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The Bastogne Fusion Process: A Commander-Centric Approach to Planning and Decision Making (Page 36)

Contextual Training for Junior Leaders (Page 40)



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COL WILLIAM J. BUTLER Deputy Commandant, U.S. Army Infantry School

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FRONT COVER:

A paratrooper assigned to the 2nd Battalion, 503rd Infantry Regiment, 173rd Infantry Brigade Combat Team (Airborne), pulls rear security during a live-fire exercise as part of exercise Rock Proof in Postonja, Slovenia, on 28 April 2014. Sky Soldiers conducted a two-week training exercise with their partners from the Slovenian army's 10th Battalion. (Photo by SSG Pablo N. Piedra)

BACK COVER:

An Infantryman with Headquarters and Headquarters Company, 1st Battalion, 68th Armor Regiment, 3rd Armored Brigade Combat Team, 4th Infantry Division, gets into position as an enemy sniper, 13 March 2014. The Soldier was playing a member of the opposing force to help his unit train on various Infantry tactics and techniques to enhance combat readiness. (Photo by SSG Grady Jones)

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Commandant's Note

COL WILLIAM J. BUTLER, DEPUTY COMMANDANT

KEEPING THE PRIORITIES STRAIGHT

he U.S. Army has come a long way since the terrorist attacks of 11 September 2001, and the Infantry has been the tip of the spear as we deployed to face a threat whose relentlessness and ingenuity bore little similarity to those of earlier adversaries. During the Cold War, the monolithic threat of the Soviet Union and her satellite states was considerable, but we understood their doctrine, capabilities, and likely courses of action. We understood their logistical capabilities and weaknesses, and knew they were bound by the same rules we followed regarding noncombatants, wounded, and prisoners of war. Today's enemy is different. Al Qaeda, the Taliban, and organizations such as Hamas, Hezbollah, and others show no such restraint. Launching rockets into Israel from civilian neighborhoods in Gaza will draw Israeli counter-fire, but Hamas persists in provoking this devastating response. We live in an increasingly uncertain world in which the possibility of uncontrolled weapons of mass destruction is moving from the realm of mere speculation into that of possibility, and now more than ever our Infantry will be a key player as America asserts her role as the leader of the free world. As instability threatens regimes in the Middle East, in former Soviet states, along the Pacific Rim, in North Africa, and in sub-Saharan Africa, the necessity of maintaining credible forces capable of rapid deployment in support of U.S. interests cannot be ignored, and this mission will require Infantry. In this Commandant's Note, I want to highlight a number of ongoing initiatives that the U.S. Army Infantry School (USAIS) is pursuing to ensure that in this time of constrained resources and increased commitments we can continue to field the world's best leaders and Infantry Soldiers.

The dismounted squad is the foundation of the Infantry force. The key to decisive victory lies in the hands of Infantry squads of tactically and technically proficient Soldiers and leaders of the cohesive, resilient teams that can seize and retain the initiative in every fight and under all conditions. The dismounted Infantry squad is the cutting edge as we train a force that will close with and destroy the enemy at the time and place of our choosing, and under the conditions that will give us the greatest advantage while we deny him anything close to a fair fight. We maintain that advantage by continually enhancing the capabilities of small units. One example of this is the Lethal Miniature Aerial Munition System (LMAMS) currently under development. A LMAMS-equipped unit will be able to immediately engage targets that are out of range of our current line-of-sight and indirect fire weapons on complex terrain and which may be otherwise limited by rules of engagement (RoE). The advantages offered by LMAMS include responsiveness, high lethality, reduced likelihood of fratricide, and less collateral risk to noncombatants. The Infantry squad's lethality will also be enhanced by the fielding of the M4A1 carbine featuring a new barrel assembly, auto trigger assembly, ambidextrous selector, bolt assembly, and other features which provide the automatic fire Soldiers need during fire and movement when suppressive

fires are most needed. The enemy we have faced in Iraq and Afghanistan has displayed extraordinary tenacity and innovation in his tactics and techniques, and organizations such as the ISIS elements rampaging across Iraq, Taliban, Hamas, Hezbollah, and others are why we need to maximize Soldiers' situational awareness, resilience, and survivability.



We must continue to enhance our reconnaissance and security (R&S) capability by improving R&S doctrine, organization, training, education, materiel improvements, and personnel policies.

The discipline and health of the force are paramount concerns today. Educating Soldiers about Army Values in all of our training is critically important to ensure that our Soldiers represent the American people in whose name we fight. Enforcing standards and discipline, developmental counseling, initiating efforts to reinforce unit cohesion, and offering sponsorship and mentoring all support building effective Infantry teams, squads, and platoons. The Army's values are those of our society, and young Americans bring with them many of those qualities when they join our ranks. However, they also sometimes come with defective attitudes that can destroy unit cohesion and morale. Sexual harassment and assault are realities of the civilian world, and have begun to manifest themselves in our armed services. Part of this is due to attitudes that developed during or after high school and were never corrected; this is a form of deviant behavior that we simply cannot tolerate. The Sexual Harassment Assault Response & Prevention (SHARP) initiative currently stressed at the Army's highest command levels is both a way forward for today and a hope for future healthier relations between the genders and value systems that the Army comprises. For many young Soldiers, the Army is their family now. They look to us for their moral azimuth, and we owe it to them to help them remain proud members of the honorable profession of arms.

Finally, the Army's Comprehensive Soldier and Family Fitness Program is a superb conditioning and bonding opportunity that will strengthen the resilience of our Soldiers, leaders, and family members by giving them the knowledge and tools they need to fully recognize and support the importance of the Army as a team in which everyone plays an important role. Few other professions demand as much from their members; military families cope with stress levels unimaginable to non-military family members, and children are some of the most seriously affected. The Comprehensive Soldier and Family Fitness Program can help. I encourage you to support it. We owe our Soldiers and Families no less.

One force, one fight! Follow me!

Infantry News



BEEFIER CARBINES EN ROUTE TO SOLDIERS

DAVID VERGUN

A thicker barrel will absorb more heat in the new M4A1 carbine, should a Soldier need to flip the selector to auto, according to Soldiers overseeing the new configuration now being added to the M4.

While shooting in the automatic mode is less efficient and not as accurate as firing in bursts, it has its place on the battlefield, explained CSM Doug Maddi, Program Executive Office Soldier, Fort Belvoir, Va.

"Soldiers need automatic capability while providing suppression fires during fire and movement," he said, noting that Soldiers deployed to Afghanistan asked for that and are now getting it, an option absent in the M4, which only fired in semi-automatic and bursts. A new drop-in trigger allows the A1 to function with the automatic setting.

CSM Maddi and others spoke May 21, during a media roundtable, marking the milestone of the first Army unit to receive the beefed-up carbines, 1st Infantry Division, out of Fort Riley, Kan.

The beefier weapon is not unknown to the Army. Soldiers in U.S. Special Operations Command have been using M4A1s since 1994.

The trade-off in weight and performance is something Soldiers gladly accept, Maddi said, noting that the M4A1 weighs 7.74 pounds compared to the M4's 7.46. The weight comparisons include the back-up iron sight, forward pistol grip, empty magazine, and sling.

Another feature that's new on the A1 is an ambidextrous selector lever, something that's especially attractive to Maddi, who said he's a lefty who often gets left out when it comes to equipment design.

Doing the numbers, LTC Shawn P. Lucas, product manager Individual Weapons, Picatinny Arsenal, N.J., said the configuration conversion won't be finished until the halfmillionth carbine is converted, by the end of 2019.

Priority for those receiving the A1s will obviously go to brigade combat teams that are high in the readiness cycle and likely to deploy, said Lucas, adding that Army headquarters and U.S. Army Forces Command use a readiness model with a lot of variables that are periodically adjusted, so providing a schedule of which units will get A1s and when, would be guesswork at this point.

Total program cost, including all the labor and hardware, is an estimated \$120 million, he said.

Right now, conversions at Fort Riley are starting to get ramped up, with about 300 conversions being done a day, Maddi said. That works out to an entire brigade combat team



Figure 1 — M4 Carbine Product Improvement Program

getting A1s every week or so. And, those who are getting them are offering "resounding accolades."

Maddi said 2nd Brigade is receiving the new configuration even as one of their battalions is deployed conducting gunnery exercises. "Good units are able to do multiple things at multiple times, and I appreciate that."

Conversion Process

The Maneuver Center of Excellence at Fort Benning, Ga., requested implementation of the conversion in 2010. Reliability testing for the A1s was done at Aberdeen Proving Ground, Md., in 2013, to ensure "no harm" to performance following the conversion. After successful testing, Army headquarters gave the nod to begin the conversions, Lucas said.

Anniston Army Depot, Ala., then began receiving parts from large firms like Colt and from a number of small businesses. A team from U.S. Army Tank-Automotive and Armaments Command, Warren, Mich., assisted, he added. The parts were then boxed up and shipped to Fort Riley, much like a dresser might be shipped to a customer with instructions on how to screw it all together. But unlike a dresser that might come with instructions that are hard to understand, the A1 parts came with highly trained armament technicians to do the conversions, Lucas said.

Besides doing the assembly of the upper and lower receiver and bolt carrier group, the team brought along a laser engraver to re-mark the setting nomenclature, he said. "Safe, Semi, and Burst" was changed to "Safe, Semi, and Auto." Also, the "A1" was added to "M4."

The A1 conversions will probably not be the last word on the carbine, said Maddi, who expects it to continually evolve.

Every Soldier qualifies with the carbine, or the M16A2 or M16A4, twice a year. Their feedback, along with that of Soldiers returning from theater, will continue to be monitored and tweaks to the system are always possible, he said.

The small-arms community which includes Soldiers, special operators, and those from the other services — are discussing other performance enhancements like an extended forward rail, folding front sight post, match-grade triggers for designated marksmen, and integration of suppressors, he said, adding that at this time they're only "on the drawing board."

Maddi thinks Eugene Stoner, the designer of the M16 and its family of weapons, including the carbine, should be considered in the same august group as Colt, Smith & Wesson, and Browning.

The M4, which Stoner designed several decades ago, was "a pretty good idea," Maddi said.

"Soldiers trust in it," and it consistently ranks first among all weapons in Soldier satisfaction surveys, he added.

So, he said, "the big question is, 'how do you improve on something that's already pretty darn good?""

(David Vergun writes for the Army News Service.)

INSECT-INSPIRED TECHNOLOGY TO EXTEND SITUATIONAL AWARENESS

JENNA BRADY

Soldiers' missions frequently lead them to locations where they must assess the status of structures and where the presence of threats is not immediately known or easily detectable. These threats include ambushes and chemical and biological threats that could be lurking around every corner. Current technology assists Soldiers in detecting these possible threats by allowing them to assess structures and threats through the use of teleoperated sensing systems.

"Think of it as a camera on wheels, where Soldiers have a one or two-pound sensor that they can throw into a building to assess situational awareness," said Dr. Brett Piekarski, chief of the U.S. Army Research Laboratory's Micro and Nano Materials and Devices Branch within the Sensors and Electron Devices Directorate (SEDD); and cooperative agreement manager of the Micro Autonomous Systems and Technology (MAST), Collaborative Technology Alliance. "The Soldier controls it like a video game to complete the task."

Though successful in getting the job done, current systems have their drawbacks.

"In order for Soldiers to send a system into a building and guide it along the way, they must put their weapons down to do so. This creates the need for other Soldiers to stop what they are doing to protect the Soldier that is controlling the system," Piekarski said.

In addition, existing sensing systems do not have the ability to go everywhere the Soldier goes, as they are not very successful in rugged terrain and are too slow to keep up with the speed of the Soldier.

According to Piekarski, in terms of the future, sensing systems are desired that have the ability to find their own way in and out of a structure, instantaneously send back information to the Soldier from within the structure, hover to defend Soldiers' perimeters and perch to conduct surveillance, all



Photo by Doug LaFon

Dr. Joseph Conroy checks the vehicle operation of the microquadrotor, a platform for testing integrated sensing and processing on size-constrained robotic systems.

INFANTRY NEWS -

while being minimally monitored by the Soldier.

"The end result is to create a system that would be a true teammate for Soldiers, one that could keep up with their speed," Piekarski said. "We want these systems to be small, fast, lightweight, cost-effective, and have the ability to go wherever the Soldier needs to go."

These systems can come in the form of ground vehicle sensors, aerial sensors, and humanoid robots that would work hand-in-hand with Soldiers, creating what Piekarski calls a "bubble" around them for sensing and protection purposes.

The U.S. Army Research Laboratory (ARL) is working toward providing improved situational awareness capabilities for Soldiers through projects that involve small unmanned aerial vehicles and insect-scaled platforms.

Researchers are currently working with the ARL microquadrotor, which is a platform for testing integrated sensing and processing on size-constrained robotic systems.

The system is currently able to fly using a manual pilot control or within a test environment that utilizes an external visual tracking system, such as a Vicon system.

According to Dr. Joseph Conroy, research engineer in SEDD, the sensing integrated onto this iteration of the vehicle provides limited capabilities for sensing the environment.

"Methods currently used for control, navigation, and obstacle avoidance, such as laser range finders, are prohibitively heavy and expensive. We wish to use methods inspired by the neurophysiology of the insect visual system to provide these capabilities within the necessary payload," Conroy said.

Conroy noted that Soldiers have expressed a desire for general purpose squad-level intelligence, surveillance, and reconnaissance (ISR) capabilities that can be provided by flying robotic vehicles; however, they wish to minimize weight, training required, and time spent paying attention to the robotic system instead of the environment around them.

"For this reason, these vehicles must demonstrate a high

degree of autonomy in a small package," he said.

In terms of insect-scaled platforms, ARL researchers are developing and testing millimeter-scale robotic leg structures.

According to Dr. Ronald Polcawich, team lead for Piezoelectric-Micro Electro-Mechanical Systems Technology at ARL, the leg structures consist of segments of piezoelectric thin film actuators and thin film copper sections that are designed to mimic the kinetics of a leg and have the ability to move, lift and resist impact.

Heading into the future, Polcawich says that these robotic platforms will be of great benefit to Soldiers on the battlefield.

"It is envisioned that robots and structures on this size scale can provide a unique set of advantages and capabilities to the Soldier. Their inherent size makes them useful to access difficult to reach areas such as in rubble for search and rescue, and behind closed doors for reconnaissance," Polcawich said.

Amidst the benefits that these future systems could offer, foreseen challenges do exist.

"One of the challenges of future systems in being a true teammate to the Soldier involves joint decision-making and the trusting of information," Piekarski said. "Soldiers can become fatigued after long hours on duty, whereas systems are more consistent, but Soldiers may be able to see better firsthand if something appears to be a threat or not. We are currently examining how Soldiers will ultimately make their decisions. Will they trust their instinct, the system, or a combination of both?"

Through the challenges to be faced and the development and testing of these future technologies, the goal of Army researchers remains the same, to extend the situational awareness of Soldier's in order to provide them with advanced protection on the battlefield that could help save their lives when they are put in risky and unknown situations.

(Jenna Brady works for the U.S. Army Research Laboratory's Public Affairs Office.)



ECBC's Pyrotechnics and Explosives Branch detonates an HX smoke test grenade to evaluate its composition.

ARMY DEVELOPS NEW SMOKE SCREENS

The U.S. Army Edgewood Chemical Biological Center (ECBC) is researching and developing smoke screen compositions to keep pace with the changing face of conflict.

ECBC is currently completing a multiyear effort to refine several smoke screen compositions that will allow troops to mask themselves from enemy fire.

A new formula will replace the World War II-era HC Screening Smoke Grenade.

"When people think of ECBC, they think of the great work in chem-bio defense equipment. Lesser known is the role ECBC plays in developing battlefield obscurants to protect the warfighter," said Nino Bonavito, Pyrotechnics and Explosives Branch chief.

Several potential smoke compositions are nearing the end of the decision cycle that will determine which composition goes into development to become the smoke composition of choice for the next century. Before deciding, the Army will consider performance, manufacturing cost, toxicity, environmental impact and the availability of materials.

Read more about the Army's development of smoke screens at www. army.mil/article/126407/Army_develops_ smoke_screens_for_future_battles.

25th ID Team Wins Best Ranger Title

NICK DUKE

For the first time since 1995, a team representing the 25th Infantry Division took home top honors at the David E. Grange Jr. Best Ranger Competition (BRC), which was held 11-13 April at Fort Benning, Ga.

The two-Soldier team of 2LT Michael Rose and 2LT John Bergman were able to come from 13th place after Day 1 to win the BRC.

Fifty teams started the competition, but roughly half of those teams were still standing at the end. At the conclusion of the event, 26 teams were able to cross the finish line that marked the end of nearly 60 consecutive hours of physical activity.

This year's event included numerous challenges, including some that competitors said almost took them out of the competition.

"That road march on Day 1 was the most challenging event that we had," said SFC Steven Sparks, who represented the National Guard as part of Team 35. "By the time we got done with day land navigation, I was already cramping. My partner looked at me and told me we had to get through it to get to Day 2, so we just kind of put our head down and got to the finish line "

The competition challenges twoman teams in events that test their physical conditioning, Ranger skills and team strategies. The events are purposely scheduled back-to-back and around the clock for 60 hours, allowing little time for rest and meals. The road march was just one event in a competition that also included buddy runs, obstacle courses, a 200-meter swim, a combat water survival assessment, stress shoots, night stakes, day stakes, night orienteering, and a spot jump.

Read more about the 2014 BRC at http://www.army.mil/ article/124103/25th_Infantry_ Division_team_wins_Best_Ranger_ Competition/.

(This article was adapted from two articles by Nick Duke, who is a staff writer for Fort Benning's Bayonet & Saber newspaper.)



Photo by SGT Daniel P. Shook

BRC winners 2LT John Bergman and 2LT Michael Rose run between obstacles on the Darby Queen Obstacle Course during the third day of the grueling competition.



Photo by Patrick A. Albright

2LT Michael Rose, left, and 2LT John Bergman hold their Colt pistols after the 2014 Best Ranger Competition awards ceremony.

2014 BRC FINAL STANDINGS

1. Team 20 - 2LT Michael Rose and 2LT John Bergman — 25th Infantry Division 2. Team 32 - CPT Robert Killian and 1LT Nicholas Plocar - National Guard 3. Team 45 - SSG Christopher Broussard and SFC Charles Cogle — 75th Ranger Regiment 4. Team 46 — SFC Justin Glaubitz and SSG Kelly Davis - 75th Ranger Regiment 5. Team 7 — SSG Benjamin Sievert and SSG Michael Phillips 173rd Infantry Brigade Combat Team (Airborne) 6. Team 19 - 1LT Kyle Cobb and 1LT Kevin Higuchi — 25th Infantry Division 7. Team 4 - SSG William Haney and SGT Brendon Wellendorf — 7th Infantry Division 8. Team 47 - CPL Daniel Puckett and SSG Eric Adams — 75th Ranger Regiment 9. Team 25 - 1SG. Joshua King and SFC Robert Jackson — 5th Special Forces Group 10. Team 26 — CPT Steven Crowe and SSG Matthew Boesch — 5th Special Forces Group 11. Team 33 - SFC Jason Broyles and SSG Erich Friedlein — National Guard 12. Team 37 — CPT Phil Divinski and CPT David Gardner — 199th Infantry Brigade 13. Team 29 — SFC Brook Redding and SSG Charles Hannan — 316th Cavalry Brigade 14. Team 23 - SSG Adam Davila and

14. Team 23 — SSG Adam Davia and 1LT Gregory Scheffler — 504th Battlefield Surveillance Brigade

See the complete list of finishing teams at http://www.army.mil/ranger/teams.html.

Professional Forum

EVERY SOLDIER COUNTS: PART I THE ROLE OF THE COMPANY COMMAND TEAM IN MANNING A BRIGADE IN TODAY'S FORCE REDUCTIONS

MAJ CHRISTOPHER L. MOORE

Editor's Note: This is the first article of a three-part series on how company command teams, battalion S1s, and brigade S1s sync their efforts to properly man brigade combat teams as the Army reduces its end strength.

ffective manning of a brigade starts at the company command team. As the Army reduces its personnel strength to prewar levels, leaders at all echelons must understand that every Soldier assigned to their formation counts. Gone are the days that non-available Soldiers can be overlooked. Due to this reality, company command teams must understand their Soldiers' available statuses at all time and work diligently to mitigate any issues that negatively impact them. Company command teams can accomplish this by aggressive enforcement of their Soldiers' medical and dental readiness, updated Family care plans, and regular participation in the unit's Soldier Readiness Process (SRP).

The Army's current personnel reduction from the wartime

high of 569,000 to a prewar level of 490,000 or lower is a massive culture shock for many of our company command teams. Since 2001, the Army has steadily increased its end strength in order to meet operational requirements in Operations Enduring and Iraqi Freedom. The last such increase came in 2009 as then Secretary of Defense Robert Gates requested and received a temporary end strength increase of 22,000 Soldiers.¹

Of the wartime end strength increases, the temporary end strength increase was unique since it was granted specifically to overcome the large number of Soldiers in a non-available status.² Intended to increase the Army's end strength to 569,000 for three fiscal years, this increase enabled units to deploy to Operations Enduring and Iraqi Freedom at

> Soldiers with the 3rd Brigade Combat Team, 10th Mountain Division pull security during a route clearance foot patrol in Paktiya Province, Afghanistan, on 19 March 2014. Photo by PFC Dixie Rae Liwanag

100 percent of their required strength. Simultaneously, this temporary increase enabled non-available Soldiers to work through issues ranging from medical to Family care plans and either return to their units as available Soldiers or separate from the Army.

Three years later, the 2012 Army Manning Guidance directed leaders to closely "screen, identify, properly code, and work to resolve Soldiers with both temporary and permanent non-available conditions, returning as many of them as possible to an available status as soon as possible."³ This guidance was a reflection of the end of the 2009 temporary end strength and the start of the Army's force reduction. Units were no longer authorized to man their units above their designated levels "to compensate for non-available personnel."⁴ Instead, leaders were tasked with maintaining their units' mission readiness by monitoring their Soldiers' readiness as closely as they do their equipment's readiness.

While Army and Department of Defense staffs review policies to expedite the separation of long-term unavailable Soldiers, command teams — from company to brigade — must ensure available Soldiers maintain their status through aggressive tracking and actions. Company command teams can directly affect their Soldiers' availability by focusing on three main areas.

The first of these is the aggressive enforcement of medical and dental readiness. Company commanders can use the Medical Protection System (MEDPROS) to monitor their Soldiers' medical and dental readiness, but the company command team will need to motivate Soldiers to receive their annual vaccinations and dental exams before they become susceptible to health issues and possibly become a medically non-available Soldier.

The second area company command teams should focus on is ensuring appropriate Soldiers have completed a Family care plan. Army Regulation (AR) 600-20, Army Command Policy, paragraph 5-5, charges unit commanders with the enforcement of Family care plans.⁵ While it is open for interpretation as to which level of unit commander is charged with enforcing the use of Family care plans, the company commander is ideal due to the close proximity he spends with the vast majority of Soldiers. It is that proximity that best equips the company commander to effectively ensure that the appropriate Soldiers have a fully functional Family care plan. Company commanders, along with their first sergeants, must identify the Soldiers who qualify for Family care plans in accordance with AR 600-20 to ensure these Soldiers are fully available for deployments. Once properly counseled, Soldiers that require Family care plans have 60 days to complete their plan or face separation in accordance with AR 635-200 (for active Army Soldiers), AR 135-178 (for Reserve Component Soldiers), and AR 135-91 (for Army National Guard Soldiers).⁶ Strict adherence to this standard ensures that all Soldiers that meet this criterion are available for all unit operations.

The third area that company command teams must focus on is the Soldier Readiness Process (SRP). While battalion and brigade S1s generally are tasked with coordinating the necessary agencies to execute the SRP, it is company command teams that successfully execute this process. Company commanders and first sergeants are the leaders that conduct the preliminary SRP packet checks; ensure Soldiers have their eyeglasses/inserts, legal documents, and next-of-kin notification documents; and load Soldiers onto the buses that transport them to the SRP site. Their involvement improves the effectiveness of the unit's SRP and increases the unit's number of available Soldiers.

As Army Chief of Staff GEN Raymond Odierno testified before Congress, the Army will use many measures to meet its lower end strength and reduction of 12 brigade combat teams. One of these measures will be separation boards used to select Soldiers for involuntary separation.⁷ With the pending use of these boards, it is imperative that company command teams actively invest their energies in maintaining each of their Soldier's availability status. If not, the Army risks not meeting its operational responsibilities due to the impact of a large population of non-available Soldiers on our much smaller end strength.

While manning a brigade is a multi-echelon effort that spans from company command teams, battalion and brigade S1s, division G1s, and the various assignments personnel stationed at Human Resources Command (HRC), it is company command teams that can best affect the availability of individual Soldiers on a daily basis. They are the leaders that have the day-to-day interaction with each Soldier necessary to validate his or her availability. Due to this reality, company command teams have the necessary understanding of their Soldiers' available status to maintain their unit's readiness status. These leaders can and must accomplish this by aggressively ensuring their Soldiers' medical and dental readiness, updated Family care plans, and regular participation in the unit's SRP.

Notes

¹ John J. Kruzel, "Gates Calls for Increase of 22,000 Soldiers," U.S. Army website, http://www.army.mil/article/24678/gates-calls-for-increase-of-22000-soldiers, July 2009.

² Ibid.

³ All Army Activities (ALARACT) message 293/2012, "HQDA EXORD 10-12 ISO the HQDA FY13-15 Active Component Manning Guidance," Pentagon Telecommunications Center, Headquarters, Department of the Army, Washington, D.C., October 2012.

⁴ Ibid.

⁵ Deputy Chief of Staff, G-1, "Army Command Policy - Rapid Action Revision 2012," HQDA, Washington, D.C., September 2012, 5-5.

⁶ Ibid.

⁷ GEN Raymond T. Odierno, "Planning for Sequestration in Fiscal Year 2014 and Perspectives of the Military Services on the Strategic Choices and Management Review," House Armed Services Committee, First Session, 113th Congress, Washington, D.C., September 2013.

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Responding to MASCAL TERRORISM AT THE COMPANY LEVEL: LESSONS IN CONSEQUENCE MANAGEMENT FROM OIF

n 20 June 2009, the quiet atmosphere of a rural town in northern Irag called Taza was shattered by a devastating terrorist attack. Located 10 kilometers south of Kirkuk, the majority Turkomen town of 5,000 thrived amongst the ethnic fault lines between competing Arab, Kurdish, and Turkomen enclaves. Seeking to inflame territorial tensions and undermine coalition authority, an al Qaeda splinter group drove a vehicle laden with almost 2,000 pounds of explosives into Taza and detonated the device in a residential district near its Shia mosque. The resulting explosion obliterated the entire neighborhood, damaged half of the town, killed 87 people, wounded another 400, and displaced hundreds more.¹

The Taza district at this time shared political, economic, and security partnership with C Troop of the 4th Squadron, 9th Cavalry Regiment, 2nd Brigade Combat Team, 1st Cavalry Division, which was assigned to Multi-National Division-North and headquartered out of Kirkuk.² With a platoon conducting a key leader engagement (KLE) at a village several

kilometers away at the time of attack, the troop immediately moved to assist the stricken town. In the hours that followed, as coalition elements converged at Taza, junior officers and mid-grade NCOs grappled with a scope of disaster response they could not have previously imagined. As they assisted with an unexpected plethora of consequence management tasks, ranging from mass casualty (MASCAL) evacuation to establishing a hasty refugee camp, the Soldiers involved learned valuable lessons concerning the myriad challenges of asymmetric terrorism.

Five years after the Taza bombing, as the U.S. Army engages in a new strategy of brigade regional alignment with execution of foreign partnerships often at the company level, the final years of Operation Iraqi Freedom have gained new relevancy.³ Similar to the partnered conditions defined by the 2009 Security Agreement between America and Iraq, Army units will advise and assist host-nation armies with a great diversity of military operations.⁴ Among scenarios that pertain to potential engagement with enemy forces, response to extremist terrorism or other humanitarian disasters are far more likely than maneuver combat.

C Troop's response to the crisis at Taza, in the context





Figure 1 — C/4-9 CAV Initial Response to Taza Attack

of Soldiers conducting consequence management as first responders, thus offers pertinent lessons concerning company-level preparation for MASCAL events. Since partnered deployments will often be executed at lower echelons, this article addresses, through the lens of the disaster response in Taza, potential aspects of anticipatory preparation. Specifically, it argues that leaders should invest in practical preparedness that complements comprehensive assessment of external environmental factors with internally focused planning and training. Like all tactical vignettes, these experiences are not absolute but rather offer considerations for junior leaders as they engage foreign partnerships.

Before delving into the consequence management lessons learned at Taza, it is necessary to outline a progression of events. In a larger operational context, C Troop's mission at the time focused on mediation between opposing Arab and Kurd parties; economic stimulus programs; formal partnership with the Taza, Laylan, and Daquq political councils, four Iraqi Police (IP) stations, and one Iraqi Army (IA) battalion; and informal relations with one Peshmerga battalion. From this support posture, the unit did not control the Taza response, but rather worked in support of the Iraqi effort with non-governmental agencies and under the direction of higher echelons, revealing the importance of multi-organizational synergy. Beginning with the moment of attack, the following is an encapsulation of the troop's intervention:⁵

• 20 June 2009 at approximately 1320: Al Qaeda in Iraq (AQI)-affiliated terrorists detonate a utility truck laden with homemade explosives near the Taza Shia mosque; the blast successfully targets an intersecting movement of worshipers exiting the mosque and women and children congregating in the adjacent neighborhood following the release of primary school. It leaves a blast hole that is 40 feet wide and 20 feet deep while obliterating 90 buildings and structurally damaging hundreds more.

• A+15M (1335): 1st Platoon, C/4-9 CAV, arrives to investigate. Upon arrival they encounter chaos as thousands rush to the blast site; dust makes visibility near impossible and wounded and dead are immersed in the rubble. The mayor and police are overwhelmed; the Turkish aid organization Red Crescent has begun to load ambulances for transport to Azadi Hospital in Kirkuk.

•A+40M (1400): The C Troop commander and 2nd Platoon arrive; 1st Platoon has secured the blast site while medics assist with triage and first aid; 2nd Platoon establishes an outer perimeter with vehicular traffic control points (TCPs) while personnel provide medical support; the commander establishes a forward command post (CP) near the mosque, coordinates a casualty collection point (CCP), and stands down 3rd Platoon at Kirkuk to rest for anticipated reversecycle duty; a scout weapons team (SWT) soon patrols against potential secondary attacks.

• A+1.5H (1500): The 4-9 CAV commander arrives to assess while escorting a tactical psychological operations team; Delta Forward Support Company (DFSC), 4-9 CAV, arrives with class I humanitarian aid (HA) while escorting a military working dog team (explosive) and an explosive ordnance disposal team (EOD); higher echelons have initiated high altitude surveillance; the Taza cemetery is hastily expanded to accommodate the dead.

• A+6H (1930): 3rd Platoon arrives with Public Affairs and a water pallet to relieve 2nd Platoon on south TCPs; darkness falls, complicating the search while bulldozers and backhoes continue to excavate.

• A+8.5H (2100): DFSC and element of the 15th Brigade Support Battalion (BSB) arrive with a larger HA shipment (16 water pallets, 100 blankets, 100 food bags, four electric generators for light); 3rd Platoon assumes security and reporting duty overnight as all other elements return to base. Iraqis continue to search for victims while ambulances shuttle casualties to Kirkuk.

• 21-26 June 2009: C Troop provides continuous assistance at Taza with a three-platoon rotation; Red Crescent establishes a hasty camp for refugees comprised of tents, a cooking facility, and latrines; IP and IA assume security while the district council supervises food distribution, burial ceremonies, and population displacement; a working group of representatives from 2/1 BCT, the United States Agency for International Development (USAID), the United Nations, and Provincial Reconstruction Team (PRT) plan rebuilding strategies. Numerous visits from officials and dignitaries follow throughout the coming weeks.

• July-December 2009: C Troop resumes steadystate operations with broader regional partnerships while supporting the Taza recovery with a focused micro-grant program; 4-9 CAV conducts a series of raids against suspected instigators of the attack in southern Kirkuk

> A Soldier stands in solidarity with his Iraqi Police partner in the aftermath of the June 2009 Taza bombing. Photos courtesy of author

Province; within weeks coalition forces capture the AQI planners and they are sentenced to death.⁶

C Troop's involvement in the Taza crisis proved to be a highly developmental experience. At the company and platoon levels, the execution of layered consequence management demanded application of doctrinal skills to new paradigms. While most of the troop leadership had conducted stability operations prior to the bombing, none had been trained institutionally or prepared personally to grapple with the material and psychological trauma of a large-scale MASCAL attack. The leadership's professional education (both officers and NCOs) had primarily focused on a range of high-intensity combat training and decentralized counterinsurgency operations, all dwarfed by the scale of the Taza recovery.

Despite the dearth of expertise in disaster management, the troop managed to negotiate the unfamiliar problems posed by massive casualties, population displacement, economic and political disruption, and security neglect by focusing on universally applicable fundamentals trained by all tactical companies. While the specifics of the environment in Taza remain unique due to particular ethnic tensions, the dynamics of the American-Iraqi military partnership in 2009, and resources available in that time and space, there are generalized lessons that can be extrapolated for future deployments under brigade regional alignment and other partnerships abroad. These learning points, which for sake of brevity move past prevention and center on anticipatory preparation, emphasize the critical convergence of junior leader crisis response with larger support networks of multiechelon and multinational teams.

Preparation — External Focus

The first lessons of the Taza recovery, focusing on company-level preparation for rapid response, emerge in the area of assessment and coordination with external elements. As units deploy, they should seek to understand historical tensions and oppositional dynamics in their host locale. This analysis includes not just appreciation of their intended role and parameters as supporters, but also a calculated assessment of the record, capabilities, and interests of their partnered organizations. In this regard, leaders should utilize sources such as Army intelligence, the Central Intelligence Agency's World Fact Book, State Department documents, and the U.S. Military Academy's Center for Language, Culture, and Regional Studies to investigate the potential for terrorism across the political and social landscape.7 In environments destabilized by a history or imminent possibility of attack, this analysis is more easily focused.

Another key factor in the troop leadership's assessment of the human terrain can be assessing interested nongovernmental entities. While these parties often arrive with partisan or ulterior agendas, they frequently have the ability to provide critical materials in communities where governments are unable or unwilling to rapidly mobilize. At Taza in particular, the Turkish Red Crescent moved with amazing alacrity as they used helicopters to transport and construct a working refugee camp within days of the attack. USAID and State Department personnel likewise proved impactful, providing expertise to the American military command. Given the unique capacity of organizations like these to deploy support with rapidity, partnered leaders should educate themselves on the potential non-governmental, tribal, and religious actors that could assist in any humanitarian disaster.⁸

Once leaders have assessed their host-nation partners, surrounding elements, and threat probabilities, they should pursue multi-organization contingency plans for potential terror strikes. This manner of preparation could range from detailed conversations with partnered security forces to much larger rehearsals amongst first responders. This collaboration could include identification of hospitals in relation to probable targets, templating potential casualty collection points and adjacent helo platforms, involvement of interested NGOs, and clarification of how American forces are legally allowed to contribute. Additionally, leaders should assess the possibility and inherent tensions of sharing security responsibility between police and military or encouraging rapid response agreements between adjacent communities. In Kirkuk Province, for example, this kind of support plan would require nuanced understanding of the strategic consequences of hastily moving IA or Peshmurga battalions across the "Red Line" dividing Arab-Iraq and Kurdistan for any reason.

This concept of contingency planning with partners and interested parties is again validated by C Troop's experience at Taza. While the unit maintained excellent partnerships with its assigned partners and had by that time conducted numerous combined training events, patrols, and raids, there had been no specific coordination for reaction to a spectacular attack across the assigned districts. In the Taza case, prior planning could have allowed a swifter security response with IA guarding entry points against secondary strikes while IP from other towns assisted with the search. As it happened, C Troop assumed protection of the operation for the first 48 hours while the provincial government and NGOs came together haphazardly for the initial recovery.

A second aspect of external preparation pertains to the company's relationship with its higher headquarters. As in all combat operations, the communication between the forward elements and the battalion tactical operations center (TOC) will experience strain during an intense response to a largescale terror event. Company-level leaders therefore need to ensure they understand the battalion commander's intent for rate of situational development and expectations of reporting metrics for spectacular attacks. On the battalion level, it may be important to allow key staff to visit the recovery operation to gain contextual appreciation for the mission they are supporting, but it is equally important to limit "sightseeing" by unhelpful parties. On the company end, junior officers and NCOs need to be continually reminded of the vast apparatus working endless hours to support forward operations and attempt to maintain patience accordingly.

Ultimately, as C Troop learned at Taza, the successful



Taza residents search and excavate for missing victims after the 20 June 2009 bombing.

cooperation between higher and lower echelons will have profound and multiplying impacts on mission success. In that scenario, the squadron commander provided clear intent and orders and visited the recovery site daily to maintain contextual understanding, but did not "camp out" in what he designated as a company-level operation. On the squadron staff, the operations officer and his team likewise enhanced the response by forecasting critical enablers, synchronizing logistical and maneuver elements, and maintaining constant dialogue with their counterparts in the troop command post.

Preparation — Internal Focus

A second and perhaps more important aspect of company preparation for a potential terrorist attack is internal training of subordinate platoons and sections. In this internally controlled domain, as opposed to the world of host nations and NGOs, the habitual administrative and tactical systems of the U.S. Army are already ideally suited to quickly implement crisis management. While maneuver tasks are indeed very different than the execution of humanitarian exercises, the fundamental values of mission command, lateral and horizontal coordination and cooperation, tactical discipline, network-centric enhancement, and operational flexibility at the company level remain the universal ingredients for success in all environments.

Taken to specifics, U.S. Army companies deployed in partnership roles abroad should seek advance preparation for a catastrophic event, terrorist inspired or purely environmental, by training personnel and developing versatile systems for contingencies. Similar to assessing host-nation factors, the leadership should survey the assets and capabilities of all available American units, agencies, and organizations in relation to their specific mission. This could include tactical support from manned and unmanned aerial platforms, military working dogs, explosive ordinance disposal, and quick reaction forces in addition to support from Civil Affairs, Special Operations Forces, federal agencies, and joint service elements. At Taza, for example, the brigade Civil Affairs team provided more than 100 food bags, six boxes of clothing, and consignments of rice and cooking oil for immediate support.

Once educated on available resources, commanders should supervise contingency rehearsals in response to a MASCAL event by the headquarters section and subordinate platoons. In this exercise the performance of the troop command post in particular is crucial, as it needs

to understand its primary and alternate lines of communication (higher and lower) as well as specific reporting and asset request procedures. This proficiency is combined with the necessity for the commander to plan for varied operational cycles that allow the company to "surge" maximum combat power for a short duration or maintain continuous platoon coverage for an extended period. Additional critical assessments may include the company's ability to project a forward command post, capability to communicate via secure transmission over various distances, and the maintenance of reserve emergency HA packages in concert with partnered elements.

The challenge of responding to a MASCAL incident requires additional tasks that can be addressed, at least in general terms, while establishing unit procedures. First, leaders should be prepared to survey and catalog the crime scene (if appropriate and in the absence of host-nation efforts) to gain fleeting but valuable information about the scene leading to the strike. As in all sensitive site exploitation, personnel should be tasked to photograph the scene and chronicle the event in writing as practicable. Second, leaders should assess the capacity of company medics for massive triage and first aid and create potential emergency medical packages. All Soldiers should likewise be trained on appropriateness of assisting with corpse removal and protective measures to be taken if in contact with injured and dead victims. Personnel should also be educated in cultural norms concerning gender restrictions and burial traditions for assigned regions.

The vital importance of internal unit preparation at all echelons within the company structure was again proven in the Taza bombing. In contrast with the unfamiliar challenges of managing massive casualties and widespread destruction, C Troop found the actions of projecting and coordinating its platoons to be merely an implementation of the administrative

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and tactical mechanisms developed over the previous months of patrols and raids. Much of this success can be accredited to the Soldiers of the command post section. With the executive officer and acting first sergeant leading in their doctrinal roles, the headquarters section acted as a critical conduit between the squadron TOC and the platoons rotating through Taza. They also proved highly adept in passing through and requesting key enabling assets needed by the forward elements, as evidenced by the unmanned aerial systems (UAS) and SWTs that immediately enhanced security after the blast.⁹ This competency, earned through exhaustive shift work, ultimately allowed the commander to maintain his attention forward at the operational decisive point.

In addition to planning for actions during crisis response, company leadership must prepare to implement a concerted effort to cope with residual post-traumatic stress (PTS) among Soldiers who are exposed to mass carnage. This contingency program, usually led by the battalion chaplain and senior NCO leadership, becomes particularly important when officer leadership is compelled to rapidly focus the company on new priorities amidst a demanding operational tempo. In the months following the Taza event, C Troop personnel who were parents seemed to experience the highest rates of PTS after observing dozens of Iraqi fathers claiming their dead families from the rubble.

The final lesson of company-level preparation learned at Taza, encompassing leader initiative and decision making, finds greatest relevance at the actionable echelons. While the command post performed well in its functions, it was the maneuver platoon, section, and squad leaders who adapted habitual tactical functions to an unfamiliar problem set that required constant improvisation. Throughout the entire Taza operation, the lieutenants and NCOs repeatedly made critical decisions as they provided purpose and direction to fatigued, and sometimes emotionally traumatized, personnel. The first 24 hours in particular — when dismayed Soldiers provided security while distributing HA and medical support in the midst of tumultuous crowds, constant vehicle traffic, and horrendous visuals and odors - revealed the value of previous emphasis on tactical discipline and fundamentals. In sum, because C Troop arrived at Taza on 20 June 2009 as a communicative, synchronized, and versatile organization, it was able to rapidly implement adaptable recovery solutions in the face of unprecedented chaos.

Conclusion

Despite its occurrence in a different time and conflict, C/4-9 CAV's response and recovery effort at Taza stands as an informative event for U.S. Army units deploying in accordance with brigade regional alignment. As these companies face the prospect of terrorist attacks (however remote and ranging from disruptive to spectacular), there are lessons that can be drawn from the partnership mission of the latter years of OIF. Along with understanding their intended and legal role as partners, deploying companies should seek to prepare themselves for the possibility of supporting their host community in the event of a humanitarian crisis. This includes educating leaders about partnered organizations and interested NGO capabilities, learning which enabling assets are available in specific locales, understanding higher echelon requirements, and conducting rigorous contingency rehearsals at the company level.

Ultimately, as with all military operations, the final and most important dimension of this preparation lies in training junior leaders and Soldiers in fundamental tasks that will translate into a range of versatile action when needed. In events such as the Taza bombing, these platoons and sections will likely arrive first and develop the tactical situation in the absence of higher supervision. They will seek to augment varying degrees of host-nation competency and response capacity, and if necessary will provide security and medical aid in order to save lives. In the final assessment, the fight will be won or lost at the company level. To win this endeavor, junior officers and mid-grade NCOs must be prepared and empowered so that when disaster strikes they will act decisively the face of calamity.

Notes

¹ Casualty estimates in this article are based upon reports received from the author directly from the Taza mayor and district council members.

² See FM 3-20.971, *Reconnaissance and Cavalry Troop*, for the doctrinal composition and capabilities of an armored brigade combat team reconnaissance troop.

³ See "AFRICOM: Regionally Aligned Forces Find Their Anti-Terror Mission," *Defense News*, 20 October 2013, for an example of how the brigade regional alignment strategy intersects with counterterrorism (http://www.defensenews.com/article/20131020/ SHOWSCOUT04/310200014/AFRICOM-Regionally-Aligned-Forces-Find-Their-Anti-terror-Mission).

⁴ See Security Agreement document at http://www.state.gov/ documents/organization/122074.pdf.

⁵ Timeline and details derived from report, 4-9 CAV, dated 22 June 2009; additional information gained from interviews with the involved leadership of C/4-9 CAV.

⁶ See "U.S. Army: Micro-grants assist growing economy," *Satellite Spotlight*, 16 July 2009, for a relevant media example of coalition force's small business stimulus program in Kirkuk, Iraq, during 2009.

⁷ See MAJ Adam Brady, MAJ Dustin Mehart, MAJ Russell Thomas, "A Tool for Achieving Regional Understanding at the Company/Platoon Level," *Armor*, October-December 2013, for instruction on using the PMESII-PT concept to conduct regionspecific training (http://www.benning.army.mil/armor/eARMOR/ content/issues/2013/OCT_DEC/Brady.html).

⁸ See "Iraq: Taza bombing situation report," ReliefWeb, 13 July 2009.

⁹ See comment by GEN David Rodriguez, in "AFRICOM," *Defense News*, emphasizing importance of "command post exercises, where we train the leadership."

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U.S. Army paratroopers from the 82nd Airborne Division parachute from a C-17 Globemaster during Joint Operational Access Exercise 13-03 at Camp Mackall, N.C., on 26 June 2013. Photo by A1C Cory D. Payne, USAF

OPERATIONALIZING THE MISSION COMMAND NETWORK FOR JOINT FORCIBLE ENTRY OPERATIONS

MAJ CLAUDE A. LAMBERT

n late June 2013, the 82nd Airborne Division conducted its quarterly Joint Operational Access Exercise (JOAX) 13-03 to train for its Global Response Force (GRF) mission and move forward in resetting the division's GRF readiness cycle after 12 years of combat deployments. The weeklong exercise commenced with a no-notice alert to deploy with a full operation orders process and then transitioned to outload/final manifest procedures, a simulated long flight that included in-flight parachute rigging, and enroute communications establishment with rear and adjacent units. The exercise culminated with an airborne joint forcible entry by the 82nd Airborne Division's tactical headquarters node and a reinforced airborne brigade combat team to seize airfields, evacuate U.S. and allied citizens, and secure chemical weapons and critical infrastructure.

JOAX 13-03 was the largest airborne joint forcible entry exercise held since combat operations began in Afghanistan and Iraq. The exercise involved approximately 6,800 Soldiers working closely with elements of six air wings from the U.S. Air Force's Air Mobility Command and U.S. Air Force Reserve Command to conduct 24 airborne operations.¹ A joint exercise of this scale and complexity occurs only through willing teamwork among joint commanders who have the mandate to train and maintain an airborne joint forcible entry capability for the nation's future contingencies. From this exercise, Army and Air Force leaders are continuing to learn that the ability to defeat known and anticipated anti-access/area denial (A2/ AD) threats while gaining and maintaining opposed access requires adaptable, flexible leaders skilled at rapid decision making who can successfully integrate mission command across networks to achieve cross-domain dominance.

The preceding overview of JOAX 13-03 illustrates a critical piece of the foundation for mission command in forcible entry operations and by extension to all military endeavors: the network which provides a conduit for shared understanding must be operationalized in order to provide a relevant medium for the commander. The recent experience of leaders in the airborne task force which executed JOAX 13-03 provides several salient lessons for this enterprise. These instructive examples highlight the necessity to resource and train leaders in a demanding environment in order to integrate a network-enabled mission command approach across all warfighting functions and phases of the operation.

Forcible Entry as a Prelude to Sustained Operations

The current Defense Strategic Guidance clearly identifies the requirement to project power despite A2/AD challenges as a key component to credibly deter or defeat potential adversaries.² The Joint Operational Access Concept (JOAC) describes the military's unique capability to project power in the face of such armed opposition. This overarching concept is characterized by the twin efforts of overcoming A2/AD measures, thereby introducing combat power into a previously distant region of operations. Current joint doctrine casts cross-domain synergy as the underlying approach for operational access — the complementary combination of our own asymmetrical advantages inherent in the joint force. Within the JOAC, the act of forcible entry engenders purposeful action to project land forces into an adversary's territory, ostensibly to enable further operations.³

A joint forcible entry operation provides an excellent construct to stress the mission command systems in an organization. Personified by an opposed airfield seizure and the expansion of a lodgment, this form of warfare encompasses not only tactical actions but also operational art and the strategic context. Given the rebalancing strategic climate, an airborne joint forcible entry operation's potential of global reach can integrate unified land operations into any theater's joint campaign plan.⁴ This notion reflects the reality that some emerging models under the broad scope of JOAC such as Air-Sea Battle could be fundamentally insufficient to support that strategy since major military, political, and population objectives are too far inland to affect with a distant force lacking a sustained presence among the people.⁵ In establishing a defended lodgment, a joint forcible entry operation which seizes a viable airfield supports an operational approach which links tactical action to strategic aims by providing for a transition to sustained land operations.

Additionally, the forcible entry imparts operational shock to an adversary's system and fundamentally dislocates it in terms of both space and purpose. Operational shock reflects the notion that although it is impractical to destroy an adversary's combat power in its entirety through attrition, a force can attack the coherent unity of the adversary as a system.⁶ If recent experience indicates anything, it is that this dynamic transition to sustained operations is a requisite element of land warfare when compared to a myopic approach rooted in effects-based operations.⁷ Simply put, there is no substitute for unified land operations' central theme of seizing, gaining, and exploiting the initiative to gain and maintain a position of relative advantage; forcible entry is a significant means to that end.

The Utility of Mission Command

Mission command guides this critical activity by effectively countering the inherent uncertainty in operations.⁸ This is not simply because mission command is a doctrinally anointed model for guiding unified land operations; it reflects the advantage of purposefully adaptive organizations. As such,

it should appeal to doctrinaires and pragmatists alike.

Before delving into the operational details of mission command, it is beneficial to gain an appreciation for the command philosophy as a whole - an ecology of form, function, and logic. At each echelon, commanders establish a readily identifiable mission command system with physical components such as personnel, communications networks and information systems, equipment, and facilities. These complement the somewhat abstract qualities of personnel, processes, and procedures.9 The mutual trust and shared understanding between commanders described in the principles of mission command underscores the notion that an adaptive organization has a requisite amount of complexity inherent to its structure. One of the key precepts of complex adaptive system theory is that sources of order can emerge from any point. This is reflected in mission command since the command philosophy gives equal weight to several aspects of the system such as: the commander's guidance to subordinate units, the opportunity inherent in creating a shared understanding across the formation, and the power of bottom-up refinements engendered in the principle of mutual trust. This allows an organization to go beyond a direct adaptation, one that does not require a change in the way it fundamentally processes information. Through devices like a commander's guidance or collaborative efforts to understand the environment, an organization can change its entire schema and process information through an entirely new form of shared understanding.¹⁰

An airfield seizure such as the one executed as a part of JOAX 13-03 illustrates the cumulative effect of uncertainty inherent in a complex operation and the utility of an adaptive organization. The system employed by the airborne task force is truly complex, so the dizzying multitude of relationships provides for a great sensitivity to initial conditions.¹¹ As such, deliberate planning cannot faithfully predict the effects of the friction of warfare on the objective, only anticipate probable outcomes and prepare the force with guidance. Mission command distributes a complex environment's uncertainty across the formation, allowing commanders at multiple echelons to rapidly adapt within this framework of guidance and trust. Critically, it allows these commanders to address an issue with their unique understanding of local context.¹² Therefore, it is ideally suited to the airborne leader's cultural mindset of leading "little groups of Paratroopers" in a cluttered and confusing environment along the way to assembly areas and initial objectives. But the utility of mission command is not limited to the tactical actions on the objective. The effort to outload and maneuver an airborne armada from multiple intermediate staging bases is an equally complex venture, with similar cascading effects from inevitable delays and setbacks. In many instances, these can only be reconciled through distributed decision making and leaders at all levels balancing risk with opportunity. This notion underscores the importance of a conduit for mutual trust, disciplined initiative, and shared understanding. Without this conduit, there is little hope of changing the organization's schema and moving beyond episodic direct adaptation.

Operationalizing the Mission Command Network: Structure and Context

An operationalized network is the expression of this conduit. This is not an earth-shattering notion, nor do I seek to cast mission command as a revolutionary step in the art and science of command. Rather, it is a punctuated advance in the evolution of that art and science. Clausewitzian notions of overcoming the inherent friction and complexity in warfare were arguably only realized when an increasingly distributed battlefield was linked with modern communications and transport systems.¹³ Similarly, command philosophies such as Auftragstaktik were only viable options due to the emerging prevalence of radio communications. The current proliferation of dependable bandwidth, transmission, and sensor options provides the form and function for our networks which enable mission command. Beyond the metaphor of the network as a conduit, it has several specific roles: gaining understanding of the operational environment, enabling decisions through analysis, and coordinating efforts to achieve the commander's desired operational objectives.14 This underscores the necessity of an operationalized network instead of an inadequate repository of data with little value to a commander in a fluid operation. This is only realized when the command structure consists of a network of leaders linked by technology, driving toward mission accomplishment.¹⁵ With this emphasis on the importance of network-enabled mission command, planning at all echelons for JOAX 13-03 focused on a robust set of command posts and communications infrastructure.

The first aspect of the network that must be operationalized is the structure. In this regard, a forcible entry provides a unique set of challenges. In almost any contingency, it is realistic that a mission network will already be established. Metaphorically, the force must penetrate and extend this network to ensure access throughout the operation.

Penetrating the network involves breaking through the firewalls (both digital and organizational) that normally partition separate networks. This provides the force with access to the existing mission network to support collaborative planning during the initial phase of marshalling and deploying the force. Extending the network is the means of broadening the conduit of information across the entirety of the force to promote a shared understanding and facilitate bottomup refinements. As the forcible entry operation secures its objectives, the transition of the physical structure of the network becomes a critical event. The initial assault is characterized by an austere environment for mission command. which includes more rucksacks and analog tools than tailored facilities and digital architecture. The transition to sustained operations can only begin as combat power builds in the lodgment and enhanced equipment is introduced, such as communications nodes, tent structures, and generators. Interim means such as vehicle-based mission communications systems must bridge the gap during this transition. In summary, the force must carefully plan these transitions. There must be a detailed plan to prioritize the Army Battle Command Systems (ABCS) integration on the drop zone and to increase bandwidth as assets become available to the commander. Thus, within this operationalized structure, the network must lend suitable context to the commander's ability to make decisions if it is to have any useful application and must be collaborative across echelons, organizations, and systems (i.e., U.S. Army Project Foundry and the Joint Improvised Explosive Device Defeat Organization and their specialized data systems/applications).

The Emerging Model for Mission Command in Joint Forcible Entry

Ultimately, a forcible entry requires this operationalized network to maximize the potential of mission command as the guiding command philosophy for operations. This endeavor is inherently difficult given the complex nature of a forcible entry in which the commander and his staff rapidly transition from home-station planning and preparation to a high-tempo combat operation. This requires a change in the way in which commanders and staffs visualize the network and a concurrent increase in two specific capabilities to enable the network.

First, commanders and staff must stop visualizing the established home-station network as an ideal and the austere aspects of a tactical network as a lesser counterpart. Since the theory and practice of mission command do not change between these modalities, neither should the network which



Photo by SSG Jason Hull

Paratroopers from the 2nd Brigade Combat Team, 82nd Airborne Division establish their tactical headquarters at Camp Mackall, N.C., on 22 June 2013.

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enables it. As a model, they must view the installation as a docking station and unify the components of both networks. Under this concept, the unit conducting a forcible entry operation must metaphorically "plug-in" to the network for planning and preparation, unplug to marshal and deploy, plug in en route to the objective, unplug to assault immediate objectives, and finally plug-in to secure the airhead line and expand the lodgment. The Installation as a Docking Station concept relies on both the ability to penetrate and extend the mission network as described above and assured access to the network when the operation is most fluid and therefore requires the most command decisions.

JOAX 13-03 identified two of those critical periods: the approach to the objective area and the tactical actions within the airhead line. To address the first critical period, en route communications should be improved with existing equipment in the military's inventory or by leveraging off-the-shelf commercially available communications terminals. To enable the airborne commander's ability to refine plans en route and ensure a shared understanding across his force, the joint force must invest in solutions such as the Joint Command and Control System (JC2S) and Fixed Install Satellite Antenna (FISA) on the air transport platforms which support joint forcible entry operations. This technology would allow the airborne commander to communicate across domains via secure airborne broadband and have the ability to seamlessly send and receive data (i.e., digital voice communications, high-definition video, and imagery) by means of beyondline-of-sight, satellite communications.¹⁶

The second critical period is the transition to ground combat, during which most of the mission command network takes the form of analog battle-tracking over tactical radio nets. JOAX 13-03 tested the capabilities of a modified utility vehicle with satellite and FM communications and achieved notable digital and voice communications successes. However, this is only an interim solution developed by resourceful junior leaders seeking to fill a capability gap. A similar mobile system must be developed as an approved U.S. Army Acquisition Program and fielded to airborne and contingency ground forces.

To realize the benefits of the aforementioned initiatives, training for forcible entry operations must continue to progress from individual training to collective training across the joint force. An exercise such as the JOAX provides just that - an opportunity to conduct decisive action which is guided by mission command and enabled by an operationalized network. As such, the JOAX should mature to a fully accredited joint exercise in order to provide adequate resources for this critical operational capability. This becomes an increasingly critical enterprise as the military enters the next interwar period. Our history indicates that the militaries which use these interludes to prepare for the next unknown conflict successfully are the ones that can meld the fantastic with the feasible. This is a fleeting opportunity for the military's force of choice for forcible entry to implement our matured command philosophy with the current and emerging inventory of network assets.

Notes

¹ Dennis Steele, "Global Response Readiness," *Army* 63, no. 9 (September 2013): 22-28.

² Sustaining U.S. Global Leadership: Priorities for 21st Century Defense (U.S. Department of Defense, 2012), 4-5.

³ Joint Operational Access Concept (JOAC), version 1.0 (U.S. DoD, 2012), 6, 16.

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COISTS FOR THE DECISIVE ACTION ENVIRONMENT

1LT PATRICK COUGHLIN AND CPT WILLIAM TAYLOR

Today's Army, experienced at counterinsurgency (COIN) operations, cannot afford to lose the valuable knowledge garnered since 9/11. As the Army rapidly transitioned and adjusted to a COIN environment, Delta Company, 2nd Battalion, 505th Parachute Infantry Regiment created a company intelligence support team (COIST) as a direct reaction to the unique hybrid threats that our unit faced. Taking the success of a company's intelligence team in COIN and applying it to the current force is essential for readiness in the next fight. A properly led COIST in garrison will serve as a great risk mitigation tool in a decisive action environment and an essential tool for training squads and platoons on the latest enemy tactics, techniques, and procedures (TTPs).

Building a Needed Asset

Companies often do not have a trained collective element at their command posts (CPs) that commanders can dedicate to conduct enemy/terrain analysis, record significant actions (SIGACTs), pre/post patrol briefs, synchronize actions with higher and adjacent units, and proactively analyze their operating environment (OE). Often, fire support officers (FSOs) or the CP Soldiers who learn on-the-go take on these tasks as additional duties. While commanders will always be responsible for their companies, they are often unable to directly supervise intelligence collection. The COIST can serve as an extension of the commander's intent by executing critical intelligence tasks and ensuring platoons and squads retain crucial situational awareness.

Building a company intelligence team from the ground up is a very delicate task. The following technique worked extremely well in our Infantry heavy weapons company that did not possess a COIST. First, company leader emphasis on the proper selection of Soldiers proved extremely important in the early formation of the team. We looked for intelligent and motivated Soldiers who genuinely wanted to be part of this new enterprise. Some of these troopers had college degrees, and many had a genuine interest in world events. Second, we considered longevity in the company and selected two troopers from each platoon along with two from the company's headquarters platoon to ensure leadership at the top. Drawing two 11B Soldiers from each platoon ensured continuity of the COIST program and enabled each team member to advocate for intelligence analysis at the platoon headquarters level. Third, we formed a team of a dozen such Soldiers and conducted a 40-hour training

block of instruction using a U.S. Army Forces Command (FORSCOM) counter-improvised explosive device (C-IED) integration cell (CI2C) COIST instructor. The course focused on the basic intelligence analysis cycle for non-intel Soldiers and stressed the importance of predictive analysis to achieve actionable results. At the end of instruction, the team delivered an hour-long threat analysis brief to the COIST instructor and company commander to prove it was ready to bring what it learned in classroom to the real world.

As the COIST progressed, we developed a weekly SOP for the production of the weekly briefing (see Figure 1). Over the course of our COIST weekly briefings, we covered diverse topics to reflect the ever-changing threats and hot spots to American interests. The regime and opposition antiarmor capabilities in Syria, the considerations of possible noncombatant evacuation operations (NEO) operations in Nigeria, and the fluid and dangerous actors in the Central African Republic, were just a few of the topics covered in weekly threat briefs.

With the future uncertain where the next deployment might be, units must be ready to hit the ground immediately. In the case of the 82nd Airborne Division, one battalion is always on an 18-hour alert to deploy. This does not provide adequate time for a unit to accomplish the reception, staging, onward movement, and integration (RSOI) tasks. Therefore, it is important to address these tasks before notification. While waiting for the call, the COIST fills the gap. A paratrooper needs to understand where he is, the enemy he faces, and the task at hand. In this context, the vision for our COIST was to ensure all Delta Company paratroopers were informed of the enemy threat, human terrain, and the overall operational environment. That way, every paratrooper hits the ground in a foreign country knowing the operating environment and enemy threat capabilities, how to survive, how to engage and partner with the local populace, and how to WIN!

Why a COIST?

The COIST is the focal point for a maneuver commander to accomplish proactive detailed risk mitigation. Imagine a Soldier who receives COIST briefs for six months on three different countries. Within each country, there are five different enemies. These enemies use varying Russian or Chinesemade weapon systems. This Soldier has 18 hours to deploy and will jump into harm's way soon after. Those six months of intelligence briefs paired with a tactical standard operating procedure (TACSOP) book will build confidence in every

Figure 1 — SOP for Production of Weekly Briefing



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Soldier. For a Soldier to hit the ground confident in where he is, the enemy he faces, and the tasks at hand will prove decisive during the opening hours of a conflict and essential for the remainder. Each Soldier will need to know generally what and whom he is facing as well as the environment in which he will face them. Coupled with terrain analysis, each Soldier will already be familiar with his objective and drop zone. This increases a Soldier's lethality and survivability. Most importantly, it allows for mission success.

A properly operating COIST will ensure a commander can synchronize his training plans with the most current enemy TTPs. This leads to more realistic training events and prepares Soldiers for future missions based on unique OEs and tasks. A COIST should conduct weekly current intelligence briefs (CIB) before weekly training meetings. Attendees should be platoons sergeants, platoon leaders, and platoon COIST representatives.

Based on recent world events in multiple hot spots, enemies use a wide range of weapons from small arms to antitank weapons that range from rocket-propelled grenade (RPG) launchers and IEDs all the way up to Chinese and Russian equivalents to the U.S.'s tube-launched optically tracked wire-guided (TOW) missile and Javelins. Knowing the exact capabilities of each weapon system (more than just its ranges — launch characteristics, employment methods, and launch signatures) will ensure U.S. forces can array their forces correctly and react accordingly, whether mounted or dismounted.

CIBs should primarily focus on enemy weapons systems, TTPs, enemy task organizations, and human populations. When dealing with most enemy weapon systems, whether small arms or anti armor, our senses will be our first indicator of defense of an enemy attack. Knowing these systems beforehand will ensure that when the call does come, your Soldiers will be ready. Through these briefs, each key leader in the company receives intelligence that can enhance the overall preparation of the company. For example:

• A commander will be confident in knowing the number of American citizens to evacuate for a NEO, the ability of host-nation forces, and relationships with the U.S. State Department.

• A company executive officer will know exactly which electronic countermeasure devices, reactive armor, or extra survivability measures will be needed for the company.

• A first sergeant will know that his dismounted company will receive vehicles and he can start roll over and simulation training immediately in order to be ready.

• Platoon leaders will know to mitigate environmental risks immediately (weather, wildlife, illumination, etc.).

• Platoon sergeants will know how to plan Soldier's weight loads for a combat jump and follow on operations.

• Squad leaders will be aware of the capabilities of local police or army and how to integrate them.

• A mounted gunner will know the indicators for an enemy AT weapon launch.

• A dismounted Soldier will know how to implement counter-IED technology.

Knowing the human terrain is just as important as knowing the enemy weapon systems you will face. A company intelligence team is the best resource for a company to understand a foreign culture and region. A COIST brings to light the subtle nuances that separate multiple groups of people across a wide spectrum of cultures, religions, and communities. It will give every Soldier in a company situational awareness on the many distinct personalities in an OE. All Soldiers would know which host-nation forces they will potentially partner with, which governmental agencies the U.S. government will send in for disaster relief efforts, and which communities/tribes of people will be present. Knowing this in advance will build a flexible



Figure 2 — Worldwide Hot Spots



Figure 3 — Potential Conflicts in Future Deployments That a COIST Can Help a Company Understand

team of Soldiers able to foresee and overcome any point of friction.

A secondary effect of a COIST is the leader development and growth it offers to junior enlisted Soldiers. From our experiences, we found that these Soldiers, who spoke weekly in front of the company leaders, grew quickly to become tacticians on enemy weapon systems and world hot spots. The company intelligence members accomplished phenomenal research while veterans of multiple deployments threw many realistic questions for them to contemplate. Each week, these junior leaders grew more confident in speaking, researching, and performing their additional duties. In turn, the company became more confident in understanding world events and foreign enemy weapon systems. Whether it was a threat from Boko Haram in Nigeria or one of the five known factions operating in different friendly, neutral, or enemy territories of Syria, the company knew. Company leaders raised the unit's overall level of readiness through these briefs.

The future brings uncertain threats in a multitude of unique OEs across the world. As leaders, it is our responsibility to prepare and train for this incertitude in order to improve lethality and survivability. Unilateral operations are fading, and interoperability is becoming the new focus for future operations. The importance of the company intelligence team will only increase as the potential threats to American interests grow and diversify. Faced with more information than in decades past, a company will need to grow to meet all the challenges in an OE. It is the responsibility of the company leadership to ensure that preparation to tomorrow's threats begins today. Just as there are specialty positions in a company headquarters such as medical, fire support, supply, or communication, in time, having a dedicated intelligence position can ensure there is a collective specialized element dedicated to support. However, whether the COIST is manned by an Infantry Soldier or an Intelligence Soldier, the essential intelligence and analysis it provides the commander and the company in general will make it a necessary part of any headquarters element. Even if there is no looming deployment on the horizons for a unit, a company intelligence team is still a great way to understand enemy weapon systems and train according to their employment. Once the call does come to deploy, a COIST's actions prior to the call will prove to be significant.

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> An Infantryman from the 82nd Airborne Division monitors movement in Zabul Province, Afghanistan, on 23 June 2014.

> > Photo by SSG Whitney Houston

April-June 2014 INFANTRY 19

IA DRANG VALLEY, VIETNAM, 17 NOVEMBER 1965 THE BATTLE AT LZ ALBANY

CPT J. DALLAS HENRY

he Battle at Landing Zone (LZ) Albany — fought between the 2nd Battalion, 7th Cavalry of the U.S. Army and the 8th Battalion, 66th Regiment, along with the 1st Battalion, 33rd Regiment of the Peoples Army of Vietnam (PAVN) on 17 November 1965 - was the deadliest single-day battle during the Vietnam War.¹ Using the lens of doctrine, one can see that LTC Robert McDade, the 2-7 CAV commander, violated three of the five principles of patrolling: reconnaissance, control, and common sense.

After World War II, the United States remained acutely aware of communist regimes around the world, with particular focus on Southeast Asia. Before 1961, the U.S. presence

An, and the 1st Battalion, 7th Cavalry, commanded by LTC Harold Moore, with aid from the 2nd Battalion, 5th Cavalry, commanded by LTC Bob Tully. Marching from a drop zone two miles southeast of LZ X-Ray, 2-5 CAV arrived at 1200 on the 15th as reinforcements for 1-7 CAV, which was in continuous enemy contact beginning on 14 November. Marching from LZ Columbus (two miles east of LZ X-Ray) to provide additional support, 2-7 CAV arrived once the majority of the fighting was complete at 0900 on the 16th. At 1040, COL Tim Brown, the brigade commander in charge of U.S. forces on the ground, ordered 1-7 CAV to pull out of LZ X-Ray by helicopter. A relief in place was conducted as 2-5 and 2-7 CAV took over

South Vietnam consisted in of advisors to the Army of the Republic of Vietnam (ARVN), whom played a supporting role as the nation underwent military and social struggles. The leader of the North Vietnam communist movement, Ho Chi Minh, and the elected leader, Prime Minister Diem, were catalysts in the escalation of U.S. force beginning 1961. Consequently, their in actions led to the commitment of U.S. ground troops to Vietnam. The decisive point for U.S. involvement in the Vietnam War came on 2 August 1964 when three North Vietnamese ships attacked the USS Maddox, an American destroyer. The attack President spurred Lvndon Johnson to order the bombing of North Vietnam, and by April 1965, 60,000 American troops were deployed to Vietnam.²

The first major American direct fire conflict took place in November of 1965 in the la Drang Valley. The conflict is divided into two engagements: the Battle at Landing Zone (LZ) X-Ray and the Battle at LZ Albany. The Battle at LZ X-Ray occurred on 14-16 November between the PAVN's 9th Battalion, 66th Regiment, commanded by Senior Lieutenant Colonel Nguyen Huu





defensive positions held by 1-7 CAV. The remainder of the day on LZ X-Ray consisted of sporadic enemy mortar and rifle fire. Into the night the men maintained 100 percent security, without sleep and in defensive positions. On the morning of 17 November, COL Brown ordered 2-5 and 2-7 CAV to leave LZ X-Ray, as it was marked for an Air Force bombing. The units responded quickly. LTC Tully led his men off of LZ X-Ray at 0900, and LTC McDade followed 10 minutes later. Moving to its assigned location of LZ Columbus, 2-5 CAV led the way with 2-7 CAV following. Eventually breaking off to the north, 2-7 CAV moved to its assigned destination of LZ Albany.³

LTC McDade did not have a clear picture of the operational environment his unit was moving into. He recalled having no idea of what to expect and was instructed to establish an LZ at "a place called Albany" without being given an enemy situation overview.⁴ His operation order (OPORD) to the leaders of 2-7 CAV followed in suit with regards to brevity. After returning from LTC McDade's brief, CPT Joel Sugdinis, commander of Alpha Company, 2-7 CAV, informed his subordinates that the situation was "pretty unclear," but confirmed enemy units in the area. CPT Sugdinis told his men that they were the lead element in a battalion march to LZ Albany, where they would be extracted. The men of 2-7 CAV would begin by following 2-5 CAV east and then branch north alone. The entire orders and preparation process took less than two hours and provided little in terms of contingency or alternate course-of-actions plans.5

The 2-7 CAV order of march to LZ Albany was: Reconnaissance Platoon, Alpha, Delta, Charlie, and Headquarters (HQ) companies. Last in the order of march was A/1-5 CAV, which had been attached to replace B/2-7 CAV, as it previously fought attached to 1-7 CAV during the battle at LZ X-Ray. As planned, 2-7 CAV followed 2-5 CAV east to a fork in the path where it branched north an additional two miles to LZ Albany.⁶

During the march, Soldiers carried a full combat load that reached weights of 80-110 pounds. The further into the movement, the more arduous the terrain became. Kneehigh elephant grass turned to chest high as flat terrain turned into rolling. The thick single overhead tree canopy became a triple canopy, which increased temperatures and humidity. Exhausted from marching and having no sleep for 36-48 hours, Soldiers discarded equipment to lighten their load. As fatigue increased, the ability to remain disciplined was diminished during security halts; taking up defensive positions was second in priority to drinking water and recovering. The unexpectedly thick canopy forced the perimeter security element provided by A/2-7 CAV too close to the main body to effectively provide early warning.7 While LZ Columbus received preparatory artillery fires, LZ Albany did not. CWO Hank Ainsworth, a Huey pilot assigned to 2-7 CAV, conducted aerial reconnaissance of LZ Albany prior to 2-7 CAV's departure of LZ X-Ray. After completing the reconnaissance, CWO Ainsworth reported negative enemy contact to COL Brown. Armed with that information, COL Brown decided to withhold artillery fires on LZ Albany to



Stemming the Tide, May 1965 to October 1966 by John M. Carland, Center of Military History

Map 2 — Battle at LZ Albany

mask the movement of 2-7 CAV. This deception plan set by COL Brown was counteracted when 2-7 CAV set fire to grass huts along its movement route. The high-rising smoke was visible for miles.⁸

Within 150 meters of the LZ, 1LT Pat Payne, the reconnaissance platoon leader, turned the head of the battalion column northwest. When doing so he saw a PAVN soldier asleep on the ground behind a six-foot tall termite hill. Sounding the alarm, 1LT Payne jumped on him and detained the prisoner. His platoon sergeant captured a second resting PAVN soldier while a third member of the apparent PAVN scout element escaped. No official report of an escapee was made to the chain of command. The prisoners made claims of being PAVN deserters but provided no actionable intelligence. The capture confirmed PAVN soldiers in the area. During this time 2-7 CAV halted movement; however, still stricken by exhaustion, the majority of the battalion did not take up formal defensive positions.⁹

After completing the interrogations, LTC McDade called the company commanders forward to establish and disseminate his plan to occupy the LZ. LTC McDade began his briefing before CPT George Forest, commander of A/1-5 CAV, arrived from the rear of the column. All other commanders traveled forward accompanied by their radio transmission operators

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(RTOs); first sergeants from A/2-7 CAV and B/2-7 CAV also attended. As the battalion commander briefed his plan, the reconnaissance platoon, along with 1st and 2nd Platoons of A/2-7 CAV, reconnoitered the LZ. Before the completion and formal reports from the reconnaissance elements, LTC McDade along with his commanders and staff moved to a cluster of trees in the middle of LZ Albany. All other companies remained spread along a 500-meter battalion column awaiting guidance. At approximately 1315 on 17 November, still awaiting the completion of the reconnaissance and main body's occupation of the LZ, 2-7 CAV began to receive direct and indirect contact. The 8th Battalion, 66th Regiment and 1st Battalion, 33rd Regiment of the PAVN were executing a flanking attack from the northeast.¹⁰

Fighting broke out at the head of the battalion formation and continued down the northeast flank of the battalion. The PAVN fired from positions in the trees and ran through 2-7 CAV lines to cause a splintering effect between elements. The enemy closed with 2-7 CAV Soldiers, thus preventing the use of U.S. indirect fire. Unable to support one another, elements of 2-7 CAV conducted react-to-contact battle drills and mission command on levels as low as squad. Enemy indirect fire came from a PAVN local support-by-fire position near C/2-7 CAV. Still able to maneuver, C/2-7 CAV destroyed the enemy mortar assets. While successful in its attacking efforts, C/2-7 CAV received the most casualties in the battalion during the fight.¹¹

1LT Larry Gwin, the A/2-7 CAV executive officer (XO), recalled receiving most of the casualties within the first 30 minutes of fighting. Gwin was co-located with the battalion HQ element in the middle of LZ Albany when 2-7 CAV began its counterattack. Charlie Company's destruction of the PAVN mortar positions provided 2-7 CAV the freedom of maneuver, and 1LT Gwin recalled the enemy's formation disestablishment resulting in the PAVN simply walking around in search of surviving U.S. Soldiers. This enabled 2-7 CAV to employ "sniping" of the PAVN, one by one. Although the PAVN attack became increasingly disorganized, the conflict was far from over.¹²

As a result of multiple breaks in contact, LTC McDade struggled to effectively command his force for a majority of the afternoon and into the evening. Ineffective radio communication was the primary cause. Malfunctioning equipment and the loss of key leaders and radio operators resulted in the inability to maintain communication long enough for the battalion to effectively maneuver. The battalion operations officer, CPT Jim Spires, recalled that the ability to effectively execute mission command was greatly diminished. LTC McDade did not receive a clear picture of what the entire battalion column was experiencing until late in the day. At 1426, LTC McDade, his staff, and the A 2-7 CAV leadership fought as an independent small unit in the small wooded area on LZ Albany, paralleling the actions of the other battalion elements.13 All components of the battalion remained in squad- and platoon-size formations as each pulled security, fired on small groups of PAVN soldiers, provided medical aid, and awaited indirect fire and reinforcements.14

The 2-7 CAV XO, MAJ Frank Henry, provided indirect fire, air assets, and medical aid. Located on LZ Albany with the battalion HQ, MAJ Henry radioed in artillery and air support, aiding in the suppression and destruction of the PAVN. MAJ Henry and CPT Joe Price, the battalion fire support officer, began by calling in fire on known enemy positions in the trees surrounding LZ Albany. Calling in effective indirect fire on the PAVN positions was a challenging and slow process as the enemy had intermingled among U.S. forces. According to 1LT Payne, the Soldiers cheered as aircraft flew by so close they could see the pilot's profile in the cockpit. The outlook for 2-7 CAV remained positive as reinforcements arrived by air and ground. Marching north from LZ Columbus, B/1-5 CAV made contact with CPT Forest and the men of A/1-5 CAV at 1636. CPT Forest's familiarity with the unit provided quick integration as B/1-5 CAV helped attack the PAVN and relieve pressure on the rear of the battalion column. Recovering at Camp Holloway, the unit's forward operating base, B/2-7 CAV was still raw from its part in LZ X-Ray when it received orders for a night mission onto a hot LZ. At 1845, the company arrived on LZ Albany by helicopter.¹⁵

By early evening, the battle successfully shifted in the favor of U.S. forces. The arrival of B/2-7 CAV allowed the battalion HQ security perimeter to strengthen and expand. As the perimeter grew, wounded CAV Soldiers in hiding were either found or made their way to the HQ element. After the first round of medical evacuations (medevacs), helicopters pilots refused to extract the wounded from LZ Albany because it was "too hot," but MAJ Henry made a special request for the "229th Huey Slicks."16 After hearing MAJ Henry's request, CWO Ainsworth recalled that "the whole damn unit volunteered."¹⁷ At 2146, four helicopters began the evacuation of casualties off LZ Albany. Fighting continued in bursts as reinforcements and medical aid continued to arrive at the LZ throughout the night. Air Force bombers dropped napalm around the perimeter of U.S. forces, allowing LTC McDade time and space to reconstitute his formation into larger masses.¹⁸ Finally, at dawn the U.S. CAV leadership assessed the conflict as possibly concluded. CPT Sugdinis, recalled the morning as calm but not comforting. The toll of fighting and the violence of the PAVN attack became clear to the leadership of 2-7 CAV. To ensure LZ Albany was void of PAVN soldiers, LTC McDade commanded 2-7 CAV to conduct a "mad minute" firing of all weapons systems at any and all suspected enemy positions. The action did not elicit a response. The fight at LZ Albany was over, and 2-7 CAV was able to collect its wounded and dead. The PAVN fatalities totaled 403 with 150 additionally wounded. The U.S. forces sustained 151 fatalities and 121 wounded.¹⁹

Analysis

During the Battle at LZ Albany, LTC McDade and 2-7 CAV violated reconnaissance, control, and common sense. The second principle of patrolling, reconnaissance, is defined as "the responsibility to confirm what you think you know, and to learn that which you don't."²⁰ Violation of reconnaissance occurred when LTC McDade ordered the reconnaissance

platoon to move as the lead element in the battalion column instead of acting as forward element detached from the battalion column. LTC McDade chose to move onto the LZ with his commanders and staff before the reconnaissance was complete and before the LZ was formally occupied. This is an additional violation of this principle. As a result of these violations, LTC McDade's subordinates were unable to paint for him a picture of LZ Albany prior to occupation or call-in fires on the LZ once the reconnaissance platoon discovered the enemy. LTC McDade and 2-7 CAV learned what LZ Albany held firsthand and fought reactively rather than proactively.

The fourth principle of patrolling is control. It is defined as clarifying the concept of the operation and commander's intent, coupled with disciplined communications, to bring every man and weapon available to overwhelm the enemy at the decisive point.²¹ The violation occurred when LTC McDade did not provide clear a mission and intent to his subordinates prior to the initiation of movement. His subordinates were in equal violation by leaving the OPORD brief without receiving clarity of the battalion commander's intent. Furthermore, LTC McDade violated the principle of control when he called his company commanders to the head to the battalion. This provided the PAVN an initial advantage over 2-7 CAV upon contact. Detaching the commanders from their respective companies slowed the ability of 2-7 CAV to bring maximum arms to bear against the enemy or to exercise disciplined communication upon initial contact.

Burning huts during the movement to LZ Albany and not providing clear intent for actions on enemy contact violates the principle of common sense. Smoke created en route to the final destination neutralized the battalion's deception plan. Despite knowledge of likely enemy in the area of operation, the battalion commander did not provide any formal guidance with regards to actions on enemy direct fire contact. Violations of common sense resulted in the enemy's ability to mass forces onto 2-7 CAV's suspected route as well gain and maintain the advantage upon initial contact.

The Battle at LZ Albany was the deadliest single-day battle in the Vietnam War. Reviewing the movements, reactions, and decision-making processes involved can afford valuable lessons learned. While conflict with the PAVN would have likely been unavoidable, either on LZ Albany or en route to the objective, the resulting consequences could have been mitigated had the principles of patrolling been followed.

Notes

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When this article was written, **CPT J. Dallas Henry** was attending the Maneuver Captains Career Course at Fort Benning, Ga. He began his military career as a member of the 1st Battalion, 38th Infantry Regiment, 4th Brigade, 2nd Infantry Division. While with 1-38 IN, he served as a mobile gun system platoon leader, Headquarters and Headquarters Company executive officer (XO), and as the rear detachment battalion commander. CPT Henry deployed in support of Operation Enduring Freedom (OEF) 12-13.

CPT Henry is a third generation combat arms officer and the grandson of 2-7 Cavalry XO MAJ Frank Henry. The review of this battle remains pertinent and practical in the ever important understanding of the principals of patrolling and how a clear understanding of the mission and operating environment can have an effect.

MANEUVER SELF-STUDY PROGRAM

The MSSP consists of books, articles, doctrine, films, lectures, and practical application exercises to help educate maneuver leaders about the nature and character of war, as well as their responsibilities to prepare their Soldiers for combat, lead them in battle, and accomplish the mission. The intent is to enhance understanding of the complex interaction between war and politics and to improve the effectiveness of maneuver leaders in complex environments and in combat against determined, adaptive enemies. Visit the program's website at www.benning.army.mil/mssp.



¹⁷ Ibid, 282.

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¹⁹ Ibid, 285.



Throughout the history of armed conflict, military commanders have wrestled with the difficulties of what we currently call mission command. The tenets, components, and philosophy of this aspect of warfare have varied over the years, but the core dilemma has remained relatively constant: how to create shared understanding and purpose in a large diverse organization. Continual improvements in military hardware and software technologies have presented the opportunity to use the advances in the science of control to better address this dilemma — particularly in a geographically dispersed formation on the move.

The 2nd Armored Brigade Combat Team (ABCT), 4th Infantry Division took advantage of a welcome confluence of training and experience on the part of subordinate commanders, technical expertise in our staff, and adequate training time and resources to deliberately focus on applying the capabilities of the Army Battle Command System (ABCS) to this problem. In particular, we sought to improve the ability of commanders throughout the brigade combat team (BCT) to understand, visualize, and then describe all aspects of the operational environment: terrain, friendly, enemy, etc. For this purpose, we spent a great deal of time and energy to realize the full capability of the BCT's digital systems. In essence, we sought to become a "digital" unit — not just digitally equipped.

One of the strongest successes in this effort was our ability to link the intelligence digital systems to the maneuver digital systems across the BCT. This was especially significant in our ability to connect from the upper tactical internet to those systems on the lower tactical internet through our terrestriallybased Force XXI Battle Command Brigade and Below (FBCB2) systems. Accomplishing this allowed us to share data while on the move — an essential and illusive aspect of modern mission command. In essence, leaders at all levels had near instantaneous access to situation templates (SITEMPS), spot reports (SPOTREPs), and analyst assessments across the BCT footprint.

While we still have room for improvement, the significant accomplishments of the Warhorse Brigade in leveraging the organic digital capabilities were a large component of our success at the National Training Center (NTC), Fort Irwin, Calif.

> — COL Omar Jones Commander, 2/4 ABCT

his article focuses on 2/4 ABCT's successful use of the Distributed Common Ground System-Army (DCGS-A) during decisive action (DA) and wide area security (WAS) training in preparation for the theater response force mission Spartan Shield. The purpose is to highlight how the Warhorse Brigade capitalized on DCGS-A's tools, products, and capabilities to increase commanders' common operational picture (COP) and situational awareness. The brigade's successful use of DCGS-A was the result of tenacious work from the field support representatives (FSRs), embedded trainers, and our intelligence tech during unit-level reset - specifically Mission Command System Integration team events at Wilderness Training Area, a brigade field training exercise (FTX) at Pinion Canyon Maneuver Site (PCMS), and NTC rotation 13-08. Incorporation of DCGS-A throughout the training plan required "buy in" from all the commanders. Initially, it was a challenging sell. However, once the benefits of the system became evident, support increased. Fortunately, commanders encouraged an aggressive approach to intelligence collection and the use of all available digital systems. This nature reinforced our insistence on using the system to maximize our capabilities.

The DCGS-A Commander's Handbook describes the DCGS-A as the "Army's primary intelligence system deployed across the Army in support of ground Army commanders. It is the Army's primary intelligence system for ISR (intelligence, surveillance, and reconnaissance) tasking, processing, exploitation, and dissemination..." DCGS-A reduces the overall tactical risk throughout the brigade's battlespace by providing the BCT commander with the tools to visualize, analyze, and understand the threat. This resulted in the Warhorse Brigade leveraging vast amounts of analyzed data at various classification levels and disseminating to all commanders throughout the ABCT.

During 2/4 ABCT's decisive action training environment (DATE) rotation at NTC in June 2013, the brigade intelligence support element successfully employed DCGS-A for dissemination of graphics and correlated enemy data on both upper tactical infrastructure and lower tactical infrastructure. This is the first successful employment of the capability at NTC by a rotational unit and validated multiple DCGS-A system capabilities.

Efforts to accomplish these achievements began months earlier during unit collective training events. The brigade's FTX at PCMS allowed the unit to identify configuration and coordination requirements between intelligence (S2) and communication (S6) sections, system capabilities, and additional training task objectives during the unit's NTC rotation. It validated the DCGS-A suite of intelligence systems in enabling the commander's decision-making process on both the upper tactical infrastructure and the lower tactical infrastructure at all tactical echelons through robust communications architecture.

Training Progression

Following post-deployment reset, all available Warhorse Brigade intelligence analysts attended new equipment training events during November and December 2012. The emphasis of the training centered on the Soldier Training Package applicable to DCGS-A, version 3.1.6 SP2. This training covered basic user functions and configuration, and also provided limited instruction on use of the publish and subscribe server (PASS) to transfer graphics and enemy situational data from DCGS-A to other Army Battle Command Systems. Additionally, the training provided no instruction on passing messages from DCGS-A on the upper tactical infrastructure to FBCB2 platforms on the lower tactical infrastructure. The collaborative intelligence processing of human, signal, and imagery intelligence (HUMINT, SIGINT, IMINT) as well as all source intelligence facilitated by the 4th Infantry Division foundry site. The training introduced intelligence Soldiers to CAM; however, the exercise also identified the need to train all intelligence personnel throughout the brigade on the employment of DCGS-A.

The next training event was the FTX at PCMS, which consisted of approximately two weeks of maneuver company situational training exercise (STX) lanes and one week of CAM lanes for each combat arms battalion. The weather conditions during the exercise presented a significant challenge as the unit faced a blizzard and two winter storms as well as an austere environment requiring organic network capabilities. A WAS intelligence scenario developed by the Training Brain Operations Center (TBOC) allowed incorporation of exercise information, enemy significant activity, and basic enemy data for intelligence analysts to exercise procedures and methods of analytical development throughout the exercise. The scenario allowed the analysts to employ the intelligence preparation of the battlefield (IPB) functionality of the DCGS-A, develop enemy SITEMPs, and correlate data using the DCGS-A. Separately, a command decision to establish and utilize all exercise traffic and ABCS platforms on the secure internet protocol router network (SIPRNET) facilitated upper tactical infrastructure communication. Ultimately, this command decision reinforced and emphasized the "train as we fight" mentality and established the foundation of digital efforts throughout the training at PCMS and NTC.

During the PCMS exercise, the brigade intelligence support element successfully developed enemy graphics consisting of named area of interest (NAI) overlays and doctrinal, situational, and event templates. These overlays, developed through the multi-function workstation (MFWS) 2D map functionality, were sent through the PASS maintained by the S6 section on SIPRNET and successfully plotted by S2 operations and plans personnel on the Command Post of the Future (CPOF) platform. This action formed a fundamental step in enabling the brigade's and subordinate battalions' initial transition from a "digitally capable unit" to a "digitally operational unit."

discovered

during

the

communication infrastructure resident in the training facility influenced both issues listed above. Separately, training emphasized employment of the system in counterinsurgency (COIN) or WAS scenarios rather than supporting combined arms maneuver (CAM). The Warhorse Brigade continued training with the DCGS-A platform in February 2013 during an event involving brigade analysts and the military intelligence company (MICO). It allowed

Figure 1 — 2/4 ABCT DCGS-A Post Deployment Training Progression

considerations

Additional



PROFESSIONAL FORUM -

development and transfer of these overlays was the requirement to use correct symbology resident in the symbol palette of the 2D mapping system rather than the drawing tools available to the MFWS. Failure to use the resident symbology resulted in rejected items in the PASS topic manager. Ultimately, the graphics drawn outside of the symbol palette did not transfer or display on other ABCS.

While each of these efforts focused on enabling the commander's decision-making process at each tactical echelon, the brigade intelligence warfighting function identified that alternative communications methods must be employed if a battalion lacked connectivity to the brigade's upper tactical infrastructure. This led efforts to identify software programs resident in the DCGS-A suite and develop procedures that would allow direct dissemination from DCGS-A platforms to each battalion's organic FBCB2 equipment on the lower tactical infrastructure.

Exercise Conditions for NTC

Our training rotation at NTC consisted of four days of reception, staging, onward movement, and integration (RSOI); eight days of STX lanes; 10 days of CAM/WAS operations; and eight days of recovery/redeployment.

During the RSOI portion of the rotation, brigade analysts, the MICO all source intelligence technician, and DCGS-A FSRs worked with brigade communications personnel to conduct a validation exercise to verify basic connectivity between all portable MFWS, the ISR fusion server, and the network. The validation exercise included all brigade and most battalion intelligence leadership, analysts, and the FSRs to establish, develop, and maintain DCGS-A communications procedures across the formation. Hindsight showed the need to have all battalion intelligence Soldiers and their hardware present. Guidance reflecting specific messaging requirements for DCGS-A was not thoroughly defined from NTC. Therefore, the Warhorse Brigade developed an ad-hoc requirement for DCGS-A to send and receive applicable messages (enemy situation messages, graphics messages, etc.) through the PASS to other ABCS platforms. During this period, the brigade successfully sent multiple enemy situation messages, graphics including NAI overlays and enemy SITEMPs to multiple ABCS platforms. This included the Advanced Field Artillery Tactical Data System (AFATDS), Air and Missile Defense Workstation (AMDWS), CPOF, and Tactical Airspace Integration System (TAIS). This enabled each staff section to integrate enemy SITEMPS into the planning process and allowed the brigade staff to refine operational plans and orders for the rotation. During the RSOI period, the transmission of these products from the upper tactical infrastructure to the lower tactical infrastructure (DCGS-A to FBCB2) was not exercised due to issues resulting from a information assurance update.

As the unit transitioned into STX lanes, personnel reestablished connectivity in an austere environment and prepared for CAM/WAS training. During this eight-day period, analysts continued to submit messages through the PASS to ABCS and subscribed through the PASS subscription manager to messages from those same systems. Additionally,

analysts configured the entity extraction and auto plot configuration interfaces of the MFWS to receive and display friendly graphics from other brigade systems. This allowed the portable MFWS to receive and display friendly graphics transmitted from other platforms.

Additionally, when analysts subscribed to the appropriate PASS feeds, position reports and observation reports sent from the FBCB2 network were extracted, displayed, and synchronized on each workstation in the brigade tactical operations center (TOC). Approximately halfway through the rotation, the 52nd Infantry Division (NTC higher control) directed personnel operating AFATDS to switch from the PASS to the division Data Distribution Service to facilitate transmission of 52nd ID graphics between brigade and division AFATDS. This action effectively severed the ability to transfer graphics and enemy situation messages using the PASS between DCGS-A and AFATDS at the brigade level.

FSRs resolved the update issue and reestablished the pathway that allowed the common message processor to activate during the closing days of the STX portion. This allowed analysts to generate and send variable message-formatted data to selected FBCB2 platforms. Initial tests consisted of Freetext messages, entity data messages, NAI, and enemy SITEMP graphics were sent to the brigade S2 operations FBCB2 who verified receipt. Once verified, these messages were sent to various FBCB2 platforms resident in tactical vehicles across the brigade formation and verified through Freetext message responses received by the DCGS-A journal entry viewer.

During the tests, analysts discovered that the number of FBCB2 platforms selected to transmit the data affected the transmission speed of the data. To circumvent delays, internal protocols were established; these included transmitting graphic messages to only the brigade S2 FBCB2 platform initially and then further transmission across the tactical footprint. Entity data messages were transmitted to the brigade FBCB2 platform manned by the TOC radio operator for transmission to subordinate units.

Although highly successful, the transmission of enemy SITEMP and NAI overlays resulted in some minor confusion. For example, some enemy graphics such as battle positions and operational graphic control measures displayed in black and with small text consisting of "ENY." Additionally, the development of these communication procedures and capabilities occurred in a relatively short time. This resulted in knowledge gaps and communication issues that presented a challenge for portable MFWS operators and the FBCB2 operators. At times, enemy SITEMP graphics were not displayed due to the FBCB2 operator misunderstanding or error. Also, DCGS-A operators misunderstood the requirement to use the MFWS journal entry viewer to view and plot incoming messages.

Identified Challenges

Additional challenges impeded the full utilization of DCGS-A communication capabilities. These originate from a lack of understanding across the Army of DCGS-A networking

requirements, individual sustainment training on functionality, and FSR support. The single most severe challenge to DCGS-A functionality observed was the failure of some units and organizations to segregate portable MFWS into a separate operator/user group, protecting the platforms from automatic updates. These updates often stripped DCGS-A user accounts and FSR administrative accounts from each laptop. Additionally, S6 sections must enable battalion command post network servers to recognize or allow portable MFWS and DCGS-A IFS server's internet protocol addresses, as well as allow these addresses access to the network. A solution is the designation and training of an ABCS knowledge manager within all Army echelons from tactical to strategic. The knowledge manager needs to know the requirements and capabilities of each ABCS including required updates and communication methods.

Second, intelligence analysts attended new equipment training (NET) approximately six to seven months prior to the NTC rotation. However, Soldiers did not conduct sustainment training on the system. Their lack of training and consistent use of the system resulted in them failing to retain the basic functionality and knowledge of the system. An emphasis on digital training and sustainment training for low density military operational specialties (MOS) and unit staffs will mitigate DCGS-A user knowledge loss.

Finally, lack of consistent support from FSRs and embedded trainers restricts consistent use of the system. Fortunately, the Warhorse Brigade enjoyed full, unwavering, and energetic support from level one and level two FSRs throughout the training cycle. Peer-to-peer dialogue indicates a lack of support or contractor accountability. Possible solutions to this issue include a detailed screening process to identify the most capable applicants and involving the supported unit in contractor performance evaluations.

Training Recommendations

Employing additional training opportunities across the Army will enable full use of our digital systems. A four-tiered model that includes new equipment training, advanced equipment training, integrated ABCS training, and unit sustainment training will encourage consistent use of the DCGS-A system. Additionally, units should identify platform subject matter experts for each ABCS and send them to applicable training (such as the currently suspended master analyst program for DCGS-A at Fort Huachuca, Ariz.) to further enable unit capability and use of each digital system.

Training could initially occur utilizing a centralized, on-post training facility that incorporates all ABCS platforms including the FBCB2. Units need to identify personnel requiring training on specific systems based on duty position and send them to a course allowing them to train on their selected systems. The training should concentrate on the basic use of each system, transition to advanced training, and culminate with the integration of all systems in a CAM/WAS scenario that requires Soldiers to communicate between ABCS platforms on both upper and lower tactical infrastructures. Many of these training centers exist across the Army; however, they are likely underutilized and require a command emphasis in order to further develop these capabilities across the Army. Unit sustainment training should follow a similar track. As units prepare for deployments or FTXs, they should incorporate mobile training teams (MTTs) for equipment fielding and software updates.

Identification of subject matter experts enables units to identify individuals responsible for systems integration and identification of training requirements to develop the use of digital systems. Soldiers identified should attend specific training to enable knowledge proficiency and use of each system. The development and use of additional skill identification codes will aid the assignment and personnel management of these Soldiers across the Army.

Despite extensive contention that what the Warhorse Brigade attempted was not possible, the brigade successfully employed the DCGS-A network. The brigade proved that the system works and is effective. It provided unparalleled situational awareness for commanders and battalion staffs by providing the ability to transmit enemy templates, enemy unit locations, and additional intelligence from DCGS-A portable MFWS on the upper tactical infrastructure to tactical systems like the FBCB2. It enabled the commander's decision-making process at all tactical echelons in the event subordinate units were unable to establish upper tactical infrastructure networks.

Ultimately, tenacious Soldiers and civilians contributed to the success. Reluctant commanders eventually embraced the system once they witnessed the benefits. All commanders embraced digital systems and encouraged aggressive intelligence collection. The unit's training plan incorporated multiple field exercises in austere environments allowing operators to test and adjust the system in deployment conditions. The plan required persistent use of the system that maintained operator knowledge. Finally, none of it was possible without reliable and consistent support from FSRs and embedded trainers, full coordination and cooperation between the Warhorse Brigade intelligence and communication warfighting functions, patient commanders, and persistent Soldiers and officers.

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THE ART OF SUPPORT BY FIRE

SFC CARTER H. CONRAD SFC JOHNNY TINSLEY

The Army Strong theme is not a phrase — it is a way of life. The U.S. Army is strong because it uses procedures of mutually supporting actions to accomplish the mission. The concept of Soldiers and units supporting each other while conducting military operations is paramount to any unit's success. Each element of the team has a specific function and role to help the commander accomplish his/her mission. During a deliberate attack for example, the assaulting force is supported by the supportby-fire (SBF) element. The SBF element's focus is to gain fire superiority and cover the maneuver of the assaulting force as it gains a foothold onto an objective.

Establishing the SBF is as critical to the deliberate attack as conducting the assault. Without the SBF, the assaulting element has to contend with an enemy that is presented with only one problem. When the assault element is covered by the SBF element, the enemy is now presented with a dilemma. A dilemma causes the enemy to change their plan as they contend with multiple problem sets causing a weakness in their force, disruption of their current plan, and their ability to fight effectively. More discussions about dilemmas can be found in FM 3-21.8, *The Infantry Rifle Platoon and Squad*, paragraph 1-103.

A Soldier with A Company, 5th Battalion, 20th Infantry Regiment, 2nd Infantry Division provides suppressive fire as squad members bound to cover during a squad live-fire exercise in Diyala Province, Iraq, 27 June 2010. Photo by MC2 Ted Green, U.S. Navy Over the last decade of combat operations, Army units have lost the experience and, therefore, the expertise of establishing and effectively utilizing the SBF in the conduct of offensive operations. This article will discuss observed problems with SBF occupation, employment, fire control measures, rates of fire, and communication during rotations at the Joint Readiness Training Center (JRTC) at Fort Polk, La. The objective of this article is to discuss these areas to better prepare units for combat operations around the globe.

Occupation

Before occupying the SBF, leaders must understand the science of the SBF and know how to employ each section and weapon system in the support-by-fire element. FM 3-34.2, *Combined-Arms Breaching Operations*, paragraphs 1-12 and 1-13 state:

"Suppression is a tactical task used to employ direct or indirect fires on enemy personnel, weapons, or equipment to prevent or degrade enemy fires and observation of friendly forces. The purpose of suppression during breaching operations is to protect forces reducing and maneuvering through an obstacle. Effective suppression is a missioncritical task performed during any breaching operation. Suppressive fires in sufficient volume serve to secure the reduction area. Successful suppression generally triggers the rest of the actions at the obstacle."

Leaders must perform adequate analysis of the terrain and select positions for the SBF that provide the best vantage points for adequate fields of fire to support the assaulting element. During the leader's recon, the weapons squad leader (WSL) will

identify the positions to place the SBF element as well as the last covered and concealed position prior to occupying the position. The WSL will lead the SBF element to the last covered and concealed position to avoid exposing the unit to the enemy on the objective.

Once the WSL reaches the last covered and concealed position, he will assume the prone position to indicate that the element has reached the point where each member will assume the appropriate movement technique necessary to move forward to occupy the SBF position. The last covered and concealed position is a good location for the SBF element to cache any unnecessary equipment as extra weight and bulky assault packs may make it difficult to occupy the SBF position undetected. The success of the deliberate attack depends initially on the SBF element's ability to move undetected into position; therefore, leaders and Soldiers must be disciplined in selecting the correct movement technique to move into position so they do not compromise the operation. At JRTC, Soldiers are regularly observed walking or crouching as they move into their positions instead of low crawling, which compromises the operation.

WSLs will dictate the appropriate individual movement techniques that will be used to move into position such as low crawl, high crawl, and 3-5 second rush. Leaders recognize that low crawling with a machine gun is different than a rifle. Gunners should be encouraged to low or high crawl by gripping the top of the bipods just underneath the barrel as they crawl forward. The machine gun is oriented in the direction of travel to avoid being caught on vegetation or obstacles on the route to the SBF position. This method decreases the gunner's fatigue and the time it takes to travel to the next position.

Machine-gun crews must properly employ their weapon systems. Many gun teams are not properly trained to execute the crew drills outlined in appropriate manuals. These manuals illustrate the correct steps for putting a gun into action, yet JRTC Live Fire Division NCOs routinely observe units that have not practiced the steps needed to properly emplace the machine gun. The crew's leaders will train each member of the gun crew on their individual tasks. Once the individual tasks are performed to standard, then the Soldiers will perform their individual tasks as a team. Rehearsals and troop leading procedures (TLPs) will provide the available time for the gun team to practice the

The success of the deliberate attack depends initially on the SBF element's ability to move undetected into position; therefore, leaders and Soldiers must be disciplined in selecting the correct movement technique to move into position so they do not compromise the operation. steps necessary for their assigned mission.

Leaders will emplace one machine gun at a time. This action allows for covering fire for the rest of the SBF element and reduces the signature of a large force moving into position. The WSL will emplace the first machine gun in the SBF position on bipod prior to bringing the remaining gun teams to the SBF location. With the first gun team in position, the assistant gunner (AG) from the second gun team will move

forward to emplace his tripod. The WSL will then signal for the second gunner to move forward and mount his gun on the tripod, perform the necessary actions to put his gun into action, and start scanning the objective. After gun two is set on tripod with rounds on the feed tray, spare barrel pulled out, ammunition linked together and the gun laid on target, team one can put its gun on the tripod. Time constraints or enemy contact may require the SBF elements to conduct a hasty occupation of the SBF which may not allow for the guns to be set in one at a time. In these situations, the WSL will expedite the occupation plan but still emphasize the concealed movement into the SBF so the element is not compromised before the guns are set in position.

SBF leaders should consider the acronym OKOCA (observation, key terrain, obstacles, cover and concealment, avenues of approach) when emplacing the SBF position. Observation is an important factor in emplacing the guns because the gunner must be able to see the objective and the target areas. Gun teams will give feedback to the WSL if their position does not offer optimal fields of fire. Identifying key terrain is important so units can place their SBF positions in areas that deny the enemy the ability to use the terrain to maneuver on the SBF element. Locating obstacles on the objective give the SBF the ability to provide suppressive fires as the assault element breaches the obstacle to continue the assault. Cover and concealment is important for protecting the SBF and identifying areas that the enemy forces could use as fighting positions. Avenues of approach for enemy movement should be identified from the SBF position; a plan for the SBF's withdrawal from the objective should also be identified.

Leaders will ensure the gun locations are not too close or too far away from each other. Gun teams that are too close can both be easily engaged from one weapon system or damaged by enemy indirect fires. Gun teams that are too far apart may provide a challenge to the WSL's ability to effectively command and control the SBF element. The SBF leadership will consider plans for additional leadership on the SBF positions to help with command and control issues. Before the WSL contacts the commander to report that the SBF is set, he will make adjustments as needed if time is not a factor. Once the engagement begins, leaders will make corrections to the SBF positions to support the assault element or engage the enemy as needed. The SBF element will continue to prepare for the upcoming engagement by



Soldiers with 3rd Battalion, 509th Infantry Regiment, 4th Infantry Brigade Combat Team (Airborne), 25th Infantry Division keep watch from a fighting position at the Joint Readiness Training Center in Fort Polk, La., on 18 April 2014. Photo by SSG Christopher Klutts

scanning the objective area as a sensor and keep the WSL informed of any critical information.

Once the SBF positions have been properly occupied, each gun team will be prepared to execute its mission in support of the assault element. Each team has clearly identified primary and secondary sectors of fire with target reference points (TRPs) and specified engagement criteria. The SBF element is now ready to support the commander as he prepares to take the objective. The next critical step is the employment of the SBF.

Employment

The machine-gun employment in support of the assaulting element leads into the "art" of the SBF. This section is based on the common sense and observed best practices that leaders of the JRTC Live Fire Division have observed in more than 300 combined arms live-fire exercises involving SBF and assaulting elements. Many WSLs do not understand the principles of fire control measures and controlling rates of fire. Machine-gun placement and proper machine-gun employment begins in the planning phase. Leaders will identify what terrain and/or threat-based fire control measures they want to use to control and coordinate direct fire weapon systems based on current intelligence, imagery, or map reconnaissance. During this time, the WSL and platoon leader should develop a rates-of-fire plan in order to determine how long the SBF can support the assault. Refinement of fire control measures and rates of fire should occur in the objective rally point (ORP) after the leader's recon is completed. This article focuses on fire

control measures and rates of fire because they are the most often misused or underutilized aspects of machine-gun employment.

At some point, it will be time for the SBF element to initiate direct and indirect fires from the SBF position. Army Doctrine Reference Publication (ADRP) 3-90, *Offense and Defense*, states, "The first aspect of the art of tactics is the creative and flexible application of the means available to the commander to seize the initiative from the enemy and to retain it. Because the enemy changes and adapts to friendly moves during the planning, preparation, and execution of an operation, there is no guarantee that a tactic which worked in one situation will work again. Each tactical problem is unique."

With the above reference in mind, the SBF creates the ability for the commander to achieve fire superiority and the support by fire needed to execute the assault. The commander will normally initiate the SBF element to start firing on the objectives by designating TRPs, target areas, or priority targets. Regardless of what the commander has designated, there should be a predetermined amount of time and ammunition that the SBF has prepared to facilitate each phase of the deliberate attack. The crucial times for the SBF elements are: the initiation, the breach, establishing the foothold on the objective, and shift and lift fires. The two most dangerous periods for the attack are the breach and establishing the foothold.

The initiation of the SBF on planned TRPs and target areas ensures that fire superiority is established. The commander will assess how much time is needed to obtain the fire superiority based on the enemy situation and use this time to ready his breach and assault elements to start their tasks. During this time period, the SBF positions are firing either at the rapid or cyclic rates of fire depending on the enemy situation. Once the SBF has achieved the fire superiority, it is common to return to a sustained rate of fire on the objective.

The next phase is the obstacle reduction or breach. The commander is prepared to send Soldiers to a location that is normally covered by indirect or direct fire weapons or observation. To protect the breach element, the commander should increase the rates of fire from the SBF element. This increased fire, along with any indirect fire, smoke, and small arms fire from the breach and assault elements, greatly enhances the dilemmas discussed earlier in the article. The rate of fire from the SBF should continue at a higher rate until either the breach is completed and the far side of the breach is established or the breach element has placed the explosive charge needed to reduce the breach and returned to their last covered and concealed positions. Once completed, the SBF returns to the sustained rate of fire.

The SBF element will increase its rate of fire once the assault element starts maneuvering to establish the foothold. This is the last moment the enemy may try and stop their perimeter from being breached. The possible enemy response may cause the SBF element to increase its rate of fire to protect the assaulting element in establishing the foothold. The SBF element can be quickly overwhelmed with enemy actions, fires, and managing the support required by the assaulting element. Fire control measures are in place to assist the commander and leaders in ensuring mutual and interlocking fires have been established on the objective before and during the assault.

Fire Control Measures

Fire control measures assist the commander in controlling direct fires on the objective. Fire control measures are used to coordinate fires on enemy positions and prevent fratricide as friendly troops advance on enemy positions. FM 3-21.10 identifies 18 different fire control measures, and they are divided into two categories: terrain-based and threat-based. For an in-depth explanation of each, machine-gun leaders should read Chapter 9 of FM 3-21.10.

The Infantry company commander uses terrain-based fire control measures to focus on a particular point, line, or area rather than on a specific enemy element. A majority of the leaders that execute live-fire training at JRTC focus primarily on sectors of fire and TRPs to control their unit's fires. Leaders who focus on the use of sectors of fire and TRPs are able to execute their live-fire density safely by having a shared understanding of the plan to control direct fires.

A TRP is an easily recognizable point or location on the objective that is used to orient friendly forces and control direct fires. Soldiers in the SBF tend to focus on that specific point and do not engage targets in close proximity of the TRP. Leaders must coach this aspect of using the TRP system and allow Soldiers to use disciplined initiative when engaging targets on and around a designated TRP. Leaders must stress the use of the TRP for just what it is — a reference point. Soldiers will be trained to prioritize targets and engage the greatest threats first, then engage secondary targets.

The quadrant method of terrain-based fire control measures is a good method to ensure the SBF is supporting the commander during the assault. Quadrants are subdivisions of an area created by superimposing imagery with perpendicular axis over the terrain to create four separate areas, or quadrants. When units use quadrants in conjunction with TRPs, they are called terrain-based quadrants. By splitting the objective into sections, Soldiers use an area to engage rather than a point target. A benefit to using the quadrant system is it gives a leader the ability to establish left and right limits of fire and change those left and right limits easily as the assault element advances through the objective. If a leader simply assigns a sector of fire for a machine-gun team, he will have to either shut that gun down or shift his fire (usually off the objective) as friendly troops enter that gun's sector of fire to prevent fratricide. If the objective is split into four quadrants, the leader only has to shut down the quadrants that are occupied by friendly troops, allowing the guns to continue to engage targets in the other quadrants.

The Infantry company commander uses threat-based fire control measures to control direct fires by directing the unit to engage a specific enemy element or position rather than fire at a point or area. Threat-based fire control measures allow the commander to control what the SBF engages by setting his priorities for fire on the objective. The commander is able to control what order to engage targets and what weapons systems to use during the engagement based on the enemy movement and activity. Most units know this type of threat-based fire control measures as engagement priorities or criteria. Engagement criteria are another form of threat-based fire control measure available to control machine gun teams. Engagement criteria are a specific set of conditions that specify the circumstances in which subordinate elements are to engage.

A WSL will know what to do when the enemy situation changes if he has been issued engagement criteria. At JRTC, most of the observed WSLs are not being given engagement criteria. The commander and subsequent leaders need to develop their fire control measures and disseminate those measures down to the element leaders prior to executing the mission. Fire control measures that work on one objective may not work on another. As leaders learn and understand the fire control measures outlined in Chapter 9 of FM 3-21.10, they will increase their ability to put accurate fires on the object as well as minimize the potential for fratricide.

Rates of Fire

As discussed earlier, there are distinct phases of rates of fire being employed by the base of fire element: the initial heavy volume (rapid rate) to gain fire superiority, the slower rate to conserve ammunition (sustained rate) while still preventing effective return fire as the assault moves forward, the increased (rapid or cyclic [if needed]) rates as the assault nears the objective, and the lift and shift to targets of opportunity.

Most WSLs do not understand how or why they control

rates of fire. Rates of fire are given by the SBF leadership based on the enemy situation and the current phase of the assaulting element. Rates of fire are changed by verbal and non-verbal commands by the leadership. Machine-gun teams alter the number of rounds fired in each burst (i.e., sustained rate of fire is characterized by a 6-9 round burst every 4-5 seconds). Each rate of fire has a suggested burst count and suggested time between bursts and the suggested times for gunners to change barrels.

The FM gives a table as a guide for machine-gun teams to utilize during their SBF mission. SBF leaders and machinegun teams will operate with disciplined initiative to perform their mission and manage the ammunition requirements needed for the entire mission. A primary concern for the machine-gun team is running out of ammunition. All Army unit missions are planned and deliberate; therefore, units will ensure that their mission planning incorporates the resupply of ammunition and needed equipment for follow-on missions. Training units only focus on the basic load and do not request or have a plan to order or carry more ammunition based on the need to accomplish the mission. The SBF leaders will conduct the necessary analysis to ensure their Soldiers do not run out of ammunition during the mission.

Commanders will consider the assets needed for the SBF. An Infantry company should have six M240B machine-gun teams in the organization. Splitting the gun teams across the objective hinders flexibility and control for a SBF element. However, there may come a time when the enemy situation warrants SBF dispersion. The unit will then have to figure out how to employ, utilize, support, and resupply the machinegun teams. Some of the planning considerations include: time for the initial engagement to gain fire superiority, time to cover the breach team, time to cover the assault element establishing the foothold, and the shifting and lifting of fires to include the ammunition requirements for a counterattack. The planning considerations must include the basic load requirements, additional mission-essential ammunition that the unit must request and carry, and the approximate times the unit will take to conduct each phase of the operation.

The figure below is an example of how a unit may formulate a plan and establish a time table for a deliberate attack. The chart could be used to do the math required to forecast and plan ammunition requirements. Obviously, the availability of required ammunition and the enemy situation may limit or constrain the commander's plan which will have an effect on additional ammunition. Units will plan for and request the ammunition needed to accomplish the mission. Once additional ammunition is received, the unit will figure out the best way to accomplish the mission. If additional ammunition is received, the SBF leaders will consider how the elements will carry or cross-level additional ammunition across the SBF element. For ammunition shortages, the plan will have to be adjusted to ensure that the SBF element can still support the breaching and assaulting elements. Commanders will consider the reduction in the support for the assault, shift fires, lift fires, and counterattack ammunition to maintain the needed fire support during the most dangerous times in the mission. Resupply plans should focus on the timing of the resupply without disrupting the mission and still allow the SBF to continue to support the commander.

Communication

The WSL must understand the commander's intent and control the SBF element using disciplined initiative. The WSL must communicate effectively to the elements of the SBF, the commander, and the assault element. His ability to communicate is instrumental to the success of the overall mission. Rehearsing with the machine-gun teams and ensuring they understand the concept of the operation allows the WSL to control the SBF element during the mission. A gun team that knows to shift fires when the assaulting element reaches TRP #1 will do so without the WSL saying a

Gun #	Initial (20 sec)	Breach (45 sec)	Foothold (3 min)	Assault (3 min)	Shift Fires (3 min)	Lift Fires (as needed)	Ammo Needed for Mission	Additional Ammo Needed
1	Cyclic	Sustained	Rapid	Sustained	Sustained		1,541	341
2	Sustained	Cyclic	Sustained	Sustained	Sustained		1,533	331
3	Cyclic	Sustained	Rapid	Sustained	Sustained		1,541	341
4	Rapid	Cyclic	Sustained	Sustained	Sustained		1,566	366
5	Sustained	Rapid	Sustained	Sustained	Sustained		1,083	None
6	Cyclic	Sustained	Rapid	Sustained	Sustained		1,541	341

Example Plan for Establishing Time Table for Deliberate Attack

Notes:

1. The cyclic rate of fire for the M240B is 650-950 rounds per minute (RPM). The chart above uses an average of 800 RPM for the initial and breach calculations.

2. The cyclic rate of fire also calls for a barrel change after one minute of continuous firing, however, the gun would transition from cyclic to sustained reducing the number of barrel changes based on only shooting 1/3 of the 800 round belt.

3. The chart calculations are only an example of how a unit may plan a company deliberate attack. The enemy situation and target exposures will affect the amount of required ammunition. The commander may decide that the SBF will not need additional ammunition and adjust the planning times to accomplish each phase of the operation. The important aspect for rates of fire is the planning factors and considerations for the unit's leaders and SBF element.

4. Rehearsing the plan will assist the WSL to identify the best times to conduct the required barrel changes. This example of the detailed planning can be used to ensure the commander and the assault element is supported throughout the mission.

5. Basically, the formula starts by dividing the RPM by time.

single word. Rehearsals are paramount to an effective SBF machine-gun team.

The SBF internal communication will be challenging during the mission once the firing has been initiated. The WSL must select positions for the gun teams to provide the level of command and control necessary to accomplish the mission. The WSL must rehearse and practice the verbal and non-verbal signals for the mission. These rehearsals should be incorporated into the unit SOP and adjusted based on the mission given to the unit. In the event terrain does not allow for a desirable machine placement, the commander or platoon leader may elect to have the first sergeant or platoon sergeant help control a section of the machine guns.

The WSL will personally inspect the machine-gun lines of sight and fields of vision. Sometimes, there is a need for the machine-gun team to move to continue to support the operation. The machine gunner should immediately notify the WSL if the gun team cannot observe the necessary fields of fire. The AG may assist in directing the gunner to the appropriate targets as needed. The entire machine-gun team will echo fire commands and the gun status during the conduct of firing. Rehearsals and a shared understanding of the concept of the operation will assist the WSL in controlling communication, rates of fire, and when barrel changes should take place during the mission.

Elements separated by time or space are challenged by effective communication restraints. Communication between Soldiers, teams, elements, and leaders can present significant challenges during the operation. The commander must have a formal and rehearsed communication plan before executing the mission. The primary, alternate, contingency, and emergency (PACE) plan is critical to the success of the mission. The PACE plan provides a redundant ability to communicate across an objective and increases the probability of mission accomplishment. In many instances the following PACE plan will apply to many Army units: the primary method of communication could be a FM radio; the alternate method could be a handheld flare, star cluster, or smoke grenade; the contingency method could be a whistle, voice, or hand and arm signals; the emergency method could be a runner or messenger.

Leaders will account for distance between elements, terrain, and weather conditions when determining the most effective alternate, contingency, and emergency communication plans. Smoke and flares may be affected by timing and weather conditions; therefore, leaders must be cognitive of the environmental conditions. Units will plan for how they will send the confirmation signal. A parachute flare shot from the assault position should be echoed from the SBF position to confirm that the action resulting from the signal has been acknowledged or completed.

There have been some discussions of who initiates the signal in accordance with the PACE plan. Leaders from the SBF have initiated a shift fire for the machine guns on their own and without the commander or assault leader's knowledge. The assault element or the commander will initiate the decision for the SBF element to shift fires. The

commander, in his planning process, should consider surface danger zones (SDZs) and the appropriate time to shift and the lift fires on the objective.

Rehearsals continue to be an important theme in conducting a military mission. Just as the SBF, breach, and assault elements conduct a rehearsal, the devices used during a mission should also be rehearsed. Leaders must know how to activate the type of pyrotechnic device they will use on the objective. On many occasions, leaders fail to properly launch a star cluster flare because they have not been properly trained. Soldiers often throw the smoke grenade without pulling the pin.

It is important for leaders to employ a signaling device in the correct location. If the SBF is using smoke to signal confirmation of shift or lift fire, they must not throw it out in front of their position as the smoke will obscure the objective. The SBF element leader should throw the smoke laterally towards the assault element side of the SBF so the assault element can see the confirmation signal. The star cluster and parachute flares should be fired in a direction that will maximize the chances that the assault element or commander will see or hear it. Leaders should fire the flare so that it flies at a 45-degree angle across the objective. The assault element will be focused on the objective and more likely to see the flare.

Conclusion

Soldiers and units support each other while conducting military operations. In offensive operations, the SBF element is responsible for supporting the breach and assault elements and therefore perform mission-essential tasks during the mission. The SBF element's focus is to gain fire superiority and cover the maneuver of the assaulting force as it gains a foothold onto the objective. The enemy is presented with a complex dilemma when effectively engaged by the SBF element which helps the breach and assault elements in the performance of their duties.

Over the last 13 years, Army units have lost the experience and, therefore, the expertise of establishing and effectively utilizing the SBF in the conduct of offensive operations. This article discussed observed problems with SBF occupation, employment, fire control measures, rates of fire, and communication. We hope this article can serve as a basis of discussion for units and leaders to better prepare their units for combat operations around the globe.

As OCTs, SFC Conrad and SFC Tinsley have both observed more than 150 company and platoon live-fire exercises since May 2012.

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THE BASTOGNE FUSION PROCESS

A COMMANDER-CENTRIC APPROACH TO PLANNING AND DECISION MAKING

LTC SCOTT SENTELL LTC PHILLIP KINIERY

"Commanders are the most important participants in the operations process. While staffs perform essential functions that amplify the effectiveness of operations, commanders drive the operations process through understanding, visualizing, describing, directing, leading, and assessing operations."

- ADRP 5-0, The Operations Process, May 2012

n the spring of 2012, as the 1st Brigade Combat Team (Bastogne), 101st Airborne Division (Air Assault) prepared to conduct collective training prior to a deployment to Afghanistan, it was determined that the brigade staff needed to enhance the planning process to help gain a deeper understanding of the environment in a way that supported the brigade commander's personality and way of thinking. The brigade commander was concerned that traditional methods and processes did not account for the complexity of the Afghan environment. How would the staff decide when and where to apply resources and effort? In an attempt to contribute to the brigade commander's understanding the environment, the brigade staff developed a commander-centric approach we called the Bastogne Fusion Process (BFP). The brigade applied this process while deployed to Afghanistan from November 2012 until August 2013 as a security force assistance brigade.

Although the Army operations process provides a template for planning and problem solving with the Army design methodology and the military decision-making process (MDMP), the staff should tailor these processes with the commander's personality in mind to maximize mission command and his ability to balance the art of command with the science of control. The correct inputs and outputs, synchronized within a process, should align with how a commander internalizes understanding and how his visualization of the environment reinforces their decisionmaking methodology. The process should also deepen the shared understanding of the operational environment across



Figure 1 — The Bastogne Fusion Process

higher and subordinate commands to ensure that the unit's effort and resources are not applied against poorly defined problems.

The overarching goal of the BFP is to provide feasible solutions to complex, ill-structured problems, tailored to the commander's thought process. Throughout the development and execution of this process, the brigade staff determined that there are several characteristics that the Bastogne Fusion Process exhibits:

♣ Adapts to fit the commander's thought process and his decision-making horizons

♣ Allocates time; 75 percent is dedicated to preparation and 25 percent is dedicated to planning and execution

Accommodates short and long-term problem sets

♣ Ensures that actions are tied directly to a deep understanding of the environment (through iterative process)

Focuses on uncovering opportunities

♣ Avoids offering simple answers to complex problems; simple approaches are easy to understand, but often ineffective in execution

♣ Is resilient to friction and turbulence as friendly actions create new circumstances (intended and unintended) in the environment

✤ Utilizes comprehensive inputs from subordinate commanders and staffs to frame the problem set

✤ Changes conceptual thinking into executable orders; finds the critical transition point between conceptual and detailed planning

✤ Includes inputs that are designed to be intuitive, easy to use, and clearly understood down to the platoon

The BFP does not seek to replace design or the MDMP. Instead, it ensures that mission analysis is thorough and clarifies the problem set. Throughout numerous iterations of this process during the brigade's Mission Command Training Program — Brigade Warfighter Exercise, Joint Readiness Training Center (JRTC) rotation, and deployment to Afghanistan, the staff continued to refine the BFP to improve the understanding of the environment and describe it in a manner that resonated with the both the staff and the commander. This process also had to transform a conceptual plan into detailed executable orders for subordinate units and ensure that the action is being assessed appropriately in order to restart or continue the process with sufficient data points. Ultimately, the purpose of this paper is to show how the brigade staff accounted for the commander's personality in tailoring a planning and problem-solving process. In Afghanistan, where complexity and friction thrive at the crossroads of human and physical terrain, the staff validated the BFP and found it to be a sound approach to commander-centric planning and problem solving built on a deep and accurate shared understanding of the operational environment.

Defining the Inputs

The information that goes into any process — the inputs — must be carefully considered. One consideration used to determine the relevant inputs was to ensure we were not creating redundant reporting requirements for subordinate commands and staffs. The brigade commander's battle rhythm was used to identify those venues and existing reporting requirements as well as higher's battle rhythm to avoid overloading a subordinate staff officer with redundant reports. (It is no secret that a brigade staff can quickly overwhelm a battalion/squadron staff with reporting requirements that do not serve as valid inputs to a relevant process.) Once the standard reporting requirements were outlined, the staff identified efficiencies within those reports that would contribute to the brigade commander's visualization of the environment. The battle rhythm consisted of commander update briefs (CUBs), battle update briefs (BUBs), warfighting function (WfF) working groups (WGs), staff updates, and commander assessment briefs (CABs) — all designed to serve as inputs to the BFP.

Finding the correct inputs was a continuously evolving process that assessed whether or not the information requested actually benefited the BFP. Getting rid of a report or staff estimate which did not make sense was occasionally a significant emotional event for staff officers whom had adopted the processes from the previous staff or from a previous job. Inputs and venues must be synchronized and sustainable. They should contribute and be formatted to the brigade commander's visualization in order to gain efficiency in staff work. Additionally, understanding the impact a commander has on the operational environment while conducting deliberate/dynamic engagements and battlefield circulation is critical for the staff. Assembling the brigade staff with the commander following battlefield circulation is a technique the staff developed in Afghanistan. This meeting ensured staff situational awareness and prevented the development of divergent views of the operational environment. Initially, this meeting involved all brigade staff officers. However, with increasing requirements, only key or select staff officers were required for future meetings. In this case, the commander used his weekly staff update to provide insights to the remainder of the staff.

Framing the Problem

One of the primary characteristics that made the BFP successful is the integrated staff approach which fostered an environment where all participants were encouraged to challenge the status quo and question assumptions. The critical phase in the BFP — framing the problem — was the forum for such collaboration. Initially, this series of meetings with the entire brigade staff was frustrating and often did not produce the outputs desired. When trying to define a complex problem set, it proved to be difficult to identify a start point. As a result of trial and error, the staff determined that identifying the right contributors, proper framework, and an open mindset go a long way in making this key step successful.

In practice, the Design WG (see Figure 2) is a room populated by white boards with representatives from each staff section and interagency representatives. The rank of the participants was not considered a prerequisite for contributing. Instead, new and unconventional approaches are welcome in a generally doctrine-laced environment of post-Captains Career Course (CCC) and Intermediate Level Education (ILE) graduates. For example, it was noted that enlisted intelligence analysts had a deep understanding of a specific topic, ethnic group, or geographic location. Their perspectives were essential to developing a complete picture of the operational environment. In many cases, the non-combat arms officer, chaplains, and lawyers gave some of the best insights because they were able to widen the aperture and look at the operating environment through a different lens.

Meetings were also framed around a range of variables depending on the operating environment. For example, the operational variables - political, military, economic, social, information. infrastructure. physical environment and time (PMESII-PT) - worked to effectively describe an Afghan province or district. SWOT (strengths, weaknesses, opportunities, and threats) analysis was also used when attempting to describe a specific

Design Working Group					
Purpose: Understand the Operating EnvironmentFrequency: First day of cycleDuration: As neededLocation: Brigade conference roomChair: XOLead: S3Attendees: S1, S2, S3, S4, S5, S6, FSO, TGTofficer, S7, S9, SJA, MISO, PAO, MEDO, EW,PMO, BAE, ENG, ALO, CHAP, CA, Safety, S3Plans, EOD, ANSF/SFAAT representative, DoS	Proposed AgendaRoll call(S3)Intel update(S2)Operations update(S3)Commander's intent(S3)WfF updates(various)Framing discussion(ALL)				
Inputs: Current OE Assessment (S2) SIGACTs from previous cycle (S3) OPSUM from previous cycle (S3) CAB/CUB/BUB and CDR feedback (staff) Current staff estimates (WfF) Current campaign plan (S3) Current HNSF assessment (SFAAT CDR) Current PMESS-II assessment (S3) IIA assessment (S7) Media activity (PAO) Atmospherics (S9)	 Outputs: ▲ Refined IRs to battalions ♦ Proposed problem set ♦ Any recommended changes to commander's intent ♦ WARNO 1 				

Figure 2 — The Design Working Group (Framing the Problem)

element such as the Afghan National Army or a Taliban subcommander in the area of operation (AO). The method used to capture this critical discussion is not paramount. Instead, the staff should use the framework that will resonate the most with how your commander thinks and how he sees the environment. As conversations began to answer or describe the chosen variables, it became easier to identify the problem set and recognize those opportunities that clearly involve multiple variables. Through this process, the staff modified the endstate initially drafted by the brigade commander.

It is important that the staff not approach this process strictly within their WfF, but more like students asked to read a novel and then give their opinions and raw ideas; an informal discussion where new ideas were accepted instead of a canned briefing format. This approach enabled each staff member to draw from his background, education, and experiences rather than focusing narrowly within the WfF. The staff also understood that challenging assumptions and thoughts was highly encouraged because it forced members to come to the meeting prepared to defend their positions. These meetings were not one the commander would normally attend. On occasion the commander would sit in the back of the room to gain insight on discussions and thought processes but mostly he allowed the staff to continue to muddle through this phase and formally present the proposed problem set for approval.

Subordinate units played an important role in this phase as well. During the early stages of the framing phase, the brigade staff developed information requirements (IRs) based on gaps in knowledge of the environment. The staff would categorize these IRs along the same variables used to frame the problem (i.e., PMESII-PT or SWOT). Those IRs were immediately distributed to the battalions and the brigade staff relied heavily on their feedback to help achieve a better understanding of the environment. Bringing in this bottomup refinement early in the BFP was essential as it helped to validate thought processes and built credibility into the staff's recommendations to the commander.

Fusion

The next phase of the BFP is the process of "fusing" all of the data garnered from the previous framing phase. The inputs into this fusion phase included subordinate feedback to the IRs, a proposed problem set, recommended changes to the commander's endstate, proposed lines of effort, and draft opportunities. Within each line of effort, multiple opportunities were identified. These opportunities provided operational orientation for the brigade's efforts. It is through those opportunities for success that the brigade staff would apply the traditional MDMP resulting in a detailed order given to the subordinate units for action.

In the fusion phase, the staff refined the identified opportunities based on the staff's understanding gained during the framing phase. In preparation for the commander's review, the staff defined each opportunity in a written description of the current state of the environment that requires this action and the action being proposed. Also defined is the risk associated with this opportunity if not executed or executed ineffectively as well as identifying who owns "the fight" at each level. This helped to prioritize resources and establish unity of effort. It is important to note that a full course of action brief was not the target, but a one slide description that explains the opportunity (see Figure 3). In order to prevent wasted effort, the staff would not conduct any additional planning until the opportunity was approved and prioritized during the commander's decision brief.

The output of this phase was a written brigade narrative — not a PowerPoint presentation — that would be given

to the brigade commander for review prior to seeking a decision from him. The combined brigade narrative included a narrative from each of the battalion commanders and one from the brigade staff. In order to prevent the brigade staff from regurgitating what the battalion commanders were saying in their narrative, a proposed problem set, defined lines of effort and the opportunities that met the criteria of cross-cutting multiple lines of effort were presented in the narrative. The embedded battalion commanders' narrative was the forum for subordinate commanders to articulate to the brigade the current state of their operating environment and any emerging opportunities and exploitable networks (friendly, enemy, or mutually supporting). It was through this narrative format that the brigade commander could best internalize the information and would also act as the read ahead prior to our commander's decision brief in the following phase.

Deciding

Pinning down the commander in a combat environment for a decision is nearly impossible when he has not been given ample time to think. Creating a read ahead narrative - the combined brigade narrative - and a desk-side huddle with the deputy commander (DCO), executive officer (XO), S3, S2, and targeting officer prior to the formal decision brief was critical. This guick meeting helped the commander to focus on what decisions were being asked of him and when the decision was needed. The desk-side huddle also provided insight on where the brigade commander was leaning in regards to prioritization and approval of the opportunities which allowed the brigade staff to begin the initial steps of MDMP. It also provided insight on what opportunities were misaligned with the brigade commander's read of the environment. This normally led to analysis on additional opportunities that were not initially identified.

The brigade commander's decision brief (Figure 4) was the final step prior to moving into the MDMP with each opportunity. This brief involved all battalion commanders and brigade staff officers. This forum was not for the weak of heart; the staff would defend their product to the brigade and battalion

Brigade Opportunity (Example)			
Opportunity: Brief definition of the opportunity that outlines the current situation and illustrates how the opportunity will achieve the commander's endstate and contribute to the entire brigade operating environment.			
IRs: List of all information requirements associated to the opportunity			
Risk: 1. List of potential risks associated to the opportunity if executed or not executed 2. Risk 2 3. Risk 3 4. Risk 4			
Brigade fights: Identify brigade-level decisions and influence			
Battalion fights: Identify battalion-level decisions and influence			
SFAAT fights: Identify battalion-level decisions and influence			

Figure 3 — Opportunity Presentation Template

commanders so each fully understood the background and operational approach. Transparency between brigade and battalion staffs was essential and argumentative discourse was encouraged. The discourse that derived from this forum helped refine the brigade commander's planning guidance and approval of our operational approach. At the end of this meeting, the brigade staff would have prioritization on which opportunities to continue planning on and any adjustments to the problem set, lines of effort, or commander's endstate.

Planning and Execution

Once the commander decided on where to prioritize his efforts and apply resources, the brigade staff used the remaining 25 percent of time to conduct the more traditional MDMP steps. Mission analysis became more focused on the tangible aspects of resourcing the actions inside of the defined operational environment – facts, assumptions, tasks, and limitations - instead of trying to understand stakeholders, networks, and the human terrain. The majority of time was spent on course of action (COA) development. The benefit of the BFP up to this point is that the battalions were read in on the opportunities and in most cases developed them in conjunction with the brigade staff. This allowed for several efficiencies to include parallel planning and the brigade staff's ability to immediately request the enablers needed from the regional command headquarters. An additional benefit that inherently emerged from this process was that everyone on the brigade staff understood the intellectual underpinnings of the operation being planned and how it tied to the brigade's campaign plan. The output of this phase was an executable order (fragmentary order [FRAGO], operation order [OPORD], or concept of operation [CONOP]), directing subordinate units to take the necessary actions to achieve the commander's endstate.

Assessing the effects of the operation always created friction points among the staffs based on the read they were getting from the available data. Assessment working groups that involved every player in each current or completed operation were held (see Figure 5). The outputs of this forum

fed directly back into the BFP and the reframing process. It was in this meeting where planners discussed the relevance of the data being measured with an eye to ensuring it contributed to the planning process. This was generally a heated conversation that led to a better understanding for everyone as the environment continued to change based on our actions.

Success in the assessment phase is defined by the brigade commander's ability to articulate refined guidance to his subordinate commanders. Additionally, establishing the correct battle rhythm for the assessment phase is important to remain relevant in the current fight. However, the staff quickly determined that maintaining the same frequency of the meeting was less important than ensuring that the assessment measures were correct. As time passed, the environment changed and

Commander's Decision Brief					
Purpose: To present COAs and attain planning guidance for identified emerging opportunities Frequency: Last week of Bastogne fusion cycle Duration: 60 minutes Location: Brigade conference room Chair: B6 Lead: XO Attendees: Battalion commanders, SFAT team leader, S1, S2, S3, S4, S5, S6, FSO, targeting officer, S7, S9, SJA, MISO, PAO, MEDO, EW, PMO, BAE, ENG, ALO, CHAP, Safety, S3 Plans, EOD, ADS	Proposed AgendaRoll call(XO)Mission (revisit)(S3)Commander's intent(S3)Problem set statement(S3)Line of effort review(S35)Opportunity discussion(S35)For decision(BDE CDR)For guidance(BDE CDR)				
Inputs: B6 Narrative CONOPs for approval CONOPs for guidance	Outputs: ♣ Proposed changes to opportunities ♣ Planning guidance — prioritization ♣ FRAGO				
Figure 4 — Commander's Decision Brief					

became more complex as the actors in the system reacted to the brigade's actions. Changing a meeting time and the inputs from the staff and subordinate units are extremely disruptive, but it does ensure relevant meetings that focus on the changes that require updated assessment measures. Without adapting to the environment, meetings lose their substance and no one, especially commanders, will gain anything from the information being presented because it is no longer relevant to the environment.

The brigade staff designed the BFP to match the brigade commander's personality and benefits from an inherent ability to ensure that everyone gets all the information and data available. This was made possible because of the

physical structure of the fusion cell, also doctrinally called "plans." Only two areas existed in the brigade HQ: the joint operations center for current operations and the fusion cell for planning. Walls were literally knocked down and individual offices removed, preventing stove-pipe organization а among the staff and creating a bay office where every WfF section worked. Another technique used to ensure that information was disseminated as widely as possible was resourcing each battle space integrator (battalion), combat advisory group (company), and security force advise and assist team (SFAAT) with a video teleconference capability allowing for anyone to join any meeting to provide their direct input.

Assessment Working Group Purpose: The Assessment Working Group (AWG) analyzes **Proposed Agenda** operations over the last fusion cycle to determine whether the tasks Bastogne fusion status and desired effects outlined in priorities development were achieved (S35) (5 min) (MOPs). It further determines whether the desired effects had the Review commander's intent intended impact on the BCT's opportunities. The AWG acts as the (5 min) (S35) primary input to the Operations and Development WG where the BCT Definitions analyzes each LOE and their associated opportunities to determine their continued validity. (5 min) (S7) Combined priorities overview Frequency: Monday, 2nd and 4th week of 4-week cycle (5 min) (All) Duration: 1.5 hours Location: Brigade conference room Assessments review (40 min) (All) Chair: B6 Questions & closing comments Lead: ADS (5 min) (S35) Attendees: Brigade staff primaries, COMSDIR, FSO, ENG, ANA BDE SFAAT S3s, ABP Z1 S3, AOSC S3, AOSC S2, PRT, AOB Inputs: **Outputs:** INTSUMs/GRINTSUMs Recommended OPSUMs adjustments to current priorities 🜲 B6 vision paper Recommended new Measures of effectiveness (MOEs) priorities Measures of performance (MOPs)

Reframing and Frequency

At any point during the BFP, conditions on the ground were likely to change creating unforeseen circumstances. new opportunities. or а renewed understanding of the environment. The iterative design of the BFP allowed the staff to reframe if required. If there were no major changes in the environment, the staff would conduct the design working group on a recurring basis to determine if the key inputs -IR feedback, CUBs, BUBs, CABs — have revealed gaps in our understanding that require additional analysis.

Whether the output of the design working group is to frame an initial problem, to reframe based on changes in the environment, or to validate the existing opportunities determining the frequency of the BFP is important, but not paramount. The BFP may be conducted on a two, three, or even a four-week cycle or planning horizons with traditional "targeting meetings" occurring multiple times within each BFP cycle. Essentially, there is no defined cycle for the BFP. The environment and the brigade commander's personality will determine the necessary tempo of the process.

Conclusion

Throughout the development and implementation of the

Figure 5 — Assessment Working Group

BFP, the brigade staff found that many steps in the process were simply extensions of the way our commander viewed planning and problem solving. Challenging the status quo, questioning shallow assumptions, and adjusting the plan throughout execution were all characteristics that the staff had to adopt. In doing so, the staff gained a much deeper understanding of the environment and was able to develop more detailed solutions to complex problems. When finally presented to the commander as recommendations for decision, the gaps in understanding were narrower, confidence in the process was higher, and the desire for action was greater.

The Bastogne Brigade's 2012-2013 deployment to Afghanistan provided a unique opportunity to validate the Bastogne Fusion Process. The brigade's security force advise and assist mission created distinctive and nontraditional problem sets where a shared AND accurate understanding of the environment was essential to properly apply limited resources in a geographically complex region. The BFP became a collaborative and iterative approach that significantly altered the way the staff viewed planning and problem solving. The ability to become comfortable with being uncomfortable was essential in providing the commander the information he desired in a format that supported his thought processes. It is not expected that units will completely adopt the BFP as their method. Instead, it is our desire that this article has emphasized the importance of finding a process that your commander is comfortable with, addresses the complexities of the modern environment, and improves the ability to create a shared understanding. In the end, it is the active dialogue between commanders - company, battalion, and brigade and the staffs that highlight the benefits of the BFP.

ACRONYM LIST	
	FRAGO — fragmentary order
ABP — Afghan Border Police	FSO — fire support officer
ALO — air liaison officer	GRINTSUM — graphic intelligence summa
ANA — Afghan National Army	HNSF — host nation security force
ANSF — Afghan National Security Forces	IIA — inform and influence activities
AO — area of operation	ILE — Intermediate Level Education
AOB — advanced operating base	INTSUM — intelligence summary
AOSC — area of operations support	IR — information requirement
command	JRTC — Joint Readiness Training Center
AWG — assessment working group	KSP — kinetic strike package
B6 — Bastogne 6	LOE — line of effort
BAE — brigade aviation element	MDMP — military decision-making process
BCT — brigade combat team	MEDO — medical officer
BDA — battle damage assessment	MISO — military information support office
BFP — Bastogne Fusion Process	MOE — measure of effectiveness
BN — battalion	MOP — measure of performance
BUB — battle update brief	OE — operational environment
CA — civil affairs	OPORD — operation order
CAB — commander assessment brief	OPSUM — operations summary
CAP — crisis action planning	PAO — public affairs officer
CCC — Captains Career Course	PMESII-PT — political, military, economic,
CDB — commander's decision brief	social, information, infrastructure, physical
CHAP — chaplain	environment and time
CHOPS — chief of operations	PMO — provost marshal
C-IDF — counter indirect fire	PRT — provisional reconstruction team
C-IED — counter-improvised explosive device	SFAAT — security forces advise and assist
CNE — catastrophic negative event	team
COA — course of action	SIGACTs — significant activities
COMSDIR — communication director	SJA — staff judge advocate
COMSTRAT — communication strategy	SWOT — strengths, weaknesses,
CONOP — concept of operations	opportunities, and threats
CUB — commander update brief	TGT — targeting
DCO — deputy commander	TST — time sensitive target
DoS — Department of State	WARNO — warning order
DSLE — dynamic soldier leader engagement	WfF — warfighting function
ENG — engineer	WG — working groups
EOD — explosive ordnance disposal	XO — executive officer

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> A Soldier with the 1st Brigade Combat Team, 101st Airborne Division, mans an observation post in Nangarhar Province, Afghanistan, on 31 May 2013. Photo by SGT Margaret Taylo

Training Notes



CONTEXTUAL **T**RAINING FOR **J**UNIOR **L**EADERS

CPT CHARLES W. WOOD

hadn't heard the sound of incoming small arms fire zipping overhead in a few years and definitely didn't expect it on the second week of a deployment to Jordan. SFC Vincent Duenas and I were assigned by the Airborne and Ranger Training Brigade (ARTB) to work with the Asymmetric Warfare Group (AWG) by observing and advising the Jordanian Special Operations Command's (JORSOCOM) Ranger School. We weren't in an insurgent ambush, but on the opposite side of a hill that served as the crew-served weapons range for a unit training to support the United Nations in Africa.

"We go behind the truck," my Jordanian counterpart wisely suggested. It made me think of all the times I complained about the restrictions put on live-fire ranges. Perhaps those surface danger zones and maneuver lanes held some value. From our new vantage point, we were able to discuss with the Jordanians the tactical problems with using both sides of the hill as a range, how their army and culture was willing to accept more risk than ours, and also how the higher level decision to schedule simultaneous training affected us on the tactical level.

During the two months that SFC Duenas and I spent in Jordan, we learned invaluable lessons about Arab culture, advising foreign armies, and most importantly, thinking about the strategic effects of our actions. While the experience gained from this type of assignment is very valuable for us, it has incredible potential as an investment for the technical, cultural, and professional development of Army junior officers and NCOs in a future without combat deployments to Iraq and Afghanistan. Assignments like these will develop tactical proficiency, cultural awareness, and foster understanding of strategic initiatives.

SFC Vincent Duenas shows Jordanian Ranger instructors (RIs) techniques for a squad react-to-contact battle drill. The Jordanian RIs were eager to compare tactics, techniques, and procedures.

Photos courtesy of author

Our mission in Jordan was to foster relationships, enhance future partnerships, and to build cultural and tactical interoperability between ARTB and the JORSOCOM Ranger School. We conducted key leader engagements (KLEs) with Jordanian leadership, observed and advised the JORSOCOM Ranger instructors (RIs), and briefed the Special **Operations Command Central** (SOCCENT) commander on our accomplishments and proposed way ahead. Throughout the deployment, we worked with two operational advisors (OAs)



Jordanian Ranger students perform a hand-to-hand combat demonstration in preparation for graduation.

from AWG, who provided us with guidance and continuity. At the beginning of our time in Jordan, we spoke with both SOCCENT and JORSOCOM leadership to confirm the intent from both organizations. JORSOCOM wanted for us to be more hands-on with training and teach classes to the students while SOCCENT was leaning towards mentoring the instructors and setting conditions for an exchange program between JORSOCOM and ARTB. We decided to spend most of our time mentoring and observing the JORSOCOM RIs during their blocks of instruction while also teaching a few classes in order to meet the intent of both parties. Observing the RIs facilitated our assessment of what they needed to improve while teaching classes gave us a chance to show them techniques for planning, preparation, and execution of training.

Jordanian Ranger School is conducted roughly in three phases: individual skills, followed by collective tasks, and finally mountaineering and patrolling. Those phases blend together, and the class does not necessarily follow a set program of instruction (POI) from class to class due to several reasons, to include conflicting land reservations, visits by high-level commanders, and a recently implemented overhaul of the course. Their basic training program is not very robust (basic trainees may fire as few as three rounds through an M16A1 rifle), so the Ranger School POI is forced to focus on training the students on tasks that we consider very basic, such as loading and clearing a rifle. That being said, the RIs were very knowledgeable, and between them had a good understanding of battle drills, the orders process, and mountaineering techniques.

We quickly discovered our biggest challenges were going to be adapting to the Jordanians' culture. There was the obvious language barrier as well as a shorter work day. However, SFC Duenas and I found that the Jordanians were disciplined and eager to hear what we thought of their training. With that knowledge we saw the potential for significant improvements, but they would have to be based on conditions and not grounded in a time schedule. Throughout our time training with the JORSOCOM, we modified our plan — with the help of the AWG OAs — according to the changes they made to the POI. However, in the end we knew that our goal was to move towards the strategic-level change stated in our mission to build relationships, partnerships, and interoperability. With that in mind, we spent the majority of our time evaluating the focus of their school, laying the foundation for an exchange program, and preparing suggested changes for the JORSOCOM schoolhouse commander and SOCCENT.

During our two months in Jordan, we spent a relatively small amount of time advising the Jordanian RIs on tactics. However, that is not to say that we did not prepare to do so. SFC Duenas and I created and rehearsed classes on battle drills, movement techniques, and other basics. Sharing tactics, techniques, and procedures (TTPs) was also one of the best ways for us to build trust and spark interaction between us and the Jordanians. At the same time, it allowed us another chance to review and confirm our knowledge of the basics of small unit tactics. The Jordanian RIs had a high level of knowledge when it came to small unit tactics, which helped allow us to focus on improving the course within the context of the Jordanian culture.

Through our interaction with the JORSOCOM Ranger School leadership, we created a weekly report that detailed our observations and made one or two recommendations for them to consider. Those recommendations were then consolidated into a report that contained all of our observations, both positive and negative, and were given to the JORSOCOM schoolhouse commander. That may have been the most visible assistance that we gave, and we tried to give general ways to improve with a few specific possible courses of action. In the end, we were trying to avoid telling them what to do and instead suggesting ways for them to address issues that we had identified. There was personal value in creating the reports for me, as I endeavored to phrase suggestions in such a way that they did not portray the Jordanians negatively. They weren't doing anything specifically wrong; there was simply potential to improve the school. An example of this was shifting the focus of the course toward leadership. As Americans, we frequently tend to jump

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to the conclusion that the host-nation forces are incorrect or are making bad decisions instead of assuming that there is a reason why they operate differently. In stepping back from that notion and trying to stand in their shoes to look at any given situation, we were able to create suggestions in the reports that were courteous, honest, and easy or inexpensive to implement.

Along with tactical advice and recommendations for the JORSOCOM Ranger School, we were given the opportunity to be involved in implementing change in the big picture. Part of our mission was to set the conditions for an exchange between

the JORSOCOM Ranger School and ARTB. The program would potentially create a system for Jordanian RIs to come to the United States to seek education and on-the-job training with American RIs. The foundation for the program had already been laid by AWG and required us to provide recommendations as the subject matter experts as to why the program would be beneficial and why it is needed. If we report effectively on those issues, there is potential for a large step forward in the military relationship between the U.S. and Jordan, in the eyes of senior Jordanian commanders and SOCCENT leadership. Creating this report required us to brief officials at the embassy as well as the SOCCENT commander. Through this process, we learned valuable lessons about how to consolidate the information that we had learned over 50 days into a clear, concise report, I discovered how to tell the difference between issues that were only of tactical importance and those that were effective on strategic levels. It was difficult at first to focus on the big picture as SFC

If we, as an Army, are truly interested in preserving our lessons learned from Iraq and Afghanistan, then deployments that mirror our experience are a way that we can continue to maintain our ability to tailor plans to local cultures. This ability has taken us years to learn and could potentially be lost in only a few generations. Duenas and I had been measuring our success in the ability of our Ranger students to execute a raid or an ambush. Once we shifted focus from how many Jordanian Rangers could clear a malfunction to the relationship between the Jordanian and U.S. militaries, it became clearer what kind of observations and recommendations to include in our report.

Looking back at this experience, I realize that I gained experience that would be a valuable substitute for a young officer or NCO who may not deploy to a combat zone. As the Army will soon be populated predominantly by young officers and NCOs with

no experience working with foreign militaries, short-term deployments of this nature have the potential to mitigate the knowledge gap in three distinct ways. First, Soldiers deploying to foreign countries will be forced to become masters of small unit tactics. It may not be necessary to teach those tactics to the host-nation militaries, but this expertise creates credibility. As American RIs often discover, preparing for and teaching small unit tactics is the best way to learn and master them. With that in mind, not only will the host nation benefit, but the deploying Soldier can take that knowledge back to his unit.

The second value that this type of deployment presents is the ability to learn about and integrate with a foreign culture in a low-threat environment. Creating an understanding among young officers and NCOs about the cultural differences of foreign countries will help to posture the Army as a whole for future operations. Exposure to allied foreign nations allows these Soldiers to learn and grow with less serious consequences in the event a mistake is made. For instance,



SFC Vincent Duenas observes the Jordanian Ranger students during desert camouflage training.

more often than not, a Jordanian is understanding of an American who makes a potentially offensive cultural or religious error, but it may be damning to a young platoon leader while trying to win over an Afghan tribal leader. Even with SFC Duenas and me, it was eye-opening to see a moderate Muslim culture while in a relatively low-threat environment. Short-term advisor deployments like these can prepare our young leaders to better learn and understand the cultural and religious customs of wherever they are sent. It will also help to promote the Chief of Staff of the Army's (CSA's) goal of producing adaptive leaders for a complex world, as well as contributing to building a globally-responsive and regionallyengaged Army. If we, as an Army, are truly interested in preserving our



and conduct training. Learning these lessons helped us to not only think on how to improve the situation in Jordan, but also how to best effect positive change in our own units. In some cases, with this mindset we may even be able to create positive change on a greater scale beyond our company and battalion. With the right mentorship, being exposed to strategic leadership has the ability to create strategic-level thinking in our young officers and NCOs. Not only will they be able to explain to their Soldiers the effects of their decisions and the reasoning behind strategic-level initiatives, they will also be able to assist in creating solutions to complex problems, in addition to their influence on the tactical situation directly around them.

The author, CPT Charles Wood, observes an Australian rappel lane at the Jordanian mountaineering training camp. Mountaineering has a crucial role in building confidence in each of their Ranger students.

lessons learned from Iraq and Afghanistan, then deployments that mirror our experience are a way that we can continue to maintain our ability to tailor plans to local cultures. This ability has taken us years to learn and could potentially be lost in only a few generations.

Finally, the ability to think about the strategic effects of our actions is vital in both our ability to create plans and to explain why we are executing them. As defined in the CSA's Army Leader Development Strategy (ALDS), "strategic leader development includes opportunities to understand politicalmilitary relationships beyond the Army, to understand the global environment, to interact with high-level leaders and influential people, and to understand the context of defense policy making." Advising JORSOCOM and interacting with SOCCENT leadership allowed us such an opportunity. The OAs from AWG had extensive experience in thinking on a strategic level and tailoring reporting to influence the big picture, and were able to mentor SFC Duenas and me on how to influence strategic change. As RIs, we had a tendency to focus on how to improve the tactical proficiency of the Jordanian students. What we learned was that in order to create real change, we had to try to affect strategic-level goals. For example, teaching one Jordanian Ranger class how to conduct a raid would have had very little influence on the overall schoolhouse, whereas implementing the exchange program to further educate Jordanian RIs and encouraging the school to focus on leader development could have an impact on every Ranger who attends the course in the future. It helped us to realize why at times we must make sacrifices on the tactical level in order to effect strategic change. We were also able to see how the relationship between the United States and Jordan had an impact on how we could influence

Both SFC Duenas and I received a tremendous amount of professional development from this deployment. I discovered that what I assumed to be a few months of work for the sole benefit of the Jordanian Army was actually far more beneficial to me. We were able to confirm our knowledge of small unit tactics, learn about a foreign culture in a controlled environment, and learn how to think about the strategic impacts of our decisions. Short-term advisor deployments for young officers and NCOs paired with strategically-experienced mentors will benefit our Army in the future and will preserve some of the hard-learned lessons from Iraq and Afghanistan. We need to have tactically proficient leaders in order to make sound plans. Also, in accordance with the strategic context for unified land operations, political, economic, and social variables all must be considered in gaining knowledge of the operational environment. If we are to fight by this doctrine, we need to have officers and NCOs who are not only socially aware, but also skilled in tailoring plans to work within the environment of a foreign culture. Finally, we need officers and NCOs who can contribute more to our strategies and understand the strategic implications of their decisions.

Our short deployment to observe and advise the JORSOCOM Ranger School may serve as a blueprint for building these skills in the years following the eventual end of our actions in Iraq and Afghanistan.

At the time this article was written, **CPT Charles W. Wood** was a platoon tactical trainer in B Company, 5th Ranger Training Battalion at Camp Frank D. Merrill, Ga. He previously deployed as a platoon leader and executive officer with the 4th Brigade Combat Team, 10th Mountain Division in support of Operation Enduring Freedom (OEF) XI. He is a graduate of the U.S. Military Academy at West Point, N.Y., with a bachelor's degree in systems management.

DIGITAL LEARNING CONTENT FOR C-IED

CLIFF REPICKY BILLY MASSENGILL

The Maneuver Center of Excellence (MCoE) at Fort Benning, Ga., takes training very seriously and none more so than that related to the number one killer of Soldiers on the current battlefields worldwide. Current counter-improvised explosive device (C-IED) instruction provided at the installation includes a block on available training resources on the topic and directions on how to get them. Units that receive training and any "stay behind" material for unit trainers receive instruction on how to locate and access the material for future training as well as some best practices on how to best incorporate it in their training events.

The Instructional Technology Development Team (ITDT) with the technical assistance of the MCoE's C-IED training Team at Fort Benning recently

completed the development of several Digital Learning Content (DLC) products that can support the three learning domains (institutional, operational, and self-development). These digital training applications can be employed through commercial mobile devices supporting the Department of Defense's Bring Your Own Device (BYOD) strategy. The products can be utilized on unit kiosks, SmartBoards, or other computerized means to support the Army Learning Model (ALM).

These new products include MCoE "Smart" products that are mobile application releases of key C-IED training materials that make it easier for warfighters and leaders to

maintain 24/7 access to key training topics through the use of current smart devices. The product titles include the "MCoE Counter-IED Smart Guide" and the "Dismounted C-IED Smart Book." These two products are ideal for "white space" discussion topics or as a refresher/familiarization with key basic IED topics that apply across all OEs and not just Afghanistan.

The newest and most detailed product released is titled the MCoE Handheld Detector Interactive Multimedia Instruction (IMI). an application designed to support a blended learning program of instruction for future warfighter leaders at all levels. The IMI can be used to introduce/ familiarize the warfighter with key C-IED enablers as well as refresh or sustain knowledge on these systems. The IMI is divided into five modules, the first four covering predominant handheld devices



Figure 1 — Dismounted C-IED Smart Book Application

(HHDs) employed by the Warfighter that include the DSP-27, VMC1 Gizmo, VMR2 Minehound, and AN/PSS-14 as well as a fifth module covering the dismounted CREW system Thor III.

Sub-lessons are arranged in a logical progression and build upon skills and knowledge developed in previous sections of each module. They can also serve as refresher training for those who already have some experience with the systems, but haven't had recent "hands-on" experience with them.

- These include the topics:
- 1. Introduction and theory of operation
- 2. Prepare for operation

Figure 2 — Screenshot from MCoE Handheld Detector IMI



Figure 3 — Warrior University Website: www.warrioruniversity.army.mil

3. System controls, indicators, and operation

4. Troubleshooting

Interested leaders and trainers can find these products on the Warrior University website — www.warrioruniversity.army.mil. Access to IMI will require a CAC login or AKO user name and password. User/Download Note: Users can submit their feedback on the product in Warrior University. Your feedback helps develop better products that meet the warfighters' needs.

The ITDT has the ability to produce mobile applications, IMI, training videos, VBS 2/3 scenario's, and three-dimensional (3D) interactive models that can be used by students or the instructor in or out of the classroom. The products may be implemented on unit kiosks, SmartBoards, or other computerized means.

Commanders seeking development of DLC to support ALM should contact the ITDT located in McGinnis-Wickham Hall. The point of contact for product development is Dr. Roy Elam, chief of the ITDT, at roy.m.elam.civ@ mail.mil or (706) 545-8828.

Cliff Repicky is currently serving as a C-IED analyst/ training developer on the Individual and Systems Training Division/Systems Training Branch, MCoE C-IED Team. His previous assignments include serving as an instructor on a Long Range Advanced Scout Surveillance System (LRAS3)/Driver's Vision Enhancer (DVE) mobile training team with Omega Training Group, Iraq; and IMI development team-11B Infantry subject matter expert with Omega Training Group, Columbus, Ga.; and an 11B senior instructor, NCO Academy (Advanced NCO Course/Senior Leaders Course), Fort Benning.

Billy Massengill is a training specialist with the MCoE's Directorate of Training and Doctrine, Training Development Division, Systems Branch, Instructional Technology Development Team, Fort Benning. His previous assignments include serving as a training specialist, Simulations, Fort Knox, Ky., and as an instructor for the Maneuver NCO Course and Basic NCO Course at Fort Knox. He retired as a SFC in 2003 after serving 20 years as a 19D Cavalry Scout.

APPS, MULTIMEDIA, AND TRAINING VIDEOS

Fort Benning's mobile development team with the Directorate of Training and Doctrine (DOTD) has developed a series of training applications and assorted multimedia. Publicly accessible apps include Recognition of Combat Vehicles (ROC-V), Jumpmaster Study Guide, Ranger Handbook, and MCoE Arab Cultural Awareness Application. Additional apps and Interactive Multimedia Instructions (IMIs) are available to those with Common Access Card (CAC)/Army Knowledge Online (AKO) users; these include Preliminary Marksmanship Training, Route Recon, Winter Warfare, Bradley Preventive Maintenance Checks and Services (PMCS), and Air Ground Operations. For a complete list and more information on these applications, go to: http://www.benning.army.mil/mcoe/dotd/apps/.

GERMAN HEAVY BRIGADE ATTACKS

THE CONCEPT OF CAPABILITIES DEMONSTRATION EXERCISES IN THE CONTEXT OF LEADER DEVELOPMENT

MAJ JENS-UWE ROHRMOSER, GERMAN ARMY

"The Capabilities Demonstration Exercise is of crucial importance for the German Army ...

"We are an Army constantly on deployment, and we have gained considerable experience on operations abroad, a good share of which also in combat operations. Every year we get new soldiers, and we want to familiarize them with the character of a deployment Army as quickly as possible. That is why we show them those live vignettes during their professional development training in order to purposefully prepare them for future deployments."

> - LTG Werner Freers Chief of Staff of the German Army, 2011

he German armed forces started a process of transformation in 2011 in order to better prepare for possible future challenges. This process is known as "Army 2011," marking the year when it was initiated. A reduction in numbers should not lead to a reduction in capabilities and combat power; on the contrary, the new, leaner structure is aimed at improving the combat effectiveness of the brigade level, which is to become the core element in future deployments.

The German Army is no longer the only service conducting land-based operations. The Joint Support Service, established in October 2000, plays a vital role in

a firepower demonstration.

supporting the Army during operations at home and abroad. Consequently, the German Chief of Defense decided in 2012 that, instead of conducting separate demonstrations for the Joint Support Service and the Army, he wanted to use a more realistic scenario in which both services demonstrate their capabilities jointly.

The Army Chief of Staff tasked Armor Demonstration Brigade 9 (located in Munster, northern Germany) to represent the Army during this joint demonstration and showcase all aspects and capabilities of a modern army brigade.

The target audiences were mainly young leaders (officer candidates and lieutenants), participants of the National and International General Staff Course, as well as high-ranking officials from the German armed forces and our allied partners.

Historical Excursion

Back in the 19th century, officers and NCOs were sent to so-called "Lehrbataillone" (demonstration battalions) on a temporary basis in order to practice exemplary training and tactical behavior or to test new materiel, force structures, and tactics. Finally, these new insights were then demonstrated to representatives of higher commands, international guests, and students of the Army Officers Academy.

While the *Reichswehr* (1919-1935) did not have such units, the *Wehrmacht* (1935-1946) embraced this idea and used it to develop ideas for highly mobile warfare (better known by the unofficial name "Blitzkrieg tactics"). The *Bundeswehr* (1955-present) adopted this principle and transformed it several times. During the past 10 years of constant overseas deployments, the former Lehrbataillone have had a double role as demonstration units and as operational units. Although the principle of demonstration exercises remains and has since been conducted by rotating army brigades, these battalions were officially stripped of their demonstration tasks during the most recent army restructuring.

Leader Development and Capabilities Demonstration Exercises

Since 1995, the German armed forces have been engaged on a larger scale in stabilization operations ranging from the Balkans to Afghanistan. It is quite obvious that some deficits (e.g., in large-scale combined arms and highintensity combat operations) have become apparent over time. Generations of young German leaders have never experienced such military operations and have therefore no clear picture in mind when it comes to applying the necessary skills.

As the armed forces are downsizing and looking for new ways of efficiency, large-scale exercises will become rare. Furthermore, the German Army Chief of Staff wanted to have certain standards and standardized live vignettes to provide Army leaders with.

Consequently, the tradition of capabilities demonstration exercises was used to not only show the latest developments in technologies and tactics, but to give leaders of all echelons the opportunity to hone their professional knowledge and regain lost skills through watching situation vignettes.

The overall scenario named "Obsidia" is the common basis for all tactical scenarios at Germany's Army Officers Academy and at the Armed Forces Command and Staff College. It is also well known throughout the German Army as a basic scenario for all training projects and exercises.

Ideally, the students at the Army Officers Academy have already had their first staff exercises and battlefield tour based on this scenario. During the demonstration, they will be shown what all the things they have learned look like in reality. With these fresh impressions in mind, they will then go back to their academy and conduct their final simulation-based command post exercise, hopefully with a better understanding of what high-intensity warfighting could look like.

The 2013 Joint Capabilities Demonstration

Exercise

"The Capabilities Demonstration Exercise is an excellent learning tool: its images and sounds have a formative effect on the spectators."

> — LTG Werner Freers Chief of Staff of the German Army, 2011

German soldiers participate in a firepower demonstration.

This exercise was the first joint showcase in the history of the German armed forces and consisted of 12 different stations to show the joint capabilities in land-based operations to the audience.

Two rotations were conducted, each lasting two days, with six stations per day.

The stations were:

- 1) Dynamic display
- 2) Forward operating base
- 3) NBC (nuclear, biological, chemical) event
- 4) Logistics in theater
- 5) Convoy operations
- 6/7) Static display
- 8) Brigade command post and network operating center
- 9) Combat supply operations
- 10) Battalion command post
- 11) Medical role 1
- 12) Live-fire exercise (LFX)

The highlight every year is the live-fire exercise conducted at Europe's largest LFX training area, the NATO Training Area Bergen in northern Germany. As the culmination of the overall exercise, this LFX incorporated and/or referred to all other stations that have contributed to a better understanding of the battle. Therefore, the LFX was the best showcase when it came to the capabilities in land-

Figure 1 — Overview of Exercise Situation

based operations in the framework of Army 2011.

Situation — The exercise's overall situation described a conflict between two states of which one is part of an overarching alliance while the other one is relatively strong militarily but economically weak. The scenario led up to a high-intensity conflict including the civilian population and a hybrid threat in the given area of operations. A mechanized enemy with modern equipment is attacking along two axes of approach from the north in order to gain control of his southern neighbor.

The multinational alliance is conducting a delaying operation with two brigades abreast while the division reserve, a mechanized infantry brigade, is preparing for a counterattack. In order to shape the battlefield for this brigade-size counterattack, the enemy has to be stopped at a certain line and his combat strength has to be reduced by a certain degree. To reach this mission objective, the

X

Figure 2 —

Battalion

Structure

commander of the left brigade has decided to conduct a battalion-scale counterattack against opposing forces. This counterattack is the scenario on which the LFX is based.

Force Design — The new German Army structure provides for a strengthening of the brigades by adding a new light and/or mechanized infantry battalion in order to improve combat effectiveness and long-term sustainability for future operations within the framework of stability operations.

Battalion Structure — The structure of the battalion-size task force is derived from the brigade structure. It reflects not only the capabilities of a mechanized brigade, but also incorporates assets that have been newly assigned to the division level such as joint fires.

Sequence of Events — The previous stations prepared the audience for the battle demonstrated in the LFX by leading them from the beginning of the delaying operation to the very last moment in the command post before the counterattack begins. Therefore, all scenarios shown at the individual stations are grounded in the overall scenario, fit into the timeline, and aim to show the complexity of modern mechanized highintensity warfare.

Technical Remarks — In order to give the audience the best possible impression, all tactical communication was carried out uncoded and transmitted to loudspeakers at the platform. Helmet-mounted cameras and dismounted mobile camera teams were used to give detailed impressions of complex and sophisticated situations by transmitting them to TV screens in front of the audience.

The Battle — In order to have a solid situational awareness, reconnaissance was conducted in every phase, especially during the movement to contact.

The brigade commander used his light and medium reconnaissance forces as well as mediumrange (MR) unmanned aerial systems (UASs) for gathering information about the opposing forces long before the actual battle began. The resulting intelligence was then communicated to his subordinate units.

The battalion commander used his own assets — shortrange (SR) UAS, recon platoon, and his preliminary forces — to consolidate and update the intelligence obtained and to provide an operational picture to his subordinate units.

During this reconnaissance, a platoon-size regular formation — along with irregular forces and civilians — was spotted in the village (Heidedorf), north of a chokepoint the battalion had to pass. The commander decided to pass this enemy formation quickly on their right flank, leaving this enemy to the follow-on forces in order to rapidly close in with the enemy's main force.

While conducting this maneuver, the armor company ran

into an undiscovered minefield at the chokepoint and received heavy small arms and rocket-propelled grenade (RPG) fire from the village northwest of their position. The following mechanized infantry company was immediately tasked to provide flank cover and support by laying fire on the enemy formations in this village.

While the armor company returned fire and the mechanized infantry company moved into position, the battalion commander decided, in order to regain the initiative, to outflank the enemy on his respective left flank and engage his position in the village. He tasked his second mechanized infantry company and his attached light infantry company to conduct a short flanking maneuver while his recon platoon provided intel with the SR UAS and dismounted recon teams.

The mechanized infantry company, reinforced with a tank platoon, led the attack on Heidedorf, followed

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by the light infantry company, while the enemy returned fire with RPGs and small arms and used prepositioned improvised explosive devices (IEDs) to defend positions. The mechanized infantry company on the hilltop provided the necessary flank cover, mainly with the sniper squad, while the infantry destroyed the enemy line defense in close combat, minimizing civilian casualties.

As the battalion maneuvered into position and attacked the enemy in close combat, the brigade recon assets spotted enemy formations closing the distance and moving into position to open fire. The battalion prepared for a second line of defense. The brigade commander therefore ordered to destroy these enemy formations. While the artillery UAS provided real-time information on the enemy, the attached artillery battalion destroyed them with howitzers. Simultaneously, a swarm of Tiger attack helicoptersdestroyed armored formations with anti-tank guided missiles (ATGMs) and infantry formations with both heavy machine-gun fire and unguided missiles.

After destroying the enemy in Heidedorf, the engineer company moved into position to clear the minefield in front of the armor company. Meanwhile, the attacking infantry forces maneuvered into position to consolidate their gains and prepare for the continuation of the attack. The Tiger helicopters continued to provide long-range fire support, disrupting enemy forces in the depth of the battlefield.

While the enemy continued to maneuver and try to

establish a second line of defense, the engineer company managed to clear a path through the minefield, allowing the armor company to pass the chokepoint and to reengage the enemy.

After securing the village and clearing the chokepoint, the battalion commander ordered his units to engage the enemy with the reinforced armor company in the main effort of this attack. While the main effort is in the center, the battalion commander issued warning orders to his mechanized company to be prepared for flanking maneuvers on both sides and ordered the artillery to deal with the enemy in the depth. The battalion reconnaissance company provided flank cover and intel with their SR UAS.

With overwhelming fire and maneuver from multiple directions — in close coordination with indirect fire provided by attack helicopters, howitzers, and at very long distances by artillery rockets — the forces disrupted the enemy and set the stage for the division counterattack later on.

While all this happened in the depth of the battlefield, the light infantry company exploited the gains in Heidedorf, working closely together with elements of the Joint Support Service (such as military police, psychological operations, and civil-military cooperation elements) to fight against the last remnants of the regular and irregular forces in the village. They also cleared a helicopter landing zone for medical evacuation elements and coordinate the materiel evacuation to the logistical facilities both seen prior to the LFX

Summary

The final LFX was designed to show a heavy brigade of the German Army 2011, reinforced by elements of the Joint Support Service and the Joint Medical Service, in a high-intensity conflict. During this culminating point of the overall exercise, the audience should have witnessed the close coordination of fire and maneuver at all echelons, joint fire support, and combat and combat service support acting closely together against a hybrid threat. They should have also witnessed the importance of reconnaissance at all echelons and in every stage, and the close coordination between reconnaissance, joint fire support, and fire and maneuver at all times and at all echelons. Finally, the audience should have witnessed leadership during combat operations; for example:

- Leading upfront and by example,
- Executing mission command at all levels (Auftragstaktik),
- Taking action and gaining the initiative,

• Demonstrating sound understanding of the capabilities of the fielded elements even at the lowest level.

German Army Major Jens-Uwe Rohrmoser is currently serving as German liaison to the U.S. Army Infantry School. In his last assignment, he served as the battalion deputy commander of the Mechanized Infantry Demonstration Battalion 92, which planned and executed the 2013 live-fire exercise discussed in this article.

Book Reviews

In the Gray Area: A Marine Advisor Team at War By Seth W. B. Folsom Annapolis, MD: Naval Institute Press, 2010, 196 pages Reviewed by LTC Keith Everett

U.S. Marine Corps LtCol Seth Folsom started his first week as an advisor to the Iraqi Army with an accidental shooting incident where one Iraqi soldier held an AK-

47 up to another soldier's ear and pulled the trigger as a joke. Since weapon safety is so basic, this incident and others like them clearly highlight how huge an advisor's job was in Iraq. Folsom began his time as an advisor with a somewhat pessimistic view towards the task. After his year in Iraq, he left the country with that same pessimistic view, but with concrete examples to support it. The strength of his story are the many examples of what an advisor was tasked to do in Iraq and how he accomplished some things but failed at others.

Before deploying, Folsom completed six weeks of advisor training, which revolved around tactical training and culminated in a three-day exercise called "Mojave Viper." Folsom provides a sparse outline of this training and also discusses the training he received in-country through the Phoenix Academy. Folsom describes this training as six days of substandard training given by contractors.

This story touches on the role of advisors in the counterinsurgency effort in Iraq and is compiled from Folsom's deployment journals, after action reports, and discussions he had with his team. Part of his preparation for his second deployment to Iraq was reading reports of the kidnapping and execution of an Army transition team in Karbala in 2007. Transition team operations are not for the faint of heart and require flexibility and adaptability as well as other capabilities picked up along the way.

The short, concise chapters each contain nuggets of information on how to adapt to the environment — from surviving the blinding sandstorms (aajaaz) to the various ways and means of establishing relationships with the Iraqi soldiers. This war memoir is a solid introduction to the life of an advisor in Iraq, with the proviso that the situation varied from place to place in Iraq and the situation was constantly changing as time passed. I would recommend Folsom's book for anyone wanting to supplement reading on an advisor's role in Southwest Asia.

The Quiet Professional: Major Richard J. Meadows of the U.S. Army Special Forces By Alan Hoe Lexington, KY: University of Kentucky Press, 2011, 253 pages Reviewed by LTC (Retired) Rick Baillergeon

In every profession, there are those select people who have established themselves as legendary figures. Within the circle of U.S. Special Operations Forces, Richard "Dick" Meadows is a celebrated Soldier. For those unfamiliar with his career, his credentials are incredible. These include achieving the rank of master sergeant at age 20 (the youngest at that time), becoming the first U.S. Army NCO to serve with the British Special Air Service (SAS) regiment, participating in numerous behind-the-lines operations in the Vietnam War (leading to a battlefield commission), and serving as a team leader in the Son Tay Raid. Additionally, after retiring from the Army, Meadows was a special consultant and conducted covert reconnaissance during the Iran hostage rescue mission. Clearly, Dick Meadows should be known and admired by a far greater audience.

Author Alan Hoe has filled this void with his excellent biography of Meadows appropriately entitled, *The Quiet Professional.* Within its pages, Hoe provides readers with a detailed perspective of the life and career of Meadows. Obviously, Hoe keys on the above achievements of Meadows; however, he also delves into the personal live of Meadows and his relationships with friends and family.

Hoe is uniquely qualified to craft a biography on Meadows for several reasons. First, he was a close friend of Meadows for 35 years and was asked by him to write this biography. Second, Hoe understands the world Meadows operated in since he is a retired British Army special forces soldier. Finally, he has written (or co-written) several acclaimed books including a biography on famous British Special Forces Colonel Sir David Stirling. It is a background and skill set Hoe deftly utilizes throughout *The Quiet Professional*.

From start to finish, Hoe has organized a volume which will hold the attention of any reader. Certainly, he has much to work with; clandestine operations in Vietnam, the Son Tay Raid, Operation Eagle Claw (the Iranian hostage rescue mission) each in themselves are highly captivating. Combine them was other intriguing stories and you have a gripping and highly readable book. Of course, it takes a talented author to put it all together, and readers will agree Hoe is unquestionably gifted.

The clear strength of *The Quiet Professional* is the words of Meadows himself. As addressed earlier, Meadows asked Hoe to pen his biography and made himself available for hours of interviews. Hoe utilizes these words to provide readers unique details and perspectives on the missions Meadows participated in. For those with prior interest and knowledge on the aforementioned operations, Meadows' thoughts will fill in some blanks and in some cases, "tell the rest of the story."

Before starting *The Quiet Professional*, readers must understand what this book is and just as importantly what it isn't. Hoe's objective is to introduce a new audience to Dick Meadows and celebrate his distinguished career. Those looking for a biography which may provide any "warts" Meadows may have had in his life are not going to find them. Hoe focuses on the positive and in today's world of journalism I found it refreshing. Perhaps Meadows did possess some warts along the way. However, all things I have ever read indicate he was an extremely rare man in that regard.

You must give credit to Alan Hoe in writing a biography on a close friend. This is a difficult undertaking, and the end result is often a volume lacking in substance or containing information only of interest to the author. Hoe surely meets the challenge though. He has written a book which is substantive, informative, and highly readable. More importantly, *The Quiet Professional* is a fitting tribute to a true legend.

War on the Run: The Epic Story of Robert Rogers and the Conquest of America's First Frontier By John F. Ross NY: Bantam Books, 2010, 549 pages Reviewed by BG (Retired) Curtis H. O'Sullivan

generation of Americans

thought that Robert Rogers looked like Spencer Tracy at the start of "Northwest Passage." There are no surviving pictures of him, but it is unlikely there was much similarity. Rogers was a rugged, six-foot, scarred (from wounds and smallpox) backwoodsman. In *War on the Run*, author John Ross gives a good verbal portrayal of Rogers — warts and all. Not all of his campaigns were successful and some of the fault lay with him. He was twice in debtors' gaol (jail) for being careless with his accounts. This didn't have quite the stigma you might expect. (Robert E. Lee's father, Light Horse Harry, was incarcerated under similar circumstances.) He was once charged and tried for treason. Although he was acquitted, the case is reminiscent of the Burr-Wilkinson case a bit later.

Disturbing to some is that he remained loyal to the Crown during our Revolution. After all, he was a half-pay British officer. Also, it should be remembered that about one-third of the population was loyalist Tories, one-third patriot rebels, and the rest neutrals who said a pox on both sides and went their own way. Little known is that when he was recalled to the British army, he served in counterintelligence and was responsible for the capture and execution of another American hero — Nathan Hale.

Ross gives a vivid account of Roger's various campaigns and journeys. The book reads like a novel, and the reconstructed part may be fiction but is based on solid research. Although I knew the broad outline of the stories, I was kept in suspense.

The addition of a dramatis personae is a little unusual but was helpful. On the other hand, the chronology was much too brief. The maps supplemented the text. It is not only the story of the man, but a good summary of the history of the era. I highly recommend to anyone with an interest there. It is fairly long, but there is much new (or with a new angle) to warrant reading it.

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