Access and download information from CALL's website. CALL also offers Web-based access to the CALL Archives. The CALL home page address is:

<http://call.army.mil>

CALL produces the following publications on a variety of subjects:

- **Combat Training Center Bulletins, Newsletters, and Trends**
- **Special Editions**
- *News From the Front*
- **Training Techniques**
- **Handbooks**
- **Initial Impressions Reports**

You may request these publications by using the "RFI or CALL Product" link on the CALL home page.

COMBINED ARMS CENTER (CAC)
Additional Publications and Resources

The CAC home page address is:

<http://usacac.army.mil/cac2/index.asp>

Center for Army Leadership (CAL)

CAL plans and programs leadership instruction, doctrine, and research. CAL integrates and synchronizes the Professional Military Education Systems and Civilian Education System. Find CAL products at <http://usacac.army.mil/cac2/cal/index.asp>.

Combat Studies Institute (CSI)

CSI is a military history think tank that produces timely and relevant military history and contemporary operational history. Find CSI products at <http://usacac.army.mil/cac2/csi/csipubs.asp>.

Combined Arms Doctrine Directorate (CADD)

CADD develops, writes, and updates Army doctrine at the corps and division level. Find the doctrinal publications at either the Army Publishing Directorate (APD) <http://www.usapa.army.mil> or the Reimer Digital Library <http://www.adtdl.army.mil>.

Foreign Military Studies Office (FMSO)

FMSO is a research and analysis center on Fort Leavenworth under the TRADOC G2. FMSO manages and conducts analytical programs focused on emerging and asymmetric threats, regional military and security developments, and other issues that define evolving operational environments around the world. Find FMSO products at <http://fmso.leavenworth.army.mil/>.

Military Review (MR)

MR is a revered journal that provides a forum for original thought and debate on the art and science of land warfare and other issues of current interest to the U.S. Army and the Department of Defense. Find MR at <http://usacac.army.mil/cac2/militaryreview/index.asp>.

TRADOC Intelligence Support Activity (TRISA)

TRISA is a field agency of the TRADOC G2 and a tenant organization on Fort Leavenworth. TRISA is responsible for the development of intelligence products to support the policy-making, training, combat development, models, and simulations arenas. Find TRISA Threats at <https://dcsint-threats.leavenworth.army.mil/default.aspx> (requires AKO password and ID).

Combined Arms Center-Capability Development Integration Directorate (CAC-CDID)

CAC-CDIC is responsible for executing the capability development for a number of CAC proponent areas, such as Information Operations, Electronic Warfare, and Computer Network Operations, among others. CAC-CDID also teaches the Functional Area 30 (Information Operations) qualification course. Find CAC-CDID at <http://usacac.army.mil/cac2/cdid/index.asp>.

Army Irregular Warfare Fusion Cell (AIWFC)

AIWFC integrates and collaborates information exchange and analysis for irregular warfare (IW) activities in order to advocate DOTMLPF (doctrine, organization, training, materiel, leadership and education, personnel, and facilities) solutions addressing IW threats. AIWFC synchronizes and assists in the development of IW and countering irregular threats enterprises to support a coherent Army strategy that accounts for building partner capacity, stability operations, and the integration of unconventional warfare and counterterrorism. Find AIWFC at: <http://usacac.army.mil/cac2/AIWFC>.

Joint Center for International Security Force Assistance (JCISFA)

JCISFA's mission is to capture and analyze security force assistance (SFA) lessons from contemporary operations to advise combatant commands and military departments on appropriate doctrine; practices; and proven tactics, techniques, and procedures (TTP) to prepare for and conduct SFA missions efficiently. JCISFA was created to institutionalize SFA across DOD and serve as the DOD SFA Center of Excellence. Find JCISFA at <https://jcisfa.jcs.mil/Public/Index.aspx>.

> *Support CAC in the exchange of information by telling us about your successes*
> *so they may be shared and become Army successes.*

Center for Army Lessons Learned
10 Meade Avenue, Building 50
Fort Leavenworth, KS 66027-1350

www.leavenworth.army.mil

US UNCLASSIFIED
FOR OFFICIAL USE ONLY

US Army
Combined
Arms Center

"Intellectual Center of the Army"