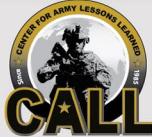




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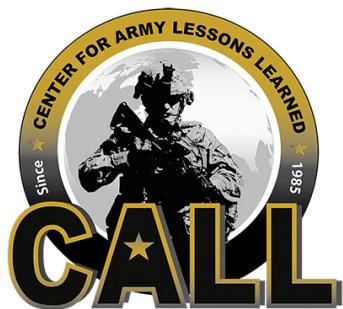
JUL 16



MULTINATIONAL INTEROPERABILITY REFERENCE GUIDE

Lessons and Best Practices

APPROVED FOR PUBLIC RELEASE
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Multinational Interoperability Reference Guide

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Preface

The challenges and complexity of the future will require the Army to provide a broader range of capabilities to achieve strategic outcomes across a complex and diverse range of global missions. The Army Vision cites “integrate operations” as one of the unique roles performed by the Army, providing combatant commanders with foundational capabilities, to include headquarters capable of integrating joint, interagency, and multinational operations. In the future, the need for interoperability will extend to lower echelons of Army forces in order to effectively integrate smaller national contributions into multinational operations.

The Army Vision further describes interoperability as one of eight key characteristics of the Army of 2025.

As the foundation upon which other U.S., allied, and multinational capabilities will operate, the Army of 2025 must be interoperable by easily supporting and enabling joint, whole-of-government, and multinational land-based operations. We must develop and advance a base technological architecture into which other military Services, U.S. government agencies, and allies and partners can easily “plug and play.”

Improving the Army’s multinational force interoperability (MFI) with allies and partners remains a high priority for the Army. Army MFI activities enhance the Army’s readiness to fight and win as part of a multinational force that provides strategic options for civilian and military leaders in current and future crises.

The foundations of MFI are broad, running across all of the Army warfighting functions, and have human, procedural, and technical aspects. While interoperability often is most closely identified with technical issues related to mission command and automated information exchange, the broader requirements of interoperability demand that attention also be paid to its human and procedural aspects. The human dimension builds the basis

of mutual understanding and respect that is fundamental to unity of effort and operational success. The procedural dimension ensures that we achieve sufficient harmony in our policies, doctrine, and tactics, techniques, and procedures that will enable us to operate together effectively.

The institutional Army continues to be heavily engaged in developing MFI solutions and enablers. The focal point for testing interoperability solutions and training to develop and maintain interoperability, however, is increasingly shifting to the operational Army. The combat training centers and the Army Service component commands are now a primary effort in training and executing our concept of interoperability with our multinational partners. The demanding training conducted by Army forces with allies and partners provides badly needed and realistic feedback on how well we are improving our interoperability.

U.S. national strategy makes clear that the U.S. Armed Forces will seldom, if ever, fight alone. Consequently, MFI must become a fundamental consideration in how the Army prepares to “fight tonight and fight tomorrow.”



Foreword

The Army will continue to fight in coalitions in the future, just as we have in our recent past. The Army Operating Concept stresses this facet of operations and considers multinational interoperability one of the critical warfighting challenges we will face. The task is magnified by the fact that many of our most reliable partners and allies have been reducing their force structure, which in turn has lowered the echelon at which interoperability will be required. In Afghanistan, it was common practice to interoperate below the brigade level, and in the future we can anticipate doing that again — but in high-intensity combat operations.

Interoperating at the tactical level is not easy. Even seemingly simple tasks bring myriad challenges in blending our procedures, our technology, and our cognitive approach to operations. At the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany, we work to close these gaps every day. We host monthly exercises that bring together multiple allied and partnered nation armies in a brigade-size formation, handing the unit tactical tasks to solve in the intense crucible of a combat training center competitive training event. These exercises reveal gaps in our interoperability. More important, they give commanders the opportunity to close those gaps. At JMRC, we observe these solutions closely; find the best practices; and propose them as tactics, techniques, and procedures (TTPs) for future operations. This handbook is an attempt to codify and distribute those emerging TTPs. Commanders at all levels will find it useful not just for the TTPs it provides, but for the logical construct it affords for solving the complexities of multinational interoperability. The goal of this handbook 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 a multinational environment.

As our exercise program evolves, we will continue to refine and develop new solutions to the technical, procedural, and human challenges inherent

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in coalition operations. By working these TTPs into exercises at home station, commanders will be better prepared to enter and lead the coalition operations we know we will face in the future.



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Introduction

A North Atlantic Treaty Organization (NATO) ally is attacked. Under Article V of the treaty, the alliance comes to the defense of that nation. Many of the NATO allies, due to political and fiscal decisions made since the end of the Cold War, contribute what forces they have available. In many cases, the contribution is small maneuver formations and enabling units to a coalition that is being formed. The task organization of that formation will most likely look highly multinational at the tactical level from the brigade, battalion, and potentially the company level. If the premise is true that the United States will never fight alone again, then we must come to grips with the reality and the challenge that interoperability creates among tactical formations from different countries. Multinational interoperability will be a component of any future contingency operation in which the United States participates as a leader or member of the coalition.

The current security environment continues to evolve in an unpredictable, often violent manner. The world has seen a wide range of threats from terrorist organizations including al-Qaida; ISIS, which has spread in Iraq, Syria, and elsewhere; Boko Haram; and al-Shabab; as well as other threats to stability such as the Ebola outbreak in Africa and Russian aggression in Ukraine. No one could have accurately predicted the current security environment a year ago. In response to these threats, coalitions have formed. These responses are fundamentally different, but each requires troop-contributing countries, as members of an international coalition, to be prepared to respond to a range of threats in a very complex world. The challenges of interoperability are persistent and must be addressed for any coalition to form, operate effectively, and ultimately achieve both military and political objectives.

Many countries are willing to contribute to contingency operations to address these threats to security and stability but are not able to provide a large number of troops and equipment. With the dissolution of the known threat to Europe (the Soviet Union), NATO nations reduced military spending and focused on the development of smaller maneuver formations or specific niche capabilities. This is the driving force behind the complex, multinational formations being built in response to new contingencies. The need for interoperability at the tactical level continues to go lower and lower.

For decades within NATO, tactical doctrine, aside from NATO Standardization Agreements, or STANAGs, has been considered a national responsibility. Examples of NATO STANAGs address standard ammunition calibers, calls for fire, medical evacuation procedures, etc. Existing STANAGs are insufficient for a multinational force to achieve interoperability at the brigade level and below without filling in many gaps with agreed-upon standard operating procedures or doctrine. The

lack of common tactical doctrine causes multiple seams to appear between units, evidenced not only by varying uniforms and equipment, but also by different languages and military cultures, which an enemy may exploit.

NATO developed a new strategic concept in response to the changing security environment, titled NATO 2020: Assured Security; Dynamic Engagement. Two main points of the concept are: (1) reaffirming NATO's core commitment: collective defense; and (2) working with partners.¹ To accomplish these ends, the Connected Forces Initiative and Smart Defense concepts were developed. The Connected Forces Initiative is a “multifaceted project which provides the structure for allies to train and exercise coherently; reinforces full-spectrum, joint, and combined training; promotes interoperability (including with unified action partners); and leverages advances in technology.”²

During a time when countries cannot afford large standing armies, military capabilities are acquired from multiple contributing nations to build tactical formations. NATO's Smart Defense attempts to synchronize requirements, pool and share capabilities, and prioritize efforts.³ When multiple countries come together to accomplish the mission, issues of interoperability will arise. These must be addressed by leaders of that multinational tactical formation.

Here at the Joint Multinational Readiness Center (JMRC), we train interoperability during rotational training events every month with multinational formations at the brigade level and below from across Europe and elsewhere. Multinational rotations develop leaders, increase unit readiness, and strengthen the NATO alliance — the longest, most successful alliance in human history. The lessons learned from these exercises are critical to us all as military land power professionals as we look to the future and may be tasked to build a multinational tactical formation to fight and win in a very complex world. On the following pages are just two recent examples in the past year of brigade-size unit task organizations fighting in a decisive action environment – one formed and led by a Lithuanian brigade headquarters and the other by a United States Army brigade combat team headquarters.

Saber Junction 14 saw 15 countries form a multinational brigade comprising more than 6,000 Soldiers (one-third of them provided by countries other than the United States) organized under a Lithuanian brigade headquarters. Even the individual battalions were task-organized with multiple countries providing assets to enhance the capabilities of the organization.

Combined Resolve III saw 13 countries form a multinational brigade comprising more than 4,000 Soldiers (more than half of them provided by countries other than the United States) organized under a U.S. brigade headquarters.

A complex task organization requires leaders to take a flexible approach toward the different capabilities and cultural norms of the countries participating in operations. As defined and described in NATO doctrine (Allied Joint Publication-01[D] 0314), “the effectiveness of allied forces in peace, crisis, or in conflict depends on the ability of the forces provided to operate together coherently, effectively, and efficiently. Allied joint operations should be prepared for, planned, and conducted in a manner that makes the best use of the relative strengths and capabilities of the forces which members offer for an operation. Interoperability of formations and units of a joint and multinational unit has three dimensions, technical (e.g. hardware, systems), procedural (e.g. doctrines, procedures), and human (e.g. language, terminology, and training).”⁴ To mitigate the complexity of a multinational tactical formation, leaders must build an organization that has trust, a shared understanding, and the ability to work as a team. To reach this goal, commanders must understand how to balance the three key aspects identified above in building such a complex organization to achieve interoperability: human, procedural, and technical.

Human. Identify the problem and provide tools to solve the problem, understanding the people in your organization and where they can provide the largest benefit to mission accomplishment.⁵ The leader preparation needed to pull units from different countries into an effective team cannot be understated. The cognitive approach that all leaders take in a multinational formation will determine how effective the formation will be. Leaders must spend the time to build relationships and trust, as well as develop common understanding through the depth of the formation. Receiving new teammates, fostering dialogue about unit capabilities and limitations, and leading more graduate-level discussion on “how we fight” are critical to team formation in a multinational environment. Leaders must be sure to understand what the multinational units in their task organization can do, in order to assign appropriate tactical tasks and make correct decisions on task organization or command support relationships to enable successful outcomes. Leaders also must ensure that the headquarters above has a common understanding, as well; therefore, leaders cannot focus only on their unit, but must have a much broader understanding of the formation at echelon. The common understanding generated among leaders or commanders must also exist in staff-to-staff relationships to truly make a multinational formation interoperable.

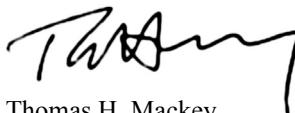
Procedural. “Procedural control is a technique for actively regulating forces where actions are governed by written and oral instructions which do not require authorization to execute.”⁶ This portion of interoperability addresses procedures, policies, and doctrine, or the lack thereof. In order to build an effective tactical organization, common doctrine and procedures enable common vision and systems for dealing with routine operations and actions. For a brigade, the doctrine to conduct unified land

operations requires leaders and staffs to engage in a series of “how we fight” discussions to come to an agreement on how the entire formation will conduct offensive, defensive, and stability operations. The common doctrine of the formation may be a combination of several national doctrinal solutions, but it must be discussed, agreed upon, and implemented throughout the formation to allow interoperability to occur. An example from a recent JMRC exercise is a discussion among a U.S. brigade commander and four battalion commanders (three from other nations) about the definition of a tactical task. Due to national doctrines, each officer had a different definition of “seize.” The solution was to use a common definition and then to define the tactical tasks in brigade orders until the entire team had a common understanding. The same is true for everything from reports and returns at echelon to meeting inputs, etc. Getting on a common sheet of music is a critical undertaking in creating an interoperable tactical formation.

Technical. This aspect asks what equipment you use and how you make it operate with other equipment. A future vision for tactical interoperability was best stated recently by LTG Ben Hodges, Commander of U.S. Army Europe, as “three key elements of interoperable communications to include: secure tactical FM radio (U.S. company under an Estonian battalion); interoperable friendly force tracking (FFT) (such as Blue Force Tracker; ... there are 13 different types of FFT in NATO); and a lower-unit common operational picture (COP) that shows up on a higher unit COP (a German battalion under a U.S. brigade).”⁷

A commander may not be able to influence what equipment countries provide to the organization, but knowing the capabilities and limitations of that equipment will help in the task organization of the force enabler. As a commander, how do I communicate with my subordinate commanders? How do my subordinate units request enablers like air weapons teams, or call for indirect fire when they are requesting an asset from another country in the formation and do not have compatible communications systems? Commanders must take a very deliberate approach to answering those questions and more. Not every country brings compatible radios, FFT devices, or command information systems. There are some technical solutions that can be addressed, and for NATO members, STANAGs for some of the communications architecture can result in interoperability. Leaders must be prepared to build and embed liaison teams with the right communications packages both vertically and horizontally to connect encrypted enclaves if the entire formation cannot be on the same, common network. Leaders must address the combination of digital capabilities and analog requirements, from overlays to orders to the COP for the formation.

Although the United States has forces aligned with specific regions around the world where bilateral or multilateral defense treaties exist, that does not necessarily mean you or your formation will join with those countries exclusively on some future contingency operation. The issues related to interoperability will remain the same no matter what the task organization is. Although the observations included in this handbook come from rotational training at JMRC, where we use the NATO construct to address many of the issues with tactical interoperability, gaps still exist at the tactical level. The lessons in this handbook transcend this location and can be informative to any tactical unit deploying to any part of the world to join or form a multinational tactical formation. This handbook attempts to provide commanders or leaders at echelon and their staffs a foundation of knowledge on how to become interoperable multinational formations while working under constrained timelines. As each multinational formation may offer different challenges, units should choose the principles in this handbook that fit specific problem sets and use them as a basis to begin solving interoperability issues.



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Endnotes

¹ North Atlantic Treaty Organization, *NATO 2020: Assured Security; Dynamic Engagement* (NATO Public Diplomacy Division. Brussels, Belgium: NATO Graphics & Printing, 2010), 8-10.

² North Atlantic Treaty Organization, *Connected Forces Initiative*, http://www.nato.int/cps/en/natolive/topics_98527.htm.

³ North Atlantic Treaty Organization, *Smart Defense*, http://www.nato.int/cps/en/natohq/topics_84268.htm.

⁴ North Atlantic Treaty Organization Allied Joint Publication 01(D), *Allied Joint Doctrine* (Brussels, Belgium: NATO Standardization Agency, 2010), 3-4.

⁵ U.S. Army Doctrine Publication 6-0, *Mission Command* (Washington, D.C.: Government Publishing Office, 2012), 10.

⁶ U.S. Army Doctrine Reference Publication 6-0, *Mission Command* (Washington, D.C.: Government Publishing Office, 2012), 2-16.

⁷ LTG Hodges, Frederick (Ben), Saber Junction 15 NATO DV Day Briefing. USAG Bavaria-Hohenfels. 15 APR 2015. Speech.

Chapter 1

Mission Command Warfighting Function

Observation: Understanding Unit Capabilities and Limitations

Discussion: Units that have never worked together before, whether they come from the same or different countries, require time to develop relationships; learn the capabilities and limitations of one another's equipment and weapon systems; understand their respective tactics, techniques, and procedures (TTPs); and, finally, implement and practice common standards, procedures, and tactics. Units also must develop common casualty treatment and evacuation methods and viable sustainment plans (concepts of support) for all classes of supply.

Failing to understand all aspects of partner forces degrades tempo, flexibility, and agility. More importantly, poor understanding of partner forces increases the risk of fratricide and exploitation by enemy maneuver/effects.

U.S. forces typically have not been exposed to North Atlantic Treaty Organization (NATO) standardization agreements, terminology, or tactics, and tend to make communication more difficult by using American terms (especially acronyms and initials), contractions, and slang.

Many countries, including non-NATO members, participate in multinational training rotations at the Joint Multinational Readiness Center (JMRC). These countries bring a wide variety of uniforms, vehicles, weapon systems, and general equipment. The different weapons and vehicles do not necessarily use NATO standard ammunition or JP8 fuel.

Sustainment for multinational forces can be difficult, as each country will have its own sustainment systems. This problem raises challenging questions about such issues as how repair parts will flow, what types of rations units will consume, where units will get their fuel and supplies, etc. U.S. forces must be mindful of what support and classes of supply they provide to their partner forces.

Recommendations: Understanding the capabilities of partner forces must be a formal, structured process supervised by unit leaders. Units should plan and execute the process any time the task organization changes. Unit leaders must teach measures to identify vehicles and prevent fratricide to every Soldier in all formations and practice them.

Prior to arrival at the training center, units should research their expected partner forces. Open-source references such as Jane's Defense Weekly provide a wealth of foundational knowledge and are easy to access. Perhaps the most important focus areas are vehicle and uniform recognition. Units

should develop reception plans for how they will receive and integrate partner forces into their teams. The integration plan should start with basic life support, followed by a sustainment plan, a communications plan, and, finally, common procedures and tactics. Also, prior to arrival, units should develop an integration checklist that details every task units must accomplish with new partner forces or assets prior to conducting operations. This checklist should apply to U.S. forces and assets, as well.

Integration of partner units should begin immediately upon the brigade's arrival at JMRC or as soon as a partner force arrives. Face-to-face contact is the preferred method for initial contact, and commanders should make themselves available to meet the subordinate commanders as soon as possible. Several techniques have been effective in sharing unit capabilities and limitations. They include:

- Establish warfighting function working groups to discuss and resolve interoperability issues. Commanders must approve the solutions, update them in unit standard operating procedures (SOPs), and then issue them in written orders to subordinate units. The unit must address fratricide prevention measures in detail prior to conducting any operation.
- Allow time up front to get to know individual leaders on a personal basis.
- Give each unit a briefing role in commander's update briefings. Prepare unit commanders for their roles and briefing areas. Conduct commander's update briefings face to face for the first few meetings.
- Ensure that the brigade staff includes every partner country (regardless of size) in running estimates and staff update briefings.
- Have each unit prepare a unit capabilities briefing to deliver to the battalion and brigade command groups and brigade staff.
- Review and update unit SOPs to ensure ease of translation and resolve foreign disclosure issues. Create a streamlined version of the SOP for multinational forces to remove any sensitive information. Be prepared to provide a copy of the SOP to all partner units. If possible, have the SOP translated.
- As time allows, have partner forces visit every unit within the brigade and allow Soldiers to handle one another's vehicles and weapons. Ensure that U.S. forces conduct the same demonstrations for partner forces. Allow every Soldier to observe the vehicles maneuvering in open and restrictive terrain to help identify vehicles and understand their capabilities.

- Ensure and enforce collaborative planning with subordinate units (field grade officer input). Subordinate unit input is critical for course of action development and is strongly encouraged for course of action analysis. Liaison officers (LNOs) typically are very effective at researching and relaying information. They typically are not skilled planners or maneuver experts — do not rely on them as such for conducting the military decisionmaking process (MDMP).
 - Make time for detailed one-on-one back briefs with unit commanders. Detailed back briefs with solid rehearsals are arguably much more important than operation orders.
-

Observation: Understanding National Caveats

Discussion: Every country has laws and regulations that govern the training and employment of its armed forces. National caveats are restrictions placed on the use of national military contingents operating as part of a multinational operation. Caveats may limit a troop-contributing country's rules of engagement and ability to perform certain tasks, missions, or maneuvers. For example, combat vehicle drivers in some armies are required to sleep at least six continuous hours in a 24-hour period prior to conducting operations. It is important to understand such regulations so that planners can incorporate them into operations.

Broadly, there are two types of caveats: declared and undeclared. Declared caveats are expressly communicated and known to commanders. Undeclared caveats are typically unknown to commanders until they assign multinational units a specific mission, at which point the tasked unit communicates a restriction on some portion of the task due to a particular caveat. Uninformed commanders might view undeclared caveats as subordinate units pushing back or trying to get out of unwanted tasks. More realistically, undeclared caveats result from lack of research or collaborative planning wherein subordinate units assist their headquarters on how best to employ their forces.

Recommendations: To reduce the impact of national caveats on operations, commanders at every level must understand how caveats will affect unit capabilities. Prior to working with partner armies, unit leaders must research, record, catalogue, and maintain listings of caveats for every country participating in the exercise. Rotational planning conferences provide great opportunities to begin dialogues with participating countries about national caveats. Rotational planners from the respective countries are also able to provide contact information for unit leaders to further such discussions. Establishing early unit-to-unit contact fosters relationship

building and limits discovery of undeclared caveats later during training. Offices of defense cooperation are also able to provide essential information about national caveats.

To limit any negative effects of undeclared caveats, units should foster a collaborative environment based on open communication and teamwork. Subordinate units must be encouraged, and even required, to provide input to the battalion and brigade staffs on how the respective multinational forces are typically and best employed. Subordinate leaders must actively assist their higher headquarters during the planning process by ensuring that appropriately trained personnel are present during key steps of the MDMP. Establishing relationships among training units and facilitating information sharing prior to the rotation help foster team building and greatly reduce the surprise discovery of undeclared caveats during missions.

Observation: Understanding Cultural Sensitivity and Friction Points When Task-organizing Units

Discussion: NATO's shift from building a multinational task force at the corps and division level to creating such a force at the brigade and battalion level transfers the interoperability problems from the strategic/political level to the operational/tactical level. Building a multinational task force is a difficult endeavor due to the complexities involved when dealing with the technical, procedural, and human dimensions. Operating in these dimensions raises many difficult questions and identifies potential problems or friction points: compatible mission command systems, common operating pictures, operational terms, information flows, and methods of interacting at the individual through task-force level. The technical and procedural dimensions are challenging but fixable with technology, standard agreements, and doctrine. The human dimension, on the other hand, cannot be resolved so easily due to other complexities. Recent NATO exercises demonstrate a growing trend of conducting brigade-level contingency operations within a multinational task organization. Brigade multinational task forces now struggle through friction points in the human dimension that did not previously exist because countries, units, and individuals that are not necessarily friendly with one another now must work together.

Multinational brigade task forces often struggle in the human dimension because common experiences define people and influence how they interact with others. NATO comprises countries with diverse histories. It is critical for commanders to understand the historical context of each NATO ally or partner country when developing the task organization and conducting operations as a multinational task force. American units, in particular, struggle with cultural understanding because the United States is a melting pot of history and culture. Compared with the European allies, Americans

hold a less complex view of the world as they have not fought a foreign invader on their own soil in 200 years. Americans are not as burdened by history, and their narrative is based on a shared common experience, not an exclusive one. On the other hand, the European NATO allies often have fought with and against one another as a result of historical grievances, which at times foster mistrust among them. Some NATO and partner countries have fought one another in the past 30 years, so the mistrust remains strong and some grievances are unresolved.

While building a multinational task force is challenging in itself, it becomes even more challenging if commanders do not understand the history and relevant experiences of their allied and partner formations. As an example, three countries in a recent exercise were task-organized together as a multinational battalion task force, thus creating significant friction within the battalion task force and ultimately for the brigade. Two of the countries were amicable toward each other but viewed the third country as a mortal enemy. The common view of all three countries was, “Why should we help train an enemy that we will fight again in the future?” As a result of the lack of cooperation within the battalion task force, one country received tasks that minimized its participation in the operation, preventing it from fulfilling any meaningful training objectives. The battalion eventually was restructured to reduce friction and achieve effectiveness by gaining combat power and capability that was not being fully utilized by the battalion. Even though this is an extreme example, it is important to realize that even countries within the same organization can have antagonistic relations that can ultimately limit the effectiveness of the task force as a whole.

Recommendations: Understanding and taking steps to mitigate friction caused by the historical experiences, culture, and politics of each task force member and how they interact with each other are critical when establishing a multinational joint task force. A good way to gain understanding and maximize relationships while reducing friction in the task force is for units to conduct leader professional development classes on typical points of friction such as history, cultural differences/similarities, military doctrine/structure, economy, and the geopolitical ties/views of each of the countries that will form the task force. The task force staff/commanders must conduct their own research and present their own interpretations of potential cultural differences prior to forming the task force. An important supplementary or field-expedient method is to have honest one-on-one dialogue with key subordinate unit leaders of each member of the multinational task force. It is imperative for all members of the task force to be completely open and honest about their unit’s experiences, strengths, weaknesses, and national caveats. This communication will help the brigade commander make better decisions on how to task-organize and decide what tasks are appropriate for each subordinate unit, and may help him identify potential friction between members of the task force. Ultimately, misunderstanding and failing to

mitigate friction between units/countries prevents good integration and interoperability, degrading the effectiveness of the multinational task force during operations.

Observation: Defining Appropriate Command and Support Relationships

Discussion: Command relationships establish the degree of control and responsibility commanders have for forces. Support relationships define the purpose, scope, and desired effect. U.S. units typically understand and routinely practice U.S. doctrinal command and support relationships, and are able to change quickly and effectively the relationships between phases of operations. In contrast, most foreign units training at JMRC employ NATO command and support relationships. Most U.S. Army leaders at the brigade level and below have very little exposure to NATO terminology and do not understand the differences between NATO and U.S. command and support relationships. Confusion or misunderstanding of terminology may cause problems in sustainment operations where multinational units are not included in the support plan and left to their own means to sustain themselves. While sustainment relationships are inherent to U.S. doctrinal command relationships, NATO doctrine places ultimate responsibility on force-providing countries to ensure the provision of logistic support for the forces those countries allocate to NATO.

Misunderstanding the nuances between U.S. and NATO terms causes confusion among commanders, slowing tempo and decreasing units' ability to adjust to the enemy or take advantage of tactical opportunities. For instance, NATO tactical control (TACON) is defined as the detailed and usually local direction and control of movements and maneuvers necessary to accomplish missions or assigned tasks. U.S. doctrine defines TACON as the command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned. Though similar, NATO TACON does not assign a command relationship with the gaining unit. Thus, the gaining headquarters is only able to direct the movements of the TACON unit insofar as it assists the TACON unit in accomplishing the missions and assigned tasks from a headquarters with which the TACON unit has a command relationship.

Recommendations: Learn and study the NATO command and support relationship definitions. (See Figure 1-1, next page.) Ensure understanding of the definitions down to company commander level. Prior to conducting any mission planning, brigade commanders should discuss command and support relationships with leaders of every partner unit for the exercise. The

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Authority	Most Control					Least control				
	FULL CMD	NATO OPCODEM	NATO OPCON	NATO TACOM	NATO TACON					
Direct authority to deal with nations, diplomatic missions, and agencies	X									
Granted to a command	X	X								
Delegated to a command			X	X	X					
Set chain of command to forces	X									
Assign mission/designate objective	X	X								
Assign tasks	X	X			X					
Direct/Employ forces	X	X	X	X						
Establish maneuver control measures	X	X	X	X	X					
Reassign forces	X	X								
Retain OPCON	X	X								
Delegate OPCON	X	X	X							
Assign TACOM	X									
Delegate TACON	X	X	X							
Retain TACON	X	X	X							
Deploy forces (information/within theater)	X	X	X							
Local direction/control designated forces	X				X	X				
Assign separate employment of unit components	X	X								
Directive authority for logistics	X									
Directive joint training	X									
Assign/Reassign subordinate commanders/officers	X									
Conduct internal discipline/training	X									

The national authority always retains FULL COMMAND under allied doctrine.

- has this authority

- denied authority or not specifically granted

LEGEND

OPCON - Operational Control
OPCOM - Operational Command
TACOM - Tactical Command
TACON - Tactical Control

Figure 1-1. Diagram of current NATO command. (Source: Field Manual 3-16, *The Army in Multinational Operations*)

unit leaders should come to a consensus on which command relationships the brigade will use (U.S. or NATO). As part of mission planning, staffs must assign every partner unit an appropriate command and support relationship with the appropriate headquarters for each mission. As part of course of action development, while ensuring all available forces are task-organized to a higher headquarters, staffs should expand the step to direct an initial command and support relationship for every available unit. After finalizing the command and support relationships during course of action analysis, staffs must clearly delineate the relationships in mission orders, then check them for understanding. A recommended method is for units to expand the typical “block and line” task organization chart to graphically depict assigned command and support relationships.

Observation: Establishing LNO Requirements and Packages

Discussion: Although current U.S. doctrine recognizes that “multinational operations require greater liaison efforts than most other operations” (Field Manual [FM] 6-0, *Commander and Staff Organization and Operations*, 05 MAY 2014), the current modification tables of organization and equipment for combat brigades and battalions do not provide enough personnel or equipment for reciprocal liaison operations with subordinate and adjacent units. According to FM 6-0, “when possible, liaison is reciprocal among higher, lower, supporting, supported, and adjacent organizations.” Under current manning authorizations, brigades and battalions can field only one team (an officer or noncommissioned officer with an assistant), which is intended to operate in the respective unit’s higher headquarters.

In addition to the lack of available personnel, the rank and experience level authorized for battalion and brigade LNOs do not facilitate shared understanding during multinational operations. According to FM 6-0, in order to conduct effective liaison (cooperation and understanding among commanders and staffs of different headquarters; coordination on tactical matters to achieve unity of effort; synchronization of lethal and nonlethal effects; and understanding of implied or inferred coordination measures to achieve synchronized results), LNOs must:

- Know the sending unit’s mission; current and future operations; logistics status; organization; disposition; capabilities; and TTP.
- Appreciate and understand the receiving unit’s TTP, organization, capabilities, mission, doctrine, staff procedures, and customs.
- Maintain familiarity with:
 - Requirements for and purpose of liaison.
 - The liaison system and its reports, documents, and records.
 - Liaison team training.

- Observe the established channels of command and staff functions.
- Display tact.
- Possess familiarity with local culture and language, and have advanced regional expertise if possible.

The current rank/experience authorizations are detrimental to multinational operations, where brigade and battalion staffs expect LNOs to be proficient in the MDMP (or the NATO operational planning process), unit tactics, techniques, and overall general staff procedures. This is especially apparent in units that do not have solid collaborative planning processes or during time-constrained decision-making process periods.

LNOs often have limited ability to communicate inside receiving units' tactical operations centers (TOCs) or main command posts (CPs). Technical limitations and limited availability of equipment can restrict the LNO from remotely operating his vehicular radio communications, blue force tracker, or other digital communications platforms.

Recommendations: Battalions must plan and prepare for reciprocal liaison operations with each adjacent battalion. Preferably, LNO teams should be manned from like organizations remaining at home station. If not possible, JMRC recommends using experienced platoon leaders with able platoon sergeants capable of effectively serving as platoon leaders. When providing an LNO to a multinational unit, the battalion should provide a Captains' Career Course graduate who is proficient in MDMP, understands decision point tactics, and has solid knowledge of battalion-level TTP. If a U.S. battalion is attached to a multinational brigade combat team, the battalion should provide a captain with company command experience or a major.

Liaison teams must be equipped to facilitate communications independent of the receiving unit. The LNO team should have a laptop computer and the appropriate equipment to remote the team's combat net radio and digital vehicular radio system into the receiving unit's CP.

Observation: Developing Common Risk Management Procedures

Discussion: Risk management practices and procedures are widely varied throughout Alliance and coalition forces. Many countries have established regulations, and most actively practice risk management to some level. Some countries are concerned with accidental and tactical risk; others are actively concerned with tactical risk only. Compliance with existing national safety regulations varies from unit to unit. Standard safety practices, such as seatbelt usage and traffic regulations, vary from country to country. Several countries' militaries do not possess night vision devices

and are not well-practiced at operating during limited visibility conditions. Several countries also do not have heavily armored vehicles, or units have not practiced operating near tanks and infantry fighting vehicles.

Recommendations: Prior to deploying, unit leaders and safety officers should identify expected accidental and tactical risk hazards and develop draft mitigation measures and controls. If possible, socialize the hazards, mitigation measures, and controls with all partner forces for the training exercise. Unit safety personnel should research cultural and military aspects of safety for all partner forces (seatbelt use, speed, training during limited visibility conditions, heavy/light integration, etc.). Units should make unit safety officers a part of the planning process, especially during course of action development and course of action analysis. Risk management should be addressed during orders briefings and rehearsals.

Observation: Understanding Menus of Available Restrictive Control Measures

Discussion: Mission command is not the absence of control measures, but the art and science of effectively prescribing control measures when required. Commanders at every level must provide enough control measures to control the tempo and effects of the fight without inhibiting initiative and lethality. Misunderstanding or misapplication of mission command — control measures — can equate to micromanagement. Minimum essential control measures provide flexibility within the operational framework and accomplish the commander's intent. What is often seen depicted on graphics are the basics: boundaries, attack/support by fire positions (ABF/SBF), routes, engagement areas, checkpoints, etc.

However, full consideration of control measures is often lacking in three areas. The first problem area involves failing to provide the required level of detail to depict or state control measures intended to control the fight.

Examples of this problem area include:

- Not using restrictive firing lines between converging/adjacent units.
- Not providing weapons control statuses for air defense artillery or other units.
- Not controlling units moving through passage points (between sister or adjacent units).
- Not providing engagement priorities or criteria to attack aviation or other units to set conditions in depth or at decision points.
- Not designating reconnaissance and battle handover lines (RHO/BHO).
- Not placing no-fire areas over observation post locations.

A second problem area concerns lack of quality control in depicting control measures on maps or digital systems such as PowerPoint (PPT), Command Post of the Future (CPOF), and BFT. Often, control measures can become intent graphics and not true control measures for facilitating unit coordination, considering weapons/munitions effects, preventing fratricides, depicting ABF/SBF locations precisely at actual ground/above ground locations, and controlling tempo. Examples of this problem area include:

- Prescribing boundaries on roads instead of to either side of them to specify what unit controls them.
- Failing to base RHO/BHO lines and engagement areas on actual terrain.
- Omitting prescribed passage points during passage of lines operations, etc.

The third problem area concerns failure of units to provide dynamic control measures during the fight. As units rarely execute operations as planned, they also rarely take advantage of revisiting control measures during the fight to consider such circumstances as converging forces or redirecting attack aviation for unplanned enemy actions.

Recommendations: Depicting control measures on PPT, CPOF, or BFT is acceptable for intent graphics, but does not provide the granular depiction required for integrating air and ground operations safely or effectively. For clarity and risk reduction, units must use overlays with control measures from a scaled topographical map and distribute overlays to subordinate units. Inherent in operations are risk and mitigation measures (calculated risk), often in the form of control measures. When identified, control measures should be briefed in risk management briefs and during rehearsals. Finally, the MILES (Multiple Integrated Laser Engagement System) does not effectively adjudicate surface danger zones from direct, indirect, or air munitions. Effective planning to emplace control measures is an absolute must for units. To be effective, units must understand the differences between planning offensive, defensive, various enabling operations, and the inherent control measures therein. Range safety pamphlets and ammunition and explosives safety standards are excellent sources for the math-to-battlefield geometry, allowing effective fire and maneuver during combined arms operations; these sources should be used during the operations process.

Observation: Developing Anti-Fratricide Measures

Discussion: Incidents of fratricide are much more frequent during multinational rotations. Though the most common causes of fratricide at JMRC are the same as those that U.S. forces have experienced throughout our country's history (failure to obtain positive identification and lack of

situational understanding/awareness), Soldiers also face having to learn a deluge of new vehicles, uniforms, and TTP. In addition, the opposing force is typically a multinational task force, which tends to heighten Soldiers' concerns about penetration of their lines.

Recommendations: The earlier that brigades can address these matters, the better. Additionally, units must continually update and distribute information as task organization changes and different multinational forces work together during different phases of operations.

- Establish, resource, and publish a day and night vehicle marking system that works for all participant capabilities (not all units will have the same night-vision capabilities).
 - Conduct vehicle and equipment displays and vehicle capability demonstrations for all members of the organization. This allows forces to see the equipment up close and while on the move.
 - Distribute pictures of the types of equipment and vehicles throughout formations for quick reference during operations.
 - As time permits, allow the observation of training lanes by other multinational partners.
 - Ensure and enforce the widest distribution of common operational graphics (at least to the squad level).
 - Enforce proper clearance of fires (direct and indirect).
-

Observation: Developing Communications Equipment Compatibility Matrices

Discussion: Multinational units employ a wide variety of communications equipment and typically do not have the ability to communicate via digital means away from established/pre-wired facilities. Units must arrive with some understanding of the systems that partner forces use and how they transmit different types of information. This includes understanding how many networks a unit is able to monitor or understanding what types of information are transmitted over the respective networks. Units that do not obtain such understanding may struggle to develop effective, redundant means to communicate throughout each of the warfighting functions.

Most multinational units are unable to encrypt their communications at the levels that U.S. forces typically employ. Some countries are unable to encrypt their communications at all. As a result, units often migrate to the lowest level of encryption or operate "in the red" and unnecessarily expose themselves to jamming or eavesdropping.

Units must plan and execute a structured communications system validation by using communications exercises (COMMEX) and digital exercises (DIGEX). Units that do not validate their systems for every level of their primary, alternate, contingency, and emergency (PACE) plans face possible degraded communications abilities for several warfighting functions until well into the “force on force” days (X-days) of the exercise.

Recommendations: Prior to arrival, units should research what types of equipment their partner forces use, what levels of encryption those forces are able to employ, how many networks the units typically operate, and what types of information are passed over each network. Units should try to create compatibility matrices that depict what systems are able to communicate over different frequencies or networks. Units should also create draft PACE plans for every warfighting function to include what level of encryption each system will employ. The brigade S-3 and S-6, with input from the entire staff, should prepare draft COMMEX and DIGEX plans with the intent of executing the systems validations before completing the reception, staging, onward-movement, and integration process.

Establish a communications working group that includes communications specialists from each partner unit and specialists from every echelon of the command from the company level and up. The objective of the working group is to fill in information gaps about communications systems and processes, then agree upon an updated draft PACE plan for every echelon of the command for each warfighting function. The working group should brief and obtain approval of these plans from the brigade commander. Units also must ensure that their intended plan meets U.S. foreign disclosure regulations.

In situations where not every unit is able to encrypt communications to the same level, units should consider creating “spheres of encrypted communications” to allow specific units to continue to maximize use of their encryption capabilities internally. With networks that must be operated at a lower level of encryption (or no encryption at all), units are encouraged to create procedure words (prowords), code words, operational schedules, or other measures to frustrate unauthorized monitoring.

After the commander approves the PACE plan, the S-3 and S-6 finalize the COMMEX and DIGEX plans and then publish an appropriate order. The COMMEX and DIGEX must be structured exercises that validate the unit’s ability to pass genuine information over respective nets, such as formatted logistics status reports over the Battle Command Sustainment Support System, processing digital calls for fire over the Advanced Field Artillery Tactical Data System, and so forth. The COMMEX and DIGEX should culminate with units passing information over distances they expect to operate across during their missions (validating retransmission assets and teams). The battle staff should be fully manned and actively tracking unit

progress throughout these exercises. The brigade executive officer or S-3 should also be active participants during these exercises. The COMMEDEX and DIGEX should result in approved/validated PACE plans and network diagrams that can be used as foundations for communications running estimates.

Attaching operators trained in U.S. radios and systems to partner-unit headquarters is a viable solution to bridging a system gap. Units should be prepared to mitigate several potential issues:

- Language abilities of radio operators
 - Number of radio operators required for continuous operations
 - Life support plans for radio operators
 - Foreign disclosure regulations regarding equipment and communications security
 - Unit expectations (radio operators typically are not trained to serve as LNOs)
-

Observation: Integrating and Synchronizing Multinational Brigade Aviation

Discussion: Multinational units have significantly fewer opportunities to work with helicopters at their home stations. Most multinational brigade combat teams do not have organic brigade aviation elements (BAEs). This lack of opportunity and aviation subject matter experts limits air-ground integration and synchronization. While the BAE does not take the place of aviation task force (TF) involvement in the planning process, the BAE assists the brigade in aviation planning and provides the supporting aviation TF with mission information. The multinational brigade requires integration and synchronization of aviation into the ground scheme of maneuver. Essential elements include airspace command and control planning synchronized with the air LNO (ALO) and fire support coordinator (FSCOORD) for combined arms operations.

Recommendations: First, it is critical to understand specific multinational units' capabilities. Relationships with multinational partners should be developed as early as possible in order to understand the limitations of their personnel, training, and equipment. This will allow tailoring of beneficial liaison/equipment packages between units to mitigate shortfalls. Second, it is critical for aviation commanders and S-3s to lead aviation mission planning in support of multinational brigades. Third, aviation integration and synchronization should be taught to multinational brigades in collaboration with the FSCOORD and ALO. Finally, the aviation TF

should provide a robust team capable of planning and synchronizing efforts for current and future operations. The team should possess the equipment (liaison with radios and appropriate digital systems) and the ability to overcome the complexities of a multinational brigade. This is done by enabling mission command and planning efforts (engagement area development, placement of aerial battle positions/air control points, flight routes, fire support coordination measures, etc.) while maintaining understanding of the brigade common operational picture and other liaison activities.

Observation: Integrating Multinational Partner Short-Range Air Defense Assets

Discussion: Several years ago, the U.S. Army removed the bulk of the Stinger/Avenger weapons systems from its air defense artillery (ADA) inventory. As a result, Army ground units now are challenged to defend themselves against enemy fixed-wing and rotary-wing air threats. Many multinational partners still maintain short-range air defense (SHORAD) assets in their ground forces. Army leaders must take advantage of all available weapons systems and plan to incorporate these multinational assets into their air defense network.

The SHORAD artillery systems provided protection from enemy air threats for decades prior to the Army's decision to shift those systems to the National Guard, which often employed them in a homeland defense role. Many of the former Stinger/Avenger batteries were transformed to counter-rocket artillery and mortar units, which enabled the brigade combat team (BCT) to defend itself from direct- and indirect-fire threats common to forward operating base-centric conflicts. However, as we train for the transition to an expeditionary fighting force from a counter-insurgency force, BCTs now face near-peer enemy aviation threats. Short-range air defense weapons systems from any source must be part of their air defense planning by the BCT. The Patriot weapon system can defeat fixed- and rotary-wing enemy aviation, but that system primarily is employed to defend geopolitical assets, not maneuver forces. BCTs are able to nominally counter enemy air threats with heavy machine guns and tank main guns, but those weapons generally are effective against enemy air threats only up to 1,000 meters versus the longer engagement range of the Stinger missile.

Recommendations: The solution to countering fixed- and rotary-wing threats in an area of operations is to fight truly as a multinationally integrated force. NATO allies and partners maintain SHORAD proficiency with an array of weapons systems in their respective inventories, many of which are similar to our mostly reallocated Stinger. A brigade that has such assets task-organized within its formation must effectively plan and

integrate its multinational partner ADA assets to allow for successful engagements of enemy aviation threats.

Understanding what multinational partners bring to the fight is critical to creating an effective plan. It is simply unwise to ignore a threat as capable as enemy aviation when we have the assets to defeat it. If a multinational ADA platoon's key mission-essential task is command post protection, the unit should employ it in that role. Units must avoid squandering ADA assets by misappropriating them toward ground maneuver tasks such as area security details instead of allowing them to provide SHORAD coverage to the BCT. U.S. BCTs must learn to incorporate air defense assets into their plans. Units should integrate multinational air defenders into the staff early during all aspects of the planning process. Man-portable air defense system (MANPADS) teams must be positioned far enough from the defended asset to prevent the air threat from completing attacks. Units must have effective means of communicating with MANPADS teams to update them on current air defense warnings and weapons control statuses. Units must integrate these teams to ensure that orders are understood and fratricides are prevented.

Observation: Developing Reports and Returns Matrices

Discussion: Attached units, whether U.S. or multinational, typically struggle to understand what information their higher headquarters requires, how and when the information should be transmitted, and what to expect in return. Brigade headquarters typically become frustrated with missing, late, or incorrect reports. Classic examples are contact reports. Even within U.S.-pure formations, battalion and company leaders struggle to understand what type of information the higher-level commander wants and when to send a report over command nets. This struggle results in a command net packed with constant chatter or filled with silence. Either way, the commander does not get the required information to increase his situational awareness and his ability to fight the battle.

Recommendations: Brigades should establish and publish a reports and returns matrix that clearly describes the expected report, what information is required in the report, the expected format, suspense time(s) for submission, and the primary and alternate means for transmitting the information. See Table 1-1 (beginning on the next page) for an example of a reporting matrix.

Table 1-1. Reporting matrix for multinational force.

Report	Function	From	To	Frequency	Comms System
Green 1	Request for Intel	Unit	Next higher	As needed	P: CPoF A: FM O&I NET C: FBCB2 E: FM CMD NET
Green 2	Sensitive items accountability report	Unit	Next higher	Daily at 0600 1800	P: CPoF A: FM O&I NET C: FBCB2 E: FM CMD NET
Green 3	Weather report	BDE	Next lower	As necessary	P: FM O&I NET A: FBCB2 pre-format C: FBCB2 free text E: FM CMD NET
Green 4	BDA Report – To provide S-2 necessary information to estimate combat strength	Unit	Next higher	As necessary	P: FM O&I NET A: FBCB2 pre-format C: FBCB2 free text E: FM CMD NET
Green 5	Intel Summary Report (INTSUM) – To provide subordinate S-2 with summary of enemy activity	BN S-2 BDE S-2	BDE S-2 DIV S-2	2400 daily or as nec. 0600 daily	P: CPoF A: FM O&I NET C: FBCB2 free text E: FM CMD NET
Green 6	Reporting captured enemy equipment	Cap-turing unit's S-2	Sub. unit	Within two hours of capture	P: FM O&I NET A: SVOIP C: FBCB2 free text E: FM CMD NET
Green 7	Intelligence NET call	BDE S-2	BN S-2	Daily	P: FM CMD NET A: FM O&I NET C: FM A&L NET E: SVOIP conf. call

(Table continues on Pages 24 to 31)

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Report	Function	From	To	Frequency	Comms System
Blue 1	SPOT report	Unit	Next higher	As necessary	P: FM CMD NET A: CPoF C: FBCB2 E: FM O&I NET
Blue 2	Commander's SITREP (NET call)	BDE S-2	Next higher	1600 daily	P: FM CMD NET A: CPoF C: SVOIP conf. call E: FM O&I NET
Blue 4	Closing report – When a unit has moved from one location to another	Unit	Next higher	NLT 30 minutes after unit completes its move	P: FM CMD NET A: CPoF C: FBCB2 E: FM O&I NET
Blue 8	Airspace control measure report – To request airspace control measures for inclusion on a future airspace control order	Unit	Next higher	As necessary NLT time published in DIV OPORD	P: CPoF A: FM O&I NET C: FBCB2 E: FM CMD NET
Blue 9	Patrol report	Unit	Next higher	As necessary NLT 1 hour following patrol	P: SIPR A: CPoF C: FBCB2 E: FM O&I NET
Blue 11	Commander's daily SITREP – Report on the previous 24 hours, effects assessment, and recommendations for future activities	Unit	Next higher	1200 daily	P: CPoF A: LNO (courier) C: FBCB2 free text E: FM CMD NET
Blue 26	Route clearance report	Unit	Next higher	As necessary	P: SIPR A: CPoF C: FBCB2 E: FM O&I NET

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Report	Function	From	To	Frequency	Comms System
Yellow 1	LOGSPOT – Provides information on actual or anticipated changes in the logistic situation that may affect operational capability	BDE S-4	DIV S-4	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 2	LOGSTAT – Daily summary of positive and negative logistical developments that could affect the conduct or outcome of future operations; report status as of 1600	BN S-4	BDE S-4	Every 12 hours (as directed in DIV OPORD)	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 3	Maintenance SPOTREP – Provides the commander a view of subordinate maintenance status per pacing item	Unit	BN S-4	When requested or when a unit becomes AMBER in capability due to maintenance	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 4	Emergency ammunition request	Unit	BN S-3/ S-4	When a unit becomes RED on ammunition earlier than anticipated	P: CONET A: CPoF C: FBCB2 E: FM O&I NET
Yellow 5	Daily COMSTAT report	BN S-6	BDE S-6	1900 daily	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 6	Detailed FBCB2 report	BN S-6	BDE S-6	1900 daily (with the Yellow 5)	P: CONET A: SVOIP C: FM A&L NET E: LNO (Courier)
Yellow 7	LOG NET CALL	BN S-4	BDE S-4	1300 daily	P: CONET VTC A: SVOIP telecon C: FM A&L NET E: LNO (courier)
Yellow 8	MEDSITREP	BN MEDO	BDE MEDO	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (Courier)

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Report	Function	From	To	Frequency	Comms System
Yellow 9	MED SPOT report	BN MEDO	BDE MEDO	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 10	Blood report	BN MEDO	BDE MEDO	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 11	Medical team movement report	BN MEDO	BDE MEDO	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (Courier)
Yellow 12	Daily disposition LOG	BN MEDO	BDE MEDO	Daily IAW times published in DIV OPORD	P: CONET A: SVOIP C: FM A&L NET E: LNO (Courier)
Yellow 13	S-6 Tactical Operations Readiness Capability (TORC) report	BN S-6	BDE S-6	2400 daily	P: CONET A: SVOIP C: FBCB2 E: FM BDE CMD NET
Yellow 14	Frequency request	BN S-6	BDE S-6	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (Courier)
Yellow 15	Joint Spectrum Interference Resolution (JSIR) report	BN S-6	BDE S-6	As necessary	P: CONET A: SVOIP C: FM A&L NET E: LNO (courier)
Yellow 16	COMSEC incident report	BN S-6	BDE S-3/ S-6	Immediately once a compromise is known or suspected	P: CONET A: SVOIP C: FBCB2 E: FM CMD NET

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Report	Function	From	To	Frequency	Comms System
Red 1	Commander's personnel manning report	BN S-1	BDE S-1	0800 daily	P: CONET A: SVOIP C: FM A&L NET E: FBCB2 free text
Red 2	Personnel SPOT report – used to report mass casualties	BN S-1	BDE S-1	When a unit becomes AMBER in combat capability due to personnel loss	P: CONET A: FM BDE A&L NET C: FBCB2 free text E: FM BDE CMD NET
Red 3	Personnel Requisition Report (PRR) – Requisition for replacements	BN S-1	BDE S-1	In conjunction with a Red 2 report	P: CONET A: FM A&L NET C: FBCB2 free text E: FM CMD NET
Red 4	PERSTAT (Personnel strength report – task force summary)	BN S-1	BDE S-1	0800 and 2000 daily or IAW DIV OPORD	P: CONET A: FBCB2 free text C: SVOIP E: FM A&L NET
Red 5	Unit casualty feeder report	BN S-1	BDE S-1	As necessary, as soon as accurate information is available	P: CONET A: FM A&L NET C: SVOIP E: FM CMD NET
Red 6	Change of command report – provides notification of company level and above change of commands	BN S-1	BDE S-1	As necessary, NLT 2 hours after a change of command	P: CONET A: SVOIP C: FM A&L NET E: FM CMD NET
Red 7	Suspected law violation report	BN S-3/XO	BDE SJA/XO	As necessary, as soon as accurate information is available	P: CONET A: FM A&L NET C: SVOIP E: FM CMD NET
Red 8	Suspected friendly fire report	BN S-3/XO	BDE SJA/XO	As necessary	P: FM CMD NET A: CONET C: FBCB2 free text E: FM A&L NET

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Report	Function	From	To	Frequency	Comms System
Red 9	Accident report	BN S-3/ XO	BDE S-3/ XO	As neces-sary, as soon as accurate information is available	P: FM CMD NET A: CONET/email to BTL CPT and Safety Office C: FBCB2 free text E: FM A&L NET
Red 10	Serious incident report (SIR)	BN S-3/ XO	BDE S-3/ XO	As neces-sary, as soon as accurate information is available but NLT 1 hour after the incident	P: FM CMD NET A: CONET C: FBCB2 free text E: FM A&L NET
Red 11	MEDEVAC request	BN MEDO	BDE MEDO	As necessary; for urgent casualties use NATO 9-line MEDEVAC format	P: FM CMD NET A: SVOIP C: FBCB2 free text E: FM A&L NET
NBC 1	Observer's initial report – to provide units with an initial report of areas that may be contaminated	Ob-server	Next higher	As necessary and imme-diately upon receipt of information	P: FM CMD NET A: SVOIP C: FBCB2 free text E: FM A&L NET
NBC 5	Report of contaminated areas	Ob-server	Next higher	As necessary and imme-diately upon receipt of information	P: FM CMD NET A: SVOIP C: FBCB2 free text E: FM A&L NET
NBC 6	Report of chemical or biological attack	Ob-server	Next higher	As necessary and imme-diately upon receipt of information	P: FM CMD NET A: SVOIP C: FBCB2 free text E: FM A&L NET

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Report	Function	From	To	Frequency	Comms System
Black 1	Sea port of debarkation status report	BN S-1	BDE S-1	As necessary	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 2	Sea port of embarkation status report	BN S-1	BDE S-1	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 3	Aerial port of debarkation status report	BN S-1	BDE S-1	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 4	Aerial port of embarkation status report	BN S-1	BDE S-1	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 5	Marshaling area status report	BN S-1	BDE S-1	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 6	Marshaling area facility status report	BN S-1	BDE S-1	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 7	Intermediate staging base/staging area/assembly area/operating base status report	BN S-1	BDE S-1	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET

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Report	Function	From	To	Frequency	Comms System
Black 8	Logistical sustainability report	BN S-4	BDE S-4	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 9	Rail movement status report	BN UMO	BDE S-4	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 10	Rail up-load report	BN UMO	BDE S-4	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 11	Rail off-load report	BN UMO	BDE S-4	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 12	Convoy status report	BN UMO	BDE S-4	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 13	Convoy SP report	BN UMO	BDE S-4	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 14	Convoy RP closing report	Unit	Next higher	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET

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Report	Function	From	To	Frequency	Comms System
Black 17	Air movement status report	Unit	Next higher	As necessary and immediately upon receipt of information	P: FM CMD NET A: SVOIP C: Courier E: FM A&L NET
Black 20	RSOI tracking report	Unit	Next higher	0500 daily; information as of 0001	P: CONET A: SVOIP C: Courier E: FM O&I NET
Purple 1	Detainee report	Unit	Next higher	As necessary and immediately upon receipt of information	P: CONET A: FM CMD NET C: FBCB2 free text E: FM O&I NET
Purple 2	Blood report	BN MEDO	BDE MEDO	Daily, NLT time published in DIV OPORD	P: CONET A: SVOIP C: Courier E: FM O&I NET
Purple 3	DNBI report	BN MEDO	BDE MEDO	Weekly	P: CONET A: SVOIP C: FM A&L NET E: FM CMD NET
Purple 4	IED/UXO report	Unit	Next higher	As necessary	P: CONET A: SVOIP C: FM O&I NET E: FM CMD NET
Purple 5	Detainee abuse serious incident report	Unit	Next higher	As necessary, immediately upon notification or suspicion of abuse	P: CONET A: SVOIP C: FM O&I NET E: FM CMD NET
Purple 6	Detention of host nation security forces or government leaders by coalition forces	Unit	Next higher	As necessary, immediately upon detention	P: CONET A: SVOIP C: FM O&I NET E: FM CMD NET

Chapter 2

Movement and Maneuver Warfighting Function

Observation: Understanding the Brigade Versus Battalion Fight During Planning and Execution

Discussion: Brigade staffs are equipped with the means to plan and execute at the same time. Brigades must focus on future transitions and forecasts; however, it also is important to resource and coordinate the current fight. As part of mission command, brigades must provide battalions with resources and enablers to support current operations and shape the deep fight in depth within the area of responsibility. Units must implement adequate control measures to control the tempo of operations, kill the enemy, and prevent fratricide. Units at every echelon must develop details in operations such as reconnaissance and battle hand-over lines, passage of lines, and others to enhance the commander's overall visualization and control of the battlefield.

Recommendations:

- To fight in depth, brigades can identify target selection standards and provide attack guidance matrices for using close air support and close combat air assets. They can also provide priorities of assets and use passive/active control measures for assets (for example, weapons control status, engagement criteria/priorities, etc.).
 - Units can improve the use of control measures and set the tempo for the fight by reviewing offensive/defensive planning tactics and techniques. For example, units should tie the sequence of offensive missions to terrain-based control measures to control fires (such as target reference points, restrictive fire lines, indirect fire control measures, no-fire areas, and coordinated fire lines).
-

Observation: Improving the Integration of Attached Units through Increased Understanding of Unit Capabilities

Discussion: When multinational partners come to train, U.S. units must understand significant differences among allies' capabilities in the areas of staffing, equipment, and operational readiness. U.S. units must assume that attachments might arrive with significant gaps in operational or sustainment capabilities, including medical support, recovery assets, fire support vehicles or forward observers (FOs), obstacle breaching assets, anti-armor systems, night-vision capabilities, mission command equipment, and even seemingly basic items such as cold/wet weather gear and sleeping systems. Additionally, multinational units might employ key systems differently, including combat vehicles. Prior to making decisions about tactical

employment, or assigning tasks and purposes, unit leaders must identify these differences or shortcomings. Conversely, unit leaders must also review their attachments' capabilities to identify any tactical opportunities, such as air defense equipment.

Multinational partners also arrive with significant differences in terms of operational capability or training readiness. These differences stem from limitations in training, differing doctrine, and traditional means of employment. For example, some armies employ only helicopters in their nations' air forces, and as a result light infantry could lack familiarity or experience with air assault or air insertion techniques. Other shortcomings might include a lack of night training. Still other countries may focus primarily on defensive operations. Units must thoroughly integrate their attached units to understand exactly what they can or cannot do.

Recommendations:

- Generate discussions with attachments during the reception and staging process of integration. Use comprehensive mission- or environment-specific checklists to assess attachments' capabilities and identify shortcomings or possible opportunities.
 - Develop the company/team (Co/Tm) or task force (TF) task organization in a manner that cross-levels critical capabilities as required. For example, consider cross-attaching an engineer sapper squad, a Bradley fire support team vehicle with FO, medics, or a Javelin anti-armor team to an attached multinational organization.
 - Assign achievable tasks and purposes to attached units, based on candid discussions between leaders and staff from parent and attached units.
-

Observation: Improving the Integration of Attached Units Through the Assignment of Achievable Tasks and Purposes

Discussion: After working with attachments during a thorough integration process, units must assign their attachments achievable tasks and purposes that are commensurate with their operational capabilities. Due to possible shortcomings in equipment, training, or operational doctrine, attached units could struggle to achieve their assigned tasks, and might be unwilling to express their concerns or reservations about them prior to the execution phases of operations. A common example is tasking an attached element to conduct night operations without realizing or understanding severe limitations in that unit's night-vision capabilities, whether with vehicular or individual optics. Compounding the issue, U.S. units sometimes want to assign a particular attachment unit as the decisive element of an operation in a misplaced sense of team building, when that particular unit might be unable to accomplish that mission.

Recommendations:

- Implement a thorough and structured integration program for attachments, leading to an understanding of capabilities and limitations of attached forces.
 - Require attached units to provide in-depth back briefs of their plans to the Co/Tm or TF commander to ensure that there is a complete, feasible plan to achieve each assigned task and purpose.
-

Observation: Improving the Integration of Attached Units Through the Assessment of Training Proficiency and Development of Training Requirements

Discussion: TF and Co/Tm commanders must identify training deficiencies that can be overcome given appropriate time or resources. For example, a TF commander who identifies that his attached rocket propelled grenade (RPG) gunners are not proficient with their weapon systems can direct his attached light infantry companies to conduct specific training with their RPG gunners in order to increase accuracy and lethality. Another example is conducting cold- and hot-load training with attached companies to develop and improve air insertion capabilities. By identifying training deficiencies as early as possible, and developing training plans to mitigate potential operational or tactical effects, commanders can integrate attached units to achieve their maximum capabilities.

Recommendations:

- Review capabilities and limitations of attached units and assess whether there are any shortcomings that extra training opportunities can help reduce.
 - Leverage external headquarters or assets as available to mitigate organic unit impacts.
-

Observation: Employing Methods of Fratricide Prevention

Discussion: Working with multinational partners in close proximity on the battlefield can present challenges to all Soldiers. Given that NATO allies and partner nations have different equipment and uniforms and lack standardized markings, it can be difficult to distinguish between friendly and enemy equipment/personnel. Exacerbating this problem is the fact that several U.S. allies and partners use the same or similar equipment as our potential enemies. Adding to this complexity is the requirement to be able to operate during conditions of limited visibility, since many partner nations lack organic night-vision equipment. Although most units use boundaries

and other control measures to help mitigate the likelihood of fratricide, some types of units tend to transit brigade areas of operations without making the effort to conduct prior coordination. These units might include special operations forces, engineers, logistics, and reconnaissance forces. Fratricide is also more likely during operations when multiple multinational partners come in contact, such as during rearward or forward passage of lines. If units do not deliberately plan and rehearse such operations, these conditions can lead to fratricidal events.

Recommendations:

- Units must ensure that all elements share the same level of situational awareness regarding adjacent unit locations and dispositions on the battlefield. Units must provide subordinate commanders with graphic control measures that show all adjacent units and boundaries and provide these graphics both on plastic acetate overlays as well as on mission command systems such as Blue Force Tracker (BFT) and the Command Post of the Future (CPOF). As an additional measure, units should also disseminate adjacent unit frequencies and call signs.
- Brigades should consider establishing contact and/or coordination points on their maneuver graphics between adjacent units to assist them in maintaining situational awareness.
- Units should exchange liaison officers (LNOs) with adjacent units when possible. If units cannot assign permanent LNOs with adjacent units, then during mission analysis they should identify critical points/times when having an LNO would help mitigate risks.
- Units must make positive contact with the land-owning headquarters before crossing any adjacent unit boundaries.
- Units should have adequate standard operating procedures (SOPs) for passage of lines and should rehearse with adjacent units to the maximum extent possible prior to execution.
- Units should develop vehicle identification marking systems to aid individual Soldiers or crew members in distinguishing between friendly and enemy vehicles. The marking system must be visible at night, and the use of foliage or camouflage nets should not obscure the markings.
- Units must ensure that Soldiers are familiar with the equipment and markings of their allies and partners. When possible, provide pictures or static displays of all equipment within the TF during hours of both daylight and limited visibility.

Observation: Utilizing Additional Personnel to Provide Headquarters Staff Augmentation

Discussion: Many brigade and battalion staffs are not robust enough to effectively plan or conduct operations with a large number of attached U.S. and multinational forces. Additionally, many units are unfamiliar with conducting operations in a multinational environment and do not account for some of the unique challenges associated with employing and sustaining these units. However, there are examples of achieving increased success by requesting and integrating staff officers and noncommissioned officers (NCOs) at battalion and brigade levels to assist with this process. Staff augmentation, ideally from an attached unit's higher headquarters, can relieve some of the additional burden on an organic staff, as well as provide solutions to many of the technical and operational gaps identified as key lessons learned. Staff augmentations in the maneuver, sustainment, fires, or mission command warfighting functions are all valuable.

Recommendations: When practical, require attached units to provide staff augmentation, in addition to LNO support, at the battalion and brigade levels. This helps mitigate many of the identified capabilities gaps for both organic as well as attached units. It also serves to address many of the interoperability challenges that cannot be addressed by overburdened staffs.

Observation: Providing LNOs at Each Echelon to Ease Integration and Increase Capabilities

Discussion: Effective use of LNOs down to the company level is essential during multinational operations. Due to differences in equipment, capabilities, and language, LNOs serve a variety of functions within organizations. Most commonly, LNOs provide conduits to pass information regarding unit capabilities, location, sustainment requirements, and current operational focus. However, LNOs also can provide both the supported and supporting headquarters with critical expertise in the employment of attached units, as well as planning considerations that lead to the assignment of appropriate tasks and purposes. Additionally, LNOs can provide technical expertise to help units fill specific capability or functional gaps. For example, providing LNOs who have indirect fires expertise and communications capabilities assists in the integration of indirect fires from the company to brigade level. Assigning LNOs from brigade combat teams to attached multinational battalions can help to achieve shared understanding at both echelons using mission command systems.

Recommendations:

- Provide LNO teams at each echelon within the formation. Ensure that each team consists of enough personnel to conduct 24-hour operations over extended periods. This should equate to a minimum of two to four personnel at the company level, and will most likely require more personnel at the battalion and brigade levels.
- When selecting LNOs, identify personnel with specific functional expertise based on mission requirements to address specific technical and capabilities gaps.
- At a minimum, the suggested composition of an LNO team from a U.S. combined arms battalion or Stryker rifle battalion assigned to an attached multinational company should include an experienced and outgoing officer (1LT or CPT), an NCO (SSG or SFC), and a driver. A better option is a team of four Soldiers, including one medic and one communications specialist, if possible. Select LNO teams trained in planning and executing fire support missions. In addition, equip each team with a wheeled vehicle such as the HMMWV with dual long-range radios and BFT capability.

Observation: Establishing Effective Communications Systems as Critical Operational Enablers

Discussion: Communication, whether through radio transmissions or digital media, is one of the primary challenges faced from the platoon to the brigade levels. While language differences are obvious issues, many units do not have effective systems in place to standardize reporting requirements. Additionally, in many cases, units do not have compatible equipment sets, forcing units to redistribute equipment or personnel to ensure accurate transmission and reception of information.

Recommendations:

- Identify and use a common language across unit radio networks and other communication systems. Additionally, identify personnel in the formation who can serve as interpreters when necessary, or provide translated copies of common reports to make them easily understood.
- Use an execution checklist format using words that are easy to pronounce and understand to rapidly transmit information and unit conditions during operations.

- Establish a common frequency bandwidth or medium and equip the formation with the systems to allow all to communicate. Establish a communications network cleared through foreign disclosure channels for usage by all participants. Clear all of the systems in the exercise for use and viewing by all participants or clearly publish any viewing/usage restrictions. Bring leaders together to discuss the restrictions to verify understanding.
-

Observation: Obtaining Detailed Standards for Operational Planning Processes

Discussion: National planning processes are often dissimilar in form, process, inputs, outputs, and timelines. They may be more or less commander-centric than the military decisionmaking process (MDMP). Even those processes that look most similar to MDMP may allocate time in a different way, or have different expectations of similar processes, leaving one echelon frustrated or unprepared to participate in the other echelon's briefings and rehearsals.

Recommendations:

- Higher echelons should provide detailed standards for required subordinate briefings and rehearsals pertaining to unit tactical SOPs, tactical operation center SOPs, and planning SOPs. Additionally, use LNOs to ensure subordinates understand these standards and expectations.
 - Higher echelons should request subordinate planning timelines and nest them with their own to ensure that they are enabling their subordinates.
 - Higher echelon commanders should invest the time with their subordinates to ensure that they understand their requirements.
-

Observation: Understanding Differences in Operational Lexicons

Discussion: All subordinates must commonly understand national or NATO doctrinal language in planning and execution to avoid confusion. As an example, “zone reconnaissance” in U.S. doctrine is synonymous with “area search” in NATO doctrine. One nation’s use of the term “neutralization” is equivalent to another’s use of “suppression.” Additionally, other nations use their own terms, such as “break-in point,” “report lines,” or “forming-up point.” Incorrectly assuming that terms are equivalent is likely to lead to confusion, and could hinder a unit’s ability to achieve the commander’s intent.

Recommendations:

- Higher echelons must take the lead in establishing commonality of operational terms and graphics. Defining and referencing all tactical tasks or effects assigned in the text of the operation order (OPORD) provides clarity.
 - Define tasks and effects during the actual OPORD briefing.
 - Subordinates should describe how they intend to achieve defined tasks or effects during both the back brief and the rehearsal.
-

Observation: Understanding How Differences in Planning Processes Can Affect Operational Tempo

Discussion: Some nations use an abbreviated planning process that does not provide sufficient detail for conducting operations. This lack of detail allows plans to be put together rapidly, but with the understanding that the unit's reconnaissance elements are expected to gather or confirm the intelligence necessary to finalize plans. Because units may not gather this intelligence until the execution phase of the mission, the likely result is that the unit must take a tactical pause to finalize and issue fragmentary orders, thus affecting the tempo of the operation.

Some nations may overly rely on ample U.S. fire support assets to destroy large numbers of enemy forces before initiating movement. Only when external fire support assets shift to a deeper fight does the unit start to move. This tendency may hinder true maneuver when defined as movement with fires or with fires potential.

Recommendations:

- Assign clear standards and subjectively define directions or commands such as "be prepared to" or "when I have set the conditions." Using "not earlier than" or "not later than" may provide some flexibility, but "on order" or setting a specific line of departure time are examples of the best techniques to maximize control of the tempo of an operation.
- Combined arms rehearsals should provide a shared understanding of not only the scheme of maneuver and scheme of fires, but also commander's decisions and criteria for making them at all echelons.

Observation: Forecasting and Supporting Logistical Needs

Discussion: Each unit has differing sustainment requirements based on varying unit-specific equipment sets and sizes of formations. An additional constraint is the contracted support model utilized by many of the multinational units due to a lack of higher-level sustainment assets. Due to these differences, battalion and brigade staffs seldom are fully integrated into the overall sustainment concept. This is problematic during the MDMP, as staffs are not able to effectively forecast sustainment requirements and account for them in the scheme of maneuver. This can result in the lack of a fully developed concept of sustainment, as well as the loss of training opportunities across multiple levels of the organization.

Recommendations:

- Require all units, regardless of inherent types of support or internal capacities, to report sustainment requirements through pre-determined reporting procedures at both the battalion and brigade levels. Alter existing reporting formats to account for potential differences in procedures and requirements from all multinational partners.
 - Enforce battle rhythm reporting requirements from all subordinate elements to ensure that these elements understand and are accounting for all sustainment requirements during the planning process.
 - Augment battalion and brigade S-4 sections, as well as brigade support battalions, with subject matter experts from each multinational organization to ensure that all requirements are met.
-

Observation: Creating and Preparing Common / Consolidated Graphics

Discussion: Higher headquarters typically struggle with the requirement to create consolidated graphics that accurately reflect subordinate unit plans. Making the situation worse, some multinational allies and partners tend to make limited use of operational graphics and rely heavily on intent graphics. Although this enables increased flexibility and latitude in subordinates' plans, it also reduces the higher headquarters' ability to conduct accurate battle tracking and results in reduced situational awareness by both higher headquarters and adjacent units. Completed consolidated graphics allow increased situational awareness at all echelons. The practice of actually consolidating the graphics usually must occur on several systems, as national mission command systems frequently do not communicate with each other.

Recommendations:

- Require that subordinate units submit operational graphics.
 - Prepare and distribute consolidated graphics to higher, lower, and adjacent units.
 - Ensure that graphics are usable by subordinates, whether by manually creating overlays or by using LNOs and shared mission command systems.
-

Observation: Conducting Enemy Analysis at the Company Level

Discussion: Understanding the enemy situation allows leaders to fight the enemy, not the plan. An effective analysis gives leaders an understanding of what combat power the enemy has and what the enemy's scheme of maneuver will look like. This understanding helps the commander create his scheme of maneuver and understand where he must focus the effects of his combat power to achieve his decisive point. Due to the time constraints of decisive action training environment (DATE) rotations, most companies do not conduct the planning required when creating the enemy situation, resulting in a vague enemy situation during an OPORD briefing. This then filters down to the platoon and squad levels, and does not give those leaders a clear understanding of what type of enemy they are facing and what type of capabilities the enemy has. Understanding the enemy is even more crucial when a company integrates multinational units into its formation. Conducting effective intelligence preparation of the battlefield (IPB) allows the multinational leader to make decisions during the mission based off the enemy threat, resulting in more trust between that leader and the company commander.

Recommendations:

- Create a company intelligence support team (CoIST) to assist in developing the enemy situation. Be sure to choose the right Soldiers and train them on how to conduct their duties. Utilize Soldiers from attached multinational platoons/squads to increase their understanding and provide additional insight.
- Develop a planning SOP that specifically tasks subordinate leaders such as platoon leaders (PLs), executive officers (XOs), and platoon sergeants (PSCGs) with creating products describing the enemy situation, allowing more time for the company commander to focus efforts elsewhere.
- Have the multinational leader back-brief a leader (CDR, XO, CoIST) on his enemy analysis.

Observation: Improving the Company Orders Process

Discussion: The company orders process is crucial to operational planning and prioritizing efforts within the unit. It also enables the commander and other leaders to use available time effectively and efficiently in the planning and execution of company operations. Due to the high tempo of DATE rotations, companies struggle with the orders process, resulting in incomplete plans. Company orders often are given within hours of start point (SP) times, if at all, leaving platoon leaders without ample time to create and brief their plans. Multinational unit leaders often are left out of the planning process, decreasing their awareness and degrading the company's ability to build a team.

Recommendations:

- Use warning orders to disseminate information in a timely manner.
 - Develop a planning SOP that specifically puts certain leaders (PLs, XOs, PSGs) in charge of creating specific products for the company OPORD, cutting down on the time spent creating products and planning. A planning SOP will also give those leaders assisting in creating the company plan a better idea of what is going on.
 - Have a leader (PL, PSG, squad leader) from the multinational unit assist in the planning process. This will increase understanding and assist in team building.
-

Observation: Integrating Multinational Units into Logistical Support Requirements

Discussion: Integrating non-organic units into the formation is a deliberate process that requires significant planning and coordination. The Co/Tms and higher-echelon units must clearly understand and account for the differing capabilities of each organization during the MDMP and the troop-leading procedure (TLP) process. During the MDMP, TLP, and planning conferences, units must anticipate, forecast, and/or account for multinational partners' classes of supply. If not forecast or accounted for, the unit fails to take ownership of the multinational partners, thus creating a dramatic difference in capabilities and making it harder to sustain the multinational partners.

Recommendations:

- During planning conferences and prior to the execution of rotations, ensure that an agreement is in place to sustain the multinational partners that are a part of a task force. This will decrease friction and allow faster integration and team-building. During the MDMP and

TLP, clearly define the command relationships between elements. Proper command relationships will decrease friction points with logistical support.

Observation: Incorporating Multinational Company Command Posts in DATE Rotations

Discussion: “A tactical command post is a facility containing a tailored portion of a unit headquarters designed to control portions of an operation for a limited time; a command post is a unit headquarters where the commander and staff perform their activities” (Field Manual [FM] 6-0, *Commander and Staff Organization and Operations*, 05 MAY 2014). The command post is critical to allow the commander to understand the operating environment and significantly influences his ability to visualize, describe, and direct his unit. Key personnel in the infantry company include the XO; first sergeant; fire support officer; radio and system operators; supply sergeant; delegated chemical, biological, radiological, and nuclear personnel; mortar section leader; armorer; and medic. Dividing tasks, as well as training subordinates to accomplish tasks with little guidance and supervision, allows the commander and key personnel to maximize their time to effect mission accomplishment. The command post will have different configurations depending on the mission. Each configuration employed must be deliberately planned, resourced, and rehearsed. The command post also serves as the reporting hub for higher and subordinate units.

Recommendations:

- Establish a command post SOP for each configuration, and train all personnel to understand their specified tasks along with the implied tasks associated that support them.
- Have the higher-echelon commander (battalion/squadron) inspect each multinational subordinate’s command post to increase understanding of capabilities and to identify shortages.
- Incorporate a warfighting function exercise (mission command, movement and maneuver, intelligence, fires, sustainment, engagement, and protection) during situational training exercises to validate all reporting requirements. Having and rehearsing a primary, alternate, contingency, and emergency plan for each warfighting function allows units to maintain a more accurate common operating picture. This enables the unit leadership to empower subordinates and make decisions more rapidly during combat operations.
- Be prepared to incorporate LNOs from higher echelons to facilitate mission command.

Observation: Employing Graphic Control Measures That Facilitate Tactical Movement and Enemy Contact

Discussion: Tactical movement is movement in preparation for contact. Knowing when and where to transition between movement techniques during movement from the tactical assembly area to anticipated initial contact with the enemy has been a difficult process to fully conceptualize at the platoon and company levels. Commanders and platoon leaders alike have a difficult time understanding when to transition between movement techniques, which can hinder their ability to gain contact with the enemy in the most favorable manner. The problem starts during preparation for the mission as part of TLPs. At the company level, leaders often fail to specifically highlight these techniques during the scheme of maneuver portion of their OPORD briefings. Additionally, the graphic control measures that should serve as visual cues before conducting SP and during execution of the mission often are not annotated graphically on the leaders' maps.

It is imperative that company commanders and platoon leaders account for these transitions in their plan because, in most cases while training at JMRC, they will have a platoon attached from one of our many multinational partners. The doctrinal foundation and tactics, techniques, and procedures of our multinational partners regarding movement and maneuver can vary significantly. Incorporating these movement techniques in the planning process will greatly assist the multinational units in understanding when and where they need to be prepared to transition from movement to maneuver in expectation for contact with the enemy. Additionally, this will increase situational awareness across formations at the company level and enable mission success.

Recommendations:

- Leaders should conduct proper IPB and identify where contact with the enemy is most likely to occur. This allows them to identify specific points along their axis of advance where they will have to transition between movement techniques before conducting deliberate maneuvers as part of actions on contact.
- Leaders at the platoon and company levels should create graphic control measures (phase lines, checkpoints, etc.) on their maps that are easily identifiable to serve as visual cues during rehearsals and execution.
- Leaders should incorporate these movement techniques and transition points into rehearsals at every echelon to ensure that leaders fully understand the overall scheme of maneuver.

Chapter 3

Fires Warfighting Function

Observation: Employing Centralized Versus Decentralized Fires

Discussion: JMRC has observed a more pronounced use of decentralized fires. This generally renders the multinational force unable to manage counter-fire missions against an opposing force (OPFOR) that maintains fires parity with the training unit. It also delays clearance of fires and airspace deconfliction as units from other countries retain their own interpretations as to how to clear fires/deconflict airspace, and at which echelons they are cleared. Further, the way some multinational units interpret decentralized fires results in firing assets serving in a quasi-direct support role to maneuver task forces, which limits the multinational force's ability to shape fights in security areas or otherwise.

Recommendations: Develop a common understanding regarding which processes and functions will be centralized with allied or partnered units, whether those processes will change for offensive or defensive operations, and whether different unit capabilities play a role in driving those decisions. Most importantly, reserve echeloned firing assets dedicated to a counter-fire role (at a minimum during key phases of an operation if not indefinitely) to limit the effectiveness of OPFOR fires (for example, during execution of the obstacle breaching fundamentals of suppressing, obscuring, securing, reducing, and assaulting obstacles).

Observation: Conducting Multinational Tactical Fire Direction

Discussion: In a multinational field artillery task force headquarters, units routinely employ field artillery assets successfully, regardless of type or from what country, provided that all elements contribute robust liaison and fire direction personnel centrally located at the appropriate mission command echelon. Additionally, a proven technique is to conduct tactical fire direction via voice or a shared non-digital common operational picture (typically analog).

Recommendations: Fire direction is essentially a common language that transcends most armed forces. The empirical requirements for field artillery task forces remain unchanged even if encompassing multinational firing assets. To maintain a high degree of success, collocate echelon-appropriate fire direction centers to maximize massing of fires while enabling subordinate firing elements to work within their national technical fire direction systems. If this is not possible, establish robust liaison officer (LNO) capabilities that adequately detail tactical fire direction information,

movement requirements, and planning considerations to the gaining headquarters. These LNO cells should contain a minimum of four personnel (one officer, one noncommissioned officer, and two radio operators) to monitor multinational force fires and the field artillery task force command frequencies. Ideally, these LNO cells retain the capability to transmit data over voice and digital systems and can assume some technical fire direction responsibilities within the multinational force fire support system.

Observation: Developing a Common Understanding With Multinational Fires Assets/Systems

Discussion: Observer-coach/trainers commonly observe inappropriate asset-to-task matching when units plan and employ fires in support of unified land operations. An example is the use of 1960s-era self-propelled howitzer units with prolonged response times as reactive shooters for counter-fire, counter-preparatory fire, and other such missions. This inappropriate asset-to-task matching is due to an incomplete understanding between U.S. and multinational units with respect to response times, targeting objectives, and weapons capabilities.

Recommendations: While planning offensive and defensive operations, the multinational force and subordinate field artillery task force must consider the assets available and the capabilities of those assets. At the multinational force level, this means assigning an appropriate asset in the execution portion of the unit's fire support tasks. At the field artillery task force level, this requires marrying the appropriate firing asset to the unit's field artillery task, as different countries retain distinct capabilities. An example: Many of the new NATO members use or were trained in old Soviet field artillery doctrine that emphasized volume of fire over accuracy, and therefore planned barrage fire over responsive supporting/precision fire. To maximize the multinational force's capabilities, units should consider not only the weapon systems of the contributing countries, but also their doctrinal lineage and tactics, techniques, and procedures that may predispose such units to certain types of fires.

Observation: Developing and Refining Fire Support Plans and Supporting Products

Discussion: JMRC commonly observes major information gaps in the multinational force and task force-level Annex D (Fire Support) sections of unit tactical operation orders. Noticeably absent are fire support execution matrices, attack guidance matrices, target selections standards, and high-payoff target lists. These are supporting documents that enable a multinational force and subordinate task force to develop, refine, and

Target Development in the MDMP

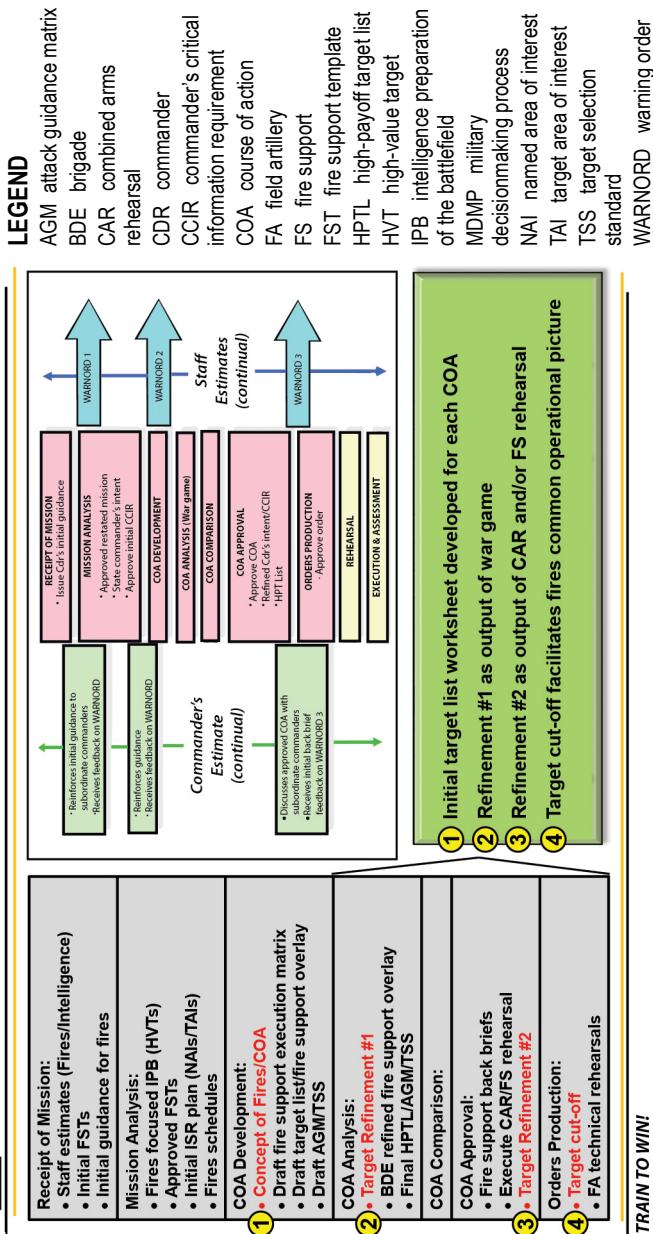


Figure 3-1. Target development in the military decisionmaking process.
(Source: JMRC)

employ a sensible targeting program and provide appropriate attack guidance to observers on the ground. These omissions result in many fire support pathologies, to include ammunition wastage, or inappropriate asset-to-task matching (for example, a rocket artillery mission used against a moving enemy reconnaissance section), and a general notion that all targets are a priority and thus must be serviced in the order received. That last notion, as a matter of course, leads to significant target decay. Figure 3-1 (Page 49) illustrates target development in the military decisionmaking process.

Recommendations: A general, but rather obvious, recommendation is that fire support plans must be complete, thoroughly war-gamed, and refined by subordinate elements prior to a multinational force-level combined arms rehearsal or similar event in terminal planning. Additionally, keep in mind that allies/partners routinely execute bottom-up planning with top-down consolidation, which will conflict with the U.S. practice of top-down planning with bottom-up refinement. Further, when operating in a multinational force, units must take special care to adopt common terminology both in planning and execution.

Observation: Centralizing Radar Management

Discussion: When units operate as part of a multinational force, they have differing interpretations as to who controls radar locations, sensor zones, and displacement criteria for the unit's organic assets, as well as how the multinational force manages reinforcing radar assets from a higher headquarters (for example, a mobile AN/TPQ-37 Firefinder weapon locating radar system). This is a particularly difficult point if the multinational force headquarters is a non-U.S. formation. Further, units operating in a multinational force should be aware of differences in doctrine in the use of radars. For example, NATO doctrine includes seven different radar zones that differ from U.S. zones:

- Locating zone
- Critical friendly zone
- Engagement zone (akin to a call-for-fire zone)
- Acquisition target report zone
- Censor zone
- Inhibit zone
- Remaining area

Recommendations: At the multinational force level, centralize control of all radar assets, sensor zones, and displacement criteria, and use the fires cell and counter-fire cell (if present) as the primary staff actors to effect zone management and placement on the battlefield.

Ensure that the field artillery task force maintains administrative, security, and sustainment requirements for the individual radar sections/platoons.

Consider the composition and location of the counter-fire cell given two cases:

- Operating as a U.S.-led multinational force
- Operating as a multinational-led multinational force

In the former case, the U.S. counter-fire cell will operate with the multinational force fire support cell as per normal operations. In the latter case, it is imperative that a U.S. counter-fire cell is reinforced by a qualified fire support element (at a minimum, an assistant fire support officer [FSO], fire support noncommissioned officer [FSNCO], and two Advanced Field Artillery Tactical Data System [AFATDS] operators). This element will augment the existing multinational fire support cell and perform fire support-specific liaison duties.

Observation: Defining the Role of the Brigade Fire Support Coordinator in a Multinational Environment

Discussion: The brigade fire support coordinator (FSCOORD) role in a multinational environment is primarily dependent on national doctrine and often is not congruent with U.S. perceptions of the position. Primarily, most countries identify the brigade FSO as the FSCOORD, whereas the artillery battalion commander is relegated to the position of “force provider.” This is a particularly challenging notion in the instance where a multinational headquarters is directly supported by a U.S. field artillery battalion; the former does not automatically assume the role of brigade FSCOORD and is required to play a supporting role to the force FSO.

Recommendations: Although there is no prefabricated solution that can be applied to all multinational situations, a few mitigating actions can enable cooperation between the brigade fire support cell and the field artillery battalion. First, the field artillery battalion can provide additional liaison to the brigade fire support cell. This is especially important if the gaining unit is a multinational force and has limited organic capabilities. This LNO cell can assist the multinational force with parallel planning and provide warning orders and other information to the field artillery battalion and allow the latter to be more proactive during planning and execution. Second,

careful delineation must be made to identify exclusive responsibility between the multinational force FSO and the field artillery battalion. Such delineation may not be strictly doctrinal, but rather should focus on what is most productive for the organization as a whole. Last, the field artillery battalion commander must work in earnest to gain the confidence of the multinational force commander and have himself considered more than a force provider within the force structure.

Observation: Enhancing Communications within the Fire Support System

Discussion: With its high density of radio systems and heavy reliance on digital messaging, the fire support system (sensor – shooter) of a typical U.S. brigade is designed to support the complexities of establishing and maintaining communications. This is extremely challenging during the execution of multinational operations. As a whole, a multinational force will experience a higher volume of voice traffic because most allies and partners do not have the means to transmit formatted messages digitally on limited communications pathways coupled with numerous non-standardized reports transmitted across an already cluttered net. Voice and digital communications become particularly challenging, especially in light of dissimilar operating systems and language barriers.

Recommendations: Enable multinational units to operate using the convenience of their own organic communications systems within the entire fire support system. Enforce the use of NATO encryption keys on key fires frequencies to enable use of organic systems. Such efforts can be enhanced by applying a tactical voice bridge over complementary radio systems with priority going to the multinational force's fires net.

Avoid using chat portals (such as Jabber/MiRC) if not readily used by the multinational forces. Over-reliance on command post nodes (CPNs) that degrade easily (for example, the movement of a battalion-level fire support cell) and typically may display many non-standardized reports and unconfirmed information may add confusion to the fires common operating picture.

If operating with allies and partners, enforce standard calls-for-fire and messages-to-observer formats.

Lastly, enforce a robust use of analog products (especially fire support overlays, target list worksheets, fire plans, and schedules of fire) for multinational maneuver units that may have difficulty receiving data digitally or by voice.

Observation: Assigning U.S. Fire Support LNOs to Multinational Maneuver Task Forces

Discussion: To further enhance communications, it is often advisable to assign a U.S. LNO with robust fire support capabilities to a multinational maneuver task force, especially if the parent multinational force headquarters is a U.S. brigade combat team. In this instance, the LNO can serve two duties simultaneously:

- As a general LNO to the multinational force
- As an assistant FSO who can provide additional capabilities to that task force, garner responsive fires, and enable that task force fire support cell to better understand its supporting units (for example, the direct-support field artillery task force)

In addition, U.S. LNOs can provide extra communications capabilities not organic to the multinational maneuver task force. Typically, a task force retains the capability to monitor task force command and multinational force fire support nets without any additional room for growth.

Recommendations: Assign a U.S. LNO cell consisting of two to four personnel (at a minimum, one officer and one radio operator) who bring in digital (AFATDS, if practicable) and voice capability. (See Table 3-1, next page.) These assets augment the multinational maneuver task force for at least a direct-support field artillery task force command net and a direct-support field artillery task force fire direction net to facilitate decentralized fires for the supported unit. This LNO team enables the task force to continue to operate on its existing equipment without forcing centralized operations or “flipping” frequencies.

Table 3-1. Recommended assets for fire support LNOs.

Gaining unit	Field Artillery Battalion Headquarters	Task Force Fire Support Cell
Composition	1 fire direction officer 1 fire direction NCO 2 AFATDS operators 2 radio operators/vehicle drivers	1 fire support officer 1 fire support NCO 2 fire support specialists
Equipment	1 fire direction shelter 1 HMMWV for transport 1 AFATDS 4 FM radios with supporting long-range antennae 1 printer 1 Blue Force Tracker system terminal (vehicle-mounted)	1 HMMWV or BFIST vehicle 1 AFATDS 2-4 FM radios with supporting long-range antennae 1 printer
AFATDS BFIST HMMWV NCO	Advanced Field Artillery Tactical Data System Bradley fire support high mobility multipurpose wheeled vehicle noncommissioned officer	

Observation: Simplifying Ammunition Management

Discussion: When executing unified land operations with a multinational field artillery task force, the headquarters might experience some difficulties in establishing and maintaining ammunition management with two (or possibly three) differing families of munitions to plan for and maintain.

Recommendations: Approach all multinational forces as composite task forces and use the field artillery tasks to simplify ammunition management (for example, make one firing battery the primary smoke shooter, and so forth). If subordinate allied/partnered units do not bring organic transportation assets, dedicate a portion of the field artillery task force's sustainment footprint to directly support that element, especially if the munitions are not compatible.

Apply unique commander's guidance, attack guidance, and supply rates to account for each caliber of munitions used within the formation. Attack guidance is particularly important as the field artillery fire direction center must differentiate how many rounds it takes to suppress targets using 105mm versus 152mm ammunition.

Observation: Improving Airspace Coordination and Clearance of Fires

Discussion: For multinational decisive action training environment rotations, JMRC consistently observes a delayed responsiveness tied directly to the unit's ability to clear airspace and ground areas of operation. There are two components to this issue: those deriving from operating as a multinational force/task force (external) and those deriving from an incomplete understanding of U.S. doctrine (internal). Common contributing factors to airspace clearance delays include:

- Multinational force fire support cells unnecessarily requesting maximum ordinate and gun target lines for all missions, regardless of whether those missions break the coordinating altitude.
- Leaving selection of position areas for artillery to the discretion of the field artillery task force, thus limiting the ability of a multinational force to pre-clear fires (reducing responsiveness) and control placement of field artillery assets.
- Positioning mortars in areas where they will automatically break a coordinating altitude given a specific target area, nullifying the inherent responsiveness of the weapon system.
- Not planning rotary-wing battle positions and attack-by-fire positions in conjunction with the aviation task force and the multinational force aviation element, causing a reduction in air/ground situational awareness.

Recommendations:

- Develop a common understanding between the multinational force and the higher headquarters on procedural control for fires that break the coordinating altitude.
- Consider developing position areas for artillery (and mortar firing points), which will enable shot-to-target area without breaking the coordinating altitude or causing unnecessary clearance battle drills.
- Pre-clear airspace for planned targets, such as in support of a breach site.
- Enable all mortars to be cleared by task forces (facilitated by published coordinating instructions).
- During mission analysis, clearly articulate employment of air and surface fires to subordinate multinational formations, the criteria for clearance, and the thresholds for attack (e.g., attack guidance and target selection standards). This last note is especially important as

allies and partners have a wide variance when it comes to employing multinational force-level assets. Those Soldiers coming from countries with fewer enablers are far more reluctant to ask for support; those coming from countries that have more abundant enablers but typically fight at a task force/battle group level have an extremely high expectation for support, regardless of multinational force-level circumstances.

Chapter 4

Intelligence Warfighting Function

Observation: Conducting Intelligence Preparation of the Battlefield (IPB)

Discussion: To be successful in staff mission planning, units must create quality IPB products early and update them often. Responsibility for developing the IPB process falls primarily on the S-2, but the best IPB products are a combined effort of the entire staff. Every staff officer has some specialty that can enhance the overall understanding of the enemy situation. When staff members come together to work on the mission analysis portion of the military decisionmaking process (MDMP), they often expect the S-2 alone to complete it. A quality IPB often can take more than a day to create from start to finish. If the entire staff does not assist the S-2, the IPB will be of lower quality and result in an incomplete understanding of the enemy forces the unit will face. Finally, the most important product produced is the enemy situation template (SITEMP). Creating more complete enemy SITEMPs allows for better course of action (COA) development. It becomes very difficult to anticipate enemy actions and adjust during the operation if only one SITEMP is war-gamed, especially if the enemy ends up not executing that particular plan.

Recommendations: The executive officer should divide the staff into warfighting function working groups to conduct enemy force staff estimates. The unit must use these staff estimates to create more complete enemy SITEMPs, enabling greater situational understanding by the staff.

Observations: Conducting Information Collection and Rehearsals

Discussion: The most common intelligence collection capabilities provided by partner countries to multinational rotations are individual battalion S-2s, unmanned aircraft systems, rotary-wing aviation, low-level voice intercept teams, human intelligence (HUMINT) collection teams (HCT), and personnel to augment the operational management teams. In order for intelligence collectors and users to understand how information will be collected and disseminated throughout the operation, units should conduct information collection rehearsals as part of their MDMP. Rehearsals involving multinational partners can assist in synchronizing collection plans while integrating multinational intelligence collectors and analysts into the team.

Recommendations: A properly conducted information collection rehearsal provides the commander and staff with understanding of how and when information must be collected and to whom the information collected must be disseminated. All information collectors should brief how they will share the information they have collected, what intelligence requirements they believe they can answer, how the information collected will be communicated to the units, and who is responsible for sending and receiving this information.

Observation: Maintaining Common Operating Pictures (COPs)

Discussion: Friendly forces often are unable to maintain a COP of the enemy situation. An overreliance on digital communication systems; a lack of clear primary, alternate, contingency, and emergency (PACE) plans between units; and underutilization of the brigade operations and intelligence frequency-modulated (FM) radio nets are among the most common issues that observer coach trainers observe. The brigade S-2s and their analysis and control elements (ACE) are able to receive top-down intelligence feeds from their higher command headquarters and maintain awareness of all reporting from constructive intelligence, surveillance, and reconnaissance assets. Conversely, the battalion S-2s are more reliant on FM communications for information and do not have constant access to digital systems. A challenge for the brigade S-2 section during a multinational decisive action training environment (DATE) rotation is to update and maintain the threat COP. Most multinational battalion tactical operations centers (TOCs) are very effective in maintaining a COP through traditional non-digital methods. However, most U.S. units use digital systems as their primary mechanism to maintain situational understanding.

Recommendations: Units should standardize what systems to use to maintain a COP across the brigade, implement PACE plans for communicating COP updates, and rehearse COP updates prior to mission execution. If units choose to use U.S. digital systems as their primary COP, a successful previously used technique is to main a command post node team with associated personnel at each multinational unit TOC. This team provides access to the unclassified closed network.

Observation: Avoiding Over-Classification or Over-Marking of Information

Discussion: The success of a multinational operation hinges on timely and accurate information and intelligence sharing. The development of a culture of trust, rooted in an effective information-sharing environment, ensures that all units within the joint command structure are able to weigh the best available intelligence when conducting MDMP against their developed courses of action. Although multinational units must protect information according to their respective laws, intelligence sections must set goals to classify products at the lowest level possible, and staffs should encourage the use of unclassified information whenever possible. Intelligence professionals must resist the temptation to classify all information at the maximum classification level for the information system they most often use — this system or level of classification may not be releasable to multinational partners, or even to subordinate units.

Recommendations: Units should begin developing intelligence products with a multinational focus from the beginning of operations. Using guidance from appropriate regulatory and reference documents and coordinating with the unit foreign disclosure officer intelligence sections can empower multinational partners to use intelligence to drive operations.

Observation: Producing and Managing Priority Intelligence Requirements (PIRs)

Discussion: PIRs must consistently reflect multinational concerns and must translate well across the warfighter formation elements. While brigades produce, approve, and post approved PIRs throughout the command post, they must also reference them when briefing updates to the commander. Units must accurately track each PIR as they answer them, and replace them when they are no longer relevant. To the commander, PIRs are indicators that reflect the intention or capability of an adversary to adopt or reject a certain COA. Intelligence analysts develop those indicators through detailed indicator analysis. Once identifying an indicator, the unit must quickly update PIRs to answer the next logical information gap.

Recommendations:

The S-2/S-3, with input from each staff section, must produce initial PIRs. The staff must write PIR questions clearly to identify any intelligence gaps that need to be filled for the commander.

The staff must assign each PIR a latest time information is of value (LTIOV) caveat and add a subsequent PIR that becomes active after the initial PIR reaches its LTIOV. The staff must tie each PIR and subsequent

PIR to a decision point and fully synchronize each of them with the collection plan.

All Soldiers involved must know and understand PIRs as they relate to friendly and enemy situations. Below is an example of PIR management using the LTIOV and subsequent PIR method:

- PIR 1: When and where will the 111th BTG pre-stage airborne, air assault, or special operations forces with transportation assets such as transport aircraft or helicopters? (LTIOV 010001LJAN2011)
 - Refined PIR 1a: When and where will the 111th BTG establish forward arming and refueling points for transport aircraft and helicopters? (LTIOV 010001LJAN2011)
 - Follow-on PIR 1b: When and where will the 111th BTG insert airborne, air assault, or special forces? (LTIOV 010001LJAN2011)
-

Observation: Overcoming Interoperability Challenges in a Combined Joint Counterintelligence and HUMINT (CJ2X) Operating Environment

Discussion: A reoccurring issue encountered in the conduct of combined-joint multinational HUMINT operations is the inability to produce and share an intelligence COP derived from HUMINT. Units often produce intelligence information products within specific analytic sections such as the analysis and control element (ACE), counterintelligence HUMINT and reporting cell (CHARC), and other adjacent intelligence elements that remain in “stovepiped” unshared status. This situation leads to limited final analytical COPs that provide commanders and senior intelligence officers with downgraded levels of final intelligence. The threshold upon which sharing of intelligence is legitimately limited occurs when potential compromise to sources (such as HUMINT) and sensitive source methodologies are revealed — either overtly or in a derivative capacity.

Another challenge is that U.S. classifications and NATO/other alliance classifications impose restrictions on information sharing, dissemination, and fusion of intelligence products. To compound the issue further, reporting sensitivities derived from HUMINT source management information pose an operational risk across the warfighting function. For example, production of U.S. formatted intelligence information reports (IIRs), contact reports, and associated technical reports used in conjunction with NATO HUMINT reports lend themselves to a restricted flow of useful intelligence information that is authorized for release and fusion in combined-joint HUMINT missions. As a result, operational units often do not capture valuable information not restricted by limiting caveats, and multinational combined partners need to analyze such valuable information.

Units must take into account foreign disclosure challenges and formally evaluate categories of intelligence to identify releasable information and process them through the foreign disclosure process. U.S. units need to practice streamlined use of “tear lines” in intelligence reporting to ensure the widest dissemination to multinational partners. **Too often, units fail to share intelligence information due to a lack of understanding of classification requirements and caveats, and/or over-classification.**

Analysts should consult relevant security classification guides when determining appropriate classification of information. Senior analysts must review overall marking of products to identify appropriate multinational releasability and to include interagency intelligence community partners in a particular operating environment. The S2X synchronization process experiences limitations with the coupling of “stovepiping” and withholding of intelligence due to misinterpretation of some specialized single-source intelligence.

Recommendations:

- Units performing operations in support of a CJ2X environment should identify key intelligence personnel organic to the formation to conduct reviews of HUMINT and all source analysis products, IIRs, and any associated production, and push useful information to units/elements that have a need to know in a particular deployed mission. Foreign partners working in concert with U.S. elements facilitate combined mission success when they prepare COPs with fidelity and share them with important staff sections.
- Units must scrub SOPs for NATO/other alliance unclassified releasability, classified release levels, and sensitive caveats, and must specifically address foreign disclosure release procedures. The SOPs also must incorporate current allied joint published doctrine to streamline the common operating language. The official language must be translated into key NATO or other alliance approved target languages. SOPs must be functional, identifying key personnel to perform certain functions to facilitate streamlined intelligence. To streamline the intelligence information production, managers, staff officers-in-charge, and commanders must ensure that dissemination, releasability, and fusion systems are in place.

HCTs and individual collectors that operate in a multinational environment should make an effort to write for releasability. Information resulting from HUMINT activity is not automatically classified or considered not releasable to international partners. Collectors should not over-classify or over-mark reports and products, as this limits valuable distribution and synchronization with multinational partners.

Observation: Conducting Foreign Disclosure Training and Manning for Multinational Partnered Operations or Exercises

Discussion: Every rotation at the Joint Multinational Readiness Center (JMRC) involves U.S., allied, and multinational partner units. Due to national policies and regulations regarding unclassified and classified information, many U.S. units arrive at JMRC unprepared to properly review, approve, and share information with multinational partners. Most documentation from the Decisive Action Training Environment 2.1 manual published by the U.S. Army Training and Doctrine Command's G-2 Intelligence Support Activity, February 2014, is approved for public release. However, orders and scenarios are considered controlled unclassified information and labeled For Official Use Only by United States Army Europe. The JMRC foreign disclosure representatives (FDRs), with authorities delegated from the Joint Multinational Training Command (JMTC) foreign disclosure officer (FDO), will review and approve all basic exercise documents issued to the rotational training unit (RTU) as the higher headquarters control. The RTU FDO/FDR must then review and approve all RTU-generated products before distributing them to multinational partners. At the RTU level, many units arrive with no foreign disclosure training program or FDRs. Consequently, units are limited in what they can share with foreign nationals due to a lack of internal training. While many units manage a foreign disclosure program through the brigade and battalion S-2 levels, most do not have enough personnel trained.

Recommendations:

Rotational units must contact their division FDOs and establish a training program. The Department of Defense has an online training program through the Center for Development of Security Excellence (CDSE), GS 401, U.S. Army Foreign Disclosure Officer Certification Curriculum, which allows many Soldiers and officers to be trained at their own pace. The course completion certificate must then be sent to the division FDO to have a Delegation of Disclosure Letter (DDL) written which appoints these individuals to approve unclassified and classified documents for release. This list of approved FDRs with DDLs is provided to their observer-coach/trainers (OCTs) at JMRC. There are no limits to the numbers of FDRs or FDR-trained personnel in a unit. For maximum interoperability down to the lowest levels, the recommended numbers for FDRs are as follows:

- **Brigade:** Two with the S-2 section; two with the S-3 section; one with the S-7/S-9 section
- **Battalion:** Two with the S-2 section; two with the S-3 section
- **Company:** One

Chapter 5

Protection Warfighting Function

Observation: Improving Survivability Standards and Defensive Planning

Discussion: Units must seek out and understand survivability standards for various multinational vehicles and equipment to achieve the maneuver commander's intent. The defense is usually a time-constrained phase in which maximum efficiency is needed to protect combat power. Past training rotations have shown that supporting units tend to make calculations based on U.S. vehicle and platform characteristics. U.S. Army engineers customarily calculate "battlefield algebra" specifications based on M1 Abrams tank and M2 Bradley Fighting Vehicle turret-defilade positions, which can be much different from what is needed for various multinational armored vehicles such as wheeled personnel carriers.

Because U.S. units are familiar with digging in M1s, M2s, and M577 command post vehicles, these are what their synchronization matrices are based on. Furthermore, planning takes into account the number of hull and turret defilade positions that maneuver commanders desire. U.S. units must strive to be more efficient; although multinational units are typically satisfied with the results, blade assets often end up either sitting idle or overused because supported units do not articulate clear standards to supporting units.

One helpful technique is the creation of a document or publication that includes multinational vehicle battle positions or protection standards for use by all units. In the interim, U.S. or multinational units should reconstruct particular survivability standards using similarly sized vehicles available in the inventories of their counterparts. For example, to achieve maximum tactical efficiency when digging in Czech or Slovenian Pandur vehicles, units should plan the defense synchronization matrix and required blade resources using a comparable U.S. vehicle such as the Stryker. In this way, similar dimensions could be calculated and executed to maximize efficiency during preparation for defensive operations.

Recommendations: Units should review NATO or other alliance/coalition survivability standards that:

- Provide protection from direct fires.
- Mitigate against indirect fire effects and explosive hazards.
- Ensure proper standoff from the protective position.

With these fundamentals identified, it is also important to understand how U.S. or multinational partner vehicles fight. Although units with M1 tanks require turret defilade positions, units with other vehicles may have

less stringent requirements, depending on individual vehicle mobility. By analyzing specific requirements in this way, the supporting unit can better utilize its survivability assets and possibly re-task as necessary to support other survivability priorities of effort. U.S. doctrine designates command posts, logistic sites, and aviation sites as high-value areas. Although these elements are just as important to multinational forces as they are to U.S. forces, there is no doctrine that codifies them as such within partner country militaries. It is incumbent on units to identify high-value areas.

Observation: Sharing Obstacle Intelligence

Discussion: There were several incidents during previous rotations when friendly BLUE forces (BLUEFOR) entered a BLUEFOR or already identified opposing force (OPFOR) minefield or obstacle. In each instance, the BLUEFOR suffered casualties that affected its total combat power. A specific issue exists in terms of complying with recording and reporting procedures for minefields. To provide common principles and procedures when dealing with both friendly and enemy conventional and scatterable self-destructing mines, units must use reporting and recording formats found in the appropriate standardization agreement (STANAG).

Fundamentals for friendly actions in mine laying and reporting include:

- Report of initiation
- Report of completion
- Report of transfer
- Report of change
- Overwatch

In addition to these fundamentals, each unit that provides a countermobility asset or discovers an OPFOR obstacle should provide the following information:

- Tactical purpose of the minefield/munitions field
- Estimated number and type of mines to be emplaced
- Location
- Proposed start and completion times
- Type of minefield/munitions field
- Whether mines are surface-laid or buried
- Location and width of lanes and gaps

The appropriate STANAG will provide limited guidance on marking and reporting of enemy minefields. A generalized commonality among all of the doctrine screened is that as soon as the situation allows, tactical commanders will mark the four corners with an appropriate safety or standoff distance and then report the minefield/obstacle to the next echelon of command.

To implement a solution given these fundamentals, proper doctrine and guidance exist in the Department of Army standardized minefield record form and appropriate STANAGs. The aim of STANAGs about mine laying is to standardize the procedures and techniques of planning, laying, marking, recording, reporting, and control of minefields for use by coalition and multinational forces. Both U.S. and multinational units must be fully aware of initiation, completion, transfer, change, and overwatch reports required by operating procedures. Friendly units must follow doctrine in terms of reporting of friendly laid minefields as well as provide clear guidance on reporting and marking enemy minefields.

Recommendations: Units must continue to educate all personnel and ensure compliance with mine laying, recording, and reporting procedures for all alliance/coalition members using the techniques mentioned and discussed.

Observation: Facilitating Obstacle Turnover Between Engineer and Maneuver Forces

Discussion: Coalition forces must become more familiar with each other's operational procedures, particularly as they relate to engineer obstacle marking and obstacle turnover procedures. Appropriate allied STANAGs are designed to establish standards for multinational operations. These standard agreements enable partner nations' engineers to perform their role in combined arms operations in a standard way, regardless of the equipment involved. STANAGs permit the transfer of obstacles in a rapidly changing tactical situation. This is useful in cases where U.S. forces are augmented by formations from allied countries. During a counterattack, standard procedures enable engineers supporting the attack to rapidly overcome, bypass, or breach obstacles laid by allied engineers while reducing the danger to the combat troops they are supporting.

Engineers must synchronize obstacle turnover with the maneuver commanders on the ground ensuring that obstacle locations and compositions are reported to the task force level and then disseminated across the task force. These procedures help prevent mass confusion when uninformed elements encounter their own obstacles. Properly controlling obstacles and keeping them under direct fire observation and indirect fire coverage helps prevent the enemy from easily breaching them.

Recommendations: Allied combat engineers must ensure common marking of battlefield obstacles and facilitate rapid turnover of obstacles during sequential phases of an operation. To accomplish this, brigade and subordinate battalions must make concerted efforts during the planning processes and rehearsal timelines to synchronize efforts and enable shared understanding across the task forces.

Chapter 6

Sustainment Warfighting Function

The sustainment umbrella consists of transportation, ordnance, quartermaster, and medical branch operations; therefore, the following issues and recommendations reflect the different branches as a whole.

Observation: Understanding Impacts of National Caveats on Brigade Support Plans

Discussion: It is more important than ever that we as a NATO or other alliance/coalition fighting force understand that we will continue to fight together as a multinational force. Each contributing country, including the United States, has restrictions or “national caveats” to which it is tied. These national caveats outline what each nation’s Soldiers can or cannot do and what capacity of support their Soldiers can provide during a training exercise. These caveats can vary from tactical applications, such as what countries can provide medical care for their Soldiers, to operational concerns for materiel acquisition. Before sustainment commanders can truly understand the task organization 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 each country can participate. Only then can commanders truly understand their sustainment shortfalls.

To mitigate logistic shortfalls, mediation of strategic-level negotiations takes place with authorities at the State Department, the combatant commands, and/or service component commands. These agreements are known as acquisition and cross-servicing agreements (ACSA), formerly falling under statutes such as the NATO Mutual Support Act of 1979, which authorized the Secretary of Defense to acquire logistic support, supplies, and services for U.S. Armed Forces deployed in Europe from other NATO countries. An ACSA is a bilateral negotiated agreement between the United States and an ally or coalition partner in exchange for support. This could include Class I (food), Class III (fuel), Class V (ammunition), Class VII (equipment), and transportation. These agreements are carefully composed to provide mutual logistical support in order to reduce the burden and to leverage flexibility for critical common logistics enablers to increase interoperability between countries. 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.

Recommendations: Logisticians must carefully consider the resources each nation brings as well as what resources the United States is allowed to provide. Not all countries bring the same resources, and the United States cannot always solve their resourcing shortfalls. Only through an awareness of these stipulations and agreements can sustainment commanders clearly understand their true requirements and capabilities within their multinational task organizations.

Observation: Understanding the Inherent Logistical Risks and Impacts of Task-Organizing Multinational Formations with Other Countries' or U.S. Formations

Discussion: Task-organizing multinational companies or platoons with other nations' task forces does increase combat power and capability; however, it also creates shortfalls in logistics that require consideration by logistics planners. Remember that logistics is a national responsibility. In terms of national caveats, it is possible that a country may not have agreed to feed and fuel attachments, generating a logistics shortfall. It is not a simple plug-and-play task organization change, as these formations (multinational) are not U.S. formations. As an 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 sustain itself. 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. Due to incompatible equipment, the Romanian logistics company cannot cross-level repair parts. Additionally, the Romanian task force may not be able to fuel the Danish tank company because of fuel compatibility problems (DF2 versus DF54). Therefore, the Danish logistics company must maintain its support relationship with the attached Danish tank company. This is why understanding national capabilities, task organization, and support relationships becomes vital in sustaining multinational formations. This requires synchronization and common understanding of the support plan.

Recommendations: Understand that both the task organization and the command support relationships cannot be PowerPoint deep. U.S. logistics leaders cannot be myopic in believing that they are supporting only U.S. formations. The task organization and the command support relationships provide the vehicles for visualization to all units in support or supporting roles. If multinational task forces are in a brigade's task organization, then it is that brigade's responsibility to ensure that every subordinate command is being sustained.

Observation: Understanding How Multinational Units Plan to Sustain Themselves and Identifying Any Cross-Service Agreements in Effect

Discussion: The United States has one of the few armed forces that is designed for and capable of sustained force projection or expeditionary operations. NATO allies and partners have militaries typically designed to protect their respective national boundaries and conduct limited force projection operations with a relatively small force structure in support of alliance members. Allied and partner country forces training at the Joint Multinational Readiness Center (JMRC) typically lack tactical sustainment capacities such as forward support companies or brigade support battalions. Multinational units deploy to JMRC with small national support elements and typically rely on contracted sustainment for nearly all of their resupply. Multinational companies and platoons that arrive without parent headquarters usually are solely reliant on contracting and the framework brigade headquarters for support.

Procuring fuel and repair parts is a problem every rotation. Without prior approval from the U.S. government, U.S. forces are not authorized to provide fuel or repair parts to multinational partners. In addition, the multinational partners are expected to compensate the U.S. government for the exchange of any services or commodities. If the U.S. government has authorized the exchange of services or commodities, the authorization must be established in a written acquisition and cross-service agreement (ACSA). ACSAs are negotiated on a bilateral basis and allow U.S. forces to exchange or provide most common types of support including food, fuel, transportation, repair parts, and ammunition.

Recommendations: The planning process for rotations at JMRC allows for sustainment planning and support discussions. It is crucial to have logistical representation from all levels attend these conferences and establish contact and communications. The information gained from these meetings greatly enhances the understandings of the capacities of all participating units.

Observation: Understanding Brigade Key Enabling Systems and Monitoring Brigade Combat Power

Discussion: Logisticians must help their brigades achieve a better visualization of combat power by first understanding the key enabling systems available. Logisticians in U.S. formations must look at unit modification tables of organization and equipment, be cognizant of key battlefield equipment, and zero in on prescribed pacing items. Remember to look at the key enabling systems by warfighting function but also assess readiness by using the methodology of “shoot, move, communicate, and sustain.”

Although Table 6-1 (next page) is not all-encompassing, it is a sample illustration of critical equipment usually tracked by logisticians at the brigade or brigade support battalion levels.

It is essential that early planning captures what equipment exists in multinational formations so that logisticians can infer what needs to be tracked. Do not over-complicate this problem set. Simply group all U.S. and multinational key enabling systems by like warfighting function. All nations understand this approach, as they will associate their equipment capabilities with those of partner nations. Maintaining status of equipment by warfighting function simplifies the process and narrows down what equipment is important.

Recommendations: It is critical for logisticians to clearly define assets relative to combat power and warfighting function across the battlefield and develop ways to display such information in an easy-to-read format. By understanding key enabling systems, logisticians can recommend shifts in priorities of maintenance in order to support mission requirements. This equally applies to multinational formations in brigade task organizations.

Table 6-1. Sample of key enabling U.S. Army equipment, organized by warfighting function.

Movement and Maneuver	Protection	Intelligence
M1A2 Abrams tank	M9 ACE Armored combat earth mover	Prophet AN/MLQ-40
M2/M3/M6/M7 Bradley vehicle	HMEC High mobility engineer excavator	Trojan AN/TSQ-190
M113 Armored personnel carrier	M31E1 Biological integrated detection system	DCGS-A Distributed Common Ground System-Army
M1064 Mortar carrier	D7 Medium bulldozer	CHARCS Counterintel and HUMINT Automated Reporting and Collection System
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	HETS Heavy Equipment Transport System	JNN Joint Network Node
M777 Howitzer	PLS Palletized Load System	CPN Command Post Node
M109A6 Self-propelled howitzer	LHS Load Handing System	CPOF Command Post of the Future
Q36 Radar	MTV Wrecker M1089	CONET Network
60mm Mortar	M88A1/A2 Recovery vehicle	TAIS Tactical Airspace Integration System
80mm Mortar	2.5K Fueler	AMDWS Air and Missile Defense Workstation
120mm Mortar	5K Fueler	BFT Blue Force Tracker
AFATDS Advanced Field Artillery Tactical Data System	M997 FLA Field litter ambulance	FBCB2 Force XXI Battle Command Brigade and Below
	M113 Armored medical evacuation vehicle	

Observation: Developing a Logistics Common Operational Picture (LCOP)

Discussion: When determining the key considerations in the development of a multinational LCOP, senior logisticians must first understand the COP across the operational environment and effectively synchronize the logistical support in order to “allow the arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time” (Joint Publication 2-0, *Joint Intelligence*, 22 OCT 2013). There are four essential elements that should be considered when developing a multinational LCOP:

- Enhancing interoperability among multinational forces
- Understanding national caveats and doctrine of individual multinational partners
- Analyzing task organizations
- Standardizing reporting

Interoperability: The NATO definition of interoperability dives much deeper than just having interoperable communication platforms among multinational partners. Interoperability is the ability of alliance forces and, when appropriate, forces of partner and other countries to train, exercise, and operate effectively together in the execution of assigned missions and tasks. Interoperability clearly involves more than communications. It reduces duplication in an alliance of 28 members, allows pooling of resources, and produce synergy among members. In return, developing systems and procedures that are interoperable among multinational partners enables logisticians in the development of the LCOP to provide the logistical support needed to sustain multinational task forces across the battlefield.

Multinational caveats and doctrine: Each multinational partner has restrictions or national caveats that specify what each of the participating multinational partner’s Soldiers can or cannot do and what capacity of support their Soldiers can provide and/or receive. It is imperative that logisticians truly understand these caveats and think through what resources each multinational partner requires or brings in order to sustain the fight. Each multinational partner that participates operates under its own military doctrine. It is imperative that logisticians identify doctrinal differences up front and bridge gaps when developing concepts of support, even prior to conducting the military decisionmaking process (MDMP).

Task organization: The most crucial piece of the logistical puzzle in developing an LCOP is analyzing the complexity of a task organization. Once logisticians understand the supported multinational task force caveats,

requirements, capabilities, and operational missions by phase of the operation, they can start to project requirements for future operations and continue to develop the concept of support for specific task forces. After establishing the capabilities and requirements needed to sustain each task force under the task organization, logisticians can begin to transition into developing the reports required to capture the pertinent information required on a daily basis.

Standardized reporting: One of the biggest challenges for logisticians is capturing the pertinent data points for the logistics status (LOGSTAT) reports, especially when trying to capture multinational LOGSTAT data. There are several areas that contribute to the struggles in trying to capture this data. One key area of emphasis should be placed on getting to know the different types of requirements for each item of multinational partners' equipment. When developing standard daily LOGSTAT reports, logisticians must learn and incorporate the requirements for all classes of supply for U.S. forces and multinational partners. Additionally, logisticians must capture the brigade's combat power. When incorporating data from the combat power slants into the LOGCOP, logisticians must determine U.S. equivalents or pacing items of particular pieces of multinational equipment so that they can prioritize information that is reported. This equivalency assessment helps portray an accurate picture of effectiveness for combat enablers. Finally, logisticians must develop processes and means to transmit and receive reports, overcoming the many challenges with interoperability of communications platforms within multinational task forces. This is made more complex through language differences and communication protocols. Logisticians must recognize communication gaps early on to better determine how LOGSTAT reports are collected and how logistics synchronization meetings are conducted.

Recommendations: Taking into account the four essential elements, create LCOP products to track ground-truth LOGSTATs that help provide accurate pictures for the brigade commander. Make determinations of how reports will be sent and received by higher headquarters. Assign liaison officers with clearly defined sets of tasks, purposes, and authorities throughout supported and supporting units to facilitate clear communications among all elements.

Observation: Conducting Sustainment Rehearsals

Discussion: In accordance with Field Manual 6-0, *Commander and Staff Organization and Operations*, May 2014: "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."

The rehearsal is an extension of the commander's intent, which creates the conditions for common understanding of the concept of the operation. The rehearsal allows for mission command to continue while synchronizing and coordinating with adjacent units. Most importantly, commanders use rehearsals to identify additional friction points and increased risks, and to develop mitigation techniques for both. Units conduct sustainment rehearsals to confirm that their subordinate logistics units understand when, where, and how sustainment is going to occur through all phases of the operations over time and space.

Unit leaders find multiple reasons for not conducting support rehearsals, with lack of time cited as the main reason. Units should use the one-third/two-thirds method during planning, meaning that one-third of available time is used for planning while two-thirds of available time is used for preparation. Generally, units will not conduct rehearsals if it means Soldiers have more time to conduct preparation for their missions, but saving time then comes at the cost of common understanding. What is needed is common understanding of sustainment and synchronization within operations. That understanding is important for all formations and even more so when the task organization has multinational formations associated with it. At the brigade level, the support operations officer and the brigade S-4 plan the concept of support for the brigade's operations. The rest of the logisticians plan within their battalion task forces.

At what point must leaders ensure synchronization is occurring? We assume synchronization occurs during planning, but synchronization is truly demonstrated at the rehearsal. Do not assume that logistics synchronization occurs because you said it will happen. Without rehearsing, logistic leaders cannot confirm or deny common understanding of the support plan, nor can they ensure that 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 sustainment rehearsals.

Recommendations: Insist on conducting sustainment rehearsals, and develop sustainment scripts as key start points for understanding operations. These scripts focus the rehearsals and give them organization by keeping them on track. Sustainment rehearsal scripts set the conditions for synchronization for both U.S. and multinational logistics leaders through each phase of an operation, ensuring that all participants know their roles and what they will be expected to brief. Overall, sustainment rehearsals confirm that subordinate logistics units understand when, where, and how sustainment is going to occur through all phases of operations over time and space.

Observation: Managing Phased Transitions Between Operations

Discussion: Units must fully develop detailed branch plans across all warfighting functions during the MDMP. They must actively reengage planners during the execution phases of operations to increase the ability to provide all classes of supply to account for changes in demand during phase transitions. Army Doctrine Reference Publication 5-0, *The Operations Process*, May 2012, identifies the need for establishing decision points and designing branch plans ahead of time — combined with a clear commander's intent — to help create flexible plans.

Without managing phased transitions, the brigade jeopardizes timely logistics deliveries. When the planning team completes the MDMP and creates an operation order, units must revisit their decision points and triggers during the execution of operations, which normally leads to additional branch planning. When units transition from the offense to the defense, they must create working groups with key staff members to plan the next phase of the operation. For example, when transitioning to the defense, there is an increased requirement for blocking and barrier materials (Class IV). Logisticians must decide on appropriate timing and configuration of requests for specific classes of supply. These requests must be synchronized for the transitions to new phases of operations. Using working groups with the brigade S-3, engineers, support operations officer, and the brigade S-4 helps synchronize desired effects (block, disrupt, fix, turn) and clarifies requirements for classes of supply. Not using detailed branch plans, created during execution with condition-based decision points, could result in late arrivals or incorrect configurations of Class IV materials to brigade engineers for emplacement to meet the commander's desired effects.

Recommendations: In preparation for the defense, the brigade S-3, brigade engineer, and the logistics officers must understand the commander's intent. The defense is about what effects are required to place on the enemy. The deliberate use of obstacles is designed to achieve a desired effect: to block, disrupt, fix, or turn the enemy into a direction of the brigade's choosing or to stop the enemy's momentum. A working group including the brigade S-3, brigade engineer, and the support operations officer can assist in planning for the defense. Without consideration of the transition from the offense to defense, a rush to plan for defense will decrease the commander's ability to gain the initiative in defensive preparation. By integrating all warfighting functions during branch planning or creating planning teams prior to transitioning to the next phase, logistic requirements can be synchronized in time and space with the maneuver commander's requirements.

Observation: Preparing Convoy Commanders to Execute Resupply Operations

Discussion: Although convoys are the primary means of transporting supplies across the battlefield, they often are one of the least practiced activities observed. Units tend to pay insufficient attention to route reconnaissance, precombat checks and inspections (PCCs/PCIs), convoy tracking, and battle drills. This trend is further burdened by unit failures to address these procedures in their standard operating procedures. Company-level leaders tend to regularly overlook such tasks prior to conducting operations. Other rudimentary tasks neglected by units prior to convoy operations include air and ground security integration and quality-control checks on maintenance.

Recommendations: Units should plan and coordinate convoy operations as deliberate combat operations. Units must rehearse battle drills prior to mission execution. Successful units designate maintenance teams that execute technical inspections of all convoy vehicles, weapons, and communications equipment before every mission. Leader PCCs/PCIs should include inspections of licenses, vehicle maintenance inspection, and communications checks, and should ensure that all Soldiers are qualified to operate their assigned weapon systems.

Convoy leaders should prepare back briefs to BSB leaders that summarize convoy operations by covering routes of march, security, communications plans, and actions on the objective. BSB commanders must spot-check their leaders during the issuance of operation orders and during rehearsals. Commanders must emphasize that return operations are as critical as initial departures.

Chapter 7

Engagement

Engagement is being considered as an Army warfighting function. It is meant to improve the Army's ability to effectively operate in the land domain by accounting for the human aspects of conflict and war in order to employ lethal and nonlethal capabilities to assess, shape, deter, and influence the decisions of security forces, governments, and people.

Experience shows there are significant challenges to successfully executing engagement. They include:

- Insufficient understanding of the complexity of the operational environment
- Ineffective civil-military operations
- Failure to identify and mitigate sources of instability
- Ineffectual information operations

Observation: Understanding the Complexity of the Joint Operations Area (JOA)

Discussion: Since intelligence drives operations, formations that do not understand the complexity of the JOA face difficulty accomplishing their missions. Understanding the operating environment is often hindered by a predominant focus on traditional adversary information and intelligence gathering. Because of this tendency, intelligence efforts tend to focus primarily on enemy groups and actions, while neglecting information about the population (ethnic and tribal identities, allegiances and behaviors, religion, culture, politics, economics, etc.), which is a prerequisite for success. This situation is exacerbated by the failure of units to meet with the local population to confirm intelligence preparation of the battlefield (IPB) information; the failure to incorporate information gathered by human intelligence and civil-military cooperation (CIMIC) teams into operations; and the lack of a standardized operational environment (OE) reporting template. Some units use a matrix utilizing the eight operational variables of political, military, economic, social, information, infrastructure, physical environment, and time (PMESII-PT), and others use unique frameworks. This means any non-threat OE information comes in many forms to higher echelons, making it difficult to incorporate into planning.

Recommendations:

- Be sure to gather and incorporate non-threat OE data into the military decisionmaking processes (MDMP) and IPB products.

- Meet with local leaders and the population to gather local perceptions to identify local sources of instability. Often, what is considered a source of instability by military formations is not viewed as such by the population.
 - Ensure that gathering OE data and local perceptions are command priorities. Direct subordinate formations to support CIMIC elements so they can engage the population. If no CIMIC assets are available, formations should use their own assets to conduct these engagements.
 - Update OE estimates throughout the exercise.
 - Identify a common OE reporting template, and train subordinate formations to use it.
-

Observation: Integrating Military Operations Using a Comprehensive Approach Nested with Civil and Military Actions During all Campaign Phases

Discussion: Civil actors must be integrated and synchronized with military planning efforts to ensure that military actions support political objectives. Civil actors include the local authorities and populace as well as international, national, and non-governmental organizations (NGOs) and agencies, known collectively as unified action partners (UAPs). There are two major challenges to effective civil-military integration. First, since civil actors are not part of a military staff structure, they are often not identified. Thus, their capabilities, relationships, and information are excluded from operations. Second, civil actors operate differently than military units. They have their own missions, operating procedures, and terminology. As an illustration, one unit keeps sending out mass e-mails to NGOs asking for their capabilities and capacities by using jargon such as “Class VIII.” It should be no surprise that the NGOs do not respond.

Recommendations:

- Identify and communicate with UAPs to leverage their knowledge, capabilities, and capacities. UAPs have data critical to understanding the OE and facilitating military objectives.
- Foster a comprehensive approach by including UAPs in planning.
- Ensure that staff structures facilitate civil-military operations.
Examples:
 - Physically locate UAPs near the command staff to foster access and interaction.
 - Have S-9 or CIMIC personnel facilitate civil-military interaction.

- Be patient and use language and terminology understood by UAPs. UAPs do not work for the military. Find areas of mutually beneficial cooperation.
- If required, use brigade assets to ensure that CIMIC personnel can execute their missions.

(**Note:** For more on UAPs, see Center for Army Lessons Learned Handbook 15-15, *Unified Action Partners' Quick Reference Guide*.)

Observation: Identifying, Targeting Local Sources of Instability

Discussion: Sources of instability are things that decrease support for the government, increase support for spoilers, and disrupt the normal functioning of society. Before initiating operations, formations first must identify the local sources of instability to ensure tactical success, support mission objectives, attain broader foreign policy goals, and facilitate a successful transition to civilian control.

Because traditional intelligence efforts focus on enemy formations, they often fail to identify things that are not viewed as direct threats to the military but could be direct threats to overall mission success. For example, units often fail to understand why insurgents have popular support or why the government lacks popular support. In other words, units focus on the “threat” while ignoring the “enemy” (i.e. the reason the threat exists). Examples of the “why” could be a hated police force, political discrimination, insecurity, etc. Without understanding the sources of instability, targeting is ineffective and lethal operations increase instability. This decreases host government legitimacy and works against broader policy goals. Another challenge is that standard targeting tools target threats, not sources of instability. Consequently, sources of instability are not integrated into the targeting process.

Recommendations:

- Develop an inclusive process (G-2, G-3, CIMIC, military information support operations [MISO] UAPs, etc.) to identify sources of instability, and integrate this information into the targeting process.
- Identify the “why?” behind public sentiment or popular support.
- Modify targeting methodologies to include sources of instability as “targets.”
 - Example: A unit made two adjustments to its decide-detect-deliver-assess (D3A) targeting process:
 - * Inserting a column on key actor means and motivations.
 - * Adjusting the measures of effectiveness (MoE) column to reflect a stability-based understanding of effectiveness.

Observation: Giving Information Operations (IO) a Key Role in Decisionmaking

Discussion: The ability to defeat adversaries or potential adversaries rests on the perception of all actors involved, particularly the local population. To effectively employ IO across the range of military operations from the tactical to the strategic levels, formations must have a comprehensive understanding of the JOA. Without effective IO, messages do not produce the desired effect, or they have unexpected or damaging second- and third-order effects. An incomplete understanding of the JOA also hinders key leader engagements. These engagements will be ineffective if they do not include detailed information about key personalities, leadership styles, motivations, objectives, current positions, psychological profiles, dependencies, and personal histories.

In addition to a limited understanding of the JOA, effective IO are hindered by a lack of baseline data detailing the normal and current perceptions, attitudes, and behavior of the target audience. Without baseline data, units cannot measure the effect of IO messages; that is to say, changes in the target's behavior. Another challenge is the lack of integration and synchronization of military IO messages with civil and political activities.

Recommendations:

The following are techniques for improving IO baseline data:

- MISO should conduct a target audience analysis before creating IO messages.
- Create a key leader engagement plan that contains information on the situational context (planning milestones), critical events, planned engagements, objectives, main issues to be discussed and/or addressed, desired effects, and MoEs.
- Include a behavioral MoE for each IO message.
- Integrate IO personnel in the targeting process, and include an IO message for each identified target.
- Coordinate IO messages with civilian and political counterparts.

Chapter 8

Special Operations

Observation: Ensuring Effective Liaison and Staff Communications

Discussion: A number of frictions come into play which can limit the flow of effective communication and information between special operations forces (SOF) and conventional forces (CF) during exercises and operations. In an era when communications technology often negates the requirement for face-to-face communication, it often goes unacknowledged that the sheer volume of information renders the necessity for human interaction in real time more critical.

Despite often ambiguous command relationships with CF, SOF often are well-situated to provide information and analysis to CF battle staff officers. Although the available communications technology is often good, real-time information sent from SOF to CF is often reviewed at leisure by CF staff personnel, given the myriad tasks and issues in which they typically are immersed. This is problematic because much of the information and atmospherics that SOF garners during operations is not SOF-specific in utility. Given this inherent shortcoming, the exchange of liaison officers (LNOs) becomes critical, particularly in instances when SOF and CF mission command (MC) nodes are easily accessible to each other.

Another key challenge is the human dynamic between SOF and CF leaders and staff. Whether viewed through the prism of professional courtesy or rapport building, efforts to build a working relationship with CF leaders is critical given that SOF leaders usually will be junior in rank to their counterparts. During exercise Combined Resolve III, SOF and CF leaders and staffs often missed opportunities to synchronize operational effects, or took advantage of them later than was optimal, often to the detriment of both.

- On multiple occasions when SOF conducted special reconnaissance of objectives, information that would have been useful to the CF commander was transmitted (via LNO) to the CF staff, but was “lost in the shuffle.” Specific information in one instance included confirmation of the absence of air defense artillery or anti-aircraft artillery assets, and composition/disposition of enemy forces well inside the town, which was the final objective for the CF brigade counterattack. Neither of these data points was an SOF information requirement or a priority information requirement; nevertheless, both were provided to the CF staff yet were not acted upon.

- SOF special reconnaissance elements positioned forward of CF forces had visibility on an objective along the CF axis of advance but received no queries from the CF battle staff officers or their higher headquarters. Despite having coordinated for no-fire areas and other control measures with the battle staff officers, this special reconnaissance element was subsequently engaged by CF in a fratricidal incident.

Recommendations:

- The SOF commander should, at the earliest opportunity, provide an SOF capability briefing to the CF commander and relevant staff officers. The briefing should cover the SOF mission for the scenario, approved mission sets, command relationships, capabilities and limitations, and communications/contact plan. It should conclude with a discussion of key CF and SOF battle rhythm events relevant to SOF and CF LNOs.
- SOF LNOs must identify which CF staff members are relevant to a given problem set and take measures to engage them (and their alternate shift assistants) together for discussion and coordination at key intervals during the SOF mission planning cycle. Although conducting initial coordination via email may be acceptable preparation for face-to-face communication, communication in real time with all relevant players is absolutely critical.
- SOF LNOs must identify key battle rhythm events early to ensure that SOF interests and concerns are represented. Concurrently, by injecting into the CF battle rhythm early it is more feasible to inject an “SOF breakout” into the schedule and ensure that the regular participants include the staff personnel identified above.
- When feasible, SOF should set up their operational MC (Special Operations Command and Control Element, Special Operations Training Group, or other structure as appropriate) and be prepared to participate in the brigade/battle staff officer command post exercise segment of the exercise. This juncture provides the best nexus to set conditions to synchronize operational effects.

Chapter 9

Working With Americans

The intent of this chapter is to assist non-U.S. forces who will work with American forces to better understand us: how we are organized, how we think, why we do what we do. At the Joint Multinational Readiness Center, we asked some of our multinational partners for suggestions on topics they thought would help other multinationals to more quickly develop an understanding of the United States Army. The following topics were suggested.

Understanding American Military Culture

Over the past 241 years, the United States Army has proudly served the nation by winning its wars and securing the peace. As the 38th Chief of Staff of the Army, GEN Raymond T. Odierno, noted in 2012, U.S. Army history is marked by decisive action in a wide range of missions — including regular and irregular warfare, humanitarian assistance operations, engagement with allies, and support of civil authorities.

The American Army was created on 14 June 1775, when the Second Continental Congress assumed command of militia forces as the “American Continental Army” at the beginning of the Revolutionary War. From the start, the Army comprised a small national force and the state militias’ citizen-Soldiers. In times of emergency, the standing army was enlarged with recruits and augmented by mobilizing the militia and creating volunteer units. This tradition of an Army that combines “full-time” regular Soldiers and citizen-Soldiers serving for short active-service periods is still the cornerstone of Army organization. The U.S. Army is a huge and complex organization. It includes the Regular Army, the Army Reserve, and the Army National Guard. Multinational forces may find themselves working with Army units from any of these three components.

Warfighting is the U.S. Army’s primary mission. Everything that it does should be grounded in this fundamental principle. The Army must be responsive to combatant commanders as part of the joint force, rapidly dominating any operational environment across the range of military operations. The Army has a dual nature — it is both a Military Department (a part of the Armed Forces) and a military profession.

Throughout its history, the Army has demonstrated respect for enduring principles and institutional characteristics in its service to the nation. The most important are the primacy of the Constitution, the rule of law, and military subordination to civilian authority. Others include maintaining the ability to mobilize rapidly to support the United States’ interests, integrating new technology, and quickly adapting to and learning to win in changing environments and circumstances.

The American Profession of Arms

The purpose of any profession is to serve society by effectively delivering a necessary and useful specialized service. The profession of arms is global. Most nations maintain armies. American Soldiers consider soldiers of most other nations to be peers. They consider each other members of a community born of similar experiences, military cultures, and values. However, the American profession of arms is distinguished in three ways:

- Service to the Constitution
- Officer and noncommissioned officer professionalism
- Proficiency in integrating technology

Members of the American military profession swear to support and defend a document, the Constitution of the United States — not a leader, people, government, or territory.

The Army's culture has its roots in tradition and history. The Army's culture promotes certain norms of conduct. U.S. Army norms of conduct demand adherence to the laws, treaties, and conventions governing the conduct of war to which the United States is a party.

The Army is a values-based organization. It upholds principles that are grounded in the Constitution and inspire guiding values and standards for its members. These principles are best expressed by the Army Values, Soldier's Creed, and Warrior Ethos. (See Appendix F for details.)

Leadership, Training, and Doctrine

The U.S. Army defines leadership as influencing people — by providing purpose, direction, and motivation — while operating to accomplish the mission and improving the organization. The Army is always training for ongoing operations and preparing for other possible contingencies simultaneously. The American Army is a doctrinally based force.

Land combat against an armed adversary is an intense, lethal human activity. Its conditions include complexity, chaos, fear, violence, fatigue, and uncertainty. The battlefield often teems with noncombatants and is crowded with infrastructure. In any conflict, Soldiers potentially face regular, irregular, or paramilitary enemy forces that possess advanced weapons and rapidly communicate using cellular devices. Any mission can rapidly become a combination of combat, governance, and civil security. Most of our missions require combinations of lethal and nonlethal actions. This is inherent in the nature of land operations, usually conducted in the midst of noncombatants. When called upon, Soldiers accomplish nonlethal missions such as disaster relief and humanitarian assistance quickly and effectively.

The U.S. Army defines ***Army doctrine*** as fundamental principles, with supporting tactics, techniques, procedures, and terms and symbols, used for the conduct of operations and which the operating force, and elements of the institutional Army that directly support operations, guide their actions in support of national objectives. It is authoritative but requires judgment in application. (Army Doctrine Publication [ADP] 1-01, *Doctrine Primer*) Doctrine is neither arbitrary nor static. It is based on decades and often centuries of experience. Local procedures, best practices, and lessons learned from operations and training often gain widespread acceptance because of their applicability over time in varying circumstances. The Army incorporates the best of these ideas into doctrine. While grounded in enduring principles, doctrine is also flexible, adaptable, and changing.

U.S. Army doctrine is about the conduct of operations by Army forces in the field (and to a limited extent the guidelines for training for operations). Doctrine is the body of professional knowledge that guides how Soldiers perform tasks related to the Army's role: the employment of land power in a distinctly American context. Doctrine establishes the language of the profession.

The Army approaches solutions to problems through changes to broad, general categories of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF). Doctrine is usually the first approach taken, as it is often the easiest and quickest to change and can dramatically affect the conduct of operations. In some cases, the impact of changes on the other factors cannot be fully realized without a significant change in doctrine. Doctrine also can serve as the basis for changes in the other DOTMLPF categories.

Unified land operations is the Army's basic operational doctrine. It emphasizes the necessity of synchronizing our capabilities with the other Services (joint), other government agencies (interagency), other international government partners (intergovernmental), and military forces from partner nations (multinational). The basic premise of unified land operations is that Army forces combine offensive tasks, defensive tasks, stability tasks, and defense support of civil authorities (DSCA) in concert with joint, interagency, intergovernmental, and multinational partners. Army operations conducted overseas combine offensive, defensive, and stability tasks. Within the United States, we support civil authorities through DSCA. If hostile powers threaten the homeland, we combine defensive and offensive tasks with DSCA. The effort accorded to each task is proportional to the mission and varies with the situation. We label these combinations **decisive action** because of their necessity in any campaign. (Unified land operations and decisive action are discussed further on Page 90.)

Tactics include the ordered arrangement and maneuver — the employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy — of units in relation to each other, the terrain, and the enemy (Army Doctrine Reference Publication 3-90, *Offense and Defense*). Tactics vary with terrain and other circumstances; they change frequently as the enemy reacts and friendly forces explore new approaches. Applying tactics usually entails acting under time constraints with incomplete information. Tactics always require judgment in application; they are always descriptive, not prescriptive. (See Appendix F for more information on tactics, techniques, and procedures.)

An operating **procedure** is the approved process to complete a complex, recurring task. A procedure consists of a series of detailed steps or subordinate tasks, and carrying out those steps ensures a desired result. A standard operating procedure (SOP) provides the instructions for performing an operating procedure. Writing down instructions for operating procedures is essential for units to achieve the desired result easily and repeatedly.

Organization for Combat

Multinational units that work with U.S. forces should understand that the brigade is the basic combat organization of the Army.

The brigade combat team (BCT) is the Army's primary combined arms, close combat force. BCTs often operate as part of a division or joint task force. The division or joint task force acts as a tactical headquarters that can control up to six BCTs in high- or mid-intensity combat operations. The tactical headquarters assigns the BCT its mission, area of operations, and supporting elements. Brigade combat teams organize to conduct decisive action.

The BCT includes capabilities across the warfighting functions: mission command, movement and maneuver, intelligence, fires, sustainment, and protection. These capabilities are scalable to meet mission requirements. All BCTs include maneuver; field artillery; intelligence; signal; engineer; chemical, biological, radiological, and nuclear (CBRN); and sustainment capabilities. Higher commanders augment BCTs for specific missions with additional combat power. Augmentation may include aviation, armor, infantry, field artillery, air defense, military police, civil affairs, military information support elements, engineers, CBRN, and information systems. Organizational flexibility enables the BCT to accomplish the mission across the range of military operations. The three types of BCTs are the infantry brigade combat team (IBCT), the Stryker brigade combat team (SBCT), and the armored brigade combat team (ABCT). (See Appendix A.)

The U.S. Army is organized based on a table of organization and equipment (TOE). The modified table of organization and equipment (MTOE) is a modified version of a TOE approved by Headquarters, Department of the Army that prescribes the unit organization, personnel, and equipment necessary to perform an assigned mission in a specific operational or geographical area. Because of this, multinational units should ask questions about the specific organization of any U.S. Army units they work with in order to learn not only their organization, personnel, and equipment, but also their capabilities and limitations. They should also expect their American counterparts to ask similar questions about their organization.

The Military Decisionmaking Process

The military decision making process (MDMP) is an iterative planning methodology to understand the situation and mission, develop a course of action, and produce an operation plan or order (ADP 5-0, *The Operations Process*). The MDMP helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. This process helps commanders, staffs, and others think critically and creatively while planning.

The MDMP facilitates collaborative planning. The higher headquarters solicits input and continuously shares information concerning future operations through planning meetings, warning orders, and other means. It shares information with subordinate and adjacent units, supporting and supported units, and unified action partners. Commanders encourage active collaboration among all organizations affected by pending operations to build a shared understanding of the situation, participate in course of action development and decision making, and resolve conflicts before publishing the plan or order.

During planning, assessment focuses on developing an understanding of the current situation and determining what to assess and how to assess progress using measures of effectiveness and measures of performance. Developing the unit's assessment plan occurs during the MDMP — not after developing the plan or order.

The MDMP also drives preparation. Since time is a factor in all operations, commanders and staffs conduct a time analysis early in the planning process. This analysis helps them determine when to begin certain actions to ensure that forces are ready and in position before execution.

Commanders initiate the MDMP upon receipt of, or in anticipation of, a mission. Commanders and staffs often begin planning in the absence of a complete and approved higher headquarters operation plan (OPLAN) or operation order (OPORD). In these instances, the headquarters

begins a new planning effort based on a warning order (WARNORD) and other directives, such as a planning order or an alert order from its higher headquarters. This requires active collaboration with the higher headquarters and parallel planning among echelons as the plan or order is developed.

Commanders may alter the steps of the MDMP to fit time-constrained circumstances and produce a satisfactory plan. In time-constrained conditions, commanders assess the situation, update the commander's visualization, and direct the staff to perform the MDMP activities that support the required decisions. In extremely compressed situations, commanders rely on more intuitive decision making techniques, such as the rapid decision making and synchronization process. (For more on the military decisionmaking process, see Appendix B of this guide as well as Center for Army Lessons Learned Handbook 15-06, *MDMP*.)

MDMP and Other Planning Processes

Experience indicates that a basic understanding of planning processes employed by other nations can be useful in multinational operations. Each country has evolved its own approach to military planning and decision making. Appendix C provides an overview of the military planning processes of several multinational partners. The processes are displayed in a matrix for comparison. Units involved in multinational operations have found it useful to see where they were in their own process and others were in theirs.

The After Action Review

American units routinely conduct after action reviews (AARs). Any multinational unit working with U.S. Army units should understand the concept of the AAR and should expect to participate in one. The after action review has been part of the Army's training doctrine since the early 1980s. AAR procedures were developed at the National Training Center (NTC) as a means to provide feedback and guide units to identify their own strengths and weaknesses while training at the NTC. The AAR proved such an effective tool that it has been incorporated into all aspects of Army training and operations. To an outside observer, the discussion during an AAR can appear very candid, even harsh. The objective is to learn what happened so that improvements can be made. One of the "ground rules" of an AAR is to leave your ego outside.

AARs are a professional discussion of an event that enables Soldiers/units to discover for themselves what happened and develop a strategy (e.g., retraining) for improvement. They provide candid insights into strengths and weaknesses from various perspectives and feedback, and focus directly

on the commander's intent, training objectives, and standards. Task standards are performance measures found in the respective training and evaluation outlines (T&EO).

Leaders must avoid creating the environment of a critique during AARs. Because Soldiers and leaders participating in an AAR actively discover what happened and why, they learn and remember more than they would from a critique alone. A critique gives only one viewpoint and frequently provides little opportunity for discussion of events by participants. The climate of the critique, focusing only on what is wrong, prevents candid discussion of training events and stifles learning and team building.

Effective AARs are a reflection of the commander and his role in training. AARs foster an environment of trust, collaboration, initiative, and a co-creation of context necessary among Soldiers and leaders in decentralized operations. Soldiers learn and understand the commander's intent and act decisively while accepting prudent risks.

AARs during training include the same four parts as AARs during operations:

- Establish what happened.
- Review what was supposed to occur.
- Determine what was right or wrong with what happened.
- Determine how the task should be done differently next time.

There are two types of AARs: formal and informal. A formal AAR is resource-intensive and involves the planning, coordination, and preparation of the AAR site, supporting training aids, and support personnel. Informal AARs require less preparation and planning. Appendix D provides additional insight into AARs during multinational operations.

Rehearsals

American leaders routinely conduct rehearsals as part of their planning process. A basic understanding of the U.S. approach to rehearsals can be useful to non-U.S. units when they will be working with Americans. Multinational partners can expect to be part of some form of rehearsal. (See Appendix E for more detailed information about the American approach to rehearsals.)

American Military Terminology

Appendix F provides references and a short glossary of relevant commonly used American terms. A basic understanding of some key doctrinal terms will help non-U.S. forces better understand their American counterparts.

Unified land operations is the Army's operational concept and the Army's contribution to unified action. ***Unified land operations describes how the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability or operations in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution*** (ADP 3-0, *Unified Land Operations*).

Army commanders can achieve strategic success by integrating the four foundations of unified land operations:

- Initiative
- Decisive action
- Army core competencies
- Mission command

Operational initiative is setting or dictating the terms of action throughout an operation. **Individual initiative** is the willingness to act in the absence of orders, when existing orders no longer fit the situation, or when unforeseen opportunities or threats arise. Initiative gives all operations the spirit, if not the form, of the offense. It originates in the principle of war of the offensive. Army forces demonstrate the Army's core competencies through ***decisive action — the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks*** (Army Doctrine Reference Publication 3-0, *Unified Land Operations*). In unified land operations, commanders seek to seize, retain, and exploit the initiative while synchronizing their actions to achieve the best effects possible.

Army forces demonstrate their core competencies of combined arms maneuver and wide area security by combining offensive, defensive, and stability or DSCA tasks simultaneously. As part of a combined arms force within unified land operations, Army forces accept prudent risk to create opportunities to achieve decisive results.

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. Exercised by Army commanders, it blends the art of command and the science of control while integrating the warfighting functions to conduct the tasks of decisive action.

Mission command has six fundamental principles:

- Build cohesive teams through mutual trust.
- Create shared understanding.
- Provide a clear commander's intent.
- Exercise disciplined initiative.
- Use mission orders.
- Accept prudent risk.

Commanders use the warfighting functions to help them exercise command and to help them and their staffs exercise control. A ***warfighting function*** is a group of tasks and systems (people, organizations, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives. All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects. The Army's warfighting functions link directly to the joint functions. There are six warfighting functions:

- Mission command
- Movement and maneuver
- Fires
- Intelligence
- Protection
- Sustainment

Appendix A

The U.S. Army Brigade Combat Team

This appendix provides an overview of the U.S. Army's basic organization of brigade combat teams (BCTs). It is not intended as an in-depth description, but should familiarize non-U.S. forces with basic structure and capabilities.

The BCT includes capabilities across the warfighting functions: mission command, movement and maneuver, intelligence, fires, sustainment, and protection. These capabilities are scalable to meet mission requirements. All BCTs include maneuver; field artillery; intelligence; signal; engineer; chemical, biological, radiological, and nuclear (CBRN); and sustainment capabilities. Higher commanders augment BCTs for specific missions with additional combat power. Augmentation might include aviation, armor, infantry, field artillery, air defense, military police, civil affairs, military information support elements, engineers, CBRN, and information systems. Organizational flexibility enables the BCT to accomplish the mission across the range of military operations.

The three types of BCTs are the infantry brigade combat team (IBCT), the Stryker brigade combat team (SBCT), and the armored brigade combat team (ABCT). The following sections summarize each BCT's mission and organization.

Infantry Brigade Combat Team

The IBCT is an expeditionary, combined arms formation optimized for dismounted operations in complex terrain — a geographical area consisting of an urban center larger than a village and/or two or more types of restrictive terrain or environmental conditions occupying the same space. The IBCT can conduct entry operations by ground, airborne, air assault, or amphibious assault (via surface and vertical) into austere areas of operations with little or no advance notice. Airborne IBCTs can conduct vertical envelopment by parachute assault.

Three infantry battalions as well as one cavalry squadron serve as the IBCT's primary maneuver force. The infantry battalions organize with a headquarters and headquarters company, three rifle companies, and a weapons company. The headquarters and headquarters company provides planning, intelligence, signal, and fire support to the battalion. The headquarters company has a battalion command section; a battalion staff section; a company headquarters; a battalion medical, scout, mortar, and signal platoon; and a sniper squad.

Infantry rifle companies have three infantry rifle platoons, a mortar section, and a headquarters section. Each rifle platoon has three infantry rifle squads and a weapons squad. The mortar section has two squads, each with a

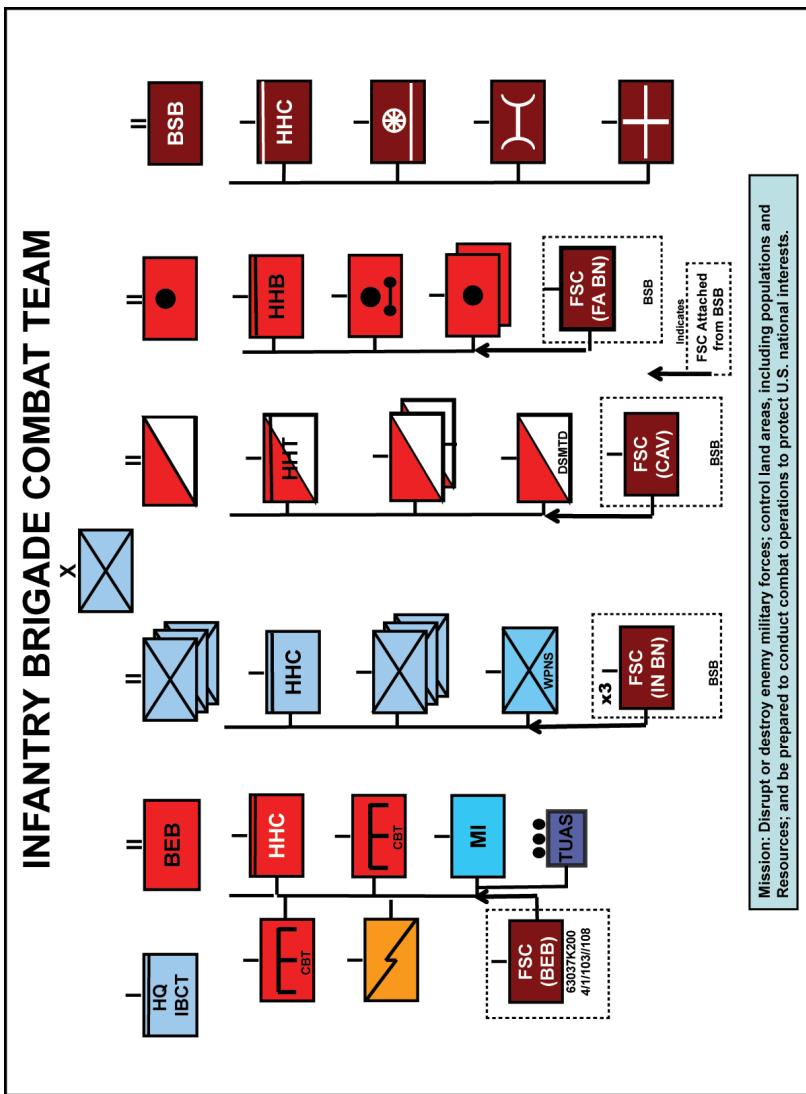


Figure A-1. Infantry brigade combat team.

60-mm mortar. Habitual attachments to the infantry rifle company include a fire support team at the company level and forward observer teams at the platoon level, medics assigned to the rifle platoons, and a senior medic at the company level. (See Figure A-1.)

Stryker Brigade Combat Team

The SBCT is an expeditionary combined arms force organized around mounted infantry. SBCT units operate effectively in most terrain and weather conditions due to their rapid strategic deployment and mobility. The role of the SBCT is to close with the enemy by means of fire and movement, to destroy or capture enemy forces, or repel enemy attacks by fire, close combat, and counterattack to control land areas, including populations and resources. The SBCT can gain the initiative early; seize and retain key terrain or any locality or area, the seizure or retention of which affords a marked advantage to either combatant; and conduct massed fire, fire from a number of weapons directed at a single point or small area, to stop the enemy.

SBCTs balance combined arms capabilities with significant mobility. The SBCT primarily fights as a dismounted infantry formation that includes three SBCT infantry battalions and one cavalry squadron. The SBCT infantry battalion has three SBCT infantry rifle companies, each with three SBCT infantry rifle platoons. Each SBCT infantry rifle company has a section of organic 120-mm Stryker mortar carrier vehicles with 60-mm dismounted mortar capabilities, a sniper team, and a mobile gun system platoon with three mobile gun system vehicles. The headquarters and headquarters company also has a mortar platoon, equipped with 120-mm Stryker mortar carrier vehicles that have an 81-mm mortar dismounted capability. In addition, the headquarters and headquarters company has a scout platoon, a fire support team, one sniper squad, and a medical platoon. (See Figure A-2, next page.)

LEGEND FOR FIGURES A-1, A-2, A-3

BEB	brigade engineering battalion	HHC	headquarters and headquarters company
BSB	brigade support battalion	HHT	headquarters and headquarters troop
CAB	combined arms battalion	IN BN	infantry battalion
CAV	cavalry	MI	military intelligence
CBT	combat	TUAS	tactical unmanned aircraft system
DSMTD	dismounted	WPNS	weapons
FA BN	field artillery battalion		
FSC	forward support company		
HHB	headquarters and headquarters battery		

STRYKER BRIGADE COMBAT TEAM

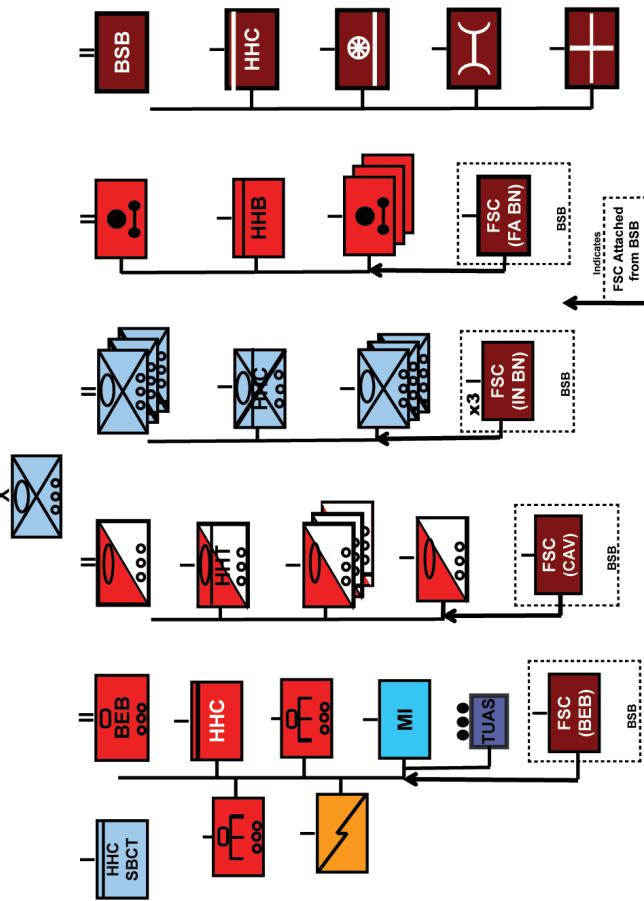


Figure A-2. Stryker brigade combat team.

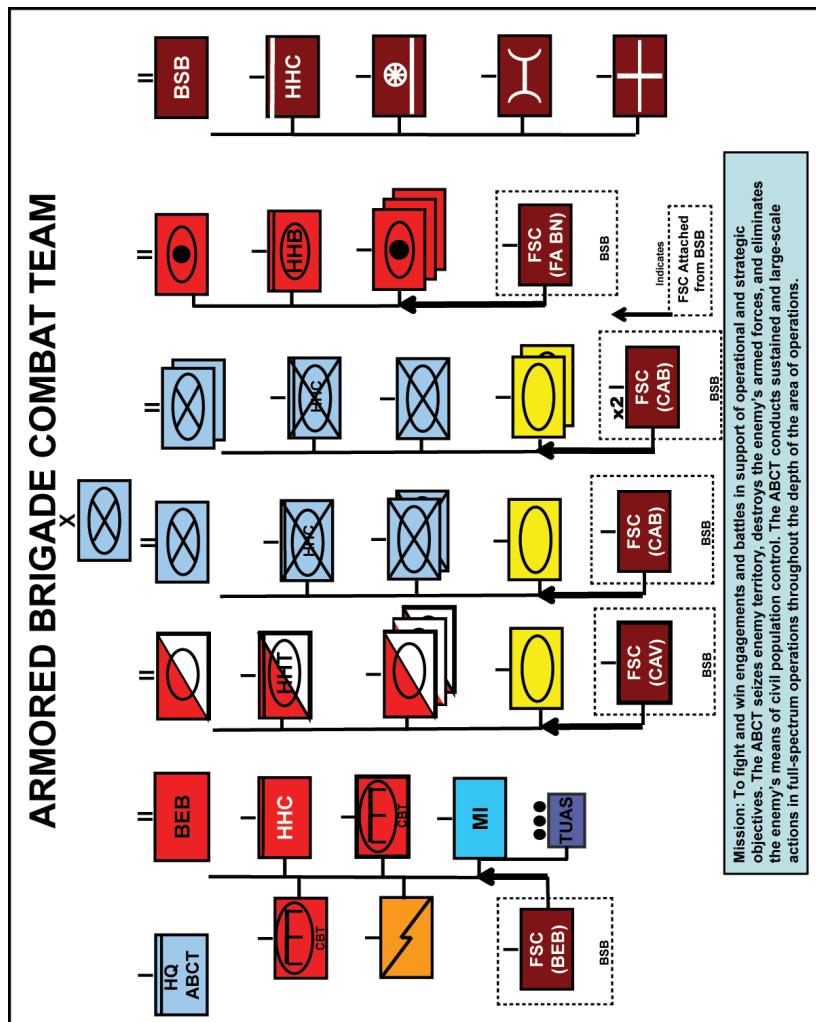


Figure A-3. Armored brigade combat team.

Armored Brigade Combat Team

The ABCT's role is to close with the enemy using fire and movement to destroy or capture enemy forces; repel enemy attacks by fire; engage in close combat; and counterattack to control land areas, including populations and resources. The ABCT organizes to concentrate overwhelming combat power. Mobility, protection, and firepower enable the ABCT to conduct offensive tasks with great precision and speed. The ABCT performs missions complementary to those of the IBCT and SBCT.

The ABCT is a combined arms organization consisting of three combined arms battalions of armor and mechanized infantry companies. Cavalry, field artillery, engineer, intelligence, signal, sustainment, and CBRN reconnaissance units are organic to the ABCT, also. (See Figure A-3, Page 97.) Higher commanders augment the ABCT for a specific mission. Augmentation can include aviation, armor, field artillery, air defense, military police, civil affairs, military information support operations elements, engineers, CBRN, and additional information systems assets.

Three combined arms battalions along with a cavalry squadron are the ABCT's primary maneuver force. The combined arms battalion combines the efforts of its two armor companies and two mechanized infantry companies along with the headquarters company to execute tactical missions as part of a combined arms operation. The combined arms battalion conducts sustained combined arms and close combat land operations as an essential part of the ABCT formation. Combined arms battalions serve as a deterrent to armed conflict; they can deploy worldwide in the conduct of decisive action. Combined arms battalions are responsible for executing combined arms operations within their assigned area of operations to support the ABCT commander.

Appendix B

The U.S. Army Military Decisionmaking Process

This appendix provides a brief overview of the U.S. Army military decisionmaking process (MDMP). The intent is to acquaint non-U.S. forces with the American planning process.

Historically, a unit's success is directly related to the ability of the staff to execute the MDMP. Given the increased complexity of today's operational environment and the vast array of mission command systems and processes, integration and synchronization of all activities associated with operations are increasingly difficult.

Both in actual operations and in training at the combat training centers (CTCs), planning time is often extremely limited. In these instances, units often omit steps of the MDMP. Most CTC trainers agree that when time is limited, completely omitting any step of the MDMP is not the solution and often degrades mission success. Combat operations in Iraq and Afghanistan resulted in the use of non-doctrinal story boards in the planning process. This practice lacks the fidelity necessary to provide the commander with decision making information he needs, and can lead to a loss of synchronization during operations.

The MDMP is a solid model for developing a solution to a problem. However, if the staff conducting the MDMP is unfamiliar with each of the steps, the process can become very complex, and errors committed early in the process become increasingly problematic as planning continues.

The MDMP facilitates interaction among the commander, staff, and subordinate headquarters throughout the operations process. It provides a structure for the staff to work collectively and produce a coordinated plan. During planning, staff members monitor, track, and aggressively seek information important to their functional areas. They assess how this information affects course of action development and apply it to any recommendations they make.

Planning is the art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing about that future. Planning helps commanders create and communicate a common vision among themselves, their staffs, subordinate commanders, and unified action partners.

All planning is based on imperfect knowledge and assumptions about the future. Planning cannot predict exactly what the effects of the operation will be, how enemies will behave, or how civilians will respond to the friendly force or the enemy. Nonetheless, the understanding and learning that occur during the planning process have great value.

CENTER FOR ARMY LESSONS LEARNED

Key inputs	Steps	Key outputs
<ul style="list-style-type: none"> Higher headquarters' plan or order or a new mission anticipated by the commander 	Step 1: Receipt of Mission	<ul style="list-style-type: none"> Commander's initial guidance Initial allocation of time
		Warning order
<ul style="list-style-type: none"> Commander's initial guidance Higher headquarters' plan or order Higher headquarters' knowledge and intelligence products Knowledge products from other organizations Army design methodology products 	Step 2: Mission Analysis	<ul style="list-style-type: none"> Problem statement Mission statement Initial commander's intent Initial planning guidance Initial CCIJs and EEFJs Updated IPB and running estimates Assumptions Evaluation criteria for COAs
		Warning order
<ul style="list-style-type: none"> Mission statement Initial commander's intent, planning guidance, CCIJs, and EEFJs Updated IPB and running estimates Assumptions Evaluation criteria for COAs 	Step 3: Course of Action (COA) Development	<ul style="list-style-type: none"> COA statements and sketches <ul style="list-style-type: none"> Tentative task organization Broad concept of operations Revised planning guidance Updated assumptions
		Warning order
<ul style="list-style-type: none"> Updated running estimates Revised planning guidance COA statements and sketches Updated assumptions 	Step 4: COA Analysis (War Game)	<ul style="list-style-type: none"> Refined COAs Potential decision points War-game results Initial assessment measures Updated assumptions
<ul style="list-style-type: none"> Updated running estimates Refined COAs Evaluation criteria War-game results Updated assumptions 	Step 5: COA Comparison	<ul style="list-style-type: none"> Evaluated COAs Recommended COAs Updated running estimates Updated assumptions
<ul style="list-style-type: none"> Updated running estimates Evaluated COAs Recommended COA Updated assumptions 	Step 6: COA Approval	<ul style="list-style-type: none"> Commander approved COA and any modifications Refined commander's intent, CCIJs, and EEFJs Updated assumptions
		Warning order
<ul style="list-style-type: none"> Commander approved COA and any modifications Refined commander's intent, CCIJs, and EEFJs Updated assumptions 	Step 7: Orders Production, Dissemination, and Transition	<ul style="list-style-type: none"> Approved operations plan or order Subordinates understand the plan or order

Figure B-1. The military decisionmaking process.

Planning activities occupy a continuum ranging from conceptual to detailed. On one end of the continuum is conceptual planning. Understanding the operational environment and the problem, determining the operation's end state, establishing objectives, and sequencing the operation in broad terms all illustrate conceptual planning.

At the other end of the spectrum is detailed planning. Detailed planning translates the broad operational approach into a complete and practical plan. Detailed planning works out the scheduling, coordination, or technical problems involved with moving, sustaining, synchronizing, and directing the force.

U.S. Army leaders employ three methodologies for planning, determining the appropriate mix based on the scope of the problem and their familiarity with it, the time available, and the availability of a staff. Methodologies that assist commanders and staffs with planning include Army design methodology, MDMP, and troop leading procedures.

The MDMP is an iterative planning methodology that integrates the activities of the commander, staff, subordinate headquarters, and other partners to understand the situation and mission, develop and compare courses of action (COAs), decide on a COA that best accomplishes the mission, and produce an operation plan or order for execution. (See Figure B-1, Page 100.) The MDMP helps leaders apply thoroughness, clarity, sound judgment, logic, and professional knowledge to understand situations, develop options to solve problems, and reach decisions. The MDMP is a process that helps commanders, staffs, and others think critically and creatively while planning.

The MDMP facilitates collaborative and parallel planning as the higher headquarters solicits input and continuously shares information concerning future operations with subordinate and adjacent units, supporting and supported units, and other military and civilian partners through planning meetings, warning orders (WARNORDs), and other means. Commanders encourage active collaboration among all organizations affected by the pending operations to build a shared understanding of the situation, participate in COA development and decision making, and resolve conflicts before publication of the plan or order.

The MDMP also drives preparation. Since time is a factor in all operations, commanders and staffs conduct a time analysis early in the planning process. This analysis helps them determine what actions are required and when those actions must begin to ensure that forces are ready and in position before execution. This may require the commander to direct subordinates to start necessary movements, conduct task organization changes, begin information collection operations, and execute other preparation activities before completing the plan. The commander directs

these tasks in a series of WARNORDs as the commander and staff conduct the MDMP.

During planning, assessment focuses on developing an understanding of the current situation, ascertaining what to assess, and determining how to assess progress using measures of effectiveness and measures of performance.

Developing the unit's assessment plan occurs during the MDMP — not after the plan or order is developed.

Appendix C

A Tool for Parallel Planning in a Combined Brigade Combat Team

**MAJ Joel P. Gleason and MAJ Patrick Bryan,
Joint Multinational Readiness Center**

Due to current operational and strategic realities, multinational operations have become part of today's tactical landscape. Because multinational formations are especially difficult to control due to myriad languages, cultures, vehicles, capabilities, etc., combat training centers have increasingly focused efforts on interoperability. In doing so, it has become apparent that effective planning is paramount to resolving many of the challenges associated with interoperability.

Many commanders — regardless of national origin — now are catching their first glimpse of the wide array of planning procedures that exist in a multinational force. U.S. doctrine accurately states that commanders can most directly influence operations during the planning process. But what is the appropriate planning process for a multinational brigade combat team (MNBCT)? This question should be among the first a commander poses when he learns that his unit is to function as part of a multinational operation, regardless of whether his unit represents the lead nation or is a subordinate headquarters. In order to execute a tactical-level operation with a multinational task organization, the commander should either establish a common planning process, or understand how diverse planning processes nest with each other. In other words, the commander must make sure that the planning processes are interoperable. This appendix seeks to demystify common planning processes, such as the NATO Operational-level Planning Process (OLPP), so that commanders can feel comfortable using a NATO process or letting subordinate units use their own national processes in parallel.

The NATO OLPP, which many allies are comfortable using, is very similar to the U.S. Army military decisionmaking process (MDMP). As a result, U.S. commanders and staffs should be able to adapt quickly without significant friction. Further, the OLPP follows the basic seven-step planning model common in most partner militaries. During a crisis, it might even be best to let each formation continue with its familiar process and simply seek to understand the parallel steps. Therefore, identifying and understanding the subtle differences between the processes is invaluable to simplifying planning, thereby simplifying operations. (For more information about the MDMP, see Center for Army Lessons Learned Handbook 15-06, *MDMP*, and Army Doctrine Publication 5-0, *The Operations Process*.)

In order to comfortably place multiple planning processes in parallel, planners should seek to understand the lowest common denominator among processes. All planning methods can be boiled down to five basic steps:

1. Planning initiation
2. Planner orientation
3. Generation and analysis of options
4. Selection (decision) of an option
5. Resourcing, execution, and assessments

The lowest common denominator chart (see Figure C-1, Pages 106 and 107) is a tool to assist commanders and planning staffs in synchronizing their planning processes. The chart is approximately aligned to these basic steps.

The first seven columns of the chart are seven-step processes that represent the multitude of processes similar to OLPP, including MDMP and the joint operation planning process (JOPP). These seven steps are grouped according to the lowest common denominators, although those five lower steps are more helpful with planning processes outside the familiar seven-step model. Commanders who have elements within their formation that use a seven-step model like OLPP need not worry about the varied names used for the same steps, but instead focus on the principles behind each step, thereby keeping the processes in parallel.

Six relatively diverse planning models are provided in the last six columns of the chart in order to help commanders and planners find the parallel steps in processes that are unlike the basic seven-step model. The German planning process is close to the seven-step mode but gives an example of unique considerations that are less familiar. The Canadian operational planning process is a great example of a common five-step model. The United Kingdom's Combat Estimate (aka Seven Questions) and the French Army's operational decision elaboration method also provide great examples of alternative perspectives to planning. In the second-to-last column, the rapid decisionmaking and synchronization process exemplifies a shortened version of the seven-step model that is used in many armies for abbreviated decisions.

The final planning process shown is the NATO Comprehensive Operational Planning Directive (COPD). The COPD is displayed because many NATO officers are familiar with it, but the COPD is not recommended for use at the tactical level because it is designed to respond to the strategic and operational direction of the North Atlantic Council on a much slower timeline. It should be noted that the COPD is aligned with the five lowest common denominator steps; however, most planners encountering COPD will find that although the lowest common denominators are the same, only Phases III through IVb will actually occur at the same time as any tactical planning.

Although, the multitude of planning processes available cannot be represented easily on one page, the lowest common denominator chart provides a quick reference to assist coalitions in comprehending and synchronizing diverse planning processes. The purpose is not to fully comprehend any planning process but to decrease friction among diverse elements conducting parallel planning. This outlook provides a baseline for commanders to coordinate with their higher, adjacent, or subordinate units without forcing everyone to adopt an unfamiliar planning process in the middle of a crisis. However, during more deliberate multinational operations, it may be appropriate to establish a common process, and this chart provides a baseline for doing so.

As the commander determines which planning process is best for the organization and how adjacent processes function in parallel, some friction will be removed. Commanders can utilize the five basic steps from the lowest common denominator chart to ensure that any planning processes are interoperable. In this way, commanders can feel comfortable using a NATO process or letting subordinate units use their own national processes in parallel.

CENTER FOR ARMY LESSONS LEARNED

Lowest common denominators:	OLPP	JOPP	MCPP	ADM/MDMP	ESP	NLD	GRC	
	Operational-Level Planning Process	Joint Design and Joint Operational Planning Process	Marine Corps Planning Process	Army Design Methodology and the Military Decisionmaking Process	Spanish Army Planning Process (at tactical level)	Dutch Army Planning Process	Greek Army Military Decisionmaking Process	
OLPP/MDMP-Style 7 Step Planning Processes								
Multiple nations use the 7 Steps familiar to many U.S. and NATO officers. Some nations with similar processes are listed below.						Coalition CDRs seek common procedures. ESP, NLD, GRC have 7 Step variants with direct links to OLPP or MDMP.		
1. Initiate	Initiation of OLPP	Planning initiation	Design	Army Design Methodology	Receipt of mission	Review the situation	Receipt of mission	
				Mission analysis				
2. Orient	Problem and mission analysis	Mission analysis	Problem framing	Mission analysis	Evaluation of factors	Analysis of factors	Mission analysis	
					Mission analysis	Analysis of factors		
3. Generate and analyze options	Course of action (COA) development	COA development	COA development	COA development		Formulation of potential COAs	COA development	
	COA analysis	COA analysis and war game	COA war game	COA analysis (war game)			COA analysis (war game)	
	COA validation and comparison	COA comparison	COA comparison and decision	COA comparison	COA validation and comparison		COA comparison	
4. Decide	Commander's COA decision	COA approval		COA approval	Commander's COA decision	Decision	COA approval	
	Concept and plan development	Plan or order development	Orders development	Orders production	Orders production	Execution	Orders production	
5. Resource, execute, assess	Campaign assessment and plan review/revision		Transition					
	Nations using 7 Step models: Greece, Latvia, Lithuania, Netherlands, Portugal, Spain, United States Nations using NATO doctrine above tactical levels: Greece, Italy, Portugal				The Dutch and Spanish Armies use processes similar to 7 Step models, yet each is unique. Other processes listed to the left may have unique features. Many nations use NATO COPD and OLPP above tactical levels.			

Figure C-1. Lowest common denominator chart: multinational planning processes in parallel. (Source: JMRC)

MULTINATIONAL INTEROPERABILITY REFERENCE GUIDE

	DEU	CAN	GBR	FRA	RDSP	COPD
German Army Decisionmaking Process	Canadian Army Operational Planning Process	British Army Combat Estimate (aka 7 Questions)	French Army Operational Decision Elaboration Method	U.S. Army Rapid Decisionmaking and Synchronization Process *	NATO Comprehensive Operational Planning Directive	
<i>Auftragstaktik</i> (Mission command)					* Note: RDSP is a shortened process utilized during execution/assessment	PH I: Indications and warnings
		What is the situation & how does it affect me?		Direction		Phase II: Assessment
	Initiation				Compare current situation to order	
Situational awareness	Mission analysis		What have I been told to do & why?		Analysis	Phase III: Response options development
	Estimate of situation: own, environment, enemy's	Orientation	What effects do I need to achieve & what direction must I give in order to develop a plan?	Phase 1		
Planning	Own possibilities		Where can I best accomplish each action/effect?		Develop a COA	
	Comparison of forces	COA development	What resources do I need to accomplish each action/effect?	Provisional Findings		Phase IVa: CONOPS development
	Comparison of COAs		When & where do the actions take place in relation to each other?	Summary	Refine and validate the COA	
Issuing orders	Commander's decision	Plan development	What control measures do I need to impose?	Phase 2	Maneuver development	
	See note on OPORD *					PH IVb: OPLAN development
Following up		Plan review				PH V: Execution
						PH VI: Transition
* The OPORD development scheme in German doctrine links mission analysis products to OPORD/FRAGORD.	Planning and preparation techniques such as troop leading procedures (TLPs) are not listed in this chart but may be something tactical commanders can explore to find commonalities within a multinational task organization.				RDSP is not unique, as many doctrines have abbreviated procedures.	COPD is not aligned in time to the other processes, as it is a strategic and operational process.

Appendix D

After Action Review Considerations During Multinational Operations

MAJ Patrick L. Bryan, Joint Multinational Readiness Center

“After the battle they bring this mobile theater, and they do what they call an ‘after action review’ to teach you what you’ve done wrong. Sort of leadership by humiliation. They put a big screen up and they take you through everything and then, ‘You didn’t do this and you did do this,’ etc. I walked out feeling as low as a snake’s belly in a wagon rut. And I saw my battalion commander, ‘cause I had let him down. And I went up to apologize to him and he said, ‘Stanley, I thought you did great.’ And in one sentence he lifted me, put me back on my feet, and taught me that leaders can let you fail and yet, not let you be a failure.”¹

The United States and its partners increasingly are focusing their efforts on an uncertain future against uncertain enemies. Consequently, combat training centers are exercising multinational interoperability. The after action review (AAR) is a ubiquitous tool within these training environments, yet many multinational forces are entirely unfamiliar with its use as an assessment tool. Further, AARs are not always adjusted appropriately to accommodate international audiences. This article is designed to introduce facilitators to AAR challenges in a multinational environment and to introduce our partners to the process.² In the spirit of interoperability — where trust is paramount — we do not want our coalition partners to walk away from our AARs feeling “as low as a snake’s belly in a wagon rut,” as GEN McChrystal once did. In order to avoid that, we need to understand our training audience.

Even within the U.S. military — a generally homogenous organization — many unique subcultures exist: Marines, airborne infantry, mechanized infantry, armored, support, etc. We are made up of men and women from the north, the south, other countries, and virtually every ethnic origin. By all accounts, we are an organization with many cultures, but our U.S. military culture binds us. Our coalition partners, too, have their own unique military cultures and subcultures. To be sure, creating one multinational military culture is difficult, but not impossible. Good AAR practice helps us to build the camaraderie and trust critical to interoperability.

AAR Purpose

AARs’ enduring principles and methods have remained relatively unchanged over the years, having really only updated terminology to match

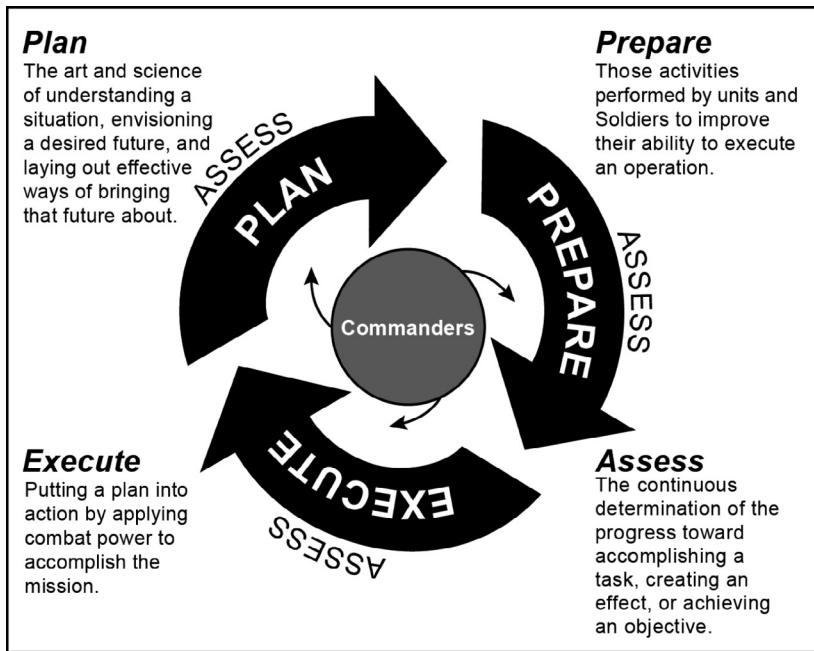


Figure D-1. The four-step process for conducting AARs.
(Source: Army Doctrine Publication 5-0, *The Operations Process*)

the vernacular of the most current doctrine. For example, what was once a “battlefield operating system” is now a, “warfighting function.” At their core, AARs are tools to analyze a unit’s performance in order to improve future performance.³ They are professional discussions — guided by a facilitator — about a unit’s strengths and weaknesses during a particular training event.⁴ Conducted effectively, they develop a strategy and assign responsibility to solve those individual or collective tasks that require improvement.

AARs are very much a part of the Army’s operations process in that they provide critical feedback to the commander so that he can assess his unit. They are necessarily part of the commander’s assessment process. They help to build the common framework for exercising mission command.

In the same vein, the best way to conduct an AAR (multinational or otherwise) is through the same mission command activities performed during operations: plan, prepare, execute, and continuously assess. (See Figure D-1.)

Plan

AAR planning is absolutely critical to the effectiveness of AARs. All those providing input to the AAR must know and understand the commander's intent for the training event (i.e., the training objectives), the concept of the operations, and the tasks to be trained.⁵ Successful AARs, therefore, have effective AAR plans for each training event that include such factors as selecting appropriate observer/coach-trainers (OCTs), scheduling, determining attendance, choosing training aids, and reviewing performance standards.

In a multinational environment, reviewing performance standards becomes exponentially more important in order to gain and maintain credibility. During multinational operations, we need to look to sources from outside our own doctrine so that we can make meaningful and accurate observations and potentially compare and contrast methods and standards. In other words, we need to be learned facilitators rather than instructors. Where we would normally look to training and evaluation outlines to develop training objectives, a multinational AAR requires more research from North Atlantic Treaty Organization (NATO) sources and other country-specific sources so that feedback is meaningful. Despite our deference toward the familiar, not everybody does things the way the U.S. Army does, nor do they necessarily want to.

For example, during a recent training rotation at the Joint Multinational Readiness Center (JMRC) at Hohenfels, Germany, an Italian-led multinational brigade task force commanded and controlled several multinational (including U.S.) task-organized battalions. Among the Italian brigade's training objectives was to "plan operations." At first glance, one could have easily opened *The Army Universal Task List* (ADRP 1-03, October 2015) and identified multiple subsidiary training objectives with well-developed tasks, conditions, and standards. However, the Italians do not use Army design methodology or the military decisionmaking process (MDMP). Instead, they use something more akin to the NATO comprehensive operational planning directive. Further, one of the task force's subordinate battalions used the Great Britain Army Combat Estimate (also known as the 7 Questions); the other used the MDMP. In order to be effective in helping to assess this brigade's training, one must at least become conversant in the subtle differences in those processes and how they are interoperable. In this example, that OCT working knowledge provided a foundation for the AAR as it pertained to "planning operations."

Prepare

AAR preparation is continuous and bridges the gap between planning and execution. During the preparation phase, AAR facilitators — whether internal, external OCTs, or both — should review all orders, training

objectives, concepts, and tasks in order to make sure everything observed is relevant. In reality, preparing for the AAR mostly consists of observing the training events and organizing the observations appropriately for the AAR. Regardless of the unit being trained, or the complexity of the training, training must be recorded with enough detail to make the AAR meaningful. Details should include events, actions, and observations with accurate date-time groups. At the earliest opportunity after the observed event, they should be integrated with other observations (by OCTs, the opposing force, and others as applicable) and refined into an appropriate medium in order to provide a complete picture of the event.

Depending on the size and structure of the OCT network, preparation also requires that key events be identified so that resources can be applied to it. For example, if one of the unit's training objectives is to conduct a passage of lines, then resources have to be in place to observe and record the event as accurately and completely as possible. Perhaps that means observing the event from perspectives of both the moving and stationary units, or at the planned and actual contact points.

Preparation can be slightly more multifaceted during multinational operations. Observing a passage of lines between two partner forces, for example, presents an additional level of complexity — new tactical relationships, different languages, unique procedures, different and unfamiliar vehicles. All of these factors have to be identified prior to the key event so that the most appropriate resources can be dedicated to observe and document it.

Finally, the AAR needs to be organized and rehearsed. The Leader's Guide to After Action Reviews identifies three ways to organize AARs: chronologically, by warfighting function, or by key event/theme/issue.⁶ It can be done on a HMMWV truck top, on a terrain model, via PowerPoint presentation, etc. The AAR is flexible and therefore can be organized and conducted in any useful way imaginable.

Since the purpose of the AAR is for participants to self-discover strengths and weaknesses, solutions, and courses of actions to resolve weaknesses, the method should be the most appropriate method for the participants. Again, this takes research and understanding of the audience. While a PowerPoint presentation discussing issues through warfighting functions might work great for a U.S. battalion, it is probably inadequate for a formation that is unaccustomed to PowerPoint as a teaching tool and does not fight by warfighting function.

Execute

Rules should be set and expectations managed right up front, regardless of the training audience. Although most American Soldiers have been through countless AARs from the time they enlisted or were commissioned, the rules for each AAR might be different depending on facilitator and/or audience, and therefore should be clearly understood and expressed. As a baseline, every AAR should include the basic rule that everyone should participate and the understanding that the AAR is not a critique, evaluation, or grade.

Soldier participation is paramount to self-discovery. Among other things, Soldier participation during the AAR is directly related to the atmosphere created by the facilitator. Therefore, the facilitator must foster an environment where Soldiers feel comfortable and free to disagree with one another and give honest opinions. They need to know that it is an open forum, generally free from outside influences designed for candid input.

This is difficult for U.S. forces, and perhaps more so with multinational participants. How do we ensure group participation with such a diverse audience? Hopefully, by the time an AAR is conducted, there is a comfort level among the participants. Regardless, group dynamics will fail if we communicate poorly.

Facilitators should avoid idioms, axioms, colloquialisms, and especially acronyms. Despite how much they mean (or do not mean) to us, they often confuse, have no meaning, or mean completely different things to our coalition partners, regardless of whether they speak fluent English. Where an American facilitator might tell his audience to “have thick skins,” in order to facilitate dialogue, a multinational partner might interpret that to mean, “This is going to be harsh; I should deflect this or otherwise not absorb what is about to be said.”

Simple, seemingly unambiguous words might also have vastly different meanings, influenced by culture. For example, U.S. Service members tend to use the term “leaders” almost interchangeably with the term “Soldiers,” with only “commanders” enjoying a unique role within military leadership parlance. However, during at least one JMRC rotation, “leader” had unique meaning among the primary participants — it meant “decision maker.” As a result, when the facilitator insisted that leaders provide the input to the AAR, the input came from only a select few. The point is to identify and understand these idiosyncrasies throughout the AAR planning process, and consciously execute the AAR around them.

Finally, facilitators have to execute the AAR according to the developed plan. Although it does not have to be scripted, having a general agenda to facilitate flow of information is a good thing. Typically, after a short

introduction, the facilitator summarizes the events (what actually happened), identifies what went right or wrong, and guides the participants to determine how it could be done differently. At its conclusion, the facilitator should summarize and link the conclusions to future training.⁷

Assess

Retraining should be conducted immediately for the AAR to have its greatest effect. However, assessment is a continuous process, and the commander can use the lessons learned from the AAR long after the training event. Further, he can build on those lessons to create new challenges for his unit at each successive training event or operation.

To help the unit link the AAR’s conclusions to future training or operations, facilitators often frame the challenge as questions:

- What do we want to fix? (What actually happened that could be done better?)
- How can we fix it?
- Who is going to fix it?

In keeping with the theme that AARs are an element of the operations process (assessment), facilitators might also consider asking this question: How will we know if we fixed it? (How will we know if it is better?)

Put in the U.S. operations process context, the former identifies a measure of performance, and the latter identifies a measure of effectiveness.⁸ This is distinguishable from hindsight at the next AAR. This should be identified right up front — asking the hard questions that will tie the AAR to the next training event or operation, and whether we achieved the intended results. It has to be clear and measurable. Once it is identified, one should be able to state unequivocally that the task has been accomplished (or not).

For example, during a recent mid-rotational AAR at JMRC, a battalion command sergeant major referenced a casualty collection operation that he wanted to fix. He explained that he was going to “keep the plan simple” in order to fix it. He had therefore identified something he wanted to fix, and stated how he was going to fix it. But how does he know that he has kept the plan simple? Simple according to him? Simple according to the medics? What’s the metric? Linking his proposed solution to a measure of effectiveness would have provided that metric, allowing him and his commander to more clearly assess the planning, preparation, and execution of the next training iteration.

Conclusion

After action reviews are important assessment tools — to us and to our multinational partners. Because commanders are conducting simultaneous offensive, defensive, and stability tasks — and increasingly as part of a multinational effort — AARs are as important now as they have ever been. But we have to do them right. AARs help to provide a common lens through which we can assess and improve our multinational interoperability. The conduct of AARs must acknowledge and be responsive to differences in culture and language in order to accomplish this. As a facilitator, the key is to know your audience. Conduct an AAR most useful to them — not necessarily what you might find most useful. Above all, be humble, be kind, and be adaptive.

Endnotes

¹ GEN Stanley A. McChrystal (Ret.), recalling an experience as a company commander during an AAR at the National Training Center, in an interview for the “TED Radio Hour,” National Public Radio, 17 JUN 2014; <http://www.npr.org/2014/01/17/261084625/how-do-leaders-deal-with-failure>.

² This article is meant to supplement, not replace, the *Leader’s Guide to After Action Reviews*, U.S. Army Combined Arms Center–Training, Fort Leavenworth, KS, 2013. It also should be noted that the *Leader’s Guide* is based on Army doctrine — not joint, NATO, or partner doctrine. Regardless, applying critical analysis to its core will still yield results across formations.

³ Army Doctrine Reference Publication 7-0, *Training Units and Developing Leaders*, August 2012, para. 3-73.

⁴ *Leader’s Guide to After Action Reviews* (hereinafter *Leader’s Guide*).

⁵ *Leader’s Guide*, 7-9.

⁶ *Leader’s Guide*, 13.

⁷ *Leader’s Guide*, 16.

⁸ ADRP 5-0, 5-2–5-3.

Appendix E

Multinational Rehearsals

This appendix provides a summary of rehearsals used in U.S. Army planning and operations. It is intended to provide non-U.S. units and leaders with information about how U.S. Army units conduct rehearsals and their importance in planning and preparation for combat. This information is provided because multinational units that work with U.S. Army units will participate in rehearsals.

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 help Soldiers build a lasting mental picture of the sequence of key actions within the operation.

Rehearsals are the commander's tool to ensure that staffs and subordinates understand the commander's intent and the concept of operations.

Rehearsals allow commanders and staffs to identify shortcomings in the plan not previously recognized. Rehearsals also contribute to external and internal coordination, as the staff identifies additional coordinating requirements.

Effective and efficient units habitually rehearse during training. Commanders at every level routinely train and practice various rehearsal types. Local standard operating procedures (SOPs) identify appropriate rehearsal types and standards for their execution. All leaders conduct periodic after action reviews to ensure that their units conduct rehearsals to standard and correct substandard performances. After action reviews also enable leaders to incorporate lessons learned into existing plans and orders, or into subsequent rehearsals.

Adequate time is essential when conducting rehearsals. The time required varies with the complexity of the mission, the type and technique of rehearsal, and the level of participation. Units conduct rehearsals at the lowest possible level, using the most thorough technique possible, given the time available. Under time-constrained conditions, leaders conduct abbreviated rehearsals, focusing on critical events determined by reverse planning. Each unit will have different critical events based on the mission, unit readiness, and the commander's assessment.

The rehearsal is a coordination event, not an analysis. It does not replace war gaming.

Commanders war-game during the military decisionmaking process (MDMP) to analyze different courses of action to determine the optimal one. Rehearsals practice that selected course of action. Commanders avoid

making major changes to operation orders (OPORDs) during rehearsals. They make only those changes essential to mission success and risk mitigation.

The U.S. Army uses four types of rehearsals:

- Backbrief
- Combined arms rehearsal
- Support rehearsal (fires, sustainment, intelligence, etc.)
- Battle drill or SOP rehearsal

During multinational operations, the most likely rehearsals to be conducted at brigade combat team level will be the combined arms rehearsal and the support rehearsal. All types of rehearsals may be used during an operation.

Backbrief. A backbrief is a briefing by subordinates to the commander to review how subordinates intend to accomplish their mission. Normally, subordinates perform backbriefs throughout preparation. These briefs allow commanders to clarify the commander's intent early in subordinate planning. Commanders use the backbrief to identify any problems in the concept of operations.

The backbrief differs from the confirmation brief (a briefing subordinates give their higher commander immediately following receipt of an order) in that subordinate leaders are given time to complete their plan. Backbriefs require the fewest resources and are often the only option under time-constrained conditions. Subordinate leaders explain their actions from the start to the finish of the mission. Backbriefs are performed sequentially, with all leaders reviewing their tasks. When time is available, backbriefs can be combined with other types of rehearsals. Doing this lets all subordinate leaders coordinate their plans before performing more elaborate drills.

Combined arms rehearsal. A combined arms rehearsal (CAR) is a rehearsal in which subordinate units synchronize their plans with each other. A maneuver unit headquarters normally executes a CAR after subordinate units issue their OPORD. This rehearsal type helps ensure that subordinate commanders' plans achieve the higher commander's intent.

Support rehearsal. The support rehearsal helps synchronize each warfighting function with the overall operation. This rehearsal supports the operation so units can accomplish their missions. 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

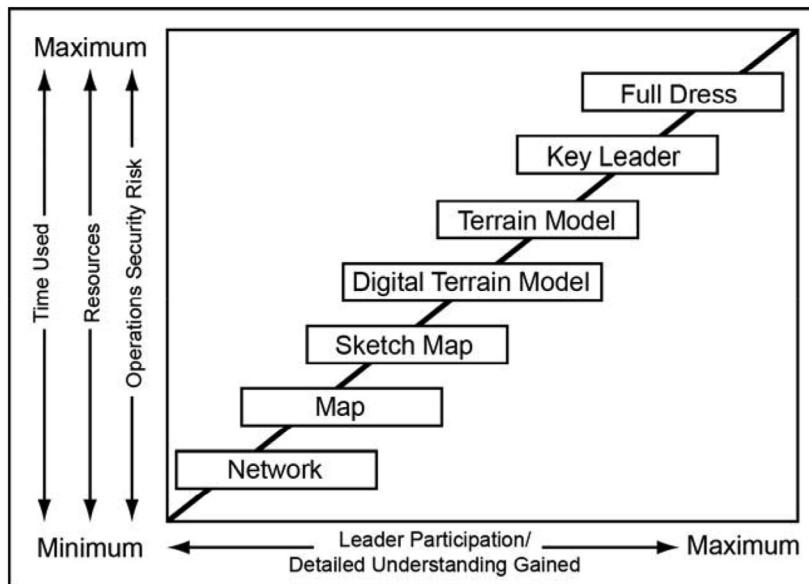


Figure E-1. Types of rehearsals.

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.

Battle drill. A battle drill is a collective action rapidly executed without applying a deliberate decision-making process. A battle drill or SOP rehearsal ensures that all participants understand a technique or a specific set of procedures. Throughout preparation, units and staffs rehearse battle drills and SOPs. These rehearsals do not need a completed order from higher headquarters. Leaders place priority on those drills or actions they anticipate occurring during the operation.

Methods for conducting rehearsals are limited only by the commander's imagination and available resources. Several methods are illustrated in Figure E-1. Resources required for each method range from broad to narrow. As listed from left to right, each successive method takes more time and more resources. Each rehearsal method also imparts a different level of understanding to participants.

The most common method of rehearsal used during multinational operations is terrain model, map, key leader, and sketch map. Constraints such as time, terrain, lack of common operating digital systems, and lack of

common networks can challenge the use of other methods. Multinational units should be prepared to participate in whatever rehearsal method is used. If in doubt, ask questions to clarify. If you have an American liaison officer (LNO), have him explain your responsibilities and your contribution to the rehearsal. If you do not have an LNO, ask your American counterpart for this information. All participants in a rehearsal have specified responsibilities; as a leader, you will use an established format during the rehearsal to effectively articulate your unit's actions and responsibilities in executing the plan. You must be prepared to answer questions, make adjustments, and make decisions during the rehearsal.

All participants have responsibilities before, during, and after a rehearsal. Before a rehearsal, the rehearsal director states the commander's expectations and orients the other participants on details of the rehearsal, as necessary. During a rehearsal, all participants rehearse their roles in the operation. They make sure they understand how their actions support the overall operation and note any additional coordination required. After a rehearsal, participants ensure that they understand any changes to the OPORD and coordination requirements, and they receive all updated staff products.

An effective rehearsal follows a prescribed agenda that everyone knows and understands. This agenda includes, but is not limited to:

- Roll call
- Participant orientation to the terrain
- Location of local civilians
- Enemy situation brief
- Friendly situation brief
- Description of expected enemy actions
- Discussion of friendly unit actions
- A review of notes made by the recorder

The execution matrix, decision support template, and OPORD outline the rehearsal agenda. These tools, especially the execution matrix, both drive and focus the rehearsal.

Full-dress rehearsal. A full-dress rehearsal produces the most detailed understanding of the operation. It includes every participating Soldier and system. Leaders conduct the rehearsal on terrain similar to the area of operations, initially under good light conditions, and then in limited

visibility. Full-dress rehearsals consume more time than any other rehearsal type. All echelons involved in the operation participate in the full-dress rehearsal. Terrain management for a full-dress rehearsal is challenging.

Key leader rehearsal. Circumstances may prohibit a rehearsal with all members of the unit. A key leader rehearsal involves only key leaders of the organization and its subordinate units. It normally takes fewer resources than a full-dress rehearsal. Terrain requirements mirror those of a full-dress rehearsal, even though fewer Soldiers participate. The commander first decides the level of leader involvement. Then the selected leaders rehearse the plan while traversing the actual or similar terrain. A key leader rehearsal normally requires less time than a full-dress rehearsal.

Terrain model rehearsals. The terrain model rehearsal is the most popular rehearsal method. It takes less time and fewer resources than a full-dress or reduced-force rehearsal. An accurately constructed terrain model helps subordinate leaders visualize the commander's intent and concept of operations. When possible, commanders place the terrain model where it overlooks the actual terrain of the area of operations. The model's orientation coincides with that of the terrain. The size of the terrain model can vary from small (using markers to represent units) to large (on which the participants can walk). A large model helps reinforce the participants' perception of unit positions on the terrain.

Digital terrain model rehearsals. Digital terrain models are virtual representations of the area of operations. Units drape high-resolution imagery over elevation data, thereby creating a fly-through or walk-through. Holographic imagery produces the view in three dimensions. Often, the model hot-links graphics, detailed information, unmanned aircraft systems, and ground imagery to key points providing more insight into the plan.

Sketch map rehearsal. Commanders can use the sketch map technique almost anywhere, day or night. The procedures are the same as for a terrain model rehearsal except that the commander uses a sketch map in place of a terrain model. Large sketches ensure that all participants can see as each participant walks through execution of the operation. Participants move markers on the sketch to represent unit locations and maneuvers. Sketch map rehearsals take less time than terrain model rehearsals and more time than map rehearsals.

Map rehearsal. A map rehearsal is similar to a sketch map rehearsal except that the commander uses a map and operation overlay of the same scale used to plan the operation. A map rehearsal is normally the easiest technique to set up because it requires only maps and graphics for current operations. Units tailor a map rehearsal's operation overlay to the echelon conducting the rehearsal. Multi-echelon rehearsals using this technique are difficult.

Network rehearsal. Units conduct network rehearsals over wide-area networks or local-area networks. Commanders and staffs practice these rehearsals by talking through critical portions of the operation over communications networks in a sequence the commander establishes. The organization rehearses only the critical parts of the operation. These rehearsals require all information systems needed to execute that portion of the operation. All participants require working information systems, the OPORD, and graphics.

Appendix F

Glossary

The Army Values

- Loyalty
- Duty
- Respect
- Selfless Service
- Honor
- Integrity
- Personal Courage

The Soldier's Creed and Warrior Ethos

I am an American Soldier.

I am a warrior and a member of a team.

I serve the people of the United States and live the Army Values.

I will always place the mission first.

I will never accept defeat.

I will never quit.

I will never leave a fallen comrade.

I am disciplined, physically and mentally tough, trained and proficient in my warrior tasks and drills.

I always maintain my arms, my equipment, and myself.

I am an expert, and I am a professional.

I stand ready to deploy, engage, and destroy the enemies of the United States of America in close combat.

I am a guardian of freedom and the American way of life.

I am an American Soldier.

Doctrinal Terms for Clarity

Five basic types of information are included in Army doctrine (Army Doctrine Publication 1-01, *Doctrine Primer*):

- Principles
- Tactics
- Techniques
- Procedures
- Terms and symbols

Principles

A **principle** is a comprehensive and fundamental rule or an assumption of central importance that guides how an organization or function approaches and thinks about the conduct of operations.

Tactics

Tactics are the employment and ordered arrangement of forces in relation to each other. They include the ordered arrangement and maneuver of units in relation to each other, the terrain, and the enemy in order to translate potential combat power into decisive results. Tactics vary with terrain and other circumstances. They change frequently as the enemy reacts and friendly forces explore new approaches. Applying tactics usually entails acting under time constraints with incomplete information. Tactics always require judgment in application and often require creative thinking; they are always descriptive, not prescriptive. Employing a tactic may require using and integrating several techniques and procedures. An example of a tactic is a movement to contact organized with a security force — either a covering force or an advance guard — and a main body.

Techniques

Techniques are non-prescriptive ways or methods used to perform missions, functions, or tasks. Techniques are more specific than tactics and less structured than procedures. Techniques are similar to tactics in that they are descriptive. They are similar to procedures in that they are often described in terms of steps. As with tactics, techniques require judgment in application. Soldiers and leaders choose specific techniques based on the situation and the precise mission or task. They expect the conditions they encounter to affect the way they perform a given technique. An example of a technique is a bounding overwatch.

Procedures

Procedures are standard, detailed steps that prescribe how to perform specific tasks. They also include formats for orders, reports, and control measures. Procedures are prescriptive. They consist of a series of steps in a set order that are completed the same way, at all times, regardless of circumstances, or a series of formats that must be used without variation. An example of a procedure is a 9-line medical evacuation (known as a MEDEVAC) message.

Terms and Symbols

Terms and symbols are the language and graphics used on operations. **Terms** are words defined in doctrinal publications specifically for Army use and codified in Army and joint doctrinal reference publications. **Symbols** are those graphics defined specifically for military use. They are codified. Terms and symbols provide a common language to communicate during the conduct of operations. Establishing and using terms and symbols with a common military meaning enhance communication among military professionals in all environments and make a common understanding of doctrine possible. Terms and symbols are prescriptive.

Doctrine and concepts often are confused. Doctrine is validated principles, tactics, techniques, procedures, and terms and symbols that the force can apply. Concepts are ideas for a significant change based on proposed new approaches to the conduct of operations or technology.

Definitions

area of influence

A geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support systems normally under the commander's command or control.

area of interest

That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. This area also includes areas occupied by enemy forces that could jeopardize the accomplishment of the mission.

area of operations

An operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces.

combined arms

The synchronized and simultaneous application of arms to achieve an effect greater than if each arm were used separately or sequentially.

combined arms maneuver

The application of the elements of combat power in unified action to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy to seize and exploit the initiative.

commander's visualization

The mental process of developing situational understanding, determining a desired end state, and envisioning an operational approach by which the force will achieve that end state.

culminating point

That point in time and space at which a force no longer possesses the capability to continue its current form of operations.

cyber electromagnetic activities

Activities leveraged to seize, retain, and exploit an advantage over adversaries and enemies in both cyberspace and the electromagnetic spectrum, while simultaneously denying and degrading adversary and enemy use of the same and protecting the mission command system.

decision point

A point in space or time at which the commander or staff anticipate making a key decision concerning a specific course of action.

decisive action

The continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks.

DOTMLPF

Doctrine, organization, training, materiel, leadership, personnel, and facilities.

execution

Putting a plan into action by applying combat power to accomplish the mission.

fires warfighting function

The related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process.

inform and influence activities

The integration of designated information-related capabilities in order to synchronize themes, messages, and actions with operations to inform United States and global audiences, influence foreign audiences, and affect adversary and enemy decision making.

intelligence warfighting function

The related tasks and systems that facilitate understanding the enemy, terrain, and civil considerations.

military decisionmaking process

An iterative planning methodology to understand the situation and mission, develop a course of action, and produce an operation plan or order.

mission command warfighting function

The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions.

mission orders

Directives that emphasize to subordinates the results to be attained, not how they are to achieve them.

movement and maneuver warfighting function

The related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats.

nongovernmental organization

A private, self-governing, not-for-profit organization dedicated to alleviating human suffering; and/or promoting education, health care, economic development, environmental protection, human rights, and conflict resolution; and/or encouraging the establishment of democratic institutions and civil society.

operational approach

A description of the broad action the force must take to transform current conditions into those desired at end state.

operational art

The cognitive approach by commanders and staffs — supported by their skill, knowledge, experience, creativity, and judgment — to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means.

operational environment

A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander.

operations process

The major mission command activities performed during operations: planning, preparing, executing, and continuously assessing the operation.

PMESII-PT

Acronym for political, military, economic, social, information, infrastructure, physical environment, and time; often used as an analytical start point to assess an operational environment.

planning

The art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing about that future.

preparation

Those activities performed by units and Soldiers to improve their ability to execute an operation.

procedures

Standard, detailed steps that prescribe how to perform specific tasks.

protection warfighting function

The related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission

prudent risk

A deliberate exposure to potential injury or loss when the commander judges the outcome in terms of mission accomplishment as worth the cost.

rules for the use of force

Directives issued to guide United States forces on the use of force during various operations. These directives may take the form of execute orders, deployment orders, memoranda of agreement, or plans.

rules of engagement

Directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered.

running estimate

The continuous assessment of the current situation used to determine if the current operation is proceeding according to the commander's intent and if planned future operations are supportable.

situational understanding

The product of applying analysis and judgment to relevant information to determine the relationships among the operational and mission variables to facilitate decision making.

standard operating procedure

A set of instructions covering those features of operations which lend themselves to a definite or standardized procedure without loss of effectiveness. The procedure is applicable unless ordered otherwise.

sustainment warfighting function

The related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance.

synchronization

The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time.

task organizing

The act of designing an operating force, support staff, or sustainment package of specific size and composition to meet a unique task or mission.

troop leading procedures

A dynamic process used by small-unit leaders to analyze a mission, develop a plan, and prepare for an operation.

unified action

The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort.

unified action partners

Those military forces, governmental and nongovernmental organizations, and elements of the private sector with whom Army forces plan, coordinate, synchronize, and integrate during the conduct of operations.

unified land operations

How the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability operations in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution.

warfighting function

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

wide area security

The application of the elements of combat power in unified action to protect populations, forces, infrastructure, and activities; to deny the enemy positions of advantage; and to consolidate gains in order to retain the initiative.

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

Combined Arms Doctrine Directorate (CADD)

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

Foreign Military Studies Office (FMSO)

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

Military Review (MR)

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

TRADOC Intelligence Support Activity (TRISA)

TRISA is a field agency of the TRADOC G2 and a tenant organization on Fort Leavenworth. TRISA is responsible for the development of intelligence products to support the policy-making, training, combat development, models, and simulations arenas. Find TRISA at <<https://atn.army.mil/media/dat/TRISA/trisa.aspx>> (CAC login required).

Capability Development Integration Directorate (CDID)

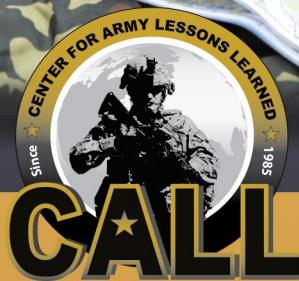
CDID conducts analysis, experimentation, and integration to identify future requirements and manage current capabilities that enable the Army, as part of the Joint Force, to exercise Mission Command and to operationalize the Human Dimension. Find CDID at <<http://usacac.army.mil/organizations/mccoe/cdid>>.

Joint Center for International Security Force Assistance (JCISFA)

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

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