DECISIVE ACTION TRAINING ENVIRONMENT AT THE JMRC, VOLUME III

MULTINATIONAL INTEROPERABILITY

Lessons and Best Practices
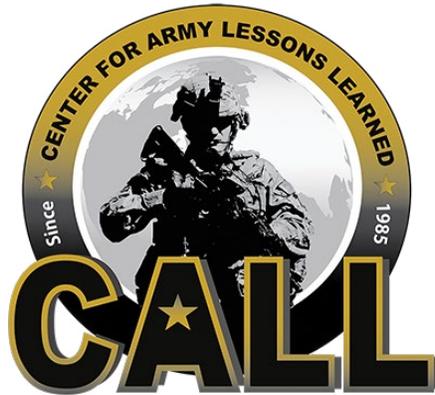
Decisive Action Training Environment at the Joint Multinational Readiness Center, Volume III:

Multinational Interoperability

Foreword

Drawing on its unique and strategically advantageous location at Grafenwoehr, Germany, as well as its experience in training U.S. Army Europe (USAREUR) assigned forces, regionally aligned forces (RAF), the Global Response Force (GRF), and North Atlantic Treaty Organization (NATO) allies and multinational partners, the Joint Multinational Training Command (JMTC) is ideally suited to build and sustain readiness. As a component of JMTC, the Joint Multinational Readiness Center (JMRC) at Hohenfels, Germany, is USAREUR's combat training center. The JMRC is a premier venue for up to brigade-level force-on-force training in the decisive action training environment, with rotations routinely featuring several thousand participants from many nations and operating in various capacities. It is a laboratory for experimenting and solving tactical multinational interoperability issues. The JMRC is also the place where U.S. Army tactical units build readiness and learn to interoperate with allies and partners, all while conducting unified land operations to solve tactical problems. The complexities of operating with multinational task organizations routinely offer significant challenges that affect each of the warfighting functions in accomplishing missions.

USAREUR units are exceptionally active in training and operating on a monthly basis to develop leaders, build combat readiness, and strengthen alliances. JMRC's observer coach trainers (OCTs) and opposing forces Soldiers have an excellent vantage point from which to observe and learn from their experiences in working with our Army, NATO allies, and multinational partners. These OCTs are able to analyze the gaps and challenges of not only cultural and language barriers, but also technological, doctrinal, procedural, and resource disparities in tactical formations. The OCTs are then able to assist training audiences in the development of working tactical solutions that optimize capabilities. In multinational formations, OCTs recognize the value in units understanding each other's capabilities, limitations, and national caveats early in the process, as well as the value of building teams using the U.S. Army's concept of mission command.

The lessons learned in tactical interoperability are relevant to the future of warfighting for the United States Army. This future is based on the premise that never again will we fight alone, but will always fight as a member of an alliance or coalition. We have learned over the past decade of experience that nations now integrate and conduct combat operations at, or below, the brigade combat team level.

The tactical lessons in multinational interoperability contained in this newsletter are not unique to the NATO alliance but are, however, transcendent to any situation in which a military coalition of nations must form, build a cohesive team, and operate seamlessly against a common enemy at the tactical level of warfare. This newsletter's collection of articles is intended to supplement and reinforce those lessons described in our publication of the *Multinational Interoperability Reference Guide* (CALL Handbook 16-18). Thus, the goal is to provide tactical-level insights and lessons gleaned from numerous multinational exercises that military leaders can use to logically approach the complexities of interoperability in multinational environments.

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DATE at the JMRC, Vol. III: Multinational Interoperability	
Table of Contents	
Chapter 1. Enhancing Interoperability: The Foundation for Effective NATO Operations *Dr. James Derleth, Senior Interagency Training Advisor, Joint Multinational Readiness Center*	**1**
Chapter 2. Avoiding the False Start on the Game-Winning Drive *MAJ Brian M. Middleton, Joint Multinational Readiness Center*	**7**
Chapter 3. Planning Opposing Force Operations at the Joint Multinational Readiness Center *MAJ Ryan Liebhaber, Joint Multinational Readiness Center*	**11**
Chapter 4. Tactical Rules of Engagement Management During Unified Land Operations *MAJ Patrick Bryan, Senior Legal Observer Coach Trainer, Joint Multinational Readiness Center*	**21**
Chapter 5. Interoperability at JMRC: Mission Command and the LNO Team *CPT Kenneth P. O'Reilly and CPT James P. Devlin, Joint Multinational Readiness Center*	**27**
Chapter 6. Liaison Officers in Air Assault Planning for Multinational Operations *MAJ Bradley C. Gates, Joint Multinational Readiness Center*	**35**
Chapter 7. Training in Stability Operations: A Czech Perspective *CPT Jesus J. Torres, Joint Multinational Readiness Center*	**37**
Chapter 8. Creating a Brigade Enemy Situational Template in a Multinational Environment *MAJ Jeremiah Pray, Joint Multinational Readiness Center*	**39**
Chapter 9. Engineer Operations in the Decisive Action Training Environment *MAJ Jonathan M. Chakeres, Joint Multinational Readiness Center*	**47**

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Chapter 1

Enhancing Interoperability: The Foundation for Effective NATO Operations

Dr. James Derleth, Senior Interagency Training Advisor, Joint Multinational Readiness Center

> "Interoperability is essential to ensure of NATO's forces effectiveness."
>
> General Jean-Paul Paloméros, Supreme Allied Commander Transformation, 25 SEP 2013

Since the end of the Cold War, interoperability has been at the heart of a debate over the viability and relevance of the North Atlantic Treaty Organization (NATO) alliance in a new security environment. The shift of focus from territorial defense to multinational expeditionary missions (Afghanistan, Kosovo, Libya) and the challenges encountered executing them has demonstrated the limits of allied interoperability. While some interoperability challenges (sovereignty concerns, differing national interests, cuts in defense spending, support for local defense industries, disparities in technological capabilities, etc.) can only be resolved by politicians at the strategic level, there are also numerous tactical challenges to interoperability. They include technological disparities, command and control, doctrinal differences, and resource gaps. To mitigate them, NATO enacted the "Connected Forces Initiative" (CFI).

The goal of the CFI is to increase readiness and combat effectiveness by improving interoperability through expanded education and training, increased exercises, and better use of technology. To support the CFI, the Joint Multinational Training Command (JMTC) headquartered in Grafenwoehr, Germany, launched the "Combined Training Initiative" (CTI). Drawing on the JMTC's unique location and experience educating and training NATO allies and multinational partners, the CTI expands education and training and uses technology to execute integrated, simultaneous, live, virtual, and constructive exercises. The CTI greatly reduces the cost of training, fosters multinational partnerships, and most importantly, improves alliance interoperability.

The Need

NATO defines interoperability as "the ability to operate in synergy in the execution of assigned tasks."[1] Even after many years of emphasizing interoperability and NATO standardization agreements (STANAGs) to foster it, recent missions have shown the limits of interoperability.[2] Recognizing this situation, alliance leaders created the CFI. Its purpose is to ensure NATO formations can communicate, train, and operate together effectively. Although the need is clear, there are many challenges to implementing the CFI. The next section examines some of the main challenges and how the JMTC has mitigated them.

Challenges

While there are strategic and tactical challenges to interoperability, this chapter focuses on the latter. Overcoming strategic challenges requires political decisions, while overcoming challenges at the tactical level can be accomplished through the establishment of common tactics, techniques, and procedures (TTP). Key tactical interoperability challenges include technological disparities, command and control, doctrinal differences, and resource gaps.

Technology disparities. There are vast technological disparities among NATO forces. On one end of the spectrum is the United States with its reliance on digital technology. Unmanned aircraft systems, Command Post of the Future, and Blue Force Tracker systems are all readily available to American commanders to help them establish common operational pictures. However, such operational pictures are not "common" if other members of a joint task force cannot see them. There are at least 13 different systems used for battle tracking within NATO. Many of those systems, because of different technical standards, are not interoperable.

To mitigate this situation, the JMTC has pursued low-tech solutions. These include using vehicle markings to identify friendly forces, using simple graphic control systems to control movement, relying on frequency modulation (FM) radio communications, conducting rehearsals to achieve shared understanding, and most effectively, ensuring every battalion or higher level formation has liaison officers (LNOs) to synchronize operations with adjacent and higher level formations. Exchanging LNOs is particularity effective as those LNOs facilitate integration and foster peer-to-peer contacts. This has both operational and long-term benefits. As MG Walter Piatt, former Deputy Commander of U.S. Army Europe noted: "Countries don't have relationships, people do. We gain credibility through shared hardship."

Mission command and control. The past decade of war has reinforced the importance of integrated command and control. Operations have become very complex, distinguished by continuous interactions between friendly forces, enemy forces, and local populations. Simply giving national formations a "task and purpose" within a joint task force is not enough. It requires collaborative planning and integration to develop and maintain a common understanding of the operational environment and the mission. Too often units are deployed without knowledge of their allies' systems or an understanding of what type of information is sent over those systems. This lack of interoperability makes it difficult for units to communicate and maneuver effectively.

The JMTC mitigates this interoperability challenge by having its observer coach trainer (OCT) teams work with exercise participants before they arrive at the training center. The goal is to ensure all formations understand — and are able to integrate — each other's unique capabilities and capacities. This includes having each participating country identify what types of equipment they use, how many networks they typically operate, and the type of information passed over those networks. This information leads to the construction of a compatibility matrix that shows what systems are able to communicate over different frequencies or networks.

Doctrinal differences. It is not surprising that within a group of 28 countries there are significant doctrinal differences. For example, in U.S. doctrine, "fires" means integrating and delivering lethal and non-lethal fires to enable joint and maneuver commanders to dominate their operational environment. In contrast, NATO countries trained in Soviet doctrine employ fires primarily in an area/barrage role. Also, in contrast to U.S. doctrine, these countries establish a "hide" position (a location approximately one kilometer from their designated firing point) to protect artillery assets. This means fires are not available for 15-25 minutes once they are called. Since U.S. artillery assets are able to provide support in 3-5 minutes, this has a significant effect on interoperability.

To diminish doctrinal differences among countries, the JMTC has learned to make diversity a virtue. The JMTC does not force allies or multinational partners to use U.S. doctrine; instead, it fosters functional interoperability. As an illustration, during a 2014 exercise the 173rd Infantry Brigade Combat Team (Airborne) (IBCT [A]) had a Czech Republic 152-millimeter artillery

battery attached to the brigade. In accordance with Czech doctrine, the battery employed concealment and movement. This caused a lag between the call for fires and their delivery. To account for this difference, the 173rd IBCT (A) established event-based time triggers. Once the triggers were included in the planning process, the BCT was able to successfully execute timely and accurate joint fires. Noteworthy, because of the Czech emphasis on concealment, the BCT's artillery assets were much less vulnerable to enemy attacks. This emphasis on functional interoperability improved alliance capability and capacity.

Resource gaps. Sustaining multinational forces is a significant interoperability challenge. While there is a NATO STANAG that defines logistics as the planning and implementing of force movement and maintenance, implementation of this standard varies. As in other areas, interoperability is affected by different terminology, traditions, capabilities, capacities, etc. Differences range from how many spare parts are carried to the type of rations Soldiers eat. While many countries were able to access the U.S. supply system in Afghanistan, expeditionary deployments to the JMTC have shown that some alliance members have difficulty providing their own ammunition, food, and fuel, let alone taking care of sanitary needs, housing, water, etc.

To foster interoperability, the JMTC attempts to implement the NATO principle of providing logistical support on a functional, rather than a national, basis. Tactically, this can be accomplished through early pre-mission planning discussions between logisticians in a multinational working group. This group identifies capabilities and requirements to mitigate possible sustainment shortfalls. For example, in a recent exercise, this working group identified a bulk water shortfall across the joint task force. This challenge was solved by distributing water equally across the formation to ensure operations would continue unimpeded.

Although the interoperability challenges are significant, the JMTC has been able to reduce those challenges and provide effective, integrated training as a result of its location in the center of Europe, its unique capabilities, and its extensive experience working with allied and multinational partner military forces over the last decade. However, it is still not at the level envisioned in NATO's CFI. To implement this guidance, the JMTC launched the CTI.

The Combined Training Initiative

The CTI takes advantage of changing conditions[3] to take NATO interoperability and operational readiness to a higher level. It is based on NATO's three components of interoperability: technical, procedural, and human.

Technology. While joint planning and execution of exercises has been common throughout NATO for years, the JMTC has significantly improved interoperability through enhanced technology. For example, the JMTC's Joint Multinational Simulations Center located at Grafenwoehr, Germany, establishes a joint operations center to control and "fight" a distributed portion of an exercise while the JMRC executes the live portion of the exercise. In Exercise Saber Junction 13, the 2nd Stryker Cavalry Regiment conducted live training at the JMRC, while the Italian Folgore Brigade virtually supported its flank from Italy.

Both live and virtual units can be connected "up" to a NATO corps headquarters (the JMTC and the Allied Rapid Reaction Corps were connected for the first time in a Fall 2014 exercise); and "down" to subordinate brigades, battalions, and companies in Hohenfels and at allied and partner training centers throughout Europe. The JMTC's CTI fosters interoperability by integrating NATO and partner assets, capabilities, relationships, and technology to create live, virtual,

and constructive exercises that simultaneously connect formations from the tactical to corps level across the continent. The CTI is the first time the JMTC — or any other combat training center — has executed exercises of this complexity and scale. This program allows allies and multinational partners to train together while remaining in their home station locations. This reduces costs while facilitating interoperability. As an illustration, exercise Swift Response II (August 2015), was executed simultaneously at three different training centers in Bulgaria, Germany, and Romania.

Procedural. This category fosters interoperability through doctrinal and organizational changes. The Joint Multinational Readiness Center (JMRC), a component of the JMTC located at Hohenfels, Germany, is contributing to NATO doctrine and developing STANAGs based on lessons learned at the center. In addition, the JMRC is identifying and codifying TTP that mitigate doctrinal diversity by focusing on functional interoperability. These TTP are disseminated via the NATO Centers of Excellence (COE) and training facilities throughout Europe and North America.

Human. This group includes education, training, and the adoption of common terminology. Seeing rotational units struggle with interoperability challenges, the JMTC initiated the Joint Combined Academic Program (JCAP), consisting of two components. The first component is the deployment of mobile training teams to locations of allies and multinational partners to conduct leader training programs, provide specialty training, facilitate the development of local training centers, and participate in military-to-military cooperation events. Not only has this program been a cost effective way to facilitate standardized education and training, but these missions also mean that when NATO formations train together, they start at a higher level of interoperability and readiness.

The second JCAP component is a series of instructional modules that are given to the staffs of all members of the joint task force prior to an exercise. The seminars cover the warfighting functions of mission command: movement and maneuver, protection, sustainment, fires, engagement, and intelligence; i.e., the key areas most affected by limited interoperability. During these seminars, leaders from the JMRC introduce key topics and identify challenges faced by previous units. The joint task force then works with its subordinate formations to identify ways to mitigate interoperability challenges.

Conclusion

As former U.S. Secretary of Defense Chuck Hagel noted, "the most persistent and pressing security challenges to Europe and the United States are global." Therefore, we must "develop strategies to address global threats as we build more joint capacity with European militaries."[4] Because of its capabilities, location, and extensive experience working with NATO and partner countries, the JMTC is uniquely positioned to implement NATO training guidance. Its CTI improves NATO interoperability and readiness through expanded education and training and technology. This allows NATO members to work more effectively together and fosters European security by helping protect alliance members, deterring conflict, and increasing global stability.

Endnotes

1. "Interoperability: Connecting NATO Forces," last modified 11 MAY 2012, http://www.nato.int/cps/en/natohq/topics_84112.htm.

2. As an illustration, while conducting operations in Libya, NATO had interoperability challenges in air-to-air refueling, intelligence, communications, surveillance, and reconnaissance.

3. Examples include: fiscal constraints which are decreasing training budgets; improved technological capabilities; the establishment of combat training centers in a number of allied and partner countries; and a NATO directive to "build a robust exercise and training program … which capitalizes on the individual training efforts of allies and identifies areas for collaboration and potential synergies."

4. Chuck Hagel, "Speech Delivered at the Munich Security Conference" (speech, Munich, Germany, 01 FEB 2014), U.S. Department of Defense, http://archive.defense.gov/Speeches/Speech.aspx?SpeechID=1828.

Note: A version of Dr. Derleth's article was published in *NATO Review*, 2015.

Chapter 2

Avoiding the False Start on the Game-Winning Drive

MAJ Brian M. Middleton, Joint Multinational Readiness Center

On the road, 00:01 left on the clock in the fourth quarter, down 21 to 27 with the ball one yard short of your opponent's goal line. It all comes down to this. Everyone — from the offensive line, to the quarterback, to the fullback, running back, tight end, and receivers — must be synchronized. They had to have rehearsed this play hundreds of times, know the snap count, and understand their roles in the play for this to work. This analogy illustrates what every task force commander is faced with at the beginning of a rotation at the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany. One false start and the game is over.

The JMRC is the world's premier training venue when it comes to multinational integration and interoperability. In any given month, over a dozen nations from three continents come together overnight to form a single task force poised to achieve multiple military objectives while combating a complex, hybrid threat from a professional opposing force in the enemy's backyard. These task force commanders face not only a dynamic multifaceted enemy, but significant challenges within their own formations. Cultural differences, language barriers, different doctrinal frameworks, and disparities in capabilities of both personnel and equipment are difficult to overcome within a two-week period. If the following three major areas are not properly addressed before the ball is hiked, the desired end state may never be realized.

Doctrine. The first point of friction is the standardization of operating procedures. Each nation comes to the training center with its own doctrinal framework. Some may work from unit or national-level standard operating procedures (SOPs) and regulations, while others have adopted international standards such as North Atlantic Treaty Organization (NATO) regulations. Former Warsaw Pact and NATO allies fight side by side in today's task forces and have vastly different foundations for mission command. Without a single, clear, and all-encompassing doctrinal foundation, consistent mission success will be elusive.

NATO doctrine offers a basic framework, similar to U.S. doctrine, which can form a common base for partner nations. NATO doctrine is intentionally vague and conceptual, allowing for application in a variety of environments and task force compositions. NATO doctrine helps develop a baseline of terminology, establishes methods of employment of firepower, and sets concepts of team building. That doctrine, however, must be paired with a comprehensive unit or national-level SOP to flesh out specifics. In order to have effective, centralized planning at the brigade and battalion task-force levels, a common understanding of doctrinal tasks, methods of maneuver, and tactics, techniques, and procedures (TTP) must be consistent. Without this consistency, simultaneous and decentralized execution will never be synchronized after first contact.

Capabilities and limitations. Each task force normally consists of light and/or mechanized infantry (the task force may include Strykers or main battle tanks), light mortars to motorized artillery, logistics and support battalions needed to sustain the fight, and the full complement of aviation assets. Aviation assets include both manned and unmanned platforms. Unmanned aircraft systems available may range from the Raven family of systems, Shadows, and Hunters in the U.S. inventory, to the German Aladin and the Norwegian DA-42 multipurpose platform

(MPP) Guardian manned-unmanned plane. Rotary-wing units training at Hohenfels include all types of helicopters in the U.S. Army inventory: V-22 Ospreys, and partner-nation Hinds, Hips, Cougars, and Hueys. Additionally, many rotations are supported by U.S. or partner-nation air forces.

A shared understanding of the capabilities and limitations of these weapon systems and the proficiency level of the Soldiers within the task force are key to maximizing the lethality of combined arms task forces. Suggested techniques to improve such understanding include using a "Capabilities Day" to display weapon systems and demonstrate to all partner nations how best to employ those weapons in the order of battle. In addition, communication exercises and full combined arms rehearsals must be included in all task force-level planning to identify the interoperability of communication equipment, mobility rates, and synchronization of maneuver elements. The line of scrimmage is not the time to find out that the crowd noise is "jamming" your primary method of calling the audible, or that not all your players even understand the meaning of the audible.

Cultural differences and language barriers. After establishing a common doctrinal framework and an understanding of the equipment and personnel abilities available in the fight, a shared understanding of mission, intent, and desired end state may still be a challenge. The U.S. Army has become very good at issuing and receiving orders informally or verbally. Whether using radios, transverse chat systems, or face-to-face contact, Americans often choose the speed and efficiency of informal orders to communicate.

When colloquialisms and doctrinal terms are used between Americans, little is lost from the initial intent to the responding action. With our multinational partners, however, this informal method is often not executed well. Sometimes this is due to equipment limitations, or radio or network compatibilities. However, more often the breakdown is due to cultural differences or language barriers. Often, our partners are forced to operate in a common language of English. This is a second language for the majority of our allies. Generally speaking, comprehension of a second language is better at the written level than at the spoken level. When confusion exists, it is easier for these partners to research the meaning of a phrase, word, or tasking when it is on a written order. It is also less confrontational to research the written order than to appear to question the verbal order face to face.

Cultural barriers also play a factor in establishing effective communications. For instance, in Bulgaria, the head nods for "no" and "yes" are reversed. Additionally, many partners' understanding of mission command is different from American doctrine. In some countries the issuing of orders, decision making, and planning are often reserved for the leader at the highest level in the organization. Informal orders to liaison officers or radio and systems operators often cut the decision maker out of the loop and cause confusion. To avoid this confusion, verbal or informal orders must be accompanied with written orders (through established channels) in time to action them. This process requires a mature and disciplined staff to consistently articulate the vision of the operation, utilizing plain, common, doctrinal language.

Just as in football, the preparation and conditioning of the team directly affects its ability to effectively maneuver and communicate within the prescribed play. By establishing the playbook from a common doctrinal framework, each member understands how the play should develop when the ball is snapped. Knowing which unit provides what specific capabilities and limitations allows the task force commander to maximize units in different positions on the battlefield and plan around their limitations, avoiding exploitation. Communicating with the team requires a consistent process of formal mission orders, with appropriate individual- through team-level practice. The linchpin in achieving unity of effort is the consistent use of confirmation briefs, back briefs, and rehearsals executed prior to each phase of the operation. Taking care of these fundamentals at the beginning of the task force building period will result in shared understanding and mutual respect required for mission success.

Chapter 3

Planning Opposing Force Operations at the Joint Multinational Readiness Center

MAJ Ryan Liebhaber, Joint Multinational Readiness Center

Serving as the battalion operations officer (S-3) for the Joint Multinational Readiness Center's (JMRC's) opposing force (OPFOR) (1st Battalion, 4th Infantry Regiment [1-4 Infantry]) is a challenging and unique professional development opportunity. The joint and multinational nature of JMRC provides a valuable and rewarding experience difficult to match in any other battalion in the Army, particularly when planning and executing decisive action training environment (DATE) rotations.

During most of the previous decade, the Army's combat training centers (CTCs) were focused on mission rehearsal exercises that prepared brigade combat teams (BCTs) for deployment to Iraq and Afghanistan. Thus, the operational environment at the CTCs strictly replicated a counterinsurgency (COIN) environment, and the OPFOR served almost exclusively in insurgent roles. This characteristic changed in late 2012, when the CTCs began conducting DATE rotations in order to rebuild combined arms maneuver capabilities within the force after a decade of focusing on the COIN fight. This chapter describes the uniqueness of JMRC DATE rotations compared with the other CTCs; provides some proven operational tactics, techniques, and procedures (TTP) that the OPFOR has developed over numerous DATE rotations; and shares some observations of rotational training unit (RTU) trends at JMRC from the OPFOR perspective. The purpose of this chapter is to help unit leaders at the battalion and brigade levels prepare for CTC rotations (to include the National Training Center [NTC] and the Joint Readiness Training Center [JRTC]), as well as prepare for real-world combat operations.

JMRC's DATE Rotation: Different from NTC and JRTC

During DATE rotations, the OPFOR utilizes the hybrid threat doctrine outlined in U.S. Army Training Circular (TC) 7-100, *Hybrid Threat*. While DATE rotations are based on new doctrine, they strongly resemble the 1990s-era force-on-force rotations conducted at CTCs which pitted an RTU brigade against an OPFOR regiment and were described in detail in Tom Clancy's 1994 book, *Armored Cav*. The difference lies in the combined arms maneuver doctrine that OPFOR utilizes and the incorporation of asymmetric threats into the operational environment (OE) that are largely based on experiences gathered over the past 13 years of COIN operations. Whereas in the old CTC force-on-force rotations the OPFOR was bound to Soviet/modified-Soviet doctrine (in 1993 CTCs switched from strict Soviet doctrine to a modified-Soviet doctrine), the hybrid threat doctrine dictates that OPFOR can utilize a mixture of different doctrines, and allows the OPFOR to apply the best doctrinal solution to the situation based on the factors of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations.

While the DATE is similar to the pre-Global War on Terror rotations that took place at the CTCs, it does differ significantly and is arguably much more complex in nature. The intent is for DATE rotations to challenge RTUs by replicating the complex types of threats that U.S., allied North Atlantic Treaty Organization (NATO), and partnered-nation forces will undoubtedly face while executing future unified land operations.

During DATE rotations at NTC and JRTC, the OPFOR units plan operations against standard U.S. Army brigades organized according to basic modified tables of organization and equipment (MTOEs). These units include variations primarily among light, heavy, and Stryker brigades. In contrast, at JMRC the RTU task organization is unique in each rotation due to the heavy multinational nature of the CTC. These factors result in considerable variations in planning OPFOR operations.

The Chief of Staff of the Army (CSA) tasked JMRC to focus on multinational interoperability at brigade level and below, something NATO never accomplished even during the height of the Cold War (NATO doctrine strictly addresses interoperability at the division level and above). During a DATE rotation at JMRC, the RTU brigade consists of either a U.S. or allied/partnered-nation brigade headquarters, with a varying mix of U.S. and allied/partnered-nation battalions for both maneuver and supporting elements. Furthermore, within the RTU battalions, there is a mix of U.S. and allied/partnered-nation companies and platoons, thus creating multinational battalions and companies within the multinational brigade. Planning operations and fighting against such multinational units are considerably different from planning to fight a homogeneous U.S. brigade.

There are three primary series of DATE rotations that occur at JMRC: the Saber Junction series, Combined Resolve series, and Allied Spirit series. More information on these exercises can be found at http://www.eur.army.mil/exercises/default.htm. Rotations as part of the Saber Junction series are the only Title 10-funded DATE rotations at JMRC. Saber Junction exercises always involve one of the two remaining United States Army Europe (USAREUR) brigades (the 173rd Infantry Brigade Combat Team [Airborne] or the 2nd Cavalry Regiment), completing their annual Title 10 certification. Typically, these rotations will feature the U.S. brigade headquarters leading a multinational brigade at the Hohenfels Training Area (nicknamed "the box"), along with one of its organic maneuver battalions and two attached multinational maneuver battalions. The remaining battalions from the USAREUR brigade, not physically participating in the Hohenfels box, typically conduct operations elsewhere in Europe (Lithuania, Latvia, Poland, and Romania have been some of the recent locations), but tie into the JMRC rotation's scenario through the use of digital instrumentation. Observer coach trainers (OCTs) and elements of 1-4 Infantry regularly support these "out-of-sector" missions, ensuring that a professional OPFOR is present to challenge the unit and that the unit receives OCT mentorship and feedback, despite being physically separated from the JMRC and the Hohenfels box.

The other two series of DATE rotations at JMRC, Combined Resolve and Allied Spirit, are not Title 10-funded rotations, but comply with the CSA's guidance to focus on multinational interoperability at the brigade level and below. The Combined Resolve series involves a U.S. regionally aligned force (RAF) brigade leading a multinational brigade headquarters with at least one of its organic battalions and typically two allied/partnered-nation battalions for the "box fight." Like the Saber Junction series of DATE rotations, the RAF brigade's battalions that are not physically participating in the "box fight" conduct operations elsewhere in Europe, but are linked to the Hohenfels scenario through digital instrumentation with a forward-deployed OCT and OPFOR package. Since the U.S. RAF brigades aligned with Europe include heavy BCTs, the OPFOR at JMRC plans operations against the full spectrum of U.S. BCTs, with the 173rd Airborne being a light BCT, 2nd Cavalry Regiment being a Stryker BCT, and the RAFs including heavy BCTs. The OPFOR also encounters a diverse mixture of allied and partnered-nation units, which include light infantry, motorized infantry, mechanized infantry, and armored forces. Fiscal year 2015 included five DATE rotations conducted at JMRC: Saber Junction 15, Combined Resolve III and IV, and Allied Spirit I and II.

Within a DATE rotation, there is no pre-set division of RTU offensive operations to defensive operations to stability operations. Each rotation is unique in this regard and planned according to the RTU's desired training objectives and time available (DATE rotations span 7 to 10 days for the force-on-force portion). The rotations will often begin with an initial movement-to-contact (MTC) battle period, with the RTU brigade starting on one end of the box and the OPFOR brigade tactical group (BTG) starting on the other end of the box, with a meeting engagement occurring somewhere in between. After this initial battle period, the rotation will then shift to alternating offensive/defensive battle periods, with the intent that the RTU brigade gains ground through the conduct of successive offensive operations. In the exercise days between offensive and defensive battle periods, the opposing brigades will conduct reconnaissance and counter-reconnaissance operations, and the RTU brigade will also focus heavily on stability operations, to include civil-military operations and area security. The varying nature of the RTU's task organization, length of the rotation, and desired training objectives mean that planning OPFOR operations requires far more than cookie-cutter techniques; it requires a thorough military decisionmaking process (MDMP) with special emphasis on developing the enemy situational template (SITEMP).

1-4 Infantry Battalion as the OPFOR BTG

During DATE rotations, 1-4 Infantry transforms from an MTOE light infantry battalion into an OPFOR combined arms BTG as outlined in TC 7-100.2, *Opposing Force Tactics*. Apache and Blackfoot companies are each able to transform into OPFOR combined arms battalions (minus) replicating up to 20 Boyevaya Mashina Pekhoty (BMPs) and 10 main battle tanks (MBTs) apiece (MBTs and BMPs are replicated with M113-variant vehicles with visual modifications [VISMODS]). Cherokee Company replicates the OPFOR Division Tactical Group (DTG) reconnaissance and BTG reconnaissance elements using its 10 Boyevaya Razvedyvatelnaya Dozornaya Mashina (BRDMs) (high mobility multipurpose wheeled vehicles [HMMWVs] with VISMODs) and six MBTs. Cherokee Company is additionally tasked with replicating the OPFOR special purpose forces (OPFOR special operations) and insurgent elements.

In addition to 1-4 Infantry's organic companies, the OPFOR BTG is augmented during each DATE rotation with U.S. Army Reserve/National Guard infantry and engineer companies and typically at least one multinational company. Figure 3-1 on page 14 shows the OPFOR BTG task organization for Rotation 15-03 (Saber Junction 15), where the OPFOR BTG was augmented with a Romanian battalion headquarters, Bulgarian battalion headquarters, Romanian infantry company, Bulgarian infantry company, Lithuanian infantry platoon, Romanian scout platoon, a U.S. Army National Guard infantry company, and a U.S. Army Reserve engineer company. 1-4 Infantry also sent one of its platoons from Apache Company to Romania to support the out-of-sector portion of Saber Junction 15. When the OPFOR BTG is operating at its maximum vehicular combat power of 26 MBTs, 40 BMPs, and 10 BRDMs, it must rely heavily on augmentation for its dismounted infantry assets. The OPFOR BTG also has a "red air" capability that comes from the Falcons OCT team (aviation trainers at JMRC), which provides two Hind-D attack helicopters (replicated by Lakota helicopters with VISMODs). OPFOR artillery is virtual, but must be physically controlled by the OPFOR BTG and is fully susceptible to RTU counterfires.
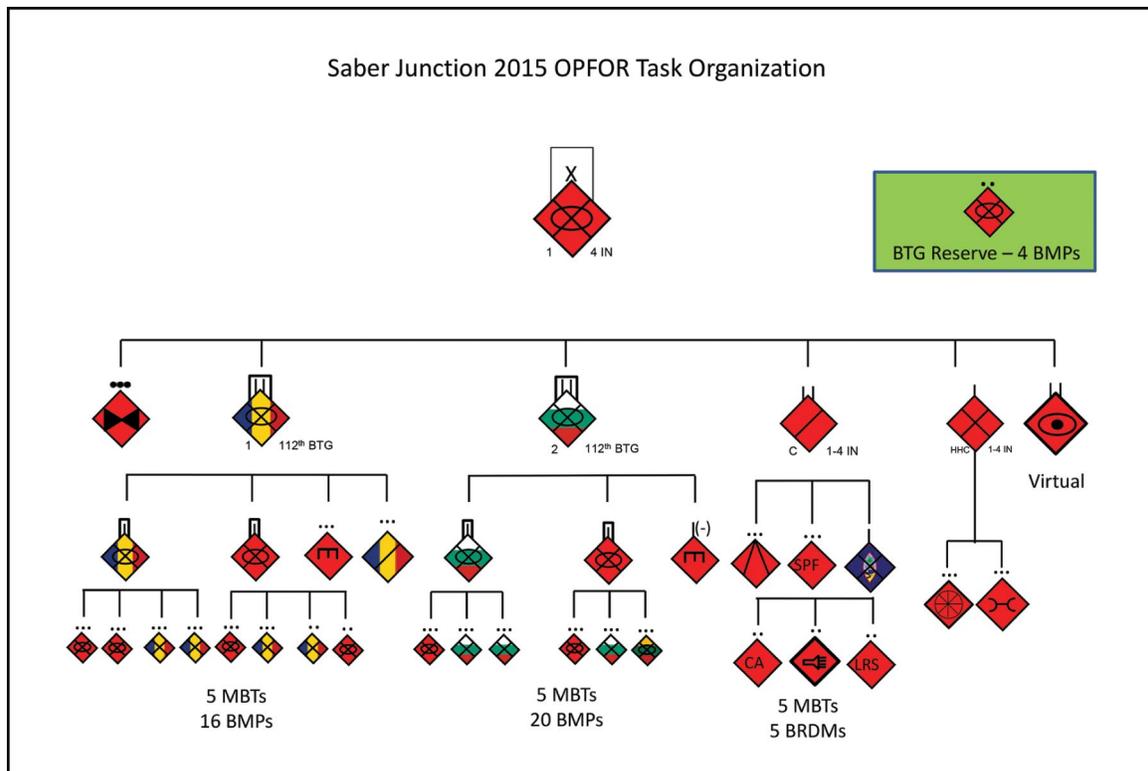
Figure 3-1. OPFOR task organization for Saber Junction 15.

Successful OPFOR TTP and Lessons

The 1-4 Infantry has the great benefit of planning and executing a DATE rotation approximately every other month. This schedule provides the opportunity to try many different TTP, continually develop those that are effective, and further refine them over time. This process is essential for OPFOR success because RTUs will almost always have a 3:1 correlation of forces and means (COFM) model when they attack the OPFOR; however, most often OPFOR will have only a 1:1 COFM with RTU in the attack. This means that the OPFOR can never rely on brute force to defeat the RTU, but rather must fully leverage its available assets and maximize the use of the terrain — the OPFOR must have finesse in its game.

The multi-course of action (COA) attack model. (Further information can be found in Center for Army Lessons Learned Combined Training Center [CALL CTC] Quarterly Bulletin 97-4, Special Edition, *Decision-Point Tactics*.) Over the past several DATE rotations, the OPFOR battalion has developed a multi-COA attack model that plans and prepares for several attack options based on possible RTU COAs. The success of this model hinges on the BTG reconnaissance elements providing timely and accurate feedback with regard to an RTU's actual battlefield posture so that the BTG can execute the appropriate attack COA. During the MDMP, the OPFOR BTG plans for four possible attack COAs: a northern attack, a southern attack, an attack north with a feint to the south, and an attack south with a feint to the north. The attack COA selected by the commander will most often exploit the weakest point in the RTU defense (as determined by reconnaissance) with the intent of achieving a penetration of the RTU lines, achieved through bypassing its main engagement areas. If the RTU brigade is believed to be keeping a significant reserve force or another maneuver task force to the rear, then the feint

option can be employed as a means to commit these additional RTU elements to the feinting attack. This tactic then facilitates the main attack's success at penetrating the RTU lines. The drawback to using the attack with feint option is that it draws combat power away from the main attack, and thus makes it less potent. The benefit of the feint drawing the RTU reserve/additional task force away from the main attack location, however, will usually outweigh this disadvantage.

During the conduct of the MDMP, checkpoints, coordination points, target reference points, and general routes are identified and planned for all four COAs. While there are four possible attack COAs in this model, the bulk of the planning is done for the two COAs that do not include a feint (the northern attack and the southern attack). Thus, to execute one of the options with a feinting attack, planners simply combine the northern and southern attack COAs with minor modifications. Additionally, the forward passage of lines and rearward passage of lines (RPOL) between the attacking element(s) and the reconnaissance element(s) are also planned for all COAs. This multi-option model allows the OPFOR to better fight the enemy, rather than fighting a plan that was made before the "ground truth" of the RTU disposition was known. There is no significant additional planning required to execute any of the four attack options; the BTG commander simply decides what option to execute and the BTG is able to execute. Since its development, this model has been highly successful, with the OPFOR BTG successfully penetrating the RTU defenses on every occasion it has been employed. It should also be noted that since the OPFOR BTG usually attacks with only an overall 1:1 COFM ratio, it is essential that the OPFOR avoid well developed RTU engagement areas to achieve success.

Bounding maneuver task forces during a BTG movement to contact. While executing a brigade movement to contact, the OPFOR BTG has been successful by bounding its maneuver task forces to successive attack-by-fire positions as it moves across the box. There are numerous open areas across the Hohenfels box that are surrounded by restrictive terrain (see Figure 3-2 on page 16). During defensive battles, these open areas will undoubtedly be used as engagement areas (EAs) by both the RTU and OPFOR. However, during an MTC battle period, these same EAs can also be used in an offensive manner by bounding maneuver task forces forward and establishing temporary attack-by-fire positions. Because OPFOR equipment is generally inferior to that of the RTU (BMPs lack thermal capabilities and their MBTs are unable to engage targets while moving), fighting from a fixed position is highly advantageous, if not necessary, during a 1:1 COFM engagement. For example, the OPFOR will have two task forces moving abreast across the box. One task force will move forward to a potential EA and then set into a temporary overwatch posture. Once set, the other task force will bound beyond that task force and set into an overwatch posture at the next potential EA. Reconnaissance elements will be pushed out in front of both task forces to provide information about the RTU's disposition and location. Once the RTU's main elements are determined to be approaching one of the overwatch positions, the BTG will halt that task force's forward movement and simply allow the RTU elements to continue movement into the OPFOR EAs. This technique allows the OPFOR BTG to set the conditions for a favorable meeting engagement against the RTU as the OPFOR will almost certainly fight the engagement on favorable terrain. This simple technique of bounding to subsequent positions of cover and concealment, as taught to all Army basic trainees at the buddy-team level, can also be applied at the battalion and brigade levels with great success.
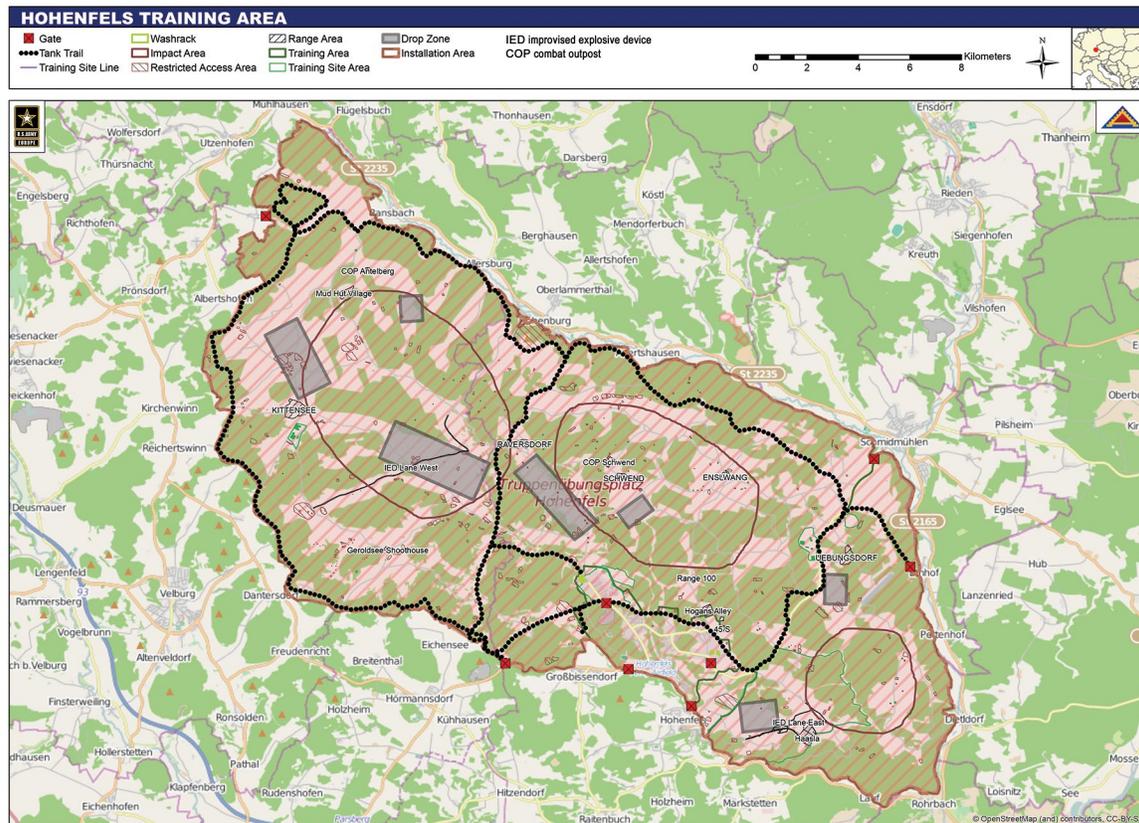
Figure 3-2. The training box of JMRC's Hohenfels training area.

Exploitation of seams during the offensive. Exploiting boundaries is a classic way of taking advantage of the enemy's communication difficulties and planning/rehearsal shortfalls. When exploiting the seams between multinational elements, these benefits can be magnified exponentially and have thus remained enduring OPFOR TTP used at JMRC.

The Hohenfels box is approximately 17 kilometers east to west and eight kilometers north to south, with DATE rotations taking place along the east-west axis. The OPFOR/RTU can start on either end of the box, so this is a variable that changes from rotation to rotation. The RTU brigade has essentially two options for arraying its maneuver task forces given the size and layout of the Hohenfels box. The first option is to fight with two task forces abreast, dividing the eight-kilometer front (distance of the box from north to south) in two and giving each task force approximately four kilometers. The second option is to echelon the RTU task forces, with one assuming the entire eight-kilometer front and the other task force(s) remaining to the rear. The option the RTU brigade executes dictates how OPFOR can best exploit the RTU seams.

If the RTU splits the front between two task forces, there is an obvious seam that can be exploited. An attack in the vicinity of the boundary between the two task forces will undoubtedly create confusion within the RTU brigade; however, there is another option that can be more effective. If the OPFOR attacks north or south of the shared task force boundary and achieves a penetration in one of the task force's area of operations (AO), the OPFOR can then turn toward the adjacent RTU task force's AO and attack its unprotected flank. If this occurs quickly enough, there is the very real possibility that the RTU task force that was not penetrated will not realize

that a penetration has occurred in its adjacent unit's AO. This is because the reporting from the penetrated task force to the brigade and back down to the other task force will take several minutes (this timeframe is increased in the multinational environment). Thus, it is possible that the non-penetrated task force will be attacked without warning by OPFOR MBTs and BMPs in its flank and be caught completely off guard. This method of attack has even surprised OCTs who have accused the OPFOR of leaving the box and reentering via administrative roads in the rear of the RTU elements (this has never actually happened).

Employment of scatterable minefields (SCATMINEs). During a battle period in which an RTU is attacking and OPFOR is defending, the OPFOR BTG will typically be allocated one artillery-delivered family of scatterable mines (FASCAM) minefield as part of its defense. This minefield is released to the BTG on order of the DTG commander (the Commander of Operations Group fulfills this role at JMRC). This limited resource must be planned for and executed in order to ensure maximum disruption of an RTU attack. To achieve this effect, the OPFOR will typically attempt to employ the FASCAM minefield along the RTU main effort's axis of advance between the forward line of troops and the forward edge of the battle area.

There are several intelligence requirements that must be met in order to maximize the disrupting effect of FASCAM minefields. First, during the MDMP the OPFOR S-2 must identify the composition and disposition of the RTU main effort. For example, in a recent rotation it was determined that the RTU main effort would comprise two companies of Dutch mechanized infantry in CV-90 infantry fighting vehicles. Since one company of Dutch mechanized infantry consists of 12 CV-90s, the OPFOR knew that the main effort would consist of any concentration of CV-90s greater than 12. Once OPFOR reconnaissance identified the axis of advance for the main effort, it was evident which of the templated FASCAM targets would likely be executed. However, to further disrupt the RTU main effort's advance, the OPFOR will attempt to time the firing of the FASCAM minefield so that it isolates the security element (typically a combined arms team) from the obstacle-reduction element (typically an engineer platoon) as the breach force approaches one of the established kill zones (OPFOR term for an EA). To do so, the OPFOR will allow the security element of the breach force to establish nearside security on the kill zone before firing the FASCAM target behind it. If successful, this action separates the different elements of the breach force from one other, and thus makes it very difficult for the RTU commander to select and move to an alternate breach location. (An alternate option that can achieve similar effects is to time the firing of the FASCAM so it separates the entire breach force from the assault force). If executed correctly, this tactic will stall, if not totally halt, the main effort's attack and allow the OPFOR BTG to capitalize on the resulting confusion.

Reconnaissance maintaining continual contact with the RTU. When the RTU brigade is attacking, BTG reconnaissance has mastered a technique of gradually falling back to its main defensive lines and then conducting an RPOL at a preplanned location. This allows the OPFOR BTG to maintain continual contact with the advancing RTU elements (primarily using visual contact), and thus maintain a clear and accurate picture of the battlefield leading up to the RTU attack. The BTG reconnaissance will most often use enemy-based triggers, such as identifying a designated number of a particular type of enemy vehicle (as described previously) to determine when to displace from its hide positions. During MDMP, the RPOL location(s) will be planned and the reconnaissance elements and the defensive elements will be anticipating the execution of the RPOL.

A lane will typically be left open in OPFOR kill zones/EAs that can be quickly closed with a man-portable SCATMINE dispenser after the last reconnaissance element has passed through. It is essential during MDMP to plan in detail RPOL locations and enemy-based triggers for the displacement of the reconnaissance elements, and also to include these plans on the OPFOR BTG's operational schedule. This planning allows the entire OPFOR BTG to track the movement of the BTG reconnaissance rearward and the execution/completion of the RPOL, thereby allowing subordinate commanders to know exactly when there are no longer any friendly forces to their front and allowing them to engage at will.

Using light infantry to seize key terrain during an attack. During mechanized combined arms warfare, light infantry has limited uses due to its inherent lack of mobility and firepower. One of the enduring TTP of the OPFOR at JMRC is the use of light/dismounted infantry to seize pieces of key terrain during an OPFOR attack. The Hohenfels box is densely vegetated and has many hills and valleys. Thus, there are many natural chokepoints throughout the box that if defended properly can effectively halt an offensive movement. There are also many town-sets that serve as major road junctions (like Bastogne during the Battle of the Bulge).

To prevent these chokepoints from halting an OPFOR attack, the BTG will typically employ light/dismounted infantry to seize these pieces of key terrain prior to the advance of the main body. The dismounted infantry will often infiltrate during darkness to the vicinity of the key terrain, and then attack to seize the key terrain based on a friendly trigger (such as the BTG main body departing its assembly area). This timing ensures the key terrain is seized just prior to the arrival of the main body so there is little chance of the RTU counterattacking to retake the key terrain before the OPFOR main body arrives. During the Saber Junction 15 rotation, the OPFOR BTG air assaulted three platoons into the box to seize three key town-sets on the opening day of the rotation in which the OPFOR BTG was conducting a movement to contact. The air assault facilitated the BTG's advance across the box and its meeting engagement with the RTU brigade in a location favorable to the OPFOR. This tactic can also be employed by the RTU, but it often is not; therefore, the OPFOR BTG often ends up halting RTU attacks with relative ease.

Some Observed RTU Trends from an OPFOR Perspective

Friendly forces identification (FFID) continues to be a challenge for the RTU units, due in large part to the multinational nature of JMRC. Gone are the days of the Cold War when the "good guys" had certain types of vehicles and the "bad guys" had different types of vehicles. The fact is many of the newer members of NATO use the same former Soviet-bloc vehicles that potential adversaries also use. Since the OPFOR BTG is augmented with multinational units, this dilemma is often replicated during rotations at JMRC. Additionally, the OPFOR uses M113-based variants to replicate BMPs, and many NATO countries also use the M113. The combination of these factors means that FFID is not as simple as correct vehicle identification and remains a constant challenge to the rotational units. JMRC collects TTP and best practices for successful FFID and provides these to the Center for Army Lessons Learned (CALL) for posting to the Joint Lessons Learned Information System (JLLIS) and dissemination to the Army.

Mission command is very challenging in the multinational environment, where there are language barriers and different types of radios and encryption. The first couple of battle periods can be very slow due to the RTU's inability to effectively execute mission command, especially during RTU offensive operations. RTU reconnaissance elements have often been successful in acquiring observation of OPFOR elements, but have been unable to effectively report back to their higher headquarters due to communications difficulties. The OPFOR BTG can be very

successful in exploiting this period of confusion while the RTU brigade is establishing effective mission command. As the rotation progresses, there is usually a very noticeable increase in the RTU's ability to execute mission command and the unit becomes much more effective in executing operations during later battle periods.

RTU counterfire operations have struggled to be successful when OPFOR uses its doctrinal battery displacement time of approximately four minutes. Several factors contribute to this continual struggle. First and foremost is the lack of practice and experience on the part of U.S. forces, having not regularly practiced counter-battery for the past 10 years. Senior artillery noncommissioned officers at the battery level were likely just entering the Army when the Global War on Terror began, and thus they never had counter-battery as a focus in their careers. Language barriers, communication platform differences, and other difficulties posed by the multinational environment make the challenges even greater. In order to make fires and counterfires more competitive, the OPFOR has changed its displacement time to match the average time achieved by RTUs during the situation training exercise that occurs prior to the box fight. This allows the RTU brigade a better chance of success in counterfire operations while at JMRC and ensures that OPFOR fires do not dominate the RTU.

The reconnaissance and counter-reconnaissance fight has been a challenge for RTU units, with some performing much better than others. One observed trend has been that RTUs do not establish large enough reconnaissance/security zones in front of main element(s). This results in RTUs not being able to fight the OPFOR BTG in depth and creates a close-range "knife fight" between the two opposing forces. The OPFOR has generally capitalized on this mistake by successfully penetrating RTU defenses because the RTU unit is not able to anticipate and/or track the movement of advancing OPFOR during an attack. The RTU then cannot employ fires or FASCAM minefields to break up the movement of the OPFOR attacking elements because there is not an adequate reconnaissance zone established. The lack of an adequate reconnaissance zone also prevents the RTU from conducting an effective reconnaissance/counter-reconnaissance fight; reconnaissance elements often end up as maneuver forces in an "advanced guard" role for which they are not necessarily suited.

The COIN mindset continues to haunt U.S. RTUs. One example of this mindset is the recurring desire for RTUs to establish large fixed-site brigade support areas, similar to the forward operating bases used in Iraq and Afghanistan, but not at all conducive to maneuver warfare. An extreme example of the COIN mindset occurred during a combined arms breach conducted by an RTU battalion task force. The OPFOR BTG called in a FASCAM minefield that came in directly on top of the breaching force's security element (imperfect timing by the OPFOR). This action decimated the RTU element, and the U.S.-led task force immediately abandoned its mission of conducting a combined arms breach and transitioned to executing a mass casualty (MASCAL) exercise. According to the OCT assigned to the RTU task force, there was never any planning, rehearsal, or even mention of a MASCAL drill during the RTU's MDMP process. Thus, when the unit sustained a large number of casualties, it simply reverted to the COIN mindset and executed a MASCAL. Abandoning the actual task of executing a combined arms breach effectively halted the RTU brigade's offensive operations.

Conclusion

As demonstrated during Operation Desert Storm and Operation Iraqi Freedom I, the best way to prepare units for high-intensity combat is through the CTC program and the use of a competitive, free-thinking OPFOR with near-peer capabilities. GEN George S. Patton famously wrote in 1944 that "a pint of sweat will save a gallon of blood," and it could be said that this is the adage that JMRC lives by. As recent threats in the European theater continue to develop, it is likely that JMRC's mission will become even more crucial. At JMRC, 1-4 Infantry will continue to help prepare U.S., NATO, and other partnered nations for the threats that may await them by providing the best OPFOR possible.

Chapter 4

Tactical Rules of Engagement Management During Unified Land Operations

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After years of conflict in Afghanistan and Iraq, many Soldiers view rules of engagement (ROE) as static, or otherwise slow and unlikely to change. During the Global War on Terrorism, a unit could enter a theater of operations for a particular mission and reasonably expect that the ROE would be the same as during the unit's previous rotation. The ROE, therefore, were more easily trained at home station and during mission rehearsal exercises at Army combat training centers (CTCs) because they were predetermined and mature.

The United States and its multinational partners, however, are increasingly focusing their efforts on an uncertain future against uncertain enemies. Consequently, the CTCs are designing decisive action training environments that offer realistic challenges designed to exercise brigade- and battalion-level command and staff functions that have atrophied over the last decade, including ROE management.[1]

The ROE encountered in a new environment are often complex and dynamic. At the beginning of hostilities, the preplanned ROE are based on considerations such as international agreements, interpretations among multinational partners regarding international law and the Law of Armed Conflict, target identification, etc. Higher headquarters will change the ROE often as its situational understanding develops. Likewise, a commander might find himself in command of a force that has multiple sets of ROE it must follow, and the hierarchy of which ROE set should be followed is sometimes unclear.

Regardless of the complexities, commanders at every level have a responsibility to understand and drive the ROE to accomplish their mission or tasks. If the ROE are too restrictive for the mission or task, then the commander must seek to adjust the ROE. If the ROE cannot be changed, it is then up to the commander to revise the scope of the mission or tasks. Thus, ROE management at every level of command has two elements: ROE tracking and ROE development. Neither is more important than the other.

ROE Tracking

The commander on the ground must understand the ROE thoroughly so he can provide guidance to shape the battlefield according to his vision. This requires the staff to do more than just receive the mission, find the appropriate ROE annex, republish the annex, brief it, and wait for the next ROE message. Of course, that is all part of the process, but the ROE must be placed into the context in which a unit will be operating — within an area of operations, area of influence, and area of interest. The process requires a thorough understanding of the enemy and the operational environment so that the ROE can be appropriately applied. As Army Doctrine Reference Publication (ADRP) 3-37, *Protection*, points out, "a [unit's] failure to understand and comply with established rules of engagement can result in fratricide, mission failure, or national embarrassment."[2]

As long as somebody is actively looking for them, ROE changes from higher headquarters are relatively easy to track. The difficulty is organizing and disseminating that information across

the formation in a timely manner so that the Soldiers at the lowest levels know it and understand it. For this reason, it is vital that training includes changes to ROE that accurately reflect the dynamic nature of unified land operations.

Even more complicated are situations wherein multiple ROE (or restrictions to existing ROE) apply during the same operation. These situations most often occur when:

- There is a shift in the relative weight given offensive, defensive, and stability tasks during unified land operations.

- There are multiple, distinct enemies.

- Unique missions or tasks — under separate authority — have been assigned to the unit.

- A coalition partner must adhere to a national caveat (or other restriction) more restrictive than the published ROE.

Consider the situation that occurred during Exercise Swift Response 15, a Joint Multinational Readiness Center (JMRC) rotational training exercise held partially in Hohenfels, Germany. A U.S.-led multinational brigade-sized task force conducted a joint forcible entry and lodgment operation in a semi-permissive environment against "separatist" elements from the host nation's army. Simultaneously, another potential adversary crossed the international border under completely different auspices, violating the territorial integrity of the host nation. A United Nations Security Council resolution authorized force against both adversaries, and both adversaries were declared hostile by a competent higher headquarters.[3]

In this unique but very realistic situation, force was authorized against two declared hostile forces. However, since the composition of one force included citizens from the host country (a non-international armed conflict), and the other force was composed of opposing state actors (an international armed conflict), the military, political, and legal considerations regarding each opposing force drove two differing ROE sets. Fortunately, the unit faced only the former (although the latter certainly existed within the unit's areas of interest and influence).

Regardless, the former was not without its own complications. The enemy consisted of local separatists who, until recently, were still part of the larger host-nation army. As a result, the unit faced an enemy that was wearing the same uniforms and driving the same vehicles as its host-nation allies. This sort of problem could have been mitigated in several ways, but in the absence of time, the commander issued very detailed guidance. Specifically, he directed that deadly force would be used by his forces only against an enemy who was wearing specific gear/driving specific equipment (i.e. "positively identified") and who demonstrated hostile intent.[4] In other words, because positive identification alone was insufficient to identify the enemy, he provided guidance on the use of force.[5]

Later, the same unit conducted a noncombatant evacuation operation (NEO). The NEO came with completely different ROE, driven substantially by the U.S. Department of State.[6] In summary, this five-day exercise had multiple missions with at least three different ROE sets that the brigade headquarters had to track, one of which required significant commander's guidance to ensure subordinates understood the ROE distinctions. At the same time, some subordinate

multinational units were restricted by national caveats.[7] For example, some units, due to treaty obligations, could not employ mines of any type during offensive operations; this caveat was more restrictive than the published ROE.

No matter the situation, the commander, through the collaborative efforts of his entire staff, must account for the ROE. Effective ROE tracking during the operations process allows the commander to better understand the overall situation. As a result, he will be able to better visualize, describe, and direct operations. He will also be able to better organize and array his forces to best accomplish the mission. To the extent the ROE limit his ability to accomplish the mission, he (and his staff) must develop the ROE.

ROE Development

ROE should never be too restrictive for the task at hand. If there is a term in the ROE that is excessively restrictive or ambiguous considering the current situation — and therefore negatively affecting operations — it needs to change. If the ROE cannot be changed (for myriad reasons), commanders and their associated staffs must examine the scope of the military action anticipated and refine it appropriately. Even if the authority to change the ROE remains at a higher level of command, the staff should provide a refined product to the higher headquarters. In other words, take the guesswork out of the process for the higher headquarters by making it part of the planning process. Because ROE do not need to be static, ROE development should be part of the detailed planning process at every level. Resources should be dedicated to ensuring that an operation has the most ideal ROE set for the circumstances.

Many factors drive a particular operation's ROE, including customary and treaty law, policy objectives, and mission limitations.[8] However, ROE are commanders' tools for regulating the use of force,[9] and as such, are necessarily flexible. Tactical-level commanders and their staffs — the ones who can see the adversary and therefore have unique situational understanding — provide substantial input to shape future ROE (through input from all warfighting function representatives). Effective ROE management includes the application of critical thinking to determine whether the ROE "work" for the task at hand. That includes analysis of not just whether the ROE are unduly restrictive, but also whether they are unnecessarily permissive considering the situation. In other words, the commander does not let the ROE define his left and right limits; he develops his own left and right limits, and uses the ROE as his tool to do so.

Usually, published ROE from higher headquarters will contain provisions on how a commander may augment, refine, or restrict the terms of the current ROE. Even the U.S. standing rules of engagement (SROE), which provide a common ROE template for the full range of operations, provide such language.[10] The SROE also provide general guidelines on ROE development. At the JMRC the policies and procedures established for ROE are in effect until rescinded, but supplemental measures may be requested to augment the ROE. Supplemental measures must be immediately reported through the chain of command. The bottom line is that ROE are flexible, and commanders at every level should seek to develop them to best accomplish their mission in a dynamic operational environment.

ROE Management Recommendations

Assign a staff member to be the ROE manager. The judge advocate/legal adviser is a logical choice, but it does not have to be, especially since not all staffs include a legal adviser (e.g., many multinational forces, battalion staffs). It should be a staff member who has broad situational understanding and grasps the commander's intent.

Post the ROE in the tactical operations center and brief them often. The brief should be concise and understandable and should highlight whatever specifics the commander deems most important. At a minimum, the ROE should state who can be engaged, how to identify who can be engaged, and how those individuals can be engaged. These details are particularly important in the beginning of hostilities when the ROE are in a constant state of flux, but remain necessary throughout the operation (especially when ROE changes are implemented).

Consider forming a ROE working group. Again, ROE development requires deliberative planning. The ROE working group should provide the collaborative process necessary to maximize the effectiveness of future ROE. At a minimum, the working group should be chaired by the ROE manager and should, at a minimum, include a maneuver, fires, and intelligence planner.

Focus ROE training on the dynamic nature of ROE. Training should include changes to ROE to reflect the dynamic nature of a new battlefield. Likewise, training should include scenarios where multiple ROE are in effect for different subordinate units.

A caveat regarding ROE cards: In dynamic operational environments, commanders — particularly those commanding multinational forces — should resist the temptation to issue ROE cards to the force. Consider the potential for confusion when the ROE change, or a portion of a task force operates on a slightly different ROE based on a unique authority or task sometime during a deployment. There will be problems with policing up the old cards, making sure everybody has the current card, and making sure everyone understands the changes, etc. Rather, make sure Soldiers actually understand the current ROE, and more importantly, understand that they could change at any given moment. The training objective should be to react and adapt to the change effectively.

Conclusion

Unified land operations are complex. Because commanders are faced with conducting offensive, defensive, and stability tasks simultaneously — and increasingly as part of a multinational effort — the ROE with regard to each operation become more important. Any shortcomings could have tactical, operational, and even strategic consequences. Commanders must be fully aware of the myriad ROE and caveats present in each mission and be ready to adjust accordingly based on their understanding of the OE. In short, they need an effective ROE management plan that includes ROE tracking and ROE development.

Endnotes

1. ROE management is not a doctrinal term, but rather the author's concept of how ROE should nest within Army doctrine, specifically in accordance with Army Doctrine Publication (ADP) 3-0, *Unified Land Operations*, 10 OCT 2011, and ADP 5-0, *The Operations Process*, 17 MAY 2012.

2. ADRP 3-37, *Protection*, 28 FEB 2013, pp. 4-14.

3. A "Declared Hostile Force" is "Any civilian, paramilitary, or military force or terrorist that has been declared hostile by appropriate U.S. authority. Once a force is declared 'hostile,' U.S. units may engage that force without observing a hostile act or demonstration of hostile intent; i.e., the basis for engagement shifts from conduct to status. Once a force or individual is identified as a declared hostile force, the force or individual may be engaged, unless surrendering or *hors de combat* due to sickness or wounds. The authority to declare a force hostile is limited, and may be found at Appendix A to Enclosure A, paragraph 3 of the SROE." *Operational Law Handbook 2015*, The Judge Advocate General's Legal Center and School, Charlottesville, Virginia, 15 JUN 2015, p. 83.

4. Hostile act/hostile intent is ordinarily a self-defense concept, but worked perfectly in this situation.

5. Note that this was not a change to the ROE; most ROE — including the U.S. SROE — will use language that units *may* engage an enemy that has been declared hostile, not that they *must*.

6. Although this was a NEO of U.S. governmental personnel, North Atlantic Treaty Organization and other NEOs will always be driven by the particular state requesting the NEO.

7. The origin of national caveats and how they would play into an operation is beyond the scope of this chapter. For a good discussion on caveats, see "*Multinational Rules of Engagement: Caveats and Friction*" by MAJ Winston Williams, Jr., in the January 2013 edition of *The Army Lawyer* magazine.

8. *Operational Law Handbook 2015*, The Judge Advocate General's Legal Center and School, Charlottesville, Virginia, 15 JUN 2015, pp. 90-110. The SROE give U.S. forces a starting point for ROE during every operation. However, they are supplemented depending on various factors, including those discussed in this chapter.

9. Ibid.

10. Ibid.

Chapter 5

Interoperability at JMRC: Mission Command and the LNO Team

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> "Alliances are force multipliers: through multinational cooperation and coordination, the sum of our actions is always greater than if we act alone. We will continue to maintain the capacity to defend our allies against old and new threats. We will also continue to closely consult with our allies as well as newly emerging partners and organizations so that we revitalize and expand our cooperation to achieve common objectives. And we will continue to mutually benefit from the collective security provided by strong alliances."
>
> — 2010 National Security Strategy

The Importance of Mission Command

As we continue to employ regionally aligned forces and conduct more training exercises with our European allies and partners, the reality is that it is becoming less and less likely that U.S. forces will conduct unilateral operations. For this reason, it is imperative that battalions look at their task organizations and figure out how to properly leverage interoperability and partnership.

Interoperability is defined as: "the ability to operate in synergy in the execution of assigned tasks. The condition achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases."[1]

Battalions training at the Joint Multinational Readiness Center (JMRC) that are task-organized with a multinational company often struggle to achieve effective interoperability. One of the main reasons units struggle is an inability to effectively conduct mission command. A lack of mission command creates frustration at all levels, hampering interoperability. The implementation of a liaison officer (LNO) team is instrumental to the success of executing mission command and interoperability when conducting operations with multinational units. A battalion's ability to quickly understand what its multinational company has to offer, and then utilize those capabilities effectively, will have a huge impact on the battalion's success.

> **Tactical Vignette**
>
> "Roger, out," the task force commander replied on the radio after receiving an update to his combat power. It was now 1530 and the task force had been on the offensive since early morning, seizing multiple objectives. They had lost significant combat power in doing so, and now had to turn to one of the two multinational companies within the task force. The task force had integrated LNO teams into the multinational companies upon arrival at the JMRC with the intent of more effectively conducting mission command; the task force would soon reap the benefits of doing so.
>

The battalion commander used the radio to call 1LT Queen, the officer-in-charge (OIC) of the LNO team embedded with a multinational company. The battalion commander gave 1LT Queen a rally-point location so he could link up with the company's commander. The multinational company moved to that location and linked up with the task force commander, who tasked the company to seize the final objective — a village that had been occupied by approximately a platoon-sized enemy element. The company would attempt to seize the village while a section of tanks would provide overwatch. The LNO team was equipped with radios, which provided the ability to communicate with the tank platoon leader over a secure network — a capability the company lacked without the LNO team. The company commander, with the assistance of 1LT Queen, quickly developed a plan to seize the objective. 1LT Queen was a senior first lieutenant who had the experience and knowledge to assist the company commander in making a tactically sound plan. Once the plan was complete, the company commander briefed his platoon commander while 1LT Queen back-briefed the task force commander over the radio. The company then began movement into the village.

The company's 1st Platoon initially made contact with two enemy squads defending from an abandoned combat outpost (COP). 1LT Queen quickly got on the radio and coordinated with the unit providing overwatch, communicating where the friendly elements were and passing on target information. The tanks engaged and destroyed the enemy guard towers, allowing the platoon to maneuver onto the COP and successfully seize it with minimal casualties. While 1st Platoon was seizing the COP, 2nd Platoon moved out of the wood line and began its assault on the village, immediately making contact.

The 2nd Platoon took some casualties, but was able to seize a foothold within the village. Although the unit had seized a foothold, it was still taking effective direct fires from the enemy. When the company commander realized he was outmatched in the village, he had 1LT Queen send a situation report back to the task force commander and ask for additional forces. The task force commander told 1LT Queen that there were no additional forces available and that the unit would have to seize the village on its own. With that guidance, the company commander called his 3rd Platoon forward. Once 3rd Platoon linked up with 1st Platoon, they moved into the village to assist 2nd Platoon, which was still taking effective fire. The two platoons were able to engage and destroy multiple targets, causing the enemy to withdraw and take up new positions within a building in the southeastern portion of the town. As the company maneuvered against the enemy, the LNO team provided the task force commander with timely and accurate reports, as well as recommendations from the company commander, until the mission was complete.

Ultimately, despite its differences in radios, tactics, equipment, and language, the multinational company successfully achieved its assigned mission. The key enabler, in this case, was an effective LNO team, at the right time and place, that was trusted by both the company and task force commanders.

Defining Liaison

U.S. maneuver battalions must fully understand the necessity of using effective LNO teams. According to Field Manual (FM) 6-0, *Commander and Staff Organization and Operations*, liaison is "that contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action."[3]

Liaison helps reduce the fog of war through direct communications. It is the most commonly employed technique for establishing and maintaining close, continuous physical communication between commands. Commanders use liaison during operations and normal daily activities to facilitate communication between organizations, preserve freedom of action, and maintain flexibility. Liaison provides senior commanders with relevant information and answers to operational questions and ensures commanders remain aware of the tactical situation. Liaison activities, designed to augment the commander's ability to synchronize and focus combat power, include establishing and maintaining physical contact and communication between elements of military forces.

Mission Command and the LNO Team

Mission command is one of the most important foundations of unified land operations. "Mission command is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations."[2] Battalions training at JMRC have better success executing mission command when they embed LNO teams into multinational companies. These LNO teams are able to build cohesive teams, create a shared understanding, assist the company commander in exercising disciplined initiative and accepting prudent risk, and ensure mission orders and the commander's intent are understood.

Building a cohesive team through mutual trust is extremely difficult when integrating a multinational company. Building a team does not happen overnight, but it almost has to based on the high operating tempo of unified land operations. The way a battalion receives and integrates a multinational company into its formation will set the stage for the rest of the time the units work together. Battalions need to identify the members of the LNO team prior to meeting their multinational units for the first time and integrate those LNOs immediately. When multinational companies are brought into the operations process too late, the ability to create a shared understanding is severely degraded. Integrating the LNO team early allows the battalion commander and staff to synchronize collaboration and foster open dialogue, all while assisting the battalion in creating a shared understanding.

Generally, battalions must strive to do a better job at making sure that multinational companies understand problem sets or the overall goals for particular operations. The companies must not only understand what their missions are, but must understand the larger picture and how they fit in the overall operation. The LNO team can play an important role in ensuring multinational commanders have a shared understanding, know how they fit in a battalion's overall plan, and understand the overall end states. These actions will ultimately facilitate the development of mutual trust.

A major principle of mission command is providing a clear commander's intent. When a battalion commander has multinational commanders in his task force, he must ensure that his commander's intent is understood. Not all multinational commanders will speak fluent English, and on a rare occasion, a multinational commander may speak very little English. This can prove to be a major issue and usually results in a misunderstanding of the battalion commander's intent. Often, the multinational commander will not ask for clarification during a brief or rehearsal, so it is assumed that he has a clear understanding. The LNO team can fix that issue by attending all briefs and rehearsals with the multinational commander and making sure he understands everything. Any questions or issues can then be brought to the battalion commander's or staff's attention.

Figure 5-1. A U.S. LNO attends a key leader engagement with a multinational company commander. (Photo by CPT James P. Devlin)

Commanders often rely on subordinates to exercise disciplined initiative, especially when attempting to seize, retain, or exploit the initiative. When conducting unified land operations, taking the initiative is essential in mission success. Initiative allows commanders to maintain the tempo necessary to defeat the enemy. Maintaining this tempo can be difficult when integrating multinational companies into U.S. battalions, as some multinational units do not view the concept of initiative in the same way. Some multinational armies are built upon Soviet doctrine, a doctrine which does not value initiative at the lower echelons in the same way as in Western doctrine. Another major issue arises when units have not worked together before. When using initiative, knowing and understanding the higher commander plays a role in exercising disciplined initiative. An effective LNO team will understand the battalion commander's intent and ensure the multinational commander is operating within that intent while exercising disciplined initiative.

When exercising mission command, commanders must use mission orders to assign tasks, allocate resources, and issue guidance. It is imperative that the multinational companies understand these mission orders. The LNO team can assist multinational commanders in understanding mission orders. The team needs to attend all briefings and rehearsals and read all orders from battalion. This way the LNO team not only helps the commander, but also understands the mission, as well. In some instances, multinational commanders may be too embarrassed to ask for clarification during a briefing or rehearsal. In these situations the LNO can assist by bringing those questions to the battalion commander or staff. The language barrier can be a huge issue when using mission orders. Battalions must limit the use of jargon, spell out all acronyms, use doctrinal tactical tasks, and issue clear and concise orders to overcome this barrier. Successful techniques include clearly defining tactical tasks and purposes and using NATO terminology.

Some multinational units do not accept prudent risk in the same way the U.S. military does. The commander may not understand the U.S. military's process for assessing risk, or, if he does, he may not put the level of emphasis on risk mitigation that is needed during an operation. The LNO team can assist the commander in this process, for both accidental and tactical risks. The battalion commander or staff can give guidance to the LNO team in regard to risk, and they can assist the multinational commander in the risk-mitigation process. Battalions need to provide their risk-management worksheets to the company commander. That way he understands how important the process is, and he can utilize the battalion's plan when mitigating risk at his own level.

Figure 5-2. A task force conducts a rehearsal with its multinational company representatives and their respective LNOs present. (Photo by CPT Kenneth P. O'Reilly)

LNO Manning

Manning of LNO team(s) is difficult. Giving up the right Soldiers will hurt somewhere. The task is critical enough, however, that a unit should consider pulling platoon leaders with strong platoon sergeants, or requesting external augmentation. Best practices have been to use LNOs with attached multinational companies. The same principles, however, can be applied when establishing LNOs with adjacent units. A battalion commander should choose a competent team that he trusts. If the LNO team is not considered a potential combat enabler, then there will be

significant issues in executing disciplined initiative and facilitating the multinational partner's capabilities. The LNO team and the battalion need to clearly understand and articulate the command relationships between the battalion and the multinational unit. Not understanding the command relationship can create significant issues during the planning and sustainment phases.

The team needs to have an OIC and a noncommissioned officer-in-charge (NCOIC). The OIC should be a senior lieutenant or junior captain with a maneuver background to facilitate synchronization of the battalion plan with the multinational company. The OIC needs to be an officer the battalion commander trusts to do the job, as the team has a significant impact on his ability to conduct mission command. The OIC needs to understand the planning process, as he may be assisting the multinational commander in developing his plan.

Figure 5-3. The LNO OIC assisting the company commander in developing his plan. (Photo by SGT Michael Broughey)

The NCOIC should be either a senior staff sergeant or a sergeant first class with some type of platoon sergeant time. Platoon sergeant experience will be key, because a great deal of time and effort will be spent ensuring the company is managing its logistics properly, whether it be sending reports or receiving supplies from battalion. Many multinational units have limited planning and logistics capability, so additional expertise can be beneficial.

If the LNO team is using a command and control vehicle, it will need a driver and possibly a gunner. Best practices have been to fill these positions with a medic or forward observer, who can serve a dual rule. In some cases, multinational companies lack medical training and supplies, so a well-trained medic can be beneficial on the battlefield. A forward observer is beneficial when calling for fire; however, a well-trained OIC or NCOIC can call for fire or control close-combat aircraft.

Proposed Equipment Package for an LNO Team Integrating with Multinationals

The LNO team must have the ability to maneuver mounted and dismounted.

Movement and maneuver. If the multinational company is mounted, the LNO team needs a vehicle with a crew-served weapon (M240B, MK19 or M2 .50 CAL). This will allow the LNO team to move with the multinational company, as well as give it firepower for self-defense. If at all possible, the LNO vehicle should not stand out from the multinational company's vehicles, as the enemy will try to destroy the command and control vehicle.

Intelligence. Some multinational companies have their own intelligence collection platforms and some do not. Depending on the mission of that company, it may be beneficial to include a RAVEN unmanned aircraft system (with operator) in the LNO team. At the very least, the battalion needs to develop a plan that keeps the LNOs aware of any intelligence updates on the battlefield, whether that be through the operations and intelligence radio net or another means of communication.

Fire support. The LNO team needs to have the capability to call for indirect fire because some multinational units lack these skills. The team should either have a forward observer as part of the package or a competent OIC or NCOIC who can plan for and call for fires.

Protection. Some multinational units will have very minimal hauling capabilities. This severely degrades units' ability to haul Class IV barrier materials around the battlefield. Equipping the LNO team with a trailer to tow behind its high mobility multipurpose wheeled vehicle (HMMWV) is a way around this problem. This trailer will allow the LNO team to haul a Class IV package for the company in case it needs to build obstacles, especially in the defense.

Mission command. Vehicle platforms need to be outfitted with a Blue Force Tracking system and at least two mounted radios, one to monitor battalion command and one to monitor the multinational company command net. This last is the most important piece of the package, as it allows the multinational commander to communicate with the battalion. The LNOs must have a plan to maintain mission command while dismounted, as well.

Sustainment. As mentioned, some multinational units lack hauling capabilities. If the LNO team has a trailer, it will be able to haul supplies for the company. Most multinational companies lack adequate Class VIII medical supplies, so the LNO team must have an understanding of the Class VIII status and may have to facilitate Class VIII resupply for the multinational company.

Conclusion

When partnering with multinational companies, LNO teams allow the battalion to effectively execute mission command. The LNO teams allow the battalion and the multinational company to become a cohesive team with shared understanding. The team assists the battalion commander in providing his commander's intent, assists in issuance of mission orders, facilitates acceptance of risk, and exercises disciplined initiative. A properly resourced and integrated team allows for a smooth integration. The task force mentioned in the opening vignette effectively utilized the LNO team, which enabled successful issuance of orders and the commander's intent over a secure net to the company commander for that mission. The LNO team also ensured the company commander exercised disciplined initiative by providing the battalion with updates from the ground when assaulting the final objective. The LNO team will not provide all the solutions when integrating multinational companies and executing mission command; however, units that integrate and utilize LNOs earlier at the company level tend to be more successful.

Endnotes

1. Army Doctrine Reference Publication (ADRP) 1-02, *Terms and Military Symbols*, 07 DEC 2015, p. 1-51.

2. ADRP 6-0, *Mission Command*, Change 2, 28 MAR 2014, p. 1-1.

3. FM 6-0, *Commander and Staff Organization and Operation*s, 22 APR 2014, p. 13-1.

Chapter 6

Liaison Officers in Air Assault Planning for Multinational Operations

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Multinational unified land operations are the way of the future for how our Army will fight because of the possibilities in leveraging the capabilities, talents, and expertise of several nations at once. Conducting multinational air assault operations is extremely challenging for many reasons, as was seen during Exercise Combined Resolve I (Joint Multinational Readiness Center [JMRC] training rotation 14-01). Such challenges include differing systems for passing mission information, different languages, and unfamiliarity with each other's doctrine. In multinational decisive action training environments, effectively using aviation liaison officers (LNOs) is of critical importance because the LNO assists in the parallel-planning process, integrates the intelligence efforts of both the ground and aviation units, and, most importantly, provides the human face of the aviation task force to the supported multinational commander.

Aviation LNOs enhance partner capacities by providing ready access within the command posts of multinational partners and aiding in the parallel-planning process. Without aviation LNOs it would be extremely difficult to conduct a 72-hour air assault planning process, because most supported units do not publish their courses of action (COAs) until after analysis and comparison. Even after these steps are complete, many units wait until COA selection, which is almost always within 24-48 hours of scheduled execution times. Even a highly trained aviation task force would struggle to plan and execute an air assault with a new unit in such a condensed timeline and still bring the added capabilities of the various enablers, such as suppression of enemy air defense fires, attack aviation, long-range surveillance teams, and scout insertions. Liaison officers serve to gather information during the supported unit's COA development and push that information back to the aviation task force to assist the parallel-planning process. This interaction aids in extending the available planning time, providing accurate and relevant information, and providing insight to the commander's decision points. The more involved and proactive the LNO, the more lead time the aviation unit gets to plan.

Additional benefits of having aviation LNOs include increased knowledge of the ground tactical plan and the supporting intelligence that drives the operation. Integrating aviation early into the planning process can also lead to increased aviation support to the intelligence collection plan. The supported unit can then further refine potential COAs throughout the development process, leading to more informed decisions during the analysis and selection phases. This shift, from reactionary intelligence preparation for aviation missions to proactive intelligence collection in support of a combined operation, requires training of LNOs and a command that empowers and emphasizes the importance of aviation LNOs.

When fighting as a multinational aviation task force it is vitally important to remember that LNOs sent from other battalions to the task force (for example, a UH-60 pilot sent from the attack helicopter battalion [AHB] to support the AHB task force) are not there to provide liaison within the task force; rather, they must focus outside of the task force and integrate with multinational partnered units in order to assist in the parallel-planning process. Much like scouts, LNOs serve little purpose if they are focused inside their own units rather than where the commander needs to see the fight.

A final and extremely important function of aviation LNOs in multinational fights is that they serve as the human face of the supporting aviation task force. The personal relationship forged by the aviation LNO accomplishes more to progress the multinational partnership than any phone call or e-mail could ever accomplish. As partnerships progress through multiple missions, habitual relationships form and trust within the partnership grows, but the value of the LNO does not diminish.

Regardless of mission complexity, the aviation LNO is an important link between Army aviation and our extremely capable multinational partners. There is arguably no better way to improve situational awareness and form a partnership based on mutual trust than through the use of skilled, competent, and empowered LNOs. Conversely, there is no surer path to failure than neglecting to resource the LNO and neglecting the potential for increased partnered capacity.

Chapter 7

Training in Stability Operations: A Czech Perspective

CPT Jesus J. Torres, Joint Multinational Readiness Center

During decisive action training rotations exercised at the Joint Multinational Readiness Center (JMRC), observer coach trainers are able to reflect on lessons learned while observing the conduct of unified land operations in coordination with other sovereign nations and nongovernmental organizations. Whether the participants belong to the North Atlantic Treaty Organization (NATO) alliance, the NATO Partners for Peace program (aimed at creating trust between NATO and other states in Europe), or are part of a temporary alliance, communication and coordination of efforts are instrumental to achieving success.

A unit's ability to coordinate its efforts is vital for mission success when conducting stability operations in the application of unified land operations among a coalition of nations, especially because of the inherent challenges that exist. It is of the utmost importance to recognize that not all countries define stability operations the same, use the same doctrine for the execution of stability operations, or have the expertise and resources organic to the unit to conduct stability operations.

As an example, the Czech Republic's army refers to civil-military operations (CMO) as civil-military cooperation (CIMIC) and uses the definition from NATO joint doctrine. NATO allied doctrine defines CIMIC as: "the coordination and cooperation, in support of the mission, between the NATO Commander and civil actors, including national population and local authorities, as well as international, national and nongovernmental organizations and agencies."[1]

In comparison, U.S. doctrine defines CMO as: " … the activities of a commander performed by designated civil affairs or other military forces that establish, maintain, influence, or exploit relationships between military forces and indigenous populations and institutions, by directly supporting the attainment of objectives relating to the reestablishment or maintenance of stability within a region or host nation."[2]

During Exercise Combined Resolve I (JMRC Rotation 14-01), difficulties in communicating with coalition partners resulted not only because of language barriers, but also due to differences in doctrine, social perspectives, and availability of resources of the various partners. Among NATO allies, the differences in terminology and doctrine are substantial enough to cause disparities in expectations and outcomes; however, despite the possible breaks in communication or in expectations of desired effects, the partnered nations were able to overcome much in the successful accomplishment of stability operations.

A good example of effective stability operations occurred during Combined Resolve while conducting defensive operations. A Czech unit was tasked to assist local authorities and coordinate the evacuation of civilian personnel in the area of operations and relocate them to a more secure area behind the engagement area. Even before they had received the task to do so, members of the Czech CIMIC cell in the battalion operations center were working on a plan to evacuate the civilians on the battlefield. The Czech CIMIC officer briefed company commanders and battalion staff on civilian considerations on the battlefield, handed out fliers with instructions in the local language on safe areas and location of refugee camps, and instructed Soldiers about local cultural norms to keep Soldiers from upsetting the population. The CIMIC team was also

conducting leader engagements and coordinating with nongovernmental organizations (NGOs) in its sector to alleviate the resource drain on its own companies, while enabling NGO freedom of movement in the battalion area of operations. The CIMIC team was able to accomplish all of these tasks while conducting its own independent operations and supporting the commander's mission, even with minimal guidance from its headquarters.

Despite learning the important lesson of properly emphasizing the communication of mission intent and end-state expectations of conducting stability operations, much credit is due to the partner nations that are able to conduct CMO/CIMIC at high levels. Future exercises and operations must continue to build on such successes and strengths to ensure stability operations missions are accomplished to appropriate standards based on commonalities in doctrinal application and efficient means of communication.

Endnotes

1. Allied Joint Publication (AJP)-3.4.9, *Allied Joint Doctrine for Civil-Military Cooperation*, 08 FEB 2013, p. 2-1.

2. Joint Publication (JP) 3-57, *Civil-Military Operations*, 11 SEP 2013, p. ix.

Chapter 8

Creating a Brigade Enemy Situation Template in a Multinational Environment

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In today's complex environment, the need for allied and partner nations to conduct military operations together continues to grow in importance among North Atlantic Treaty Organization (NATO) nations and Partners for Peace nations. In order for multinational military organizations to work together successfully, they must share agreed-upon standards for how they intend to conduct planning and execution at all echelons of the tactical level of war. One challenge identified at the Joint Multinational Readiness Center (JMRC) is the ability for brigade combat teams (BCT) to create and disseminate a shared understanding of the enemy situation to all subordinate units and higher headquarters. Typically, differences in tactical doctrine, experience, and communication systems are the root causes preventing multinational BCTs from achieving a complete understanding of the enemy situation. This chapter provides observations and describes recommended methods for enabling a multinational BCT to effectively understand, visualize, and disseminate the enemy situation across its operational environment (OE).

Tactical Multinational Interoperability

Tactical multinational interoperability is the ability of tactical formations to conduct successful combat operations together in any operating environment. The greatest challenge is the absence of tactical doctrine giving multinational units a common framework for conducting operations. Even among NATO allies, there is insufficient doctrine governing tactical operations because NATO views doctrine below the operational level of war as a national-level responsibility.

One of the greatest hindrances to tactical multinational interoperability is multinational units' inability to communicate by secure means. One typical solution is for multinational units to use the least common denominator of communication, often analog hard-copy maps and overlays updated by courier or unsecured radio communications. Most multinational battalions are very effective in maintaining a common operational picture through these traditional non-digital methods.

Most U.S. units, however, use digital systems as the primary mechanism to maintain situational understanding. If multinational units choose to use U.S. digital systems as the primary digital communications mechanism, that decision would require a U.S. command post node team, with associated personnel, at each multinational unit's tactical operations center. These teams would provide access to U.S. systems such as Command Post of the Future (CPOF), but would be taxing to U.S. units due to the additional personnel and equipment requirements.

The most effective solution is for multinational units to take advantage of their secured means of Internet communications and use digital slides that closely replicate the tools that CPOF uses. These features allow commanders to visualize their OEs and make effective decisions.

The Enemy Situation Template (SITEMP)

A SITEMP is basically a doctrinal template with terrain and weather constraints applied. It is a graphic description of an enemy's disposition should he adopt a particular course of action. It shows how enemy forces might deviate from doctrinal dispositions, with frontages, depths, and echelon spacing depicted to account for the effects of terrain and weather. A SITEMP is a visual technique focused on specific mobility corridors. By placing a doctrinal template over a segment of a mobility corridor, the analyst adjusts units or equipment dispositions to depict where those assets might actually be deployed in the situation. Time and space analysis is important in developing a SITEMP, and the result of that analysis is used during the war-gaming process.

Arguably, the enemy SITEMP is the most useful product used by commanders and staffs to understand and visualize the enemy's composition, disposition, and strength across the OE. At a minimum, the SITEMP should include:

- Engagement areas and supporting obstacle systems.

- Unit range fans covering engagement areas with direct-fire weapons.

- Templated units two echelons below the level of the major defending unit.

- Counterattack force locations, routes, and attack-by-fire positions.

- Timed phase lines depicting the force's movement from assembly areas to commitment.

- Artillery locations supporting the main and covering force battles that include range fans for the closest possible gun, howitzer, or mortar.

- Primary and subsequent positions for the covering force units.

- Air defense artillery positions.

- Engagement areas and air avenues of approach for close-air-support aircraft and attack helicopters.

- Reconnaissance positions.

- Command and control positions.

- Combat service support unit and activity positions.

- Alternate and supplementary positions for maneuver forces.

- Control measures, particularly boundaries and counterattack objectives.

Unfortunately, once all, or even most of, these graphics are placed onto a single digital slide, the slide becomes difficult to understand and most commanders are unable to visualize the enemy in their respective OEs. Typically, SITEMPs are created on a single digital slide that shows the entirety of the OE. See Figure 8-1 on page 41 for an example of just such a SITEMP used at JMRC.

Last 24: Enemy (ENY) continued to prepare and shape the battlespace through obstacle emplacement, in particular the use of mines along Phase Line (PL) Red in the north widely throughout the southern corridor. Mekhrably was left lightly defended, with all approaches heavily obstructed. Early ENY strategy involved heavy indirect fire (IDF) on units slowed by obstacle emplacements, and a total denial of the southern corridor by family of scatterable mines (FASCAM). As units entered the northern corridor, the tank reserve manueuvered from the northern wood line. ENY units withdrew into Avsar and Aghjabadi City to continue defensive efforts. Next 24: The 112th will continue the widespread use of mines and other obstacles to limit friendly forces (ff) freedom of manuever. The strategy of obstacles combined with effective fires will continue as ENY seeks to delay and destroy FF as they advance East of PL Orange. Obstacle efforts will continue to be focused on denying the southern corridor as units are forced to move through the open terrain IVO Avsar and northern corridor. Small echelons of mechanized infantry will continue to be used to harrass and disrupt. We assess that enemy will attempt to counterattack along the northern corridor to stall our attack and regain initiative. 11 date-time group (DTG) prepared a reserve force of 1 Mechanized Infantry Battalion (MECH IN BN) (-) to be used in counterattack. ENY chemical IDF attack is likely when enemy is facing the loss of Aghjabadi City. an indicator for chemical attack wills bw 115th Field Artillery (FA) BN's movement west toward area of operation (AO).

Figure 8-1. Representative example of a traditionally prepared enemy SITEMP.

It is likely that brigade S-2 sections understand this type of product, but it requires a significant amount of written assessment and does not provide the visualization necessary to conduct operations against the enemy. It should be every brigade S-2's goal to create SITEMPs that are valuable not only to brigade-level commanders and staffs, but also to subordinate company commanders.

The Three-Dimensional Enemy SITEMP

A recommended solution for creating a brigade product that is useful for both commanders and staffs to visualize the OE is the three-dimensional enemy SITEMP. If applied correctly, this product can be useful to maneuver commanders down to the company level. In order to create a product that shows all elements required of a SITEMP, it may be necessary to break the map into more manageable pieces. A preferred method is to divide the map by phase. Phases can easily be distinguished by phase lines (see figure 8-2 on page 42).
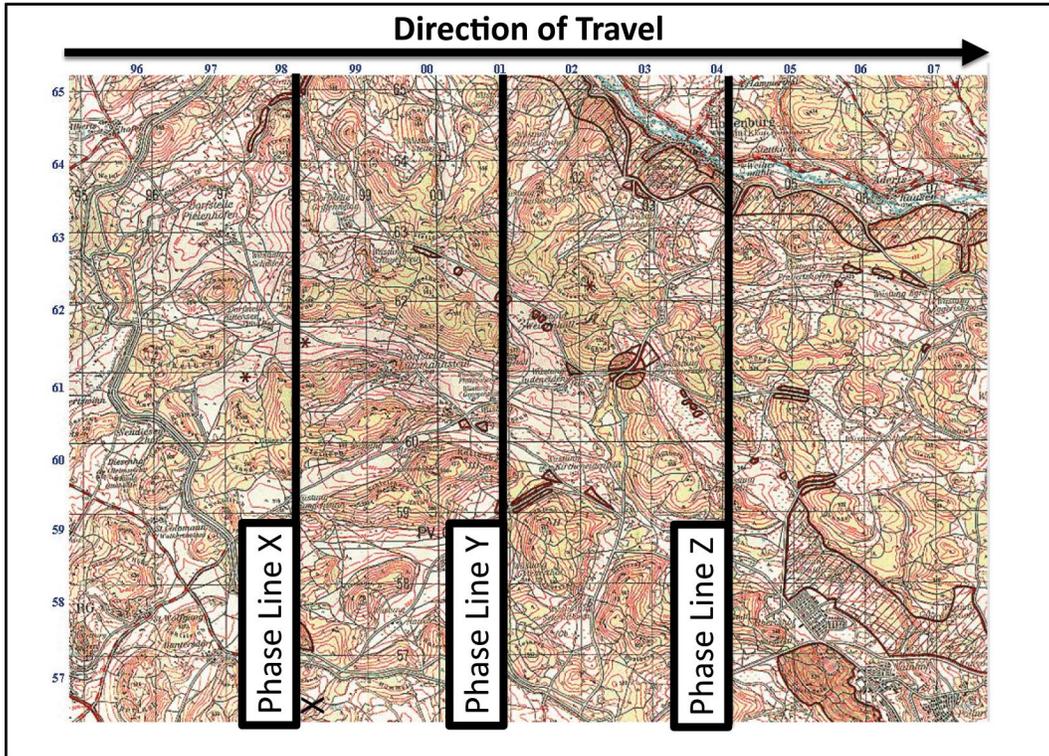
Figure 8-2. Using phase lines to distinguish phases of the operation.
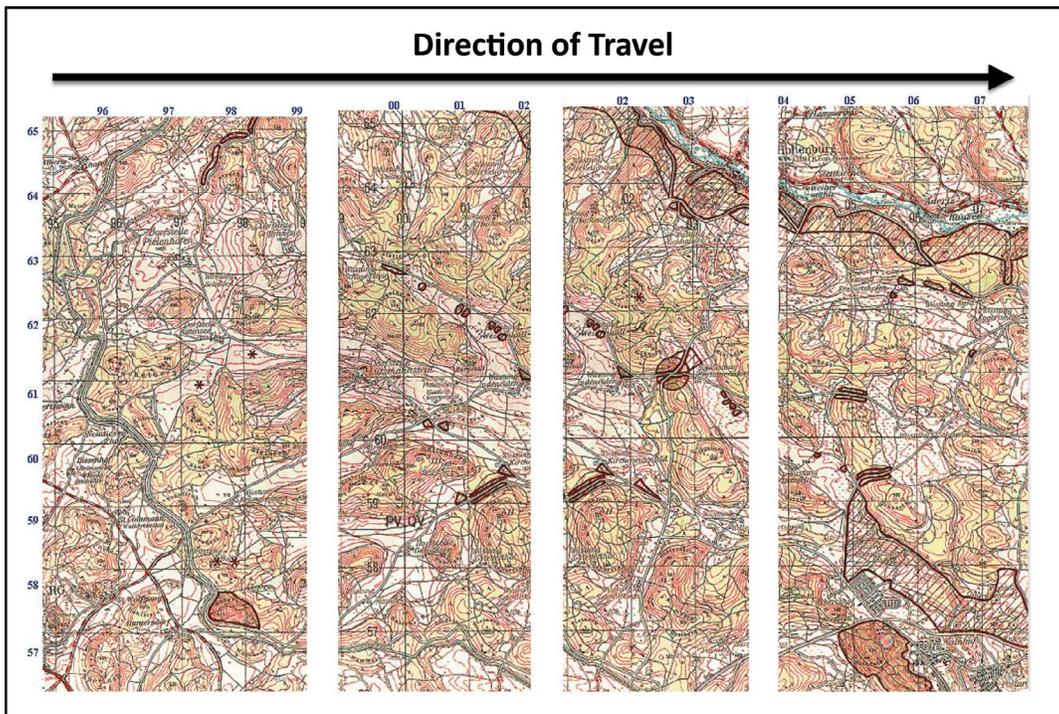
Figure 8-3. The SITEMP becomes more manageable by separating the map into phases.

Once the map is broken down into manageable sections, the sections can be separated and oriented to the direction of travel that maneuver forces will follow (see figure 8-4 below).
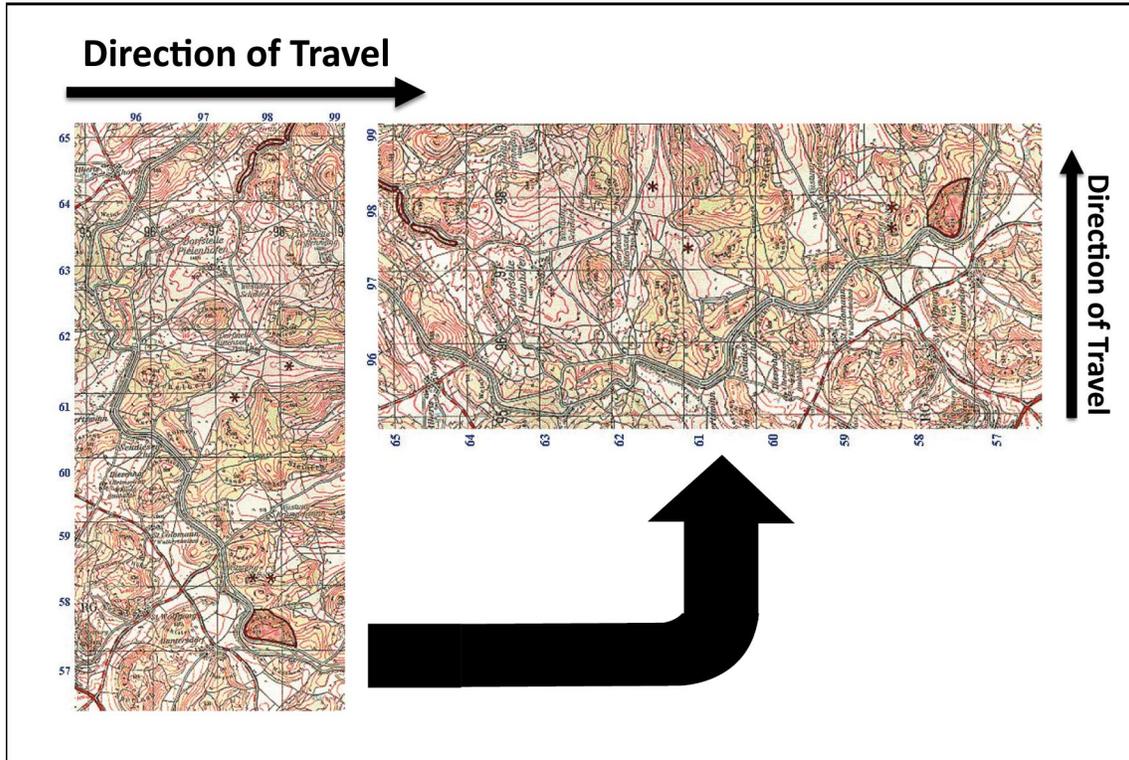
Figure 8-4. Orienting each map section to the direction of travel.

Finally, the single section can be tilted to show the topography that the maneuver force can expect to maneuver through (see figure 8-5 on page 44). Several different military and commercial mapping programs are available to show the three-dimensional topography necessary to create this type of visualization product.
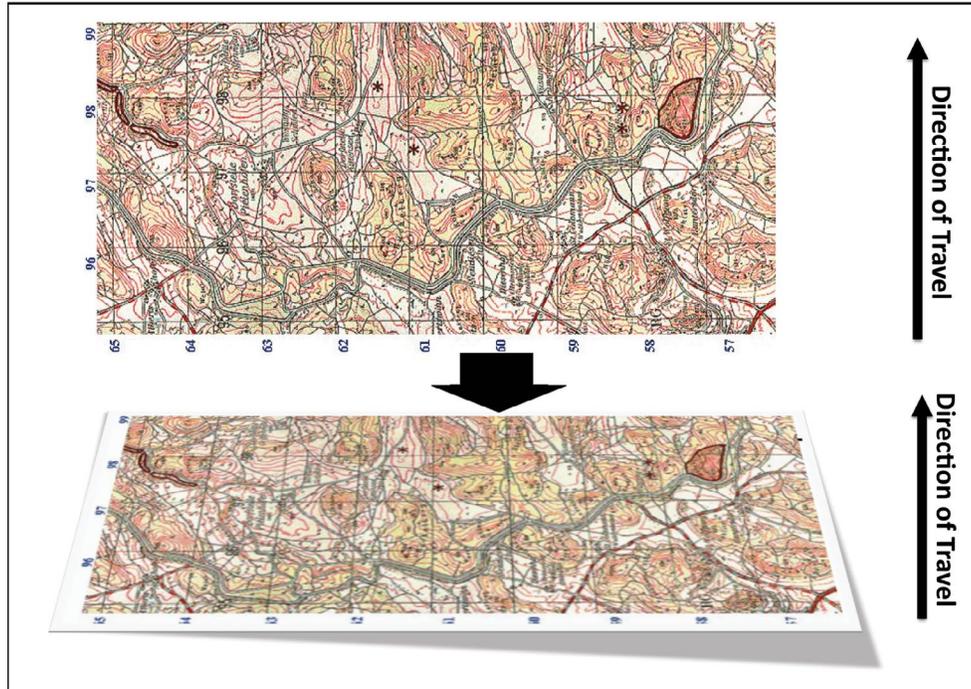
Figure 8-5. Tilting the graphic to show topography.
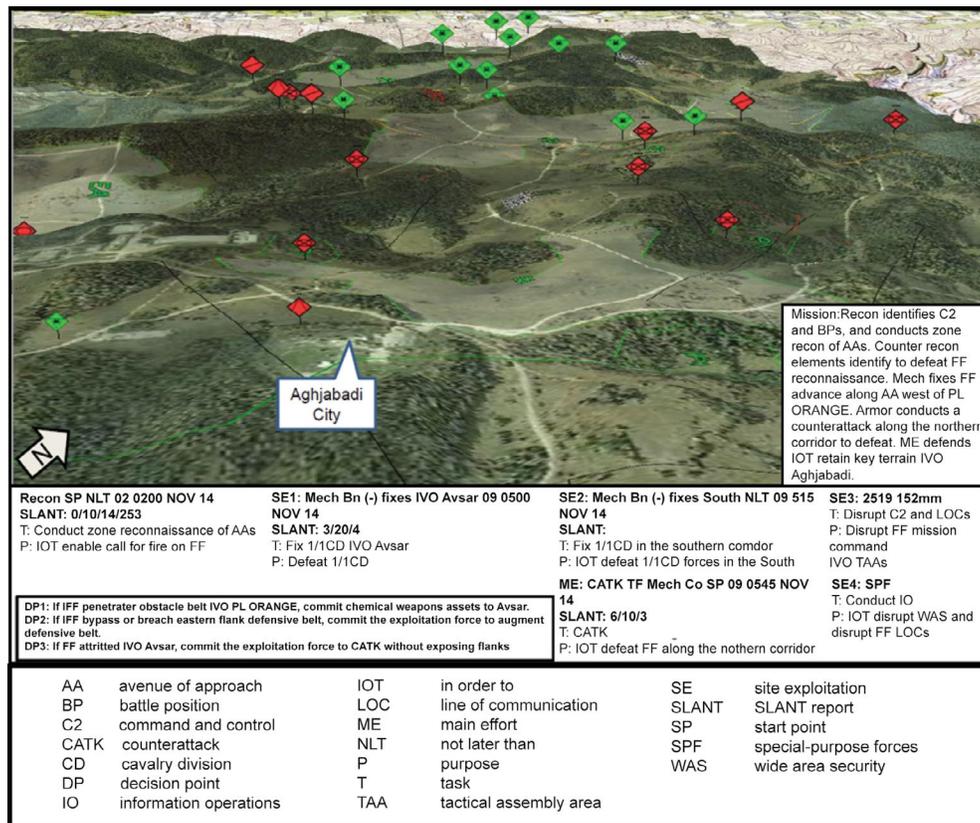
Figure 8-6. An example of a three-dimensional SITEMP.

This product, when properly prepared, provides multinational commanders and their staffs the visualization necessary to develop a common understanding of the enemy situation. In addition, this product becomes a tool useful below the battalion level.

Conclusion

The three-dimensional SITEMP is one example of a tactical product that can be disseminated across multinational formations using technologies available to multinational units. This technique enables units to rapidly disseminate information, plan operations, and back-brief commanders in order to ensure a common understanding of the operational environment. By no means is it the only solution for creating an easily understandable enemy SITEMP, but it is a recommended technique that multinational formations may implement in their standard operating procedures and use when training together.

Chapter 9

Engineer Operations in the Decisive Action Training Environment

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After more than a decade of war in which combat engineers have primarily focused on specific tactical tasks such as clearing improvised explosive devices (IEDs) or building combat outposts, the decisive action training environment (DATE) offers great opportunities for engineers to re-forge skills that have atrophied. The DATE Rotation 14-01A, Exercise Combined Resolve I, conducted at the Joint Multinational Readiness Center (JMRC), produced many lessons learned about the conduct of engineer operations and reinforced many observations that have been observed in previous DATE rotations.

Engineer support is complex, resource intensive (requiring much time, manpower, equipment, and materials), and requires extensive and proactive coordination. Additionally, a successful engineering effort requires an understanding of all engineer requirements (combat, general, and geospatial) and their roles in the concept of operations.

> "Engineers who support maneuver forces today face unique challenges, not only with the unpredictability of the operational environment in which they operate, but also in the adaption of the organizational restructuring of the Army as it continues to transform."[1]

Close Integration and Synchronization with Maneuver Forces

Engineers often struggle at the company level and below to truly integrate into a supported maneuver unit's organization. Many engineers became accustomed to operating nearly autonomously while conducting route clearance patrols, managing construction projects, or fulfilling other roles in counterinsurgency or stability environments. This practice often limited working relationships with maneuver units, thereby reducing the number of situations where engineers could contribute to maneuver warfare. Compounding these difficulties is the fact that many maneuver commanders have never worked with engineer units outside of a narrow route clearance or in a project-management capacity. Engineer support in a decisive action environment requires far closer coordination and synchronization between maneuver forces and engineers, particularly for offensive and defensive tasks.

During training exercise Combined Resolve I, a U.S. engineer company made a deliberate effort to clearly brief its capabilities and limitations to the multinational task force it supported. This paid large dividends during subsequent operations. The company executive officer spent hours with the task force planners discussing engineer planning factors, work rates, equipment specifications, and other details in order to help the task force staff and commander use the engineers intelligently. Additionally, the engineer company staff created a one-page capability brief to share with the maneuver task forces and the multinational brigade staff. This product saved the staff countless hours of wasted time in ambiguous analysis throughout the brigade, and it helped the engineers perform missions for which they were well-prepared and properly equipped.

For many engineer units (and other enablers) conducting training at JMRC, providing a capability brief might be a distant afterthought, but it should be used as an essential tool that can pay huge dividends, especially in a multinational environment. This technique alleviates ambiguities, helps maneuver commanders and their staffs understand engineer capabilities, and assists in planning involving almost every warfighting function.

Mobility

Mobility continues to be critically important on the battlefield, just as the counter-IED fight has been critical over the past decade of war. Exercise Combined Resolve and several other training rotations at JMRC have shown that engineer support to combat operations can be inconsistent. This support can be greatly improved by re-examining combined arms doctrine and identifying specific roles for engineers in each kind of breaching or assured mobility operation.

Breaching is a complex and dangerous task that must be carefully planned. Most of the coordination and planning for breaching during Combined Resolve was initially left to companies or even individual platoons. Lack of clearly identified breach organizations with delineated responsibilities can cause heavy casualties or severely delayed movements. Task force staffs and engineer company commanders must make deliberate efforts to template enemy obstacles along their axes of advance and task-organize engineer assets to breach lanes through those obstacles. A plan need not be perfect, but must be good enough to accomplish successful breaches of enemy obstacles to allow maneuver forces to assault their final objectives without sustaining losses to mines or other obstacles.

To prepare for complex operational environments, engineers must focus training on the different forms of breaching: mechanical, manual, electronic, and explosive.

Engineer units that conduct training at combat training centers such as JMRC must become familiar with the Anti-Personnel Obstacle Breaching System (APOBS), the Mine-Clearing Line Charge (MICLIC), and other effective breaching systems. Without in-depth technical and tactical expertise with such breaching systems, engineers may face great difficulty in supporting the maneuver and mobility of their supported task forces.

Obstacle intelligence (OBSINTEL) is a key component of the intelligence preparation of the battlefield and the reverse-breach planning processes that engineer units and task force staffs must consider. Without some type of OBSINTEL overlaid with enemy situational templates, maneuver forces face daunting uncertainty on the battlefield.

One of the simplest ways engineers can help supported maneuver units is by ensuring they rehearse different types of breaches together down to the lowest levels. It is critical that maneuver commanders and engineers develop a solid understanding of what an actual breach will consist of, and how the engineers and maneuver units will mutually support each other.

The organization for the conduct of a breach consists of a support force, a breach force, and an assault force. The support force is responsible for:

- Suppressing enemy capable of placing direct fires on the reduction area to protect the breach force as it reduces the obstacle and the assault force as it passes through the created lane.

- Fixing enemy forces to isolate the reduction area.

- Controlling obscuration smoke.

The breach force is responsible for:

- Reducing, proofing, and marking the necessary number of lanes through the obstacle.

- Reporting the status and location of created lanes.

- Providing local security on both the near and far sides of the obstacle.

- Providing additional suppression of enemy overwatching the obstacle.

- Providing additional obscuration in the reduction area.

- Assisting the passage of the assault force through created lanes.

The assault force is responsible for:

- Seizing the far-side objective.

- Reducing the enemy's protective obstacles.

- Providing clear routes from the reduction area to the battle handover line for follow-on forces.

- Preventing the enemy from placing direct fires on follow-on forces as they pass through the created lanes.

- Conducting battle handover with follow-on forces.

- Providing reinforcing fires for the support force.

- Destroying the enemy capable of placing direct fires on the reduction area on the obstacle far side.

The commander ensures synchronization through proper planning and force preparation. Fundamentals to achieve synchronization are:

- Detailed reverse planning

- Clear sub-unit instructions

- Effective command and control

- Well-rehearsed forces

Defense

Engineers have a critical role in defensive tasks, although these tasks require even higher levels of synchronization and coordination than any other task in unified land operations. Defensive planning is not the place for free-thinking initiative; it is where engineers must execute specific tasks at precise locations in precise sequence, while providing continuous updates to higher headquarters on their progress.

The goal of obstacle planning is to support the commander's intent through optimum obstacle emplacement and integration with fires. The focus at the corps, division, and brigade levels is to grant obstacle emplacement authority and provide obstacle control. The focus at the task force level and below is the actual integration of fires and obstacles.

During Combined Resolve, one of the multinational task forces turned to its assigned U.S. engineer company to assist with defensive planning and the overall obstacle effort. The engineer company executive officer dedicated dozens of hours assisting the task force staff with developing obstacle plans for the entire area of operations, complete with analyses on estimated work rates and completion times. The overall obstacle plan was thorough and generally supported the task force's efforts to destroy the enemy in designated engagement areas. However, once the obstacle effort began, the maneuver commanders did not involve themselves with the obstacle effort in their sectors and consequently never took "ownership" of any of the obstacles. Although the obstacles supported their battle positions, there was confusion over who would actually overwatch the obstacles and prevent the enemy from reducing them unopposed. This point of failure cascaded into a lack of clear fire support plans to complement the obstacle effort and an inability to inflict casualties when the enemy encountered the obstacles. With only about half of the total obstacles emplaced being overwatched when the enemy attacked, the opposing force (OPFOR) was able to reduce a complex obstacle unopposed along an avenue of approach. This allowed the OPFOR to attack the flanks and rear of the task force.

Engineers can additionally improve support to maneuver units by educating those units on the family of scatterable mines (FASCAM), the associated planning factors, and the "battlefield calculus" of preparing triggers for these systems. Engineers should be prepared to calculate where recommended trigger points should be placed based upon the enemy rates of march, the FASCAM deployment times, arming times, the approval authority's reaction times, and any other factors that are involved with deploying FASCAM systems.

Rest plans are essential, especially if engineers are responsible for employing FASCAM. Obstacle plan responsibility cannot simply be "powered down" to companies and platoons and left for them to figure out, as is sometimes done. Leaders must carefully "site-in" each obstacle

and report the start and end grid coordinates to higher headquarters. Doing so builds a true defensive common operational picture and ensures that other combined arms maneuver elements (particularly fires) will properly support those obstacles.

Careful forecasting of Class IV barrier material helps engineers ensure they have the proper obstacle materials when and where they need them. This planning factor is critical in a time-constrained environment. The U.S. and multinational engineer companies involved with Combined Resolve I coordinated closely with logistics planners to properly forecast the materials needed to complete the obstacle effort, as well as where on the battlefield to deliver the materials to save transportation time. Forecasting specific "packages" of barrier materials to create specific obstacles was also crucial in saving time and preventing waste.

Another important task is properly reporting obstacle completion status at the battalion and brigade levels. Unit leaders and their staffs must receive regular reports to understand the status of their overall defense, allowing for a true common operational picture to be formed. Maneuver commanders must know the exact status of the obstacle effort to properly allocate resources during defensive preparations.

Based on observations at the JMRC, engineers have been afforded many opportunities to glean and reinforce lessons learned in decisive action scenarios. These lessons enhance mission success by showing the importance of closely integrating maneuver forces with supporting engineers, beginning with simple, but effective, techniques such as providing engineer capability briefings. Mobility during offensive operations can only be assured by first understanding various breaching organizations and fundamentals, followed by rehearsing various breaching techniques using specialized Army systems and basing plans on enemy obstacle intelligence. During defensive operations, meticulous planning and time management are critical in applying resources requiring the utmost synchronization and coordination with maneuver units. By understanding and applying lessons learned pertaining to requirements and roles in the engineer concept of operations, units strengthen their chances for future success on the battlefield in decisive action environments.

Endnote

1. Army Techniques Publication 3-34.22, *Engineer Operations – Brigade Combat Team and Below*, 05 DEC 2014, p. 1-1.

Chapter 10

Multinational Operations: The Logistical Considerations

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Succeeding at the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany, is about having aggressively trained formations that can conduct unified land operations. The role of logisticians in these operations is twofold. Not only must logisticians sustain their brigades; they also must perform their wartime tasks, oftentimes simultaneously. Brigade and battalion commanders must understand that maneuver formations cannot function without their logistics tails.

Brigade formations do not move without fuel, equipment does not recover or repair itself, Soldiers do not heal themselves, ammunition does not distribute itself, and parts do not materialize out of thin air. It is only through the concerted efforts of the brigade's sustainment team that it all happens. This chapter is about the essential logistics considerations in a multinational environment that are often neglected during a typical JMRC training event.

Six Elements for Success

To win at JMRC when conducting multinational operations, logisticians must understand and incorporate the following:

- National caveats.

- Task organizations.

- Command and support relationships.

- Key enabling systems.

- Maneuver courses of action (COAs) and concepts of support.

- Support rehearsals.

When logisticians understand these six elements, they are better equipped to plan for and execute sustainment for their brigade combat teams (BCTs) that include task-organized multinational formations. Sustainment may be a logistician's responsibility, but this does not alleviate BCT commanders of being concerned about it. Maneuver commanders may want to move their formations, but if they do not consider their logistics tails, they will not be maneuvering far.

National Caveats

Defense spending is diminishing while international security demands continue to rise. It is more important than ever that we as a North Atlantic Treaty Organization (NATO) fighting force continue to fight together as a multinational force. All contributing nations, including the United States, have restrictions or "national caveats" to which they are tied. These caveats outline what

their Soldiers can or cannot do and what support their Soldiers can provide during a training exercise. The caveats can vary from tactical applications to which countries can provide medical care for their Soldiers to operational concerns for materiel acquisition. Before sustainment commanders can truly understand task organizations and the necessary support requirements, it is imperative their staffs carefully think through what resources each country brings to the fight and at what capacities they can participate.

To mitigate logistics shortfalls, strategic-level negotiations take place with authorities at the State Department, the combatant commands, and Army Service component commands. The result of these negotiations is known as an acquisition and cross-servicing agreement (ACSA). An ACSA is a bilateral negotiated agreement between the U.S. and its allies or coalition partners in exchange for support. This support could include classes I (subsistence), III (petroleum, oils, and lubricants), V (ammunition), and VII (major end items), and transportation. ACSAs are carefully composed to provide mutual logistics support in order to reduce an individual nation's burden, enable flexibility for critical common logistics enablers, and increase interoperability between nations.

ACSAs feed into exercise support agreements (ESAs), which clearly define what countries can or cannot contribute to a training exercise. These agreements are contractual and determine cost estimates for all signing nations. Each participating nation's ministry of defense must sign the ESAs in order to establish the support relationships. These documents and agreements are critical to understanding the national caveats and support requirements within task forces. Without clear pictures of these agreements, it is very easy to accidentally break the law or spend unauthorized funds in support of multinational partners.

At JMRC, logisticians must carefully consider the resources each nation brings with it as well as what resources the United States is allowed to provide. Not all countries bring the same resources for training, and the United States cannot always solve their resourcing shortfalls. A prime example of this consistent trend was observed during a recent JMRC rotation. One nation arrived with .50-caliber machine guns but did not bring firing pins. JMRC saw that its supply system had the same firing pins in stock but it could not legally provide that nation with the firing pins needed for the training exercise because resupply for weapons parts was not included in the ESA for that exercise. This same issue can arise for any type of support if it is not clearly annotated in the ESA and understood by the sustainment personnel on the ground.

National caveats and international agreements are critical elements of operating with multinational task forces. The training at JMRC provides insight to these challenges that will be faced in any coalition partnership in the future.

Task Organizations

Task-organizing is the act of designing an operating force, support staff, or sustainment package of specific size and composition to meet a unique task or mission.[1] Characteristics to examine when task-organizing the force include, but are not limited to, training, experience, equipment, sustainability, operational environment (including enemy threat), and mobility. For Army forces, it includes allocating available assets to subordinate commanders and establishing their command and support relationships.[2]

JMRC asserts that three groups of Soldiers must understand both task organization and command and support relationships. These Soldiers are commanders (brigade and battalion), operations officers (brigade and battalion S-3s), and logisticians (support operations officers [SPOs] and brigade S-4s).

Everyone has seen task organization charts posted in command posts — the units depicted in boxes with solid or dotted lines drawn to align units underneath a headquarters element. The task organization represents types of formations by function on the battlefield. Typical U.S. brigades have two combined arms battalions, one cavalry squadron, an artillery battalion, a brigade engineer battalion, and a support battalion.

When supporting an armor battalion, one should understand how many tanks are in a tank company, how much fuel the tanks will consume, and how many personnel will require food, water, and a basic load of ammunition. By studying task organizations, commanders can identify what missions their units can conduct with the equipment and personnel available and also what can or cannot be logistically supported. Logisticians must have mitigation strategies for what cannot be supported to overcome the shortfalls in logistics or must clearly articulate the shortfalls to their commanders, identifying where the unit can and will assume risk during operations. Likewise, commanders and logisticians must understand the multinational partners operating inside a brigade's task organization. Supporting multinational partners is not a new concept; we have seen this throughout U.S. history, through both world wars, the Korean War, the Vietnam War, and in Iraq and Afghanistan.

U.S. forces must not only embrace, but take ownership of the multinational units operating within their assigned task organizations. The biggest hurdles that most units face are the language barriers. While the two operating languages within NATO are French and English, proficiency levels vary and dialects can be difficult to understand. This obstacle is often remedied by assigning liaison officers with the proper communications equipment in command posts. To overcome persistent language problems, liaison officers should focus on relaying critical information about the formations. Some logistics examples include the following questions:

- How many personnel do they have?

- What equipment did they bring?

- What is their bulk fuel capacity?

- What types of fuel do they use?

- How will they make repairs and requests for parts?

- What ammunition do they require?

- What are the national caveats that outline what the nations will do and provide?

- With what resources will they sustain themselves?

- What are they legally allowed to provide?

- What is the unit's national plan to receive logistics?

Despite differences within each nation's military, the basic needs are the same. All classes of supply are necessary to sustain any force. U.S. logisticians cannot always provide sustainment for all in accordance with the national caveats, the ACSA, or the ESA, so the brigade's lead logistician (the SPO) must ask with what and how these multinational formations are going to support themselves.

Once logisticians understand the multinational task force's task organization, how multinational forces will sustain themselves, and what support U.S. forces can provide, they can begin to focus on the subsequent impacts on sustainment plans. The focus can now shift to determining the capabilities of the formations, the support requirements, and the shortfalls in logistics that either higher-level U.S. logistics forces or partner nations will fill. With this understanding, logisticians can start analyzing the command and support relationships within multinational task forces.

Command and Support Relationships

Establishing clear command and support relationships is a key task in task organizing for any operation. These relationships establish clear responsibilities and authorities between subordinate and supporting units. Some command and support relationships limit the commander's authority to prescribe additional relationships. Knowing the inherent responsibilities of each command and support relationship allows commanders to effectively organize their forces and helps supporting commanders understand their unit's role in the organizational structure.[3]

Table 10-1. Army command relationships.[4]

If relation-ship is:	*Then inherent responsibilities:*							
	Have command relation-ship with:	May be task-organized by:[1]	Unless modified, ADCON responsi-bility goes through:	Are assigned position or AO by:	Provide liaison to:	Establish/maintain communi-cations with:	Have priorities establish-ed by:	Can impose on gaining unit further command or support relationship of:
Organic	All organic forces organized with the HQ	Organic HQ	Army HQ specified in organizing document	Organic HQ	N/A	N/A	Organic HQ	Attached; OPCON; TACON; GS; GSR; R; DS
Assigned	Gaining unit	Gaining HQ	Gaining Army HQ	OPCON chain of command	As required by OPCON	As required by OPCON	ASCC or Service-assigned HQ	As required by OPCON HQ
Attached	Gaining unit	Gaining unit	Gaining Army HQ	Gaining unit	As required by gaining unit	Unit to which attached	Gaining unit	Attached; OPCON; TACON; GS; GSR; R; DS
OPCON	Gaining unit	Parent unit and gaining unit; gaining unit may pass OPCON to lower HQ[1]	Parent unit	Gaining unit	As required by gaining unit	As required by gaining unit and parent unit	Gaining unit	OPCON; TACON; GS; GSR; R; DS
TACON	Gaining unit	Parent unit	Parent unit	Gaining unit	As required by gaining unit	As required by gaining unit and parent unit	Gaining unit	TACON;GS GSR; R; DS

Note: [1] In NATO, the gaining unit may not task-organize a multinational force. (See TACON.)

ADCON	administrative control	HQ	headquarters
AO	area of operations	N/A	not applicable
ASCC	Army Service component command	NATO	North Atlantic Treaty Organization
DS	direct support	OPCON	operational control
GS	general support	R	reinforcing
GSR	general support–reinforcing	TACON	tactical control

Table 10-2. Army support relationships.[5]

If relation-ship is:	Then inherent responsibilities:							
	Have command relation-ship with:	May be task-organized by:	Receives sustain-ment from:	Are assigned position or an area of operations by:	Provide liaison to:	Establish/ maintain communi-cations with:	Have priorities established by:	Can impose on gaining unit further command or support relation-ship by:
Direct support[1]	Parent unit	Parent unit	Parent unit	Supported unit	Supported unit	Parent unit; supported unit	Supported unit	See note[1]
Reinforc-ing	Parent unit	Parent unit	Parent unit	Reinforced unit	Reinforced unit	Parent unit; reinforced unit	Reinforced unit; then parent unit	Not applicable
General support–reinforc-ing	Parent unit	Parent unit	Parent unit	Parent unit	Reinforced unit and as required by parent unit	Reinforced unit and as required by parent unit	Parent unit; then reinforced unit	Not applicable
General support	Parent unit	Parent unit	Parent unit	Parent unit	As required by parent unit	As required by parent unit	Parent unit	Not applicable

Note: [1] Commanders of units in direct support may further assign support relationships between their subordinate units and elements of the supported unit after coordination with the supported commander.

In addition to understanding the task organization, planners need to appreciate command and support relationships (see Tables 10-1 and 10-2). At the most basic level, these relationships identify who is responsible for resupply and who supports whom within the task organization. With the national caveats and international agreements, we know what is authorized, but command and support relationships reveal exactly who is responsible.

Although a command relationship may change, it does not necessarily mean the support relationship will also change. A company may be attached to a different battalion for a specific mission, but the original support relationships remain unchanged. This will have an impact on resupply operations and on the overall concept of support. It is vital that logisticians know the impacts and advise brigade commanders accordingly.

Another implication of command and support relationships that is often overlooked concerns the brigade support area (BSA). Many units, such as logistics support companies from both multinational and U.S. formations, can be located and operate inside the BSA. Higher echelons of logistics can be tenants inside the BSA. Elements of the brigade engineer battalion are also generally BSA tenants. The BSA houses not just the brigade support battalion (BSB), but a conglomeration of formations that have converged in one location under the control of the BSB commander. This makes the command and support relationships critical within the BSA.

The BSB cannot possibly defend the BSA by itself. Therefore, the BSB commander must develop a command relationship with the tenant units and have it approved by the brigade commander. This relationship inside the BSA is called tactical control (TACON). Tactical control is the authority over forces that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned.[6]

Defend is a maneuver-centric task and an assigned mission; therefore, command relationships must be clearly defined. Every tenant unit must be integrated into the base defense plan. This requires clear guidance from the brigade commander and active participation by every Soldier.

Although employment location and terrain clearly dictate who provides support and security, available assets are also an important consideration. It is the logistician's responsibility to advise the commander on these issues, ensure there is a clear picture of all available logistical support assets across the brigade area of operations, and avoid placing all direct support responsibilities on the BSB.

Task-organizing multinational companies or platoons with other nations' task forces increases combat power and capability; however, it also creates shortfalls in logistics. In terms of national caveats, it is possible that a nation may not have agreed to feed and fuel attachments, generating a logistics shortfall. For example, task-organizing a Danish tank company to a Romanian task force forces the brigade logistics officer to consider how this temporary task organization change will be sustained. With no task organization change, the Danish tank company receives its sustainment from the Danish logistical company and the Romanian task force receives its supplies from the Romanian logistics company. With the task organization change, the Romanian logistics company cannot conduct sustainment operations for the Danish tank company. Because of incompatible equipment, the Romanian logistics company cannot cross-level repair parts or provide fuel to the Danish tank company. Therefore, the Danish logistics company must maintain its support relationship with the attached Danish tank company.

The problem remains when task-organizing U.S. Army companies or platoons with other nations' task forces. For example, a U.S. tank company is attached to a Romanian task force. The Romanian forward support companies are not equipped to make repairs on U.S. equipment, and fuel compatibility is a challenge because U.S. forces use jet propellant (JP8) and NATO forces use diesel fuel. The Romanian task force also cannot feed the U.S. formation because of national caveats. The solution may be to have the U.S. forward support company remain in direct support with the attached U.S. tank company or the BSB, sending supplies to the Romanian task force for the U.S. tank company.

Also, who is responsible for reporting logistics data for the attached U.S. formation? This requires synchronization and a common understanding of the support plan. Without understanding task organization changes and command support relationships, units will struggle to figure out who is supporting whom.

Key Enabling Systems

The next step is for logisticians to help their brigades see themselves in terms of combat power. Logisticians must help their brigades to better visualize combat power by understanding the key enabling systems available. Logisticians in U.S. formations must look at the unit's modified tables of organization and equipment, be cognizant of key battlefield equipment, and zero in on prescribed pacing items. They should look at the key enabling systems by warfighting function (see Table 10-3 on page 60) and assess readiness by using the methodology of "shoot, move, communicate, and sustain."

Why do we need to track equipment by warfighting function? Equipment is designed to fulfill a specific mission and purpose. For example: the M9 armored combat earthmover (ACE), high-mobility engineer excavator (HMEE), and D7 bulldozer are critical enablers during defense preparation. If the unit does not track this equipment properly, then it may not be fully mission capable when needed. Conversely, when the unit transitions back to the offense, assault breacher vehicles may be the most needed pieces of equipment. Understanding the mission, the equipment, and what the BCT wants to achieve is a balancing act. By understanding the key enabling systems, the logistician can recommend a shift in maintenance priorities in order to support mission requirements. This applies equally to multinational formations.

What primarily concerns logisticians is equipment used to distribute, refuel, store, lift, recover, and evacuate personnel and equipment. The multinational S-4 or logistics company commander must provide the SPOs with information about their logistics equipment. By understanding the logistics key enabling systems, one can glean information about bulk fuel capacity, evacuation assets, and recovery assets. Figure 10-1 on page 61 provides an example of brigade combat power from a rotation at JMRC, while Figure 10-2 provides a graphic representation of a brigade's logistics posture CL I, CL III (B), and water.

Logisticians must define assets relative to combat power and develop ways to display such information in an easy-to-read format. The graphic representation of the combat power and sustainment capacities of the formations is called the logistics common operational picture (LCOP). The LCOP is the start point, or what we call start exercise data, which allows the unit to see itself logistically before operations commence. Without start exercise baseline data, logisticians cannot provide viable or suitable concepts of support capable of sustaining maneuver task forces.

Table 10-3. Sample listing of critical equipment by warfighting function.

Movement and Maneuver	Protection	Intelligence
M1A2 Abrams Tank	M9 Armored Combat Earthmover (ACE)	Prophet AN/MLQ-40
M2/M3/M6/M7 Bradley Vehicle	High-Mobility Engineer Excavator (HMEE)	Trojan AN/TSQ-190
M113 Armored Personnel Carrier	M31E1 Biological Integrated Detection System	Distributed Common Ground System-Army (DCGS-A)
M1064 Mortar Carrier	D7 Medium Bulldozer	Counterintelligence and Human Intelligence (HUMINT) Automated Reporting and Collection System (CHARCS)
M1 Assault Breacher Vehicle	AVLB Armored Vehicle-Launched Bridge	Shadow RQ-7 Unmanned Aircraft System
	Joint Assault Bridge	Raven RQ-11 Unmanned Aircraft System
	M05001 Grader	

| Fires	Sustainment	Mission Command
M119 Howitzer	Heavy Equipment Transport System (HETS)	Joint Network Node (JNN)
M777 Howitzer	Palletized Load System (PLS)	Command Post Node (CPN)
M109A6 Self-Propelled Howitzer	Load Handling System (LHS)	Command Post of the Future (CPOF)
Q36 Radar	MTV Wrecker M1089	CONET Network
60mm Mortar	M88A1/A2 Recovery Vehicle	Tactical Airspace Integration System (TAIS)
80mm Mortar	2.5K Fuelers	Air and Missile Defense Workstation (AMDWS)
120mm Mortar	5K Fuelers	Blue Force Tracker (BFT)
Advanced Field Artillery Tactical Data System (AFATDS)	M997 Field Litter Ambulance (FLA)	Force XXI Battle Command Brigade and Below (FBCB2)
	M113 Armored Medical Evacuation Vehicle	

COMBAT POWER GROUND TRUTH vs. ROTATIONAL TRAINING UNIT (RTU) REPORTS

Legend:
- 100-90% (green)
- 89-75% (yellow)
- 74% & Below (red)

TF Viper (GRIZZLIES)

MODEL	OH	FMC	026	BD	%
M2A3	10	10			100%
M1068A3	1	1			100%
M577	1	1			100%
M113A3	13	13			100%
RQ-11 (Raven)	1	0	0		100%
TAB C-79 (Rom APC)	10	6			60%
DAC FUELER	1	1			100%
AMBULANCE	1	1			100%

TF Viper (WARHOGS)

MODEL	OH	FMC	026	BD	%
M1A2	4	4			100%
M7 BFIST	1	1			100%
M113 APC	27	27			100%
MORTAR APC	4	4			100%
WISENT 1	2	2			100%
LEOPARD 2A5	4	4			100%
WHL RECOV	2	2			100%
AMB PIR APC	4	4			100%
IFV CV9035	12	12			100%

TF Saber (RAPTORS)

MODEL	OH	FMC	026	BD	%
M2A2	13	11	1		85%
ABV	3	0	1		0%
MICLIC	6	3	0		50%
M1068A3	2	2			100%
TROJAN	1	1			100%
SHADOW UAV	4	3	1		75%
M984	1	1			100%
M88A1	1	1			100%
M1075 PLS	2	2			100%

*2 ABVs circle x for mission

TF Thunder (TIMBERWOLVES)

MODEL	OH	FMC	026	BD	%
M1 SEPS	21	17	2		81%
M2A3 IFV	28	25	3		89%
M3A3 BFIST	4	3	1		75%
M1064 FOV	4	3	1		75%
M88	6	4	1		67%
M978 Fueler	4	4			100%
M1089A1	1	1			100%
HEMMT 1120	4	4			100%
M577	4	4			100%
M1068A3	5	5			100%
FOV M113A3	12	12			100%
JAVELIN	11	11			100%
VSAT	1	1			100%
M1076	1	1			100%
M1075 PLS	4	4			100%

TF Muleskinner (ADLER)

MODEL	OH	FMC	026	BD	%
M978	8	8			100%
M1075 PLS	7	6	1		86%
M105 HIPPO	2	2			100%
M984	1	0	1		0%
M88A2	1	1			100%
DSETS	1	0	1		0%
VSAT	1	1			100%
STT	1	1			100%

TF Dragon (VAMPIRES)

MODEL	OH	FMC	026	BD	%
M1075 PLS	3	2	1		67%
M1076 PLS TRL	3	3	1		100%
M88A2	1	1			100%
M978A4 Fueler	1	1			100%
M109A6	6	5	1		83%
M992 FAASV	6	5	0		83%
M1068A3	2	2			100%
M149A2 WB	1	1			100%
Q36	1	0	0		0%
Q50	1	0			100%

*Q36-Halfshaft Assembly Broke (Degraded but operational)

Figure 10-1. A graphic representation of a brigade's combat power/key enabling systems.

Logistics Status (LOGSTAT) Ground Truth vs. RTU LOGSTAT

Legend:
- 100-90% (green)
- 89-75% (yellow)
- 74% & Below (red)

TF Black Viper (GRIZZLIES)

Supply	Max Cap	OCT #	RTU #	%
CLI (DOS)		318 CS	318 CS	
CIII (B) JP8				
CLIII (B) DF2	1370	1370		100%
MOGAS	80	80		
WATER	400	400		100%

TF Thunder (TIMBERWOLVES)

Supply	Max Cap	OCT #	RTU #	%
CLI (DOS)		576 CS	576 CS	
CIII (B) JP8	9200	9200	9250	100%
CLIII (B) DF2				
CLIII (B) AVGAS/gal				
WATER	2500	2350	2350	94%

TF Muleskinner (ADLERS)

Supply	Max Cap	OCT #	RTU #	%
CLI (DOS)		3DOS	3DOS	
CIII (B) JPg/gal	24000	16500	16500	69%
CLIII (B) DF2/gal	4500	4200	4500	93%
CLIII (B) AVGAS/gal				
SMIFT Water/gal	5000	2100	2100	42%
JP8 (CSSB 5K)	13500	13000	13000	96%

TF Muleskinner: FLE

CIII (B) JPg/gal	9400	9300	9300	99%
CIII (B) DF2/gal	2300	550	550	24%
HIPPO Water/gal	2000	1700	1700	85%

TF Viking (WARHOGS)

Supply	Max Cap	OCT #	RTU #	%
CLI (DOS)		2DOS	2DOS	
CIII DM	3170	2800	2800	88%
CLIII (B) DF2				
CLIII (B) AVGAS				
WATER	1585	1585	1585	100%

TF Saber (RAPTORS)

Supply	Max Cap	OCT #	RTU #	%
CLI (DOS)		2DOS	2DOS	
CIII (B) JP8		See 2-12		
CIII (B) DF2		See 2-12		
CLIII (B) AVGAS	110	110	110	100%
WATER	400	350	350	88%

TF Dragon (VAMPIRES)

| Supply	Max Cap	OCT #	RTU #	%
CLI 134Pax		3DOS	3DOS	
CIII (B) JP8	2300	1500	2000	65%
CIII (B) DF2				
CLIII (B) AVGAS				
WATER	400	400	400	100%

Figure 10-2. A graphic representation of a brigade's logistics posture CL I, CL III (B), and water.

COAs and Concepts of Support

Developing concepts of support requires logisticians (the BSB commander, brigade S-4, and the SPO) to understand the brigade's concept of the operation. This is the "what and how" the brigade intends to fight. Course of action development is a critical step, and logisticians must be represented throughout the process and provide input.

"A COA is a broad potential solution to an identified problem. The COA development step generates options for subsequent analysis and comparison that satisfy the commander's intent and planning guidance. During COA development, planners use the problem statement, mission statement, commander's intent, planning guidance, and various knowledge products developed during mission analysis."[7]

" ... COA development greatly aids in producing comprehensive and flexible COAs within the time available. To save time, the commander may also limit the number of COAs staffs develop or specify particular COAs not to explore. Planners examine each prospective COA for validity using the following screening criteria:

- Feasible. The COA can accomplish the mission within the established time, space, and resource limitations.

- Acceptable. The COA must balance cost and risk with the advantage gained.

- Suitable. The COA can accomplish the mission within the commander's intent and planning guidance.

- Distinguishable. Each COA must differ significantly from the others (such as scheme of maneuver, lines of effort, phasing, use of the reserve, and task organization).

- Complete. A COA must incorporate –

    ○ How the decisive operation leads to mission accomplishment.

    ○ How shaping operations create and preserve conditions for success of the decisive operation or effort.

    ○ How sustaining operations enable shaping and decisive operations or efforts.

    ○ How to account for offensive, defensive, and stability or defense support of civil authorities tasks.

    ○ Tasks to be performed and conditions to be achieved."[8]

The logistician's job is to use the running estimates for key enabling systems and combat power to determine how to provide sustainment to the maneuver forces. The logistician assesses the logistics feasibility of each war-gamed COA, determines critical requirements for each logistics function (classes I through VII, IX, and X), identifies potential problems and deficiencies, and decides if support can keep up with the tempo of the operation.

Logisticians must constantly assess the status of all logistics functions required to support the COA and compare it to available assets. To a logistician, the availability of the assets includes not only what equipment is on the battlefield, but also what is not mission capable (NMC). The logistician must then let the BCT commander know whether or not NMC equipment will be available in time for mission execution. What the commander needs to know is what can be fixed and available prior to crossing the line of departure, not merely receiving information on what is down. Think about what can be done to influence the fight. This requires communication between the brigade senior warrant officer and the SPO.

The following is an example of a logistician providing a solution to the problem and how the solution supported the operation:

SPO: "Chief, the combat slant report currently has 15 M1A2 NMC across the BCT, the mission will occur 48 hours from now. I need to know how many tanks we can get fixed prior to 48 hours from now."

The Senior Warrant Officer: "Sir, I can get seven of the M1A2s up within 48 hours; we have parts available in the authorized stockage list (ASL). I recommend that we control-substitute parts from remaining M1A2s that are NMC, and I can bring up an additional five to fully mission capable status. However, by control-subbing parts from NMC M1A2s, the BCT will have three M1A2s NMC prior to mission execution."

SPO or BCT S-4 to the BCT Commander: "Sir, I can have seven M1A2s fully mission capable within 48 hours; parts are available on the ASL. Recommend that we control-substitute parts from the remaining NMC M1A2s. By doing so, we can bring up five additional M1A2s; however, three will remain NMC prior to crossing the line of departure."

Finally, logisticians must also identify potential shortfalls in logistics and develop mitigating strategies to eliminate or reduce the effects of these shortfalls. Accurately predicting requirements for each logistics function can ensure continuous sustainment. Logisticians verify movement times and ensure assets are available to support each COA. What comes out of the COA approval is a warning order that provides the overarching brigade mission and subordinate battalion missions (the main effort and supporting efforts), the updated commander's intent, the concept of the operation (what unit is going where and what it will be doing), principal tasks assigned to subordinate units, updated timelines, and rehearsals.

Once logisticians understand the approved COAs, they can then write concepts of support. When logisticians take part in COA development, the concept of support outlines are scripted simultaneously in a parallel and integrated process, not after the brigade's planning efforts. Logisticians run into problems when they wait to produce the concepts of support until after the operation orders are produced. The concepts of support detail how logisticians will sustain units throughout each phase of operations.

Rotations at JMRC generally occur in three phases: movement to contact, defend, and attack. Three operational phases require three separate and distinct concepts of support. A change in phase is a change in task; a change in task is a change in the concept of operation. If the concept of the operation changes, so does the concept of support. Once the concept of support is scripted, the logistics plan becomes an executable operation.

Support Rehearsals

The logistics leaders within the brigade must ensure that other leaders understand the concept of the operation, the concept of support, and the synchronization of movement, maintenance, medical evacuation, and resupply. The brigade's logisticians do this by conducting support rehearsals.

In accordance with Field Manual (FM) 6-0, *Commander and Staff Organization and Operations*, "Rehearsals allow leaders and their Soldiers to practice key aspects of the concept of operations. These actions help Soldiers orient themselves to their environment and other units before executing the operation. Rehearsals are the commander's tool to ensure staffs and subordinates understand the commander's intent and the concept of operations."[9]

"The support rehearsal helps synchronize each warfighting function with the overall operation. This rehearsal supports the operation so units can accomplish their mission. Throughout preparation, units conduct support rehearsals within the framework of a single or limited number of warfighting functions. These rehearsals typically involve coordination and procedure drills for aviation, fires, engineer support, or casualty evacuation. Support rehearsals and combined arms rehearsals complement preparations for the operation. Units may conduct rehearsals separately and then combine them into full-dress rehearsals. Although these rehearsals differ slightly by warfighting function, they achieve the same result."[10]

The rehearsal illustrates the commander's intent and creates the conditions for common understanding of the concept of the operation. Commanders use rehearsals to identify additional friction points and increased risks and to develop mitigation techniques for both. Logisticians conduct sustainment rehearsals to confirm that subordinate logistics units understand when, where, and how sustainment is going to occur through all phases of operations over time and space. The rehearsal allows leaders to specify what the brigade is going to do and how the logisticians will sustain the fight.

A rehearsal script is key to understanding the operation. A script is the start point that focuses the rehearsal, organizes it, and keeps it on track. The support rehearsal script sets the conditions for synchronization throughout each phase of the operation, ensuring all participants know their roles within the rehearsal and what they will be expected to brief. Without a script to focus the rehearsal, the lack of synchronization results in a lack of common understanding of time, space, adjacent units, and subordinate logistics formations.

Scripting has some challenges. For example, reading the script verbatim may cause inflexibility during rehearsal execution. It is important that subordinate units are aware of their opportunities to relay pertinent information and coordinate all issues. In multinational formations, if the partners, because of language barriers, do not understand what they are reading or are confused by what is said, it might create a logistics shortfall during execution. If the script has not allowed room for deviation, or no one has taken the time to ensure all U.S. jargon has been clearly translated, both the U.S. Soldiers and multinational partners will be set up for failure. The script should generate an opportunity for the use of creativity, critical thinking, and initiative.

Conclusion

Multinational allies and partners come to the JMRC to train alongside U.S. formations, offering opportunities to train together and to grow stronger and better. These opportunities include improving logistics operations and interoperability. In order to accomplish this effectively, logisticians must understand the complexities of working in multinational formations and the unique challenges logisticians face in the form of national caveats and orders, complex task organizations, unorthodox command and support relationships, unanticipated key enabling systems, and the inclusion of all multinational partners in the development of the concepts of support and sustainment rehearsals.

Logisticians cannot be the weak link in a multinational operation. All who come to JMRC arrive prepared to train with open minds and ready to learn. JMRC fulfills its obligation to make every unit better.

Endnotes

1. Army Doctrine Reference Publication (ADRP) 3-0, *Unified Land Operations*, 16 MAY 2012, p. 3-6.

2. Field Manual (FM) 6-0, *Commander and Staff Organization and Operations*, 05 MAY 2015, p. D-1.

3. ADRP 5-0, *The Operations Process*, 17 MAY 2012, p. 2-15.

4. FM 6-0, Change 1, *Commander and Staff Organization and Operations*, 11 MAY 2015, p. B-5.

5. Ibid., p. B-6.

6. Ibid., p. Glossary-9.

7. FM 6-0, Change 2, *Commander and Staff Organization and Operations*, 22 APR 2016, p. 9-16.

8. Ibid., p. 9-17.

9. FM 6-0, *Commander and Staff Organization and Operations*, 05 MAY 2014, p. 12-1.

10. Ibid., p. 12-2.

Note: A version of LTC Gamez's article was published in *Army Sustainment*, September-October 2015.

Chapter 11

What Do You Mean I Am Supporting a Multinational Brigade Commander?

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The United States Army has a long, successful history of working together with multinational partners and allies to achieve common military objectives. Spanning both world wars to recent operations in Afghanistan and Iraq, our logisticians have continually demonstrated their ability to plan, coordinate, and synchronize logistics to meet the commander's intent and achieve mission requirements. As written in U.S. Army Training and Doctrine Command Pamphlet (TRADOC PAM) 525-3-1, *The U.S. Army Operating Concept, Win in a Complex World*, "Army forces must ... integrate joint, interorganizational, and multinational partner capabilities and campaigns to ensure unity of effort and accomplish missions across the range of military operations."[1] The U.S. Army and its logisticians will continue to do so in the future.

Military theorist Carl von Clausewitz said it best: "Everything in war is very simple, but the simplest thing is difficult."[2] The idea of U.S. forces supporting a multinational brigade combat team (MBCT) is conceptually simple, but the reality is hard. Despite common logistics principles and objectives, we are challenged with the complexities of logistics support. Logisticians must consider and understand each nation's national caveats, logistical structures, equipment compatibilities, and supply management procedures, and find ways to mitigate the challenges and issues. So where does the brigade senior sustainer fit into the process? At the Joint Multinational Readiness Center (JMRC) located in Hohenfels, Germany, observations substantiate addressing the following to properly support an MBCT: first, the senior sustainer must balance diplomacy and mission accomplishment. Next, the logistician must understand interoperability and its effect on sustainment operations. Finally, it is essential to develop a logistics common operational picture (LCOP) that not only satisfies mission requirements, but also provides the MBCT commander with information that enhances the visualization of combat power and how the sustainment function will support the mission by providing seamless logistics operations.

Diplomacy Versus Mission Accomplishment

The brigade support battalion commander or the senior sustainer in a brigade combat team, once told he/she is supporting an MBCT commander, will quickly go through four of the five stages of grieving. Using a somewhat humorous take, the emotional responses could resemble something like this:

Denial: "Sir, you are kidding me, right? Don't the multinational allies/partners have their own structure?"

Anger: "This is insane; why on earth would I do this? We'd never do this for real!"

Bargaining: "If there was a multinational support battalion that could do this, then this would make sense."

Acceptance: "This is my assigned mission and I will execute."

Note: Depression was deliberately omitted because the U.S. Army has mastered resiliency.

Having taken the emotional response off the table, let us get down to the business of leading and supporting an MBCT. First, consider that our North Atlantic Treaty Organization (NATO) allies and a majority of Partnership for Peace program nations have professional armies. The American experience for the last 15 years has been in Afghanistan and Iraq training developing armies. We cannot use the same template when working with our multinational partners and allies. Specifically, most of our allies modeled their professional armies similar to the U.S. Army. Therefore, these armies' logistics structures are built similar to ours. This is not about building an army from scratch, but merely seeing and working with the differences in capabilities, tactics, techniques, and procedures. Understanding multinational logistics is basically understanding our own U.S. logistics model. In essence, what the senior logistician must do is develop a unity of effort and harmonization of logistic activity across the MBCT, keeping in mind that all logisticians, regardless of nation, are committed to supporting their maneuver commanders.

Diplomacy, while valued, does not by itself produce the support plan, nor does it accomplish the sustainment mission. During the first engagement with all logisticians within the MBCT, the senior sustainer must determine how each nation will provide support through the sustainment capabilities. The sustainment capabilities, as described in Army Doctrine Publication (ADP) 4-0, *Sustainment*, are as follows:

- **Logistics** — maintenance, transportation, supply, field services, and distribution.

- **Personnel services** — human resource support, financial management, and legal support.

- **Health service support** — casualty care, medical evacuation, and medical logistics.

In addition to the overall sustainment capabilities, the senior sustainer must ask specifically about bulk-fuel capacities, types of fuels required, evacuation platforms, recovery assets, distribution capabilities, and other critical information. Each nation contributing forces to the fight will generate logistics requirements. Instead of the U.S. senior sustainer trying to figure it out alone, why not ask each nation's logisticians how they would sustain their formations using the U.S. sustainment capabilities framework to gain fidelity? As an example, using artillery ammunition, the senior sustainer may want to ask how the artillery battalion resupplies ammunition. Interestingly, the Czech Republic's army resupply system is similar to ours in that it uses combat-configured loads (CCLs). When dealing with CCLs, the first CCL is at the gun line, the second CCL is with the sustainment company (forward support company), and the third CCL is at the brigade support battalion. What the senior logistician needs to know is what type of ammunition is needed (152 mm versus 155 mm), how the multinational battalion will move and store the ammunition, and what different types of primers, fuses, and charges are needed. These questions should all be considered because multinational artillery battalions use different artillery cannons than U.S. formations do. The bottom line is that nothing presented here for consideration is new to routine logistics planning. Take the complex and simplify the logistics problems to something tangible.

Finally, the senior sustainer must discuss functions — who is doing what. For example, most multinational formations do not have support operations officers, so an explanation of this unique duty position is required. Who is monitoring supply statuses, conducting forecasts for the MBCT, and who is monitoring the logistics internal to the BCT? Who is looking externally to the MBCT

to bring in commodities and supplies to the brigade support area from a higher echelon? Lastly, who is executing the missions to each of the battalions/squadrons within the BCT? Once these responsibilities are delineated, the senior sustainer can establish clear roles and responsibilities synchronizing the MBCT logistics field grade leadership. These roles and responsibilities should be agreed upon prior to mission execution. When a logistics issue arises, there is no separate need for diplomacy. It is now time for accountability based on the established roles and responsibilities.

Having to apply diplomacy after the mission starts is a course correction due to lack of a synchronized logistics plan. The senior sustainer may need to use diplomatic techniques because a unit either failed to plan logistics in detail, failed to establish a logistics system capable of supporting the MCBT, or did not provide clear expectations up front for all the logisticians involved. These situations then caused the U.S. or multinational logistics officers to operate under assumptions or implied expectations.

Do not misunderstand the point. It is not that the senior sustainer will not need to exercise diplomacy even when things go well. Certainly, diplomacy gets a foot in the door. However, once in the door, the entryway must be open and clear for professional discussions to understand each nation's logistics capabilities and capacities, and logistics shortfalls. This understanding leads to recommendations to mitigate the shortfalls, then ultimately provides a way ahead for all to support the MBCT. To best support the MBCT, the senior sustainer must understand interoperability.

Interoperability

NATO's Backgrounder publication *Interoperability for Joint Operations* states: "Interoperability allows forces, units or systems to operate together. It requires them to share common doctrine and procedures, each other's infrastructure and bases, and to be able to communicate with each other."[3]

Standardization agreements (STANAGs) are agreements among all NATO members that establish processes, procedures, terms, and conditions for common military or technical procedures or equipment. STANAGs provide common operational and administrative procedures and logistics so one alliance member's military can use the support and supplies of another member's military. A national caveat is a restriction that NATO members place on the use of their forces.

While the doctrine is scripted this way, the sustainment observer coach trainers (OCTs) at the JMRC find this meaning broad-brushed and lacking clarity, as NATO doctrine is primarily written at the strategic and operational levels of war. What the doctrine does not describe is supporting the MBCT at the tactical level of war.

To attain interoperability, do not overthink or overcomplicate the problem. Tanks need fuel, artillery pieces need ammunition, vehicles need to be repaired, supplies need to be distributed, and Soldiers need medical support, food, and water. Our partners and allies bring knowledge on how best to support their own nation's requirements. Consider their techniques and procedures. What we need to understand is that sustaining an MBCT is a collective problem. What we have to get to is a shared solution in sustaining the MBCT. The U.S. Army does not have the monopoly on great ideas. For interoperability to occur at the MBCT level, the senior sustainer must consider the following: understanding the task organization, integrating communications,

and synchronizing allied/partner capacities and capabilities. Based on these considerations, the senior sustainer must develop standards and procedures agreed upon by task-organized nations to commonly operate in the MBCT.
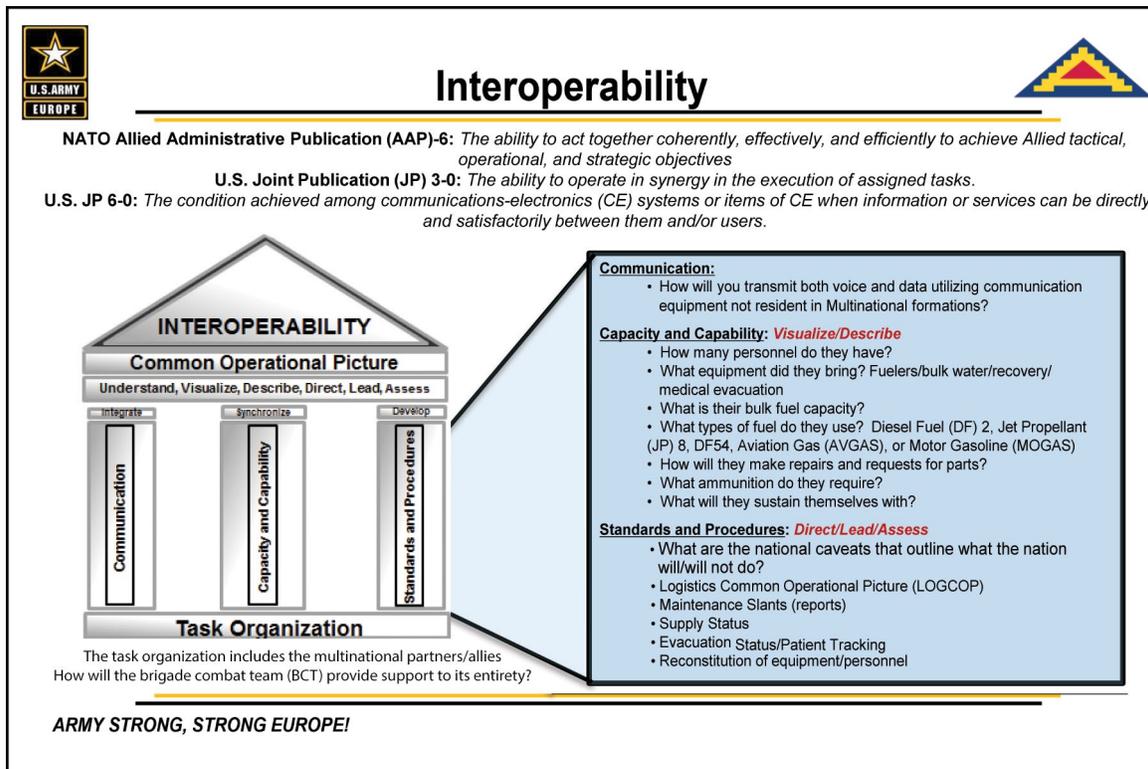
Figure 11-1. Interoperability defined, showing how a unit task organization is the foundation for the supporting pillars of integrating communications, synchronizing capacities and capabilities, and developing standards and procedures.

Task organization: The foundation of interoperability is a full understanding of the task organization and what the MBCT commander is using the task organization to achieve. A task organization chart provides the MBCT commander a visualization tool to describe the formation. He can view the task organization using the framework of the U.S. Army warfighting functions. The MBCT commander can familiarize himself with the capabilities and procedures of the battalions/squadrons under his command. This allows him to develop a plan that takes advantage of the strengths brought by each ally or partner nation. He can also discern whether a particular nation cannot perform a specific mission due to constraints regarding personnel, training, equipment, or national caveat. Understanding what each nation can do, but more importantly what it cannot, enables the MBCT commander to correctly generate a proper task organization. The task organization chart provides the senior sustainer with information about the sustainment capability of the MBCT and a visualization of which nations brought sustainment companies. Just by studying the task organization chart, commanders can see some of the logistics gaps within the formation, such as which units did not bring sustainment or health service support to the fight. In addition, the task organization will identify possible friction points, as a multinational task force may have different nations task-organized underneath the parent

organization. It is reasonable to believe that the multinational task force headquarters will report the different nations' logistics status; however, do not assume this is true. Assign responsibility to the task force S-4 and team and ensure they understand the reporting requirements.

Integrate communications: JP 3-16, *Multinational Operations*, states: "Communications are fundamental to successful multinational operations. Planning considerations include frequency management, equipment compatibility, procedural compatibility, cryptographic and information security, identification of friend or foe, and datalink protocols."[4]

In the last 15 years, the U.S. Army has enjoyed communications on built-up forward operating bases, falling in on the last unit's network. We simply changed the domain accounts for network access and the Army "kept rolling along." What we train at the combat training centers is the opposite, conducting brigade-level training in an austere environment with no preexisting communications backbone. What you brought is what you have. Therefore, to be successful, senior sustainers should first understand the capability of the communications platforms resident in their battalions. They must then understand the capabilities, limitations, and constraints of the communications platforms resident in the MBCT. As an example of a limitation and constraint, the U.S. Army has Command Post of the Future (CPOF), whereas the multinational formations do not. Also, radio systems may be incompatible due to differences in encryption levels for frequency modulation (FM) communication; this means a Type I radio system will not communicate with a Type III radio system. In these situations, the multinational formations may have to transmit over FM unsecure.

The S-6 communications officer has to know the senior sustainer's signal expectations. Presented below are some questions that will assist in describing communications expectations:

- What do you want to do with the communications networks? (use of data, voice, video, or imagery)

- How far do you need to communicate? (use of Harris radios, retransmission sites, very high frequency [VHF]/high frequency [HF])

- Who do you need to talk to and for what purpose? (use of PowerPoint, voice)

- Do you need collaboration tools or does messaging satisfy the requirement?

- Are we using the maximum capability of our communications platforms? (SharePoint, Blue Force Tracker, Coalition Net (CONET), the portal, Adobe Connect, CPOF, Joint Capabilities Release (JCR), Ventrilo Voice over Internet Protocol software)

- Have you identified friction locations where you cannot talk? (dead-space areas)

- With what you want to do, do you have sufficient bandwidth to make communications work? If not, what can you do with the bandwidth allocation available?

Consider all the staff functions (personnel, intelligence, operations, internal logistics, external logistics, the supply support activity, medical, and maintenance) in the communications plan.

While the senior sustainer may be task-organized under the MBCT headquarters, the U.S. Army sustainment community will still require sustainment information specific to the U.S. formations.

Equally, our partners and allies that provide forces to the MBCT will also have to report their logistics information through their national channels. This may potentially increase bandwidth requirements and create additional reporting requirements for units in the MBCT. Therefore, if signal requirements or reporting protocols are not solidified up front, unnecessary friction and confusion may result.

The senior sustainer should also integrate the sustainment automation support management officer (SASMO) in logistics communication planning. The SASMO's focus is solely sustainment information systems and supporting a tactical network capability by configuring very small aperture terminals (VSATs) and Combat Service Support Automated Information System Interface (CAISI). Since sustainment information systems require an extended network that reaches to remote sites normally not covered by mission command networks and/or network enterprise center (NEC), the VSAT and CAISI tactical networks are the primary means for sustainment system connectivity. The SASMO designs and sustains the Army Tactical Sustainment information system and network. The SASMO ensures that the Global Combat Support System-Army (GCSS-Army), Standard Army Ammunition System-Modernization (SAAS-MOD), Transportation Coordinator-Automated Information for Movements System (TC-AIMS), Electronic Military Personnel Officer (EMILPO), and Medical Communications for Combat Casualty Care (MC4) are working properly. The SASMO is essential for sustainment communications planning. Even by integrating the S-6 with SASMO, the senior sustainer still may not be able to communicate with all multinational elements. Therefore, we need to use logistics liaison officers (LNOs).

Our multinational partners may not have the same communications equipment; however, they do have command posts (CPs). If there is an allied/partner shortfall in communications capability, consider assigning an LNO to capture pertinent logistics information for the command. Consider the following questions, should you decide that an LNO is required:

- With whom do you need to liaise?

- How many full teams do you need?

- What capabilities does the liaison package need?

- Who will source the personnel and equipment?

- Where will the LNOs be positioned within the CP?

The JMRC OCTs recommend using a two-person LNO team that includes an officer and enlisted Soldier. The team should have a vehicle, JCR, one AN/VRC-90F (long-range radio), and a simple key loader (SKL). To integrate properly in a multinational CP, the team must be talented in logistics and demonstrate suitable and adaptable personality traits. The senior sustainer must arm the LNO team with requirements: "This is what I want you to do and what I need you to report." Having an LNO team go to a multinational CP without purpose, guidance, or direction is absolutely useless.

Integrating communications is a part of understanding interoperability. The senior sustainer must give clear guidance to the S-6 in order to effectively mission command the MBCT's sustainment activities. The days of, "S-6, just make it work," no longer exist.

Synchronize partner capacity and capability: The senior sustainer must be aware of all national caveats and support agreements between and among participating nations. This understanding sets the stage for proper integration of logistics support of the MBCT. Further, the senior sustainer must logistically understand the formation. Commanders or senior sustainers must organize a working group to capture and understand each unit's capability and capacity in the task organization. The following questions should be discussed to gain a baseline understanding of the MBCT:

- **Food:** How are you providing Class I rations for your formation? Is it a national responsibility (self-supporting through contracts) or is the U.S. providing transportation support to distribute Class I?

- **Fuel:** What is the maximum storage capacity of the sustainment company? What type of fuel is required to sustain the multinational task force?

- **Water:** What is the maximum storage capacity at the sustainment company?

- **Medical:** Do you have evacuation platforms? What are their maximum litter capacities? How many providers did you bring and what are their specialties? Do you have a supply chain for medical supplies or is there an agreement that another nation/unit can assist you with medical resupply?

- **Maintenance:** How will you provide support to your maintenance program, conduct recovery operations, and conduct repair parts management?

- **Distribution systems:** How will you move your supplies or Soldiers? How many prime movers do you have to accomplish this task?

- **Ammunition:** In case of ammunition shortages, did you consider how to request more? Do you know the process for requesting ammunition? For artillery, what are the calibers of rounds and are there different primers, fuses, and charges associated to fire the artillery piece? Do you have the prime movers to move the artillery ammunition? Describe a multinational artillery CCL. How does the CCL move? Who is controlling/managing ammunition requirements and resupply?

At the JMRC, OCTs have heard many commanders state, "I wish I had known that before now." It is a good idea for the senior sustainer to conduct a logistics capabilities briefing to better educate commanders and their staffs about the MBCT sustainment capacities. More importantly, the senior sustainer can identify the shortfalls in logistics and develop mitigating strategies to overcome the shortfalls. A concerted effort to move equipment and personnel, including the assumption of risk (location and time), ensures that the senior sustainer is aware and can determine how best to support and sustain the MBCT.

Develop standards and procedures: The senior sustainer must develop standards and procedures for reporting, logistics status returns (time/frequency), and logistics synchronization meetings (time/agenda). The senior sustainer may have to explain why the information is needed or why the briefing criteria set for meetings needs to be followed. A logical start point may be demonstrating the U.S. logistics status report template, but keep an open mind; each nation brings its own way of logistics reporting and may have a better product that can be used. Remember, this a shared problem set that requires a shared solution and understanding.

All multinational representatives should agree on report formats and agree on who is responsible for reporting to whom. For example, in one of the infantry task forces within the MBCT, you might see a German battalion headquarters with one German mechanized infantry company, a Serbian mechanized infantry company, and a Romanian armored company. It is reasonable to believe that the German battalion headquarters is responsible for reporting logistics information to the senior sustainer's support operations officer and the MBCT S-4. However, do not assume anything. Ensure the German battalion headquarters understands the reporting requirements and that it is responsible for the entire task force, not just its own national elements. This clarification ensures that the standard for reporting is understood and the report returns are complete. Logistics reporting should include:

- Supply status (fuel, ammunition, and water) broken down by nation, if required.

- Combat power maintenance status.

- Reconstitution status (personnel and equipment).

- Casualty information.

When logistics standards and procedures are fully understood and agreed to by all nations, the MBCT can produce the LCOP.

The Logistics Common Operational Picture

The LCOP: JP 3-0, *Joint Operations*, defines COP as: "A single identical display of relevant information shared by more than one command. A common operational picture facilitates collaborative planning and assists all echelons to achieve situational awareness."[5]

CW4 Timothy N. McCarter, Sr., wrote in a 2008 article for *Army Sustainment* that " … an LCOP is a single and identical accounting of the logistics capabilities, requirements, and shortfalls in an area of operations shared between the supporting and supported elements. The LCOP allows the supporting elements to determine unit capabilities, forecast logistics requirements, synchronize logistics movements, and publish information that improves situational awareness at multiple echelons of support."[6]

CW4 McCarter was precisely correct then and his assertion about the LCOP remains applicable today. However, how do you display the LCOP to the MBCT commander? What logistics data is relevant? What does the MBCT commander need to know to make a decision? What feeds the LCOP? Have you established the appropriate standards and procedures to receive timely reports? Development of the LCOP is about disciplining the systems. There are several ways to produce an LCOP at the brigade level. The JMRC recommends the technique of giving a quick snapshot to the MBCT commander.

The snapshot of the formation should reflect the functionality of the MBCT's combat power, tracked by task force, battalion, or squadron level. The senior sustainer should track combat power by key enabling systems and by warfighting function, but also assess functional readiness by using the methodological framework of "shoot, move, communicate, and sustain." A multinational task force with different subordinate national companies in the task organization requires further tracking of key enabling systems of those subordinate national companies to holistically capture the full combat power within the multinational task force. Key logistical

enabling systems are different from maneuver assets. What primarily concerns logisticians is equipment used to distribute, refuel, store, lift, evacuate, and recover personnel and equipment. The logistician must also understand each nation's storage capacity of bulk fuel and water. An example of particular logistical concern is that some allied/partner countries may not have bulk fuel/bulk water-storage capacity; instead, their method of storage is five-gallon cans. That kind of information is essential to know up front instead of two days into the fight.

What does the data on an LCOP mean to the commander? The LCOP is used to provide data, which is consolidated into information to build knowledge (following the staff analysis) and provide the commander with an understanding of the brigade's logistics status. The staff officer must conduct the analysis and arrive at recommendations for the commander if the data is determined critical to report to the brigade commander. A simply formatted method to present that information is by capturing the "what, so what, which means, therefore" for all critical logistical shortfalls.

As an example, when a brigade S-4 is notified that the field artillery battalion's 155mm high explosive munitions are "red," that staff officer must present the data in a succinct and efficient manner. The brigade commander and his subordinate commanders do not have excess time to sit through daily battle update briefings and listen to shortfalls in supplies in each battalion. The staff must present recommendations to the commander on mitigations for these shortfalls, or present decisional options for the commander to engage external brigade resources.

As the brigade S-4 captures the shortfall in munitions, this provides the "what" of the narrative in the unit's problem. This is not all that a commander needs to know. Once the staff officer identifies the data, commanders also need to understand the "so what." This process can include answering questions such as: How does this affect the unit and what will this shortfall of artillery rounds affect? Why was there no resupply? What caused the unit to become red? When is the next scheduled resupply? Are there external resupply capabilities available?

The brigade S-4 continues to build information and knowledge of the problem by addressing the "which means" aspect of the shortfall. Questions to ask at this point help build recommendations to overcome the shortfall. For example, how does the staff mitigate the shortages of munitions? What fire missions are affected and how can the mission be changed if the munitions are not resupplied? Does the brigade have to delay a follow-on mission, attack, or counterattack due to the lack of effects on the objective?

Finally, the brigade S-4 must present the commander with the "therefore" aspect to the problem. The analysis of the original shortfall must culminate with a decision by the commander. For instance: How do I reallocate resources? What do I need to influence? What does the brigade S-3 recommend regarding changes to the tactical mission? After these aspects are presented, the commander can address the battalion's shortfall. Using the mnemonic method of "what, so what, which means, therefore" allows the commander to gain the understanding required for all logistical shortfalls. All staff officers, and specifically the brigade S-4, must use this succinct and efficient mnemonic technique to present recommendations for shortfalls in brigade logistics to the brigade commander.

Conclusion

The senior sustainer must fully understand the MBCT's task organization and understand what the formation can and cannot do. You are playing with the cards you have been dealt; make it the best hand you have got. Remember that being diplomatic alone does not develop the support plan, nor will it alone sustain the MBCT. It is about establishing clear roles and responsibilities to the logistics staff. The senior sustainer needs to create opportunities to develop a multinational logistics plan considering the essential role of interoperability. Integrate a communications plan that can provide the ability to mission command the MBCT's sustainment activity. Synchronize and understand MBCT logistics capabilities and capacities. Look for the gaps in logistics support and remedy those seams. Develop the standards and procedures that are agreed to by all participating nations. Finally, develop an LCOP that assists the MBCT commander in shaping future decisions.

Training to win in a complex world in a multinational environment is unique and challenging, but also offers outstanding opportunities to excel and to highlight the talents of the U.S. Army Logistics Corps. Successful logistics commanders are the ones who remain open to new ideas and realize that they can learn from other nations' armies as they also learn from ours. The experience of integrating joint, interorganizational, and multinational partner capabilities and campaigns to ensure unity of effort and accomplish missions is rewarding as well as challenging.

Standing side by side with our multinational allies and partners strengthens the alliance as part of the NATO collective defense. Moreover, the principles addressed here can be useful for sustainment leaders operating as part of the Global Response Force or regionally aligned forces, while conducting multinational contingency operations or global humanitarian assistance operations, as well as during direct-action missions. Logistics leaders must be ready and prepared to lead anywhere in the world.

Endnotes

1. U.S. Army Training and Doctrine Command Pamphlet (TRADOC PAM) 525-3-1, *The U.S. Army Operating Concept, Win in a Complex World*, 31 OCT 2014, p. 32.

2. Carl von Clausewitz, *On War*, (Princeton, Princeton University Press, 1976), p. 119.

3. NATO Backgrounder, *Interoperability for Joint Operations*, JUL 2006, p. 1.

4. Joint Publication (JP) 3-16, *Multinational Operations*, 16 JUL 2013, p. III-20.

5. JP 3-0, *Joint Operations*, 11 AUG 2011, p. GL-7.

6. CW4 Timothy N. McCarter, "Logistics Status Reports and the Logistics Common Operating Picture," *Army Sustainment*, NOV-DEC 2008, pp. 5-7.

Chapter 12

Multinational Logistics Interoperability

CPT Theresa D. Christie, Joint Multinational Readiness Center

Sun Tzu once said, "The line between disorder and order lies in logistics." This simple statement has been proven consistently throughout history, and the commander who can ensure secure, consistent supply for his or her Soldiers has the distinct advantage in any conflict. The art of logistics is difficult in any environment, and working with armies from different countries increases that difficulty.

In a multinational environment, the key difficulty is doctrinal differences. Task organization, equipment allocation, logistics infrastructure, and planning priorities vary from country to country and must be addressed early in the collaboration.

Because of these differences, forces must focus on the basics to ensure support across the supported units. During several early rotations conducted at the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany, three fundamentals arose as the key points of success or failure for multinational task force logistics: communication, cooperation, and equipment compatibility.

Figure 12-1. Macedonian and Swedish observer coach trainers discussing a recently completed situational training exercise lane during a JMRC rotation.

Communication

At the heart of any military operation, the ability and initiative to communicate with all key elements is vital to success, and this is a greater challenge within a multinational task force. All supported and supporting elements for the operation must open a dialogue as early as possible in the planning process and continue that dialogue for the duration of the operation. Although teamwork and unity are beneficial, the real focus should be on understanding unit organization and operational missions and impacts.

It may seem obvious, but not every military is structured similarly. From a logistics standpoint, the organic support structure at each level of command will vary from country to country. Fuel, transportation, maintenance, recovery, and field feeding assets may not be able to support as swiftly or directly, or they may be more efficient and expedite the process.

All units need to have a clear understanding of the logistics abilities and requirements for every unit, the processes used for sustainment, and the differences among the nations. With that information, all units must develop a concept of support for the operation that incorporates all of these elements and mitigates every shortfall. This concept is critical to continuous and properly anticipated support.

A persistent issue in any multinational operation is language. All units must work together to ensure they are clearly understood and that they clearly understand. This issue is not solved completely by using interpreters, although that is a very good start. Liaison officers need to be emplaced throughout the supported and supporting units to facilitate clear communication among all elements.

Also, doctrinal terms and acronyms need to be used minimally or thoroughly explained to ensure understanding throughout the task force. Although simple, these steps are often overlooked, resulting in misunderstandings and poor support.

With an understanding of the logistics unit organization and a common operational language, the next point of friction is reporting procedures. Establishing standard operating procedures for the multinational organization is vital. If logistics reporting is not coordinated throughout the brigade task force, the result is a poor understanding of the units' logistical needs, as well as inadequate resupply timelines. In one rotation, the formats and information requirements were not coordinated and standardized throughout the brigade task force. For example, instead of reporting numbers and then assigning green, amber, red, or black status, units simply reported color statuses. No explanation was given for what numbers or percentages each color represented. This led to many unnecessary emergency resupply missions throughout the rotation, some of which compromised defensive positions and logistics assets. To alleviate this confusion, subsequent units have learned from this situation and clearly identified and disseminated a standard operating procedure and communication plan prior to the exercise.

Communicating within a multinational task force can be extremely difficult, but it is essential to mission accomplishment. Without the ability to clearly understand requirements and assets, sustainment plans will eventually fail. Having clear lines of communication throughout the multinational task force opens the door for collaboration among all partners and develops a strong, cohesive, allied force. The effective communication that is established in the planning stage has a positive effect on every aspect of the future operation, not just logistics, and ultimately plays a vital role in the success or failure of the entire operation.

Figure 12-2. Lithuanian, Georgian, and U.S. officers discuss the brigade maneuver plan during a rotation at JMRC.

Cooperation

The linchpin for all multinational operations is a willingness to cooperate with all multinational partners. While doctrine is a good place to start, every country has different doctrine based on its military experiences. No doctrine is necessarily better than any other, and all members of the multinational operation must acknowledge this. With that said, the logisticians must be flexible and adapt to the requirements of the situation on the ground.

The first step is to incorporate every unit, no matter what the nationality, into the team. We must build the team before the battle begins. Experiences at JMRC clearly show that forces that emphasize the importance of logistics and invest energy in an inclusive planning process have a much higher success rate in field operations. Units that fail to cooperate in planning find themselves struggling throughout the operation.

There are many ways to incorporate all multinational units into the team, but it must be a conscious decision enacted at all levels. Distrust and animosity will grow if Soldiers are not cooperating with their peers from other nations, foreign Soldiers are not receiving the same support, or there are issues communicating at the higher echelons. If it continues, the inability to trust will destroy the partnership. Once destroyed, confidence and trust are extremely difficult to rebuild. This is not to say that disagreements and misunderstandings will not occur, because they will, but they must be handled with tact. No unit or nation in the partnership can be given preferential treatment.

If everyone is comfortable working together, there should be minimal issues using that cooperation to build unique, multinational support elements. Using all possible assets can create support units unlike anything organic to a unit. The capability to diversify support elements creates options for the maneuver plan. Multinational support elements that are built with assets from all multinational partners can support any tactical combination. This is the strength and flexibility of a multinational logistics plan, and this synergy carries over to the entire operation.

Joint Publication 4-08, *Logistics in Support of Multinational Operations*, discusses many logistics issues, but only at the strategic and operational levels. It is a guideline, but it does not provide tactical-level solutions to the many challenges commanders face. It is up to the commanders on the ground to ensure cooperation throughout the echelons of command and support.

As in any operation, logistics planners must tie into the maneuver plan to ensure consistent, sustainable support throughout the operation. Because of the lack of tactical-level doctrine to direct these operations, the training rotations of Exercise Combined Resolve at JMRC serve as the most valuable tools for both training and developing logistics systems for future operations. Each training exercise is designed to replicate a North Atlantic Treaty Organization (NATO) task force in which each participating nation can provide only a specific asset, not an entire brigade. It replicates the way the world defends itself and how multinational forces develop internal support systems. Deciding who is in charge and how all the needs of all of the multinational forces will be met remains one of the biggest hurdles for every training exercise and every real-world operation.

Equipment Compatibility

Although most NATO allies work with compatible equipment, this is not always the case. Technology does not always work together, and equipment is not always built to the same specifications. This can affect battle tracking, resupply requirements, the ability to use certain logistics systems, and all maintenance operations within the multinational task force. It is vital to recognize and plan for the inherent differences and their effects on logistics readiness.

In one rotation, a seemingly minor piece of equipment created a huge interoperability issue. A multinational tactical refueling vehicle was not compatible with the U.S. bulk fuel transfer nozzles. The type of fuel connector that is organic to the U.S. bulk fuel point is a NATO D-1 nozzle, whereas the particular multinational port was European Union standard only. Typically, this D-1 nozzle and connector is compatible with most NATO nations' ports and is a vital piece of aviation refueling equipment. It is not compatible with every European nation or every multinational military unit as a whole, however. Had this issue been identified early in the planning process, it would not have strained the resupply process and forced significant changes to the support plan in the middle of operations.

Equipment compatibility also affects communications within the task force. In another rotation, the brigade established primary and alternate forms of battle tracking and logistics reporting through the Battle Command Sustainment Support System and Blue Force Tracking system. A multinationally led battalion task force had neither of these systems, resulting in poor communication with supporting and supported units. If this issue had been identified early on, the communication plan could have been altered or assets could have been given to the task force to ensure proper communication throughout the operation.

The diversity within a multinational operation is what makes it unique and powerful. When employed correctly, diversity gives a commander more, not fewer, options. Although these differences require more inventive support plans, the results are well worth the effort.

Multinational interoperability will not work if we cannot logistically support the lowest level. No matter the unit size, type, or nationality, the fundamental principles of sustainment will apply while developing and implementing a support plan. It is through these multinational partnerships that we can prevent, mitigate, and respond to threats to ourselves and our international allies. Joint and combined logistics operations can be difficult and sometimes ugly, which is exactly why it is so critical to conduct multinational training at JMRC. We must train to fight, defend, and survive alongside our allies. Multinational logistics support is a key determiner of ultimate battlefield and operational success.

Note: A version of CPT Christie's article was published in *Army Sustainment*, September-October 2015.

Chapter 13

Religious Support in the Hybrid Threat Environment

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During combat operations in Iraq and Afghanistan, the Army underwent a paradigm shift from its focus on linear operations against a comparable force to asymmetric operations against unconventional forces and irregular warfare threats. As the war in Afghanistan winds down, the Army is shifting its training focus back toward a symmetrical fight on a linear battlefield. Recognizing that any future campaign will include elements common to an asymmetric battlefield, the shift is toward an environment known as hybrid threat, evidenced by both symmetric and asymmetric features.

Just as the Army is shifting its focus, the U.S. Army Chaplain Corps must also shift focus to provide the most effective religious support possible in a hybrid threat environment. The multiple deployments of chaplains and chaplain assistants to asymmetric battlefields has provided them many valuable experiences. Unfortunately, these experiences may not prove as effective in a hybrid threat environment. There are, however, certain skills previously acquired that must be retained. The increased focus on advisement capabilities, both internal and external, must continue to be placed in the forefront of staff officer/noncommissioned officer roles of religious support teams (RST).

Warfare Models and the RST

During asymmetric warfare, RSTs are able to provide religious support on a structured, predictable schedule as Soldiers are predominately located on established bases surrounding a larger base — conceptually comparable to the spokes on a wheel. RSTs can travel to each of the smaller bases and return to their base of operations on a regular basis. At these larger bases, both air and ground transportation are typically available for RST members to conduct battlefield circulation due to the presence of multiple units on a given base. Multiple systems of communication are also available due to the prolonged use of bases, as are many of the conveniences of home station that Soldiers appreciate.

Typically, during symmetric warfare, unit locations are spread out over a larger area and are arrayed against an opposing enemy force of comparable composition along clear battle lines. In a symmetric, linear fight, unit positions can change quickly in response to different phases of battle. Communications can be spotty at best, with a primary means being Blue Force Tracker (BFT) and frequency modulation (FM) radio used at lower levels. The structure can be reminiscent of a sports bracket; platoons and companies push forward to engage the enemy on the front lines and battalion headquarters remain farther back, but still close enough to maintain command and control of the units engaged in fighting. Even farther back are the support elements that allow for logistical and Role II medical support to be far enough removed from the fight to provide greater security. The brigade headquarters may either be collocated with the support elements, or be located even farther back to enable it to remain in contact with both the division headquarters and its subordinate battalions.

Hybrid threats include a combination of asymmetric and symmetric-warfare characteristics. Unit structure and placement is most similar to those used in symmetric warfare. However, a hybrid threat recognizes that insurgent elements may remain in the area of operations, requiring

units to mitigate those threats through engagement of the local populace. Also, the presence of insurgent threats affects the security of units farther from the forward line of troops and greatly limits secure movement options. Living and working conditions are more like those in symmetric battlefields with limited communications, few (if any) hard structures to live or work in, and limited conveniences.

Religious support in the hybrid threat environment requires the Chaplain Corps to return to using the tactics, techniques, and procedures (TTP) that were practiced prior to the shift toward asymmetric warfare. This means that RSTs must train to function in austere environments and get back to building proficiency in tasks that were once common. Some of the biggest challenges facing RSTs as they make the shift toward operating in a hybrid threat environment are conducting circulation, communication, basic fieldcraft, and retaining proficiency in advisement.

Circulation

RSTs are accustomed to circulating around an asymmetric battlefield on a regular basis to provide religious support. In a hybrid threat environment, circulation is much more difficult. The linear aspects of the battlefield require a detailed knowledge of current and future operations. RSTs need to know when and where their presence will be most beneficial. Traveling to the different unit locations by integrating the RST vehicle into the logistics package (LOGPAC) is one of the most effective means of circulating. Integrating an RST vehicle with a planned convoy as opposed to simply "hitching a ride" on a convoy vehicle enables the RST to move its own necessary religious-support items and life-support equipment, as well as provide a place for the RST to sleep. The RST vehicle is also ideal as a place to provide counseling or to serve as a makeshift altar for religious services. It is also much easier to integrate a vehicle into a convoy than it is to convince a convoy commander to give up space to move RST personnel and items from one place to another.

Using the RST's vehicle requires the chaplain and chaplain assistant to be licensed and proficient with both day and night driving. When the RST vehicle gets inserted into a convoy, it is imperative for members of the RST to monitor the security situation and be informed of the unit's movement standard operating procedures. Both RST members should be involved in unit battle-drill training at home station to better understand where they fit into the larger picture and work out their roles and responsibilities. Integrating the RST as part of the LOGPAC is effective both before and after the unit is engaged in active combat.

During combat, the RSTs must place themselves in the formation where they can be most effective; to do this, the RST must fully integrate with the staff during operation planning. Taking into account the enemy's most likely course of action, most dangerous course of action, and the unit's medical plan, the RST must write a detailed religious support plan and identify RST locations during the battle and then have these plans nested in the operation order. While a unit is engaging in combat, a typical medical plan would first direct the removal of wounded Soldiers to the different casualty collection points, followed by their movement to the forward aid station (FAS) for care. The FAS is the central location for all battalion casualties to be either treated and returned to duty or evacuated further to the Role II medical center located at the brigade support area. Medical evacuations in the hybrid threat environment are typically done by ground due to the lack of aircraft dedicated to each brigade. Positioning the RST at the FAS during combat operations maximizes the amount of casualties that are ministered to by the RST.

Communication

Communication is another challenge for RSTs in the hybrid threat environment. RSTs must have an effective communications plan with both their higher RST and their command that includes verified primary, alternate, contingency, and emergency (PACE) forms of communication. RSTs must ensure that both their unit tactical operations center (TOC) and the higher headquarters RST are tracking their locations at all times. Since the austere conditions of the hybrid threat environment often prohibit the use of Nonsecure or SECRET Internet Protocol Router Network communications, RSTs need a working knowledge of FM radio and BFT communication capabilities. RSTs must possess a working radio in their vehicle that has the unit frequency, and if possible, an RST frequency that can be used for reporting.

It is recommended that RSTs conduct a daily call with higher and adjacent RSTs to coordinate efforts. Communication is only effective if the data communicated is used for a purpose. With the communicated information, the brigade RST needs to battle-track the location of each battalion RST by both digital and analog means. This enables the brigade RST to effectively coordinate religious support across the brigade's area of operations by positioning religious support personnel and resources where they will be most effective in providing targeted religious support to the brigade.

Fieldcraft

Basic fieldcraft is somewhat of a lost art among Soldiers who have joined the Army within the past 10 years, and the Chaplain Corps is no exception. The hybrid threat environment requires Soldiers to live and operate in near-total austerity. Tasks that were once trained and exercised on a regular basis, such as field sanitation procedures, TOC set-up/tear-down, vehicle load planning, selecting/digging hasty fighting positions, land navigation and map reading, and even selecting safe places to sleep, are important to RST members who are circulating throughout the battlefield and integrating with the smaller elements of their unit. Failure to have a working knowledge of field sanitation can lead to the spread of disease and parasites. Failure to have an effective vehicle load plan can cause the RST to hinder the ability of a unit to move while under fire by taking up more time than is absolutely necessary to pack and leave an area.

Advisement

Although many tasks need to be relearned as the Army transitions to fighting the hybrid threat, some TTP need to be retained. During the past years of war we saw unprecedented cooperation among the different branches of the military, governmental and nongovernmental agencies, and multinational partners. This cooperation caused a reinvigoration of joint publications that explain the way RSTs interact with one another. Religious advisement is one of the tasks highlighted in updated doctrine and it is broken down into two categories: internal and external. External advisement requires RSTs to examine the religious factors in an area as they relate to military operations. This analysis allows commanders to make informed decisions on issues that affect the religious climate of an area. Internal advisement requires RSTs to advise the commander on religious factors that influence the formation. In many cases, this includes multinational partners that are operating under the command of U.S. forces. It is important for RSTs to conduct a detailed analysis of the religious makeup of multinational partners and advise the commander on any factors that can influence the unit's mission.

Conclusion

To meet the needs of operating in a hybrid threat environment, RSTs need to adjust their way of thinking away from the model of religious support in an asymmetric environment. This requires extensive training at each level within the Chaplain Corps, with the emphasis placed upon developing brigade and battalion RSTs. Brigade RSTs are responsible for the training and development of battalion RSTs and should develop training plans that focus on communication, circulation, and basic fieldcraft in austere environments. Brigade RSTs are encouraged to seek out subject matter experts in each field to maximize efficiency. RST members also need detailed religious support plans that specify their actions in hybrid threat environments. A plan is only effective if it is communicated with all involved and integrated into the plans of others. It is essential that RSTs ensure their plans are communicated up, down, left, and right. Combat training centers are ideal venues where RSTs can execute their plans and evaluate their effectiveness prior to deployment to hybrid threat environments.

As the Army shifts its focus to face current, emerging threats, the Chaplain Corps must also shift and adapt to continue to provide the best possible religious support to our Soldiers. Although we cannot predict with certainty where the next conflict will take place, we can be sure that it will begin with the Army engaging the enemy in a hybrid threat environment. Only through proper planning and training can RSTs ensure they are prepared to meet such future threats.

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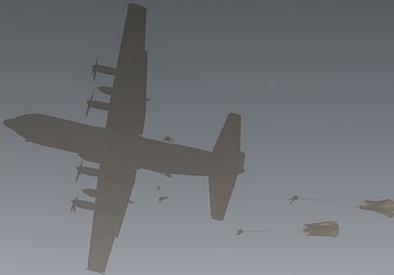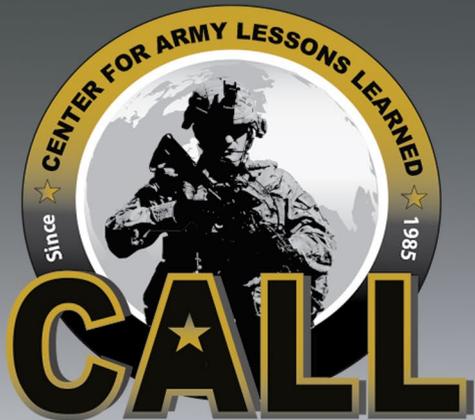
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