

Training for Decisive Action Stories of Mission Command

**Collected Insights from Commanders and
Leaders on their Experiences at the
National Training Center**



**Combat Studies Institute Press
US Army Combined Arms Center
Fort Leavenworth, Kansas**

Cover: Donovan Main Battle Tank at Sunset.
Courtesy Blackhorse PAO

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Stories of Mission Command

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Publisher's Note

This anthology of senior participants' observations of the Decisive Action Training Environment serves two functions. First, it is explicitly a teaching tool for the operating force to use in preparing commanders and units for an expeditionary future against a hybrid threat. Second, it is itself an artifact, reflecting the current understandings of Army doctrine by its practitioners during a time of turbulence in the force, uncertain resources, and a comprehensive re-engineering of that doctrine. For that reason, some usages may not perfectly accord with doctrinal definitions, and others are not found in doctrine at all. We have nevertheless chosen to retain them for the reader's benefit as an indirect lesson on the complexity of the Army's task going forward from the wars in Iraq and Afghanistan.

Foreword

“Those who cannot remember the past are condemned to repeat it” and “only the dead have seen the end of war” are famous quotes by George Santayana. These are the driving forces for military professionals to study the craft and learn from those leaders before them. As we emerge from a period of one specific type of conflict, we as a military must retain the lessons from the last 11 years of conflict and remember the capabilities we trained so intensely on that prepared us for the initial interventions into Iraq and Afghanistan.

To echo the recently published Army Regulation 350-50, the Combined Training Centers (CTCs) are the “engine of change” for collective training in the Army. At the National Training Center (NTC), we are committed to ensuring that the learning and experience gained from completed training rotations set new goals for sustainment and improvement in training and operations that apply across the force. The lessons learned over a decade of combat experience in Iraq, Afghanistan and elsewhere in support of the Global War on Terrorism remain relevant as our Nation’s Armed Forces seek to transition. But these lessons must be built upon those fundamental competencies of offensive and defensive operations that have atrophied over that same time. The newly implemented Decisive Action Training Environment presents that complex environment where the core competencies of combined arms maneuver and wide area security must constantly be balanced by agile commanders through the execution of mission command. The introduction of a realistically complex, wicked problem environment offers iterative training opportunities that bolster the need to constantly build upon the observations of completed rotations.

The National Training Center has executed five rotations in the past 18 months. The following compendium offers a collection of stories from leaders that have grown out of those rotations. It focuses on all levels, and is a complimentary volume to the *66 Stories of Battle Command* written following the 4ID and 1st Cav rotations of the late 1990s. These stories are a compelling mix of universal challenges and the new complex threat. They will undoubtedly be a wellspring of learning over the next few years. In coordination with our partnered Brigades that executed these rotations, Operations Group and the NTC presents these anecdotes as we strive to meet our Chairmen’s vision of leading “the Army’s transition to unified land operations” and enabling dialogue and learning that will “identify innovative training methods to reduce overhead without sacrificing training quality, standards or outcomes.”

Colonel Paul Calvert
Commander, Operations Group
National Training Center

Acknowledgements

The genesis of this project came from the original *66 Stories of Battle Command* published by the School of Command Preparation at Fort Leavenworth. As a Squadron Commander, I was introduced to this product by my brother Squadron Commander, Lieutenant Colonel Brian Robertson, the commander of 2/11 ACR. We each used this as a tool to break the mentality of being a road based organization and train our force on the use of terrain, movement and maneuver.

To General (Retired) William Wallace who contributed to the original 66 Stories and served as a mentor to Lieutenant Colonel Robertson and myself. Thanks for his continued contribution to the Nation and the Army particularly in the field of leader development. His contribution to this current effort recognizes the value of these stories as well as the importance of learning from the past.

The Bronco Brigade Training team use the original *66 Stories* as part of our dialogue with units during their preparation for their rotations as a tool to understand the terrain and complexities of a decisive action fight. Following rotation 13-03, we decided to attempt to capture some of the nuances of this new complex threat and how units manage the simultaneity of combined arms maneuver (CAM) and wide area security (WAS). The Armored Brigade Combat Teams (ABCT) of today has vastly greater capability with the systems and enablers than the forces of the late 1990s and the Advance Warfighting Experiment (AWE). Integrating these capabilities to deal with the complex threat is daunting without a frame of reference. This product is meant to provide some context and dialogue from the leaders that wrestled with these challenges.

Special thanks to Lieutenant Colonel Robertson for bringing this product to the National Training Center. To the Blackhorse Regiment, 1st Squadron, 2nd Squadron, and RSS and their leaders that trained an incredibly capable Contemporary Operating Force (COEFOR) and environment. To Operations Group that partnered with these Brigades to bring out the challenges, provide coaching and pushed to make them better every day. Thanks to the Bronco Team for the assistance in operationalizing this concept and assisting the units and leaders in telling their stories.

Most importantly, to the Commanders, leaders, staff and Soldiers of the 3d Brigade, 3d Infantry Division; the 1st Brigade, 4th Infantry Division; the 3d Brigade, 1st Cavalry Division; the 2d Brigade, 1st Infantry Division; the 2d Brigade, 4th Infantry Division; and the 11th Armored Cavalry Regiment. Thank you for sharing your trials, tribulations and successes with an audience hungry for knowledge.

Finally, thanks to the editors and writers, Major David Violand, Major Andrew Futscher and Major Thomas Laybourn that brought this project to life.

Colonel Christopher M. Doneski
Senior Brigade Trainer, Operations Group
NTC Bronco 07

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Illustration of the National Training Center: Western Half

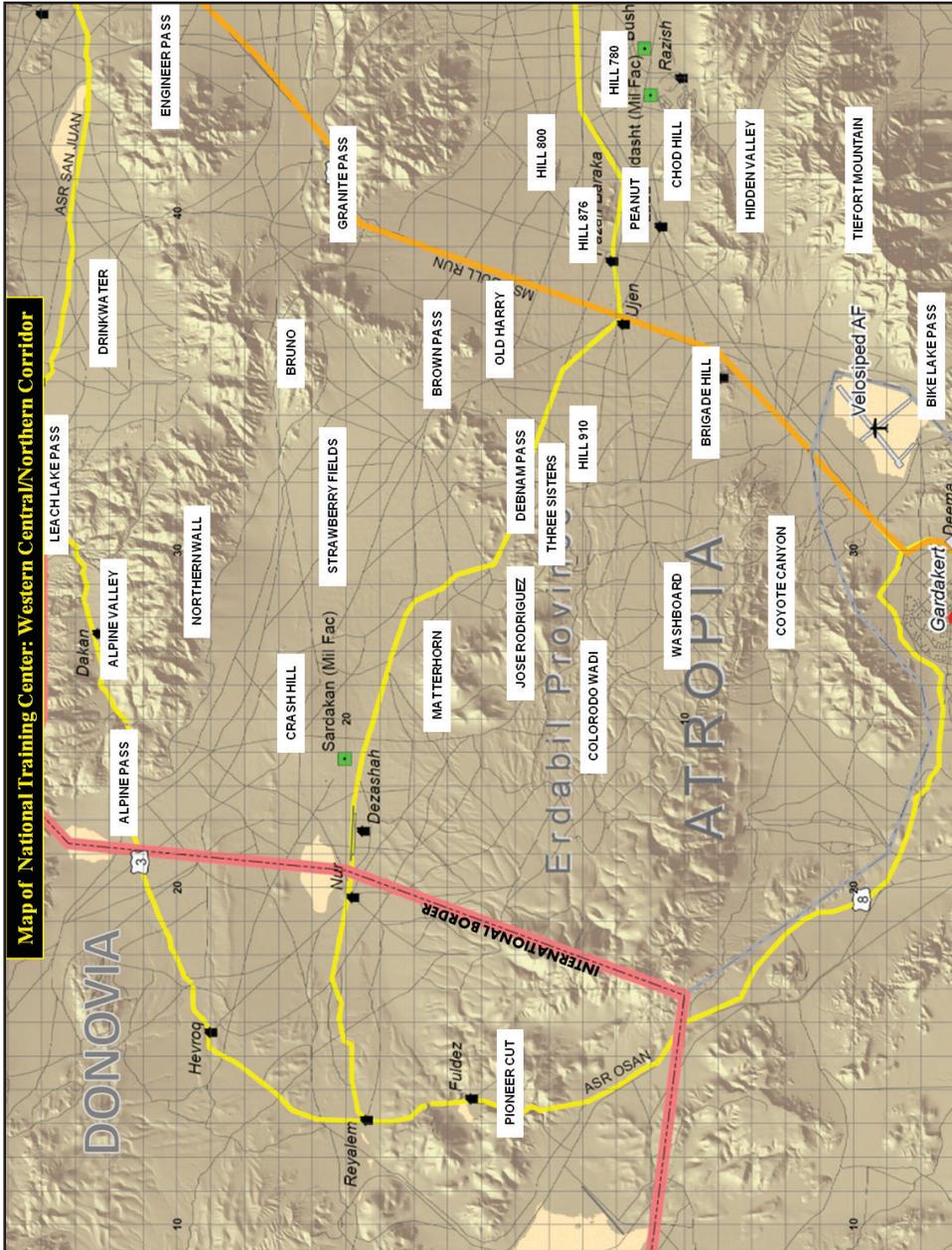
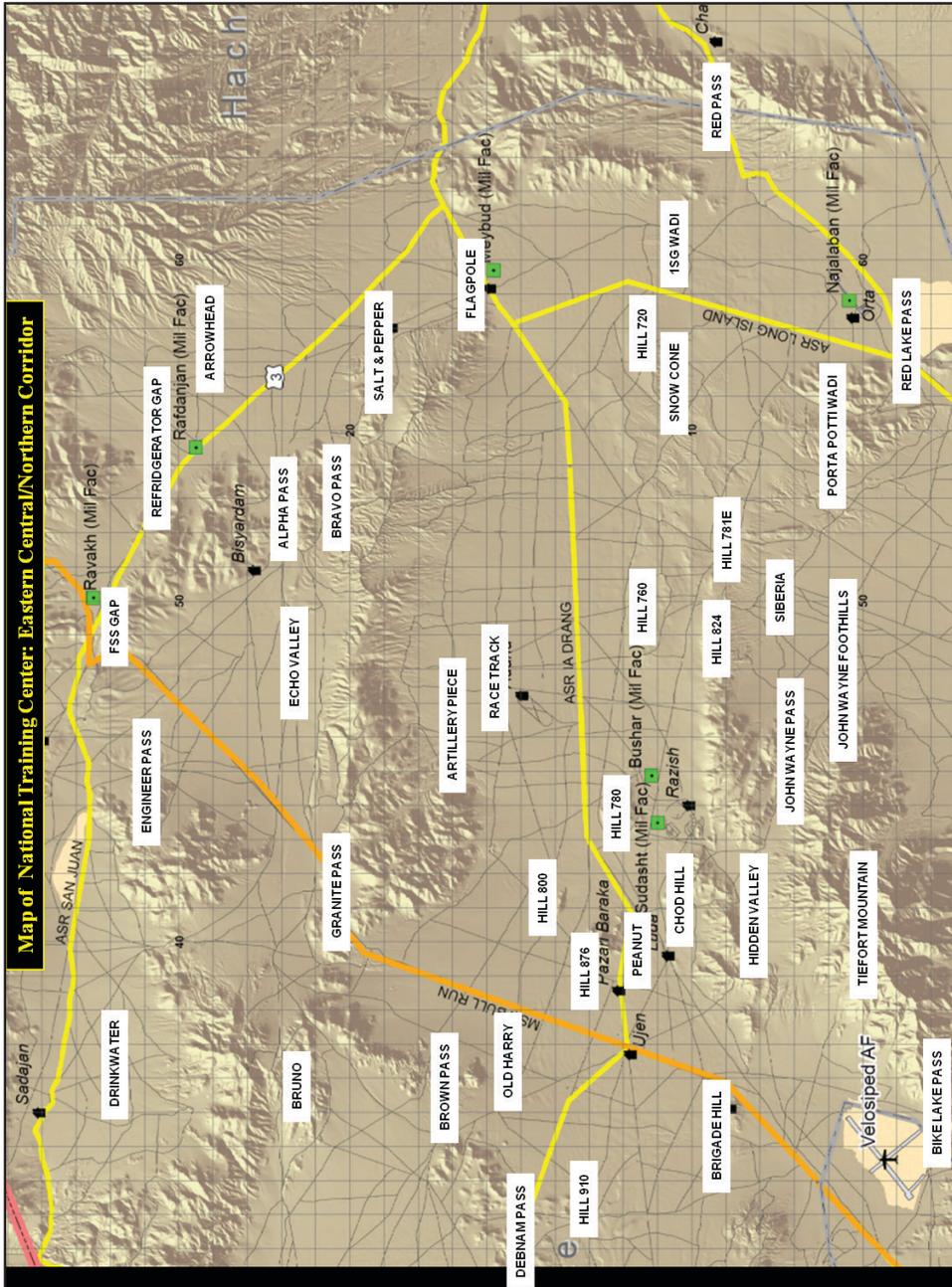


Illustration of NTC Eastern Half



Introduction

Better than a decade ago the Army Research Institute in cooperation with the School for Command Preparation at Fort Leavenworth published a collection of stories entitled *66 Stories of Battle Command*. The fact that there were *66 stories* is not significant. There could have been more – many more. The fact that it was a collection of stories is significant not only in the experiences shared in the stories, but the willingness of Army leaders to share their experiences, good and bad with whoever chose to read them.

Stories are some of the purest forms of learning. If done correctly, they capture the imagination of the listener in ways that lead to development and growth. As General Fred Franks Jr., US Army Retired said in the introduction to the first edition of *66 Stories of Battle Command* “The commander who shares his experiences, good and bad, encourages a climate of open exchange and honest appraisal. These stories are valuable. They stimulate, they enrich, they teach.” The same is no less true today, and we have a very rich decade of stories to tell that are centered on the mission of the United States Army ... to fight and win our Nation’s wars.

The Army’s doctrine has evolved over the past decade due in large part to experiences in Iraq and Afghanistan. Our terminology has evolved as well. What was Battle Command is now referred to as Mission Command with an entire doctrinal volume dedicated to its discussion and definition. Doctrine, however, is of little use unless it is put into practice. The stories in this volume are about Mission Command applied to specific circumstance. There is much to be learned in the process.

The stories in this particular volume are important not only in what they say, but also in what they suggest for the Army’s future. We have, once again, entered into a critical period of transition for the Army - A period where the Army must transition from an era of constant counter-insurgency operations and one of repetitive deployments to a period of preparation – preparation to answer our Nation’s call in the midst of an uncertain world.

Transition implies change. Change is difficult under the best of circumstances. As former Chief of Staff of the Army, General Gordon Sullivan was fond of saying “intellectual change must precede physical change.” These stories are about thinking through new and different problem sets and developing solutions to be discussed, investigated and perhaps tried out. This newly minted volume of stories prompts a dialogue in the midst of that uncertainty to help soldiers and leaders develop themselves and their units for whatever missions the Army’s future might hold.

As the Army tries to understand what to train for and how to train for it, the Army’s Combat Training Centers are once again the centerpiece of Army training and preparation. Accordingly, the Army’s Combat training Centers have – at the

direction of the Chief of Staff of the Army – begun to conduct what have been designated “Decisive Action” rotations. These rotations are characterized by a complex, yet realistic environment that is designed to stress units and individuals. The stories in this volume are primarily taken from these Combat Training Center rotations.

Beyond being interesting experiences in their own right, these articles can form the basis for officer and non-commissioned officer professional development programs where mistakes are identified and solutions developed. I commend the contributors to this volume for their participation, their diligence in making the volume a reality, and their contribution to the study of the military art.

General William S. Wallace
US Army (Retired)

The Decisive Action Training Environment

In response to Army transitions in Iraq and Afghanistan the CTCs and TRADOC stakeholders collaborated on the development of a modified training model to prepare tactical organizations to execute a wide range of operations as part of Unified Land Operations. Training the Army's core competencies of Combined Arms Maneuver (CAM) and Wide Area Security (WAS) requires a robust and flexible training model that represents real-world complexity and stimulates all the capabilities inherent in our Brigade Combat Teams (BCTs) and available enabling units.

The Decisive Action Training Environment is that model. It presents a complex training environment that provides a vehicle for building and training operationally adaptable units. The training scenario is adaptable but robust. The ground operations provide the opportunity for the Brigade to build competency with key Mission Essential Tasks while retaining many of effective practices and skills developed over the course of the last twelve years of combat. The model draws on aspects of the Contemporary Operational Environment (COE) while incorporating aspects of emerging threats and security challenges to maintain relevance. The dynamic threat environment is replicated by regular, irregular forces and criminal elements within the population. This threat to the Brigade's mission is asymmetric, adaptable and employs a full spectrum of capabilities and approaches to defeat the BCT or undermine their mission. The DATE also includes JIIM partners and a multifaceted and complex Host Nation Security Force that presents the Brigade with simultaneous challenges and opportunities for the collaboration and integration that is critical to understanding and prevailing in a volatile environment.

At the National Training Center in Fort Irwin, California, BCTs find themselves immersed in the northern Atropian Province of Erdabil. This province is a multiethnic province and flashpoint between the nation states of Donovia and Atropia. In this rough, austere space, the US-allied Atropian government contends with armed separatists and insurgents, internally displaced people and opportunistic criminal organizations. At their northern border the Donovians menace- representing a nation state actor with robust conventional and unconventional capabilities and a willingness to engage in open warfare with the Atropians and Coalition Forces. Over the course of 14 days, the BCT works through training opportunities that range from platoon and company STX and LFX lanes to battalion and brigade offensive, defensive and stability operations against the Contemporary Operating Force (COEFOR). A constant during the force on force training is the continuous tension between the urgent demands of conducting Combined Arms Maneuver and Wide Area Security. There is no perfect solution set to the DATE rotation and success is determined by training outcomes realized and captured by the BCT during their time "in the box."

The Decisive Action Training Environment presents Army forces and our Joint partners with a training model that helps leaders identify requirements and shape unit training to build formations capable of fighting and prevailing under a wide range of conditions. This capacity to stimulate and train Soldiers and units is essential to generating and maintaining a superior ground combat capability.

Lieutenant Colonel William Adler
Chief of Plans
National Training Center

Story #1

Executing Mission Command in the Brigade Attack

Colonel Joel Tyler was the Commander of the 1st Armored Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit was comprised of two combined arms battalions, an armored reconnaissance cavalry squadron, field artillery battalion, brigade support battalion, special troops battalion, and a multifunctional aviation task force. His missions included a movement to contact through Siberia and into the Central Corridor, a hasty defense vicinity centerline road, and a deliberate attack to the west of Brown and Debnam Passes towards Crash Hill.

So there we were: Training Day 14, with all its dynamics, and the BCT was tasked to attack westward through an enemy battalion (+) in the Central and Northern Corridors to restore the International Boundary, among other things. Ever since I heard General Wallace explain at an Armor Conference how he used maneuver to dislocate the enemy from sitting on all the good avenues of approach to Baghdad, I have thought we could do the same at NTC. My controlling idea for the design of the operation was “maneuver through dislocation,” but to do it we had to use the least likely (from the enemy perspective) axis and stay away from the more obvious ones. Brown and Debnam Passes always look feasible on the map, but favor the defenses to their west. The Northern Corridor was also part of our AO, but it culminates in Alpine Pass, not good for BCT maneuver. The trafficability of the Bruno is still a topic of hot debate, but also not a great option for a big force. I just didn't think the enemy would have more than a company up there and wouldn't reinforce it much, because of the terrain.

That left The Washboard as our best option but we would have to synchronize our warfighting functions for cumulative effect to get to the objective with sufficient combat power. The challenges to this synchronization came from tempo, seeing the enemy, and ultimately, concentration of maneuver elements.

Tempo is the obvious operational factor when choosing to run The Washboard. The terrain discourages most units from going this way because it imposes a pace on the attackers that allows defenders to quickly reorient from their prepared positions in the north, and it fragments orderly formations, requiring a looser mission command. Many units that try this southern axis go for the Colorado Wadi, a bad idea since mobile COEFOR AT systems scoop into it like bears fishing for salmon or sit on platforms to take you out on the approach; better to go south of the Colorado. I intended to use this perception of disadvantage as an opportunity. By going south, I figured the enemy would react by coming out of hide positions in the north and we could engage him with Joint fires. Reducing his combat power this way would allow decisive maneuver by getting combat power up to the assault position; we would then regroup and take the objective.

CONCEPT OPERATION: CE6 (ATTACK TO IB)

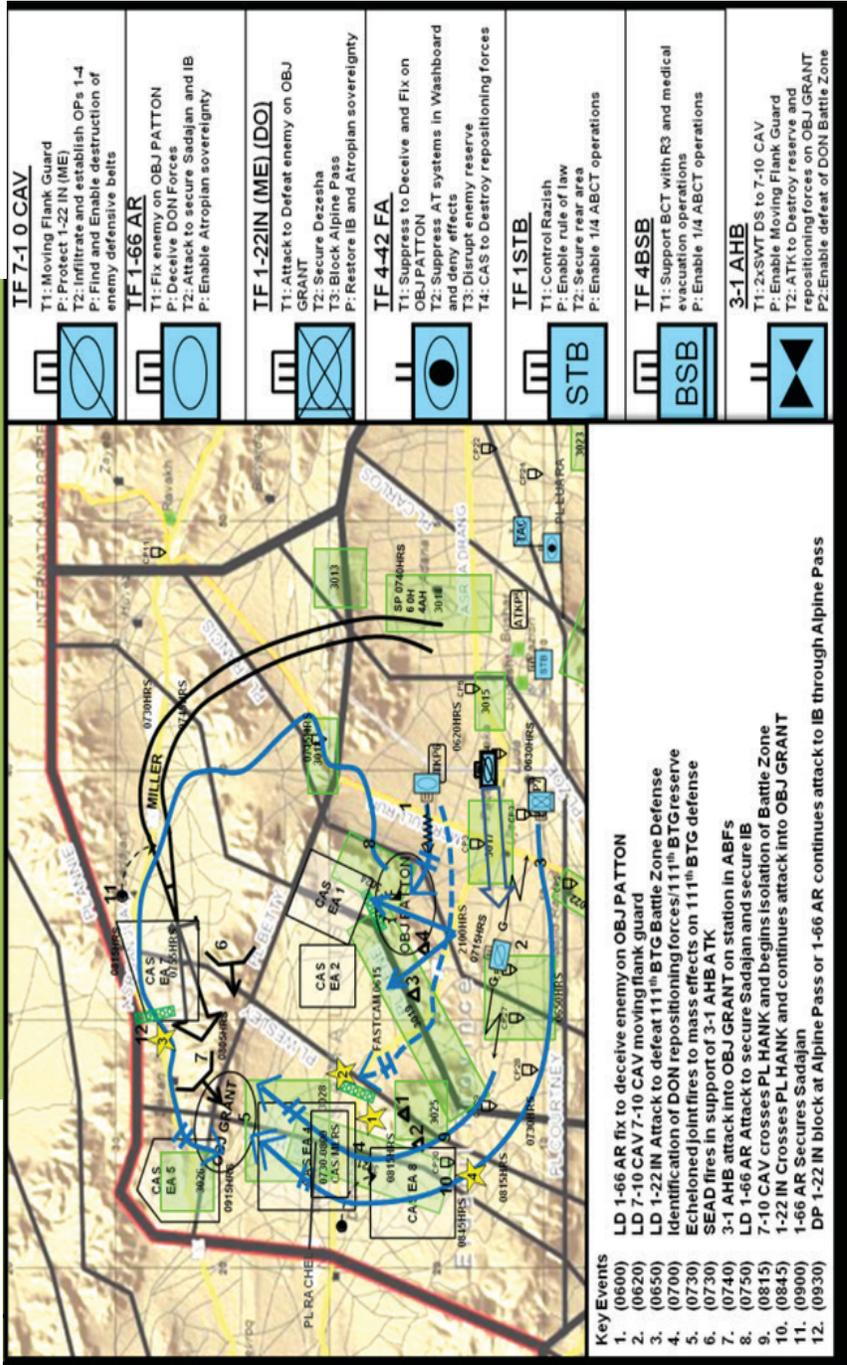


Figure 1-1. Attack to the International Boundary CONOP

I was aiming for the IV line southwest of Chinaman's Hat, a perfect place to overwatch the border and use as an assault position for the objective.

Our plan for synchronization was supposed to be cascading, not really sequential or simultaneous. We determined to fix the enemy with a demonstration oriented on the more obvious corridors of Brown and Debnam after he saw our movement in the south. This would give the enemy a dilemma in having to deal with us in more than one direction. 1-66 AR, task-organized as a combined arms battalion, attacked before BMNT and did just that, superbly.

About 30 minutes later, 7-10 CAV (augmented with an armor-heavy team) conducted a moving flank guard to the north of our main effort (1-22 CAB) in the Washboard, and used every smoke pot in the AHA to screen its movement (getting rid of tactical smokers was not a good idea). [The] 7-10 CAV had retained Hill 910 and Brigade Hill during the previous three days of "the fight between the fights". Given the enemy's repeated attempts to take them, I knew the bad guys realized their importance as key terrain for observation, ambushes, and AT platforms. I deliberately used the CAV as a security or maneuver element throughout the rotation; when it "fights big" it can do so much more than just as a reconnaissance formation. We needed the guard to get the main effort to that assault position in record time – and 1-22 IN did it in less than two hours! I found out after the fact that we had executed the COEFOR's most dangerous COA for us, and created a window of opportunity.

We wanted to give the enemy another dilemma while 1-22 IN consolidated at the attack position by sending the attack aviation battalion – 6 Apaches and 8 Kiowa Warriors – through the Northern Corridor and popping up over the North Wall. The weather had different ideas however, and precluded our aviation, our Shadow, and even our CAS sorties from executing this attack as planned. I thought the synchronization of our maneuver elements in the initial phases was good, given our rapid tempo, because I needed about 45 minutes to get 1-22 IN in good order at the assault position. The combination of weather and our consolidation would have consequences in the final push on to the objective. I also hadn't accounted for the impact our maneuver tempo had on our ability to see, understand, and engage the enemy—the central element of the controlling idea.

We couldn't see the enemy's reaction to our maneuver. 4-42 FA's artillery kept up well and greatly assisted 7-10 CAV in defeating the COEFOR's anti-tank systems north of our movement. However, the rapid tempo didn't allow our observers time to get in position to see over the hills to our north, even with a two-hour head start. We couldn't get any birds up in the high winds and were blind except for JSTARS, not the best system to use to call for fires.

With only two cannon and one MLRS batteries, we couldn't just start throwing shells around. The southern envelopment allowed the main effort to get to the assault position pretty unscathed, if a little strung out, and I really had two enemy clusters: the COEFOR company(+) around the objective, which became the focus of the fires we could muster as we closed on the assault position; and approximately two companies behind the Passes, some of which were working westward along the North Wall. Sure could have used those Apaches.

Our maneuver option in the south was limited: we could have slowed the tempo and allowed observers to get in place, but I wanted to get to the good ground at the assault position quickly. If the enemy got into Three Sisters Cut or the Jose Rodriguez in strength, we couldn't engage effectively with artillery anyway, and we would be flanked from the north. Instead of fires, we used our maneuver forces to give 1-22 time to regroup by keeping 1-66 in their very effective fixing position, and tried to probe north with 7-10 (about one troop's worth after they gave the armor team back to 1-22). I think everyone was calling for fires on the few vehicles we could see, except our trained scouts and COLTs. Not good when the BCT commander is sending calls for fire over the command net; it might not be the best target, but it always gets priority of fires! We had gained a brief window with about three companies from 1-22 in various states of consolidation to assault the objective. While we had advantage of position and numbers, we just couldn't see around the corner. I did not want to send our guys forward over the open ground. The COEFOR was able to build up more combat power in the area and I knew we hadn't seriously reduced his numbers. This lack of massed Joint fires effects and an incomplete picture of the enemy's set directly affected the final phase of the battle.

I kept 1-66 AR in place about an hour longer than I wanted. Its other significant task was to defeat a COEFOR company in the Northern Corridor. This fight in the north ended up taking about two hours, about what we expected. By the time 1-66 AR finished and was moving west, 1-22 IN had culminated with about two companies in a support-by-fire position overwatching the objective. It would have taken at least another hour to get 1-66 AR through the Alpine Pass and on to the objective; this was directly related to my earlier decision to hold up its progression going north, which in turn was done to compensate for our lack of a read on the enemy. This provided a great lesson on the linkage of information collection, maneuver, and fires warfighting functions; sustainment as well, because 1-66 AR had to refuel in the middle of its attack.

Another consideration in decisive action is apportionment of combat power throughout the operating environment, the terrain we had already fought over to get to the Passes, including the urban areas which were just now coming under host nation control. 1-66 AR's successful demonstration left it with enough good combat power to defeat the enemy in the Northern Corridor, but after it left, there was probably at least an enemy platoon(+) in the immediate vicinity, which

could have attacked east and linked up with irregular elements in Ujen or Razish.

We did have a mechanized company (-) around Ujen, supporting the STB's stability operations in the rear, and put it on alert against this potential threat. I didn't have to use it, but thinking about it really made clear the balance required by the hybrid threat.

I learned (or re-learned) a lot of lessons in this battle: the controlling idea is still a good conceptual tool to drive the design of operations; in operational design, warfighting functions must complement one another, a failure in one has to be made up for with others, like losing one of your senses; and finally, that synchronization should be cumulative, not necessarily sequential or simultaneous. I still think our maneuver was fundamentally sound; it's hard to get an advantage on the COEFOR and going where he doesn't want you to go is usually a good idea.

Story #2

Synchronizing BCT Enablers to Shape the Subordinate Units' Fights

Colonel Jeffrey Broadwater was the Commander of 2d Brigade Combat Team, 1st Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit consisted of two combined arms battalions, an armored cavalry squadron, fires battalion, special troops battalion, support battalion and an aviation task force. Among the missions the BCT was tasked with were conducting offensive and defensive operations against the Donovanian Regular Forces, including a movement to contact, hasty defense and deliberate attack.

I recognized that synchronizing COLTs, Prophets, PRD-13, JTACs, and other Brigade Combat Team (BCT) enablers to achieve my desired intent was going to be a challenge the first time we incorporated them into our operations. Our first learning point began when the enablers were task organized within the companies; the enabler task and purpose was not clearly understood down to the company level, and misunderstood capabilities and limitations caused confusion up and down the chain of command. As I spoke to my staff, the enablers were given a task and purpose to meet certain objectives within my visualization of the brigade fight. We directed where the COLTs were to be emplaced to achieve certain effects within the brigade's focus of fires. This was the start of ensuring these key enablers were utilized properly. However, I never fully confirmed the company, battalion level commanders, and battalion staffs had a clear understanding of the assets that I attached to them in order to accomplish the my intent. The link-up of the assets with the units that will emplace and employ the asset seems like a simple task, but unless it is planned, rehearsed, and supervised it will create friction in the execution of the operation.

Every unit must train to intercept enemy radio communications, see enemy movements, hear about enemy weaknesses, and conduct analysis to allow the commander to make decisions. I knew the battalions would be challenged with incorporating the various enablers that we fielded, because we had not had time to integrate certain enablers into training our training at lower levels up to this point. But the more difficult issue was tailoring mission orders and rehearsals so that my subordinate commanders understood how I wanted the enablers synchronized and employed across the battlefield.

As an example, through terrain analysis, we had narrowed the possible enemy maneuver corridors down to three major routes. We planned to

use our signals intelligence (SIGINT) collection assets to focus on enemy communications that would enable us to confirm the enemy's exact axis of approach. I directed a Low Level Voice-Intercept (LLVI) team and Prophet Sensor to be located along the brigade's screen line to report enemy communications that would provide the intelligence we needed to confirm certain enemy locations. While we talked these enablers in our combined arms rehearsal, and even executed an ISR rehearsal, the dissemination plan for moving the collected information back to our mission command nodes was not clearly understood at the lowest levels. The result was only ten percent of the SIGINT reports were received at the brigade main command post.

The details, or in this case lack thereof, of how information moves from sensor to shooter became critical in the fast paced environment of offensive operations. Company and battalion level commanders and staffs did not understand the full range of capabilities of the assets that we had assigned to them, nor did they clearly understand my intent for those assets to act as brigade collectors. I should have articulated this better to make sure everyone at each level clearly understood the intent and our actions were better rehearsed before my units crossed the line of departure. During the mission, the unit receiving the Prophet sensor placed it in a valley for local security, inadvertently making it ineffective to intercept enemy signals that could answer brigade Priority Intelligence Requirements (PIR).

It is very easy for staff members to move icons on a map or white board, but this swift, easy movement of a symbol equates into a very detailed and deliberate movement of men and equipment on the battlefield. Task organization can be assigned early during mission analysis or initial commander's guidance to allow more time for subordinate rehearsals. Unfortunately, the responsibilities of the gaining unit are often overlooked, and time is wasted for proper link up with the company or platoon. The stop watch is always running and incorporating a new element into a unit takes time to ensure that the unit's plan that incorporates the enabler is issued, understood, and rehearsed. Command relationships and the inherent responsibilities must be understood by the planners and by the unit receiving each enabler. If this link up is not understood and verified by all, the asset might not get into the fight at all. For example, COLTs with 20-kilometer optics and a communications platform capable of bringing indirect fires and airpower used to detect and destroy the enemy on a brigade movement to contact might not be available to the squadron or brigade commander. This can cause the brigade commander to make a decision to reallocate fixed wing assets into an alternate target area of

interest (TAI) based on the lack of sensors deep and timely observation of triggers.

Enabler redundancy is preferred, but very difficult to achieve because of the scarcity of resources, especially when the lack of assets is due to a preventable misunderstanding of task organization. The losing and the gaining units must not only conduct a link-up, but also have a mutual understanding of what encompasses the asset. A M1200 Knight vehicle with three days of supply, one five gallon fuel can, and lack of friendly identifiers may not satisfy the gaining units standing operating procedures. The gaining and losing unit must conduct an inventory or pre-combat checks and inspections (PCCs/PCIs) on the transferred asset. Two pieces of paper* can prevent a 5,000-man brigade from accomplishing key tasks if the task organization is not understood by all leaders and staffs. If this does not occur, the brigade commander might discover after the fact that the COLT was pulling local security within a platoon instead of being the primary observer for the brigade's number one priority fire support target.

Rehearsals are the tool that units use to visualize and ensure subordinate commanders understand the plan and validate synchronization and the proper coordination between units. Commanders and leaders of the enablers are often present at the brigade rehearsal, but the company leadership that is responsible for emplacement of the asset is usually not in attendance. A way to ensure that the unit understands the brigade commander's task and purpose is at the BCT Combined Arms Rehearsal (CAR) ensure the battalion commanders brief task and purpose of the enabler and location of employment. At the battalion level rehearsal, the company commander must brief the same information so it is clearly understood how the assets are to be employed within the BCT Commander's intent. At the Fire Support and ISR rehearsals, the enabler must brief along with the battalion level war fighting function proponent to ensure common understanding. Rehearsals can also verify the communication PACE plan for the enabler to disseminate the information to all required outlets, including the brigade main command post. The result being the brigade COLTs would identify that they will have to relay call for fires and spot reports through the squadron/battalion TOC based on the observation post terrain identified during the BCT Fire Support rehearsal.

Successful execution of enablers creates synergy and allows the brigade to execute all tasks the commander visualized. Successful brigade mission execution is determined by the company level leaders that are emplacing, securing, and using each enabler. Leaders must be informed when the attached assets are emplaced and performing their assigned tasks. The

status of an enabler causes the Brigade Commander to make decisions, and therefore, he must stay informed of any change, to include when the asset is in place and if it can observe and execute what it is needed to do. Leadership must constantly verify the proper employment and use of the enabler during operations and then report changes. The brigade staff is the integral key in the dissemination of information within a headquarters and systems must be in place to capture status updates of assets across the BCT AO focusing on CCIR. The challenge is relaying information between the enabler and the staff member at the BCT TOC in order to keep the commander informed. The reporting trail starts with a radio or BFT message with the attachment and works its way through the platoon, company, battalion, and within the BCT TOC at times switching between lower and upper tier. This is never an easy feat when all reports are competing for time on the voice and digital networks. The BFT in the BCT TOC during the battle fought over extended ranges has the potential to end up with a line of staff members waiting to send and receive messages to the enabler that they are responsible for and the commander not receiving the information needed to make a decision.

The efficient and competent execution of a brigade level plan that incorporates all combat multipliers on the battlefield will result in greater destruction of the enemy while preserving the brigade's combat power. Rehearsals must be conducted at every level to ensure that the leaders and the enablers understand their task and purpose and that the enablers are properly integrated into the plan. Leaders at all levels must confirm the proper use of the enabler and report any changes to the commander so he can make informed decisions. This line of communication may seem easy, but during execution and within the various levels of emplacement, it is graduate level integration. It is required to accomplish all tasks directed by the commander to ensure success on the battlefield. All of the Commander's intent must be synchronized throughout his staff and subordinate battalion and company formations to achieve the desired effects.

Endnote

* Referring to the 5988E, Equipment Maintenance and Inspection Worksheet.

Story #3

Want to Visualize, Describe and Direct? Get on the Ground and Conduct Leaders Reconnaissance with Your Commanders and Staff

Colonel David Lesperance was the Commander of 3d Armored Brigade Combat Team, 1st Cavalry Division during the third Decisive Action Training Environment rotation at the NTC. His unit consisted of two Combined-Arms Battalions, an Armored Reconnaissance Squadron, a Fires Battalion, a composite Aviation Task Force, Special Troops Battalion and a Support Battalion. His unit was charged with conducting a defense ranging from Red Pass in the east to Bicycle Lake in the west against a Donovanian attack. Following a successful defense, he executed a counterattack and a movement to contact to secure the population centers and deny additional Donovanian incursions.

The battlefield geometry of our assigned area was large for a brigade combat team conducting BCT defensive operations. Looking at the terrain, we faced the challenges of developing a cohesive defense 40 kilometers across its breadth, and 30 kilometers in depth, with Tiefert bisecting the terrain. This made mission command a challenge. We had to figure out how the enemy was going to take advantage of the terrain to mass fires with maneuver. Even more critically, we had to figure out how the COEFOR would attempt to influence the human terrain throughout the depth of our defense. Early on we recognized the importance of conducting terrain analysis including the physical and human aspects of terrain in the towns and villages in our security area.

As we started to plan, we knew that we were going to need a solid reconnaissance and surveillance plan that identified where the enemy was going to attack. Security was going to be paramount. We executed key leader engagements in the towns of Guba and Nabran, as these two population centers sat astride key lines of communication that would offer critical advantage if we could count on the population's support. During mission analysis, we emphasized the significance of these two population centers as key terrain- this conceptualization helped shape how we defended. In fact, protecting the population became a key task throughout our defense. We needed to ensure protection not only from the Donovanian regular forces, but also from the irregular elements, sectarian groups and criminal gangs that existed. Before we started our defensive preparations, we emphasized with subordinate commanders the concept of a population-centric defense which impacted task organization. We knew that if we didn't assign the proper headquarters and apportion adequate resources in the security area, we wouldn't have a chance to get ahead of simultaneous and continuous operations.

Our big epiphany as a brigade headquarters occurred as we started to work through COA refinement for the defense. I discovered that my plans team didn't

understand the terrain like I did and based upon that knowledge gap, the staff was having difficulty translating my intent into a coherent course of action. Since we were in the defense with Atropian elements securing the international boundary, I decided to allocate a day and execute a terrain walk with the staff to elevate everyone's understanding of the ground. Our leader's reconnaissance included Bike Lake Pass through Hidden Valley, John Wayne Pass to the Siberian Ridge, Columbia Wash, Red Pass to Red Lake Pass and finally Whale Gap. We covered the whole of our 40 kilometer frontage and spent a good eight hours discussing and appreciating the terrain and its impact on our course of action. My intent was to elevate the entire staff's understanding and appreciation of the terrain we were defending before continuing planning. I had the S2 talk how the enemy could use the terrain and fight at each location and then I would describe my intent and guidance by warfighting function for the defense. Each staff officer was able to describe and discuss the unique contribution their particular warfighting function could contribute to the coming fight. The impact this event had on the staff's ability to conceptualize my intent was profound. Consequently, we were able to produce an order that worked and enabled battalion commanders to successfully develop effective engagement areas.

Our reconnaissance led me to task my reconnaissance squadron, 6-9 CAV, to block Bike Lake Pass and screen along the northwestern ridge of Hidden Valley to Sardatep* in the east to provide early warning and protection for the BCT main effort, 3-8 CAV in the east. To provide 6-9 CAV more combat power, we attached a tank platoon and directed a BCT engagement area based upon where I thought the Donovanian BTG commander might make a run through Bicycle Lake Pass towards the very important population center of Guba. I also reinforced them with priority of counter-mobility assets and fires; we did not want the enemy to use this avenue of approach. We determined planning priority one for the brigade reserve to be the reinforcement of 6-9 CAV in the west. The use of the reconnaissance squadron in this role was required absent a third maneuver battalion in the BCT.

Division guidance allowed the BCT to defend anywhere south of the international border with no directed battle positions or engagement areas. Options included defending vicinity the Whale Gap, Siberia or the Siberian Ridge. During our leader's reconnaissance, I knew we needed to identify the decisive point for the coming fight. We were shaping our understanding of where we could complement battalion direct fires with massed joint effects. Having already determined we could not mass effects in the west, our reconnaissance efforts focused in the vicinity of the Siberian Ridgeline. The S3, S2, the Fires Battalion Commander, ALO and I had about a 90-minute discussion on the terrain near Hill 815 and 781 east, walking the ground and talking through all the different possibilities of how the enemy could achieve successful penetration of our defense.

We determined that we would lose the fight if the Donovanian commander was able to mass more than one MIBN at any one point and time against 3-8 CAV in the center. This in turn drove us to create a BCT engagement area on the crest of the IV-line south of Siberian ridge. This is the place we selected to destroy the lead MIBN of the attacking BTG—our BCT decisive point, and the ideal location to mass joint fires. Identifying the BCT decisive point early allowed us to mass indirect fire systems and observers along enemy avenues of approach prior to those threat formations entering our BCT engagement area.

We recognized that if we portrayed too much strength in the center of the BCT defense vicinity the Siberian Ridge, the threat commander would decide to attack east and penetrate 1-12 CAV defenses. We did not want the BCT fight to occur in the east because we believed the Donovanian BTG commander would make a run through Red Lake Pass towards the town of Nabran and control this very important population center. Additionally, we needed the use of the Najalaban Military Complex for future operations as a support base and we needed flexibility to counterattack northwest to in support of 3-8 CAV if required.

We needed to figure out how to influence the enemy to go where planned to destroy him instead of where he wanted to fight, so I directed 1-12 CAV to build a defense in depth stretching from Porta Potti Wadi southeast to Red Pass. I really wanted to sell this as a point of strength, so I prioritized my survivability assets in the east, recognizing that in Siberia, the ground would not support prepared positions and that 3-8 CAV could fight from the equivalent protection provided by the natural terrain. Additionally, walking the ground enabled us to identify counterattack options for 1-12 CAV to take advantage of opportunities and seize the initiative either into the flank of the attacking BTG or directly into Sardatep and Nus. We wanted to preserve flexibility and have options if conditions allowed.

The end result of our terrain walk produced a fairly concrete concept of operations for the defense (see figure 3-1). Following the issue of the brigade operations order, I conducted another terrain reconnaissance, this time with key staff members and my battalion commanders. The dialogue between myself and battalion commanders enabled me to better define the brigade fight and what we identified as the battalion fight and adjust our plan on the ground. Those walks, especially with 3-8 CAV which was my main effort, enabled mission success. While I thought I knew what the battalion fight should look like in each area, I let my commanders describe the fight as they saw it. If I identified potential points of friction, I shaped their ability to see the tactical problem as I did through discussion of terrain and how the enemy would use the ground to his advantage.

I cannot stress enough the value of these multiple terrain walks. Of the 40 hours we had for defensive preparation, I spent no more than 90 minutes with each

commander. I met the commanders on the ground, and didn't waste time moving between areas, and included my reserve company commander in each discussion so that he could visualize the quickest means of reinforcing each battalion as the battle dictated.

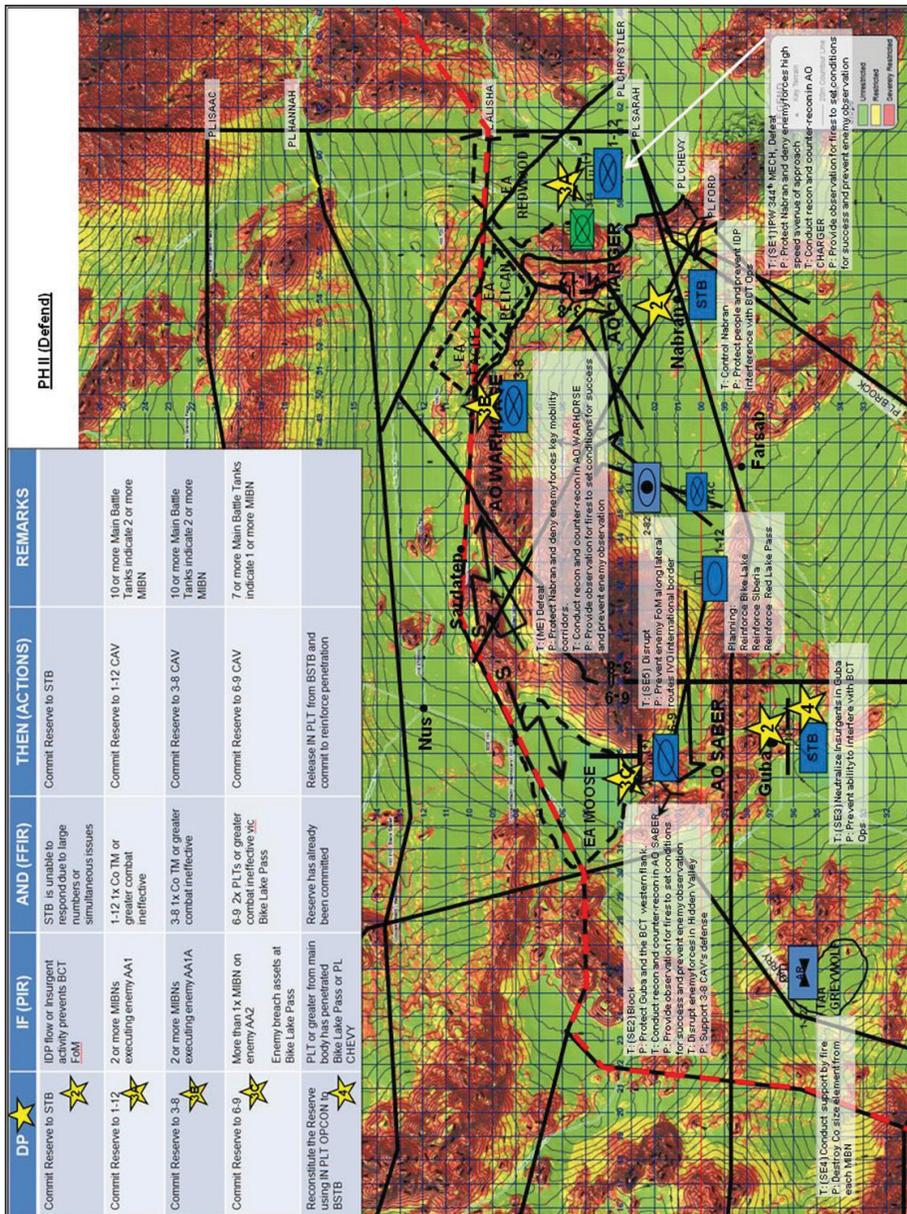


Figure 3-1. Defense Concept of the Operation.

When we moved to execution, the evidence of our unified understanding of intent and purpose was proven by our success in halting the BTG advance. We were very successful during the counter reconnaissance fight, and it wasn't by chance; we knew the ground and we shaped the enemy avenues of approach and engagement areas accordingly. As a result, we were able to destroy BTG mounted reconnaissance forces at the time and place of our choosing. It was evident to me, that the Donovanian commander didn't have a good read on our defense. Our engagement area development and shaping operations set conditions to fight our defense as planned. 3-8 CAV was able to fight in the BCT planned engagement area with success.

As with all operations, we experienced friction. We were able to get artillery into the fight; however, we struggled in massing AH-64 fires because we failed to adjust our plan when the fight didn't occur in the expected time period we planned. A four hour shift in the enemy's anticipated timeline significantly affected air-crew management. As a result, instead of being able to mass four to six aircraft, we were only able to mass two AH-64's during the BTG main assault against 3-8 CAV.

Executing Mission Command from planning through the wide area security fight, the defense and transition to BCT Movement to Contact as one continuous operation is the essence of Decisive Action. Establishing the technical systems to enable commanders to communicate was the single most challenging task we faced. Our terrain analysis, leaders reconnaissance, reduced force mounted rehearsals and detailed signals planning stretched the capability of our systems and people to the limit. Through patient use of FM line of sight systems and upper tactical internet capabilities we were able to communicate.

During the fight, I commanded the BCT from my assigned M2A3 Bradley Fighting Vehicle equipped with two ASIP FM radios and FBCB2. I communicated with my commanders and TAC via FM and my main CP using FBCB2. We executed twice daily information updates with subordinate commanders over FM and conducted periodic CPOF updates from the TAC with commanders to elevate shared understanding. It was important each battalion commander understood the unique contribution his formation had in the coming fight. I respected subordinate commanders time and knew that time meant more to them than it did me. As a result, we were able to keep commanders with their formations in their assigned areas of operation.

In spite of the friction described above, we were able to successfully execute the defense as planned. We destroyed the lead MIBN and prevented the COEFOR from massing a second MIBN on 3-8 CAV by directing a counterattack with 1-12 CAV from the east—a move that would enable us to more easily transition into our follow on mission set. In terms of recognizing transitions and planning for them early, we were able to enjoy good effects from our fire support plan. Our FSCMs

were distributed down to the lowest levels. This allowed us to execute targets of opportunity, and more importantly, enabled company commanders to call for fires based upon recognition of opportunities with significant shaping effects on future operations. Ultimately, our ability to get out on the ground with planners and commanders was the difference in my ability to successfully visualize, describe and direct intent and planning guidance. Coupled with a holistic approach to how we executed CAM and WAS simultaneously, it would prove to be the key to the continuous operations we executed.

Endnote

* For Rotation 13-03 the town of Razish was renamed Sardatep and the town of Ujen was renamed Nus.

Story #4

Utilizing Decision Support Tools to Enhance Mission Command

Colonel Christopher Doneski was the Commander of the 1st Squadron, 11th Armored Cavalry Regiment acting as COEFOR in support of the first-ever Decisive Action Training Environment rotation at the NTC. His unit was task-organized to replicate three mechanized infantry battalions (MIBN) of the 111th Donovan Tactical Group, a brigade-sized element. Additionally, he was able to leverage forty to fifty irregular forces to augment his regular forces. His missions included a movement to contact from the Donovan border west to east through the central corridor, a hasty attack towards Razish, and a deliberate defense of the international border from Crash Hill east towards Brown Cut and Debnam Pass.

Most integral to this process was inculcating mission command throughout the organization and developing simple tools that enabled this process. Through preparation, planning and rehearsals I decided we would fight off common graphics and a systematically understood Decision Support template (DST). We needed to build experience and empower our subordinate organizations to understand the environment and seize the initiative.

Prior to our invasion to liberate the Bilasuvar people in Erdabil Province, we were most concerned with 3/3 IDs Combined Arms Battalions (CAB) and their attack aviation. My desire was to shape the fight and move rapidly before they could reach the more favorable terrain of the central corridor. My initial decisions all based around where we anticipated the main battle would occur based on the success in the reconnaissance fight and progress of lead CAB. We had received limited reports from the Bilasuvar Freedom Brigade (BFB) reference 3/3 ID's activity beyond the Tactical Assembly Area (TAA). Understanding the terrain, we attempted to disrupt their movement from the southern corridor through the Whale Gap where they would not be able to disperse. Based on the initial spot reports, the Brigade's movement was very slow providing us the opportunity to seize the decisive terrain.

Upon receiving approval to commence our attack, we moved at maximum speed from the International Boundary IVO Nelson Lake east IOT clear the passes before their attack aviation could react and target our elements in march formation. As the lead Mechanized Infantry Battalion (MIBN) passed the Hill 876/Peanut gap, we transition to maneuver increasing the dispersion of the force and seizing Hill 780 IOT anchor our firing line against the Armed Reconnaissance Squadron (ARS) that had been augmented with a tank company. Gunslinger Troop began to engage lead elements of the ARS IVO Hill 760 at attrite with long range fires and indirect. Based on the read from my lead MIBN Commanders, we would be short of our initial DP IC and move to a discussed branch of establishing the

base of fire to enable Dealer Company to continue the attack along the northern avenue of approach. Critical to this decision was the dialogue between MIBN Commanders and our guerilla leader on the BTG command net. The commanders performed brilliantly discussing the arrayal of enemy forces and capabilities of their formations. As we conducted our periodic FM update, the S3 and I referenced the DSM as the baseline for our updated estimates. The BTG staff back at the main used the DSM to describe conditions, anticipate actions and make recommendations on timing of upcoming decisions. It proved to be an invaluable tool as we shared understanding enabling rapid recommendations and decision on the commitment of forces.

Dealer Company with its attached AT platoon continued its attack to seize the Racetrack and continue east before the Brigade could deploy into the central corridor. Dealer was able to quickly set the MIBN main body and bound from one indivisibility (IV) line to another with the AT platoon providing over-watch along the north wall. The tremendous cross-talk and individual initiative resulted in devastating effect against the lead CAB. Even as FM nets became extended, a clear understanding of conditions and intent down to the vehicle level proved decisive. A simple, clear and rehearsed scheme of maneuver allowed us to mass fires on the lead CAB. Although we had talked about it, it is clear we failed to plan for success along each of the avenues of approach. The majority of our DPs dealt with responding to successes of the rotational unit. However, having common graphics throughout the formation allowed us to be more agile and seize opportunities as they arose.

Despite having relatively inexperienced leaders and crews, the BTG was able to realize significant success by thoroughly briefing, rehearsing and refining our scheme of maneuver and actions during the rotation. The use of a DSM and DST to share my visualization and enabled shared understanding was integral in the execution of mission command for the BTG. The DSM focused all levels on the conditions we anticipated necessary for success and enable the BTG to operate on mission-type orders. This allowed our smaller force to fight more distributed and focus combat power at the decisive point by understanding and operating within my commander's intent.

DECISION POINTS				
DP	DECISION	IF (PIR)	AND (FFIR)	THEN (DECISION)
1A	Gunslinger ATK	1. ARS platoons are North of the 09 Northing. 2. 1st ECH CAB South of the 07 Northing	1. BTG RECON < 50% strength 2. BTG Recon cannot observe Hill 781E/824 complex 3. DTG Recon confirms 1st ECH CAB moving toward Siberia	1. Gunslinger ATK to defeat ARS/ secure Siberia for follow-on forces 2. Commit CCA to disrupt MB south of 07 Northing
1B	Gunslinger ATK	1. ARS platoons are South of the 09 Northing. 2. 1st ECH CAB South of the 07 Northing	1. BTG RECON > 50% strength 2. BTG Recon eyes on Hill 781E/824 complex; link up RIP as rehearsed 3. 1 Batt Section set IVO Hill 760, Snowcone & COP 6	Gunslinger ATK to seize Siberia
1C	Gunslinger DEF	1. ARS North of the 09 Northing in Platoon strength (BFV) 2. 1st ECH CAB north of 07 Northing	1. BTG RECON < 50% strength 2. Gunslinger > 60%	Gunslinger conducts a Hasty Defense IVO Hill 760- Hill 824 complex
1D	Conduct Artillery Raid	Steak C3 or Artillery Battery observed North of the 09 Northing	Guns in PAA	Conduct Artillery Raid
2A	Dealer ATK	1st Echelon CAB South of the 09 Northing	Gunslinger set IVO Siberia	Dealer ATK to seize Snow Cone
2B	Dealer DEF IVO Racetrack	1st Echelon CAB North of the 09 Northing	Gunslinger set IVO 760	Dealer conducts a Hasty Defense IVO Racetrack; tie-in with GS IVO Northside of Hill 760
2C	Dealer DEF IVO 780	2. Plus Companies North of the 09 Northing	Gunslinger less than 75% strength	1. Dealer conducts a Hasty Defense IVO Iron Triangle & Hill 780 2. DP 4B
3A	Coldsteel Seize Granite Pass	1st Echelon CAB West of 760	1. Gunslinger and Dealer West of the Iron Triangle or > 50% 2. Havoc DP 4B.	Coldsteel ATK to seize Granite Pass
3B	Coldsteel ATK to SDJ	2nd Echelon CAB conducts movement North toward SDJ	Gunslinger is West of the 780	Coldsteel conducts an ATK to SDJ
3C	Coldsteel ATK to exploit success	2 x CAB are fixed in the Central Corridor	Gunslinger is set IVO 760	Coldsteel conducts an ATK to the rear of the RTU to exploit success
4A	Havoc ATK to block penetration	1st Echelon CAB West of 760	Gunslinger and Dealer are between 50% and 75% strength	Havoc conducts an ATK to block RTU penetration
4B	Havoc DEF IVO Peanut/Chod	1st Echelon CAB West of 760	Gunslinger and Dealer less than 50% strength	Havoc conducts a Hasty DEF IVO the Peanut/Chod
4C	Havoc ATK through JWP	No RTU Forces dedicated to JWP	Gunslinger and Dealer greater than 75% strength	Havoc conducts an ATK through JWP toward Whala Gap
5A	Fury (RES) Point	1. 1st ECH CAB Penetration North of Siberia with two (+) Co 2. CAS & CCA are effectively engaging GS and D IVO Hill 760	1. Gunslinger and Dealer > 50% strength 2. Havoc set to execute DPs 4A, 4B, 4C	Fury moves to decline 2nd Echelon CAB of intentions IVO VOB; LOA w/o approval is Brigade Hill; w/Approval...Blue Lake Pass
5B	Commit Fury (RES)	RTU Penetration West of the Racetrack	Gunslinger and Dealer less than 50% strength	Fury ATK to defeat 2nd Echelon CAB

Figure 4-1. COEFOR Decision Points, Rotation 12-05.

Story #5

Maintaining Flexibility in Exercising Mission Command

Colonel Johnnie Johnson was the Commander of the 3d Armored Brigade Combat Team, 3d Infantry Division during the first-ever Decisive Action Training Environment rotation at the NTC. His unit consisted of two Combined-Arms Battalions, a Cavalry Squadron, a Special Troops Battalion, Support Battalion and an Aviation Battalion. His missions included a movement to contact through Siberia and into the Central Corridor, a hasty defense vicinity centerline road, and a deliberate attack through Brown and Debnam Pass towards Crash Hill.

In hindsight, I can break up my preparation and training to conduct effective Mission Command into three distinct periods: prior to arrival at the NTC, during RSOI, and then upon occupation of the tactical assembly area within the operations box. Each of these periods held unique challenges and opportunities for executing mission command that deserve mention. Pre-arrival, trying to train each of the staff sections to contribute to mission command at home station was a challenge. We conducted a brigade fire control exercise in February (one month prior to rotation), and that was the first time we were able to field all the brigade and subordinate battalion command nodes and validate our upper and lower tactical internet systems. Even then, we found ourselves unable to replicate the type of distance and terrain challenges that we would face upon arriving at the NTC.

When we established at home station, our ABCS systems worked well, but when we applied that to the vast and difficult terrain at the NTC we immediately experienced friction based on that environment. I fought the fight out of my Bradley and found it woefully ill-equipped to act as a fully-functioning C2 mobile command vehicle. How do you execute mission command on the move when you lack a platform that allows you to see the brigade and effectively communicate with subordinate elements? Once I left the Main Command Post, it was high adventure trying to execute mission command. This friction applied to the other warfighting functions as well. It was difficult trying to figure out where I needed my Fires Battalion Commander to be in order to best leverage joint fires. What I discovered was the friction between a Commander's desire to maneuver and the need to be "digitally" plugged in to effectively exercise mission command.

In dealing with this friction, I had to get creative. To reduce friction for the enablers in the offense, I task organized most of them to the battalions. However, this does not completely eliminate the Brigade's role of synchronizing the fight. Commanders must continually assess the tactical situation and exercise dynamic task organization if necessary. From a decision support tool perspective, my S3 designed a current operation synch matrix that I found highly effective for executing transitions—this was the primary mechanism that enabled the Brigade

to transition back and forth between mission planning and execution. As far as mission command on the move, I had to execute the hard way, driving around to the various battalion command posts to ensure that my intent was clear and understood and to gain feedback on how subordinate Commanders saw their areas of operations. Nothing compared to being able to break contact from the Brigade Command Post and getting out on the ground with Commanders.

The take-away was clear: Being able to huddle face to face with subordinate Commanders on the battlefield remains the most effective method of seeing yourself, the enemy, and the terrain. Right before the deliberate attack, I held a Commander's huddle and brought my Reconnaissance Squadron Commander back and met at my 1-15 IN Commander's CP, along with my Fires Battalion Commander. This was a critical meeting where I was able to exercise mission command. I remember wanting to go north around Brown's Cut, but the read that my Reconnaissance Squadron Commander was able to give me allowed me to change my intent and drive the Brigade attack through Debnam Pass. I probably would not have made such a bold decision without the clear picture that a face to face huddle provided. It also allowed me to issue additional guidance to Commander's as we continue our effort to synchronize fires with maneuver.

In closing, it is definitely worth mentioning that Commander's must be mindful that an important part of Mission Command is the requirement to paint a picture for the higher headquarters. Every battle has its own dynamics and friction which is why Commanders must visualize what is happening to his or her unit (internally and externally). I believe at different times during the fight (by phase or critical event), you inevitably had to ask yourself these important questions, "Am I adequately task-organized to fight this particular mission? Do I have enough combat power? Can I achieve my higher Commander's intent with what I have?" If the answer to any one of these questions is no, then when do you provide the higher commander that insight and how do you handle the friction that ensues? Balancing what the boss wants me to do versus what I believed we were capable of doing; that is a constant dialogue that needs to happen at every level. At times I personally struggled with this aspect of mission command.

Story #6

Executing Mission Command: Lessons from the Donovanian Perspective

Colonel Christopher Doneski was the Commander of the 1st Squadron, 11th Armored Cavalry Regiment acting as COEFOR in support of the first-ever Decisive Action Training Environment rotation at the NTC. His unit was task-organized to replicate three mechanized infantry battalions (MIBN) of the 111th Donovanian Brigade Tactical Group. Additionally, he was able to leverage forty to fifty irregular forces to augment his regular forces. His missions included a movement to contact from the Donovanian border west to east through the central corridor, a hasty attack towards Razish, and a deliberate defense of the international border from Crash Hill east towards Brown's Cut and Debnam Pass.

How did we execute mission command on the COEFOR side? At the Brigade/BTG level, we understood that our ability to exercise Command and Control after we commenced hostilities would be a critical vulnerability. Our thorough understanding of US capabilities to identify, collect and target our mission command systems necessitated our implementation of an ideal mission command network. Therefore, we implemented the principals of simplicity and dispersion in relation to our people, processes and architecture to mitigate the potential threat to our mission and network.

Prior to our fight, we invested a significant amount of time towards developing a shared understanding at echelon, with the development of common graphics and tactics, techniques and procedures for each of the MIBNs. These tools formed the foundation for our analysis by the BTG staff for the synchronization of our scheme of maneuver. Our early identification and reliance on simple tools that bridged warfighting functions facilitated rapid dissemination of orders on force arrayal and agility in directing modifications and FRAGOs—subordinate echelons understood the products and the intent behind those tools. They limited the need for detailed discussion on FM nets and reduced digital traffic necessary to modify operational graphics.

Our mission command nodes remained flexible as well. Our two persistent nodes were the BTG Main Command Post (Main) and our BTG Field Trains located in the Regimental Support Area. The BTG TOC operated in a field configuration prior to moving across the international border. This provided the BTG access to the lower and upper tactical internet through our Satellite Point of Presence, which in turn enabled detailed coordination to the DTG for guidance, coordination of enablers and synchronization. During the movement to contact mission, the BTG TOC remained stationary. We generated a mobile command group (MCG) with the S3, Command Sergeant Major and my vehicle. The S3 and CSM each followed behind the lead two MIBNs along the axis of advance. This afforded

me an assessment from a trusted agent out of direct fire contact. I then followed roughly center of mass until the lead MIBN made contact with the enemy.

Essential to our success and ability to move rapidly was our reconnaissance efforts with both the DTG Scouts and the BFB guerilla forces. These elements were able to answer many of our Priority Intelligence Requirements with regards to disposition and rate of movement of the enemy Combined Arms Battalions and Fire support assets. Communicating over FM and GSM provided me excellent situational awareness of enemy frontline traces and enabled our formations to remain travelling in march formation and rapidly seize the key terrain in the Central Corridor. FM communications with BFB leadership also served as a critical relay that bridged deficiencies in establishing Retrans and it facilitated cross-talk on the BTG Command net.

Enjoying the freedom of maneuver away from a fixed command post, I was able to link-up with the S3 and together we maneuvered to key terrain between Hill 800 and 876 improving our FM communications with our advancing MIBN along the northern axis of advance. Finally, we moved to the west side of Hill 780 providing us visibility of the main battle area and enabled the final read for the commitment of the exploitation force to follow and assume the success along the northern axis of advance.

We were able to maintain FM communications throughout the breadth of the BTG's area of operations with a Retrans in the vicinity of Brown Pass. Our JCR like system provided me great SA on the frontline progress of our elements. We also utilized it for direct communications between the MCG and the Main. Additionally, the Main's ability to track the progress of our lead elements, populate spot reports on to the system and monitor our FM enabled them to provide periodic assessments and recommendations to the MCG and me on potential actions based on our Decision Support Matrix (DSM). My S3 continued to track the combat power for the lead two MIBN's, the XO synchronized the Fires in support of the BTG fight and my CSM moved to put eyes on John Wayne Pass which we had identified as our vulnerable flank as an economy of force.

The success of our mission was largely due to the thorough understanding of the plan and the cross-talk between subordinate commanders and the MCG. MIBN commanders understood the scheme of maneuver, the criteria for the identified decisions and their tasks in relation to the enemy, in time and space. Simple, easily understood tools were the key to achieving this understanding, which then empowered them to execute restraint and audacity to shape the fight and accomplish the mission. The trust I had in the commanders understanding of the plan and their ability to report what they saw and develop the situation allowed the BTG to more rapidly maneuver to and seize the decisive terrain north of Siberia, forcing the RTU to fight piecemealed into the central corridor.

Story #7

Exploiting Gaps in the Reconnaissance Fight:

A Blackhorse Perspective

Lieutenant Colonel Jeff Bramlett was the Commander of the 2d Squadron, 11th Armored Cavalry Regiment acting as COEFOR in support of 2d Brigade, 1st Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit was task-organized to replicate three mechanized infantry battalions (MIBN) of the 111th Donovan Brigade Tactical Group, a brigade-sized element. Additionally, he was able to leverage 30 to 40 irregular forces to augment his regular forces. His missions included a movement to contact from the Donovan border west to east through the central corridor; a hasty attack towards Razish, and a deliberate defense of the international border from Crash Hill east towards Browns Cut and Debnam Pass.

All missions require the effective use of reconnaissance to enable good decision-making by commanders. This is arguably most critical in the Movement to Contact versus other forms of maneuver simply because of the speed with which decisions must be made. Decisions on avenues of approach, tempo, whether or not to push to the next piece of key terrain, and how to address tactical risk must all be made at speed commensurate with the rate of march of friendly and enemy forces. When commanders accept risk along certain avenues of approach to achieve mass in their reconnaissance, they can enable early decision-making by the enemy and can inadvertently force the premature commitment of assets on less than favorable terms.

As the Donovanian Commander of the 111th BTG, I anticipated that the opposing BCT would struggle to find the right balance for the employment of its Armored Reconnaissance Squadron. This issue of balance—one the one hand achieving reconnaissance objectives along multiple avenues of approach while simultaneously retaining enough combat power along the most likely avenue to shape the early phases of the main body fight—was a friction point that I was also familiar with from the COEFOR perspective.

Like most fights at NTC, the reconnaissance phase is absolutely critical to set conditions for success. This is especially true for the RTU which has several distinct advantages over the Donovanian force. First off, there is a high degree of overmatch on the US side both in raw numbers and in system capabilities. During this particular reconnaissance phase, the RTU had a full reconnaissance squadron augmented by an M1A2 company. The addition of tanks to LRAS equipped gun trucks and M2A3s, all with GEN3 FLIR capability, gave RTU forces a significant leg up in observational and combat capabilities compared to COEFOR recon largely equipped with only NVGs and a single ITAS BRDM in our DTG reconnaissance

formation. Secondly, the ARS enjoyed the advantage of being able to cross LD with the entire augmented Squadron at the same time as my DTG recon which consisted only of four dismounted LRS Teams and an Engineer Reconnaissance Patrol. A second element, the BTG Recon, consisted of four BMP3s and was able to LD two hours later with a significantly shallower LOA. The ARS took an extremely aggressive posture and was able to move to and seize decisive terrain within the first hour of the recon fight. This had the potential to be highly advantageous; however in their rush to move forward to gain control of key terrain along their main avenue of approach they appeared to have devoted no discernible reconnaissance effort to a second avenue of approach on their Southern flank.

I had weighted my exploitation force specifically so that I could take quick advantage of perceived gaps in their reconnaissance and before our main body crossed LD, I was able to execute DP1; whether or not to accelerate the movement of the exploitation force and conduct a deep envelopment of the BCT through the Southern Avenue of Approach. The key terrain in question was Bicycle Lake Pass, a narrow pass which, with a small economy of force, could have created a significant tactical problem for my unit. I had assessed use of this pass to be of high tactical risk, but with a correspondingly high reward if successful and so I devoted a full 1/3 of my DTG reconnaissance in order to maximize my read on that terrain prior to LD. My rationale was that I could either use it to envelope the BCT or that he would use it to envelope the BTG; in either case I knew it was critical to have good eyes on that terrain.

The RTU conversely chose to overweight their effort in the central corridor where the main battle was most likely to occur. They moved quickly and seized much of the key terrain with their reconnaissance, largely unopposed due to COEFOR adherence to a stealthy and deliberate reconnaissance tempo. Our main focus in the Central corridor became use of indirect fires against the ARS which became more feasible based on their aggressive tempo which necessitated a ROM prior to reaching their final recon objectives.

At the same time, we realized there was little if any reconnaissance devoted to the southern avenue of approach specifically to control Bicycle Lake Pass during the recon fight and so it became very easy to identify this assailable flank. Based on the limited commitment of forces, I was able to seize key terrain in the South virtually unopposed very shortly after LD by immediately diverting one of my four MIBNs to the southern pass. This in turn caused the BCT commander to commit his reserve within one hour of his LD and against a less desirable planning priority than he originally intended.

With a balanced approach of conducting thorough reconnaissance of all key mobility corridors followed by a subsequent “conditions driven” transition to seizing decisive terrain and conducting reconnaissance pull, the COEFOR would have had a very difficult fight. In hindsight, I believe a thorough analysis of COEFOR reconnaissance capabilities would have allowed the BCT commander to have spread his assets more evenly amongst all viable avenues of approach while still maintaining more than enough combat power to seize reconnaissance objectives. Furthermore this may have created better dispersion complicating COEFOR employment of indirect fires which is an area in which COEFOR enjoys overmatch. Most importantly, this balanced approach buys the commander time which allows a more deliberate decision-making process where critical capabilities are employed on his terms rather than the enemy’s.

Story #8

Getting Enablers into the Fight

Lieutenant Colonel Eric Larsen was the Commander of the 1st Brigade Special Troops Battalion (STB) during 1st Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit was tasked with conducting rear area security and focusing on stability operations and engaging the population during the brigade's offensive and defensive operations against the Donovanian Regular Forces.

How to get enablers into the fight and integrate the capabilities and advantages they provide? We asked this question twenty years ago when our brigades had only a modest number of enablers. Today, it resonates even louder. The number of capabilities available to a brigade has grown in size and complexity under the modular construct.

My battalion was organized with the normal set of organic enablers found in a heavy STB: Intelligence, Signal, and Engineer companies, along with a headquarters company that was comprised of Military Police (MP), medic, support, and chemical reconnaissance platoons. Additionally, we were tasked by brigade to receive and integrate all of the combat support attachments which included 3 x route clearance companies, 1 x MP company (at reduced manning to 4 squads), 1 x Air Defense Artillery (ADA) battery (Avengers), 1 x Explosive Ordnance Disposal (EOD) detachment, 1 x Psychological Operations (PSYOP) detachment, 1 x Civil Affairs (CA) company, and a reserve horizontal engineer company; all in, the battalion had grown to just shy of 1,200 personnel. My mission was to conduct rear area security and focus the battalion's efforts on the Army core competency of wide area security.

In order to counter the size and scope of our rear area mission, I directed the staff to task organize our myriad enablers into teams that were constructed based upon the mission they were to be assigned. These teams would become the primary units of action for me to execute my rear area mission, while also providing us the flexibility to attach them to maneuver units as they attacked forward and prepared to enter urban areas. Assigning a commander or leader to each of these teams would help ease mission command by creating fewer subordinate units and a more manageable span of control. And forming the enablers into teams improved our ability to provide protection to the many smaller, less protected units. Elements such as the CA and PSYOP Teams were paired with more secure elements such as the MPs or Route Clearance Patrols. This pairing, coupled with ensuring redundant communications capacity on the lower tactical internet, provided us the ability to move these elements around the battlefield without draining away combat power from the maneuver units.

One of the first teams we deployed was to the internally displaced persons (IDP) camp at Farsab village. The location of this camp was problematic for the brigade as it sat just inside the Whale Gap, a natural choke point and the brigade's line of departure. **Team Farsab** was directed to move to and control the Whale Gap in order to allow the brigade to move through the gap untrammelled by enemy or civilian actions. To accomplish this task, we built the team with 2 x MP Squads, a PSYOP Team, a Civil Affairs Team, and a HUMINT Collection Team (HCT). The MPs provided overall mission command and security for the team, manning a traffic control point and providing crowd control. The PSYOP Team, using its loudspeaker equipped HMWWV, provided information and instructions to IDPs, while the CA team immediately began working humanitarian assistance for the camp and the HCT began canvassing the IDP population for commander's critical information.

Once the majority of the brigade crossed the LD and the movement to contact was complete, we began re-setting for the attack into the town of Razish. 1-22 Infantry was given the mission to attack into the city and required additional enablers to complete its mission. As 1-22 IN's command post and trains moved through the Whale Gap, Team Farsab conducted a link up and was task organized under 1-22 IN and renamed **Team Razish**. After 1-22 Infantry successfully gained control of Razish, the brigade commander directed a boundary shift plan which included a battle handover of the town from 1-22 IN to the STB, thereby freeing 1-22 Infantry to assist in the brigade's defense against an impending Donovanian attack. Team Razish reverted back to STB control at this time. We immediately began planning to push elements of the team forward to our Armored Reconnaissance Squadron (ARS) as **Team Ujen**, to deal with the problematic village of 2500 people that sat just west of their screen line. Eventually the ARS left Ujen in order to screen forward in preparation for the brigade's counterattack to restore the international border. In doing so they passed responsibility of the town of Ujen and Team Ujen to 1-66 Armor. 1-66 Armor was later ordered to move to its attack position as part of the counterattack to restore the international border and transferred control of the town and Team Ujen back to the STB.

The implementation of the team concept was not without friction. I believe that had we developed the idea sooner and incorporated it into our maneuver train up, we would have enjoyed greater success and an even more effective use of our enablers. But while the creation of the teams did not solve all of our problems, it did help us effectively deal with the systemic issue of getting our assets to the right place at the right time with the right capabilities. The teaming concept gave us the ability to "breadcrumb" enablers across the area of operations. By tying the teams to the towns rather than the units that leapfrogged through them, it provided the teams time to develop the situation while also providing continuity

to the town populations as responsibility of the towns transitioned. This concept was one way our brigade tried to address the inherent tension by forcing units to resource and execute combined arms maneuver and wide area security operations simultaneously. While enablers will always come with some measure of friction, we found that creating geographic and functionally aligned teams provided a more efficient means of reducing that friction.

Story #9

Integrating Enablers into the Battalion Scheme of Maneuver

Lieutenant Colonel Steven Adams was the Commander of the 1st Battalion, 22d Infantry Regiment, supporting the 1st Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC, and task organized as a combined arms battalion. Following a movement to contact to seize initiative from the 11th DTG, 1-22 IN was tasked to secure the Atropian Provincial Capital of Razish.

The key to a successful rotation at the National Training Center (NTC) requires not only sound planning and adequate preparation for the assigned tasks such as the Movement to Contact, Attack, and Defense; it requires detailed planning and preparation for the transitions between these tasks, often foreshadowing the degree of success you'll enjoy during their execution. The time available to adequately plan, prepare, and execute an operation is one mission variable at the NTC that is always in short supply. And, as many leaders before me learned and undoubtedly those in the future will as well, everything takes longer than you think it is going to take. So, if an important mission on Day 1 is immediately followed by another critical mission on Day 2, how do you effectively transition the necessary resources, attachments, and enablers into the first fight and still set yourself up for success on the second?

For 1-22 IN our Day 1 mission was the movement to contact, immediately followed by our Day 2 mission – secure Razish. While the staff and I planned for the Razish mission prior to executing the first mission, it still proved very challenging just getting all of our attachments under our control. That task took most of the night and into the next morning before everyone had assembled in the new TAA we established upon completion of the movement to contact. While these attachments undoubtedly had played a role during the brigade's initial mission, the retrospective cost-benefit comparison of their value in terms of our inability to finalize planning and rehearsals for the Razish mission was seemingly out of balance. In hindsight, we likely would have been better served had the bulk of enablers been task organized with 1-22 IN from the beginning to set the conditions for the next mission. While the Razish mission was an overall success, I learned that the integration of attachments and enablers into the battalion scheme of maneuver must be planned for and rehearsed in detail prior to the execution of operations, especially in an urban environment.

During the planning process, I had developed a good understanding of the friendly and enemy situation and what the battalion needed to accomplish given the mission to secure Razish. The ethnic breakdown of the town was clearly spelled out. I knew which areas were generally pro-government and which were

not. I also knew that the Lezgin populated neighborhood was an area that would defend against aggression, so we should be careful not to give them cause to take up arms against us. It would be prudent to keep them out of the fight, or even better, swayed to our side to help provide security.

In my commander's intent I made it clear that we would treat all people with dignity and respect because we were there to secure the capital and protect the population in order to allow the legitimate government to re-establish control. We would take precaution to limit collateral damage to make it easier to maintain a positive relationship with the people once security was restored. I approached the Razish problem set as a deliberate offensive mission even though we knew very little about the specific enemy strength, their location within the town, and their intentions. Because so little of the details were known, we planned to use a cordon and knock method of gaining intelligence on the enemy until first contact was made. Two companies worth of dismounts, supported by a company of Bradley Fighting Vehicles in overwatch, would walk into town, secure a foothold, and start knocking on doors.

The goal was to talk with the people, gain a first-hand assessment of the situation, and then secure the town. This plan was well understood by the organic members of the battalion that had the luxury of a one-thirds, two-thirds planning timeline. However, attachments and enablers were not afforded this same amount of time to plan and prepare. Their understanding of the situation, mission, and concept of the operation was much less than the rest of the battalion, leading to problems during the execution phase. Our attached Military Police Platoon drove into the Lezgin neighborhood causing the number of enemy fighters to double in a matter of minutes. This was not the fault of the Military Police Platoon rather it was the result of the battalion's inadequate preparation of the MP Platoon to understand the situation and ensure they were ready to execute their directed task. The short time available to effectively plan and prepare could have been, at least in part, remedied by a strong rehearsal that would improve everyone's understanding of the concept of operations, control measures, decision points, and command and support relationships. While rehearsals were conducted, we focused too much on organic assets, not on ensuring all attachments were equally as prepared and understood their respective tasks and purposes.

The Gridded Reference Graphic (GRG) labeling each of the buildings was an essential product for the Razish mission. In it, the battalion had a common reference to discuss specific locations within the town. Each of the Infantry Companies knew clearly which buildings on the GRG they were responsible for checking. While the GRG was pushed up to the BCT MAIN and adopted as the BCT standard, we found out the hard way that not everyone involved in the mission had a copy. When the first set of Close Combat Attack (CCA) aircraft arrived on station, we were unable

to use the GRG because they did not have a copy – a situation we soon fixed by having them land near our Battalion MAIN and providing them a hard copy. Other enablers under our task organization, however, also did not have a copy of the GRG, hampering our ability to communicate effectively and efficiently.

Despite having a solid tactical SOP that spells out how to properly receive and integrate attachments, we failed to do so to standard. If we are to effectively integrate enablers into our formations and expect them to shape the operational environment as they are designed, it is imperative to understand what assets are available, what capabilities they bring to the fight, and how to best employ them. We must also deliberately plan for their use and allow them sufficient time to prepare for the mission just like our organic units. Timing is critical. Changing the task organization on the chart does not equate to when that unit will be able to physically get to where it needs to go. There comes a point in time and space when it is no longer beneficial for the enabler to be added to the task organization. While 1-22 IN's mission to secure Razish was clearly successful, it demonstrated that making the most effective use of attachments and enablers requires a detailed plan, time to prepare, and effective rehearsals prior to the execution of operations.

Story #10

Managing the Transition of Mission Command Nodes and Systems

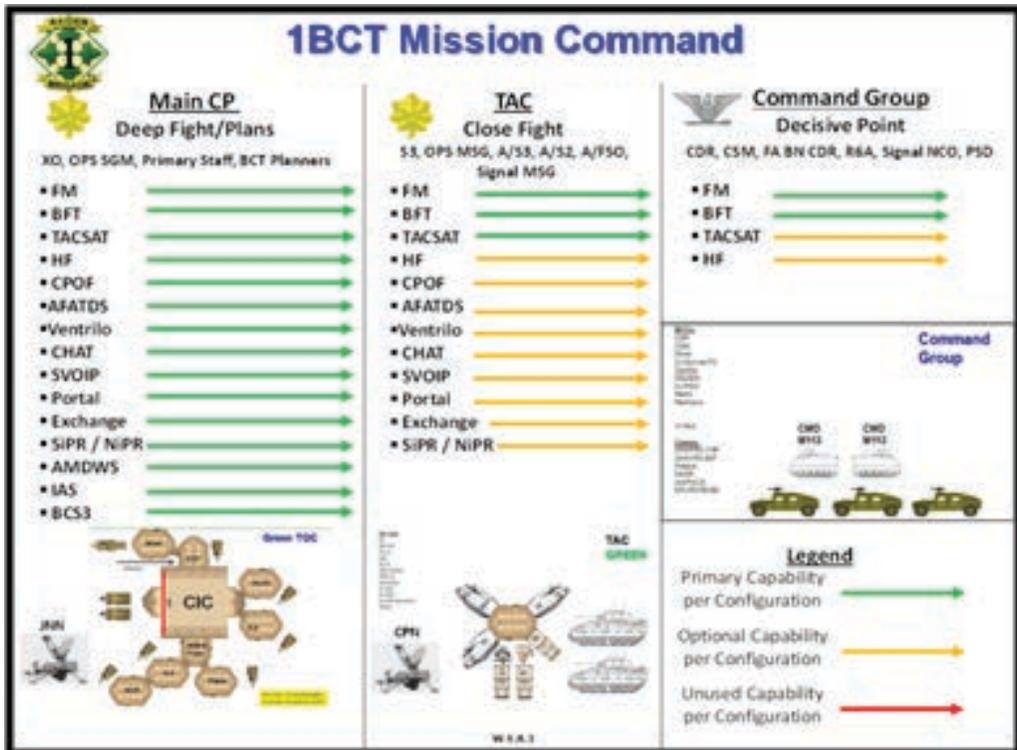


Figure 10-1. Scheme of Mission Command.

Major Pete Moon was the Brigade Executive Officer of the 1st Armored Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit conducted offensive and defensive operations against both regular and irregular forces in a complex operating environment, beginning with a movement to contact from a TAA south of the Whale Gap and into the Central Corridor and culminating in a deliberate attack through the Brown and Debnam Passes and the Washboard towards Crash Hill.

While every operation that our BCT executed during our rotation at the NTC was challenging, my hardest task as the brigade XO was making sure that our mission command nodes could communicate with each other while simultaneously controlling the placement of key systems at the proper location and time to ensure seamless mission command. To prepare for this complex task, we had spent a significant amount of effort during the train-up prior to arriving at NTC adjusting

our mission command nodes—the MAIN, TAC, and Mobile Command Group (MCG)—in order to end up starting our rotation with the configuration below.

Our starting configuration was effective when all systems were functional, when everyone was static, and when the RETRANS were at best spots on terrain. When everyone was on upper tactical internet (TI), we had a similar digital backbone to what we had experienced executing out of Forward Operating Bases (FOB) and Combat Outposts (COPs). Where things became difficult, was in transitioning from a static to mobile configuration as we learned during the movement to contact to counter the advance of the 111th Donovanian BTG, our first BCT fight.

Lacking sufficient beyond line of sight, on-the-move, voice communications platforms that we could mount on unit commander's M1s or M2/M3s, we relied on our lower TI—FM and FBCB2—for mission command on the move. This meant that despite the technological advances of the last 15 years, we still had to rely on placement and security of RETRANS sites for voice and digital, at optimal locations, to be able to talk during the fight. During the movement to contact, we placed RETRANS sites in the wrong locations, with too little planning given to security and PACE, creating reliance on a plan that did not work. As a result, I could not talk to the S3 or my brigade commander for almost half of the fight, and he was unable to rely on the FM backbone to communicate effectively with his battalion commanders.

When the MAIN could not talk to the TAC, MCG, or the battalions, it became a million dollar camping tent. We found we could pull in all the feeds from division and our brigade and above enablers, and do the analysis based upon the information coming in to develop recommendations. The pipes up were working. But our inability to communicate those recommendations to the commander prevented him from doing three basic things: 1-Make Decisions, 2-Set Priorities, and 3-Give Guidance.

By training day fourteen, we had RETRANS and PACE figured out for the attack to the international boundary (IB) from east to the western end of the box along central corridor. We secured all RETRANS teams, placed one on Bruno Hill, and I was talking clearly from the MAIN at Snow Cone to the TAC and MCG vicinity the Washboard. When I could not talk via FM, I still had good FBCB2 communications to send free-text messages.

Our transition from MTC on day 1 to supporting 1-22 IN's security operation in Razish on day 2 was also a challenge. Transitions by nature are difficult. On top of clearing everything in the TAA to include brigade and battalion command posts, the BSA, our Role II aid station, the Shadow TUAS platoon, and all the NMC combat vehicles that had been left behind, we still had to maintain a capability to continue planning for operations over 48 hours out while simultaneously preparing

to support battalion combat operations within the next 12 hours. We had a lot to do in a short amount of time. Key staff and systems, to include TGS and Prophet could not be afforded to come out of the fight for 24 hours while the MAIN moved locations. They needed to be moved into a position to integrate into the plan, collect, and shape the next operation. And we knew that the COEFOR still had a vote, as did the ever-changing weather conditions, as to how easily we would be able to transition.

To set the stage for our transition, the majority of the BCT was moving into a hasty defense, and 1-22 IN was posturing to secure Razish. The TAC, with the S3, was established, north of Siberian Ridge vicinity of Hill 760, and co-located with the MCG and Brigade Commander, while I was at the MAIN in the TAA. I discussed the MAIN jump and transition of mission command with the CDR, CSM, S3, Operations SGM, Battalion CDRs and XOs. Key points of friction and facts we had to contend with were:

1-The MAIN was going to be out of the fight for up to 36 hours from battle hand off to TAC, break down, movement to Snow Cone, and come back up to Full Operating Capability (FOC).

2- The TAC staff was going to be on minimal sleep for 48-72 hours. It also had to control the security operation in Razish as well as the transition into hasty defense east of Barstow Road for 1-66 AR and 7-10 CAV.

3- We had to get into Razish the day after MTC; the security situation was deteriorating by the minute, and it was the provincial seat of government.

4- The TAC and 1-22 Infantry needed key enablers for Razish: our information collection assets, Civil Affairs, Public Affairs (PAO), Inform and Influence Activities (IIA), and Brigade Support Element (BISE).

5- We could not stop the plans process for 36 hours.

6- Role II had to be established at its new location before we went into Razish, as casualty projections for urban operations were high.

7-The aviation battalion had to relocate everything to the new TAA, to include the FARP.

8-The Shadow platoon had to move to its new location and establish a suitable launch site and recovery runway.

9-The COEFOR would still have significant combat power west of Barstow Road following MTC to prepare for an attack to the east.

10-The TAC was on a high piece of terrain and vulnerable to enemy air threat.

We attempted to address every problem by organizing critical systems into a controlled order of march and carefully planning movement out of the TAA. The BSB commander jumped Role II early in the morning to the new BSA location. Next was the aviation battalion. The Operations SGM enabled the TAC by driving key staff (Plans, PAO, IIA, and a portion of the BISE) and additional tents to the TAC during his movement of the quartering party to Snow Cone. I moved ahead of the MAIN to the TAC and brought the remainder of the BISE, a terrain model kit, and an Avenger team. The endstate was a TAC (+) and the majority of the critical systems arrayed on the battlefield where we wanted. At a minimum, we had ensured that the TAC had a plans tent and primary staff for planning capability, 1-22 IN received its key enabling staff and systems before they executed their Razish mission, and although they established too late to ultimately support the Razish mission, we had reestablished Role II. Mission command was still a challenge—we could not talk to every battalion command post, and the TAC was starting to get overwhelmed with information during 1-22 IN's operation in Razish, with 1-66 AR experiencing significant contact east of Barstow Road. The below figure depicts the transition of mission command by systems and capabilities as they occurred.

While the solution wasn't perfect, we took away some key lessons learned in planning mission command for the next transition which included a deliberate plan and rehearsal for delineation of responsibilities between the TAC and the MAIN, movement and integration of key enablers to battalions to facilitate TLPs and rehearsals, and refinement of the PACE plan that took into account the need for relocation of RETRANS sites. When the TAC had the fight, the MAIN maintained coverage across all war fighting functions as a contingency, in the event the TAC came into contact or lost communications.

There were other significant lessons learned during the rotation that applied to managing the transition of mission command nodes. First was the need for training with a more robust communications architecture on the move at home station. This includes configuring BFT with FBCB2 through the tunnel during the train up. The tunnel is rarely available during the train up, and became a significant challenge between aviators (BFT-based) and the remainder of the BCT (FBCB2-based). Second was training and employment of signal company reconnaissance teams to conduct RETRANS site reconnaissance and emplacement. This was a tactical task that the RETRANS teams, along with the security element, need to practice to gain proficiency. Third and lastly, the command posts need to practice the transition of mission command between offensive, defensive and stability operations, as well as through phases of the operation. In addition to integrating multiple key enabler systems as battalions modify their structure, the BCT command posts must be able to act as the "swivel chair" between lower and upper TI to facilitate mission command at echelon, and empower commanders to make decisions.

Transition during the Fight (TOC to TAC)

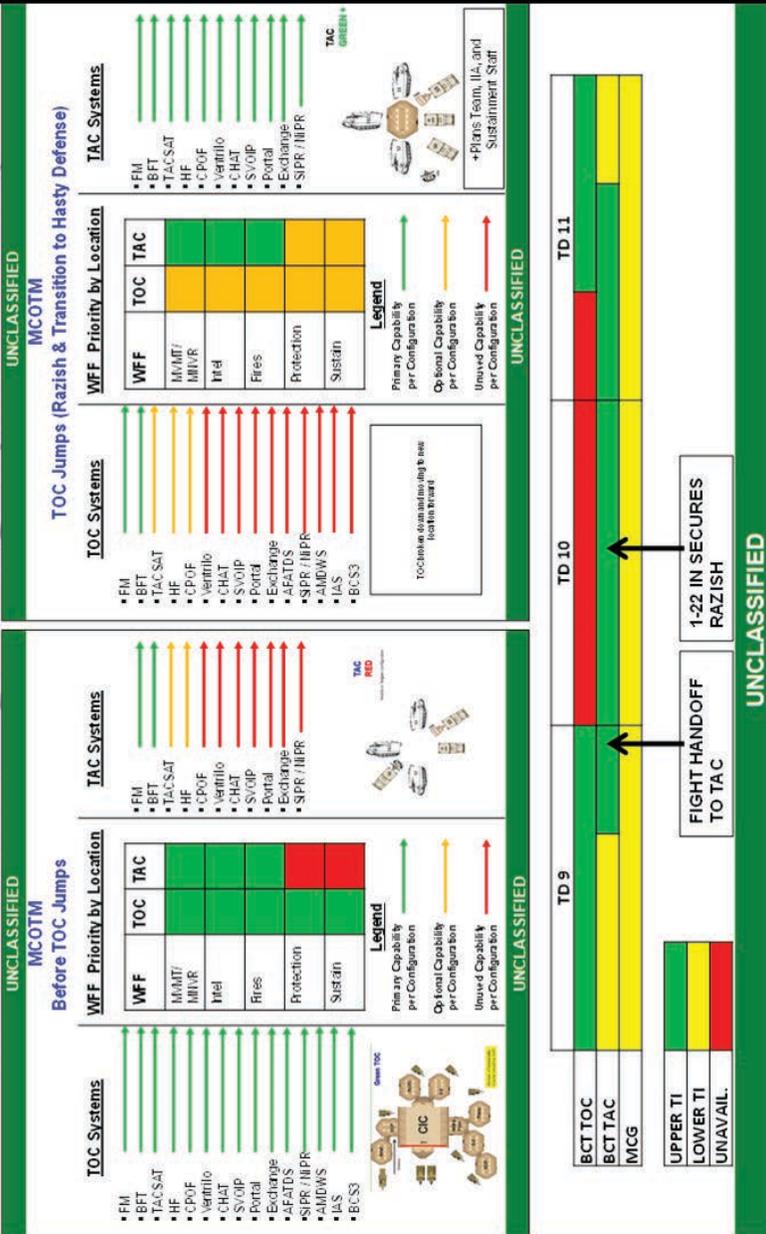


Figure 10-2. Transition of Mission Command System.

Story #11

Mission Command on the Move: EPLRS-ES

Major Barbour was the Brigade Operations Officer and Major Coleman was the Brigade Signal Officer for the 2d Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC in June 2013. The brigade was comprised of two combined arms battalions, an armored reconnaissance squadron, a fires battalion, a special troop's battalion, a support battalion, and an attached aviation task force. The brigades mission set included defending the area surrounding Dezashah and Crash Hill west of Brown and Debnam Pass complex, then conducting a counter attack to seize the central corridor and the towns of Ujen and Razish, and finally, a movement to contact south from the Siberian Ridge towards the Whale Gap.

We knew that going into NTC units had struggled with bridging the upper and lower Tactical Internet (TI) divide especially as they transitioned their command nodes or conducted offensive operations that required increased maneuver. To facilitate mission command on the move our brigade began testing the Enhanced Position Location and Reporting Systems with Enhanced Services (EPLRS-ES) to enable limited upper TI to select vehicles while on the move. The brigade S6 section worked closely with Raytheon engineers to design an operational test. This was accomplished in several phases. The first was a table top design using four radios: one for the EPLRS Network Manager (ENM), one for a transverse chat server, and two radios for SIPR client workstations. This demonstrated the proof of concept. We then moved to install the client radios into the brigade TAC M113s. Once this was tested successfully, we moved the transverse server radio to the Command Port Platform (CPP) truck that would be located at the brigade main to act as a gateway between the lower TI EPLRS radios and the upper TI. The brigade battle command control server stacks (BCCS) would be located at the brigade main and hosted on SIPR. The BCCS stack hosted all of the brigade's services including transverse chat. The only difficulty here was converting the upper TI routing to the EPLRS routing commands.

Once this was successful, we began a massive software upgrade for all the EPLRS radios in the brigade to ensure that there was a sufficient backbone of EPLRS radios to transmit the transverse data throughout the brigade's EPLRS network. We settled on using all the server rolls using the RT-1720G model radio due to their assumed position on the battlefield and increased bandwidth from the 1720G versus an "E" or "F" model radio. We limited the data sent from the client stations to transverse only data so that we would not hinder the FBCB2 SA data and messaging that the rest of the brigade would be relying on. The critical task was to connect the brigade TAC personnel (brigade commander, brigade S2,

and battle captain) to the intelligence collection systems (Prophets, UAS, and S2 CUOPS) located at various nodes around the battlefield or at the brigade main.

Using EPLRS-ES enabled all elements to be able to communicate in a collaborative environment on transverse chat regardless of their physical location on the battlefield. We found that there were three constraints. The system would be down when the brigade main was jumping as the transverse servers would be offline during that time. The EPLRS network is line of site based. Finally, the traffic must hit the brigade CPP gateway within 6 hops or else the message would time out and not be sent.

During the defense the brigade TAC was forward as well the prophets while the brigade S2, S2 CUOPS, and UAS platoon remained at the brigade main. During the counter-recon critical event, the brigade commander was able to dynamically re-task intelligence collection assets in a collaborative area in the transverse chat room. The subordinate battalion S2's were able to monitor this as well by participating in the discussion. We were able to leverage the robust EPLRS network to maintain situational awareness of all friendly forces. Additionally, graphical control measures were disseminated from brigade to battalion and laterally between battalions. Once an enemy was sighted battalion S2s would confirm reports to prevent over reporting the Donovanian strength before populating the FBCB2 COP.

During the counterattack, transverse provided the same capability between brigade level assets. When the battalion TOCs broke their upper TI, they lost the ability to participate in the transverse chat rooms. During RSOI and STX, battalion TACs were configured to use EPLRS-ES. However, this capability was not adequately explained and was therefore not widely used outside of the brigade TAC and intelligence collection resources. Since the 52ID standard chat was JABBER, located at the 52ID main, there was some confusion between staff elements and battalions on which chat server to use, JABBER versus transverse. This did cause some stove-piping of information. This forced more primitive methods of maintaining situational awareness. For example, the brigade S2-CUOPS section acted as the swivel chair between the two servers to keep everyone informed. At the conclusion of the offense, the brigade main jumped causing a 16 hour loss of transverse chat capability during the clearance of Ujen and Razish.

During the movement to contact, we task organized the Prophets differently and separated the UAS pilots from the take off site, placing them instead at the brigade main. Transverse chat over EPLRS-ES facilitated the fusion of intelligence assets during the movement to contact. We were able to step back and use the systems to identify targets/obstacles. The EPLRS-ES system enabled us to be one step ahead of the enemy. During the movement to contact, 1-67 AR was able

to beat the Donovians to Whale Gap. We were able to see that the Donovians were trying to counterattack through the Valley of Death as well as fire a linear smoke target towards the Whale Gap. The S2 was able to analyze this information in real time which enabled the brigade commander to reposition two platoons to reinforce the Whale Gap. As soon as the enemy attacked near the Whale Gap, the additional platoons were able to destroy 16 enemy vehicles that most likely would have broken through 1-67 AR's defense if they had not been reinforced. This information was all real-time which enabled us to get ahead of the enemy's decision cycle.

The full capabilities of EPLRS-ES need to be fully briefed to the battalion commanders and battalion S6s to encourage their buy-in for the system. This will help them understand the system's ability to facilitate mission command on the move with little additional overhead from the battalion. All that is required is an additional SIPR laptop to use in a battalion TAC or battalion TOC when their CPN is down. EPLRS/FBCB2 used in conjunction with organic and EAB intelligence assets can provide near real-time situational awareness of enemy and friendly unit locations. This can help prevent fratricide and enable the commanders at all echelons to reposition forces to best deal with the enemy. The key to maximizing the system is to have trained operators that are familiar with the systems capabilities and can maximize their use. This enables functional upper TI without having to have a full upper TI connection. It is a real-time system that enables tactical leaders to talk to higher level command posts. One improvement would be to make it a standard chat system (all on transverse instead of split transverse and JABBER) while establishing a digital ROE for each room so that only specific information is posted in the chat room. Numerous users can monitor the room, but only specific users should post information which will keep the room streamlined. Enforcing one standard for chat rooms is a must. Using brigade servers provides reliability when the division link goes down and ensures that all users are familiar with the layout and room names. This also gives the brigade S6 direct control over creating and editing user accounts. All war-fighting functions can benefit from using transverse chat over EPLRS-ES. During the rotation, the BCT saw significant improvement in the intelligence war-fighting function's ability to synchronize their efforts, which in turn enabled the brigade Commander to make critical and timely decisions on the battlefield.

Story #12

Defining the TAC: Maneuverability versus Capability

Major Christopher Danbeck was the Operations Officer for 2d Brigade, 1st Infantry Division's Decisive Action Training Environment rotation at the NTC. His BCT consisted of two combined arms battalions, a cavalry squadron, a fires battalion, special troops battalion and support battalion, and an aviation task force. The brigade conducted offensive, defensive and stability operations in the complex hybrid-threat environment IOT defeat a Donovanian military invasion and ultimately restore the international boundary between Atropia and Donovia.

If there is a lesson from our National Training Center rotation that I will never forget it is the critical importance of identifying the manning, placement, purpose and function of the Brigade's mission command elements. This lesson is particularly important in discussing the role of the brigade tactical command post, or TAC. We entered the rotation with a high degree of confidence in the team we put together in the TAC. The base collective had worked together for a few months managing troop/company/battery STX as well as company live fires. These scripted training events, conducted in our backyard with a well known and understood communications footprint almost exclusively on the FM nets did very little to prepare us for the challenges of the NTC environment and even less for my ability to provide the Commander with accurate and timely information to facilitate his decision making from the TAC. In execution at NTC, we tested three different configurations, each offering costs and benefits that are worth discussing as future units seek to address this complex problem.

The plan going into NTC was to jump the BCT MAIN a total of two times. Once, from the RUBA south to our initial assembly area in Atropia, and subsequently to Hill 720 from where we thought we could, with the proper employment of the TAC, provide the BCT Commander his requirements across the depth of the central corridor where we anticipated fighting. This is in fact what we were able to do with the MAIN, however, our TAC execution was at times lacking.

The first fight was a movement to contact through the Whale Gap, around the Siberian Ridgeline and down the Central Corridor to repel the Donovanian incursion into Atropia. The TOC held in place at our assembly area while the TAC was supposed to move forward to control the Whale Gap movement and set conditions at Hill 720 after the battle was complete to allow the BCT MAIN to jump into position. Friction was placed on the TAC crew almost immediately when the BCT Commander expressed his desire to bring forward the 5-ton plans van because of the amount of time we expected to be forward. This change was seen as an opportunity to use the plans van as a mobile TAC, something we had never attempted since we had no plans van at home station but, in my mind, was

simply a change up from our SICP based configuration. Needless to say while the equipment was in place, re-configuring the systems, incorporating the new personnel and the failure of our CPN team to get a link established left the TAC floundering in the background attempting to get solid communications while the BCT CDR, FSCOORD and myself controlled the fight via FM and BFT.

The TAC contributed nothing to the fight and at the final moment was destroyed by insurgent rocket fire. In retrospect, the close BCT fight was handled sufficiently by the BCT Command Group and we should have tasked one of the line battalions to escort the TAC forward into position to establish the proper communications architecture to support the follow on transition to the next phase of our operations and allow the jump of the BCT MAIN.

The TAC was next deployed in support of the Commander's desire to command forward during the brigade's hasty defense. We looked at our previous experience and decided to take a package tailored to the mission and its intended duration. This aptly named "Mini-TAC" consisted of five vehicles and included the S3, FSCOORD, CPP, CPN and Bradley security track. With these few vehicles we established the following systems: FM, BFT, SIPR/NIPR E-mail, Jabber chat, Ventrillo and SVOIP. The FSCOORD provided an OSRVT and the BCT Commander provided a TACSAT as the CPP's was inoperable. This group established the night prior to the defense in sufficient time to establish effective communications forward with the cavalry squadron and rearward to the BDE MAIN. Its footprint was approximately ten meters square. Utilizing the systems on hand the TAC crew was able to provide the BCT Commander with up to date information from the front lines, cross reference that information with the MAIN and their more robust crew and embedded kill team, and give him options for decision making that was highly effective in the positive outcome of the fight. A failure of the TAC that was identified during this iteration that couldn't be previously was a lack of tracking charts. Because we had the same COP as the MAIN and a MAIN/TAC transition wasn't anticipated it was not a critical issue but in terms of long term functionality of a TAC it was a major improvement to put in place.

The final fight saw the third employment of the BCT TAC atop Brigade Hill. Confident in our systems and buoyed by our lessons learned from the execution of the "mini-TAC" concept during the defense we were in high spirits. They were quickly dashed as our tactical movement into position took far longer than anticipated due to an extended engagement with Murphy. In an attempt to execute a tactical establishment we set the TAC on the reverse slope of the crest of Brigade Hill in hopes that our communications from there would be ideal. This turned out to not be the case. While we had excellent upper TI communications, all but two of our subordinate units had torn down their upper TI systems and thus our ability to talk to two Battalions and the MAIN did little to provide the BDE Commander

with increased situational awareness. Additionally, our FM communications were in the shade of the hill mass and even with an OE-254 antennae positioned 50 meters off the crest of the hill, we lacked positive communications with all the line battalions. This positioning highlighted for us, once again, the need to set the TAC prior to a period of zero illumination and to ensure that a balance between security and the ability to talk has the proper balance and isn't leaning too far in one direction, in this case, security.

Story #13

Rehearsing for Success in the Defense: Tailoring Rehearsals towards Critical Vulnerabilities

Major Steve Gventer was the Operations Officer for the 3d Brigade, 1st Cavalry Division during its Decisive Action Training Environment rotation at the NTC. The BCT consisted of two Combined-Arms Battalions, a Cavalry Squadron, a Fires Battalion, a Special Troops Battalion, Support Battalion and a composite Aviation Task Force. They were charged with conducting a defense ranging from Red Pass in the east to Bicycle Lake in the west against a Donovanian attack. Following a successful defense, they executed a counterattack and a movement to contact to secure the population centers and deny additional Donovanian incursions.

In addition to our six organic battalions and the aviation task force supporting us, we were reinforced for our defensive operations with a rocket battalion (-), an engineer battalion, an Avenger battery and a Combat Service Support battalion. As a brigade, we had not previously trained with all of these additional units, and we recognized that successfully incorporating these elements into our operations would be a key challenge for mission command. This was especially evident once the staff took a look at the ground and saw with our own eyes the size of the area that we would need to exercise command and control. The brigade Commander placed emphasis from the outset of our defensive planning on two critical areas: simplicity and communication. He recognized that the only way to truly execute a successful defense would be if our commanders and mission command nodes could communicate to each other over our tactical internet systems.

In terms of simplicity, the commander gave clear guidance in the form of intent. Going into mission analysis, the staff was able to understand how he visualized the battle, and developed products that translated that vision down to the battalions through WARNOs and FRAGOs. We kept our products small—low bandwidth—to facilitate sharing and we tried to utilize our lower TI systems, FM and FBCB2 to distribute products to as wide an audience as possible throughout the planning process. Additionally, the terrain walks we conducted with the staff and then with the battalion commanders enabled the commanders to verbally confirm synchronization of intent and how they would fight their particular portions of the battle within their battalion sectors.

As we transitioned from planning into execution of the defense, we recognized that our rehearsals would be key. We chose to combine the brigade Fires and IC synchronization rehearsals on a terrain board in order to save time and confirm cross talk for our sensor to shooter linkages was robust. Our FSCOORD, FSO, S3 and S2 led this event, and were able to work through several issues in both the observation plan and the fire support plan.

When discussing the brigade combined arms rehearsal, the brigade commander recognized that we had four separate and distinct compartments of terrain that would stretch us to the point of breaking—three engagement areas along the Donovanian border and our security zone with the key population centers behind those areas. The commander, through discussions with the FSCOORD and staff, came to the realization that location wasn't as important as his ability to communicate. This drove us to relook our plan for the CAR and determine that what we needed to execute a reduced force rehearsal that forced us to test our mission command systems.

It's important to understand that we had previously decided to bulk up the capabilities of the TAC. The Commander's intent was to finish with the publication of the initial order, and then not have to return to the MAIN. Instead, we ensured that we had mirrored all of the upper and lower T/I capabilities of the MAIN and enabled a robust intelligence, fires and signals capability that allowed for planning and coordination of the fight forward. This meant it was critical for our TAC to be able to communicate effectively, both to our subordinate battalion CPs and to the brigade MAIN and Division. The MAIN retained the primary responsibility of reporting to Division, but we planned redundancy as well. All of these factors lended necessity to ensuring our brigade rehearsal focused on the ability to communicate with each other over systems and not face to face.

To validate the plan, we chose to execute the reduced force mounted rehearsal from our assigned areas of operation and only on FM and FBCB2 systems. We placed the XO and S2 in the MAIN, while I was in the TAC, and the brigade commander was forward on his Bradley. In execution, the brigade and battalion command sergeants major acted as the mounted opposing force and attempted to penetrate our defensive lines based upon the identified enemy courses of action. This allowed the brigade and battalion commanders to work through their decision points (i.e. moving forces, committing the reserve) and refine their understanding of the plan. We controlled the rehearsal by following the action, reaction and counteraction technique of the wargame but without reengineering the plan as we went along. The commander controlled the introduction of friction.

The venue and format would prove powerful decisions for learning. Firstly, and on a good note, we were able to validate our fire support architecture. We did this by allowing the MAIN and TAC of the fires battalion to work through the decision support template and walk the dog on PIRS to DPs to triggers. Secondly, we quickly recognized that where the brigade Commander had chosen to fight wasn't going to work. From the start of the rehearsal, he could only talk to the brigade TAC, 3-8 CAV, 6-9 CAV and the brigade reserve but we couldn't get either the MAIN or 1-12 CAV up on FM. Thirdly, while commanders, sergeants majors and key staff primaries in mission command nodes were dialed into the rehearsal,

we realized in hindsight that those staff entities who didn't participate were left on the outside of the refined plan. In particular our sustainment sections and enablers would need to be brought up to speed in the aftermath.

Issues aside, the rehearsal was effective in allowing us to see ourselves. As a result of the rehearsal, we knew we had to adjust locations of our RETRANs in order to facilitate BCT mission command. Additionally, we had to get creative and figure out how we were going to bridge the FM gap with the brigade MAIN. It proved difficult to get the MAIN into the fight, given the distance and terrain between our location forward of the Furlong and their location southwest of OP1. Ultimately, we ended up working a soft CAU capability over IP to enable the MAIN to get up on FM and into the fight—though this issue wasn't solved during our initial defensive battle. That said, it was much better to go into the defensive fight knowing our FM weaknesses than finding out at the eleventh hour with no time to react.

The actual execution of the defensive fight proved successful. We attributed this success to two factors. First, Soldiers across the BCT had a clear understanding of the commander's intent and the plan, and were able to play a direct role in its development through the iterative process described above. Second, the mounted reduced force rehearsal—utilizing an independent opposing force and featuring the introduction of friction by the BCT commander throughout—provided subordinate commanders with the ability to synchronize mission command at echelon.

Story #14

Templating the Hybrid Threat

Major David Johnston was the Intelligence Officer of the 3d Armored Brigade Combat Team, 3d Infantry Division during the first-ever Decisive Action Training Environment rotation at the NTC. Their missions included a movement to contact through Siberia and into the Central Corridor, a hasty defense vicinity centerline road, and a deliberate attack through Brown Pass and Debnam Pass towards Crash Hill.

During our rotation, we encountered a new threat doctrine that fused the counter-insurgency fight that the Army trained against for the past decade with a conventional armored threat that we hadn't experienced in some time. This threat was coupled with a complex environment encompassing cities, open desert, and mountainous terrain. It quickly became apparent that our skill and methodology for accurately templating a near-peer conventional force had deteriorated. Identifying the key aspects of enemy maneuver such as enemy formations, speed of travel, distance between units, sustainability, and fire support had become a distant memory; at NTC we would have to learn and re-teach those skills on the fly.

Gaining an accurate template of the enemy's likely course of action required detailed analysis of how the enemy would use terrain, time, and irregular forces to shape his operations. We had several tools at our disposal to assist in that effort, including the Modified Combined Obstacle Overlay (MCOO) and the Threat Model, what we used to call a doctrinal template or DOCTEMP. We used our MCOO to identify avenues of approach, restricted terrain, choke points, key terrain, inter-visibility (IV) lines, obstacles, and hydrology which were critical variables to consider in attempting to template how the enemy would use the terrain. The DOCTEMP gave us a starting point for depicting how the enemy would fight according to their doctrine given perfect conditions with no restriction from terrain or weather. Even though we knew the enemy could task organize differently, it was critical to have a concept in mind that could offer a likely template for formations, distance between units (both by time and space), rate of march, location of support units (artillery, reconnaissance, supply) in relation to the maneuver elements. Additionally, we had to take into account the insurgent and criminal threat and template common communications capabilities and operating techniques for each group. With these two tools fleshed out during information preparation of the battlefield, we were able to develop an initial enemy course of action with respect to how the enemy would most likely operate in space and time.

Our initial mission had us conducting a movement to contact from our tactical assembly area, up through Whale Gap and across Siberia into the central corridor. I created two enemy courses of action for this mission: a most likely and a most dangerous. I developed the first course of action using the doctrinal template described above, overlaying the enemy with the terrain. COA 1 identified likely locations of reconnaissance and by using time-phase lines, depicted the enemy's movement through the Central Corridor. Given the anticipated rate of march of both our forces and the COEFOR, we projected that our two forces would meet just to the northeast of Razish, near hill 760. Our MCOO proved useful in developing this course of action since it showed the terrain favoring COEFOR elements moving west to east.

My second COA depicted Donovanian forces sacrificing security for speed. By rapidly moving forces using the high speed avenues of approach in column formations west of Razish, Donovanian forces would arrive at the key terrain north of Siberia and Red Lake Pass prior to our ability to secure it. Based on COEFOR reconnaissance capabilities and their sympathetic insurgent groups located throughout the country, our assessment was that the enemy knew the proximate location of our deep threat systems and their maximum engagement range locations. I was concerned that if the enemy successfully occupied the high ground north of Siberia, they could mass fires on units exiting the restricted terrain to the south and disrupt the brigade. Our key to negating this, I thought, would be figuring out a way to reduce the impact of the Donovanian irregular forces operating in Atropia. Our best means of achieving this was to co-opt the rival Lezgin forces into assisting our efforts and denigrating the Donovanian irregular force efforts. Understanding and leveraging the human terrain was essential.

In comparing the two COAs during mission analysis, I stressed that my second COA was more likely as the risk versus reward totaled out in the enemy's favor. Most of the brigade staff disagreed based on how the historical enemy doctrine depicted Donovanian maneuver. And while I was hoping to be able to demonstrate the frictions of COA 2 during wargaming, our time constraints forced us to only wargame the most likely COA 1. Unfortunately, this decision would cost us. The COEFOR's ability to leverage both regular and irregular forces to gather intelligence during the reconnaissance fight proved a difference-maker. The Donovanian regular forces sacrificed security for speed and quickly maneuvered through the Central Corridor to secure the high ground north of Siberia and Red Lake Pass while deploying forces with an AT capability into John Wayne Pass that slowed our rate of movement. This resulted in 3ABCT fighting earlier than anticipated on terrain not of our choosing.

The time and effort spent building an accurate DOCTEMP and MCOO allowed me to understand how the enemy would use both his regular and irregular forces to achieve his mission objectives during the movement to contact. My mistake was not selling what I had assessed as the most likely COA to the commander. While the brigade was ultimately successful on the ground, we ended up in a knife fight when we could have wanted to bring more of our joint fires to bear at greater ranges. Ultimately, the flexibility of our commanders at echelon tipped the balance back in our favor as we were forced to overcome a near-peer enemy holding advantageous terrain.

In closing, intelligence officers preparing for offensive and defensive operations at the NTC would do well to revisit those IPB tools from the now defunct Field Manual 34-130 that have been underutilized in the last ten year. By using these tools as a starting point, S2s can develop a decent assessment of likely enemy COAs, validate those assessments through wargaming and rehearsals and ultimately, ensure that, at echelon, those tools are paired with analytical assessment to paint the best possible picture for the commander of how the enemy will fight in space and time.

Story #15

Graphic Control Measures: Building a Narrative for Friendly and Enemy Operations

Lieutenant Chrystal Carmody was the Assistant Intelligence Officer for the 2d Battalion, 8th Infantry Regiment, in support of 2d Armored Brigade Combat Team (ABCT), 4th Infantry Division's decisive action training environment rotation at the National Training Center (NTC) in June 2013. Among the many offensive operations her unit performed, was the task to clear the town of Ujen after several days of irregular force harassment and lawlessness within the town.

On the morning of Training Day 13, the battalion was preparing to conduct the operation to clear the town of Ujen in order to destroy the Bilasuvar Freedom Brigade (BFB) forces that had taken control of the city, killed the local mayor and executed a captured US Soldier. Our key missions were to root out the BFB, recover the body of the Soldier, and enable the restoration of Atropian governance. I operated from the battalion TAC with the battalion S3, FSO, and ALO from the south of Ujen. Two companies were clearing the town from south to north, with the boundary between the companies set along the main road bisecting Ujen in half. The remaining companies of the battalion set an outer cordon to isolate the town and prevent BFB forces from entering or leaving the town. My situation map for the town included the battalion operational graphics which consisted of the company boundaries, a series of phase lines, and an objective area. In addition, I placed icons for templated and confirmed enemy locations; effectively tracking the progress of the battle, or so I thought.

It was about halfway through our progression that I noticed that the western infantry company had progressed much more rapidly than the eastern infantry company. The western company was near the northern edge of the town, while the eastern company was still in the center of the town—this had opened a gap between the units, allowing the BFB an opportunity to exploit the gap. The western infantry company had not reported crossing several phase lines, so we did not realize where the western company was until it reported nearing one of its objectives. I began to think of what other control measures I could have used to ensure the two companies operated in a coordinated manner, and immediately thought of contact points or coordination points that would have required the companies and their subordinate elements to cross-talk or physically meet. As I looked at our operational graphics, I realized that we have been somewhat vague in our application of graphic control measures. Had we included contact points, directions of attack, support by fire positions, and target points, we could have better created a visual narrative of how the operation would unfold. By placing contact points on the operational graphics, the battalion would visually indicate to the companies the commander's intent for

the units to make physical contact in order to ensure they remained abreast of one another and to exchange information on friendly and enemy forces and conditions in the town as they developed.

This line of thought led me to reevaluate my own templated graphics for the enemy. I had marked enemy locations on the map with diamond unit symbols to indicate both identified and destroyed forces. In doing so, I had described the enemy force using improvised explosive device (IEDs), mortar position, and small arms ambush templates but none of these graphic representations captured how the enemy would actually be conducting all these activities on the map. If we had used purpose-oriented operational graphics, such as obstacles, observers, target points, ambush positions, routes and checkpoints, we would have created a much more visual narrative that would have allowed the battalion Commander and the rest of the staff to better visualize how the enemy would fight in space and time.

Recognizing that we were too far along in the operation to alter templated graphics, I still took the time to pull out the enemy course of action situational template (SITEMP) for our attack the following day. The battalion SITEMPs identified enemy locations as a snapshot in time with unit icons placed in groups on the map based on the enemy's task organization and disposition. In particular, I looked at routes the enemy might take to seize advantageous terrain. The products were adequate, but did little to explain how the enemy forces would maneuver, employ fires, and use other enablers to support their operations. I realized that I could use the operational graphics to describe how the enemy would fight in addition to where the enemy would be, and then drew a series of routes, attack by fire positions, observation posts, target points, smoke lines, which he used to describe in a narrative how the enemy would fight.

As I looked at the COA sketches our battalion produced, I saw how difficult it was to adequately describe how the enemy would fight in sufficient detail without using a series of operational graphics. The lack of detail would reduce the value of my SITEMPs for the companies and platoons that would be executing the operation on the ground. Drawing on these lessons learned during mission planning for the subsequent fight – a movement to contact towards the Whale Gap – the S2 section was able to create the graphical products below to help subordinate commanders visualize how we expected the enemy to fight in time and space. This resulted in a much higher level of situational awareness and understanding across the task force during mission execution. Looking forward, S2s need to better understand how friendly forces maneuver and how to depict maneuver using operational graphics. When S2s use operational graphics to depict how the enemy forces will maneuver, Commanders, staffs, and subordinate troops can better understand how the enemy will fight and thus more easily defeat those efforts.

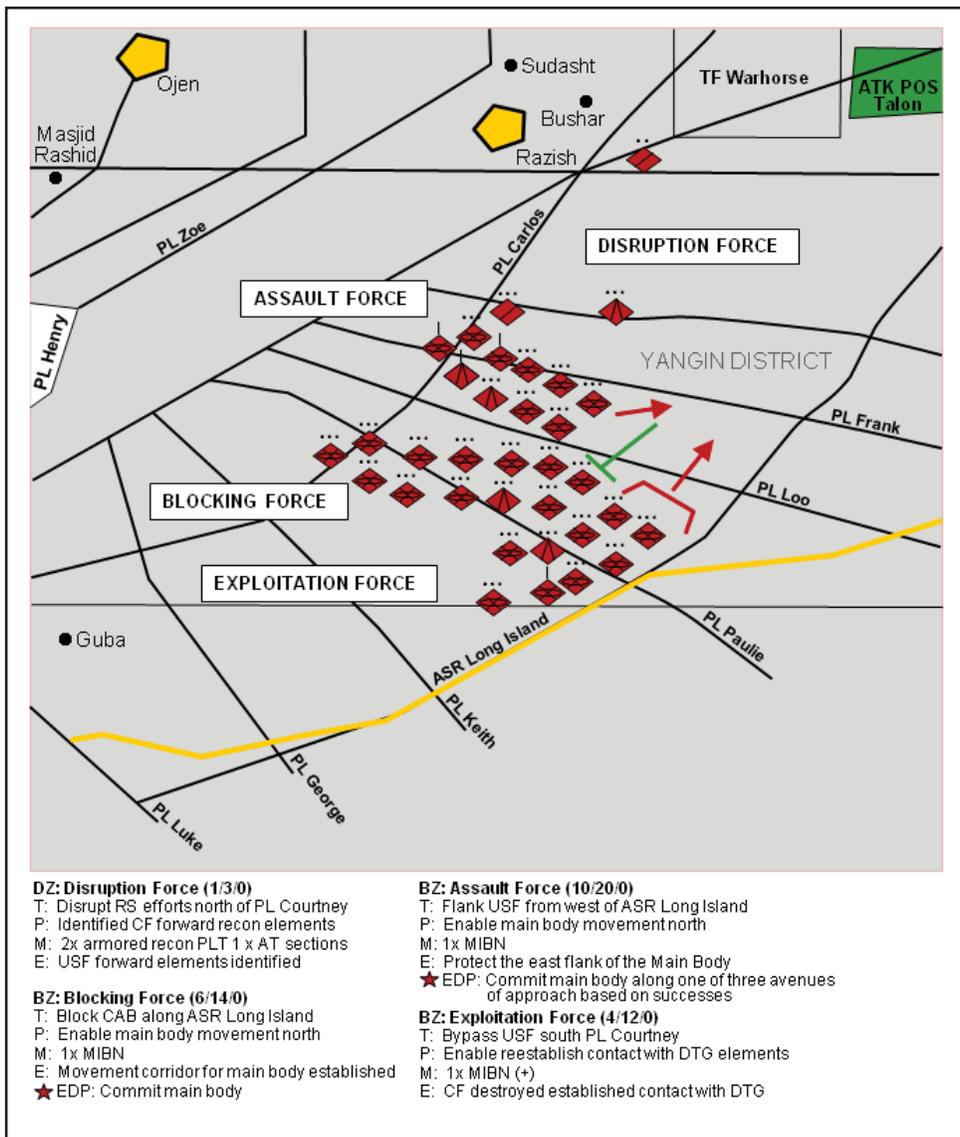


Figure 15-1. Enemy Most Likely Course of Action, MTC.

Story #16

Employing SIGINT Collection in Support of Operations

Captain Jonathan Wertz was the Military Intelligence Company Commander in support of 2d Armored Brigade Combat Team, 1st Infantry Division's Decisive Action Training Environment rotation at the NTC. His company balanced DS and GS command support relationships while providing collection capabilities to the brigade and subordinate battalions in support of offensive, defensive and stability operations in the hybrid threat environment.

From the offset of our rotation, it was clear that employment of the MICO's enabling capabilities would meet with friction as we attempted to balance command and support relationships with adherence to the brigade's collection priorities. In particular, the SIGINT platoon experienced friction in three distinct areas: reporting collected information back to the Brigade for analysis, receiving clearly published task, purpose and collection guidance within the BCT mission orders, and lack of understanding on capabilities and limitations by leadership at both the battalion and brigade levels for the SIGINT systems; specifically Prophet and LLVI.

During the course of the rotation, the SIGINT platoon faced challenges in reporting intelligence to the Brigade in a timely manner. Without the information reaching the Brigade, it was not combined with information from other sources to produce all source analysis. During Brigade operations, it became imperative that collected information be analyzed and presented to the BCT Commander to support his decision making. To accomplish this, we had to modify our PACE plan to ensure we included two intelligence specific high frequency nets, FFCB2 and the Trojan-Lite. Unfortunately, neither I nor the Brigade staff coordinated with the task organized units to ensure that our concept of the PACE plan would, or could, be established, supported, and enforced.

Rather, the SIGINT Teams were briefed a plan that was quickly negated by guidance given from the supported unit. As example, during the movement to contact, the LLVI teams were task-organized to 5-4 CAV, with that battalion's leadership further pushing the teams down to support a specific troop. The Troops briefed, supported and enforced, their own PACE plans that did not take into account the need for their task organized collection assets to communicate directly with the BCT mission command nodes. In the end, two SIGINT reports were received from our forward LLVI teams by the Brigade after completion of the movement to contact operation. This was a critical friction point—the lack of understanding at the lowest levels of the purpose behind those assets led to their non-use in answering the Brigade Commander's PIR. In hindsight, describing the PACE plan by system within the Brigade order and rehearsing the flow of reporting

during the Brigade IC rehearsal, would have likely gone a long way towards reducing this friction and increasing the effectiveness of the SIGINT teams ability to execute the Commander's intent for collection.

Another factor that inhibited good flow of reporting was systems-based. FBCB2 is a widely used lower TI capability that proved its value in enabling wide and timely dissemination. Unfortunately, the Prophet teams do not have the FBCB2 systems organic to their vehicles. This was a major gap in capability that our MTOE prevented us from overcoming. Had we enabled our vehicles with BFT or FBCB2, we would have had a reliable means of ensuring that these critical collectors were capable of transmitting their collection back to the various mission command nodes. Again, as it was, we were hindered in our ability to effectively meet the Commander's intent for these systems and their value was diminished.

Turning to planning, while we appreciated the idea that too much detail could inhibit a subordinate's ability to seize the initiative and make decisions, the lack of specific detail within the base OPORD unintentionally led to subordinate commanders trying to emplace sensors through "discovery learning" based on a lack of understanding and familiarity for the capabilities and limitations of those sensors resourced to them. When emplacing a SIGINT sensor to support the brigade collection plan, the NAI is selected at brigade, with the tasked collector selected given its specific capabilities—at least that is the way it should work. To be effective, the task and purpose for the collector needs to include: what NAI is being covered, what is being sensed in the NAI and who is supporting the sensor. These three specifics enable effective signal intercept, security for the sensors, and reporting to higher. Their lack of inclusion in our Annex L or base order, led to confusion in placement and prioritization of our SIGINT assets.

Finally, every maneuver commander and staff officer needs to understand the Brigade's SIGINT sensor limitations and capabilities to ensure proper emplacement of the sensors. Without this understanding both planning and employment by subordinate commanders suffer, often with sensors emplaced in ineffective locations. As example, during the movement to contact, the troop commander securing the Prophet system located both sensors and the control in a valley where they could not intercept any enemy signals. During offensive operations, the Squadron emplaced SIGINT sensors in different locations from what was specified in the Brigade order. As a result, the NAIs tied to the Brigade Commander's PIRs were not observed.

While I had presented a capabilities briefing to each maneuver Battalion prior to arriving at NTC, the briefing was generic and did not serve to train the commanders and staff on the technical and tactical limitations of the systems. Additionally, off-the-shelf system briefings followed by company STX requiring

the effective use of SIGINT sensors could help to educate and train company commanders and Battalion staff planners on these complex assets.

Until staff planners and subordinate commanders understand the SIGINT systems, the Brigade orders will continue to require substantial detail to ensure proper use. The Brigade base order requires, at a minimum, task organization, emplacement location, NAI observed, security requirements, and reporting procedures for all SIGINT assets. These minimum requirements need to be elaborated upon in Annex L. With more details explained in Brigade orders and better coordination through rehearsals and training, the Brigade's SIGINT systems will be better utilized to support the Brigade Commander's decision making and drive maneuver.

Story #17

Executing Combined Arms Live Fire Breaching Operations

Lieutenant Colonel John Pirog was the Commander of the 2d Battalion, 69th Armor Regiment, which acted as one of two Combined Arms Battalions for 3d Armored Brigade Combat Team, 3rd Infantry Division during the first-ever Decisive Action Training Environment rotation at the NTC. His unit was detached from the brigade and under operational control of the 52d Infantry Division in support of attacking Donovanian Forces in the northern live-fire corridor.

The 52d Infantry Division tasked the Panthers of 2-69 AR to plan, synchronize, and conduct simultaneous live fire combined arms breaching operations in support of clearing two company-sized forward objectives. Before we detached, our brigade augmented our typical task organization (organic battalion with an attached forward support company) with an armored reconnaissance troop, an armored engineer platoon (equipped with two armored breaching vehicles), a Canadian light engineer company (equipped with LAVs and Bangalore torpedoes), an artillery battery (equipped with M109A6 Paladins), an MLRS platoon, a scout weapons team, an attack weapons team, a Predator UAV (armed with Hellfire missiles), and two fixed wing sorties (equipped with Mk 84 bombs).

Conducting a full up military decision making process was a major factor in our success. We had about 36 hours from the receipt of mission to LD and we debated executing a rapid decision synchronization process to allow the battalion more time for rehearsals. We chose the full-up MDMP to ensure our plan was truly synchronized and fully employed all of our enablers throughout the mission. The battalion executive officer and S3 reaffirmed their critical roles in the process. These two worked in tandem to keep the process focused and on time and most importantly maximized the outputs from every member of the staff. Their teamwork resulted in increased efficiency and allowed the staff time to work through a detailed course of action analysis. The wargaming session led to several key modifications to our base plan. The overall process showed us how important every member of the staff is in creating a well synchronized plan that has a solid chance of succeeding.

Though rehearsals continue to be the critical preparatory step in the troop leading procedure process, the combined arms rehearsal cannot give a commander a true sense of how long it takes to conduct complicated tasks such as a company passage of lines, occupying a PAA and conducting pre-fire checks, or conducting a dismounted manual breach with Bangalore torpedoes. During mission analysis, we relied on doctrinal estimates as a

starting point, then either reinforced or modified the data with first hand experiences from unit leaders. It would have been more helpful though to personally observe how our enablers conduct their missions. Either during pre-rotation training or while at the National Training Center, I recommend that commanders observe enabler forces actually performing their routine tasks. That firsthand knowledge would have been helpful in reducing "lulls in fire" or having force sitting idle longer than necessary.

During the breaching portion of our mission, I was too focused on the actual breeches and did not pay enough attention to the next critical event early enough. In each case, we were able to overcome the enemy through violence of action and massed effects, however, the fight could have been easier if we applied more combat power forward earlier to attrite the enemy or prevent him from repositioning in response to our maneuver. Instead of just using the MLRS and the Predator's Hellfire missiles, we could have sent the attack and scout weapons teams forward as well as the ARS troop. Just as our company commanders were setting the conditions to transition through the breaching fundamentals, at the battalion level, I should have remained constantly focused on setting the conditions for the companies to transition from one critical event to the next. The breaches were critical, but an inability to clear the two objectives due to a loss of combat power would still have resulted in mission failure.

The overall mission was successful and the battalion accomplished the commander's intent ahead of schedule. Perhaps the greatest lesson learned for all levels throughout the battalion was how to effectively employ and synchronize all of our enablers to properly set the conditions to successfully transition from one critical event of the operation to the next. We entered the rotation having executed breaching operations at the platoon and the company level in both simulations and in the field against a live opposing force. Our leaders understood the tenets and how to apply the breaching fundamentals. Outside of the classroom however, we were not practiced at synchronizing and employing enablers external to the battalion as the assets were not available during our breach training. I had also not considered having either MLRS or a Predator in direct support of the battalion. The bottom line is that Battalion staffs that work as a team and incorporate significant NCO involvement can quickly overcome the many challenges of the fast paced and demanding operational environment.

Story #18

An Opportunity Missed

Lieutenant Colonel Larry Burris was the Commander of the 1st Battalion, 66th Armored Regiment, supporting the 1st Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC, and task organized as a combined arms battalion. Upon alert of a Donovanian invasion into Atropia, his unit was tasked to conduct a movement to contact from south of the Whale gap, across Siberia and destroying the enemy forces in the central corridor.

The 1-66 AR occupied its attack position approximately seven kilometers south of the LD (Whale Gap) at approximately 2300 the night prior to LD. We postured ourselves to execute movement in a battalion column, company wedge formation. The task force executed a refuel at approximately 0330 in preparation for the crossing of LD later that morning. Upon notification that the Main Body of the 111th BTG had crossed PL Gene, we were given direction from the brigade to cross the line of departure at 0700. As depicted on our COA Statement and Sketch below, our task was to destroy two MIBNs of the enemy assault and exploitation forces in EA CAT in order to protect the right flank of the 52ID and the left flank of the 12th UK.

The battalion was task organized with two armor company teams, one mechanized company team, FSC, mortars and scouts. We were enabled with CA, MISO, JTAC, ADA, chemical reconnaissance and our habitually associated engineer platoon. Key tasks for the battalion from my commander's intent included:

- Deliberately un-coil from the TAA in preparation for LD.
- Conduct route reconnaissance along axis of advance and establish OP 3 to identify enemy recon and AT forces
- Destroy the AF/EF of the 111th BTG (2 MIBNs)
- Establish a hasty defense to defeat Donovanian Counter-attack forces in EA BULL
- Sustain the battalion with timely logistics and maintenance support

Approximately eight hours earlier, the battalion's "Team Recon" had crossed the line of departure under the OPCON of 7-10 CAV. The team consisted of our scout and mortar platoons along with a chemical reconnaissance section under the command of my HHC Commander. Their task was to confirm or deny the presence

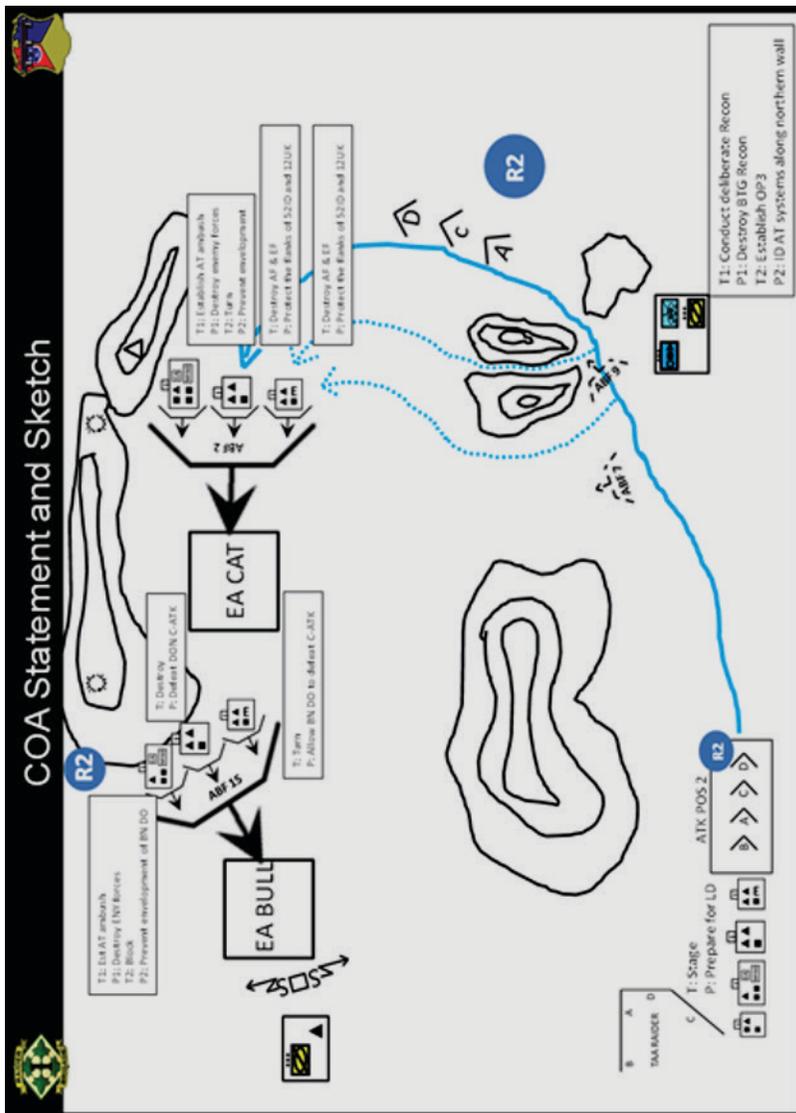


Figure 18-1. COA Sketch and Statement for MTC.

of enemy reconnaissance forces in Porta Potty Wadi and Red Lake Pass and then conduct route reconnaissance north to hilltop 720 where they were to establish OPs, one BCT directed. Their purpose was to identify enemy forces in the central corridor from the west and to attempt to identify any enemy AT teams positioned along the north wall of the central corridor. Team Recon executed its mission, crossing the LD at 2300, with little enemy reconnaissance force contact and was set in their OPs prior to the main body's movement. The team had observation down the central corridor to include coverage of both the brigade's and battalion's templated EAs.

Upon LD, the Task Force moved as rapidly as possible with two armor company teams in the lead followed by our mechanized company team and the battalion support package. The only contact received was small arms and RPG fire targeting the refit and refuel package from a built up area south of Red Lake Pass which had been previously bypassed. The contact resulted in one fueler destroyed and two casualties which were promptly evacuated. Observation of the built up area was passed from one unit to the next as the task force passed by, but the lesson learned here is that we should have ensured a security element remained in overwatch of the built up area until our less protected support elements had passed by.

During the planning phase, we had templated a refuel/rearm point just north of the built up area but I opted not to execute based upon our rate of movement, remaining fuel levels and lack of enemy contact. As the main body moved north, the reconnaissance team identified a large enemy force approaching from the west moving towards the Columbia Wash. Based on what I was getting directly from my reconnaissance team, the brigade net, and the lack of contact in the east, I felt I could see what the enemy was attempting to do, at least in the east. It was my assessment the enemy did not know where 1-66 AR was and that they perceived an unprotected flank to 1-22 IN's east. This meant that they were going to exploit the perceived flank east of 1-22 IN in order to get to the BCT rear area. What I did not have was a clear picture of what the enemy forces were doing in the west with 7-10 CAV, nor did I have clear FM communications with 1-22 IN and the situation to their immediate front.

After consulting with the BCT Commander aboard his C2 aircraft via FM, he and I both estimated the enemy was attempting to exploit a seam between 1-22 IN and 1-66 AR in order to move down through Porta Potty Wadi to reach the brigade rear area. We both agreed the task force should establish a hasty assault by fire position oriented from the south side of the Columbia Wash, tied into Hill 720 and to the north wall of the central corridor. I positioned one tank company team to the north of Hill 720, one tank company team between the Columbia Wash and Porta Potty Wadi and a mechanized infantry team between Columbia Wash and Hill 720. The task force refuel and rearm package established itself at a position just north of Najalaban and were prepared to move on order to conduct a tactical refuel of the task force.

A team of three AH64 (Apaches), in direct support to the battalion, checked on station shortly thereafter and requested guidance. The Apaches were originally planning to occupy an attack by fire position to the battalion's northern flank but were unable to occupy due to a conflict in understanding where the attack by fire positions was in relation to the brigade's northern boundary; a report given to me by the air mission commander over FM. It was later identified that the Aviation planners had incorrectly plotted the attack by fire position on their graphics. But on the fly, and not knowing this at the time, we had to react and enable the Apaches to get into the fight.

I made the decision to reposition the Apaches to a position over the shoulder of the task force; a position where they would have been able to engage the enemy to our west with immediate effects. But at that point, I received another call from the air mission commander that they were being ordered back to vicinity of the TAA to refuel as they had evidently launched prior to the trigger on the brigade's decision support template. This was unfortunate as the aircraft were in a position to engage 16 to 20 enemy vehicles in the central corridor. Regardless of the launch criteria, the Apaches should have been allowed to remain on station and engage the enemy forces in the central corridor as they were in a position to observe and engage the enemy's main body forces. The task force could have then maneuvered west with the support of the Apaches, bounding company teams using the terrain to engage the enemy force in the central corridor.

The Task Force had moved faster and along a route that the enemy had not anticipated, enabling the unit to gain a positional advantage on the high ground vicinity Snow Cone. An attack by fire position was established a few kilometers east of the planned location. Although we occupied this position of dominance on the east end of the central corridor, our dialogue over the aviation assets had robbed us of our initiative. We had stayed in one place for too long; in short, we lost the tactical advantage that we initially gained. In retrospect, I should have recommended to the BCT Commander that we continue the attack west and engage the enemy, even without the attack aviation assets. This would have enabled 1-22 IN to occupy its attack by fire position along the Siberian Ridge and relieve some of the pressure that 7-10 CAV was feeling in the west. In the absence of communication with the BCT Commander, we should have retained the initiative, coordinated with 1-22 IN and executed the attack west.

Instead, the enemy was able to establish a very effective smoke screen using vehicular mounted smoke generators and break contact to the west. We were able to achieve some effects with CAS on the enemy in the central corridor but we did not achieve the desired effect of massing both indirect and direct fires on the enemy main body. While we ultimately maneuvered west to our originally planned ABF, our earlier decision to push of fueling forced us to conduct a tactical refuel in order to continue movement as it had been approximately eight hours since our refuel prior to crossing the LD. After our refuel, we continued movement west to a hasty ABF south of Granite Pass in preparation for the establishment of a deliberate defense in support of 1-22s security operations in Razish.

It is imperative that once the initiative is gained during the offense, that it is maintained. We, both the task force and the BCT, failed to do that. Had we executed the hasty attack west, the enemy would not have been able to retrograde to the west and preserve combat power that was later used against us during the defense; clearly an opportunity missed.

Story #19

Setting Conditions: Uncoiling from the Tactical Assembly Area

Lieutenant Colonel Nelson Kraft was the Commander of the 1st Battalion, 15th Infantry Regiment, which acted as one of two Combined Arms Battalions for 3d Armored Brigade Combat Team, 3d Infantry Division during the first-ever Decisive Action Training Environment rotation at the NTC. His missions included securing the passage points at the Whale Gap and to follow and assume the attack in the Central Corridor.

The battalion's participation in NTC Rotation 12-05 was an excellent opportunity for us to put our home station training at Fort Benning, GA to the test. The biggest difference that we faced in the desert environment as opposed to the wooded terrain of Georgia was the sheer distance between friendly units and the ability to maneuver in much larger, spread out formations. The desert terrain paired with the decisive action environment brought to light that simply departing the tactical assembly area in an efficient manner can prove difficult. Throughout the rotation, we learned that orders and rehearsals must cover details of uncoiling out of the tactical assembly area and into attack positions to ensure conditions are set to enable crossing the line of departure on time. These lessons learned greatly enhanced the battalion's combat effectiveness as we deployed to Kuwait in support of Operation Spartan Shield.

As my staff conducted MDMP, my executive officer and I stressed the importance of adhering to the planning timeline. I realized that the commanders needed time to plan for the missions and their associated rehearsals. The company commanders understood from previous discussion that uncoiling from the tactical assembly area would set the tempo for the entire operation, but to drive this point home I directed that they conduct FM rehearsals of the uncoiling process at a minimum. In order to afford them the time they needed, my staff could not fall behind in the planning process. We produced a good, not perfect, plan and pushed it down to companies in time for them to begin their troop leading procedures. In the fast paced environment of a decisive action rotation, you will never have the perfect plan. It is imperative to feed the companies information as quickly as possible in order to allow time for good troop leading procedures at the company and platoon level. As we figured out, that is where the majority of delays start out and lead to larger delays at the battalion level.

We also learned (sometimes the hard way) that a unit is successful when it conducts deliberate and detailed rehearsals. Directly following the orders

brief, company commanders conducted a confirmation brief with me to ensure understanding and clear up any confusion. I instructed my staff to be a part of this so they could update our graphics and execution matrix if there was a change or de-confliction that came out of the confirmation brief. This allowed everybody to go back to their company with a clear understanding of the common operating picture. Taking extra time at the confirmation brief made our combined arms rehearsals go extremely smooth. Not only were my commanders able to brief their mission, but they understood the overall mission of the battalion. My biggest regret is that we did not allow ourselves enough time to conduct a longer FM rehearsal. We were able to conduct an FM rehearsal, but not in as much detail as I would have liked. For Commanders, while it is ultimately a matter of available time, the value of being able to replicate the reliance on FM and lower TI systems that exists during execution makes the FM rehearsal an extremely effective format for ensuring synchronization of details.

In execution, 1-15 IN learned the best way to ensure an efficient process of uncoiling out of the tactical assembly area is to set the conditions to do so when you first occupy it. All of our companies were task organized, but one company served as the brigade reserve. This left us with two infantry and one armor company teams. A/1-15 IN, an infantry company team was arrayed towards our direction of travel (north) as the first unit in the order of march. Their task was to establish contact with 3-1 CAV with whom we would conduct a passage of lines. D/1-15 IN, our remaining tank company team and second in the order of march, was arrayed to the west and south. B/1-15 IN, our other infantry company team was third in the order of march arrayed to the east and south. Our TOC and mortar platoon were located in the center of the tactical assembly area. The mortar platoon traveled behind D/1-15 IN, our main effort for the operation.

The best thing we did was establish phase lines based on our time/distance analysis that would set the conditions for elements to uncoil from the tactical assembly area and move to their attack positions while maintaining good separation. The use of our digital mission command systems, mainly the FBCB2/BFT, allowed the companies to track each other and anticipate when they needed to begin movement. Future rotational units would do well to publish the phase lines and triggers and then let subordinate commanders command the execution. While a detailed plan is good, too many details can stifle initiative and constrict flexibility. Giving the commanders the ability to lead according to the battalion commander's intent will make it easier for the companies to move out of the tactical assembly area as well as allowing the battalion leadership to focus on the upcoming operation.

As the Army continues to transition towards decisive action rotations at the National Training Center, units need to shift the focus of training away from counter-insurgency and back to a more conventional mindset. Commanders have much more freedom to exercise initiative in the decisive action training environment. This creates a need for good, not perfect, orders, detailed and extensive rehearsals, and giving commanders the ability to operate within the commander's intent. Our unit experienced a plethora of growth through this rotation and we were able to realize these points and adapt to them. Units that are able to do this will set themselves up for success and maximize their training opportunity at the National Training Center.

Story #20

Uncoiling from Attack Positions to Cross the LD

Major Jim Brady was the Brigade Operations Officer of the 1st Armored Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit conducted offensive and defensive operations against both regular and irregular forces in a complex operating environment for 14 days, beginning with the conduct of a movement to contact from a TAA through the Whale Gap towards the Central Corridor.

As a Field Grade officer with primarily a light infantry background, I've often questioned the complexities of uncoiling an armor formation. I say this from the perspective of uncoiling an Armored BCT for a rapid follow-on engagement. The execution of the Movement to Contact, Day 1 of Force on Force, at NTC was my first live experience at the brigade level. Eight months earlier, I was able to glean some lessons by observing 3/3 ID's NTC 12-05 Rotation. That reminded me how choke points like the Whale Gap can place an uncoiling operation at risk. Officers and NCOs who have experience with this operation get a concerned look on their faces if one pays lip service to the process of uncoiling. My BCT Commander and several battalion commanders kept stressing the need to have a sound plan. With a good plan the brigade would have a fighting chance against the COEFOR. Without it, we were doomed to fail at the start gate. Naïve souls will try to rectify the complexities of uncoiling by developing a good plan with clear routes, dispersed staging positions, a reasonable movement table, and a practical communications structure. However, I know as many of my peers do that a good plan can fall apart in the first fifteen minutes of execution. Even most modern people understand the problems associated with large vehicle movements. We see this in everyday life on streets and highways. If there is no control then friction builds into a colossal traffic jam. It takes a traffic cop that understands the susceptible points of friction to force control back into the jam so that movement can regain momentum. My position at the BCT TAC, south of the Whale Gap, acted as an effective traffic cop for my Brigade's uncoiling operation; however, "Murphy" in the form of poor FM communications was lingering all over the approach route, and it prevented me from seeing beyond this operation to the next bigger fight, the Movement to Contact.

The BCT's uncoiling and subsequent Movement to Contact plan was a solid product. It was guided by the BCT Commander's extensive experience with Mechanized Armor Warfare. He wanted early dispersion, a screen along the Whale-Furlong, and multiple routes and Attack Positions to increase flexibility. Of course, having good communications was essential to all of this flexibility. The BCT's Mission Command elements (MAIN & TAC) had to be able to read

Serial	UNITS	SP LOC	RP LOC	RTEs	SP TIME 1 st VEH	RP TIME 1 st VEH	RP TIME Last VEH
02 NOV 12							
1	BCT TAC / TM IDP	TAA RAIDER	ATK PSN 3	DODGERS	1700	1720	1730
2	1-22 IN / RTNS 1&2	TAA RAIDER	CP 23 & ATK PSN 3	LONG ISLAND->DODGERS	1900	1930	2000
3	4-42 FA	TAA RAIDER	PAA 1 & 1A	TWINS	1930	2000	2030
4	1-66 AR / RTNS 3	TAA RAIDER	ATK PSN 2	MANIX->TWINS	2000	2030	2100
5	7-10 CAV (HHT,A,C) / SCT 1-66 / SCT 1-22 / 3-1 FARP	TAA RAIDER	PL DEBBIE (LD)	CARDINALS / LONG ISLAND->CUBS	2000	2100	2330
6	B/1-66 AR	TAA RAIDER	ATK PSN 2	MANIX->TWINS	2030	2100	2110
7	4-42 FA	PAA 1	PAA 5 / 5A	DODGERS->ANGELS->LONG ISLAND	2330	0030	0100
03 NOV 12							
8	B/7-10 CAV	TAA RAIDER	PL CARLOS	BOWLING ALLEY	0500	0600	0615
9	C/1-22 IN (OPCONTO 7-10)	TAA RAIDER	PL CARLOS	BOWLING ALLEY	0530	0615	0630
10	1-66 AR	ATK PSN 2	CP 16	GIANTS	0500	0600	0630
11	1-22 IN	ATK PSN 3	PL DEBBIE / CP 16	CUBS / CUBS->LONG ISLAND	0615	0645	0715
12	B/1-66 AR	ATK PSN 2	CP 16	GIANTS	0645	0715	0730
13	BCT TAC	ATK PSN 3	PL DEBBIE (LD)	CUBS	0715	0745	0800
14	15TB	TAA RAIDER	CP 16	LONG ISLAND	0700	0730	0800

Figure 20-2. BCTs Movement Table from TAA to LD.

Our preparation and early movement activities followed a normal stream of events, and got the BCT on good footing to execute the plan. A lesson learned from 3/3 ID's Rotation was that the BCT needed to allocate additional time to units transitioning between battalion live-fire events north of PL DRAGON back to TAA operations the day before Main Body LD. We did make some efficiencies for our rotation, but the units still felt rushed. The brigade executed its Combined

Arms Rehearsal the morning of our last day of preparation. While the CAR may have resembled more of a back-brief than a rehearsal, the forum did enable the BCT Commander to further synchronize the plan, and it ensured that battalion commanders as well as the brigade's warfighting functions were still executing according to his intent. A few of the battalion commanders requested adjustments to the Movement Table, and the BCT Commander approved. This drove me to ensure these adjustments, with minor graphical control changes, were incorporated into a final push of information to subordinates. I could always use more time in the area of disseminating last minute adjustments. It is an art that units need to practice; otherwise, subordinates don't capture a change which adds to more confusion during execution.

The BCT TAC pushed out later that afternoon; therefore, I felt rushed to tie up loose ends and get myself with the TAC firmed-up on the plan. I satisfactorily made my SP time with the TAC. We linked up with Team IDP en route so that they could handle that pesky problem with civilians jamming the Whale Gap. My TAC OIC emphatically told me that FM communications were going to be up, as he made multiple checks earlier that day. He went so far as to do long distance FM checks to really give them a good test. As one can probably guess, I lost FM well into my movement to the TAC's preplanned position. My hope was that I could regain a good FM connection once I got the TAC settled. I was rushing to get myself up on FM prior to the BCT's first conditions check on at 1800 hrs that evening. Alas, no joy in this area. I could listen but not transmit. Thank goodness I had a CPN. I was up on SVOIP, and the CPN's remote CAU capability enabled me to use the TOC's FM station to push through their systems. The limiting factor now was that I was anchored to the CPN and could not move without losing my connection to the MAIN and the BCT CDR.

Overall, movements flowed according to the plan. The first battalion to move out was 1-22 IN which had the task of establishing a screen along the Whale-Furlong. The BCT TAC had spotty FM with the 1-22 TAC, so it was hard to get a good read on their progress. Our FBCB2 capability enabled the TAC with a redundant means of tracking 1-22 IN's progress. A systemic problem during the rotation was a lack of understanding how to execute good FBCB2 operations. There was a problem with role names, the number of essential platforms that had operational systems, and problems inherent with line of site which affects the FBCB2 and not the BFT. We also had a mix of FBCB2 and BFTs which could not talk to each other without a bridging solution. The Attack Helicopter Battalion was BFT based, while the rest of the brigade had spotty FBCB2 capability. In accordance with the movement table, the Fires Battalion and 1-66 AR began to move to their ATK Positions.

We were getting close to the early LD of our Armored Recon Squadron (ARS). I felt that I had sufficient situational awareness to keep the Whale Gap opened and to prevent the IDP camp from becoming a problem. At around 2100 hrs, we received a directive from 52ID to stand down all operations due to the ARS finding live ammunition mixed with their blanks. When other battalions check their blank ammunition draw, there were a few other instances of this problem. NTC stood down our operations for 24 hrs which allowed some people to include myself to get some much needed rest. Without going into the impact of the 24 hrs stand down, I can say that we executed all the actions mentioned above with better effectiveness the next day. One could say that the previous day served as a full force rehearsal for actions prior to LD.

The early positioning of the BCT TAC certainly facilitated bringing forces up to and just through the Whale Gap; however, degraded RETRANS capability forward prevented the TAC from effectively advising the BCT CDR on Decision Points affecting the Movement to Contact. Team IDP successfully mitigated issues with roaming civilians along the approach route; therefore, it was a successful example of planning to mitigate risk. As I said earlier, the TAC was now anchored to the CPN, but it was not in a good position to receive and transmit over the Whale-Furlong. I had to make a decision on the appropriate time to jump the TAC forward. According to the plan, my BCT CDR wanted me to wait until the both CABs and the BCT reserve passed through the Gap. But now the conditions had changed. Neither the MAIN nor the TAC could give the Commander a good picture of the enemy set forward. The MAIN had a better picture because of its connection with the ARS MAIN whose internal RETRANS were better situated to range the 7-10 CAV Commander and Squadron S3. Once the BCT CDR took to ground and began to move inside his Mobile Command Group, he had very spotty FM communications with the MAIN. The TAC, however, was able to keep him abreast by relaying reports from the MAIN. At this point, I was getting personally frustrated with my inability to see forward of the Gap and to advise the Commander.

After 1-22 IN crossed the Gap, I made a decision to re-position a portion of the TAC to the Whale Gap while the CPN and the S3's M1068 with our only FBCB2 remained fixed. This maintained the connection between the BCT CDR and the MAIN. Going to ground myself and moving cross country with the S2, FIRES, and TAC-P vehicles towards the Gap was a big time investment, and it cost me in terms of FM capability and situational awareness. Once I got set at the Whale Gap, all I had was FM with an OE-254 and the TAC-P's HF capability. We had a poor connection to the MAIN and were still unable to effectively reach the FLOT with FM. By this time, the CABs were executing a Forward Passage of Lines through the remnants of the ARS. I had lost information superiority over the MAIN in terms of advising the BCT CDR. My big lesson about uncoiling

from the BCT TAC's perspective is that brigade mission command nodes need to be positioned and postured two steps ahead of the uncoiling operation. As always, good communications in redundant forms are necessary to keep the uncoiling operation from being too much of the focus, since it is the first in a series of events that allows the BCT to close with and destroy the enemy.

Story #21

Role of the Reconnaissance Squadron in the Attack

Lieutenant Colonel Andrew Hilmes was the Commander of the 3d Squadron, 1st Cavalry Regiment, which acted as the Reconnaissance Squadron for 3d Armored Brigade Combat Team, 3d Infantry Division during the first-ever Decisive Action Training Environment rotation at the NTC. His unit was tasked to conduct a zone reconnaissance in advance of 3/3 ABCT's deliberate attack through Brown/Debnam passes.

From the onset of the executing the Brigade's deliberate attack on training day 11, the Reconnaissance Squadron was given only one specified task: conduct a reconnaissance in zone. As the mission progressed however, it became apparent that many more tasks would be required. And of even greater import, it became clear to me during the operations order briefing that the squadron was capable of contributing much more to the attack.

Our task organization for the attack was significantly reduced from what it had been during the brigade's movement to contact and hasty defense missions. One of my troops was detached; task organized to 2-69 AR covering the northern axis for the Division. So at my authorized time to cross the LD, I had a squadron with a third less of its combat power and only a hand-full of enablers in support. To complicate matters, the full brigade OPORD wasn't issued until nearly eight hours after the squadron had crossed the LD, by which time both of my ground cavalry troops had already made direct fire contact with the enemy. Because of this contact I decided I needed to remain with the squadron and manage the fight, so I chose not to attend the order and sent my XO instead. In hindsight, I regret this decision, because it became apparent later that multiple gaps existed in the plan as it concerned the squadron in the execution of the deliberate attack. By sending my XO, I ceded my personal ability to confirm the brigade's concept of my unit's mission with my own understanding of that mission.

Back in the fight, the squadron was still in contact and had a mission to reconnoiter prescribed objectives for the Brigade Commander but as of the morning of training day 12, I had yet to answer his key information requirement—the location of the enemy's main obstacle belt. To that point, I had been deliberately controlling the tempo of maneuver for my troops in order to retain stealth in our reconnaissance. However, in order to deliver answer the commander's PIR and enable his decision on where to focus the breach, I made the decision to transition the troops to rapid and forceful maneuver. It is worth noting that the rest of the brigade had not yet crossed the LD and did not appear to be in a position to conduct reconnaissance handover at the prescribed time and locations within the order before the squadron sustained heavy losses. It became clear to me that there was not a common understanding of the squadron scheme of maneuver to this point.

Leaving my command post, I took my operations officer and maneuvered back across the LD to link up with my brigade commander at the 1-15 IN command post. During the ensuing discussion, I explained that we had changed tempo in an effort to locate the main obstacle belt and that this had effectively given away my troops positions. I expected that my combat power would quickly deteriorate quickly. Additionally, I conveyed to the commander my belief that the brigade had to cross the LD quickly or we would rapidly lose the initiative. Finally, I recommended to the brigade commander that we breach at Debnam Pass, where my Bravo Troop believed they had identified the main obstacle belt.

In execution of the breach, friction abounded. As 1-15 IN began their movement forward, we directed the troops to work through the passage of the main effort forward towards the designated breach point. This effort was hampered by several factors. First, the separation of 1-15 IN's companies in their order of march was greater than we had anticipated, making it difficult to push significant combat power through the breach to gain any sort of initiative. Secondly, the brigade had never clearly defined our SOSRA drill, nor adequately rehearsed it. Lastly, the gaps in the brigade plan with respect to fires and its sequencing with the maneuver plan became evident as we stalled on the brigade effort stalled on the near side of the breach point. While the brigade order had directed that priority of fires shift to 1-15 IN as soon as the first company had breached the obstacle belt and crossed the pass, in execution we discovered that 1-15 IN was consumed by maneuvering through the breach and was not postured to process targets. While the squadron was in the best position to shape the fight with fires, the shifted priorities left us in no position to support 1-15 IN in the breach.

In closing, the challenges of executing mission command for the cavalry squadron in support of offensive operations are myriad. The squadron has to do whatever is necessary to make the brigade successful. Key is the need for mission orders to clearly define the role and duties that are expected of the squadron. Early on in the fight, I only had one specified task. As the fight progressed, that one task morphed into many. Looking back, I now realize that a gap existed in our brigade training plan for home station. Due to time constraints and internal prioritization, we focused almost exclusively on movement to contact at the expense of the brigade deliberate attack. Future squadron commanders must fight to balance their training objectives across the full spectrum of possible missions.

Story #22

Reinforcing the Cavalry Squadron for the Movement to Contact

Lieutenant Colonel Geoffrey Norman was the Squadron Commander of 7th Squadron, 10th Cavalry Regiment supporting the 1st Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His force was called upon to conduct reconnaissance and security operations in support of a movement to contact through the Whale Gap and into the central corridor, during a hasty defense along centerline road, and in advance of a deliberate attack towards Crash Hill through Brown and Debnam Passes and the Colorado Wash.

Early in our train-up for NTC the Brigade commander clearly stated that he envisioned an expanded role for the Armored Reconnaissance Squadron (ARS). FM 3-20.96 defines the “fundamental role of the squadron is conducting reconnaissance or security missions in support of the higher headquarters.” Our commander made it clear that he expected the ARS to conduct reconnaissance AND security missions in support of the BCT. This signaled a deliberate expansion of our role, which at times included significant economy of force operations and shaping operations. If we were asked whether our role was to “answer the boss’ PIR” or “fight like cavalry” the answer was a resounding “fight like cavalry.” More appropriately, the BCT commander saw his ARS “fighting like cavalry to answer to PIR and develop the situation for the BCT.”

The current MTOE organization of the ARS limits the maneuver and mission command options for troop commanders to two platoons each, and the squadron to a total of only six maneuver platoons. Many missions assigned to the ARS require more than six maneuver units. To help compensate for this deficiency, we developed “Blue” platoons to add a third maneuver unit for each troop. We envisioned the Blue platoons as economy of force elements which focused on tasks such as tactical site exploitation, RETRANS security, convoy security, command post security, key leader engagements, and deception operations. These platoons were led by our most senior staff sergeants and lieutenants we took from the staff. The platoons were equipped with four M1151s with LRAS3 as well as Javelins, RETRANS, and deception equipment. We also made our platoons “pure” – all Bradleys or all M1151s. This enabled our leaders at the platoon-level to master single platforms and their associated weapons systems vice learn both M1151s and M3A3s.

The squadron developed a unique organization for the movement to contact (see figure 22-1). I organized and employed one troop as a “recon” troop to execute rapid and stealthy recon and move to the key terrain of the Siberian Ridge to establish a screen. The “recon” troop organization included three six HMMWV “Red” platoons and a four HMMWV “Blue” platoon. This mostly wheeled

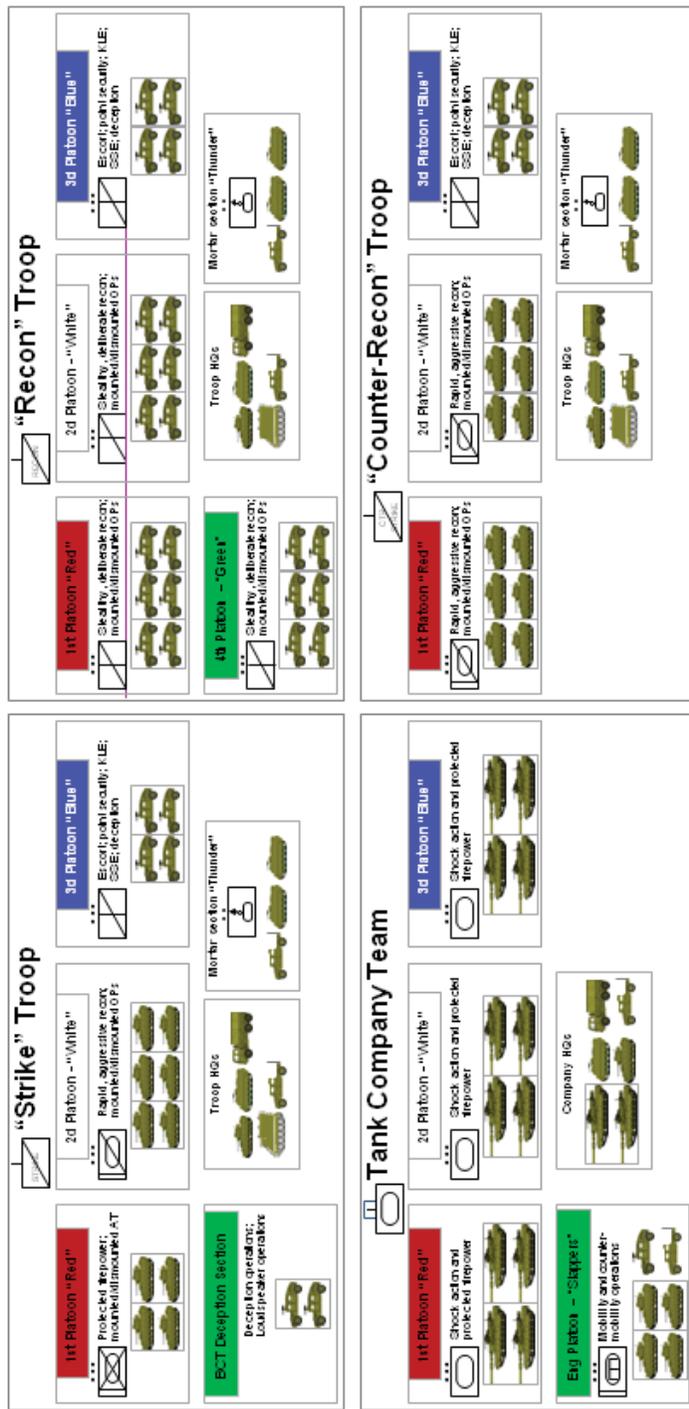


Figure 22-1. Squadron Organization for MTC.

formation was tailored for rapid, stealthy movement across permissive terrain prior to the enemy's Brigade Tactical Group reconnaissance forces reaching key terrain or Observation Posts. A "counter-recon" troop followed the "recon" troop by two hours. The counter-recon troop consisted of two six M3A3 "White" platoons and one four HMMWV "Blue" platoon. This troop was optimized to gain contact with and destroy enemy BTG recon elements between the BCT's line of departure and ground limit of advance.

These two troops developed the situation for the BCT and answered Priority Intelligence Requirements in the east of the BCT area of operations along the axes of advance for the two following combined arms battalions from the Whale Gap to the central corridor. In the west around the Shelf and Bicycle Lake Pass, the squadron executed an economy of force operation with one tank company team and a "strike troop." The tank company team, organized with engineers breached an COEFOR obstacle in the pass and attacked toward Brigade Hill to fix an enemy fixing or assault force templated to attack into the BCT's flank through the Bicycle Lake Pass and Valley of Death. The Squadron's "strike" troop consisted of a six M3A3 "White" platoon, a mechanized infantry platoon, a four HMMWV "Blue" platoon and deception section with Military Information Support Operation broadcast trucks. The strike troop was tasked to follow and support the tank company team in the west as they breached the Bike Lake Pass obstacle or follow and support the counter-recon troop in the east complete the destruction of the BTG recon forces (as depicted in figure 22-2).

This adapted task organization departed significantly from doctrinal organizations as depicted in FM 3-20.96 but worked well. The HMMWVs from the recon troop moved very quickly and quietly to the key terrain. The counter-recon M3A3s effectively gained contact and defeated Brigade Tactical Group recon in the east. These two troops benefited greatly from the continuous support from three scout weapons teams who provided uninterrupted coverage throughout the operation. In the west, the tank company team and strike troop breached a tough FASCAM obstacle in difficult terrain and fixed an enemy Mechanized Infantry Company that was poised to exploit Bike Lake Pass had it been open. However, we learned that our recon and counter-recon troop were separated too far in time and the recon troop was unable to retain several of their HMMWV-mounted and dismounted Observation Posts from significant attacks by enemy recon elements with BMPs and T80s. The strike troop became decisively engaged in the west and could not reinforce in the east to complete the destruction of identified BTG recon elements. Another significant mission command challenge was the fact that my squadron S3 controlled the fight in the east with the TAC and I controlled the fight in the west with the Mobile Command Group. This split our communications and made it difficult to maintain unity of effort within the squadron.

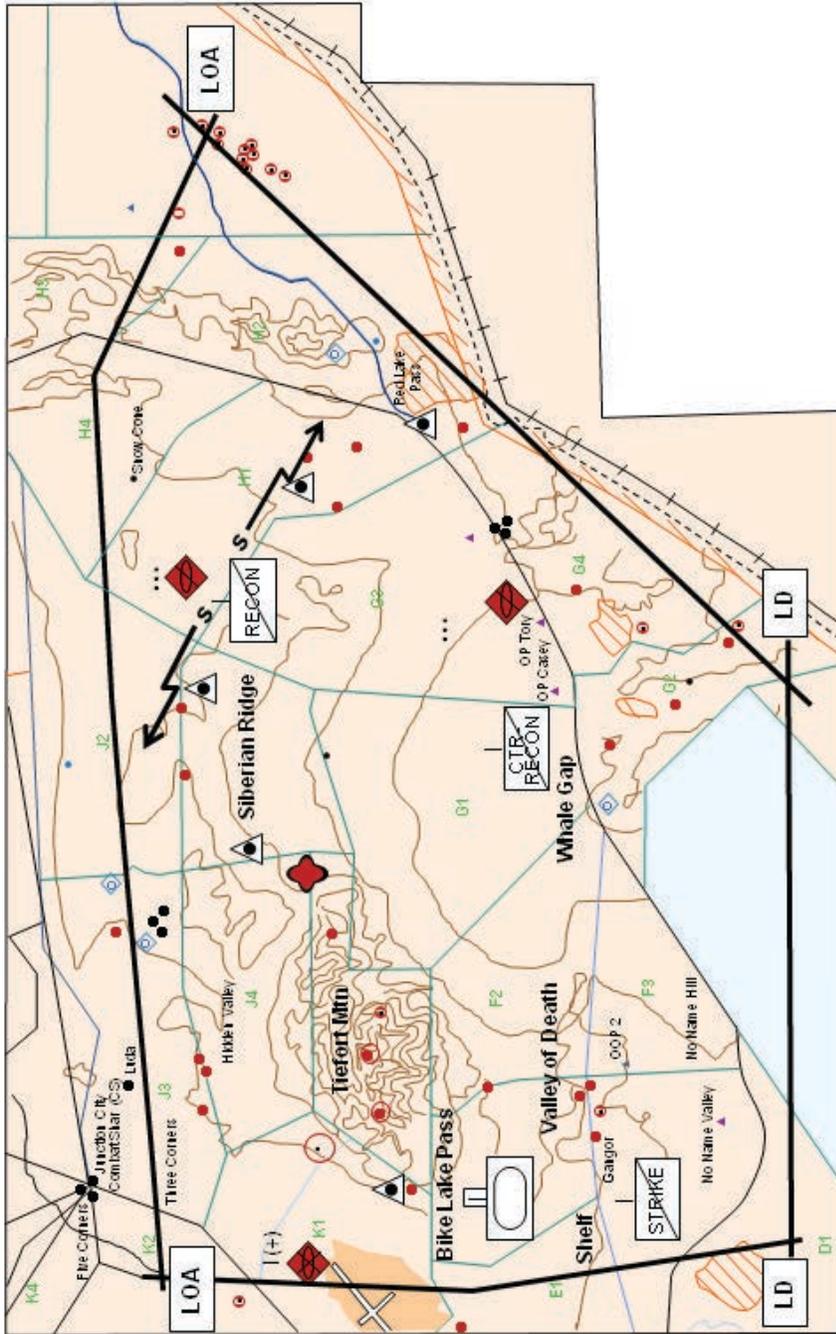


Figure 22-2. Squadron CONOP for MTC.

In retrospect, the optimal task organization would have been a lead troop with two or three HMMWV platoons and one M3A3 platoon. The trail troop should have consisted of two M3A3 platoons and a Blue platoon. The economy of force elements were organized about right. Overall, our scouts' tenacity and lethality, coupled with our unique task organization, enabled the squadron to succeed in our first force on force mission.

Story #23

Reconnaissance Support in the Movement to Contact

Lieutenant Colonel Andrew Hilmes was the Commander of the 3d Squadron, 1st Cavalry Regiment, which acted as the Reconnaissance Squadron for 3rd Armored Brigade Combat Team, 3d Infantry Division during the first-ever Decisive Action Training Environment rotation at the NTC. His unit supported the brigade by conducting reconnaissance and security operations in advance of the brigade's movement to contact through Whale Gap and north across Siberia and into the Central Corridor.

So there we were, training day 7. The evening prior to the brigade's movement to contact mission, and a major training focus for the squadron in the months preceding our arrival at NTC. We had devoted a lot of time and effort towards our preparation for this particular fight, and from a squadron perspective I thought we were more than ready to execute successfully. I understood my commander's intent, and knew what was expected of the squadron as we set to LD. Over the next twelve hours, we would experience several key missteps that, while not invalidating our ultimate success, provided several good lessons learned on how a reconnaissance squadron can best set conditions for the success of the BCT's movement to contact.

Our planning process started smoothly; we thought we had a solid plan going into execution. The squadron task organization was quite large for the mission as we had been given the bulk of information collection enablers to facilitate building understanding of the enemy and terrain during the counter-recon fight. These enablers included COLTs for target observation and Prophets and LLVI for signals collection. We also had priority of support for Aviation assets, with the aviation task force in direct support of us, as well as support from Shadow and even CBRNE reconnaissance assets. We were also task organized with a tank company. All enablers were integrated into our planning process and participated thoroughly in our squadron rehearsals. As we crossed LD, I was fairly confident that intent, task and purpose were understood by all, and that enablers had been fully integrated into the squadron's mission.

Almost immediately however, we began experiencing problems with our integration of enablers, most particularly the Shadow and the COLTS. While we had detailed our general squadron PACE plan, we found that we had gaps in our communications capabilities for these critical assets that precluded effective control. We knew that we were going to have issues communicating directly with the Shadow at the flight line, as the BCT had too many other nets to RETRANs so we had to rely on FBCB2. The COLTs as well were unable to talk to the squadron or brigade and what was planned as one of our key collection capabilities

for painting the deeper picture of the enemy movement around Siberian Ridge, became absolutely ineffective at processing vital targets.

Adding to our communications issues, the brigade had uncoiled from the TAA to the attack position very late the evening of training day 6, which in turn delayed the forward passage of lines of the squadron through 1-15 IN at the Whale Gap. 1-15 IN had been tasked to secure the LD, but the BCT's forward posturing of all units south of the LD created a significant traffic problem. We literally couldn't get the Squadron around all of the BCT's assets to cross LD in time. As a result, our LD was late and we missed a critical opportunity to interdict the DTG Reconnaissance, as they were inserted, in Siberia. Additionally, while the Squadron TAC was directly behind the Squadron's tank company and able to talk to the Squadron MAIN, the BCT TAC crossed LD extremely late and was not in position to range 3/1 CAV and 2-69 AR until well after our FPOL of 2-69 AR had occurred. This multiplied our communication problems, particularly with Brigade and impacted our ability to provide timely feedback to the Brigade Commander in shaping his understanding of the enemy set.

Once the Squadron TAC was through Whale Gap and in place, we were able to overcome our earlier communications challenges somewhat but I found that the early FM issues had made us even more reliant on FBCB2 for communications. We arrived to NTC well versed at rapidly disseminating information via FBCB2. We also did not have our MTOE Harris 150 radios, so this was a way to work around our inability to talk, via FM, over extended distances. Once in position, our TAC worked effectively for the squadron, particularly in coordinating attack aviation. This was one area where we experienced great integration and synchronization. We had ensured a well-rehearsed plan to control these assets through the squadron Fires net and because of this the squadron had great effects on the enemy using attack aviation—effectively destroying the BTG and BTG reconnaissance elements through our efforts. In hindsight, this was one of the critical factors that enabled us to overcome the earlier friction and still facilitate the relatively smooth transition of 2-69 AR into the central corridor—one of our key tasks.

We had very good communications with 2-69 AR through the Forward Passage of Lines and into the central corridor. Yet while we thought we had a pretty good reconnaissance read on the enemy, we didn't realize just how much of the COEFOR regimental main body had advanced to the eastern end of the central corridor and thus failed to inform 2-69 AR that they would be fighting in two directions once they passed through us. Our inability to clearly paint the picture for the decisive operation led to friction in their ability to turn the corner and meet the COEFOR with the full brunt of their main battle tanks—a limiting factor.

In hindsight, we learned a number of different lessons that proved valuable to reshaping even our understanding of reconnaissance operations in support of the movement to contact. First, the squadron's plan for counter-reconnaissance was too deeply embedded with the Brigade uncoiling plan and not well rehearsed to facilitate our timeline. Second, enabler integration must occur early enough to ensure rehearsals and troop leading procedures that get down into talking the plan from sensor collection and back to mission command nodes—understanding capabilities and limitations is critical. Finally, communications from the squadron to its enablers, higher headquarters and sister battalions is vital and must be rehearsed with emphasis placed on redundancy in order to overcome potential friction and meet the brigade commander's intent for reconnaissance.

Story #24

Kill Them Here and Keep Them East of the Passes

Major Ryan Kranc was the Operations Officer of the 1st Squadron, 11th Armored Cavalry Regiment acting as COEFOR in support of the first-ever Decisive Action Training Environment rotation at the NTC. His unit was task-organized to replicate three mechanized infantry battalions (MIBN) of the 111th Donovan Tactical Group, a brigade-sized element. Additionally, he was able to leverage forty to fifty irregular forces to augment their regular forces. His missions included a movement to contact from the Donovan border west to east through the central corridor, a hasty attack towards Razish, and a deliberate defense of the international border from Crash Hill east towards Brown's Cut and Debnam Pass.

The Brigade Tactical Group commander's intent was clear and simple. Kill here, strongpoint here, and force the enemy into choosing between two wicked alternatives; breach through a complex obstacle zone overwatched by some of the deadliest anti-tank weapon systems on the battlefield as well as an integrated indirect fire plan, direct fire systems, anti-aircraft manpad systems, and rotary wing aviation or venture into the unforgiving Colorado Wadi, an avenue of approach gauntleted by anti-tank weapon systems and indirect fire at nearly every choke point and mobility corridor. The commander's intent took less than five minutes to draw out and articulate to his staff.

Backward planning the design of the defense took considerably longer than the rough concept sketch the BTG commander scribbled out in dry erase pen on the operation officer's office map. By assuming risk in believing that the enemy commander would not choose to take the southern route through Colorado Wadi, the BTG appropriated the majority of wheeled anti-tank weapon systems along the southern avenue of approach. This retained combat power in-depth and maintaining maneuver agility in being able to reinforce either the southern or northern avenues of approach with a MIBN. By developing an integrated defense in-depth with his main effort along with strong-pointing dismounted infantry with AT-5s in key terrain to the east of his main defensive belt and forward reconnaissance effort in the disruption zone able to conduct reconnaissance and battle handover at echelon, he provided the BTG and DTG early and accurate warning in the disruption zone as to the intent and probable course of action of the attacking enemy.

Both survivability and counter-mobility efforts were managed in a methodical approach. Each dig team was on the clock managed by MIBN commanders and NCOs who knew that the enemy would be attacking in less than 48 hours and that they were on a stringent timeline. Obstacle efforts were planned in the same way with Class IV and V points positioned to supply mine dumps that afforded maximum efficiency to the engineers emplacing the fix, disrupt, turn, and block

obstacles. With the efficiency of a construction site foreman, the Engineer company commander monitored and adjusted efforts for both survivability and counter-mobility for the better part of two days.

Vehicle commanders sighted in primary, alternate, subsequent, and supplementary battle positions by walking the ground and laying on their bellies with binoculars to get an accurate feel for what their vehicle sights would see in the coming days. Once satisfied, dozers and ACEs would spend the next two hours carving out the battle position custom built for the vehicle's maximum survivability, cover, and lethality. Once both battle positions and obstacles were developed, subordinate commanders went to work on integrating indirect fire plans. By integrating Fire Support Coordination Measures throughout the BTG, the FSO ensured both tactical and technical triggers were established to ensure timely and accurate delivery of fires at the critical point.

Identification of triggers was entirely dependent upon the desired outcome of the action. By focusing effort on what decisions the BTG Commander had to make, the staff developed the indicators leading towards the timely decision cycle to allow the BTG Commander to "see" the battlefield as it unfolded before him and to take action based upon the stimulus presented to his forces. In determining positions on the battlefield where the enemy commander had to choose one mobility corridor over another, NAIs and TAIs were established with redundant observation in order to determine the enemy course of action and confirm or deny the SITEMP developed by the S2. Once the enemy course of action was confirmed, the BTG referenced the triggers established by the FSO on the fires worksheet. Proper use of fires helped force the enemy farther into the engagement area and forced them into a decision to breach.

Once the enemy began their breach drill, the BTG knew it would take 30-45 minutes from initiation to completion of the breach. As engineer breaching assets moved forward, the BTG placed BM-21s on standby to fire FASCAM onto the point of breach. Using the time metrics, it took 30 minutes to load the BM-21s with FASCAM before they were ready to fire. After those 30 minutes, the enemy's first elements had just made it through the breach lane with the lead elements of the assault force. At that point, the BTG fired FASCAM into the breach, isolating the lead platoon of the assault force on the far side of the obstacle at the leading edge of a prepared MIBN(-) engagement area. Simultaneously, a dismounted strongpoint unleashed anti-tank missiles and 2S19 indirect fires on the follow-on assault force still on the near side of the breach. By waiting for conditions to be set in exercising tactical patience upon identification of the enemy's intention to breach, the BTG rendered a CAB combat ineffective and the BCT in a significant problem set with how to continue the attack with limited assets since their primary breach force was destroyed. The battle culminated with the BTG still occupying the main battle zone with no enemy penetration of the main defensive belt.

Story #25

The Defense of Dezashah: Adaptation on the Battlefield

Captain Amos Fox was the Commander of Delta Company, 1st Battalion, 11th Armored Cavalry Regiment acting as COEFOR in support of the first-ever Decisive Action Training Environment rotation at the NTC. His final mission was the defense of the Atropian town of Dezashah that had been seized during the Donovanian invasion a week earlier.

At the tail end of rotation 3d Brigade, 3d Infantry Division's rotation at National Training Center, the remnants of the 11th Donovanian BTG was charged with the defense of the area surrounding Dezashah and Crash Hill, protecting the international boundary and holding ground to the Brown and Debnam Pass complexes. D Company, 1st Squadron, 11th ACR, representing an MIBN (-) was charged with the defense of Dezashah and the defeat of a numerically and lethally superior combined arms battalion. In our preparation and execution we were ultimately successful in frustrating the attack of 1-15 IN.

After receipt of mission, I identified several keys that I thought would prove the difference in my element's success in achieving our directed task. These keys were: a) retaining flexibility through understanding Commander's intent and not rigidly being wedded to a plan; b) identifying gaps in the attacking force's scheme of maneuver; c) demonstrating audacity to exploit those gaps before the attacking force could close them; and d) after seizing the initiative from the attacking force, maintaining that initiative to complete their destruction and achieve victory.

We had been designated as the shaping operation one for the BTG's overall defense of the international boundary and the town of Dezashah. Our key task and purpose from the BTG Commander was to retain key terrain (Crash Hill) in order to allow the Decisive Operation to defeat the attacking force and retain the town. The decisive operation's task was to retain Dezashah to maintain a Donovanian presence in Atropia. Shaping operation two was tasked to disrupt enemy forces vicinity Matterhorn and Brown / Dednam Pass in order to prevent massing on the decisive operation. The BTG also retained one troop in reserve, positioned approximately 1000 meters to the west of Dezashah.

To accomplish our primary task, I decided that we were going to conduct an area defense. The battle began with us defending with three platoons arrayed in a linear fashion roughly along the 26 Easting. I had been augmented with a Mechanized Infantry (Mech) platoon and an Anti-Tank (AT) section to help bolster my combat power. I placed one of my tank platoons to the north of Crash Hill and another to the south of Crash Hill. I positioned the Mech platoon and the AT section on Crash Hill. My reserve was a tank platoon, positioned approximately 750 meters behind my main line of defense, as illustrated in the graphic below.

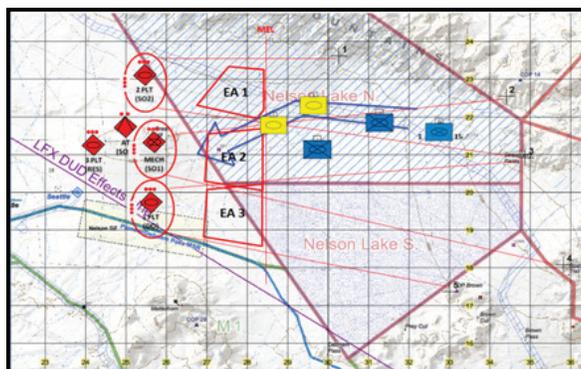


Figure 25-1. COEFOR Defense Scheme of Maneuver, Rotation 12-05.

During the reconnaissance / counter-reconnaissance fight, the rotational unit made their way from their assembly area vicinity Strawberry Fields towards our perimeter. They had found a position that offered excellent concealment on the northeast side of Hill 981. From the BTG scouts, I had a general idea where that attacking force had positioned, but I was not certain about their location.

At this point, I assessed that they had the upper hand. First, they had successfully maneuvered their formation into our main battle area with minimal casualties. Second, we were unable to identify the location of their main body. Had they retained their momentum and attacked and capitalized on our lack of situational awareness, they could have potentially destroyed D Company. Instead, they chose to sit and wait.

Recognizing the opportunity presented by the loss of momentum from the attacking force, I directed my element to attack and exploit the gap created. In a flash, we shifted from a terrain-based area defense, to an enemy-based mobile defense. Through this rapid transition, we were able to present an impression of more combat power than we actually had, creating indecision and caution on the part of the rotational element. Although outnumbered four-to-one, the tenacity of our attack overcame the numerical differences and we were able to destroy the attacking force and accomplish our mission.

After the battle, I was able to draw a number of lessons from our successful defense. First, flexibility was key. Not becoming rigidly fixated on the plan enabled me to recognize an opportunity when it presented itself to seize the initiative from the attacking force and transition. Second, commanders must always be attentive to gaps in the enemy's plan. The quicker a commander can identify gaps, the quicker a commander can exploit these gaps. My experience at NTC reinforced what I had been taught—that the commander who can adapt to the changing environment first, and subsequently act first, usually wins. Thirdly, units on the attack must maintain

the initiative. Achieving momentum is difficult. Once established, Commanders must ensure to keep the pressure on until mission accomplishment. Allowing that initiative to slip away can have devastating effects.

In conclusion, the successful defense of Dezashah was a result of flexibility and audacity, built upon basic Soldier skills of fire, maneuver and MILES gunnery. Commanders must be vigilant in looking for surfaces and gaps in their opponents; these surfaces and gaps are not necessarily physical attributes, but can take the shape of weakness in initiative, momentum, and aggressiveness. D Company's transition from an area defense to an attack within the greater BTG defense demonstrates the impact that well-trained Soldiers can accomplish when given opportunity to succeed.

Story #26

Mission Command and the Brigade Deep Fires Fight

Colonel Omar Jones was the Brigade Commander for 2d Armored Brigade Combat Team (ABCT), 4th infantry Division's decisive action training environment rotation at the National Training Center (NTC) in June 2013. Lieutenant Colonel Keith R. Jarolimek was the Commander of the 3d Battalion, 16th Field Artillery Regiment, the 2d Armored Brigade Combat Team's Fires Battalion. The brigade was comprised of two combined arms battalions, an armored reconnaissance squadron, a fires battalion, a special troop's battalion, a support battalion, and an attached aviation task force. The brigades mission set included defending the area surrounding Dezashah and Crash Hill west of Brown and Debnam Pass complex, then conducting a counter attack to seize the central corridor and the towns of Ujen and Razish, and finally, a movement to contact south from the Siberian Ridge towards the Whale Gap.

During the preparation for our rotation at the National Training Center (NTC) in the environment, we knew a significant challenge was how best to articulate how the BCT would fight. We chose to use both the deep-close-security framework to describe operations in time and space as well as the decisive-shaping-sustaining framework to nest purpose. Using these two operational frameworks allowed the BCT to synchronize actions in the entirety of its area of operations (AO).

We found it particularly useful to define the deep fight in the brigade. ADRP 3-0 defines the deep fight as, "In contiguous areas of operations, a deep area is an area forward of the close area that a commander uses to shape enemy forces before they are encountered or engaged in the close area." With organic sensors – the Armored Reconnaissance Squadron (ARS), Combat Observation Lasing Teams (COLTs), UAS platoon, prophets, and other collection assets – and a myriad of shooters – the Fires Battalion, General Support Artillery, Close Air Support (CAS), Electronic Attack, and Army Attack Aviation – the modular armored brigade combat team can truly have a deep fight, where the brigade commander can effectively shape enemy forces by entering into the enemy commander's decision cycle through joint fires and intelligence collection. How we executed the deep fight shifted based on the operation, but many of the principles and organization remained constant.

During this process, I leaned heavily on the FSCOORD to ensure synchronization through the planning process. As the Fires Battalion Commander, the FSCOORD is in the unique position to see across the brigade through his interaction with other organic and attached commanders, battalion fire support officers, the division operations staff, and the BCT staff. As the senior fire supporter in the brigade, he also has the tactical expertise and experience to assist the staff in synchronizing the application of joint fires (lethal and nonlethal) into the operation.

In addition to the doctrinal military decision making process (MDMP) steps, I directed the staff to conduct a deep strike targeting meeting, the focus of the Brigade fight. Attendees for the deep strike targeting meeting included all the players affecting the success in the Brigade fight. Participants from the BCT Staff were myself and the FSCoord, the DCO, XO, S3, S2, FSO, collection manager, and Brigade Aviation Officer; from the ARS the Squadron Commander, S3, S2, and FSO; from the Aviation Task Force the S3 and Tactical Air Operations Planner, and from the Fires Battalion the S3 and Fire Direction Officer (FDO). The deep strike targeting meeting was in reality a backbrief to the brigade commander to ensure synchronization of the deep fight in time, space, and purpose. It was designed to confirm sensors for each NAI and shooters for each TAI and target. What we discovered is it was absolutely essential to layout in specifics capabilities and requirements that linked each sensor to the decision makers. We discussed in detail the pairing of assets to maximize the cross-cuing of sensors and their method to relay that information back to mission command nodes. We continually refined the deep strike targeting meeting, improving at each subsequent session.



Figure 26-1. Deep Fight Targeting Meeting.
(Photo Courtesy of Colonel Christopher Doneski)

When planning for the defense, considerations for how the we arrayed forces, allocated battlespace, and applied the operational framework were affected by the brigade's assigned area of operation, terrain, and coalition force operations. The division's mandated limit of advance for maneuver forces (necessary due to coalition force operations) precluded a large security zone, but allowed the brigade space to shape the Donovanian brigade tactical group (BTG) with joint fires as he executed his attack. I described my intent using mainly the deep-close-security framework, stating we wanted to kill the enemy deep before it entered the main battle area using joint fires observed through the ARS, UAS, and the BCT's other organic sensors augmented by echelons above brigade (EAB) sensors such as JSTARS and coalition force reports.

The plan developed by the staff met the commander's intent, integrating all available sensors and shooters into the defense but did not achieve the synchronization or level of detail needed for the deep fight to be successful. The staff produced a collection matrix, fire support execution matrix, and high payoff target list (HPTL), and operations synch matrix in an attempt to articulate the synchronization achieved during the wargame. In the end, these products did not clearly articulate the synchronization we wanted to achieve. Additionally, the FSCoord and the staff did not achieve the level of detail in observation planning and sensor to shooter triggers, especially on the open terrain of the BCT's forward area of operations, to effectively employ indirect fires to attrit the enemy force before it entered the main battle area. We were too non-prescriptive leaving observation planning strictly to the ARS. At the BCT level, we did not see the gaps from the various locations of the sensors on the ground to observe the BCT's named areas of interest (NAIs), which they then could have covered with BCT and EAB level assets. The result was ineffective joint fires and a much larger force entering the main battle area than expected. The CABs were able to defeat the attacking BTG through direct fires and attack aviation, but the BCT lost opportunities to mass joint fires to help shape the close fight leading to higher than expected casualties.

As the BCT transitioned to conduct a counterattack against retrograding and reinforced BTG forces, we incorporated many of the lessons learned from the deep fight during the defense. In principle, the commander's intent for the deep fight did not change, wanting to attrit and disrupt the enemy in his battle positions before the CABs attacked as the decisive operation. During the MDMP sessions for the counterattack, the staff achieved greater synchronization throughout the operational framework. The staff developed many of the same products described in the defense, but added a target synchronization matrix (TSM) using the Decide, Detect, Deliver, Assess (D3A) methodology to attack the our high payoff targets (HPTs). This document tied the HPT to a target or TAI where we wanted to

achieve the commander's desired effect and of course tying a shooter to the target or TAI. The TAI was then tied to a NAI where the HPT would be observed by the designated sensor, initiating the call for fire, CAS 9 line, or Attack Aviation 5 line.

The TSM greatly aided the deep strike targeting meeting for the counterattack. It allowed the participants to focus on each enemy formation and continue to shift focus from his disruption zone to main battle area to mobile reserve, and where he would be observed and attacked. Unfortunately, the staff did not do the subsequent upfront work to ensure each enemy formation could be "seen" by an observer and the triggers associated with the shooter were in sufficient detail to process timely and accurate joint fires. During execution, this led my team in the TAC, the FSCoord and S3, to direct assets deep during the fight in order to shape the BTG for the CAB's decisive attack.

After the counterattack, we had a condensed timeline to execute a movement to contact to destroy the remnants of enemy forces in the Division's area of operations, rapidly expanding our Brigade's battlespace. Building upon the deep fight lessons from the defense and offense, the BCT improved on our planning, rehearsal, and execution of the BCT deep fight. After the shortcomings of the counterattack, the BCT FSO and collection manager conducted a detailed TAI-NAI-sensor to shooter-trigger analysis to build appropriate sensor to shooter links in order to achieve the commander's intent for attriting and disrupting enemy maneuver forces during the movement to contact in order for the CABs to destroy the enemy with direct fire. The deep strike targeting meeting executed during this battle period was by far the best, achieving a level of synchronization not seen in previous operations. Synchronization was achieved through the detailed planning of the FSO and collection manager and their cross talk with the ARS S3 and FSO. Our ability to refine this process and understand what products and synchronization must happen before, during and following this meeting has resulted in a effective system to synchronize and focus fires. In summary, we recommend BCTs adopt the deep-close-security framework in addition to the decisive-shaping-sustaining framework in the environment. While not described in this story, this framework also allows the commander to describe his intent for the security area in detail, ensuring synchronization throughout the entirety of the BCTs AO. A detailed deep fight approach, captured by a target synchronization matrix and collection matrix, and confirmed through a deep strike targeting meeting greatly enhances the BCT's ability to shape the enemy through the width and depth of the its area of operations, truly setting the conditions for the combined arms battalion to be successful in the close fight but to be successful, it takes detailed analysis and planning, early enough in the planning process to give the ARS the time they need to execute their planning process at the squadron, troop, and platoon level. When synchronization of sensors and joint fires is achieved, it is a powerful enabler the brigade commander can use to truly shape and ultimately win any fight.

Story #27

Re-Learning Fires: Fire Support in Decisive Action

Lieutenant Colonel James Willard was the Commander of the 1st Battalion, 10th Field Artillery Regiment during 3d Brigade, 3d Infantry Division's Decisive Action Training Environment rotation at the NTC. Not only was he responsible for the employment of the brigade's direct support (DS) artillery battalion but he also served as the senior advisor to the brigade commander as the fire support coordinator (FSCOORD).

How does the FSCOORD balance time between the fires battalion and brigade and who defines the critical times at each location? Re-learning the role of the FSCOORD as we transition to a high-tempo hybrid threat environment at the National Training Center is imperative to the effective integration of Fires into the planning process. The ability of the FSCOORD to act as a bridge between fires and maneuver ultimately empowers the brigade commander to execute mission command in the operating environment of the NTC.

From my perspective, the value of the FSCOORD role was most evident during the brigade's deliberate planning. I was able to provide guidance, in accordance with the Commander's intent, to both the BDE FSO and the brigade staff during critical periods of MDMP, especially course of action development and course of action analysis. My focus was to ensure that fires, both fixed and rotary wing aviation, and intelligence collection assets were effectively integrated in an effort to shape the Brigade battle space.

The planning for and management of airspace during operations was a source of friction during much of the rotation. The major challenge was overcoming many of the habits developed during our Army's experience in Operation Iraqi Freedom, where aviation assets rarely competed for airspace with artillery and mortar systems. Shifting back to more traditional airspace de-confliction measures initially proved contentious, impacting our ability to adequately plan control measures to facilitate simultaneous fires throughout the operation. We worked through many of these issues as the rotation progressed allowing us to bring the full weight of joint fires against our enemy at the conclusion of the rotation. Despite our progress, we could have been better prepared to de-conflict airspace, on the move, had we more thoroughly covered this aspect in the Combined Arms Rehearsals.

As the FSCOORD, my involvement with brigade expanded throughout the rotation, significantly impacting the time available to drive the operations process at the fires battalion. This dynamic meant the battalion executive officer (BN XO) effectively ran the battalion in my absence, led the military decision-making process and created the mission orders that would prove critical for mission command

during execution. In order to mitigate my physical absence during much of the BN MDMP process the XO often received guidance via various communications platforms, carried out my bidding during much of the MDMP process, and ensured parallel planning was executed to standard. This also dictated that the battalion staff establish and closely adhere to planning timelines to ensure the time I had available with the battalion was maximized at critical points in the MDMP process and rehearsals. This also allowed ample time for subordinate units to receive the mission, conduct rehearsals and prepare and position for the next fight.

In transitioning from planning to execution, I found no reduction in my commander's desire for me to weight my time in favor of the FSCOORD role. By ensuring that mission and intent were understood by my XO and staff during the MDMP process and confirmed during rehearsals and back-briefs, I was confident of their ability to execute that intent and accomplish the tasks directed for execution in the concept of fires while I maneuvered with the commander.

One of the biggest challenges was my ability to effectively perform the role of FSCOORD during the fight. While doctrine tells us the FSCOORD must be able to dynamically synchronize fires, provide a fires common operating picture (COP) to the brigade commander, and command the fires battalion simultaneously, this is easier said than accomplished in the high-paced operating tempo. One of those key frictions was the lack of a dedicated maneuver platform capable of operating well forward in the fight with the requisite systems to communicate on BCT CMD, BCT Fires, BN CMD, and BN Fires nets. The fast pace of the fight dictated the use of primarily FM and FBCB2 communications as critical mission command tools, as most ABC systems were unavailable due to their current lack of mobility. Without a mission command platform capable of facilitating these responsibilities, there was friction in the application and synchronization of fires. To reduce this friction, I initially positioned myself with the brigade commander, in his Bradley, during the movement to contact mission. While this provided me instant access to the commander to provide guidance and recommendations, I was limited in my ability to synchronize fires effectively by my lack of communications with fires assets, resulting in an incomplete fires COP. The remainder of the rotation I maneuvered in an up-armored HMMWV and operated from the BDE TAC upon its establishment. Though not ideal this was the most effective method based on the capabilities available for the fight.

Adding to this friction, we discovered in execution that there were not enough management systems within the ADAM/BAE Cell to support split operations between the Mobile CP, Main CP, and TAC. This was most evident during the movement to contact when the Mobile CP was well forward and had poor communications back to the Main CP and TAC; we had no capability to understand the airspace, let alone manage employment of airspace users. Ultimately, we were

able to work through these frictions, but there were definite impacts to our ability to deliver timely fires during the movement to contact. To address this shortcoming we established an ADHOC joint fires team at the BDE TAC to manage distribution and de-confliction of fires resources. This group consisted of the FSCOORD, BDE FSO, ALO and Aviation BN S3, empowered by the BDE CDR and BDE TAC capabilities to rapidly re-direct and de-conflict joint fires assets to more effectively achieve the commander's intent for fires. The establishment of this group had perhaps the greatest impact on the successes achieved as we neared the end of the rotation.

In summary, the synchronization of fires with airspace de-confliction, ground maneuver forces, and information collection systems is a complex process that must be planned in detail, validated through war gaming, rehearsed at multiple echelons and supported by a multi-tiered communications plan. The FSCOORD is in a key position to implement this coordination, but must be part of the operations process from MDMP through transition to execution in order to ensure that coordination is sufficiently executed. In execution, the FSCOORD must constantly re-evaluate where the critical points of friction are that demand management, ideally operating from a maneuver system with enough digital capability to effectively manage the fires COP while simultaneously maneuvering with the commander.

Story #28

A Vote for Air Triggers in Planning the Deliberate Attack

Lieutenant Colonel Lance Calvert was the Battalion Commander of 3d Battalion, 1st Aviation Regiment supporting the 1st Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His force provided reconnaissance, security and attack aviation support to the ground maneuver elements of the Raider Brigade as they executed a movement to contact, a hasty defense, and a deliberate attack against near-peer Donovanian Forces.

Achieving synchronization of joint fires requires detailed planning and coordination for the establishment of air triggers that take into account aircraft and crew limitations. Triggers planned too early limit the station time of the aviation assets. Triggers planned too late do not capitalize on their full capabilities. Identifying limitations and emplacing strategies to mitigate them early in the planning cycle is critical to ensuring assets are available for the decisive operation or at the decisive point. At NTC, the two most common limitations on our Multi-functional Aviation Task Force (MFATF) were aircraft maintenance and aircrew fighter management. Additional factors for planning include aircraft/aircrew survivability systems, airspace and fire support control measures, and environmental impacts (weather, illumination).

The single most important factor in our achieving success proved to be establishing a constant two-way dialogue with the BCT Commander. This allowed the BCT Commander to fully understand the limitations of my battalion and the impacts that changes to the operational timeline would have on aircraft and aircrew availability. Nowhere is the friction between adherence to planning and flexibility to respond to enemy actions more sorely felt than in the decision to allocate aviation assets. In maintaining a constant dialogue and gaining understanding of those frictions enabled the BCT Commander to better make informed decisions regarding task organization of the aviation force and where and when to weight his main effort or, assume risk in asset availability to supporting efforts or during certain time periods.

In our case SWT availability was limited by the number of available aircrews and their fighter management limits; AWT availability was limited by aircraft maintenance. Early in the rotation I was not as effective as I could have been in providing and opening this dialogue, and although aviation integration was effective, I did not fully synchronize my force into the fight.

Aircraft survivability planning on the battlefield is a tremendous challenge, given the presence of near-peer air defense assets that are capable of shooting down aircraft that put themselves at risk. Detailed intelligence analysis is required on enemy surface to air missile and anti-aircraft capabilities, and how and where

the enemy will echelon these assets and employ them. Our planning included how to avoid and defeat the threat with aircraft maneuver and survivability systems, but also required us to ensure our airspace control measures supported and enabled the BCT fires plan. Our Battalion FSO was embedded in the BCT fires planning to ensure our ACMs were incorporated to include the triggers (time and space) to activate, and more importantly, deactivate them as the attack moved forward. The SEAD fires (lethal and non-lethal) were planned to allow aircraft freedom of maneuver, while ensuring uninterrupted fire support to BCT ground forces.

Environmental factors also limited us from enabling the BCT fight. On several occasions, we were challenged by severe weather phenomena and decreased illumination windows that increased the risk to our aircrews and ultimately held them out of the fight for periods of time. In fact, severe winds and turbulence grounded all rotary wing aircraft during the decisive operation. Our aviation planners and LNOs to the BCT were proactive in forecasting and communicating to the BCT CDR the impacts of weather on our operations.

Synchronization of Army aviation into the BCT joint fires plan is a complicated, but not impossible task. The planning must take into account the BCT CDR intent for joint fires and how he sees the introduction of Army aviation into that plan, without limiting the effects of other joint fire assets. Triggers must be planned to allow maximum integration of assets and aviation capabilities, while remaining flexible and agile enough to support branches and sequels. Effective communication between the MFATF CDR and BCT CDR and staff is critical in understanding the capabilities and limitations of the aviation force, and more importantly, how the aviation force can enable the full integration of all joint fires assets.

Story #29

Radar Deception

Chief Warrant Officer 2 Steven Webb and Warrant Officer 1 Erik Dominguez were the Battalion Targeting Officer and Target Acquisition Platoon Leader, respectively, of the 4th Battalion, 42d Field Artillery Regiment supporting the 1st Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. Their battalion was charged with providing lethal fires to destroy enemy main battle tanks and supporting systems, a requirement that demanded they retain the functionality and survivability of both their guns and radar systems.

On the eve of our deployment to the National Training Center, 1st Armored Brigade Combat Team, 4th Infantry Division was determined to gain an edge. The NTC Mission Readiness Exercise was the last stop before we assumed the mission as strategic CENTCOM Reserve in Kuwait. The unit was poised to exercise a new form of doctrine called Decisive Action (DA) which required the careful management and balance of CAM and WAS. The 1st Brigade Commander sought to maximize his advantage over the opposing force and directed the creation of a Brigade Deception Cell with the charge that units support the development of deception techniques that would keep the enemy off balance. In the months leading up to the NTC rotation, 4th Battalion, 42d Field Artillery Regiment developed a concept for building a wooden version of a Q-36 radar which could meet the Commander's intent on deception by increasing survivability of our actual radar systems. Soon after approval, the order was given to begin construction of a realistic Q-36 replica that would be thereafter affectionately be known as the "Woody."

Woody had to be mobile, fit into a vehicle already owned by the unit, and be small enough to not overwhelm the unit's constraints for moving equipment to NTC. We began reaching out to the field for advice; many had seen or heard of such concepts, but no one had any historical information on how to actually start construction. A Google search produced a picture of a similar radar, but it was fixed on a hard site. It took three months from inception to completion to turn the concept into reality—basically a wooden box similar in size to a Q-36 radar with a hinged panel replicating the radar face placed in the bed of a cargo trailer.

Employing the Woody became part of the units planning process. The goal was to emplace Woody in a position that could be observed by the COEFOR, but still meet radar site selection standards. The intent was to draw enemy indirect fire, then acquire and destroy the enemy's firing element.

We failed to get Woody into the fight during the first operation due to the fast pace of the mission. While opportunities were lost during the first engagement, a new sense of urgency to effectively employ Woody gained momentum as the

battalion planned for the next fight. The planning to employ Woody would soon become reality and lend to a story of overwhelming success.

We decided to assume some risk and have the Target Acquisition Platoon Leader emplace Woody in a more visible location at dusk prior to the next battle. Being a defense, we knew the COEFOR had eyes deep, and that any radar would be high value targets worth the risk of unmasking any long range shooters. The Battalion's Q-37 section moved to a hide position and prepared to emplace in order to acquire fires against Woody. Simultaneously, we emplaced Woody. Camouflage netting was used to hide all but the face of the radar, lending to a more realistic appearance. The Q-37 section and the Target Acquisition Platoon Leader displaced to a more secure site once Woody was set.

COEFOR had positioned observers during the night who easily acquired visual identification of Woody. They called for heavy artillery fires, unmasking their long range batteries early in the battle. Unfortunately for the COEFOR, the Q-37 was positioned in a more secure position, hidden from enemy observation, and acquired the enemy indirect fire. The Q37 azimuth of search and cue schedule was optimal to acquire the enemy fires from template positions. The mission was processed through the Battalion's Counter-fire Cell and Fire Direction Center and sent to the Guns. Both Paladins and MLRS conducted counter fire. The mission was an overwhelming success.

The employment of Woody was highly effective. The unit's success continued through creative positioning and queuing schedules that allowed the Q-36 and Q-37 to remain unscathed for the remainder of the rotation. Survival of the Q-37 for the duration of the rotation became another first in NTC history. The 4th Battalion, 42d Field Artillery Regiment received high praise for their creative plan and those involved were pleased at the results of their hard work. A few weeks of labor to create a simple box constructed out of scrap wood and left over paint, was well worth the price of contributing to the overall success of the Brigade's mission objectives.

Story #30

Managing CASEVAC Operations in the Movement to Contact

Command Sergeant Major Dennis L. Bellinger was the Battalion CSM for 1st Battalion, 67th Armor Regiment, supporting 2d Brigade, 4th Infantry Division's Decisive Action Training Environment (13-08) rotation at the NTC in June 2013. During the movement to contact on Training Day 14, the battalion was tasked to move southwest through Red Lake Pass and attack towards the remnants of the 113th BTG that were located southwest of the Whale Gap.

“Casualty evacuation requires extensive planning, preparation, battlefield initiative, and coordination. Efficient or broken, your CASEVAC system will have a profound impact on the morale and combat effectiveness of your unit.”
–FM 7-20

During the planning phase for our movement to contact, I was concerned with the brigade's plan for CASEVAC given our inability to conduct a full-on sustainment rehearsal. I felt added concern because of late changes in unit CEs which desynchronized the original concept of support that had been briefed in the OPORD. I brought in the medical platoon leader and platoon sergeant to find out what they were tracking through medical channels. I was quite surprised when the answer was—nothing. When I pressed they did little to offset my concerns when they replied with, “We attempted to contact Role II by FM and FBCB2, but have not received a reply from either mode of communications.” Upon hearing that, I reviewed what their actions should have been when they could not make contact with our higher headquarters, who they should have told and instructed that they immediately executed two things: continue to attempt to gain FM/ FBCB2 communications with Role II and continue to conduct their TLPs, PCC/PCIs in preparation for our anticipated late night set and early morning LD.

To assist their efforts, I directed the Battle Captain at the MAIN to try and raise Role-II assets on the brigade A&L net; even going so far as to drop down to the Role-II company net to attempt to make communication. We were not successful. I immediately joined a convoy to the BCT MAIN so that I could do a face-to-face with the brigade medical planner as we were losing time and I wanted to ensure that our CASEVAC plan was synched with brigade. In a one-on-one discussion about lack of communication ability with my Role-I representatives, we finally achieved mutual understanding about the four AXP's templated along my unit's movement route, and the specific grid locations for the Role-II AXP's. At this point, I had a bit more confidence in our ability to execute the plan. Additionally, we had a larger discussion about Air CASEVAC capabilities in support of the MTC, and briefly discussed the role of the additional FLA and M113 support that was pushed to my BN to move casualties from Role-I back to the templated AXP's.

Armed with this information, I returned to the BN CP to conduct coordination with our MEDO, S3, and submit my recommendations for approval by the Commander. Our plan for casualties at the BN level was to co-locate the Forward Aid Station (FAS) and an additional M113 with the TAC for movement and co-locate the Main Aid Station (MAS) with the Combat Trains CP. Our FAS was comprised of two M113s and an M557. The MAS consisted of two M113, a M557, an FLA, and an LMTV. The purpose of the additional assets was to have lift capability in the event of a MASCAL. We briefed company CPs on the templated brigade AXPs via FM. The flaw in the plan and the tactical risk that we took was not having adequate security for the FAS or the MAS lift assets if they needed to execute an AXP with Role-II in areas that had not been cleared of enemy forces.

As a unit we had good communications with our MAS but still had not been able to acquire clear communications with Role-II until around 0340 – 2.5 hours before our LD time. The FAS crossed the LD at 0600 and had good communication until they were south of Red Lake Pass. This initially didn't worry me too much as I assumed the combat trains and MAS would start their move as planned and would then be able to communicate. This didn't happen, as the combat trains CP actually slowed their rate of travel while the FAS and I sprinted to keep up with the main body of the task force as it moved rapidly south of the Whale Gap to engage the enemy main body. One of the first losses in the fight was the engagement of the FAS M557 by an AT-5 resulting in one KIA, one urgent and one priority. This reduced our capability to do CASEVAC by 30% due to loss of transport capacity and supplies from that vehicle.

Making matters worse, when we attempted to contact the MAS to ascertain their location we were not able to achieve positive communications because they were still 2-3 kilometers north of Red Lake Pass. Additionally, our lack of dedicated security prohibited the remaining FAS vehicles from moving to the damaged M577 and treating the casualties. As the task force started taking massive casualties across the formation, the scene quickly devolved into loosely-controlled chaos. Our lead element had received an unknown number of casualties, the 2d and 3d Armor teams were in a knife fight and quickly attrited. Simultaneously, our combat trains was attacked north of Red Lake Pass by two BRDMs that had gotten past the task force main body and we lost the MAS—both our primary and redundant means of executing CASEVAC had now been eliminated.

Upon hearing of the loss of the MAS over the command net the battalion Commander initiated MASCAL procedures over the battalion and brigade nets. I immediately pulled my vehicle to the hasty FAS site and told the sergeant, “get ready, I think a flood of casualties are going to start coming in.” She acknowledged and went to her track and blasted the FAS grid over the battalion command and A&L nets again. Knowing that PSGs, TCs, BCs and ISGs were all working the

casualty care from point of injury to their casualty collection points and back to the FAS location, I felt that we would become quickly overwhelmed; a feeling that proved true in a matter of minutes. By this time, however, enemy resistance had almost ceased and the BCT Commander was directing additional medical and non-standard evacuation assets into the area with security provided by the BSTB's infantry platoon and the BCT TAC.

Ultimately, the actions of our Sergeants saved the day. Nothing is more lethal on the battlefield than a trained Soldier, and I can attest that no one is more adept at saving lives than the Soldiers of my medical platoon. When we found ourselves stretched thin, a young sergeant at the FAS took charge of ISGs, CPTs, SFCs and even the CSM at times—giving directions as others assumed roles as litter bearers, KIA collection point managers, and assisted loading casualties into non-standard CASEVAC vehicles for transporting. My confidence was renewed as I saw leaders from across the brigade rally to the aid of 1-67 AR.

Looking back, I realize that the most important function that ISGs and CSMs execute when reviewing CASEVAC procedures as we transition from planning to execution is ensuring rehearsals. CSMs must take the lead along with the sustainment cell to ensure that our concept of support is the best it can be. I believe that the consistent use of PCC and PCI checklists at the company, platoon and medical platoon level enabled us to be extremely successful at treating at the point of injury and getting our casualties back to the FAS. ISGs have to ensure they understand the SOP, their role and the need for timely and accurate reporting in the execution phase. Finally, I cannot re-iterate enough the need for rehearsals all the way to PL /PSG and squad leader level, with extensive details so that all understand and can execute a plan that facilitates good CASEVAC operations. Over the course of the entire rotation we did pretty well on CASEVAC. The difference in the MTC from the other missions that led to so many casualties was the lack of time to conduct a sustainment rehearsal and in the event, much higher than expected casualty rates.

At least 50 percent of our casualties died of wounds due to the lack of coordinated, effective CASEVAC procedures. Looking back, I believe some of the best TTPs on how units and leaders preparing for similar fights could focus their training to prevent this experience are:

- Have a plan (POI to CCP-FAS/MAS to Role II, MASCAL BATTLE DRILL)
- Ensure integration of the medical support plan with the tactical scheme of maneuver

- REHEARSE, REHEARSE, and REHEARSE!!!
- Plan for unanticipated casualties at undetermined locations.
- Realize that high tempo of MTC operations will often result in higher numbers of casualties.
- Identify and use nonstandard CASEVAC vehicles (LMTVs, etc) to move minor injuries.
- Order extra litters, back boards, with a goal of one per vehicle.
- Build litter teams and train them.
- Incorporate CASEVAC and MASCAL events into home station training.
- Tasks organize and allocate evacuation assets for projected casualties.
- Plan a request for additional assets.
- Plan for and use proper ground and air assets for the different categories of casualties.
- Plan for and use AXPs.
- Ensure the locations of every battalion's FAS/MAS grids are known.
- Request assistance when your FAS evacuation workload reaches 90% of your unit capability.
- Develop and disseminate a medical support matrix
- Redundant communications is vital to effective CASEVAC.
- Ensure ambulance drivers are good at map reading and can navigate effectively at night under blackout conditions.
- Plan to use RTD and slightly injured patients to assist in the event of a MASCAL.

These are just a few of the lessons we learned. Leaders at every level must anticipate the scale of possible casualties, along with the length of projected medical support lines, and do everything we can to mitigate these issues and save our Soldiers lives.

Story #31

Digitizing Sustainment for Decisive Action

Chief Warrant Officer 4 Joseph Bolte was the Brigade MATO for the Brigade Support Battalion of the 1st Armored Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit conducted offensive and defensive operations against both regular and irregular forces in a complex operating environment, beginning with a movement to contact from a TAA south of the Whale Gap and into the Central Corridor and culminating in a deliberate attack through the Brown and Debnam Passes and the Washboard towards Crash Hill.

Achieving synchronization of sustainment operations in the decisive action environment was critical to the success of our operations. The distances between the BSA and the locations of maneuver unit CTCPs, UMCPs, and TOCs were outside our ability to effectively communicate over FM without Retransmission nodes. We were only capable of retransmitting three channels, and with the focus on Command Net, Operations and Intel, and Digital Fires, we couldn't rely on using the Administrative and Logistics (A&L) net for the backbone of our sustainment dialogue, as we had intended to prior to hitting the ground.

During our train-up, we had anticipated not being able to rely solely on FM and had war-gamed possible solutions to mitigate the communications problem for sustainers in the brigade. The brigade had allocated a JNN to the BSB which enabled us to provide upper TI connectivity to FSC elements located in the BSA. In a fixed site, like the TAA or a static defense, this provided adequate capability to support sustainment, but when brigade conducted offensive operations that required mobility and maneuver we found ourselves lacking the lower TI systems that the maneuver battalions relied upon to communicate. While we had some FBCB2 systems and the ability to use TACSAT within our PACE we had critical MTOE shortages that had not been filled. We also discovered that the MTOE does not provide FBCB2 systems to the Support Operations Cell, forward CTCPs, and UMCPs. The systems we did have available were inadequate in quantity to enable the type of dialogue necessary for ensuring the details of communications between the BSA and the forward support elements on the move.

We turned to our Logistics Information Systems (LIS) as a possible means of bridging this gap and gaining the reliable connectivity we needed through use of the Combat Service Support Very Small Aperture Terminal (CSS VSAT) and the Combat Service Support Automated Information Systems Interface (CAISI). The architecture below depicts our employment of the CSS VSAT and the JNN which enabled our ability to maintain communications with the maneuver battalions. What is not depicted here is the employment of FBCB2 as a means of communication during fast moving offensive operations that would prevent the set-up and use of the CSS VSAT or JNN.

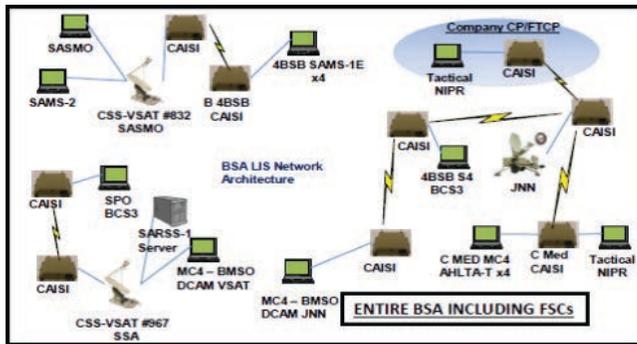


Figure 31-1. Digital Logistics Network Architecture (BSA).

The use of the FBCB2 in the PACE plan would have been a valuable tool had we been allocated by MTOE enough systems for the BSB (this includes FSCs supporting maneuver units), which would have allowed for LOGSTAT reporting and coordination for emergency resupply when the distance of radio communications were too far. At the maneuver battalion the below LIS architecture was used to mitigate this problem by leaving the CTCP and UMCP in place until it was absolutely necessary to move them forward.

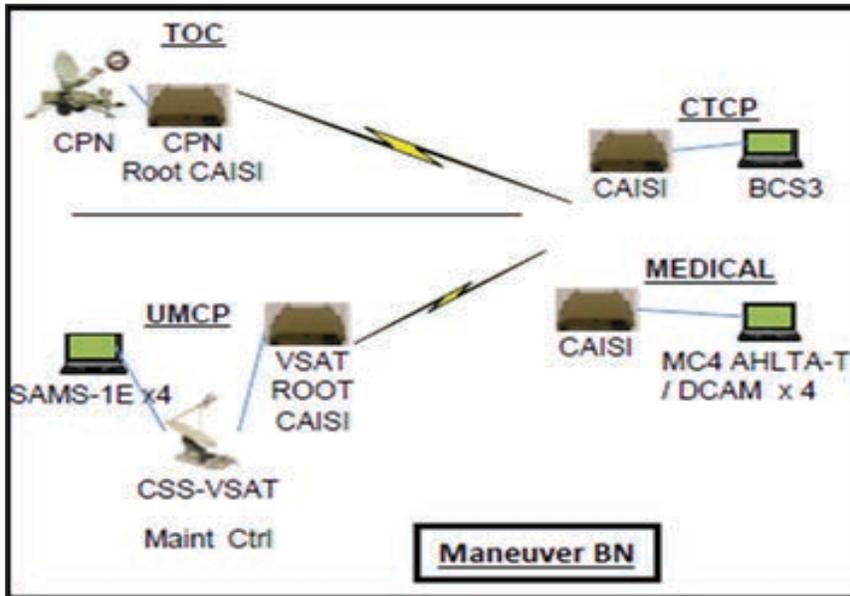


Figure 31-2. Digital Logistics Network Architecture (Battalion).

The incorporation of these digital systems became a normal part of our rapid deployment and establishment of mission command nodes. During the move to the TAA, the BSA was one of the last elements in the brigade movement plan

to arrive. In spite of this, we were able to have the CSS VSAT network up and operational at the BSB MAIN within 60 minutes of our arrival. The SPO and Brigade Maintenance Officer were able to communicate to FSCs at the CTCF and UMCP receiving LOGSTAT reports via voice satellite communications. The first 026-Report (Brigade Deadlined Equipment) was produced within two hours of arrival and had 98% accuracy. We took the use of the LIS architecture a step further by using it to connect the BCS3 and the MC4 thus providing a tactical NIPR capability via line of site over the CASSI to company CPs within the BSA. Additionally, we employed the CSS VSAT IP Phone as a means of communication when radio communications were too extended and upper TI was not available. We realized quickly that we had to educate ourselves on proper protocol because the CSS VSAT system is not a classified system and only FOUO communications can be transmitted. Adding to these challenges was the difficulty we experienced using BCS3 as the backbone for LOGSTAT reporting.

We had employed BCS3 during our War Fighter Exercise and during our BSA Operations previously, and felt we had a good process and architecture. However, we did not account for the need to certify all our systems before they could be put on the network at NTC. We were also challenged with communicating to the BCS3 FSR on the architecture we had used during training. We were able to get the system operational by Training Day 7, but the information input into the BCS3 system for it to be fully operational was more than we had time or personnel to accomplish. We learned the need to dedicate operators at the brigade level upon arrival at RSOI in order to facilitate getting the system functioning prior to movement to the TAA.

The bottom line is that the proper employment of LIS architecture enabled the collection of critical sustainment information. The information provided our Brigade and Support Battalion Commanders the ability to make critical and timely decisions on sustainment issues that directly impacted the fight. By using digital architecture, sustainment enabled mission command as a combat multiplier and the employment of LIS was a key to that success.

Story #32

Power and Air: Considerations for Operating in Extreme Heat

Major Krattiger was the Executive Officer for 2d Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC in June 2013. The brigade was comprised of two combined arms battalions, a cavalry squadron, a fires battalion, special troop's battalion and support battalion, and an attached aviation task force. The brigades mission set included defending the area surrounding Dezashah and Crash Hill west of Brown and Debnam Pass complex, then conducting a counter-attack to seize the central corridor and the towns of Ujen and Razish, and finally, a movement to contact south from the Siberian Ridge towards Whale Gap.

Our recent rotation at the NTC was facilitated by some detailed planning and execution of power generation systems and processes as well as environmental controls. I have identified some of the items we addressed prior to and during the rotation to possibly assist others in being enabled with respect to power and air.

Knowing we would be operating the brigade main and brigade jump TOC in the extreme heat of the NTC, preparations began at home station with oil and filter changes on all Trailer Mounted Support Systems Medium and Large systems (TMSS-M / TMSS-L or DRASH equipment) coming to NTC prior to deployment. With respect to draw grid equipment, a detailed PMCS on the 60KW power plant was conducted with a focus on the oil and filters of the generators prior to drawing. Once the brigade main command post was established at TAA Warhorse, the 60KW power plant; all TMSS-M, the TMSS-L, and M100/ M60 PDISE Power Distribution Boxes (PDU) were placed under camouflage netting to keep them out of direct sun light. In order to maintain back up power generation, all TMSS ECUs were linked into the central power grid, which also minimized fuel requirements for all but the 60k generators. In order to allow the generators time to cool down, instead of the normal 12-hour use of one generator, we shifted to a six-hour shift and changed generators at the hottest point of the day. As observed by the Bronco Team OC/Ts, this setup allowed the brigade to run the 60KW power plant at 90-95 percent capacity which enabled the optimal performance of the power generation equipment.

After arriving at the RUBA, the brigade main was set up to facilitate mission command and planning. This consisted of the TMSS-L system and one DRASH 3XB shelter. All other TMSS-M systems and work space items (tables, chairs, projectors and screens) were set up and a PCC/PCI was conducted to ensure that no items were left in the RUBA. All task force command posts were set up within the area of the brigade main for the same reasons.

As for the establishment of the brigade main in TAA Warhorse, the ABCT S3 OPS SGM led a quartering party consisting of, the A Co STB 1SG, B Co STB 1SG, and the STB BN S3. The location of the TOC was determined by the following criteria: 1) location had to be within the boundaries of TAA Warhorse that was dictated by the 52d ID; 2) ability for the brigade main to “talk” using FM, upper/lower TI; 3) defensibility of the terrain including being 4 kilometers away from the closest town and not being located on top of a hill mass but not in low ground which would affect FM communications.

Despite having “good” communications with the RUBA with HMMWV antennas, FM communications were a challenge the once established at the location. It was not until BCT retransmission nodes were established that the brigade main had reliable FM communication. This problem was owned by the ABCT XO, S-6 and the OPS SGM and was resolved in due course. Other issues included additional enablers such as JTAC, CA, UAS Ground Control Station (GCS) being located at the brigade main which caused additional power draw that exceeded the planned Brigade Main central power grid. These enablers had not previously operated at the brigade main and were not part of the initial set-up and power grid plan but were deemed essential to integrated Command Information Center (CIC) operations. To adapt to this unforeseen problem, another 30k generator was brought to the brigade main and the power situation stabilized. In order to prioritize in the management of power in the grid, the brigade main CIC was the primary leg off the 60KW power generation set. This assisted in preventing power issues in other parts of the grid to impact operations in the brigade main CIC. As for air conditioning, 2 TMSS-M ECUs stopped blowing cold air but were repaired by the Tobyhanna Logistics Assistance Representative (LAR).

In hindsight, we deployed to the NTC with a solid command post and power grid SOP that required only minor adjustments due to the heat and additional power draw from attachments and enablers that were collocated with the brigade main. Units coming to the NTC at this time of year must be proactive and service all generators, TMSS-M/L ECUs and shelter ECUs (JNN, STT, ACT-E, TGS, GCS, TOPO, etc) to ensure both equipment and Soldiers have a climate controlled mission command node to operate top effectiveness.

Story #33

The Value of a Logistical Common Operating Picture

Major Jerome Russell Jr. was the Support Operations Officer for the 1st Armored Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit conducted offensive and defensive operations, at the company, task force and brigade level against both regular and irregular forces in a complex operating environment that stressed sustainment operations continuously.

From the moment I assumed the position of brigade support operations officer (SPO) about two months prior to the start of our rotation at the National Training Center, I knew we would be challenged to execute sustainment operations over the width and depth of the operational environment. But looking back, I realize that even then I didn't have a full appreciation for the scope of logistical support required during our Decisive Action training exercise.

During the brigade's home station train-up we were limited by the size of the available training area at Fort Carson. The result; we were unable to fully exercise our ability to provide support to the entire brigade simultaneously. The BSB Commander recognized this limitation, and clearly voiced his intent prior to moving into the RSOI at NTC that we needed to develop a sustainment-specific synchronization matrix that was aligned with the brigade's operational sync matrix to help mitigate that factor. It was a great idea, allowing me to get organized and, in hindsight, effectively track and execute resupply operations at all levels. As shown in figure xx, my section developed the logistical synchronization matrix to capture potential times when we would plan to conduct operations at Logistical Resupply Points from CSSB to the BSB, from BSB to FSC, and from FSC to maneuver unit. This became the lead product in the build of our logistical Common Operating Picture (LCOP) to track classes of supply and make adjustments to the plan based on mission changes or briefed updates.

This product became the driver that kept our sustainment and logistics efforts in synch with the operational plan, and enabled us to stay apace with the ever-changing conditions on the ground. I used it to work the logistics staff through the operations process, ensuring we continuously updated our staff estimates for each phase of the operation. It wasn't until I was preparing to conduct our first brigade CSS Rehearsal that I realized how much of a living document the synchronization matrix had become. It provided me the ability to effectively plan and coordinate resupply operations at all levels.

During our initial mission analysis, we identified shortfalls with Class I, Class III(B) (P), and Class IX distribution. For example, we identified that FSCs would not be able to sustain resupply of water due to their MTOE limitations. To

counter this, we cross-trained FSC personnel to use a M105 HIPPO during our home station train-up and then task organized an M105 to each FSC during RSOL. This provided each FSC with a bulk water capability and decreased the number of vehicles on tactical convoy operations.

A second example was highlighted during the brigade CAR, when the brigade commander, recognizing the class III limitations, directed that FSCs would conduct refuel and rearm operations directly to maneuver units while they were in their attack positions, and prior to LD. Using our planning tables as a baseline, we re-evaluated the plan using our time/distance analysis and the logistics estimate worksheet to calculate projected fuel consumption rates; we then clarified these rates by incorporating variables of idle time, secondary route time, and cross country time. We also anticipated maneuver units would remain in their attack positions for approximately 4-6 hours before LD. Recognizing that the plan required the FSCs to retain the ability to refuel forward while on the move, we then directed the BSB's M978 tankers to conduct tactical refuel operations at the individual units' attack positions. This enabled our FSCs to retain maximum capacity and gave us confidence across the brigade that we had a clear sight picture of fuel status at the start of combat operations. Again, the value of the LCOP was evident in my ability to understand where transition points for the various phases of the operation would exist, allowing me to recommend potential decision points for resupply operations and take a proactive vice reactive approach to sustainment operations.

This isn't to say that we didn't experience friction. Training Days one through six (STX and LFX lanes) were the most difficult to plan and synchronize given the myriad requirements and varying mission sets occurring. This period often required the BSB to cross-level sustainment and direct FSCs to support other battalions in order to stay on the tight timeline requirements. We developed a graphic product to capture times and locations of maneuver units through their STX and LFX lanes and who would support them during those times. This was an extremely complex undertaking and to be successful I knew it had to be understood down to the lowest level. Timings between the CSSB, the BSB, and the supported FSC had to be synchronized and required constant communication between all three elements.

I quickly realized that the reporting process was our primary friction point due to the size of the operational environment. Our LOGSTAT reports were coming back incomplete; valuable information had to be assumed instead of relying on factual data. To reduce this friction, we used our graphic tool to ensure that every unit had a full three days of supply prior to any movements. This gave me time to determine future requirements based on consumption factors. To further gain clarity across the brigade, I defined what green, amber, red, and black reporting on LOGSTATs meant for supplies on hand. These statuses were then discussed in detail during our logistics sync meetings, which we executed daily.

Again, unbeknownst to us during the original execution, our efforts during STX/LFX training at the brigade sustainment level provided critical rehearsal that would be built upon during our execution of force on force. Our success during that first week of training demonstrated to our sustainment Soldiers that our Area Support Concept could work. This resulted in increased confidence as we learned that the BSB was able to stretch our capabilities further than expected despite the personnel shortages leading into our deployment to NTC. The usefulness of identifying and creating key products that would allow us to refine our tactics, techniques and procedures on the go was paramount. By defining the LCOP and then rehearsing our plan through both formal rehearsals like the brigade CSS, and in execution of sustainment operations during non-force on force training, we were able to experience success within the complexity and enable successful mission execution.

Story #34

Balancing CAM and WAS: An STB Story

Lieutenant Colonel Joseph Mouer was the Commander for the Special Troops Battalion (TF Lonestar), supporting 2d Brigade, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC in June 2013. His unit was given the mission of managing the security area for the brigade as they conducted offensive operations eastward to defeat the Donovanian invasion. His primary task was managing wide area security, with missions including interdicting the criminal element and neutralizing the BFB.

As the brigade sized up the operational environment that we would be facing at the NTC, the decision was made to assign TF Lonestar the mission to conduct wide area security operations in order to interdict the Bilosubar Freedom Brigade (BFB) and other malign actors within the brigade rear area of Erdabil Province. I understood “interdict” from its doctrinal definition, and thus understood that my commander expected me to prevent, disrupt, or delay the enemy’s use of an area or route but I also knew that his expectations were for me to execute this mission with as little impact on overall brigade combat power as possible, and to leverage as much of the non-lethal effort as I could in order to protect that combat power.

Following the tactical road march and quartering party operations, the initial location for the BSTB, including HHC and task organized enablers, was in a base cluster, TAA Lonestar, separated by three kilometers from the brigade TAA. This presented challenges from a command and control perspective, as large portions of my battalion—the BCT MAIN, BCT HHC, MI Company and Signals Company CPs were all located within that TAA. Additionally, TAA Lonestar was located approximately three kilometers northwest of Nur and five kilometers northwest of Dezeshah, the two towns that constituted the key urban terrain within the rear area and thus the focus of my initial engagements. While this separation allowed for dispersion of units and increased flexibility to accomplish wide area security missions, the distances tested BSTB’s communications systems and security operations plans from the get-go. I had fairly rapid feedback as to the ability of my battalion MAIN to C2 our subordinate units. To increase mission command capacity, we were allocated a CPN and I made the decision to train the staff and headquarters on executing independently from the brigade; I wanted to test my digital infrastructure by severing dependency from the BDE MAIN.

I had a good understanding of the brigade Commander’s intent: to establish conditions for the Atropian government to remain the legitimate and recognized authority in Atropia. This helped me define my wide area security mission, as I looked to prioritize limited assets against multiple lines of operation, including security, partnership, humanitarian assistance, neutralizing insurgents, interdicting

criminal elements, supporting ASF, and influencing local populace and leaders to accept the Atropian Government as the best alternative for security and stability. We definitely saw the most critical task as security, recognizing that if we established security, all the other key tasks would follow. Given our limited combat power, we knew we had to effectively integrate all enablers including Department of State and host nation security forces.

To facilitate this focus, we created multifunctional teams consisting of a Civil Affairs, MISO, HCTs and MPs. We put these teams together to tackle the issue of establishing security in the the Dezesah and Nur population centers, as I knew I would need to transition these towns back to the Atropians if I wanted to retain flexibility in my approach to Ujen and Razish. While the troops to tasks disparities of trying to conduct security for the TAA while committing our multifunction teams in Dezesah and Nur proved difficult, I was able to mitigate this friction through the allocation of a Bradley Platoon from 1-67 AR to serve as my reserve.

We quickly learned that our teams lacked in-depth understanding on the capabilities and limitations of the various specialty sections. As example, on early patrols, our MPs conducted key leader engagements (KLEs) while HCTs served as security. But as we progressed, the multifunctional team concept gained momentum in effectiveness as the individual specialty teams became familiar with each other. This was enabled by rehearsals, crosstalk and the creation of on-the-fly SOPs. Additionally, we discovered that our sharing of intelligence both internal to the multifunctional team, and external to the rest of the battalion and across the brigade, was inadequate. While we were executing patrol debriefs and entering them into our TIGR database, not all units had access to TIGR. To complicate this, each separate enabler had a counterpart within the brigade staff. Instead of creating a fused product and pushing that product through the battalion staff, we encountered enablers who went directly to their brigade counterparts and left us behind the curve.

Promises made on the ground— such as providing humanitarian assistance in the form of water – sometimes took twelve hours to be cognitively understood by myself and the staff, and more than once presented a sight picture of disorganization to civilian leadership. The cross-leveling of KLE information when conducted by multiple individuals also proved to be challenging. The criticality of staff-to-staff synchronization was a need we learned the hard way in order to minimize “KLE fratricide.” Similarly, the brigade and battalion efforts at nonlethal/lethal/C-IED working groups and planning for the tactical mission were not synchronized – especially for the brigade defense. It took hindsight to recognize that these planning sessions must be collaborative and look holistically across both CAM and WAS to truly enable shared understanding of the challenges that the brigade faced.

Shifting from Dezashah and Nur, which had predominately pro-US populations to Razish and Ujen, which were decidedly pro-Donovian proved the greatest challenge that we would face. The security issues within these two towns overwhelmed the ability of the BSTBs manning, and caused brigade to view them as larger mission sets requiring greater application of combat power. For my battalion, this meant coordination with 2-8 IN to ensure that we were able to establish a security-conditions based transition of those towns into our control. This transition had to ensure coordination not just on security, but also good staff-to-staff crosstalk on fire control measures, combat support and combat service support. Triggers were established, but had to be wedded with the reality that we wouldn't be seeing perfect conditions in either town—the Donovanian regular forces were still a viable threat within the AO and we needed to free up 2-8 IN's combat power for continuing offensive missions. As soon as we could, we leveraged our MPs as a security force, and shifted to conducting non-lethal operations that could enable and leverage local forces, again meeting the brigade Commanders intent. In Razish, we established a strong point at the government center with approval from the mayor and provincial governor, and worked our way out towards the periphery of the town, building capacity as we progressed. In Ujen, where the mayor had been assassinated, we required a larger security element to remain behind in order to ensure the pace. That said, the teams went to work as they did in Ujen, leveraging diplomatic, economic and informational contacts to create a narrative and enable the Atropian government to retake control of the city.

While there were many lessons learned from our operations throughout the rotation, my biggest takeaway was my initial lack of understanding on the complexity of our mission and the demands that would be placed upon us by the execution of simultaneous CAM and WAS. In hindsight, I characterize the battalion's mission as a cross brigade functional enabling mission with aspects of land ownership. The BSTB staff must be prepared to operate a fully functional command post while simultaneously planning to meet the Commander's intent. With the BSTB's organic enablers task organized across the brigade, the battalion must learn to do with minimal manning, and ensure continuous cross coordination of operations and support with both the task forces and the brigade headquarters. The need to effectively execute mission command, intelligence and movement and maneuver, are not particular to CAM. In fact, they required an increased level of synchronization during wide area security in order to present a unified narrative and face to the population. Our success in this challenging environment reminded me that BSTBs are operationally designed to be flexible and dynamic. And BSTB commanders and staffs can maximize this inherent capability to ensure the proper balance of attention between CAM and WAS, ensuring operational success.

Story #35

Discipline at the Heart of Combat Operations

Command Sergeant Major Edison Rebuck was CSM of the 1st Armored Brigade Combat Team, 4th Infantry Division's Decisive Action Training Environment rotation at the NTC. His unit was comprised of two combined arms battalions, an armored reconnaissance cavalry squadron, a field artillery battalion, brigade support battalion, special troops battalion, and a multifunctional aviation task force. Prior to executing offensive and defensive operations to force the Donovanian combat troops out of Atropia, his brigade occupied a Tactical Assembly Area along ASR Solerno to the east of TV Hill.

The Raider Brigade had taken on a long and comprehensive training regimen prior to our arrival at the National Training Center. Throughout our home station training, we identified discipline as one of the many bonds that would be critical towards enabling the brigade to execute its mission. That said, I often observed frustration in the more senior leadership at the platoon, company and battalion levels with the lack of field-craft knowledge amongst the junior Soldiers. I also saw that there were leaders who readily pointed their finger at what they viewed as Soldier inexperience and unfamiliarity when in reality we had identified a training shortfall. I knew that if we were going to succeed at NTC, it would be critical for us to meld the tactical experiences shared among our senior leaders with the experiences of operating out of protected forward operating bases known by the young leaders in our ranks over the past ten years – we had to get off the FOBs, literally.

It started with a definition of discipline at the highest level within the brigade. The need for persistent vigilance, managing priorities of work that integrated the simple tasks of guard duty rotations, interior and exterior security, refueling operations, Class I, 5988E flow and uniform standard enforcement—these weren't treated as generational differences, but rather as training challenges that demanded incorporation into our training calendars. Discipline and its enforcement were at the heart of our training plan and would ultimately prove essential to our successful transition away from the FOB/COP mentality and back to the basics of Soldiers operating in Tactical Assembly Areas. This was a task that was universally embraced at all echelons and by all leaders.

In my discussions with the many Soldiers and leaders of the brigade they readily admitted that over the past 10 years, the experience of junior leaders had been limited to conducting operations in hostile areas, returning to a secure and safe outpost, conducting refit, and then repeating the cycle. From the Battalion leadership's perspective they agreed that not much emphasis was placed on executing continuous operations in open terrain. Basic skills such as noise and light

discipline, sound discipline, personal hygiene and small unit fieldcraft were areas that received little to no emphasis throughout operations in Iraq or Afghanistan. The NTC provided our units with the opportunity to reverse these trends and develop engaged leaders who enforced basic discipline standards on the conduct of operations in the TAA. Starting with senior leaders teaching the standards to junior leaders and empowering them to develop and integrate TAA procedures into their lexicon, we actively refined our standing operating procedures from the top-down while incorporating feedback from the bottom-up.

Even before our arrival at NTC, leaders knew that uniform and force protection standards were non-negotiable. Company and Battalion leadership ruthlessly enforced the Brigade's uniform and security policies. Whether inside the TAA behind the line of departure or operating at a forward reconnaissance position overlooking the FLOT, a deliberate effort was made to reach into all areas and empower leaders to enforce standards. As with any training, there were some inevitable on-the-spot-corrections needed to keep the mindset tactical, but corrections were always viewed as training and leaders were encouraged to explain the reasoning behind the strict uniform enforcement policy as a deliberate shift towards continuous operations in hostile territory.

One advantage of the austerity of NTC is the ability for Soldiers to quickly "get it." Noise and light discipline are more easily taught when a sentry is able to identify an open command post tent flap over five kilometers away. And the need for proper field sanitation is easily learned when Soldiers are forced to form a line and pick up garbage that has been blown hundreds of meters away. At first, senior leaders carried the brunt of enforcement, but within days I saw a change in mindset as I visited maintenance areas and RETRANs sites and discovered Soldiers in uniform and conducting security. Tactical feeding was introduced throughout the formation. When I visited the BSA I waited in a line maintaining a five meter interval, facing out and pulling security. Looking back at the training rotation, it took engaged leadership at all levels to bring change. But when leadership worked as it did in our brigade, the effect was tremendous, as I witnessed Soldiers embracing their environment and forgetting that they were training. The effectiveness of our discipline campaign was also evident in the increased performance of our sustainment and maintenance sections, as we saw an increase in parts ordered as we moved through the rotation. Discipline enabled mission command and execution—our relatively low number of safety incidents allowed us to spend time maximizing operations at the lower levels, as evidenced by the total number of Raven flight hours accomplished by junior leaders as part of maintaining security against an uncertain irregular threat.

Learning, training and perpetuating discipline throughout the organization was well worth the cost of deliberately developing and sustaining it as a line of effort

undertaken by all. The reward of seeing Soldiers embrace the discipline and, more importantly, grasp the reasoning behind the discipline far outweighed any cost in planning or resourcing. At the heart of the matter was our command decision to frame the challenge as a training opportunity and not as a shortfall in experience. This framing became one of the critical keys to the success of the Raider Brigade at NTC and is worth replicating. As a Command Sergeant Major, I purposefully made corrections as teaching points and targeted First Sergeants and Platoon Sergeants—energizing them became one of my most useful means of enforcement. As is usually the case, by empowering and sustaining leaders, a challenging area developed into a training and combat multiplier.

Appendix A

Brigade Tactical Group Application by Warfighting Function

By Colonel Christopher Doneski

The National Training Center (NTC) has conducted five Decisive Action (DA) rotations dating back to March 2013, and since then 11th Armored Cavalry Regiment (ACR) has served as the Division Tactical Group (DTG) headquarters. Two subordinate squadrons have alternated replication of the Brigade Tactical Group (BTG) headquarters. The 11th ACR has utilized numerous techniques in the preparation and execution of the role of the Contemporary Operating Force (COEFOR). This force evolved from the legendary Opposing Force (OPFOR) of the 1980s and 1990s but now includes hybrid threats that add complexity to the battlefield.

The basis for COEFOR doctrine is outlined in TC 7-100-2, Opposing Force Tactics, dated 1 September 2011. The application of these principals by staffs and units that understand and utilize US doctrine proved to be an effective force against a Heavy Brigade Combat Team (HBCT). Most notably, the Squadron implemented the guidance in the introduction of TC 7-100-2, “baseline tactical doctrine of a flexible, thinking, adaptive OPFOR that applies its doctrine with considerable flexibility, adaptability, and initiative.” Understanding the history of many of the battles at the NTC provided the COEFOR a great resource with which to analyze the tactical situation and apply combat power at the decisive points of each phase of the operation.

These lessons were applied within the warfighting functions to maximize advantages of direct fire ranges and knowledge of the terrain as it related to each of the functions. These principals guided analysis and decisions during or planning for the decisive action fights that were anticipated.

Planning and Execution

TC 7-100-2, paragraphs 1-66, 1-68 and 1-68, outlined below governs COEFOR actions and stands as the framework for development of plans utilized at the National Training Center.

1-66. The systems warfare approach to combat is a means to assist the commander in the decision making process and the planning and execution of his mission. The OPFOR believes that a qualitatively and/or quantitatively weaker force can defeat a superior foe, if the lesser force can dictate the terms of combat. It believes that the systems warfare approach allows it to move away from the traditional attrition-based approach to combat. It is no longer necessary to match an opponent system-for-system or capability-for **Strategic and Operational Framework Publication Date TC 7-100.2 1-15** capability. Commanders and

staffs will locate the critical component(s) of the enemy combat system, patterns of interaction, and opportunities to exploit this connectivity. The OPFOR will seek to disaggregate enemy combat power by destroying or neutralizing single points of failure in the enemy's combat system. Systems warfare has applications in both offensive and defensive contexts.

I-67. The essential step after the identification of the critical subsystems and components of a combat system is the destruction or degradation of the synergy of the system. This may take one of three forms—

- Total destruction of a subsystem or component
- Degradation of the synergy of components.
- The simple denial of access to critical links between systems or components.

I-68. The destruction of a critical component or link can achieve one or more of the following:

- Create windows of opportunity that can be exploited.
- Set the conditions for offensive action.
- Support a concept of operation that calls for exhausting the enemy on the battlefield.

Once the OPFOR has identified and isolated a critical element of the enemy combat system that is vulnerable to attack, it will select the appropriate method of attack.

Intelligence Warfighting Function

Within the intelligence warfighting function it is critical that the COEFOR possess a significant understanding of the U.S. adversary. Significant knowledge of the ABCT structure as well as detailed research using open source methods to analyze the adversary prove invaluable to laying the framework for IPB. Individual and collective intelligence preparation of the battlefield (IPB) continued over multiple months. This included historical reviews of the battles in the central corridor covered in the US Army Command and General Staff College Press publication *66 Stories of Battle Command* put together by the School for Command Preparation at Ft. Leavenworth. Analysis of the Brigade by warfighting function considering their capabilities, limitations, requirements and vulnerabilities was absolutely essential to understanding the BCT. Finally, all of these considerations of friendly and enemy were laid over the terrain to determine the enemy's most likely and dangerous courses of action. These mission analysis products played a significant role in arrayal of forces and courses of action to achieve the tactical advantage at a specific time and place driving the other warfighting functions.

Fires Warfighting Function

The range and amount of fire support assets the BTG and DTG have are the one clear advantage the COEFOR has over a U.S. ABCT. The ability to mass and maintain the initiative was imperative to enable the success of the reconnaissance and main body forces due to the significant technological advantage of sensors and radars.

The establishment of a fire support element (FSE) at the BTG level as well as replication of the S19, BM21 and BM30 artillery systems was critical to the success of the BTG. This replication forced the BTG to plan for the sequencing of fires and the deliberate repositioning to evade likely counter-fire and likely ISR in response to our missions. BTG fires capabilities include high explosive (HE), dual purpose (DPICM), family of scatterable mines (FASCAM) and non-persistent chemical agents (NP-chem). The scheme of fires attempted to maximize these capabilities and establish redundant sensors for these shooters from elements organic to the BTG, the DTG and the guerilla forces (BFB). These sensors were arrayed and tasked to identify targets on the BTG High Payoff Target List (HPTL) and the ability to maintain these eyes forward greatly enhanced the effectiveness of these fires and the ability to engage targets that disrupted and degrade RTU operations.

Movement and Maneuver Warfighting Function

Adaptability

It will seek to avoid types of operations and environments for which U.S. forces are optimized. During the course of conflict, it will make further adaptations, based on experience and opportunity. In general, the OPFOR will be less predictable than OPFORs in the past. It will be difficult to template as it adapts and attempts to create opportunity. Its patterns of operation will change as it achieves success or experiences failure. The OPFOR's doctrine might not change, but its way of operating will.

TC 7-100-2 Opposing Force Tactics, dtd. 1 Sep 2011

The BTG rapidly gain proficiency maximizing our systems to conduct both movement and maneuver. The robust intelligence network and understanding of the terrain afforded the BTG to maintain rapid movement throughout the depth of the area of operations and only transition to maneuver in locations and situations that favored our systems.

The BTG and DTG utilized lift aviation to insert Scout teams deep into the AO. Our aviation assets performed additional critical missions to include reconnaissance and attack aviation missions. These were especially lethal during the counter-reconnaissance fight during the deliberate defense of the passes.

The BTG and DTG ground scouts are task organized with additional elements to provide a robust force capable of fighting for intelligence, information and key terrain. The DTG scouts are primarily a BRDM based force and normally terrain oriented. We have task organized with OSV and MTLB engineer variants to provide additional capabilities. However, this element is mostly a reconnaissance element that uses speed and stealth as opposed to fire power.

The BTG scouts are a more robust organization that is composed of a mix of OSV, BRDM, dismount AT, mounted P148D AT systems and SA-18 capabilities. The BTG focuses on intermediate objectives to set conditions for the BTG main body's decisive operation. The BTG scouts are both terrain and enemy focused when they can identify opportunities based on the ISM and HPTL. The success of the BTG scouts enables more rapid movement and delayed transition from movement to maneuver for the BTG first echelon Mechanized Infantry Battalions (MIBN).

Initiative

Doctrine guides OPFOR actions in support of the State's objectives; OPFOR leaders apply it with judgment and initiative.

The MIBN is the basic formation and heart and soul of the BTG. The MIBNs are normally task organized with six MBTs, 14 OSVs, SA-18s, Sappers and occasional mounted AT sections. Although the task organization is mission dependant, this basic building block is the initial structure with which we base our scheme of maneuver. The ability to fight down to Company strength (2 MBT, 4 OSV) is the building block for the MIBN. Each system is capable of defeating enemy Armored threats with either 125mm cannon for the MBT or 30mm cannon for the OSV. Each system also has the capability of 5 x AT5 missiles that can defeat any Armor within 2,000 meters.

The BTG focused its training at the crew and platoon levels to master the basic "blocking and tackling" of utilizing the terrain and killing at distance. Our efforts to maximize the seven forms of contact to our advantage proved decisive. Each of our subordinate elements developed proficiency in gaining visual contact through our scouts and advanced guard formations. Next, our platoons concentrated on developing those visual contacts with indirect fires and obstacles, both situational and deliberate obstacles. Finally, we massed effects of air, electronic warfare and NBC if possible to place the RTU on the horns of a dilemma to attempt to break contact before lethal direct fires completed the destruction.

Protection Warfighting Function

The BTG's greatest threat is enemy aviation capabilities. The BTG has a significant anti-air capability with SA18s, SA6 and 2S6 air defense systems. Man

Portable Air Defense (MANPAD) systems perform multiple functions not only primary protection against US aviation but as scouts forward and as rear-area security in depth. Additionally, the ability to position SA18s with ground based mechanized infantry and armor vehicles and mass fires in conjunction with the 30mm from OSVs has proven extremely effective against stationary threats and UAS platforms.

Mission Command Warfighting Function

The BTG utilizes echeloned command posts that comprise both voice and digital communications. The BTG predominantly operates using voice to command and control the tactical fight. This includes both FM and GSM systems across the depth of the area of operations. The BTG has limited secure communications over satellite through digital systems. Finally, nothing replaces the face to face communications through courier or meetings especially during the preparation and between engagements.

The BTGs main command post serves as the hub for the mission command controlling and synchronizing the warfighting functions and connecting to DTG with support for fires. The Tactical Operations Center (TOC) coordinates the air defense coverage, allocation of attack aviation and deconfliction of fires through the Fire support element (FSE). Following the line of departure of the main body, the Squadron Tactical Command (TAC) was comprised of the BTG commander, operations officer and CSM. These elements are often collocated, but also operate dispersed remaining generally online with the various avenues of approach. This provides redundant communications and first hand observation by senior leaders to answer CCIR for the BTG.

The Combat Trains Command Post (CTCP) also plays a vital role in the sustainment of the MIBNs during offensive operations. The ability to predict consumption, specifically of Class V, and rapidly resupply is essential in the ability to maintain momentum during these types of operations.

Logistical Warfighting Function

Sustaining the BTG was a significant challenge both during the offensive and defensive operations. The S4 and HHT commanders working with the XO needed to develop projected consumption rates with very little historical data. During offensive operations, as stated, the consumption of Class V for our lead MIBNs was our greatest concern. Couple those challenges with the resupply of the P148D AT systems, a major killer on the battlefield had to be flawless in order to maintain momentum and the initiative.

During the building of the defense, logistical resupply is potentially the greatest COEFOR weakness. Projecting the consumption of class IV barrier

material, maintenance for the ACE and D7 dig assets and their Class III bulk and package requirements have not been truly tested in years. Although class III is a huge concern, understanding consumption rates and linking those to defensive planning is critical to bring combat trains on line to support resupply. Additionally, the supporting engineer company tied in the recovery and maintenance assets to minimize the downtime for the dig assets and ensured our counter-mobility and survivability positions were completed within 48 hours of the start of work. Timely defensive planning and preparations were critical, particularly if preparations are completed before the RTU reconnaissance crosses LD.

Conclusion

Despite the lack of experience at all levels, the BTG and COEFOR forces were successful in operations by executing the basics. The ability to get platoon and MIBNs multiple repetitions on offensive and defensive operations ensured the basic maneuver elements for the BTG were confident and lethal on the decisive action battlefield. Following articles will discuss in more detail some key areas that enable the success during the rotation. These areas include train-up of platoons in fire and maneuver, Troop/MIBN lessons learned, integrated air defense, staff planning and rehearsals at echelon. The products may provide a way forward to prepare for this most complex mission set.

Appendix B

Bilasuvar Freedom Brigade (BFB) Threat Considerations

By Colonel Christopher Doneski

One of the most significant changes to the order of battle the Rotational Training Units now face at NTC during DA rotations, is the Bilasuvar Freedom Brigade (BFB). This guerilla force presents new and unique challenges to the threat. The BFB's affiliation with the Donovanian forces provides the BFB access to a great complement of weapon systems while acting at times as a surrogate force for the Donovanian land forces.

The BFB operates and lives throughout Atropia with greater density and influence with proximity to the Donovanian border. Their influence and freedom of action diminishes further east, past the town of Razish. The guerillas are extremely adaptive and will pursue opportunities to further their cause by attacking, delaying, disrupting or harassing US forces in order to discredit US information operations and support Donovanian strategic through tactical objectives.

Mission Command

The militant arm of the BFB is organized in company strength usually numbering between 80-120 fighters. The hierarchical structure directs the operations providing specific targets and instructions as well as a general mission and intent with which to operate. The individual, squad sized cells operate within these parameters to take advantage of opportunities as they present themselves.

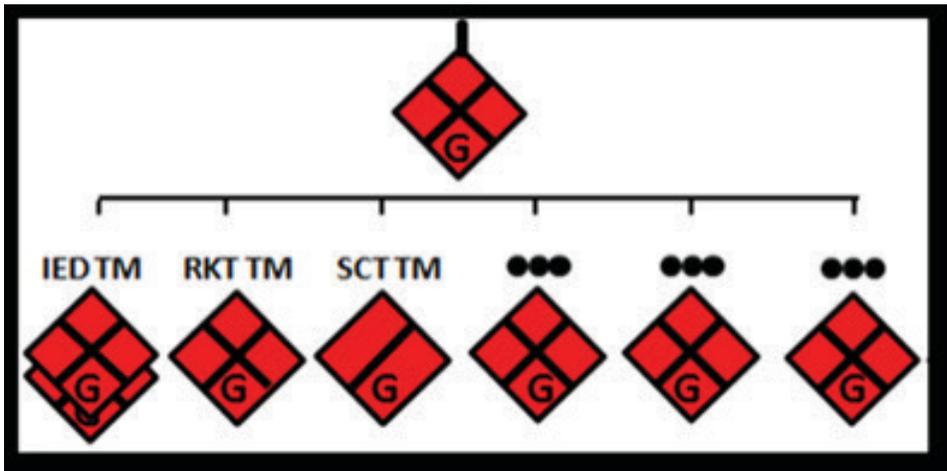


Figure B-1. BFB Organization Chart (COEFOR Redbook).

The BFB utilizes GSM cell phones to communicate throughout the depth of the area of operations between BFB leadership and major subordinate cells. BFB also utilizes GSM for their reach back to Donovanian forces and the BTG leadership.

The BFB practices limited operations security when speaking on these systems but will speak in the clear when there is an operational need. The subordinate cells utilize mainly courier, face to face and push to talk communications to coordinate missions and pass information and directives. Following the Donovanian incursion into Atropia, the BFB's communications capability was greatly improved with FM push to talk and secure communications to the key command nodes.

Intelligence

The BFB serves as the conduit for Donovanian forces into the HUMINT sources throughout the AO and often serves as a strategic recon for Donovanian forces. The BFB's ability to blend into the population and traverse the battlespace without a significant signature provides Donovanian forces a significant capability of having eyes and reconnaissance forward of their forces and beyond the reach of Division Tactical Group (DTG) recon. These missions are accomplished primarily by reconnaissance patrols in civilian vehicles. The risks for these patrols are mitigated by operating in clean vehicles. This reduces the effectiveness and immediacy of reports and limits ability for direct action. However, these patrols, if engaged present a significant weapon for information operations against the RTU in regards to civilian casualties (CIVCAS). The BFB is not above orchestrating an opportunity to create a CIVCAS event.

Donovian intelligence and operations share a great deal of their understanding of the RTU order of battle and objectives with the BFB forces. The DTG and BTG commanders communicate directly with BFB leadership providing information and tasking the BFB to enable their operations. This is normally provided in the form of a high payoff target list (HPTL). The HPTL details the types of information the Donovanian forces desire about the disposition of key systems and capabilities that answer the priority intelligence requirements (PIR) for the DTG/BTG commanders. The BFB played a significant role during Rotation 12-05 as a strategic reconnaissance force providing a clear understanding of RTU reconnaissance, main body and command and control platforms.

Fires

One of the BFB's most significant roles was acting as forward observers. The ability to identify stationary targets and provide accurate locations enabled the BTG's fires plan. During offensive operations, the BFB was extremely successful at identifying movement corridors and staging areas to target US force for the Donovanian rocket artillery. Based on terrain features and familiarity with the AO, BFB spotters provided timely and accurate spot reports as a basis for indirect fire missions.

During the BTG defense of the Brown/Debnam passes, the BFB was the main observation for BTG fires east of the town of Ujen (Barstow Rd). The BFB located task force resupply points, field artillery positions and Brigade and Battalion Command Posts. These generally stationary positions were then processed for fire

//Unclassified//

HPTL

HPTL	Indicator	Desired effect	Best method/ weapons system
OH-58/UH-60	OH-58/UH-60 spotted	Aircraft sustains significant damage and is forced to land or return to base. SWT normally operates in pairs. If one aircraft is damaged/destroyed, its wingman aircraft must disengage.	Aircraft within 500 meters. Effects on aircraft will be great if the aircraft is within 300 meters. Utilize synchronization of RPGs/HMGs.
LLVI Teams	Large puck-style antenna (one foot in diameter x six inches in height) VIC of C2 node/ OP. LLVI teams will occupy forward elevated positions with scouts//recon elements. Effective LLVI positions will require line of sight. Additionally, positions may be established near C2 nodes in the enemy support zone. Effective implementation of LLVI teams requires a minimum of two teams with line of sight and overlapping coverage.	Destruction of puck antenna and/or LLVI team required to displace.	82 mm mortar, SAF/ RPG
Re-Supply (Fuelers)	Fuel tankers	Mobility kill/resupply, degradation	82 mm mortar, 82 mm recoilless rifle, RPG, IED
Ground control System (Shadow)	HMMWVs/ building IVO Shadow launching equipment and landing strip.	Shadow grounding/ degraded. Shadow support.	82 mm mortar, SAF/ RPG

Figure B-2. BTG High Payoff Target List.

mission execution when conditions most favored the BTG. The ability to have ten digit grids with a margin of error of less the 100 meters significantly enhanced the effectiveness of all the Donovanian fires assets.

Direct Action

Where possible, the Donovanian forces direct or encourage direct action against targets to impair the RTU capabilities. Many of these targets operate within the rear area and based on the security, provide BFB opportunities to conduct direct action against these targets. They are not strictly tied to RTU movements. The BFB has the capability to emplace improvised explosive devices (IEDs) to delay movement along a certain route or as part of a complex ambush against a target of opportunity within their capabilities normally involving logistic resupply.

The BFB is extremely proficient when operating and fighting within populated areas. Their familiarity with the urban terrain and the additional complexity of population provides them greater freedom to maneuver and safety within the towns. Their ability to utilize IEDs to cause casualties against RTU and civilian population rapidly increases the complexity of an urban fight if pursued into the towns.

The BFB is extremely proficient with direct fire weapons. When supported by Donovanian forces, the BFB receives dismounted anti-tank capabilities with ranges of up to 1,500 meters.



Figure B-3. BFB reposition with PKM in Razish.

Organic to the BFB, the guerillas use RPGs, IED, crew serve machine guns up to 14.5mm and small arms. Their sniper capabilities are significant with proficiency up to 1200 meters.



Figure B-4. BFB fighter in Razish.

Conclusion

The potential for the BFB as a game changer remains significant. Although rarely exercised in the direct action role, the capabilities the BFB provided the BTG in terms of intelligence and observation of fires was immense. The time and space the BFB provided the Donovians with the defense of Razish provide pivotal in consuming Brigade focus and assets that allowed the defense of the passes to be complete prior to US ISR assets collecting on the composition and disposition of the defense. In the future, the ability to disrupt security and force the commitment of greater combat power in depth with continue to be a challenge for rotational units as the tackle the new threat at the NTC.

Appendix C

List of Commonly Used Acronyms

ABCS-Army Battle Command System(s)
ABCT-Armored Brigade Combat Team
ABF-Attack By Fire
ACM- Airspace Control Measure
ADA- Air Defense Artillery
ADAM/BAE-Air Defense and Airspace Management/Brigade Aviation Element
AF- Attacking Force (Mission designation for a Donovanian MIBN)
AGM- Attack Guidance Matrix
AHA- Alert Holding Area
ALO-Air Liaison Officer
AO-Area of Operation
AR- Armor
ARS- Armored Reconnaissance Squadron
ASR- Alternate Supply Route
AT- Anti-Tank
ATK PSN- Attack Position
AXP-Ambulance Exchange Point
BCT- Brigade Combat Team
BFB- Bilosubar Freedom Brigade (Donovian irregular forces designation)
BFT- Blue Force Tracker
BMNT- Before Morning Nautical Twilight
BSA- Brigade Support Area
BSB- Brigade Support Battalion
BSTB- Brigade Special Troops Battalion (Synonymous with STB)
BTG- Brigade Tactical Group (Donovian Mechanized Brigade)
C2-Command and Control
CA- Civil Affairs
CAB- Combined Arms Battalion
CAM-Combined Arms Maneuver

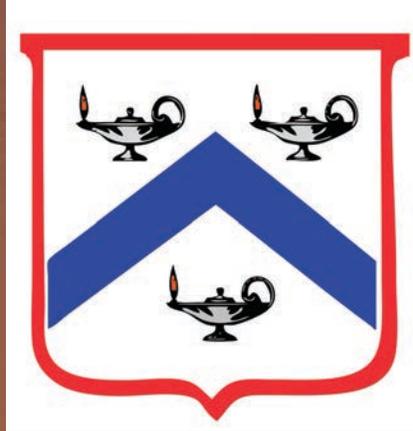
CAR- Combined Arms Rehearsal
CAS-Close Air Support
CASEVAC- Casualty Evacuation
CAU- Crew Access Unit (Intercom Equipment)
CAV- Cavalry
CBRNE- Chemical Biological Radiological Nuclear and Explosives
CCA-Close Combat Attack
CDR- Commander
CE-Critical Event
CMOC- Civil Military Operations Center
COA- Course of Action
COEFOR- Contemporary Operating Environment Force (11th Armored Cavalry Regiment)
COLT- Combat Observation Lasing Team
COP- Common Operating Picture
COP- Combat Outpost
CP- Check Point
CP- Command Post
CPN- Command Post Node
CPP- Command Post Platform
CUOPS- Current Operations
DATE- Decisive Action Training Environment
DCO- Deputy Commanding Officer
DOCTEMP- Doctrinal Template
DP- Decision Point
DS- Direct Support (Support Relationship)
DSM- Decision Support Matrix
DST- Decision Support Template
DTG- Division Tactical Group (Donovian Mechanized Division)
EA- Engagement Area
EAB- Echelons Above Brigade
ECP- Entry Control Point

EF- Exploitation Force (Mission designation for a Donovan MIBN)
EOD-Explosive Ordnance Disposal
EPLRS- Enhanced Position Location and Reporting System
EPLRS-ES- Enhanced Position Location and Reporting System-Enhanced Services
EVENTEMP- Event Template
FA-Field Artillery
FARP-Forward Arming and Refuel Point
FAS- Forward Aid Station
FASCAM- Field Artillery Scatterable Mines
FBCB2- Force XXI Battle Command Brigade and Below
FDO- Fire Direction Officer
FLOT- Forward Line of Own Troops
FM-Field Manual
FM- Frequency Modulation Radio
FOB- Forward Operating Base
FOC- Full Operating Capability
FPOL- Forward Passage of Lines
FRAGO- Fragmentary Order
FSC- Forward Support Company
FSCM- Fire Support Coordination Measure
FSCOORD- Fire Support Coordinator
FSO- Fire Support Officer
GRG- Gridded Reference Graphic
GS- General Support (Support Relationship)
HCT- Human Intelligence Collection Team
HHC-Headquarters and Headquarters Company
HF- High Frequency
HPT- High Payoff Target
HPTL- High Payoff Target List
HUMINT- Human Intelligence
IC- Information Collection

IDP- Internally Displaced Persons
IIA- Inform and Influence Activities
IN- Infantry
IOC- Initial Operating Capability
IPB- Intelligence Preparation of the Battlefield
IV- Inter-visibility
JCR- Joint Capabilities Release
JNN- Joint Network Node
JSTARS- Joint Surveillance Target Attack Radar System
JTAC- Joint Terminal Attack Control
KIA- Killed in Action
KLE- Key Leader Engagement
LAV- Light Assault Vehicle
LD- Line of Departure
LFX- Live Fire Exercise
LLVI- Low Level Voice Intercept
LNO- Liaison Officer
LOS- Line of Sight
MAIN- Main Command Post (Synonymous with TOC)
MAS- Main Aid Station
MASCAL- Mass Casualty
MATO- Material Officer
MCG- Mobile Command Group
MCOO- Modified Combined Obstacle Overlay
MDMP- Military Decision Making Process
ME- Main Effort
MFATF- Multi-Function Aviation Task Force
MI- Military Intelligence
MIBN- Mechanized Infantry Battalion (Donovian Mechanized Battalion)
MISO- Military Information Support Operations
MLRS- Multiple Launch Rocket System
MP- Military Police

MSR- Main Supply Route
MTC- Movement to Contact
NAI- Named Area of Interest
NCO- Non-Commissioned Officer
NIPR- Non-Secure Internet Protocol Routing
NTC- National Training Center
OE-254- Long Range FM Antenna
OIC- Officer in Charge
OP- Observation Point
OPCON- Operational Control (Command Relationship)
OPORD- Operations Order
OSRVT- One System Remote Vehicle Terminal
PAA- Position Area for Artillery
PAO- Public Affairs Officer
PACE- Primary, Alternate, Contingency, Emergency (communications redundancy)
PCC- Pre Combat Checks
PCI- Pre Combat Inspections
PIR- Priority Intelligence Requirement
PL- Phase Line
POI- Point of Injury
PSYOP- Psychological Operations
RECON- Reconnaissance Assets
RETRANS- Retransmission Site
ROLE I- Location of stabilization team on the battlefield
ROLE II- Location of surgical team on the battlefield
RP- Release Point
RPG- Rocket Propelled Grenade
RSOI- Reception, Staging, Integration and Onward Movement
RTU- Rotational Training Unit
RUBA- Rotation Unit Bivouac Area
SOP- Standing Operating Procedure

SEAD- Suppression of Enemy Air Defenses
SHORAD- Short Range Air Defense
SIGINT- Signals Intelligence
SIPR- Secure Internet Protocol Routing
SITEMP- Situational Template
STB- Special Troops Battalion (synonymous with BSTB)
STC- Slew to Cue
SP- Start Point
SPO- Support Operations Officer
STX- Situational Training Exercise
SVOIP- Secure Voice over Internet Protocol
TAA- Tactical Assembly Area
TAC- Tactical Command Post
TACON- Tactical Control (Command Relationship)
TACP- Tactical Air Control Party
TACSAT- Tactical Satellite
TAI- Target Area of Interest
TF- Task Force
TI- Tactical Internet
TIGR- Tactical Ground Reporting System
TLP- Troop Leading Procedures
TOC- Tactical Operations Center
TSS- Target Selection Standards
UAS- Unmanned Aerial System
UAV- Unmanned Aerial Vehicle
UMCP- Unit Maintenance Collection Point
WAS- Wide Area Security
WIA- Wounded In Action



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