TRADOC Pam 525-3-1

# The United States Army Operating Concept

NENT OF THE

STATES OF

ED

## 2016-2028

19 August 2010



(This page intentionally blank.)

#### Foreword

#### From the Commanding General U.S. Army Training and Doctrine Command

The Army is the Nation's principal military force organized, trained, and equipped for prompt and sustained operations on land. As one of the critical elements in our national defense strategy, the Army must continually adapt to changing conditions and evolving threats to our security. An essential part of that adaptation is the development of new ideas to address future challenges.

TRADOC Pam 525-3-1, *The Army Operating Concept*, describes how future Army forces conduct operations as part of the joint force to deter conflict, prevail in war, and succeed in a wide range of contingencies in the future operational environment. It describes the employment of Army forces in the 2016-2028 timeframe with emphasis on the operational and tactical levels of war. In addition to describing broadly how Army headquarters organize and direct the employment of their forces, the concept describes the major categories of Army operations and identifies the capabilities required of Army forces to guide and prioritize future force development. The ideas discussed in this document will guide revisions in Army doctrine, organizations, training, materiel, leadership and education, personnel, and facilities. These ideas will also enhance the integration of Army forces with a wide array of domestic and international partners.

The challenges of future armed conflict make it imperative for the Army to produce leaders and forces that exhibit a high degree of operational adaptability. Achieving the necessary level of operational adaptability requires the Army to build upon a foundation of two broad responsibilities within the framework of full-spectrum operations:

1) Army forces conduct combined arms maneuver to gain physical, temporal, and psychological advantages over enemy organizations. Applying an expanded understanding of combined arms, Army forces integrate the combat power resident in the Army's six warfighting functions with a wide array of related civil and military capabilities to defeat enemies and seize, retain, and exploit the initiative.

2) Army forces conduct wide area security to consolidate gains, stabilize environments, and ensure freedom of movement and action. Wide area security operations protect forces, populations, infrastructures, and activities, predominantly in protracted counterinsurgency, relief, and reconstruction efforts, and sustained engagement focused on the development of partner capabilities.

Army forces capable of combined arms maneuver and wide area security operations are an essential component of the joint force's ability to achieve or facilitate the achievement of strategic and policy goals.

This concept continues the major revision to the Army's conceptual framework that began in late 2009 with the publication of TRADOC Pam 525-3-0, *The Army Capstone Concept*. Building upon the strategic vision contained in that document, TRADOC Pam 525-3-1, *The Army Operating Concept* provides greater detail and refinement of the Army's role and contribution to national security. In addition, it serves as a central guide for the development of subordinate warfighting functional concepts addressing mission command, intelligence, movement and maneuver, fires, protection, and sustainment. Collectively, this body of ideas represents a major step forward in an ongoing campaign of learning and provides the basis for continued institutional adaptation across our Army.

MARTIN E. DEMPSEY U General, United States Army Commanding

Department of the Army Headquarters, United States Army Training and Doctrine Command Fort Monroe, VA 23651-1047

**19 August 2010** 

Military Operations

#### THE ARMY OPERATING CONCEPT

#### FOR THE COMMANDER:

**OFFICIAL:** 

JOHN E. STERLING, JR. Lieutenant General, U.S. Army Commanding General/ Chief of Staff

Uluris LUCIOUS B. MORTON Colonel, GS Deputy Chief of Staff, G-6

**History.** This pamphlet revises Training and Doctrine Command (TRADOC) Pamphlet (Pam) 525-3-1 *Operational Maneuver*. The major portions affected by this revision are listed in the summary of changes. This pamphlet revises the conceptual and operating focus of the Army from major combat operations to that of operational adaptability employing full-spectrum operations under conditions of uncertainty and complexity.

**Summary.** TRADOC Pam 525-3-1 describes how future Army forces conduct operations as part of the joint force to deter conflict, prevail in war, and succeed in a wide range of contingencies in the future operational environment. The pamphlet describes the employment of forces in the 2016-2028 timeframe and identifies capabilities required for future success to guide Army force development efforts.

**Applicability.** This concept is the foundation for future force development and the basis for development of subsequent supporting concepts, concept capability plans, and the Joint Capabilities Integration and Development System process. It supports experimentation as described in the Army Capabilities Integration Center (ARCIC) campaign plan and functions as a conceptual basis for developing future force solutions within the domains of doctrine, organizations, training, materiel, leader development and education, personnel, and facilities (DOTMLPF). This concept applies to all Department of the Army (DA) and Army Reserve component activities that develop DOTMLPF requirements.

<sup>\*</sup>This pamphlet supersedes TRADOC Pam 525-3-1, dated 2 October 2006.

**Proponent and supplementation authority.** The proponent of this pamphlet is the Director, ARCIC. The proponent has the authority to approve exceptions or waivers to this pamphlet that are consistent with controlling law and regulations. Do not supplement this pamphlet without prior approval from Director, ARCIC (ATFC-ED), 33 Ingalls Road, Fort Monroe, Virginia 23651-1061.

**Suggested improvements.** Users are invited to submit comments and suggested improvements via The Army Suggestion Program online at <u>https://armysuggestions.army.mil</u> (Army Knowledge Online account required) or via DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Director, TRADOC ARCIC (ATFC-ED), 20 Whistler Lane, Fort Monroe, Virginia 23651-1046. Suggested improvements may also be submitted using DA Form 1045 (Army Ideas for Excellence Program Proposal).

#### **Summary of Change**

TRADOC Pam 525-3-1 The Army Operating Concept

This revision, dated 19 August 2010-

- o Describes how the Army will conduct operations in the 2016-2028 timeframe.
- o Expands on the ideas in TRADOC Pam 525-3-0.

o Describes how combined arms maneuver and wide area security define the Army's responsibilities to the joint force in full-spectrum operations

- o Introduces mission command and co-creation of context.
- o Emphasizes fighting for information in close contact with the enemy.
- o Defines, revises, and creates terminology.
- o Updates assumptions and describes required capabilities organized by warfighting function.
- o Provides a list of implications for joint forces and interagency partners.

## Contents

	Page
Foreword	iii
Chapter 1 Introduction	5
<b>1-1.</b> Purpose	
1-2. The Army concept framework (ACF)	5
1-3. Assumptions	
1-4. References	
1-5. Explanations of abbreviations and terms	7
Chapter 2 Operational Context	
2-1. The Army's mission and military objectives	8
2-2. The future operational environment	8
Chapter 3 How the Army Fights	11
3-1. Introduction	11
3-2. The military problem	
3-3. Central idea: combined arms maneuver and wide area security	
3-4. Military solution	11
3-5. Supporting ideas	
Chapter 4 Organizing for Combined Arms Maneuver and Wide Area Security	21
4-1. Theater Army	21
4-2. Corps	23
4-3. Division	24
4-4. Regionally aligned forces	25
Chapter 5 Army Operations	26
5-1. Introduction	
5-2. Full-spectrum operations	26
5-3. Homeland defense and civil support	27
5-4. Sustained engagement	29
5-5. Entry operations	30
5-6. Prevent proliferation and counter WMD	
5-7. Cyberspace operations	32
5-8. Space operations	32
5-9. Foreign humanitarian assistance	33
Chapter 6 Training, Education, and Leader Development	34
Chapter 7 Conclusion	37
Appendix A References	38
Section I Required References	
Section II Related References	
Appendix B Refined Army Capstone Concept Required Capabilities	
B-1. Mission command	43
B-2. Intelligence	45
B-3. Movement and maneuver	
B-4. Fires	47
B-5. Protection	
B-6. Sustainment	
B-7. Training and leader development	48

B-8. Institutional Army	49
B-9. Human dimension	49
Appendix C Required Capabilities	49
C-1. Mission command	
C-2. Intelligence	
C-3. Movement and maneuver	
C-4. Fires	
C-5. Protection	53
C-6. Sustainment	
C-7. ARSOF	54
C-8. SMDC	
Appendix D Implications for Joint and Interagency Partners	
D-1. Introduction	
D-2. What the Army provides the joint force	56
D-3. What the Army requires from joint and interagency partners	
Glossary	
Section I Abbreviations	
Section II Terms	
Section III Special Terms	
Endnotes	

## **Figure list**

Figure 3-1.	Exercising mission command	12
-	Employing combined arms maneuver	
Figure 3-3.	Conducting wide area security	15
Figure 3-4.	Applying co-creation of context	16

## Chapter 1 Introduction

#### 1-1. Purpose

a. TRADOC Pam 525-3-1, *The Army Operating Concept* (referred to as the AOC) describes how Army forces conduct operations as part of the joint force to deter conflict, prevail in war, and succeed in a wide range of contingencies in the future operational environment. It expands on ideas presented in TRADOC Pam 525-3-0 (referred to as the ACC). The AOC describes the employment of forces to guide Army force development and identifies capabilities required for future success. The ideas introduced in the ACC and discussed further in the AOC are central to the way the future Army will fight and win and guide the integration of Army forces with a wide array of domestic and international partners.

b. The AOC poses and answers the following questions:

(1) How do Army forces conduct operations to deter conflict, prevail in war, and succeed in a wide range of contingencies in the future operational environment?

(2) How do the major Army headquarters organize and direct the employment of Army forces in a wide variety of operational settings?

(3) What capabilities must the Army develop and integrate across its six warfighting functions to respond to future threats and ensure its ability to accomplish assigned missions?

(4) What are the major implications of this operating concept for the Army's joint and interagency partners?

c. The AOC consists of 7 chapters. Chapter 1 introduces the Army concept framework and provides the assumptions that guide the AOC. Chapter 2 defines the Army's mission within the context of the future operational environment. Chapter 3 presents the military problem, central idea, and solution, along with a number of supporting ideas. Chapter 4 discusses broadly how the Army organizes for combined arms maneuver and wide area security at the theater Army, the corps, and the division level and introduces the concept of regionally aligned forces. Chapter 5 outlines the major categories of Army operations. Chapter 6 describes the most important considerations related to training and leader development required to meet the demands of future operations. Finally, Chapter 7 concludes the AOC by summarizing the major ideas.

#### 1-2. The Army concept framework (ACF)

a. To provide a clearly defined structure and enable the Army to refocus its force development efforts after more than 8 years of war, TRADOC has developed a revised set of future concept documents known collectively as the ACF. The first step in the development of this new framework was the publication of the ACC in December 2009. This landmark document marked a significant departure from almost a decade of prior Army conceptual work and now serves as a point of departure for the development of the AOC and a series of subordinate concepts

dedicated to the Army's six warfighting functions: mission command, intelligence, movement and maneuver, fires, sustainment, and protection.

b. The ACC provides the Army's vision of future armed conflict and describes the broad capabilities the Army will require in the 2016-2028 timeframe. As outlined in the ACC, Army leaders and forces must respond to a broad range of threats under conditions of uncertainty by exercising *operational adaptability* to accomplish assigned missions. Success in future armed conflict depends on the ability of Army leaders and forces to first understand the situation in width, depth, and context, then develop the situation through action in close contact with the enemy and civil populations.

c. Building upon its central idea, the ACC then outlines six supporting ideas that contribute to the Army's ability to exercise operational adaptability in response to uncertain and adaptive threats.<sup>1</sup> In addition, the ACC identifies seven core operational actions the Army must be able to perform to meet future security challenges.<sup>2</sup> These broad actions form the basis for the type of operations the Army will have to conduct as part of the joint force in the future. They also serve as conceptual threads of continuity that trace throughout the ACF.

d. The AOC describes the Army's contribution to national security within the context of joint operations. It focuses on the operational and tactical levels of war and explains how the Army employs combined arms maneuver and wide area security as part of full-spectrum operations to accomplish military missions on land.<sup>3</sup> By addressing these operations in a way that illustrates how the Army integrates its warfighting functions, the AOC provides a conceptual framework for the development of subordinate Army functional concepts. The functional concepts, in turn, contain more specific explanations of how Army forces operate within each warfighting function and outline their mutual dependencies.

e. Three additional concepts devoted to learning, training, and the human dimension round out the ACF. The Army learning concept describes the learning model required by the future Army to develop adaptive, thinking Soldiers and leaders. The Army training concept outlines the requirements and capabilities of the future force to generate and sustain trained and capable units. TRADOC Pam 525-3-7 outlines how the Army will develop the cognitive, physical, and social components of every Soldier to raise, prepare, and employ the Army in full-spectrum operations. Collectively, the ACF defines the Army's vision of how it will operate in the future and documents the capabilities required across the Army to ensure future force effectiveness.<sup>4</sup>

## 1-3. Assumptions

a. The assumptions from the ACC apply equally to all the concepts that make up the ACF.<sup>5</sup> Additional assumptions necessary and relevant to the development of the AOC and subordinate concepts build on and clarify the ACC assumptions.

b. The following assumptions concerning the character of future armed conflict derive, in large measure, from the complexity and uncertainty of the operational environment, as well as an assessment of anticipated future enemies and United States (U.S.) capabilities.

(1) Uncertainty in the future operational environment will continue to increase as political, economic, informational, and cultural systems become more complex and interconnected.

(2) Adversaries will be able to achieve tactical, operational, and strategic surprise based on rapid application of available and emerging technologies in both manned and unmanned systems.

(3) U.S. forces will operate in environments where land, air, space, maritime and cyberspace superiority is increasingly contested by an ever widening set of state and nonstate actors with sophisticated capabilities.

(4) U.S. forces will face increasing antiaccess and area denial challenges due to strategic preclusion, operational denial, and tactical overmatch.

(5) U.S. forces will have limited ability to overcome antiaccess and area denial capabilities, deploy into austere locations, and sustain operations in immature theaters.

(6) The Army will continue to employ the Army National Guard and Army Reserve on a routine basis as part of its operational forces.

(7) The Army will continue to use a force management model that relies on unit replacement and cyclical readiness to govern the training, deployment, and reset of its operational forces.

(8) Army modernization efforts will provide incremental, brigade-based capability improvements to the force.

c. Conventional modernization goals must be tied to the actual and prospective capabilities of future adversaries.<sup>6</sup> Accordingly, the AOC makes grounded projections into the future and derives future force requirements from an examination of the Army's current mission, emerging threat capabilities, and characteristics of the future operational environment. To define the problem of future armed conflict, it is important to begin with a consideration of the range of threats to U.S. vital interests as well as key environmental factors. The AOC proposes a solution that will permit future forces to assist friends, reassure, and protect populations, and identify, isolate, and defeat enemies.

#### 1-4. References

Required and related publications are in <u>appendix A</u>.

#### **1-5.** Explanations of abbreviations and terms

Abbreviations and special terms used in this pamphlet are explained in the glossary.

The next 20 years of transition toward a new international system are fraught with risks to include the growing prospect of a nuclear arms race in the Middle East and possible interstate conflicts over resources. The breadth of transnational issues requiring attention also is increasing to include issues connected with resource constraints in energy, food, and water, and worries about climate change. Global institutions that could help the world deal with these transnational issues currently appear incapable of rising to the challenges. The rapidly changing international order increases the likelihood of discontinuities, shocks, and surprises. No single outcome seems preordained.

- National Intelligence Council, Global Trends 2025: A Transformed World

#### **Chapter 2 Operational Context**

#### 2-1. The Army's mission and military objectives

a. National security guidance requires the military to be prepared to defend the homeland, deter or prevent the use or proliferation of weapons of mass destruction (WMD), win the Nation's wars, deter potential enemies, protect the global commons (sea, air, cyber, and space), develop cooperative security, and respond to civil crises at home and abroad.<sup>7</sup>

b. As the nation's principal land force,<sup>8</sup> the Army defends national interests by conducting military engagement and security cooperation; deterring aggression and violence by state, nonstate, and individual actors to prevent conflict; and compelling enemies to submit to national will through the defeat of their land forces and the seizure, occupation, and defense of land areas. The total Army provides national and state leadership with capabilities across the range of military operations in both domestic and foreign contexts. The Army supplies forces through a rotational, cyclical readiness model to provide a predictable and sustainable supply of modular forces to combatant commanders with a surge capacity for unexpected contingencies.<sup>9</sup> To fulfill its purpose, the Army must prepare for a broad range of missions and remain ready to conduct full-spectrum operations to contribute to the attainment of national policy aims.<sup>10</sup>

c. Army forces must be prepared to conduct operations abroad to help protect or advance U.S. interests against enemies capable of employing a wide range of capabilities. Army forces must also be able to identify threats to the homeland in the forward areas and approaches and employ an active layered defense to respond to these threats before they can attack the U.S. Assessing and continually reassessing how adversaries are likely to employ their forces and other means to pursue strategies and objectives that threaten national interests is critical to outlining the problems of future armed conflict.

#### 2-2. The future operational environment

a. The future operational environment will be complex and uncertain, marked by rapid change and a wide range of threats. Threats to the Nation will originate among diverse populations where the advantages of dispersion, concealment, and terrain provide the best chance for success. Beyond Afghanistan and Iraq lies an environment that will require active engagement by ground forces. Individuals motivated by *extremist ideologies* are increasingly likely to disrupt security in the U.S. homeland.<sup>11</sup> *Demographic trends* such as urbanization, youth bulges, and migration are creating overpopulated megacities in which a growing pool of youth is willing to engage in violence to achieve their goals. *Environmental changes* will result in water, food, and fuel shortages that will require long-term solutions. *Globalization* and ready access to information will increase the perception of inequity between individuals, groups, and nations, creating informed classes of haves and have-nots. Likewise, the *decreasing cost of technology* and increasing threat of WMD and improvised explosive devices (IED) will give weaker groups and individuals the ability to threaten otherwise stronger forces. Conflict waged as a result of these drivers is not easily categorized. It will evolve over time, provide a wide range of geographical and cultural considerations, and involve a range of threats that will be difficult to characterize, let alone define.<sup>12</sup>

b. Taken collectively, the types of enemies the U.S. might face in the future include the following.

(1) Existing military powers with advanced technical capabilities that seek to deter U.S. military intervention and acquire the means to disrupt U.S. military operations through counters to specific, critical U.S. military capabilities. Such enemies will have regular military forces equipped with advanced conventional weapons, and in some cases, nuclear weapons.<sup>13</sup>

(2) Terrorist groups, insurgents, militias, drug cartels, and less advanced militaries that will likely focus on irregular warfare operations, terrorism, and information campaigns to undercut U.S. political and public support for ongoing military operations.<sup>14</sup> These groups will employ low cost asymmetric weapons, such as the IED, in an attempt to achieve their operational and strategic goals.

(3) Emerging military powers and advanced nonstate entities will seek limited advanced military capabilities—such as air defenses and antiship weapons—while also developing capabilities to impose costs and undermine U.S. resolve through irregular warfare, terrorism, and attacks against U.S. multinational partners and key infrastructures.<sup>15</sup>

c. Foreign doctrine and military acquisitions suggest that state, nonstate, and criminal organizations will conduct sophisticated antiaccess campaigns to repel U.S. forces, partners, and threaten neighbors. Sophisticated antiaccess campaigns may include the use of precision missiles, submarines, and aircraft to disrupt lines of communication to forward bases. Adversaries will seek to deter U.S. intervention by preparing indepth defenses within their territories and by targeting allies upon whom U.S. forces depend for sustainment and basing. Should deterrence fail, these adversaries will seek to draw U.S. forces into protracted conflicts.

d. Enemies will exploit complex and urban terrain, associate with irregular forces, and invest in camouflage and obscurants, reflecting a growing belief in the need to evade detection and increase survivability. In addition, over 100 countries, a wide variety of nonstate actors, and multinational corporations are investing in space programs.<sup>16</sup> The proliferation of unmanned aircraft systems, robotic and unmanned ground systems, and antisatellite capabilities indicates that adversaries seek the ability to conduct precision strikes, integrate reconnaissance,

surveillance, and fires, and degrade U.S. situational awareness. The increasing use of nuclear, biological, and chemical components by multinational corporations will provide adversaries the opportunity to acquire and transport a wide variety of WMD inexpensively. In the interim, the IED will continue to provide low-cost tactical capabilities with strategic impact.

e. Nonstate actors and developing countries will use niche technologies in innovative and unanticipated ways. The expanding market for relatively old weapon systems and munitions increases the potential for their use in unanticipated ways such as the IED.<sup>17</sup> Also, an increasing number of adversaries will employ a variety of cyber and electronic attacks as a means to disrupt U.S. networks. As demonstrated during the Russia-Georgia conflict, the teaming of governments with skilled private citizens has significant implications for future cyber attacks.<sup>18</sup> While no single threat currently employs all of these approaches, collectively they demonstrate the range of capabilities U.S. forces must be prepared to confront.<sup>19</sup>

f. Technological advances, adaptation and asymmetric approaches increase tactical level threats. The development of precision technologies will lead to advances in direct and indirect fire systems such as mortars, artillery, and rockets. With over 46 countries producing unmanned aerial vehicles and 25 different countries capable of producing man-portable air defense systems,<sup>20</sup> enemies will challenge U.S. control of the airspace. Estimates indicate that nearly 30 militia groups and terrorist organizations own shoulder-fired, surface-to-air missiles.<sup>21</sup> Adversaries will attempt to counter U.S. efforts through the use of global positioning satellite jammers, obscurants, and the use of low observables. Advances in radars and computing will further development of counter-rocket, counter-artillery and counter-mortar technology.

g. Most likely and most dangerous futures.

(1) *Most likely*. Violent extremism remains the most likely threat to U.S. interests. Though not directly threatening vital interests, extremist acts can cause great damage and regional instability that may require U.S. intervention. Extremism may manifest itself in the form of violent individuals, nonstate entities acting on deeply held convictions, or state sponsored proxies carrying out violent acts in support of an extremist national agenda. Regional powers will not confront the U.S. directly using military means, but rather attack where ambiguity and anonymity protect them. Extremist organizations will operate outside of the U.S., but the threat may also include radical U.S. citizens operating both domestically and abroad.

(2) *Most dangerous*. A nation state possessing both conventional and WMD capabilities with the intent to use against U.S. interests, presents the most dangerous threat. This danger increases when a nation state sponsors, shelters and supports nonstate proxies willing to disregard the historic norms of conflict. Adversaries will attempt to deny U.S. access to key regions through comprehensive antiaccess campaigns including physical and cyber attacks in the homeland, attacks in vulnerable areas of the global commons during deployment, threats to potential partners supporting the U.S., a sophisticated global information campaign, and advanced technology and asymmetric capabilities to defeat U.S. forced entry operations. Adversaries will seek to wage "wars of exhaustion" against the U.S. while preserving their WMD capability as a final deterrent.

(3) A dangerous alternative. Though neither most likely nor most dangerous, the threat of an individual or extremist organization employing a nuclear device in the U.S. is the most dangerous alternative. As worldwide proliferation of nuclear capabilities continues, adversarial regimes and extremist groups are likely to gain control of nuclear materials that, in turn, could be made available to rogue scientists. The U.S. has only a limited ability to detect and track nuclear components, and porous borders do little to prevent the movement of nuclear devices into or around the U.S. This limitation makes the U.S. vulnerable to such an attack.

Maneuver warfare...employs the dialectic of combined arms theory whenever possible in battle in order to fight the enemy where and when he is weak, and to present him with a series of tactical dilemmas.

-Robert Leonhard, *Maneuver Warfare Theory* 

## Chapter 3 How the Army Fights

#### **3-1. Introduction**

The U.S. Army is the Nation's principal military force organized, trained, and equipped for prompt and sustained operations on land. The Army fights and wins the Nation's wars and contributes to national security as part of joint combat, security, relief and reconstruction, and engagement activities.<sup>22</sup> Army forces conduct full-spectrum operations to defeat enemies and establish conditions necessary to achieve national objectives. The Army provides professional Soldiers and leaders organized, trained, and equipped to conduct combined arms maneuver and establish wide area security in complex and uncertain environments.

#### **3-2.** The military problem

How do future Army forces deter conflict, prevail in war, and succeed in a wide range of contingencies?

#### **3-3.** Central idea: combined arms maneuver and wide area security

Succeeding in future armed conflict requires Army forces capable of combined arms maneuver and wide area security within the context of joint, interagency, intergovernmental, and multinational efforts. Army forces conduct combined arms maneuver to gain physical, temporal, and psychological advantages over an enemy. Army forces establish wide area security to consolidate gains and ensure freedom of movement and action. Army forces employ combined arms maneuver and wide area security to seize, retain, and exploit the initiative. Army forces capable of effective combined arms maneuver and wide area security at both the operational and tactical levels provide joint force commanders the ability to deter conflict, prevail in war, and succeed in a wide range of contingencies.

#### **3-4.** Military solution

a. The human, psychological, political, and cultural dimensions of conflict and the uniqueness of local conditions make military operations on land inherently complex and uncertain. To seize, retain, and exploit the initiative under conditions of uncertainty and complexity, Army forces must act and respond faster than the enemy.<sup>23</sup> To achieve speed of action, identify and exploit opportunities, and protect against unanticipated dangers, Army forces apply an expanded concept of combined arms and operate decentralized consistent with the tenets of mission command.

(1) Mission command is the exercise of authority and direction by the commander and the commander's staff to integrate the warfighting functions using the operations process and mission orders to accomplish successful full-spectrum operations. Mission command enables agile and adaptive leaders and organizations to execute disciplined initiative within commander's intent as part of unified action in a complex and ambiguous environment. Mission command is critical to Army forces' ability to develop the situation through action and seize, retain, and exploit the initiative.<sup>24</sup> The complexity of operations on land limits the accuracy and utility of a two-dimensional common operational picture as a basis for centralized decisionmaking and control of forces. Therefore, commanders decentralize decisionmaking authority and execution based on their estimate of the situation.<sup>25</sup> Over-centralization of resources and authority slows action and risks ceding the initiative to the enemy. The application of mission command is an essential component of all Army operations. (See figure 3-1.)

## **Exercising Mission Command: Ramadi, 2006**

As commander of 1st Brigade, 1st Armored Division in Ramadi, Iraq in June 2006, Colonel Sean MacFarland was told "Fix Ramadi, but don't destroy it." MacFarland decentralized his brigade's operations and set up security posts all over Ramadi and the surrounding area to protect the population while the brigade conducted isolated attacks to defeat enemy forces. As the situation on the ground developed, MacFarland realized that the key to fixing Ramadi was to win over the tribal leaders. He discovered the sheiks wanted protection for their own tribes and families and made them an offer: "If the tribal leaders encouraged their members to join the police, we would build police stations in the tribal areas and let the recruits protect their own families." The tribes agreed. Once the tribal leaders switched sides, attacks on U.S. forces stopped, almost overnight, in those areas. It was the tipping point that led to defeat of al-Qaeda in Ramadi. In the end, he accomplished the desired outcome using approaches he could not foresee at the outset.

## Figure 3-1. Exercising mission command

(2) Commanders delegate decisionmaking authority and allocate resources to seize, retain, and exploit the initiative. The exercise of mission command allows leaders and units to integrate combined arms capabilities, adapt rapidly to changes in the situation, and accomplish missions in the context of joint and multinational operations. Leaders of Army operations rely on prompt decisionmaking by subordinates,<sup>26</sup> but commanders at all levels retain their responsibility to produce complementary and reinforcing effects that ensure mission success.

b. Combined arms. Army formations integrate fire and maneuver, employing appropriate combinations of infantry, mobile protected firepower, offensive and defensive fires, engineers, Army aviation, and joint capabilities to achieve desired outcomes.<sup>27</sup> Based on the situation, the integration of these various "arms" yields an overall force that is greater than the sum of its parts.<sup>28</sup> Army doctrine defines combined arms as the synchronized and simultaneous application

of the elements of combat power to achieve an effect greater than if each element of combat power was used separately or sequentially.<sup>29</sup>

(1) To overcome complex adaptive threats in the future, Army forces apply an expanded understanding of combined arms that incorporates the broad range of civil and military capabilities necessary to achieve strategic goals and objectives.<sup>30</sup> Commanders merge not only leadership, information, and each of the warfighting functions,<sup>31</sup> but also available joint, interagency, intergovernmental, and multinational resources to accomplish assigned missions.

(2) Through a combination of complementary and reinforcing defeat and stability mechanisms, Army forces defeat enemies, consolidate gains, and stabilize environments. Understood in this broader context, *combined arms is the combination of the elements of combat power*<sup>32</sup> with the integration and sequencing of all actions, activities, and programs necessary to seize, retain, and exploit the initiative in the context of full-spectrum operations.

c. Combined arms maneuver. Combined arms maneuver exposes enemies to friendly combat power from unexpected directions and denies them the ability to respond effectively. Army forces conduct combined arms maneuver to throw the enemy off balance, follow up rapidly to prevent recovery, and destroy his will to fight.<sup>33</sup> In addition, forces conducting combined arms maneuver threaten enemies indirectly, causing them to reveal their intentions and expose hidden vulnerabilities. Combined arms maneuver primarily employs defeat mechanisms against enemies.<sup>34</sup>

(1) Combined arms maneuver is the application of the elements of combat power in a complementary and reinforcing manner to achieve physical, temporal, or psychological advantages over the enemy, preserve freedom of action, and exploit success. Physical advantages may include control of key terrain, population centers, or critical resources. Temporal advantages enable Army forces to set the tempo of operations and decide when to give battle such that the enemy loses the ability to respond effectively. Psychological advantages impose fear, uncertainty, and doubt on the enemy, which serves to dissuade his further planning and action. Army forces' ability to conduct combined arms maneuver to achieve these advantages will remain the Army's most fundamental and important competency. (See figure 3-2.)

(2) Effective combined arms maneuver causes the enemy to confront dangers faster than he can respond to them. For example, in forcible entry operations, effective combined arms maneuver defeats antiaccess and area denial efforts, disrupting the enemy and allowing the ground force to transition rapidly to reconnaissance and security operations. In stability operations, commanders employ combined arms maneuver to interpose friendly forces between the population and threats to security, which denies sanctuary to the enemy and fosters stability consistent with policy goals. Army forces follow up rapidly to prevent recovery and continue operations to destroy the enemy's will to fight.<sup>35</sup>

## **Employing Combined Arms Maneuver: Sadr City, 2008**

In March 2008, Colonel John Hort, 3d Brigade Combat Team, Fourth Infantry Division, conducted operations inside Sadr City to defeat the Jaish al-Mahdi militia threat. The forces of Muqtada al-Sadr had been using the area as a launching pad to lob dozens of rockets into the nearby Green Zone. As part of this operation, Hort's forces constructed a 3-mile concrete barrier to create a buffer between the insurgents and other parts of Sadr City. This barrier restricted the range of the rocket attacks, degraded the insurgent's freedom of movement, and enabled a major reconstruction effort south of the wall. Task organized teams of M1 Abrams tanks, Apache helicopters, unmanned aerial systems, engineers, sniper teams, and infantrymen overwhelmed the enemy in tactical engagements while applying firepower with discipline and discrimination to protect the civil population. At the same time, civil support teams established humanitarian aid sites throughout south Sadr City to provide assistance, clarify intentions, and counter enemy disinformation. These actions, along with concerted political pressure, compelled Muqtada al-Sadr to cease hostilities.

## Figure 3-2. Employing combined arms maneuver

d. Wide area security. Army forces establish wide area security to protect forces, populations, infrastructures, and activities.<sup>36</sup> Successful wide area security denies the enemy the ability to gain physical, temporal, or psychological advantages. Building upon the fundamentals of security,<sup>37</sup> Army forces establish wide area security to protect an adjacent force or a friendly population. These operations are only successful when they deny the enemy advantages such as the ability to plan and prepare for future operations, threaten lines of communication, or intimidate the population. Wide area security primarily employs stability mechanisms to protect friendly assets.<sup>38</sup>

(1) Wide area security is the application of the elements of combat power in coordination with other military and civilian capabilities to deny the enemy positions of advantage; protect forces, populations, infrastructure, and activities; and consolidate tactical and operational gains to set conditions for achieving strategic and policy goals. Traditionally, Army forces conduct security operations over wide areas in an economy of force role to deny the enemy the ability to maneuver to positions of advantage against friendly forces, and provide joint force commanders with reaction time and maneuver space. Additionally, these forces defeat or fix the enemy before he can attack, thus allowing the joint force commander to retain the initiative. (See figure. 3-3.)

(2) Future Army forces conduct wide area security not only to stabilize and protect populations in an area of operations, but also to control hostile populations and compel them to act in a manner consistent with U.S. objectives. Effective wide area security is essential to consolidating tactical and operational gains that, over time, set conditions for achieving strategic goals.<sup>39</sup> For example, Army forces could conduct wide area security to enable economic and political reconstruction, promote governance and the rule of law, and set the conditions for transfer of security responsibilities to host nation forces. Wide area security operations include protracted counterinsurgency, relief and reconstruction efforts, and sustained engagement focused on developing partner capacity as part of combatant command security cooperation efforts.

#### Conducting Wide Area Security: Iraq, 2006-2008

Faced with nearly 90 IED attacks a day and levels of violence that threatened the security and political stability of Iraq, Lieutenant General Ray Odierno, Commanding General, Multinational Corps-Iraq, established a Counter IED Operations Intelligence Center (COIC), directed by Colonel James Hickey, to focus, integrate, and synchronize the counter IED effort. The COIC defined the threat as the enemy, not the IED, and began attacking the enemy's sanctuaries. Supported by unmanned aircraft systems, Task Force ODIN observed, detected, interdicted, and neutralized IED employment along a main supply route. Small units gained and maintained contact with the enemy to turn localized security efforts into corps-wide offensive operations. Coalition and Iraqi combat units, supported by route clearance patrols, explosive ordinance detachments, and weapons intelligence teams deliberately cleared enemy sanctuaries. By June, enemy IED attacks began an irreversible decline, and attacks in key areas were reduced by 70 percent. Dramatic increases in local security, cache discovery, cooperation, and enhanced voluntarism of Iraqi youth followed. This combination of initiatives enabled the Corps to consolidate its gains throughout Iraq by early 2008.

#### Figure 3-3. Conducting wide area security

e. Co-creation of context. To develop the situation through action, commanders employ intelligence collectors, analysts, and associated systems as part of combined arms maneuver and wide area security. *Co-creation of context is a continuous process in which commanders direct intelligence priorities to drive operations, and the intelligence that these operations produce causes commanders to refine operations based on an improved understanding of the situation.*<sup>40</sup> Continuous interplay between the various intelligence disciplines and units conducting operations requires intelligence professionals and operators to collaborate at the lowest level.<sup>41</sup> This continuous dialogue creates timely, relevant, and clear information upon which commanders base their plans, decisions, and orders. (See figure 3-4.)

(1) A large amount of the intelligence that drives the conduct of operations comes from the top down, yet much of the most critical information flows from the bottom up. Commanders benefit from intelligence estimates derived from a wide array of sources and the intelligence preparation of the battlefield. However, information is never complete, often wrong, and sometimes contradictory<sup>42</sup>, and the very conduct of operations changes conditions. Therefore, commanders cannot rely solely upon initial estimates. In addition, friendly forces often do not conduct operations as planned. Therefore, information from the bottom up enables commanders to develop an improved understanding of the situation. Through personal contact and direct involvement, intelligence professionals and operators collaborate actively to create context as they develop the situation at the tactical level.<sup>43</sup>

(2) Intelligence professionals and operators do not create context solely to improve situational understanding; they create context to plan and execute operations. Key to planning successful operations is accurately identifying risks and assumptions.<sup>44</sup> Accurately identifying risks and assumptions in complex environments takes the concerted efforts of a diverse team,<sup>45</sup> capable of approaching problem sets from differing angles. Collaborating either through the use of robust workspace technologies or by simply ensuring mutual appreciation,<sup>46</sup> diverse teams prevent oversight, groupthink, and information cascades.<sup>47</sup> To create diverse teams, Army forces

reach across military specialties and echelons to amplify the "weak future signals" that typically underpin contextual discoveries.<sup>48</sup>

## Applying Co-creation of Context: Afghanistan, 2007

In 2007, Lieutenant Colonel Christopher Kolenda commanded 1st Squadron, 91st Cavalry (Task Force SABER), 173d Airborne Brigade in Kunar and Nuristan provinces, Afghanistan. Confronted with an increasingly hostile population, Kolenda refocused his intelligence shop to understand the social relationships, economic interests, religious motivations, and tribal leadership of the local community. His unit determined key factors, refined through subsequent operations, that helped him identify Afghan youth most inclined to cease violent activity. Over time, substantial defections caused tribal support to shift, as shown by increased intelligence tips, decreased violent activity, a lower cost of goods in local markets, and improved trust between tribal elders and U.S. Soldiers. According to Kolenda, "intelligence automatically defaults to focusing on the enemy if the commander is not involved in setting priorities and explaining why they are important." To succeed in complex environments, commanders must collaborate throughout their organizations to build the narrative.

## **Figure 3-4.** Applying co-creation of context

(3) Commanders position intelligence collection and analysis assets to gain and maintain contact with the enemy, identify opportunities, and protect against surprise by involving the entire organization to develop the strategic narrative in greater context.<sup>49</sup> Through the co-creation of context, Army forces conducting combined arms maneuver and wide area security gain an appreciation of both the ordinary and the unusual, to better understand and develop the situation over time. Arriving at such an appreciation requires mature judgment, experience, and time.

f. The Army contributes to joint force operations by defeating enemies and establishing conditions necessary to achieve national objectives at home and abroad. Army forces conduct combined arms maneuver and establish wide area security to enable freedom of action in the ground, air, maritime, and space domains. Combined arms maneuver seeks to gain physical, temporal, and psychological advantages over enemies, while wide area security operations seek to deny enemies these same advantages. Army forces capable of effective combined arms maneuver and wide area security at both the operational and tactical level provide joint force commanders the ability to prevent and deter conflict, prevail in war, and succeed in a wide range of contingencies.

## **3-5.** Supporting ideas

a. Seven supporting ideas contribute to the Army's ability to conduct combined arms maneuver and wide area security: operate decentralized, conduct continuous reconnaissance, conduct air-ground operations, expand capabilities at tactical levels, inform and influence populations, conduct effective transitions, and enhance unit cohesion.

b. Operate decentralized. Army forces organize command structures and empower decisions as far down the chain of command as practical to conduct operations in a decentralized manner and ensure the greatest possible freedom of action.<sup>50</sup> When charged with achieving favorable outcomes in a complex environment, small unit leaders must possess the resources, combined arms capabilities, access to relevant intelligence and combat information, and authority to act.<sup>51</sup>

(1) Effective decentralized execution requires a broad understanding of the problem, a clear concept of the operation, and well-articulated commander's intent. Commanders apply design to understand complex, ill-structured problems and develop approaches to solve them.<sup>52</sup> A clear concept allocates resources, unifies and guides the actions of subordinates, and enables them to accomplish the mission within the commander's intent. An additional requirement is the proper organization for combined arms operations. By organizing capabilities at lower levels and enabling access to the capabilities of partners in unified action, Army forces gain the ability to respond to changing conditions and direct friendly strengths against an enemy's weakness. Finally, leaders must operate using a common lexicon<sup>53</sup> to integrate task organized forces rapidly in full-spectrum operations. Common understanding of doctrine, operational terms and graphics, and mission orders enables leaders to communicate missions, tasks, and intent rapidly, clearly, and succinctly.

(2) Commanders consider a number of factors to determine the appropriate level of decentralization. The most important among these are the mission, enemy, troops, time available, terrain, and civil considerations (METT-TC) of the operation. Commanders assess the experience and competence of their subordinate leaders and the ability of those leaders to integrate additional forces, enablers, and partner capabilities. Commanders also consider the level of cohesion within their assigned units. Finally, they must anticipate and remain prepared to reaggregate decentralized forces when required.

(3) When applying mission command, commanders recognize that collaboration and trust are as important as directive authority. They understand that information from the lowest tactical echelon is often more timely and accurate than what may come from higher headquarters. Commanders must also share risks<sup>54</sup> and maintain a constant dialogue with their subordinates as they decentralize resources and authority. Leaders think ahead of the current situation and employ surveillance assets, technical intelligence capabilities, and air-ground combined arms teams with integrated unmanned systems to develop the situation and fight across the depth and breadth of the area of operations.

c. Conduct continuous reconnaissance. Essential to combined arms maneuver and wide area security is continuous reconnaissance to gather information upon which commanders base plans, decisions, and orders.<sup>55</sup> Commanders direct reconnaissance operations to determine the size, composition, location, and direction of movement of the enemy. Commanders also use reconnaissance forces to gain knowledge of routes, terrain, infrastructure, and people in their areas of operations. Reconnaissance forces operate as necessary in an economy of force role independent of, and in the terrain between, friendly units in both contiguous and noncontiguous areas of operation. In this context, it is important to emphasize the distinction between the warfighting function of intelligence, the tactical task of surveillance, and the various forms of reconnaissance operations.<sup>56</sup> The recognition of the difference between these terms stands in

contrast to conventional wisdom which amalgamates the terms using the acronym ISR, thereby stripping each of its unique meaning.<sup>57</sup> Effective reconnaissance requires the ability to fight for information in close contact with populations and enemies, constant vigilance, and available reserves to reinforce units once they gain contact with the enemy.

d. Conduct air-ground operations. Air-ground integration is the combination of ground forces with manned and unmanned, rotary and fixed-wing aviation as part of combined arms maneuver and wide area security to achieve mutually reinforcing effects. Ground forces maneuver in close contact with the enemy, fight for information in complex terrain, conduct security operations, defend key terrain and infrastructure, and interact with the population. Aviation forces maneuver relatively unhindered by terrain, conduct reconnaissance over larger areas more quickly, gain and maintain contact with enemies in complex terrain, and facilitate extended range communications. Success of future Army forces will require air-ground integration and airspace coordination not only between Army ground and aviation elements, but between ground and joint air assets, to include surface-to-surface, surface-to-air, and air-to-surface fires. Joint and Army forces develop habitual relationships to achieve understanding of local conditions. Therefore, organizations at the lowest tactical level must have required enablers to integrate joint capabilities in mission planning and execution. Army forces require leaders able to integrate air and ground capabilities in combined arms maneuver and wide area security. Leaders and Soldiers train continuously to form effective air-ground teams that integrate manned aviation and unmanned aircraft systems in combat.

e. Expand capabilities at tactical levels. Commanders at lower echelons require access to a wide array of capabilities to confront and solve complex problems. Many of the required resources are available at division or higher echelons, but not in sufficient quantities to allow multiple subordinate formations to employ them simultaneously across wide areas.<sup>58</sup> In addition to joint capabilities, Army forces must have access to interagency and other civilian enablers.

(1) Army brigades are organized with an expanded set of organic capabilities to enhance unit cohesion, give them the greatest combat effectiveness, and the ability to respond to fleeting opportunities and unforeseen dangers.<sup>59</sup> Future brigade combat teams (BCTs) require close combat forces with sufficient depth and endurance in sustained combined arms maneuver. BCTs require commensurate offensive and defensive fires capabilities to support the expansion of other BCT team capabilities. They also require reconnaissance formations with additional combat power to gain and maintain contact with the enemy, fight for information, and conduct wide area security.<sup>60</sup> The addition of attack, reconnaissance, and lift aviation – to include both manned and unmanned systems – enables both combined arms maneuver and wide area security.<sup>61</sup> Additional engineer mobility and construction assets enable operations in complex terrain and support relief and reconstruction activities.<sup>62</sup> Increased long-range and satellite communications systems enable mission command over wide areas.<sup>63</sup> Finally, enhanced logistics capabilities sustain operations at the ends of extended lines of communication.<sup>64</sup> When providing the capabilities described above as organic elements of BCTs is not possible, they must be assigned habitually to enhance unit cohesion and combat effectiveness.

(2) Brigades also require access to, and the ability and authority to employ, a wide variety of joint, interagency, intergovernmental, and multinational partner capabilities at lower levels.

As described in joint concepts, joint integration that once took place at the component level or slightly below will occur routinely in the future at tactical echelons.<sup>65</sup> Army forces must be able to communicate with and employ interagency, intergovernmental, and multinational partner capabilities at the lowest practical echelon. Army leaders must understand both the capabilities and limitations of partners to integrate them effectively in the planning and execution of operations.<sup>66</sup> As part of leader development, Army leaders participate in exchange programs with partners such as the U.S. Agency for International Development, the Department of State, the Department of Justice, and allied militaries to enhance understanding of their capabilities and limitations, and to educate them on Army operations. In addition, the Army must be prepared to operate, when necessary, without the desired level of interagency support.

f. Inform and influence populations. Because war remains fundamentally a contest of wills, prevailing in future armed conflict requires Army forces to inform allies, partners, and indigenous populations while influencing adversaries.

(1) *Inform.* Army forces inform the American public and civilian leaders by describing military operations accurately to achieve understanding and inform decisionmaking. Army forces inform allies, partners, and foreign publics to strengthen mutual trust, achieve unity of effort, and establish favorable conditions to sustain support for operations. Commanders maintain open dialogue throughout the area of operations and coordinate actions to achieve campaign goals. Army leaders and Soldiers inform indigenous populations to clarify the intent of Army operations, combat disinformation, isolate adversaries from the population, and build relationships to gain trust and support.

(2) *Influence*. Army forces influence adversaries through the use or threat of force to bring about changes in behavior or attitude consistent with military and political objectives. Army forces also influence partners and potential partners using a variety of military, economic, or diplomatic incentives to illicit behavior consistent with U.S. objectives. Army leaders must understand enemy motivations, goals, and desired methods. Army leaders engage with indigenous leaders using specialized skills such as negotiation and conflict resolution to understand how Army actions impact local perceptions and to clarify intentions.<sup>67</sup> With a clear understanding of what the enemy values, Army forces use combined arms maneuver and wide area security to gain psychological advantages. Army forces are then able to apply effective combinations of defeat and stabilizing mechanisms to destroy the enemy's will to fight.

g. Conduct effective transitions. Army forces conduct transitions to adapt to change and retain the initiative based on a continuous assessment of the situation. Operational adaptability in both leaders and units is the key enabler of successful transitions.

(1) Transitions may occur between operations (such as offensive to stability), between missions (such as attack to exploitation), or between engagement types (such as standoff attacks to close combat). Changes in the situation may require Army forces to transition from operating decentralized over wide areas to more centralized execution concentrated in a particular area. Transitions may also involve the transfer of responsibility between rotating U.S. forces or other organizations (such as multinational forces, civil authorities, or international organizations) as well as host nation security forces.

(2) The dynamic nature of the threat and environment will make many transitions hard to predict and difficult to execute.<sup>68</sup> Commanders continually refine their estimate of the situation to determine when to transition, and what type of transition is appropriate to retain and exploit the initiative. Effective transitions require anticipation, planning, adequate resources, and control mechanisms.

What battles have in common is human: the behaviour of men struggling to reconcile their instinct for self-preservation, their sense of honour, and the achievement of some aim over which other men are ready to kill them. The study of battle is therefore always a study of fear, and usually of courage; always of leadership, usually of obedience; always of compulsion, sometimes of insubordination; always of anxiety, sometimes of elation or catharsis; always of uncertainty and doubt, misinformation and misapprehension, usually also of faith and sometimes of vision; always of violence, sometimes also of cruelty, self-sacrifice, compassion; above all, it is always a study of solidarity and usually also of disintegration – for it is toward the disintegration of human groups that battle is directed.

– John Keegan, *The Face of Battle* 

h. Enhance unit cohesion. Cohesion is the unity that binds individual Soldiers toward a common purpose and creates the will to succeed. It is built on a sense of belonging and purpose, good morale, and discipline. How Soldiers are trained, educated, and led are critical determinants of success. Disciplined leaders and Soldiers instilled with the professional military ethic and bonded into a cohesive team form the foundation for combat effectiveness. They permit the Army to exercise mission command under the most demanding of circumstances.<sup>69</sup>

(1) The complexity of operating decentralized confronts Soldiers and leaders with situations and decisions that in the past fell to more senior and more experienced leaders.<sup>70</sup> Close combat and operations in, around, and among the population place extraordinary physical, moral, and psychological demands on Soldiers and units. Operating in a constant state of uncertainty – referred to as the fog of war – erodes cohesion, confidence, and combat effectiveness.<sup>71</sup>

(2) The Army must build cohesive teams and prepare Soldiers to withstand the demands of combat.<sup>72</sup> Leaders must prepare their units to fight and adapt under conditions of uncertainty, and during the conduct of operations, must also ensure moral conduct while making critical time-sensitive decisions under pressure. Tough realistic training builds confidence and cohesion that serve as psychological protection against fear and stress in battle.<sup>73</sup> In this context, applied ethics education is necessary but not sufficient to completely steel Soldiers and units against the disintegration that can occur under the stress of combat.<sup>74</sup>

(3) Past theories have argued that the ability to tailor and scale formations would provide units task organized with the exact capabilities needed and would result in a more efficient use of forces. However, this approach has a significant negative impact on cohesion and combat effectiveness. The practice of constantly task organizing units, often at the last minute or even after deployment, degrades unit cohesion, trust, leader development, and mentorship of subordinate leaders. Units with organic or habitually assigned forces achieve a much higher level of trust, cohesion, and combat effectiveness and are able to train to higher standards.<sup>75</sup> For this reason, it is essential that the Army synchronize the training, readiness, and deployment cycles of corps, divisions, and brigades to build cohesive teams, mentor subordinate leaders, and establish the level of trust necessary for successful decentralized execution. In addition, geographically co-located units benefit from maintaining a long term training and readiness oversight relationship with their higher headquarters.

In our tactical forces we have built-in organizational flexibility. We must recognize this and capitalize on it in our orders. To get maximum combat power, we must have plans flexible enough to meet rapidly changing situations, but careful planning is not enough. This must be coupled with the readiness to change and adapt to situations as they are, not as they were expected to be.

- GEN Bruce C. Clarke, Military Review, September 1961

#### Chapter 4 Organizing for Combined Arms Maneuver and Wide Area Security

a. To operate decentralized consistent with the concept of mission command, the Army employs joint-capable headquarters to direct the activities of all assigned forces consistent with the joint force commander's intent and concept of operation. Army headquarters at theater, corps, and division level are capable, with augmentation, of serving as joint task force or joint force land component command headquarters. Commanders at these echelons visualize, describe, and direct operations and ensure the integration of joint, interagency, intergovernmental, and multinational efforts. Depending upon the scope, complexity, and probable duration of the mission, combatant commanders assign forces to theater Army, corps, or division headquarters for employment. This chapter outlines the roles of the commanders and the functions of these headquarters and describes how they employ forces to accomplish assigned missions.

b. Future Army organizations place increased emphasis on the value of organically assigned and habitually associated forces to achieve the level of trust, cohesion, and common understanding required to operate decentralized consistent with mission command.<sup>76</sup> By reducing the continuous assignment, attachment, and detachment of units and promoting predictable command relationships at all echelons, particularly in the case of activated reserve component units, Army forces prevent unnecessary degradation of the cohesion and combat effectiveness of their units.

## 4-1. Theater Army

a. Theater Army headquarters assigned to geographic combatant commands are the Army's highest operational headquarters. These headquarters direct the activities of theater committed Army forces, perform enduring functions as set forth in Title 10 U.S. Code, and fulfill Army Executive Agent responsibilities as established by the Department of Defense (DOD). In

addition, they provide Army forces throughout the combatant commander's area of responsibility for a wide array of training, exercises, sustainment, and myriad other activities in support of combatant command theater security cooperation plans.

b. Theater armies coordinate Army support to allied and partner country security cooperation and efforts to build capacity as directed by the combatant commander. In support of sustained engagement, theater armies direct the activities of theater committed and regionally aligned general purpose forces. Theater armies also establish infrastructure for communications and network operations, intelligence, protection, and sustainment functions. When directed, theater armies interact with host governments in partnership with the U.S. mission and other interagency representatives.

c. Theater armies may exercise mission command for small scale and short duration contingencies. Theater armies also coordinate area of operation-wide contingency planning, including operational plans, concept plans, regionally focused intelligence estimates, and service support plans as directed in the combatant commander's theater campaign plan. In addition, they provide a range of capabilities such as theater air and missile defense, coordination of air support and ground fire support, detainee operations, theater sustainment, and activities in support of other military services as directed.

d. When the scale of operations requires a corps or division headquarters to direct the activities of committed military forces, theater Army headquarters assume administrative control of these subordinate warfighting headquarters within a joint operations area. Theater Army headquarters require theater committed forces to execute fires, sustainment, protection, intelligence, and mission command functions throughout the area of operations for joint task force (JTF) commanders, and in support of committed divisions and corps.

e. The theater Army is assigned a Theater Sustainment Command to provide sustainment to Army and other forces as directed. The Theater Sustainment Command plans and executes sustainment operations throughout the theater, to include support of corps and divisions. It also provides a centralized sustainment command structure through its sustainment brigades and combat sustainment support battalions. These units simultaneously support deployment, movement, sustainment, redeployment, reconstitution, and retrograde operations.

f. Theater armies may also include a medical command for deployment support that provides health services to Army and other forces as directed. This unit is the senior medical headquarters in theater and helps to plan and execute health services throughout the theater. This command facilitates administrative assistance and provides technical supervision of assigned and attached medical units executing health services for the supported theater. It also provides a centralized command structure for the theater Army to support health services in a decentralized manner through its medical brigades, combat support hospitals, multifunctional medical battalions, and other units operating on an area basis.

#### 4-2. Corps

a. The corps is the Army's principal deployable headquarters designed to employ a combination of divisions, BCTs, and other functional and support units. Corps headquarters are the Army's primary operational level headquarters, but may also serve as an intermediate tactical headquarters. They allocate resources, coordinate, and direct the activities of organic, habitually aligned, and attached forces. In addition, corps are able to serve as an Army Forces headquarters to synchronize the activities of Army units and other assets in major operations.

b. Corps operate in the temporal, physical, and functional realm between tactical formations and the theater strategic echelon. Corps employ operational art to translate the joint force commander's strategy into operational design and tactical action. Corps link major operations within a campaign to theater and national strategies. Applying the tenets of mission command, corps headquarters direct multiple, simultaneous, or sequential operations to achieve campaign objectives. Additionally, these headquarters integrate joint, interagency, intergovernmental, and multinational partner capabilities to achieve strategic goals.

c. Acting as a JTF or joint forces land component command headquarters, corps exercise mission command over assigned forces and assets<sup>77</sup> and provide mission command for joint, Army, and multinational forces engaged in operations within a joint operations area. While acting as a JTF headquarters, corps employ joint doctrine and procedures and require a separate Army Forces headquarters.

d. As part of a joint force, corps conduct entry operations to create conditions favorable to combined arms maneuver and wide area security. Early entry forces connect and integrate joint and theater protection and early warning systems to assist the JTF commander in preserving freedom of movement and action, facilitating sustainment capabilities, and enabling intelligence efforts during the critical early stages of a campaign. These forces also partner with indigenous forces and conduct multinational reconnaissance and security operations to develop the situation in width, depth, and context in advance of main body arrival by air or sea. In addition, early entry forces equip, train, advise, and assist foreign forces. Early entry forces also assess foreign security forces and local governments' ability to provide for their populations. When opposed, corps integrate joint capabilities during forcible entry operations to ensure freedom of movement and maneuver for early entry and follow on forces.

e. Corps seize key terrain to provide space for continuous force flow and extend operational reach. Corps headquarters direct the employment of major combat units in combined arms maneuver to gain physical, temporal, or psychological advantages, defeat enemies, and stabilize environments. Additionally, corps employ forces to conduct wide area security to deny the enemy sanctuary, fix or defeat forces, and provide commanders with reaction time and maneuver space. In support of combined arms maneuver and wide area security, corps employ a combination of joint and Army offensive and defensive fires.

f. Corps also coordinate and direct the employment of combined arms air-ground reconnaissance forces that gather combat information and develop intelligence to answer the commander's critical intelligence requirements. Reconnaissance forces gain and maintain

contact with the enemy, fight for information, and develop the situation through action, often in and among civilian populations.<sup>78</sup> These forces operate as necessary in an economy of force role forward of, and in the terrain between, major subordinate units in contiguous and noncontiguous areas of operation. They also employ Army and joint capabilities to protect other units, formations, and populations as required.

g. Corps headquarters synchronize intelligence, reconnaissance, and surveillance activities from the national to the tactical level to enable situational awareness, develop the situation, and assist commanders in making decisions. They also conduct analysis of political, military, economic, sociological, infrastructure, and information aspects of the operating environment to allow subordinate commanders to conduct operations decentralized in cooperation with partners. Corps headquarters select, organize, develop, use, and share information throughout all intelligence disciplines by weighting collection and analysis efforts to answer the commander's priority intelligence requirements.

h. Corps headquarters train routinely with augmentees identified in approved joint manning documents and manpower exchange programs to develop a common understanding of how to conduct operations as a JTF.<sup>79</sup> Augmentees are based on contingency plans and may include diverse elements such as civil affairs teams, digital liaison detachments, public affairs detachments, chemical, biological, radiological, nuclear, and high yield explosives (CBRNE) detachments, and information operations teams.

## 4-3. Division

a. The division is the Army's principal deployable headquarters designed to employ a combination of BCTs and other functional and supporting brigades. Division headquarters are the Army's primary tactical level headquarters. They direct and coordinate the activities of assigned and attached forces, synchronize joint capabilities, coordinate interagency and multinational partners, and allocate resources according to the tenets of mission command. In support of combined arms maneuver and wide area security, divisions employ a combination of joint and Army fires.

b. Divisions shape operations above the capability and beyond the planning horizons of subordinate brigades. Divisions also protect lines of communication to ensure freedom of action across the area of operations. Commanders of divisions weight the main effort by establishing priorities, allocating combat power, and assigning capabilities across their area of operations. The division focuses on the conduct of major operations and may serve as an operational level headquarters depending on the complexity and duration of the operation.<sup>80</sup> Through the application of mission command, divisions empower BCTs and other assigned functional units to fight and win battles and engagements.

c. Properly augmented, divisions can serve as JTF headquarters in small scale contingencies. To develop and sustain the necessary skills, divisions conduct regular training to integrate joint capabilities and expertise within their headquarters, build relationships with interagency organizations, and develop habitual relationships with multinational partners.<sup>81</sup>

d. Divisions employ combined arms air-ground reconnaissance forces to gather information and answer intelligence requirements. These reconnaissance forces provide the division commander an organization trained and equipped to gain and maintain contact with the enemy, fight for information, and develop the situation through action. Habitual relationships between organically assigned collectors and combat forces enable reconnaissance forces to develop the situation rapidly and find, fix, and finish the enemy, using a combination of offensive and defensive fires.<sup>82</sup>

## 4-4. Regionally aligned forces

a. Future Army forces possess the capability to build capacity and mutual understanding with a wide variety of partner nations throughout the world.<sup>83</sup> The Army provides combatant commands with regionally aligned and specially trained forces with competence in the languages, cultures, history, governments, security forces, and threats in areas where conflict is likely.<sup>84</sup> These forces support combatant command security cooperation plans by developing sustained relationships with partner nation governments and their security forces. Regionally aligned forces participate routinely in multinational exercises and security force assistance missions to reassure allies and friends while deterring adversaries.

b. Historically, Army Special Forces (ARSOF) have been the primary providers of security force assistance and advisory skills. However, given the specialized training and deep knowledge of areas of likely concern resident in regionally aligned forces, they suggest themselves as forces of first resort.<sup>85</sup> Should the situation dictate the commitment of forces for contingency operations, regionally aligned forces also serve as the nucleus of early entry forces. In this way, combatant commanders capitalize on regionally aligned forces' habitual relationships with the theater Special Operations Command, offices of defense representatives, Army attaches, and leaders of partner nation security forces.

c. Because regionally aligned forces maintain the general set of skills necessary for cultural understanding in their training, they are more capable of applying those skills in a variety of cultural settings. Thus, regionally aligned Army forces provide joint commanders the ability to comprehend more quickly and accurately, act more appropriately and effectively, and achieve the desired outcomes in any cultural context.

U.S. ground forces will remain capable of full-spectrum operations, with continued focus on capabilities to conduct effective and sustained counterinsurgency, stability, and counterterrorist operations alone and in concert with partners.

- Quadrennial Defense Review, 2010

## Chapter 5 Army Operations

## 5-1. Introduction

As part of a joint force with interagency and multinational partners, Army forces conduct combined arms maneuver and wide area security within the context of full-spectrum operations to defeat enemies and stabilize environments. Army forces prevail in a wide range of contingencies at home and abroad to include defeating adaptive enemies in major combat operations, responding with civil agencies to attacks or natural disasters, supporting and stabilizing fragile states facing internal or external threats, and preventing human suffering.<sup>86</sup>

## **5-2. Full-spectrum operations**

a. To succeed in the future operational environment, Army forces must be able to conduct full-spectrum operations, rapidly transition between types of operations, and conduct operations decentralized consistent with the concept of mission command. Army forces conduct offensive, defensive, and stability or civil support operations simultaneously to defeat enemies and secure populations. The need for forces able to conduct simultaneous full-spectrum operations applies broadly from the JTF to company level. To achieve a high degree of agility, or the ability to move and adjust quickly and easily, small units require the resources, combined arms capabilities, access to relevant intelligence and combat information, and authority to act.

b. Full-spectrum operations require leaders and organizations that are able to think, operate, and prevail simultaneously across three interconnected dimensions:

(1) *The psychological contest of wills* against enemies, warring factions, criminal groups, and potential adversaries -- involves destroying the enemy's will to fight through disintegration or other defeat mechanisms.

(2) *Strategic engagement* involves keeping friends at home, gaining allies abroad, and generating support or empathy for the mission in the area of operations.

(3) *The cyber/electromagnetic contest* involves gaining advantages in the cyberspace domain and electromagnetic spectrum, maintaining those advantages, and denying the same to enemies.<sup>87</sup>

c. Army forces must remain capable of full-spectrum operations with continued focus on capabilities to conduct effective and sustained counterinsurgency, stability, and counterterrorist operations alone and in concert with partners.<sup>88</sup> In this context, the Army executes tasks critical

to economic and political reconstruction to establish stable governance at the conclusion of a campaign. The establishment of political order and economic stability are not only part of war, but are the logical outcomes as conflict often results in a change of government for the defeated.<sup>89</sup> While other government agencies contribute in a variety of ways to national security, the Army is frequently the only agency capable of accomplishing reconstruction in the midst and aftermath of combat.<sup>90</sup> To this end, the Army identifies Soldiers and leaders within the active Army and Army Reserve component who possess unique skills, training, and experiences that could assist commanders until conditions permit other agencies to contribute.

d. Full-spectrum operations require continuous and precise sustainment, providing goods and services at the right place, at the right time, and in the right amount in both routine and emergency situations. The Army continues to improve the delivery of power, fuel, and water and gains efficiencies by decreasing reliance on bulky, vulnerable, and costly supplies moved over extended lines of communication. To deploy, supply, and maintain the force successfully, commanders must integrate sustainment demands into operational plans using networked joint and Army systems. The Army must gain operational advantage and efficiency through the increased use of robotics capabilities and unmanned systems to reduce Soldier exposure to dangerous materials and hazardous incidents.

## 5-3. Homeland defense and civil support

a. National strategy and joint doctrine call for active layered defense in depth conducted in the forward regions, the approaches, and the homeland to secure the U.S. from attack. The Army supports the security of the homeland through the conduct of homeland defense and civil support operations. The Army provides support to civil authorities in response to natural or manmade disasters, domestic disturbances, and other activities as directed. The Army integrates with U.S. Federal, state, and local governments and law enforcement agencies as required for homeland defense and civil support.<sup>91</sup> Accordingly, Army forces must be trained and ready to operate in the unique environment of the homeland.

b. Homeland defense.

(1) Homeland defense is the protection of U.S. sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression, or other threats as directed by the president. The DOD is responsible for homeland defense.<sup>92</sup> When the president directs the DOD to conduct or lead a homeland defense operation, the department has the authority to direct the implementation of the Northern Command homeland defense contingency plan. A defensive task routinely conducted in homeland defense missions is protecting critical assets and key infrastructure during crises to include WMD storage facilities.

(2) The Army fulfills its responsibility to secure the homeland through detection, deterrence, prevention, and if necessary, defeat of external threats or aggression. In homeland defense operations where DOD serves as the lead agency, the requirement to work cooperatively and collectively with local, state, and Federal law enforcement agencies becomes critical to success.

(3) A critical task for the Army in supporting homeland defense efforts is to consider the implications for homeland defense in all operations at home and abroad. As outlined above, the active layered defense approach to homeland defense requires joint, Army, intergovernmental, and interagency partners to share information to identify threats to the homeland in the forward areas and approaches before they can attack the U.S. In essence, homeland defense begins not at home, but abroad in areas where adversaries of the U.S. plan, train forces, and prepare for attacks.

c. Civil support. The primary tasks of civil support operations are support in response to domestic disasters, CBRNE consequence management, support to civilian law enforcement agencies, counter WMD operations, and to counter narcotics trafficking activities. Civil support differs from homeland defense operations primarily in the fact that DOD is supporting another government agency. The Army must be prepared to respond to catastrophic incidents as directed, to include providing responsive and flexible consequence management response forces, capabilities for domain awareness, and enhanced domestic capabilities to counter CBRNE and IED threats.<sup>93</sup>

d. Military and civilian agencies require common understanding of the policies and procedures, the legal aspects which limit actions, and the roles of the respective partners. Interoperability of equipment, policy, and regulatory compatibility and common training in planning processes are all important factors in achieving unity of effort. Some of these issues can be identified and addressed through exercises and exchanges to develop understanding of capabilities and limitations. Leader development must include education on the roles of the military and other government agencies in homeland defense and civil support.

e. The Army faces several challenges when conducting homeland defense and civil support operations.

(1) Unity of command is potentially problematic due to split authorities, particularly when conducting simultaneous homeland defense and civil support missions. DOD is the lead agency for homeland defense, and a supporting agency for civil support.

(2) Army forces conducting homeland defense and civil support missions require extensive integration and must coordinate closely with multiple local civil and law enforcement authorities.

(3) When operating on U.S. soil, leaders and Soldiers must understand the legal authorities and caveats related to military operations such as those pertaining to collecting and maintaining information on and detaining U.S. citizens.

(4) The integration of Title 10 and Title 32 forces will require planning and training to best utilize the capabilities of each.

#### **5-4.** Sustained engagement

a. The Army conducts sustained engagement activities to increase partner security capacity, improve visibility of current and emerging threats, and contribute to combatant commander theater security cooperation efforts. Deployed Army forces and those operating overseas contribute to U.S. defense commitments and remain critical to the joint force's efforts to deter conflict and advance common interests without resort to arms.<sup>94</sup>

b. Sustained engagement requires consistent efforts over time as well as a clear connection to U.S. policy goals and diplomatic efforts.<sup>95</sup> Army forces adapt sustained engagement efforts based on changes in the operational environment. Army forces support diplomacy and efforts to prevent conflict through security force assistance, forward positioning, and response to humanitarian crises.<sup>96</sup> Sustained engagement is a long term investment in developing partner security capabilities. Sustained engagement is particularly important in developing the capabilities that take the most time to mature such as fires, sustainment, and protection. While sustained engagement may require brigade or larger units when the host nation is threatened, smaller units and teams down to individual advisors conduct the majority of sustained engagement activities.

c. Alignment of selected Army forces by region augments and deepens theater Army intelligence efforts and assists forces in understanding the situation in width, depth, and context. Intelligence estimates assess the strengths, weaknesses, and strategies of foreign state and non-state actors that pose a significant threat to partners and U.S. vital interests. Intelligence efforts also contribute to an understanding of friendly government and security force capabilities. Because assisting friends often requires forces to clarify intentions and reassure populations, intelligence estimates must evaluate friendly force sustained engagement efforts in context of geography, threats, and relevant populations. While intelligence collection through a broad range of technical means remains vital to understanding the situation in breadth, sustained engagement efforts and the opportunities they present to conduct reconnaissance are critical to the systematic and holistic development of local knowledge.

d. Army forces conduct security force assistance by, with, and through indigenous forces while exerting influence to ensure outcomes and behavior consistent with U.S. policy goals and objectives. Theater armies will remain the primary coordinators of sustained engagement in countries with mature security forces operating in relatively stable environments. Based on the needs of the supported security force and the objectives of the theater security cooperation plans, Army forces may augment ARSOF efforts to conduct multinational training or combined operations with indigenous security forces.

e. Large scale security force assistance missions conducted in the context of counterinsurgency operations will require Army forces capable of compensating for weaknesses in the supported force such as leadership; command and control; intelligence collection, analysis, and dissemination; combined arms capability (such as, mobile protected firepower, fires, and engineers); and sustainment.

f. Sustained engagement must focus on developing indigenous security force capabilities and systems that take time to mature such as communications, aviation, sustainment, and protection. These mature capabilities within the indigenous force allow future Army forces to respond to contingencies rapidly and effectively. Future Army forces must possess interoperable communication capabilities that incorporate existing joint and partner communications systems. Protection capabilities that contribute to safeguarding critical infrastructure and provide early warning strengthens regional deterrence architectures and helps secure access, and preserve options for the deployment of U.S. and allied forces during contingency operations.

## **5-5.** Entry operations

a. Joint forces conduct entry operations to move forces into an area of operations by air, land or sea, or if opposed, by seizing a lodgment to enable the operations of follow-on forces or to conduct a specific operation. The Army, as part of a joint force, conducts opposed or unopposed entry operations to accomplish missions in support of the joint commander's campaign objectives.

b. Unopposed entry.

(1) Army forces conduct unopposed entry when the host nation permits entry and there is no immediate threat. Entry forces use developed air and sea ports of debarkation if available, but may also require use of austere or unimproved entry points. If the entry is unopposed, Army forces deploy rapidly and conduct reception, staging, onward movement and integration operations (RSOI) to build combat power and prepare for follow on operations. Depending on the urgency and threat level, Army forces may conduct RSOI at an intermediate staging base and arrive in theater configured for immediate operations. Sustained engagement with key partner nations prior to the outbreak of hostilities facilitates entry operations by securing agreements which enable unopposed entry.

(2) Air, land, and sea amphibious platforms move sufficient forces to secure and expand lodgment and overcome limitations of infrastructure supporting arrival by land or sea. Forces conducting unopposed entry require the same security capabilities needed for forcible entry.

c. Forcible entry. The Army conducts forcible entry operations by parachute, air, amphibious, or land assault and presents enemies with multiple threats from unexpected locations to overcome or avoid antiaccess and area denial efforts. The size and composition of the assault force depends on METT-TC considerations, but should be of sufficient capability to seize and retain a lodgment until early entry forces begin reconnaissance and security operations to enable follow-on force employment. Army forcible entry forces employ in-flight command post capabilities to enable commanders to plan and coordinate operations with joint, interagency, and multinational partners while conducting intertheater movement.

(1) Forcible entry operations may rely on sea based joint assets for command and control, fires, protection, intelligence, reconnaissance, and sustainment. Seabasing<sup>97</sup> reduces the need for improved ports and airfields while extending protection inland from the sea base. Seabasing provides a secured joint support area from which the joint force commander can sustain, support,

command, and control deployed joint forces. Under austere conditions or when overcoming antiaccess and area denial technologies, joint seabasing helps reduce the requirement for large ground based sustainment stocks and extended ground lines of communication. Army forces project from or through joint sea bases to envelop or turn, attack from unexpected directions, to seize key terrain or facilities, to disrupt rear operations, or to clear a littoral of antiaccess forces. Deployed command posts enable mission command and integration of joint, intergovernmental, interagency, and multinational efforts.

(2) Intelligence preparation for forcible entry operations conducted by ground reconnaissance and other joint collection platforms is critical to identify potential lodgments, antiaccess and area denial capabilities, force dispositions, and indigenous security force dispositions and capabilities. ARSOF and regionally aligned forces conduct sustained engagement to facilitate early entry force activities by developing relationships with indigenous security forces, local populations, and government organizations at the local to national level.

d. Whether opposed or unopposed, entry operations require detailed planning to integrate joint, interagency, intergovernmental, and multinational efforts. Army forces conduct initial assaults and subsequent security operations to ensure freedom of movement in the air and maritime domains and destroy forces as required. A critical transition in the planning of entry operations is the shift in effort from the establishment of the initial lodgment to an expansion of the lodgment area and the corresponding weight of effort in attacking capabilities, such as command posts, air defense, ballistic missile, and shore-to-ship missile units, to protect follow on joint forces and ease their employment. Army forces conduct combined arms maneuver and wide area security operations during this lodgment expansion to deny the enemy's use of key terrain and capabilities thus ensuring freedom of maneuver and action in air, maritime, space, and land domains.

#### **5-6.** Prevent proliferation and counter WMD

a. The proliferation of WMD continues to undermine global security, further complicating efforts to sustain peace and prevent arms races.<sup>98</sup> The instability or collapse of a state possessing WMD is among the Nation's most troubling concerns. Such an occurrence could lead to rapid proliferation of WMD material, weapons, and technology, and could quickly become a global crisis posing a direct physical threat to the U.S. and all other nations.<sup>99</sup> Moreover, Al Qaeda and other terrorist networks have demonstrated an interest in acquiring WMD.<sup>100</sup>

b. Preventing proliferation and counter WMD operations require forces able to monitor, detect, and interdict the production, transfer, or employment of technologies and devices. In the event of collapse of a state with WMD, the Army must be prepared to enter into unexpected and austere locations to secure production and storage facilities.

c. Through sustained engagement, the Army increases the capacity of partner nations to protect WMD technologies and devices from internal and external threats. The Army uses standoff radiological and nuclear detection capabilities and improves the responsiveness of consequence management forces<sup>101</sup> both at home and abroad. When tasked to secure WMD,

forces neutralize or render safe devices and their components. In addition, they respond to the release of harmful effects to protect the force and populations.

## **5-7.** Cyberspace operations

a. Cyberspace operations include computer network operations and activities to operate and defend the global information grid,<sup>102</sup> the interdependent network of information technology infrastructure including the internet, telecommunications networks, computer systems, and embedded processes and controllers. A critical enabler for virtually all elements of national and military power, cyberspace has become an increasingly contested domain. The protection of information and ability to guarantee its transport though cyberspace are essential to Army operations.

b. In the past, voice and data networks operated separately, but the convergence of these technologies has brought them together, enabling the delivery of multiple forms of media – text, audio, video – over the same wired, wireless, or fiber-optic infrastructures of the internet. While providing great opportunity for increased effectiveness, technological convergence also introduces tremendous vulnerabilities.

c. In the cyber/electromagnetic contest, significant advantage will go to the side that is able to gain, protect, and exploit advantages in the highly contested cyberspace domain and electromagnetic spectrum. As Army forces increase demand for cyber capabilities to support precision guidance, navigation, and communications, they must learn to operate information systems at peak capacities and when degraded or disrupted.

d. Military cyberspace operations employ a combined arms approach integrated across the warfighting functions. Commanders not only recognize the network and its systems as enablers, but also operational weapon systems. Critical to this effort, commanders enforce standards, policies, and directives across the force to ensure compliance with information assurance best practices. Achieving mission success in the cyber domain requires an investment in new capabilities and technologies to design networks for situational awareness. Finally, achieving and sustaining success in the cyber domain requires development of a sufficient number of cyber professionals trained and certified to operate across the entire network, from operations and defense to exploitation and attack.

## **5-8.** Space operations

a. Access to space and the use of space assets are increasingly contested by a range of threats that can deny, degrade, disrupt, and destroy a wide array of space systems.<sup>103</sup> Army forces conduct space operations to ensure friendly freedom of action and support the achievement of tactical and operational objectives. Strategic guidance describes the need to develop capabilities and exercise plans for operating in and through a degraded, disrupted, or denied space environment.<sup>104</sup> The protection of information and ability to maintain freedom of maneuver in space is essential to the success of the future Army force.

b. The Army depends on space-based capabilities such as global positioning satellites, satellite communications, and intelligence collection platforms for the effective execution of full-spectrum operations. These space-based capabilities are becoming increasingly important at lower echelons. The Army must not only prepare leaders and units to leverage the power of space, but to understand and adapt to the implications of degraded space capabilities by incorporating training scenarios that include the loss or disruption of these dependencies.

c. Joint interdependence is essential for the successful conduct of all space operations. To this end, the Army must continue to improve processes that identify operational requirements such that joint, interagency, and commercial enterprises are able to deliver those capabilities responsively to Army forces. Future Army forces leverage the unique capabilities provided by other military services in the conduct of day-to-day operations by developing shared processes to integrate the expanding roles of not just space, but cyberspace and other strategically-focused operations. Developing cooperative joint and Army efforts to assess space and cyberspace architectures, vulnerabilities, and solutions is imperative.

### **5-9.** Foreign humanitarian assistance

a. Foreign humanitarian assistance operations assist governments and security organizations in easing human suffering caused by natural and manmade disasters such as hurricanes, tsunamis, earthquakes, mass atrocities, or terrorist attacks. Providing humanitarian aid and assistance is primarily the responsibility of specialized civilian, national, international, governmental, and nongovernmental organizations and agencies. Humanitarian response activities often require military support. Generally, the host nation or affected country coordinates humanitarian response. If the host nation or affected country is unable to do so, the United Nations often leads the international community response on its behalf. In some cases, the Army is the only institution with the capacity to respond to a large-scale natural disaster and mitigate human suffering. Therefore, commanders must understand the role of joint forces and other organizations, such as the Red Cross and *Medecins Sans Frontieres* (Doctors without Borders).

b. Future Army forces must be prepared to conduct mass atrocity response operations (MARO) as part of full-spectrum operations.<sup>105</sup> MARO depends on the detection and prevention of genocide, and if prevention fails, seeks to halt the violence as quickly as possible to set conditions for lasting peace.

c. The first step toward prevention is building a reliable process for assessing risks and generating detection of potential atrocities.<sup>106</sup> Detection requires nontraditional types of information from nontraditional sources.<sup>107</sup> There is tremendous expertise outside the U.S. government in academia, international nongovernmental organizations, think tanks, civic groups, and other governments. Yet cooperation between the U.S. government and these other organizations with respect to detection remains relatively underdeveloped.<sup>108</sup>

d. Military operations can play an important role in deterring and suppressing violence.<sup>109</sup> Commanders must be prepared to rapidly transition between a wide array of operations. They

must also anticipate and plan for any second and third order effects that such interventions may provoke within the area of operations and even throughout the region.

e. In planning and executing MARO, commanders must remember that victims and perpetrators can switch roles quickly, thus increasing the complexity of the situation. Army forces typically participate in MARO as part of a larger stability operation, and combined with a myriad of other tasks. MARO requires combined arms formations and unity of purpose with interagency, intergovernmental, and multinational partners to create a secure environment, establish rule of law, and build security and government organizations able to maintain stability and prevent further atrocities.

People accomplish the mission. It is the human dimension with its moral, cognitive and physical components that enables land forces to deal with the situational complexity of tactical actions with strategic impacts and adapt to rapidly changing conditions. Leadership is of paramount importance, and land forces must continue to develop agile and adaptive leaders who can handle the challenges of full spectrum operations.

– GEN Casey, Army Chief of Staff, Army Magazine

## Chapter 6 Training, Education, and Leader Development

a. The accelerating pace of change and proliferation of military technologies to emerging powers and nonstate actors around the globe have combined to create a security environment in which a nation and its military that learn and adapt most quickly will prevail.<sup>110</sup> To succeed in this increasingly competitive learning environment, the Army requires leaders and organizations that can understand and adapt more quickly than their adversaries.<sup>111</sup> Accordingly, the Army must place renewed emphasis on training, education, and leader development to produce a new generation of leaders able to succeed in the face of uncertainty and effectively employ emerging technologies within their organizations.

b. Conducting operations in a decentralized manner places increased demands on both junior and senior Army leaders. Junior leaders conducting operations guided by mission orders at the ends of extended lines of communications in noncontiguous areas of operations require the maturity, judgment, and confidence to develop creative solutions to ill-structured problems and implement those solutions through effective action. Junior leaders demonstrate a willingness to accept a degree of risk in their decisions with the knowledge that senior leaders will provide the resources and authorities required to support their choices and enable them to mitigate risk as required. Senior leaders demonstrate tactical and operational patience by allowing junior leaders the time and space needed to develop the situation through action in accord with their abilities and the intent of higher headquarters. In addition, leaders at higher echelons work through ambiguity, anticipate change, create opportunities, and manage transitions to ensure freedom of action for their subordinates. Operating together in such a manner, Army leaders exhibit the necessary level of operational adaptability to adjust rapidly to changing situations.

c. Success in future Army operations depends in great measure upon effective, realistic training to build the necessary competence and confidence in Soldiers, units, and leaders. The Army's individual, collective, and leader training programs must not only transmit the required knowledge, skills, and abilities, they must do so in a manner that is suited to the learning style and preferences of a new generation of young Americans such that the All-Volunteer Army remains an attractive alternative. Properly resourced institutional and home station training programs take advantage of embedded and mobile technologies to link Soldiers and units to centralized sources of information and training support. Combat and collective training centers develop high-end collective proficiency to ensure unit readiness for deployment. Deployed forces continue to benefit from new sources of training support and reach back to sustain critical skills while away from home station regardless of the mission. Army schoolhouses and units at all levels access nested and operationally relevant scenarios that guide training and leader development across the force. Army training also incorporates increased levels of joint and interagency participation to broaden both Army and partner understanding and expertise. All of these efforts become part of a broad training enterprise that develops and sustains the tactical and technical competence that builds both confidence and agility.<sup>112</sup>

d. One of the best countermeasures against the uncertainty of the future operational environment is a well educated cadre of Army leaders.<sup>113</sup> Learning is a continuous and life-long process that builds upon formal professional military education, experience, and personal self-study. The Army must assign a high value to lifelong learning and provide its officer and non-commissioned officer leaders educational opportunities<sup>114</sup> that broaden and deepen their knowledge to prepare them to cope successfully with uncertainty. A dedicated effort on the part of senior leaders to mentor junior leaders focuses and guides lifelong learning. Other efforts include the development of basic foreign language skills<sup>115</sup> and techniques of improvisation. Promoting a culture of learning helps create leaders who are instinctively analytical in their approach to and use of information. In support of this end, Army personnel practices must once again promote the value of service as instructors for all junior and senior Army leaders.

e. Army leaders must also be able to think seriously about the broader context of war beyond the battlefield and provide the best possible military advice to civilian decisionmakers. Simply fighting and winning a series of interconnected battles in a well developed campaign does not automatically deliver the achievement of war aims.<sup>116</sup> Army leaders must understand the fundamental processes of planning and executing campaigns and apply elements of intelligence, logistics, and operational design and execution, but they must also recognize that success in war requires much more than campaign mastery. Senior Army leaders must be able to communicate within and across military institutions, with political leaders, and among allies. Moreover, they must be able to apply their skills within the framework of a larger war-winning strategy.<sup>117</sup> In addition to understanding the nature of war and how to align ends, ways, and means as part of military strategy, senior Army leaders must see beyond conflicts and be fully comfortable in the higher realm of grand strategy.<sup>118</sup> In short, the Army requires strategic leaders who understand all aspects of their role within the Nation's foreign policy and security apparatus.<sup>119</sup>

f. The Army must clarify and reinforce standards of behavior for both leaders and Soldiers. To defeat enemies whose primary sources of strength are coercion, brutality, and the stoking of hatreds, the Army must provide its members a clear set of expectations. Ignorance, uncertainty, fear, and combat trauma can lead to breakdowns in discipline and conduct that often result in violations of the Uniform Code of Military Justice, the Law of War, and the Geneva Conventions. Against such challenges, leaders must strive to reduce uncertainty through tough, realistic training that builds cohesion, confidence, and mutual trust. In addition, all Soldiers must understand and apply the essential tenets of *jus in bello*, <sup>120</sup> discrimination (between combatants and noncombatants), and proportionality in the use of force, <sup>121</sup> measured against the necessity of military operations.<sup>122</sup> Finally, leaders and Soldiers must internalize and sustain a Warrior Ethos<sup>123</sup> that insists upon commitment to core institutional values.<sup>124</sup> Particularly important is the recognition that Soldiers are expected to take risks and make sacrifices that place them at increased risk of danger or death to accomplish the mission, protect their fellow Soldiers, and strive to safeguard innocents.<sup>125</sup> The Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage serve as a guide to all Soldiers about the covenant between them and the society they serve.<sup>126</sup>

g. The nature of the military profession is such that it requires Soldiers to discharge their professional duties in a moral and ethical manner. Army leaders in particular are obligated to the American people to maintain professional competence and personal character.<sup>127</sup> As members of the profession of arms, leaders must exhibit the qualities which mark service in the military as a truly professional endeavor. These qualities include a code of professional conduct, a high degree of competence based on established and well regulated examinations of skill, education, and performance, and self-regulation to purge those members who fail to meet standards or demonstrate required professional knowledge.<sup>128</sup> Like other professions such as medicine and law, the military also requires institutional training to develop a broad range of skills and a commitment to continuous education.

h. Finally, Army leaders at all levels must recognize and adhere to proper standards of military ethics by refusing to associate the Army with any aspect of partisan politics. This is especially important in the transparent world of 24-hour news cycles and immediate access to information where politics thrives. By avoiding the pitfalls of partisan politics, Army leaders sustain public confidence in the objectivity of the Army.<sup>129</sup>

i. The success of the future Army depends on effective training, education, and leader development to produce cohesive, combat effective Soldiers, units, and leaders who exhibit the operational adaptability the future operating environment will require. A renewed emphasis on training and learning sustains the ability of Army leaders and units in challenging and difficult missions. By taking explicit steps to promote the value of education and lifelong learning, the Army assures its leaders and Soldiers possess the ability to think critically, operate in uncertainty, and adapt as needed. By developing a broader set of skills that includes an understanding of politics, economics, foreign cultures,<sup>130</sup> and the application of knowledge in an increasingly competitive learning environment,<sup>131</sup> the Army develops strategic leaders who embody the highest standards of moral and ethical conduct and ensure the continued professionalism of the Army.

## Chapter 7 Conclusion

a. The future operational environment will be complex and uncertain, marked by rapid change and a wide range of threats that will emanate from diverse populations where dispersion, concealment, and complex terrain provide the enemy the greatest advantage. Achieving the necessary level of operational adaptability in this environment requires the Army to build upon a foundation of combined arms maneuver and wide area security. Army forces conduct combined arms maneuver to gain physical, temporal, and psychological advantages over the enemy. Army forces conduct wide area security to consolidate gains, stabilize environments, and ensure freedom of movement and action.

b. Success in future military operations depends on the ability of Army leaders and Soldiers to understand the situation and apply the tenets of mission command. In support of this approach, future Army forces collaborate closely at tactical levels to co-create context and develop a better understanding of the situation. In addition, Army forces place increased emphasis on continuous reconnaissance and effective air-ground operations. Army tactical formations employ an expanded set of organic and habitually aligned capabilities that include greater access to a variety of joint enablers. Furthermore, Army units and headquarters conduct effective transitions to ensure continuity over extended campaigns.

c. To operate decentralized consistent with mission command, the Army employs headquarters at theater, corps, and division level to direct the activities of assigned forces consistent with the commander's intent and concept of the operation. Commanders at these echelons visualize, describe, and direct operations and ensure integration of joint, interagency, intergovernmental, and multinational efforts. In addition, the Army provides joint commanders with regionally aligned forces competent in the languages, cultures, history, governments, security forces, and threats in areas where conflict is likely.

d. The Army contributes to national security as part of joint combat, security, relief and reconstruction, and engagement activities. Army forces conduct full-spectrum operations to defeat enemies and establish conditions necessary to achieve national objectives. Army forces capable of combined arms maneuver and wide area security operations are essential to the ability of the joint force to accomplish assigned missions. In addition, Army forces are organized, trained, and equipped to succeed in a wide range of contingencies at home and abroad to include supporting or leading the response of civil agencies to attacks or natural disasters at home, supporting fragile states, and preventing human suffering.

e. Finally, the Army must renew its emphasis on training, education, and leader development to produce a new generation of leaders able to succeed in the face of uncertainty. Junior leaders must demonstrate technical and tactical proficiency, but they also require the maturity, judgment, and confidence to develop creative solutions to ill-structured problems. Senior leaders must become masters of operational art and must be able to think seriously about the broader context of war at the national level. In addition, all Army leaders must exemplify moral and ethical conduct and demonstrate their commitment to the professional military ethic, the Warrior Ethos, and Army values.

Appendix A References

## Section I Required References

TRADOC Pam 525-3-0 Army Capstone Concept: Operational Adaptability—Operating Under Conditions of Uncertainty and Complexity in an Era of Persistent Conflict

TRADOC Operational Environment 2009-2025.

## Section II Related References

2008 National Defense Strategy. Retrieved from <u>http://www.defense.gov/pubs/2008</u> NationalDefenseStrategy.pdf

Biddle, T. D. (2010, April). Educating Senior Military Officers: Observations from the Carlisle Parapet. [Unpublished manuscript used by permission of the author.]. U.S. Army War College. Carlisle Barracks, PA.

Bolkcom, C., Feickert, A., & Elias, E. (2004, October 22). Congressional Research Service Report. Homeland Security: Protection Airliners from Terrorist Missiles. Order Code RL31741. Retrieved from <u>http://www.fas.org/irp/crs/RL31741.pdf</u>

Brooks, D. (2010, May 27). Drilling for certainty. *The New York Times*. Retrieved from <u>http://www.nytimes.com/2010/05/28/opinion/28brooks.html?\_r=1</u>

Bush, G. W. (2002, September). National Strategy to Combat Weapons of Mass Destruction. National Security Presidential Directive 17. Retrieved from <u>http://www.fas.org/irp/offdocs/nspd/nspd-17.html</u>

Casey, Jr. G. (2009, October). The Army of the 21st century. Army Magazine, 59(10). 25-40.

Capstone Concept for Joint Operations.

Coker, C. (2007). *The warrior ethos: Military culture and the war on terror*. New York: Routledge.

Clarke, B. (1961, September). Mission-type orders. [Electronic version] *Military Review, XLI(9),* 2-3. Retrieved from <u>http://cgsc.contentdm.oclc.org/cdm4/item\_viewer.php?CISOROOT=/</u>p124201coll1&CISOPTR=698&CISOBOX=1&REC=7

Dempsey, M. E. (2009, November). Our Army's campaign of learning. *Landpower Essay*, No. 09-3. Presented by the Association of the United States Army Institute of Land Warfare.

Retrieved from <u>http://www.ausa.org/publications/ilw/ilw\_pubs/landpoweressays/</u> Pages/default.aspx

Dewar, J., Builder, C., Hix, W., & Levin, M. (1993). *Assumption-based planning*. (RAND Monograph Report). CA: RAND Corporation. Retrieved from <u>http://www.rand.org/</u>pubs/monograph\_reports/MR114/index.html

DOD Directive 5100.01 Functions of the Department of Defense and Its Major Components. Retrieved from <u>http://www.dtic.mil/whs/directives/corres/dir.html</u>

DOD Quadrennial Defense Review Report. (2010, February 1). Washington DC. Retrieved from <u>http://www.defense.gov/qdr/</u>

Field Manual (FM) 1 The Army

FM 1-02 Operational Terms and Graphics

FM 3-0 Operations

FM 3-24 Counterinsurgency

FM 3-90.6 The Brigade Combat Team

FM 7-0 Training for Full Spectrum Operations

Fisher, R. & Shapiro, D. (2005). *Beyond reason: Using emotions as you negotiate*. New York: Penguin Group.

Flournoy, M. (2009, April 29). Rebalancing the Force: Major Issues for QDR 2010. Undersecretary of Defense for Policy, Speech to Center for Strategic and International Studies. Retrieved from <u>http://policy.defense.gov/sections/public\_statements/speeches/usdp/flournoy/</u>2009/April\_27\_2009.pdf

Flynn, M., Pottinger, M., & Batchelor, P. (2010, January). Fixing intel: A blueprint for making intelligence relevant in Afghanistan. *Voices from the Field*. Center for a New American Security. Washington, D.C. Retrieved from <u>http://www.cnas.org/files/documents/publications/</u><u>AfghanIntel\_Flynn\_Jan2010\_code507\_voices.pdf</u>

TRADOC Pam 525-3-1

Genocide Prevention Task Force (2008). *Preventing genocide: A blueprint for U.S. policymakers*. Convened by the U.S. Holocaust Memorial Museum, the American Academy of Diplomacy, The U.S. Institute of Peace. Washington: DC. Retrieved from <a href="http://www.ushmm.org/genocide/taskforce/pdf/report.pdf">http://www.ushmm.org/genocide/taskforce/pdf/report.pdf</a>

Gates, R. (2009, April 6). Defense Budget Recommendation Statement. Arlington, VA. Retrieved from <u>http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1341</u>

Green, R. (2009, December). Army professional military leader development. *Army Magazine*, 59, 46.

Hiltunen, E. (2007, September). The future sign and its three dimensions. *Futures 30(3)*, 247-260. Retrieved from <u>http://www.sciencedirect.com</u>

Huntington, S. (1957). *Soldier and the state: The theory and politics of civil-military relations*. Cambridge, MA: Belknap Press of Harvard University Press.

International Institute for Strategic Studies. *The Military Balance 2010: The annual assessment of global military capabilities and defense economics.* New York: Routledge.

Johnson, D. (2010, April). Military capabilities for hybrid war, insights from the Israel Defense Forces in Lebanon and Gaza. Occasional paper prepared for the U.S. Army by RAND Corporation under project unique identification codes ASPMO09224 and ASPMO09223. Santa Monica, CA. Retrieved from <u>www.rand.org</u>

Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms

Joint Publication 3-0 Joint Operations

Kelly, J. & Brennan, M. (2009, September). Alien: How operational art devoured strategy. Strategic Studies Institute. U.S. Army War College. Carlisle, PA. Retrieved from <a href="http://www.strategicstudiesinstitute.army.mil/pdffiles/pub939.pdf">http://www.strategicstudiesinstitute.army.mil/pdffiles/pub939.pdf</a>

Kohn, R. (2009, Spring). Tarnished brass: Is the U.S. military profession in decline? [Electronic version]. *World Affairs, A Journal of Ideas and Debate*, 4. Retrieved from http://www.worldaffairsjournal.org/articles/2009-Spring/full-Kohn.html

Korns, S. & Kastenberg, J. (2008-2009, Winter). Georgia's Cyber Left Hook. *Parameters*. Strategic Studies Institute, 60-76. Retrieved from <u>http://www.carlisle.army.mil/usawc/parameters/ArticleIndex.cfm</u>

Lind, W. (1993). The Theory and Practice of Maneuver Warfare. In R. D. Hooker (Ed.), *Maneuver warfare–An anthology*, 9. New York: Presidio Press.

Mullen, M. (2010, March 03). [Nature of war today]. Joint Chiefs of Staff speech as part of the Landon Lecture Series. Presented at Kansas State University, Manhattan, Kansas. Retrieved from <u>http://www.jcs.mil/speech.aspx?id=1336</u>

Nagl, J., Burton, B., Snider, F., Hoffman, F., Hagerott, M., & Zastrow, R. (2010, February 4). Keeping the edge: Revitalizing America's military officer corps. [Electronic version]. Center for a New American Security. Washington, DC. Retrieved from <u>http://www.cnas.org/node/4077</u>

National Intelligence Council Global Trends 2025: A Transformed World. (2008, November). Retrieved from <u>http://www.dni.gov/nic/PDF\_2025/2025\_Global\_Trends\_Final\_Report.pdf</u>

National Intelligence Estimate: The Terrorist Threat to the U.S. Homeland. (2007, July). National Intelligence Council. Retrieved from <u>http://www.dni.gov/press\_releases/</u>20070717\_release.pdf

National Space Policy of the United States of America. (2010, June 28). Retrieved from <u>http://www.defense.gov/spr/</u>

Odierno, R. Brooks, N., & Mastracchis, F. (2008, 3<sup>rd</sup> Quarter). ISR Evolution in the Iraqi Theater. *Joint Forces Quarterly*, 50(55). Retrieved from The U.S. Army Professional Writing Collection at <u>http://www.army.mil/professionalwriting/volumes/volume6/august\_</u> 2008/8\_08\_4.html

Sewall, S., Raymond, D., & Chin, S., et al. (ND). MARO. Mass atrocity response operations: A military planning handbook. Collaborative Effort Between the Carr Center for Human Rights Policy, Harvard Kennedy School and the US Army Peacekeeping and Stability Operations Institute. Retrieved from <u>http://www.hks.harvard.edu/cchrp/maro/handbook.php</u>

Schadlow, N. (2003, Autumn). War and the art of governance. *Parameters: U.S. Army War College Quarterly*, XXXIII(3), 86. Retrieved from <u>http://www.carlisle.army.mil/usawc</u>/parameters/Articles/03autumn/contents.htm

Schultz, Jr., R. & Godson, R. (2006, 31 July). Intelligence dominance: A better way forward in Iraq [Electronic version]. *Weekly Standard*, 11(43), 3. Retrieved from <a href="http://www.weeklystandard.com/Content/Public/Articles/000/000/012/474cffnb.asp">http://www.weeklystandard.com/Content/Public/Articles/000/000/012/474cffnb.asp</a>

Singer, P. (2009, Summer). Tactical generals: Leaders, technology, and the perils. [Electronic version]. *Air and Space Power Journal*. Retrieved from Brookings Institute at <a href="http://www.brookings.edu/articles/2009/summer\_military\_singer.aspx">http://www.brookings.edu/articles/2009/summer\_military\_singer.aspx</a>

Snider, D. & Matthews, L. (2005, April 22). *The future of the Army profession, revised and expanded second edition*. NY: McGraw-Hill-Learning Solutions.

Snider, D., Oh, P., & Toner, K. (2009). The Army's Professional Military Ethic in an Era of Persistent Conflict, Strategic Studies Institute. Retrieved from<u>http://www.StrategicStudies</u> Institute.army.mil/ TRADOC Pam 525-3-1

Snider, D., Watkins, G., & Matthews, L. (Ed.) (2002, April 8). *The future of the Army profession*. New York: McGraw-Hill Primis Custom Publishing.

Surowiecki, J. (2005, August 16). The wisdom of crowds. New York: Random House.

TRADOC Pam 525-3-7 The United States Army Concept for the Human Dimension in Full Spectrum Operations

TRADOC Pam 525-3-7-01 The United States Army Study of the Human Dimension 2015-2024

TRADOC Pam 525-5-500 The United States Army Commander's Appreciation and Campaign Design

Unified Quest 2010 Panel Papers. (All Unified Quest panel papers references are available by individual request or through the Wiki Page at <u>https://wiki.kc.us.army.mil/wiki/UQ10</u>, a collaborative workspace for AKO/DKO users) [AKO/DKO login required]

Union of Concerned Scientists (UCS): Citizens and Scientists for Environmental Solutions. 2010, July 1.) Information retrieved from UCS Satellite Database located at <a href="http://www.ucsusa.org/nuclear\_weapons\_and\_global\_security/space\_weapons/technical\_issues/ucs-satellite-database.html">http://www.ucsusa.org/nuclear\_weapons\_and\_global\_security/space\_weapons/technical\_issues/ucs-satellite-database.html</a>

U.S. Army Combined Arms Center. A leader development strategy for a 21<sup>st</sup> century Army. (2009, November 25). Kansas: Fort Leavenworth. Retrieved from <u>http://cgsc.edu/ALDS/A</u> <u>rmyLdrDevStrategy\_20091125.pdf</u>

U.S. Joint Forces Command Capstone Concept for Joint Operations

U.S. Joint Forces Command The Joint Operating Environment 2010

U.S. Joint Forces Command Homeland Defense and Civil Support Joint Operating Concept.

U.S. Joint Forces Command Seabasing Joint Integrating Concept.

van Creveld, Martin. (1987, January 1). *Command in war.*, Massachusetts: Harvard University Press. 80.

von Clausewitz, C. (1982). On war (J. J. Graham, Trans.). New York, NY: Penguin Classics.

Wardynski, C., Lyle, D., & Colarusso, M. (2009, November). *Talent: Implications for a U.S. Army officer corps strategy*. (Strategic Studies Institute Monograph, vol. 2). U.S. Army War

College: Carlisle, PA. Retrieved from <u>http://www.strategicstudiesinstitute.army.mil/pubs/</u> <u>display.cfm?pubID=948</u>

## Appendix B Refined Army Capstone Concept Required Capabilities

a. This appendix revises and expands upon the required capabilities listed in the ACC, appendix B, dated 21 December 2009. The ARCIC revised the ACC required capabilities in coordination with TRADOC Centers of Excellence to provide a more integrated list for the AOC, the Army functional concepts, and to support the capabilities needs assessment process. The common theme to all of the ACC required capabilities is generating greater adaptability and versatility across the force to cope with the uncertainty, complexity, and change that will characterize future armed conflict. The revisions to the ACC required capabilities are summarized as follows:

(1) There are now nine required capability categories (mission command, intelligence, fires, movement and maneuver, protection, sustainment, training and leader development, institutional army, and human dimension) as opposed to the previous five categories: (battle command, movement and maneuver, protection, fires, and sustainment).

(2) There are now 47 required capabilities; before there were 36. The revision rebinned the required capabilities in the appropriate warfighting functions and categories.

b. The AOC and the Army functional concepts will refine and expand upon the following revised ACC required capabilities.

## **B-1.** Mission command

a. Exercise mission command. Future Army forces require leaders at all echelons to exercise the art and science of mission command to maximize the effectiveness of the force.

b. Develop mission command. Future Army forces require the capability to develop and advance both the art and science of mission command, ensuring new capabilities are integrated and synchronized from inception through employment, to accomplish the mission during full-spectrum operations.

c. Joint and partner interoperability. Future Army forces require the capability to be interoperable (including communications, planning and operations processes, staff functionality, language skills, and cultural knowledge) with and integrate the capabilities of joint, interagency, intergovernmental, and multinational partners to achieve unity of effort and mission success in uncertain and complex environments.

d. Joint and partner access. Future Army forces require lower tactical elements (company and possibly below based on the situation) with access to joint, interagency, intergovernmental, and

multinational assets to enable operations to be conducted decentralized and allow subordinate leaders to act with a high degree of autonomy.

e. Interoperable network systems. Future commanders require command and control systems that enable interoperability (with joint, interagency, intergovernmental, and multinational partners), help synthesize information into knowledge, operate in austere environments and on the move, and provide shared situational understanding at all levels of command to enable mission success.

f. Operations conducted decentralized and communications connectivity. Future Army forces require communication systems that allow connectivity from lower tactical elements (company and possibly below based on the situation) across the force and over distances that span the joint operational area to enable command and control of forces between all types of headquarters, and extend the benefits of decentralization without sacrificing coordination or unity of effort.

g. Fight degraded. Future Army forces requires the capability to continue the fight when communications or networks are compromised or degraded due to deliberate or unintentional friendly or enemy actions, materiel breakdown, natural atmospheric effects, or geospatial interference to preserve the effectiveness of the force and maintain the initiative over the enemy.

h. Adopt and apply design. Future Army forces require leaders adept at framing complex problems, describing the situation in depth, breadth, and context (including the enemy and civilian populations among which their forces operate, along with the terrain, weather, infrastructure, culture, demographics, neutral entities, the perceptions of partners, and other human elements of the environment) to understand the broad implications of military operations and tactics and their connection to a war-winning strategy.

i. Exert technical influence. Future Army forces require the capability to gain, protect, and exploit advantages in a highly contested cyber/electromagnetic cyberspace domain and electromagnetic spectrum to enable freedom of action and protect the ability to command and control forces while disrupting or destroying enemy capabilities.

j. Synthesize and disseminate data, information, and intelligence. Future Army forces require mission command systems capable of synthesizing and disseminating data, information, and intelligence in a timely manner to units in contact with the enemy and civilian populations to allow units to fight and report simultaneously.

k. Reduce information overload. Future Army forces require tools to manage, filter, and analyze the aggregation of data and information from the myriad sources available to the force to reduce the complexity of the information, develop a more clear understanding of the enemy, populations, and other factors in the operational environment, and provide useful, timely intelligence to commanders for appropriate decisionmaking.

1. Effective strategic engagement. Future Army forces require the capability to inform, educate, and influence relevant populations and actors, based on a consideration of the situation, knowledge of human behavior, and the relevant cultural dynamics, to correlate actions,

messages, and images to clarify U.S. intentions, build trust and confidence, counter enemy propaganda, and bolster the legitimacy of partners.

m. Operations conducted decentralized. Future Army forces require the capability to perform operations decentralized at lower tactical levels (company and possibly below based on the situation) with the combined arms and joint capabilities (as well as specialized capabilities such as psychological operations teams, civil affairs teams, and interpreters) necessary to fight for information, develop the situation, seize and retain the initiative, retain freedom of movement, see and fight across the depth and breadth of the operational area, and close with and overmatch the enemy to permit units to seize and retain the initiative while conducting full-spectrum operations.

n. Expanded executive agent responsibilities. Future Army forces require the capability to manage and execute executive agency responsibilities (including accounting for the impact on manpower commitments, force protection, and sustainment) for functions such as detainee operations, inland transportation, and port operations (among others) without effecting the ability to execute land operations in support of the joint force commander to ensure the combat effectiveness of the joint force.

o. Culture and environment of trust. Future Army forces require a culture and environment of trust and confidence among leaders, including underwriting mistakes and encouraging prudent risk taking consistent with the commander's intent, to promote initiative and enable mission accomplishment under conditions of uncertainty and complexity.

#### **B-2.** Intelligence

a. Combined arms, air-ground reconnaissance. Future Army forces must be capable of conducting combined arms, air-ground reconnaissance operations that integrate long-range surveillance capabilities and human intelligence collection to overcome countermeasures, develop the situation, and assist commanders in making decisions.

b. Combine information sources. Future Army forces require the capability to access all data and information in an integrated form from numerous collection assets to develop the intelligence and degree of understanding necessary for successful operations against enemy organizations in complex environments.

c. Interagency intelligence capabilities. Future commanders must have access to complementary interagency capabilities (for example, police and criminal investigation skills, national level intelligence analysis, institutional development skills, financial expertise, and expertise in the rule of law to understand the situation and initiate appropriate actions and programs.

d. Tactical intelligence collection and analysis. Future Army forces require the capability to push analysis capabilities and relevant intelligence products down to lower tactical elements (company and platoon, and possibly below based on the situation) to maximize the combat effectiveness of small units and allow tactical commanders to develop the situation further through action.

e. Develop and optimize collection and analytical capabilities. Future Army forces require access to and direction of advanced information and intelligence collection and analytical capabilities across the seven doctrinal intelligence disciplines and other nontraditional sources (for example, biometric and forensic capabilities, civil affairs elements, liaisons, interagency and nongovernmental organizations, psychological operations teams, and human terrain teams) at lower tactical elements (company and possibly below based on the situation) to facilitate the situational understanding and timely decisionmaking required to seize and retain the initiative.

f. Broaden analysis beyond military-focused intelligence preparation of the operational environment. Future Army forces require the capability at all echelons to conduct analysis of political, military, economic, sociological, infrastructure and informational aspects of the operating environment, to develop a clear understanding of the operational environment.

## **B-3.** Movement and maneuver

a. Project forces to positions of advantage. Future Army forces require forces that can establish strategic mobility<sup>132</sup> and operational reach<sup>133</sup> to positions of advantage while avoiding or overcoming adversary or enemy employment of strategic preclusion, operational exclusion, antiaccess and area denial capabilities to respond to a broad range of threats and challenges.

b. Fight for information. Future Army units will have to fight for and collect information in close contact with the enemy and civilian populations through continuous physical reconnaissance, persistent surveillance, and human intelligence to develop the contextual understanding to defeat enemy countermeasures, compensate for technological limitations, and adapt continuously to changing situations.

c. Improve civil support readiness. Future Army forces require the capability to provide responsive DOD support, in accordance with the National response framework for natural or manmade disasters or attacks in the U.S. and its territories, to U.S. Federal, state, and local civilian command structures.<sup>134</sup>

d. Win the close fight. Future Army units require the manpower, assured mobility, firepower (lethality), and protection to close with and defeat the enemy in conditions of uncertainty and in and among the populace to fight for information, conduct effective reconnaissance and security operations, effectively decentralize operations, develop the situation through action, and adapt continuously to changing situations.

e. Provide mobile protected firepower. Future Army forces require mobile protected firepower that can maneuver against the enemy under all conditions of battle, delivers precise lethal and nonlethal effects, is interoperable with joint and multinational partners, and provides adequate integrated command and communications systems to overwhelm the enemy and apply firepower with discrimination while operating among the population.

f. Conduct area security over wide areas. Future Army forces must be capable of conducting area security operations over wide areas to deny the enemy's use of an area to prepare for or conduct operations that threaten joint forces, partners, or populations and to protect civilian populations, friendly forces, installations, routes, borders, extended infrastructure, and other friendly actions (such as support to governance, reconstruction, development, and rule of law efforts).

g. Large force operations. Future Army forces require a force capable of conducting and sustaining large force operations (corps and division) to conduct full-spectrum operations in the context of campaigns.

h. Conduct flexible civil security. Future Army forces require the capability to secure populations (for example, civil security, discriminate application of firepower, operations conducted within and understanding of cultural considerations) to gain and maintain the trust and confidence of the civilian population or to establish control for joint force operations.

i. Build partnership capacity. Future Army forces require the capability to conduct security force assistance and civil military operations (such as military support to governance, rule of law, and institutional capacity building) in a multinational environment with partners and among diverse populations to support allies and partners, protect and reassure populations, and isolate and defeat enemies.

## **B-4.** Fires

a. Decentralize access to joint fires. Future Army forces require access to and direction of joint fires at lower tactical elements (company and possibly below based on the situation), including forces operating in support of indigenous forces, to enable operations to be conducted decentralized.

b. Balance precision and suppressive fires. Future Army forces require organic precision and area fires capabilities and the continued ability to apply both destructive and suppressive effects to support units conducting combined arms operations, decentralized, over wide areas.

c. Offensive and defensive fires. Future Army forces require offensive fires that preempt enemy actions by interdicting, degrading, defeating, and destroying enemy capabilities and defensive fires that defeat enemy capabilities and protect friendly forces, population centers, and critical infrastructure, to preserve combat power and freedom of movement and action, protect the force, and allow friendly forces to gain, maintain, and exploit the initiative.

## **B-5.** Protection

a. Detect and assess threats and hazards. Future Army forces require the capability to detect and assess threats and hazards directed against personnel and physical assets to provide the situational understanding and positive identification necessary to prevent or mitigate their effects and maintain freedom of action. b. Warn the force. Future Army forces require the capability to disseminate early warnings to achieve the desired degree of protection for personnel and physical assets.

c. Protect personnel and physical assets. Future Army forces require the capability to prevent and mitigate an attack and other hazards to protect personnel and physical assets.

d. Recover from attack. Future Army forces require the capability to mitigate the effects from attack and other threats to recover and restore mission essential capabilities.

## **B-6.** Sustainment

a. Deploy the force and overcome antiaccess capabilities. Future Army forces require the capability to mobilize, deploy, receive, stage, move, and integrate people, supplies, equipment, and units into an area of operations using advanced technology to avoid and/or mitigate enemy employment of strategic preclusion, operational exclusion, antiaccess and area denial capabilities and to ensure freedom of action.

b. Decentralized sustainment operations. Future sustainment forces require the capability to provide decentralized logistics, personnel services, and health services support (military, civilian, contractors, indigenous, host nation, or third country nationals), including joint, interagency, intergovernmental, multinational partners, that enable decisive action by leaders at lower echelons to provide commanders with operational adaptability.

c. Utilize a joint deployment and distribution enterprise. Future Army forces require a planning, execution, and control capability that delivers, governs, and tracks the location, movement, configuration, and condition of people, supplies, equipment, and unit information to sustain operations.

## **B-7.** Training and leader development

a. Train as the Army fights. Future Army forces require the capability to conduct tough, realistic training, adapting as the mission, threat, or operational environment changes, while ensuring that individual and collective training fosters adaptability, initiative, confidence, and cohesion to conduct operations decentralized.

b. Civil military operations. Future Army forces require leaders who are comfortable serving on civil military teams and possess the experience and knowledge to place military efforts in the context of policy and strategy and to achieve unity of effort with interagency, intergovernmental, and nongovernmental organizations, host nation leaders, indigenous elements, and civilian populations.

c. Lifelong learning and cognitive skills. Future Army forces require lifelong learners who are creative and critical thinkers with highly refined problem solving skills and the ability to process and transform data and information rapidly and accurately into usable knowledge, across a wide range of subjects, to develop strategic thinkers capable of applying operational art to the strategic requirements of national policy.

### **B-8.** Institutional Army

a. Combined arms teams. The Army must resource, organize, train, and equip cohesive combined arms teams able to employ the full range of joint and Army capabilities (for example, maneuver forces, mobile protected fire power, offensive and defensive fires, engineers, Army aviation, cyber/electronic capabilities, information engagement, and joint capabilities) to fight and win across the spectrum of conflict.

b. Institutional agility. The Generating Force must continually assess and adapt at a pace faster than before to direct and align modernization, readiness, and capability development processes and to ensure that the Operating Force has the doctrine, training, education, and material needed to fight and win.

### **B-9.** Human dimension

a. Develop resilient Soldiers. The Army requires the capability to develop resilient soldiers that can maintain their physical, mental, and emotional health during extended campaigns to maintain combat effectiveness.

b. Identify specialized skills and expertise. The Army requires the capability to identify and track soldiers with specialized skills and expertise (for example, commercial and business skills, language ability, ethnic and cultural background, and other specialized individual abilities) to conduct effective full-spectrum operations in complex environments.

### Appendix C Required Capabilities

#### C-1. Mission command

a. Future Army forces require the capability to educate and train the force to exploit initiative in uncertain, complex, and dynamic unified action environments to achieve operational and strategic advantage.

b. Future Army forces require the capability to operate decentralized in a unified action environment to enable them to achieve tactical, operational, and strategic advantage.

c. Future Army forces require the capability to develop leaders and staffs with expertise in design and the other components of the operations process to operate decentralized in uncertain, complex, and dynamic unified action environment.

d. Future Army forces require the capability to improve battlefield visualization, understanding, coordination, and synchronized action by sharing, displaying, and integrating essential information (such as, friendly, enemy, civil, weather) from dismounted Soldiers to theater Army headquarters within a unified action environment. This includes the incorporation

of ground and air platforms, mission command systems, and joint and Army sensors and operating in a degraded mode.

e. Future Army forces require the capability to provide timely flow of information in accordance with the commander's priorities with integrated, protected, layered, and secure communications capable of both line-of-sight and beyond-line-of-sight to enable unity of command within a unified action environment in decentralized full-spectrum operations. This includes the capability of operating in a degraded mode.

f. Future Army forces require the capability to ensure effective communication and coordination of enemy, friendly, civilian intelligence and information as well as political, military, economic, social, infrastructure and information variables across all Army echelons and joint, interagency, intergovernmental, and multinational organizations to achieve unity of effort.

g. Future Army forces require the capability to ensure effective communication and coordination of enemy, friendly, civilian intelligence and information as well as political, military, economic, social, infrastructure, and information variables across all Army echelons and external organizations to achieve unity of effort in unified action.

h. Future Army forces require the capability to gain and maintain the space, cyber/electromagnetic advantage and deny same to enemies to seize, retain, and exploit the initiative across the five warfighting domains in a unified action environment (land, air, maritime, space, and cyberspace). This includes the capability to manage and allocate the electromagnetic spectrum to understand and exploit the spectrum.

i. Future Army forces require the capability to engage and communicate via multiple means (face-to-face, print, broadcast media, text messages, social, and other emerging collaboration technology) to influence the perceptions, attitudes, sentiments, and behavior of key actors and publics in a unified action environment critical to mission success.

## C-2. Intelligence

a. Future Army forces require the capability to conduct intelligence, surveillance, and reconnaissance synchronization from the national to the tactical level during full-spectrum operations to enable situational awareness and understanding.

b. Future Army forces require the capability to develop intelligence requirements to satisfy the commander's information needs in full-spectrum operations.

c. Future Army forces require the capability to provide advanced collection capabilities in sufficient numbers and with the flexibility to address changes within the operational environment and signatures of interest to develop the situation through action by acquiring precise and timely information.

d. Future Army forces require the capability to integrate knowledge of the theater environment, such as culture, terrain, weather, infrastructure, demographics, and neutral entities,

in particular, understanding the perceptions of partners and other human elements of the environment to develop the situation through action and exert psychological and technical influence.

e. Future Army forces require the capability to conduct analysis of political, military, economic, sociological, infrastructure, and information aspects of the operating environment (and METT-TC), at all echelons to allow commanders at all levels to conduct operations in a decentralized manner in cooperation with partners.

f. Future Army forces require the capability to manage knowledge through the systematic process of discovering, selecting, organizing, distilling, sharing, developing, and using information in a social domain context to develop the situation through action.

g. Future Army forces require the capability to incorporate all sources of information and intelligence, including open source information, and fuse and produce intelligence in the context of the joint operational environment to provide a holistic understanding of the enemy and the operational environment while conducting full-spectrum operations.

## C-3. Movement and maneuver

a. Future Army forces require the capability to detect threats at extended ranges and with sufficient target location accuracy to permit engagements, and provide early warning to friendly forces and populations.

b. Future Army forces require the capability to seize and control key terrain while conducting combined arms operations to accomplish mission objectives through a combination of defeat and stability mechanisms.

c. Future Army forces require the capability to close with and defeat enemy forces while conducting combined arms operations to accomplish mission objectives.

d. Future Army forces require the capability to conduct joint vertical maneuver with mounted and dismounted forces into austere environments and unimproved entry locations while conducting combined arms operations to exploit positional advantage, put large areas at risk for the enemy, shorten the duration of battle, present multiple dilemmas to the enemy, and contribute to the more rapid disintegration of the enemy force.

e. Future Army forces require the capability to engage and control populations to ensure freedom of movement and uninterrupted maneuver, and to reduce noncombatant casualties.

f. Future Army forces require the capability to maneuver in all tactical and operational environments to destroy enemy capabilities and accomplish JTF objectives by employing a combination of defeat and stability mechanisms.

g. Future Army forces require the capability to detect, locate, identify, and track friendly and enemy forces, neutrals, and organizations in close proximity and at standoff distances while conducting full-spectrum operations in all operational environments to prevent fratricide.

h. Future Army forces require the capability to detect, locate, identify, track and engage individual leadership figures and high value targets while conducting combined arms operations in all operational environments to exert technical and psychological influence while employing a combination of defeat and stability mechanisms.

i. Future Army forces require the capability to rapidly transition between operations, shift between missions and engagements at distances from standoff range to close combat, and adjustment of geographical sectors while conducting full-spectrum operations to seize, retain, and exploit the initiative.

# C-4. Fires

a. Future Army forces require the capability to locate ground threats at sufficient ranges and accuracy to permit precision and area engagements of targets in offensive and defensive fires.

b. Future Army forces require the capability to detect aircraft, rockets, artillery, mortars, unmanned aircraft systems, and ballistic and cruise missiles, at sufficient ranges and accuracy to interdict these capabilities, warn friendly forces and populations, mitigate effects, and provide defensive fires.

c. Future Army forces require a wide range of conventional to precision capabilities to provide effective and efficient offensive and defensive fires against ground and aerial targets under a wide range of conditions.

d. Future Army forces require the capability to employ joint and multinational fires capabilities to enable decentralized access to these capabilities across wide areas.

e. Future Army forces require the capability to rapidly clear joint, Army, and multinational fires, on the ground and through the airspace, to provide offensive and defensive fires.

f. Future Army forces require operationally adaptable fires organizations with the capability to task organize at lower echelons to support operations decentralized across wide areas.

g. Future Army forces require operationally adaptable fires organizations with the capability to task organize with nonfires capabilities to conduct a wide range of missions in full-spectrum operations.

h. Future Army forces require operationally adaptable organizations with the capability to task organize with fires and nonfires capabilities to conduct a wide range of missions in full-spectrum operations.

### C-5. Protection

a. Future Army forces require the capability to integrate protection efforts and systems that are interoperable with joint partners to recommend and identify opportunities as they develop the situation through action.

b. Future Army forces require the capability to sense, monitor, and record activity (behaviors, characteristics, and others) about persons, places, or things to maintain freedom of action.

c. Future Army forces require the capability to integrate gathered data and previously produced intelligence, including threat, military and physical environments, and social, political, and economic factors to provide commander(s) decisionmakers possible courses of action.

d. Future Amy forces require the capability to determine enemy and friendly capabilities, hostile intent, and enemy likely courses of action to preserve the force.

e. Future Army forces require the capability to disseminate appropriate warning about threats; potential threats, and hazards to protect personnel and physical assets.

f. Future Army forces require the capability to execute defensive measures that generally operate independently and do not require manning and aid in preventing, deterring, or restricting the enemy from taking hostile actions otherwise employed against the joint force, to protect the force.

g. Future Army forces require the capability to execute active measures that prevent, deter, restrict, resist, or defeat enemy action or enemies who have demonstrated hostile intent to protect the force.

h. Future Army forces require the capability to provide convoy and movement protection to maintain freedom of action.

i. Future Army forces require the capability to employ survivability measures aimed at decreasing the impact of enemy attacks to maintain mission effectiveness.

j. Future Army forces require the capability to recover from the attack, manage the effects of the attack, and redistribute and restore capabilities to maintain mission effectiveness.

k. Future Army forces require the capability to provide area and fixed site protection to preserve combat power, enable sustainment operations, and allow a position from which the force can be projected.

l. Future Army forces require the capability to operate in a CBRNE environment and against nuclear armed enemies.

## C-6. Sustainment

a. Future sustainment forces require the capability to support decentralized force elements during operations for extended periods of time, over extended distances to enable commanders to exploit opportunities, control the tempo of operations, and maintain freedom of action.

b. Future Army forces require the capability to conduct sustainment operations in concert with diplomatic, informational, and economic efforts as part of a comprehensive, or whole of government, approach across the joint logistics enterprise to enhance the unity of effort and reduce complexity.

c. Future Army forces require the capability to incorporate joint and multinational sustainment information, assets, processes, personnel, and commodities into operations to achieve unity of effort and economy of force.

d. Future Army forces requires the capability to rapidly deploy and sustain forces, equipment, and materiel to multiple, widely dispersed locations down to point of employment without reliance on improved aerial and sea ports of debarkation to mitigate antiaccess challenges and allow the joint force to seize, retain, and exploit the initiative.

e. Future Army forces requires the capability to deploy forces with a fight off the ramp configuration which requires minimal RSOI and reconfiguration prior to employment in austere and complex geographical environments to allow the joint force to seize, retain, and exploit the initiative.

f. Future Army forces require the capability to deliver, manage, and track the location, movement, configuration, and condition of people, supplies, equipment, and unit information in near-real-time to achieve unity of effort and economy of force.

## C-7. ARSOF

a. Future Army forces require the capability to establish relationships and synchronize operations between general purpose forces and ARSOF elements.

b. Future Army forces require the capability to support ARSOF unique intelligence, surveillance, reconnaissance, and reach back requirements to ensure ARSOF can conduct its core missions.

c. Future Army forces require the capability to synchronize ARSOF units' intelligence and knowledge management capabilities to ensure full operational environment awareness.

d. Future Army forces requires the capability to support ARSOF intra-heater rotary and fixedwing operations to retain the flexibility to rapidly conduct widely distributed operations.

e. Future Army forces require the capability to provide, synchronize, and deconflict fire support with all ARSOF units to provide force protection.

f. Future Army forces require the capability to provide area and fixed site protection to all ARSOF units to preserve combat power and enable operations.

g. Future Army forces require the capability to integrate ARSOF requirements into sustainment operations to ensure unity of effort.

## C-8. SMDC

a. Future Army forces requires the creation of defensible cyber infrastructure with the technological diversity and capacity to enable Army forces to respond to, bypass, and fight through network intrusions, and allow Army forces to continue to operate even when systems are degraded or disrupted.

b. Future Army forces require redundant methods of transmitting, receiving, and storing information. This mitigates creating a single point of failure.

c. Future Army forces require the development of trained cyber forces that provide fullspectrum support to ground force commanders as they operate as part of a joint expeditionary force.

d. Future Army forces require commanders to train and prepare to operate networks under suboptimal conditions, including the loss of non-line-of-sight communications and global positioning systems, ensuring external threats, environmental conditions, or lack of interoperability between joint or partnered forces cannot prevent mission accomplishment.

e. Future Army forces require a synchronized approach to integrating defensive cyber capabilities with intelligence capabilities to develop understanding of the threats against networks.

f. Future Army forces require the ability to provide shared real-time situational awareness of the status of networks to facilitate command and control at all echelons, and rapidly respond to early warning of network intrusions.

#### Appendix D Implications for Joint and Interagency Partners

## **D-1.** Introduction

The conduct of future operations as outlined in this document has significant implications for joint and Army forces and interagency partners. This appendix identifies the capabilities the Army provides the joint force in support of joint combat, security, engagement, and relief and reconstruction activities. In addition, it outlines the capabilities the Army requires from its joint and interagency partners to conduct combined arms maneuver and wide area security in the context of full-spectrum operations.

## **D-2.** What the Army provides the joint force

a. The Army provides campaign-quality, expeditionary land forces capable of conducting contingency and sustained operations. Army forces conduct operations decentralized consistent with mission command and possess combined arms formations with increased capabilities at the tactical level. In concert with partners, they focus on sustained counterinsurgency, stability, and counterterrorist operations. Army forces conduct effective transitions focused on sustaining the continuity of operations over the course of a campaign.

b. The Army provides combined arms forces capable of close combat and reconnaissance in contact with the enemy and civilian populations. Army forces conduct combined arms maneuver and wide area security to seize, retain, and exploit the initiative. These forces also conduct continuous reconnaissance to discern enemy capabilities and intentions. They conduct airground operations with joint partners to achieve mutually reinforcing effects.

c. The Army provides land-based theater air and missile defense, detainee operations, and area of responsibility wide support of other military services as set forth in Title 10 U.S. Code. The Army operates theater sustainment commands to provide sustainment, including bulk fuel, to other forces as directed. The Army also operates a senior medical headquarters to provide health services.

d. The Army provides headquarters to serve as JTF and joint forces land component command when augmented, and able to integrate interagency, intergovernmental, and multinational capabilities. When augmented, corps serve in this role for major contingencies and direct the employment of major units in multiple, simultaneous, or sequential operations. Divisions can serve as JTF headquarters in small-scale contingencies and direct organic and habitually aligned forces and assets in the accomplishment of tactical missions.

e. The Army provides land-based capabilities to overcome antiaccess and area denial efforts. Army forces conduct forcible entry operations by parachute, air, amphibious, or land assault and present enemies with multiple threats from unexpected locations. Army forces employ in-flight command post capabilities to enable commanders to plan and coordinate operations with joint, interagency, and multinational partners while conducting intertheater movement. In addition, Army forces conduct combined entry operations into austere locations with damaged or destroyed infrastructure to conduct stability operations in support of foreign humanitarian assistance and disaster relief operations.

f. The Army provides regionally aligned forces to conduct sustained engagement, build capacity, and deter conflict. The Army employs specially trained general purpose forces to augment the activities of special forces in support of combatant command theater security cooperation plans. These forces build defense relationships, promote U.S. security interests, develop allied and friendly military capabilities for self-defense and multinational operations, and secure peacetime and contingency access to host nations by U.S. forces. In addition, they increase the commander's understanding of the local and regional security situation while participating in a wide array of training and exercises.

g. The Army provides selected units aligned to combatant commands to act as early entry forces in contingencies. Regionally aligned forces provide the commander with economic, cultural, and political context of the operational area, as well as the likely response of adversaries, key regional leaders, and the local populace to U.S. operations. These forces coordinate with indigenous forces to refine plans, gain and maintain contact with the enemy, fix or defeat forces to ensure freedom of maneuver for follow on forces, protect lodgment, fight for information, and provide the joint force commander reaction time and maneuver space.

## **D-3.** What the Army requires from joint and interagency partners

a. Future Army forces require assets to enable joint forcible entry. The joint force provides the means to move Army forces and counter sophisticated antiaccess campaigns across the five domains which may include terrorist attacks on the homeland, coercion of partners, air, and missile threats, cyber and space degradation, and harassment of tactical assembly areas.

b. Future Army forces require assets for intertheater movement of forces and sustainment by air and sea. Future air, land, sea, and amphibious platforms must be capable of moving sufficient forces to secure and expand lodgment and overcome limitations of infrastructure. Army forces must have access to intertheater and intratheater lift platforms with sufficient range, speed, and ability to project forces into unimproved or degraded locations. These platforms must be able to overcome enemy antiaccess, area denial efforts, or damage caused by disaster. In addition, joint forces must be able to sustain Army formations at extended lines of communication using various means of aerial resupply.

c. Future Army forces require capabilities to enable seabasing or other alternatives for theater access. Supporting arrival of Army units by sea, joint forcible entry operations provide seabased assets for command, control, fires, protection, intelligence, reconnaissance, and sustainment. Under austere conditions or when overcoming antiaccess and area denial technologies, joint seabasing reduces the requirement for large ground-based sustainment stocks and extended ground lines of communication. Army forces project from or through joint sea bases to envelop or turn, attack from unexpected directions, to seize key terrain or facilities, to disrupt rear operations, or to clear a littoral of antiaccess forces.

d. Future Army forces require joint assets to mitigate degradation of Army communication systems. The Army relies on the joint force to maintain communications, navigation, and intelligence systems necessary to conduct operations decentralized over wide areas. The joint force prevents the enemy from using commercial space capabilities and antisatellite capabilities. Army forces rely on a defensible cyber infrastructure with the technological diversity and capacity to prevent, bypass, or fight through network intrusions.

e. Future Army forces require access to joint fires in support of combined arms maneuver and wide area security. Access to joint fires is essential in close combat. Through precision and area munitions, joint fires also enable Army forces to conduct reconnaissance over large areas rapidly, and enhance their ability to maintain contact with enemies. Joint air-ground teams establish habitual relationships and operate routinely to improve speed of action and develop a deeper understanding of the environment and mission.

f. Future Army forces require interagency capabilities at lower echelons in support of wide area security and combined arms maneuver. Army forces require interagency capabilities at battalion and below to accomplish reconstruction both during and after combat. Among the most important capabilities required are security sector reform, reconstruction, and economic development, development of governmental capacity, and the establishment of rule of law. When exercised in concert with military action to ensure adequate security, these capabilities set the conditions for transfer of responsibilities to the host nation.

g. Future Army forces require protection at strategic, operational, and tactical levels. At the strategic level, Army forces require extensive integration and coordination with civil authorities to protect personnel, installations, and major transportation hubs. At the operational level, Army forces rely on other services to secure movement of personnel and equipment to and from theaters of operation. At the tactical level, the Army depends on the joint force to gain and maintain air and sea superiority. Throughout all three levels of war, the Army requires joint and interagency assets to maintain cyber and space superiority, specifically to counter sophisticated information campaigns.

h. Future Army forces require access to joint and national level intelligence assets. As part of the intelligence preparation of the environment, Army forces rely on information and intelligence feeds from national and DOD agencies, to support planning and execution. In support of forcible entry operations, joint collection platforms identify potential lodgments, enemy antiaccess and area denial capabilities, force dispositions, and indigenous security force capabilities. Army forces rely on well developed human intelligence networks to refine intelligence from other sources and drive operations. These networks also provide critical information and intelligence to Army forces conducting sustained engagement activities.

## Glossary

## Section I Abbreviations

ACC	Army Capstone Concept
ACF	Army Concept Framework
AOC	Army Operating Concept
ARCIC	Army Capabilities Integration Center
ARSOF	Army special operations forces
BCT	brigade combat team
CBRNE	chemical, biological, radiological, nuclear, and high yield explosives
COIC	Counter IED Operations Intelligence Center
DA	Department of the Army
DOD	Department of Defense
DODD	Department of Defense Directive
DOTMLPF	doctrine, organizations, training, materiel, leadership and education personnel, and facilities
FM	field manual
IED	improvised explosive device
JTF	1 1
	joint task force
MARO	mass atrocity response operations
METT-TC	mission, enemy, troops, time available, terrain, and civil considerations
Pam	pamphlet
QDR	Quadrennial Defense Review
RSOI	reception, staging, onward movement, and integration
TRADOC	U. S. Army Training and Doctrine Command
U.S.	United States
WMD	weapons of mass destruction

## Section II

Terms

## control (stability mechanism)

The imposition of civil order. Actions to establish control include securing borders, routes, sensitive sites, population centers, and individuals. Control may involve physically occupying key terrain and facilities.

## defeat mechanism

A broad approach used to accomplish the mission against enemy opposition. Defeat mechanisms include the following: destroy, dislocate, disintegrate, and isolate (TRADOC Pam 525-3-0).

## mission command

The exercise of authority and direction by the commander and the commander's staff to integrate the warfighting functions using the operations process and mission orders to accomplish successful full-spectrum operations. Mission command enables agile and adaptive leaders and organizations to execute disciplined initiative within commander's intent as part of unified action in a complex and ambiguous environment.

### stability mechanism

A broad approach used to consolidate gains and create conditions that contribute to stable situations consistent with policy goals. Stability mechanisms include the following: compel, control, influence, and support (TRADOC Pam 525-3-0).

### support (stability mechanism)

The establishment or strengthening of conditions necessary for other instruments of national power to function effectively.

Section III Special Terms

## co-creation of context

A continuous process in which commanders direct intelligence priorities to drive operations, and the intelligence that these operations produce causes commanders to refine operations based on an improved understanding of the situation.

### combined arms

The combination of the elements of combat power with the integration and sequencing of all actions, activities, and programs necessary to seize, retain, and exploit the initiative in the context of full-spectrum operations.

### combined arms maneuver

The application of the elements of combat power in a complementary and reinforcing manner to achieve physical, temporal, or psychological advantages over the enemy, preserve freedom of action, and exploit success.

#### compel (stability mechanism)

Use or threat of lethal force to establish control, effect behavioral change, or enforce compliance with mandates, agreements, or civil authority.

#### defensive fires

Protect friendly forces, populations, and critical infrastructure. Examples of defensive fires include: ballistic missile defense; support to defensive counterair operations; air and missile defense; counter rocket, artillery, and mortars; counterfire; and final protective fires. (Proposed new term.)

#### destroy (defeat mechanism)

The application of combat power against an enemy capability so that it can no longer perform any function and cannot return to a usable condition without being entirely rebuilt.

## disintegrate (defeat mechanism)

The disruption of the enemy's command and control system, thus degrading the ability to conduct operations while leading to a rapid collapse of the enemy's capabilities or will.

## dislocate - (defeat mechanism)

The maneuver of forces to obtain significant positional advantage, rendering the enemy's dispositions less valuable, and perhaps even irrelevant.

## influence (stability mechanism)

The shaping of opinions and attitudes of a civilian population through information engagement, presence, and conduct. Influence is particularly difficult to achieve and measure.

### isolate (defeat mechanism)

The denial of enemy or adversary access to capabilities that enable the exercise of coercion, influence, potential advantage, and freedom of action.

### network

A single, secure, standards-based, versatile infrastructure linked by networked, redundant transport systems, sensors, warfighting and business applications, and services that provide Soldiers and civilians timely and accurate information in any environment, to manage the Army enterprise and enable full-spectrum operations with joint, allied, and interagency partners.

### offensive fires

Preempt the enemy's actions. Examples of offensive fires include: preparatory fires, shaping fires, close supporting fires, interdiction, support to offensive counter-air operations, offensive electronic attack, and counter-fire.

## operating decentralized

A manner of conducting military operations which enables subordinates to act aggressively and independently with disciplined initiative to develop the situation; seize, retain, and exploit the initiative; and cope with uncertainty to accomplish the mission within the commander's intent.

#### operational adaptability

A quality that Army leaders and forces exhibit based on critical thinking, comfort with ambiguity and decentralization, a willingness to accept prudent risk, and ability to make rapid adjustments based on a continuous assessment of the situation.

#### wide area security

The application of the elements of combat power in coordination with other military and civilian capabilities to deny the enemy positions of advantage; protect forces, populations, infrastructure, and activities; and consolidate tactical and operational gains to set conditions for achieving strategic and policy goals.

#### Endnotes

<sup>4</sup> Earlier approved versions of Army concepts from 2005 to 2008 employed the term "future Modular Force" to describe Army organizations. This concept and all of concepts that make up the ACF utilize "future Army forces," defined to include all types of future Army organizations, units, and formations.

 $^{5}$  Assumptions from the ACC: (1) The network (to include global information grid, LandWarNet, collection platforms, and fusion and dissemination capabilities) cannot in and of itself deliver information superiority. (2) Future enemies will combine conventional and unconventional tactics while fighting in complex terrain (both urban and rural) to limit U.S. forces' ability to develop the situation out of contact and achieve overmatch with long range weapons. (3) Future enemies will attempt to counter or interrupt U.S. advantages in communications, surveillance, long-range precision fires, armor protection, and mobility. (4) Future enemies will seek WMD and ways to employ them. (5) Future enemies will attempt to influence the will of the American people and key allies, through propaganda, disinformation, and attacks on U.S. and allies' assets at home or abroad. (6) Advanced air and sealift capabilities that permit intertheater and intratheater operational maneuver from strategic distances, mounted vertical maneuver, and the use of unimproved ports of debarkation, will not be fielded in the quantities required in the concept timeframe (2016-2028). (7) The U.S. will continue to employ an all-volunteer force.

<sup>6</sup> Defense Budget Recommendation Statement (Arlington, VA). As prepared for delivery by the Secretary of Defense, Arlington, VA, Monday, April 06, 2009. Retrieved from <u>http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1341</u>

<sup>7</sup> The National Defense Strategy, the Undersecretary of Defense for Policy speech focused on rebalancing the Force, the Capstone Concept for Joint Operations, and the Army's Chief of Staff white paper addressing a balanced Army, all provide different lists of national security interests, priorities, or objectives. National Defense Strategy, June 2008. Objectives: Defend the homeland; win the long war; promote security; deter conflict; win our Nation's Wars. *Rebalancing the Force: Major Issues for QDR 2010*, Michele Flournoy, Undersecretary of Defense for Policy, Speech to Center for Strategic and International Studies, 29 April 2009. Security challenges: Rise of violent extremist movements; proliferation of WMD; rising powers and the shifting balances of power; failed and failing states; increasing tensions in the global commons. Capstone Concept for Joint Operations, 7. National security challenges: Win the Nation's wars; deter potential adversaries; develop cooperative security; defend the homeland; respond to civil crisis. *The Army of the 21st Century*, Casey, George W., General, Chief of Staff of the Army, October 2009 (Army Magazine, 59 (10). Objectives: Prevail in protracted counterinsurgency campaigns; engage to help other nations build capacity and assure friends and allies; support civil authorities at home and abroad; deter and defeat hybrid threats and hostile state actors.

<sup>8</sup> According to DODD 5100.01.

<sup>9</sup> DODD 5100.01, Functions of the Department of Defense and Its Major Components.

<sup>10</sup> The DOD QDR Report 2010 outlines six key missions for the DOD, 12-15. Those missions are defend the U.S. and support civil authorities at home; succeed in counterinsurgency, stability, and counterterrorism operations; build the security capacity of partner states; deter and defeat aggression in anti-access environments; prevent proliferation and counter weapons of mass destruction; and operate effectively in cyberspace.

<sup>11</sup> Director, National Intelligence. (U) National Intelligence Estimate on the Terrorist Threat to the U.S. Homeland, 2010. Portions cited are unclassified.

<sup>12</sup> The Operational Environment 2009-2025, TRADOC, May 2009.

<sup>13</sup> Office of the Director of National Intelligence. Long Range Military Assessment Team. National Intelligence Council, 31 May 2010.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

<sup>16</sup> Union of Concerned Scientists (UCS). UCS Satellite Database, 1 April, 2010.

<sup>17</sup> National Ground Intelligence Center. (U) Anti Armor IED Trends and Projections. Portions cited are unclassified, 15 October, 2009.

<sup>18</sup> Korns, S. & Kastenberg, J. (2008-2009, Winter) Georgia's Cyber Left Hook. *Parameters*. Strategic Studies Institute. 60-76. Retrieved from http://www.carlisle.army.mil/usawc/parameters/ArticleIndex.cfm

<sup>19</sup> Defense Intelligence Agency. (U) Joint Strategic Assessment 2010- 2030. Portions cited are unclassified, 21 May 2010.

<sup>20</sup> Congressional Research Service Report-RL31741, Homeland Security: Protecting Airliners from Terrorist Missiles, 2003.

<sup>21</sup> Ibid.

<sup>22</sup> Capstone Concept for Joint Operations, 12.

<sup>23</sup> Lind, W.S. (1993). The Theory and Practice of Maneuver Warfare. In R. D. Hooker (Ed.), Maneuver warfare – An anthology, 9.

<sup>24</sup> The concept and application of mission command is described in greater detail in TRADOC Pam 525-3-3.

<sup>25</sup> A leader may consider METT-TC or political, military, economic, social, information, infrastructure, physical environment and time as example constructs that facilitate planning.

<sup>26</sup> van Creveld, Martin. (1987). Command in War. Massachusetts: Harvard University Press. 270.

<sup>27</sup> Johnson, D. (2010, April). Military Capabilities for Hybrid War, Insights from the Israel Defense Forces in Lebanon and Gaza. "The basics of combined arms fire and maneuver are necessary for successful operations against opponents with capabilities like Hezbollah and Hamas. These hybrid opponents create a qualitative challenge that demands combined arms fire and maneuver at lower levels, despite their generally small-unit structures. The Israelis had lost these skills after years of preparing for and confronting (understandably) terrorist attacks during the second intifada. The U.S. Army, focused as it necessarily is on preparing soldiers and units for duty in Iraq and Afghanistan, might be approaching a

<sup>&</sup>lt;sup>1</sup> The six supporting ideas contained in TRADOC Pam 525-3-0 are develop the situation through action, conduct combined arms operations, employ a combination of defeat and stability mechanisms, integrate joint capabilities, cooperate with partners, and exert psychological and technical influence. For a detailed description of these ideas, refer to TRADOC Pam 525-3-0, 17-24.

<sup>&</sup>lt;sup>2</sup> The seven core operational actions outlined in the ACC are *conduct security force assistance, shaping and entry operations, intertheater and intratheater operational maneuver, full-spectrum operations, overlapping protection operations, distributed support and sustainment, and network enabled mission command.* For a detailed description of these core actions, refer to TRADOC Pam 525-3-0, 24-30.

 $<sup>^{3}</sup>$  To develop the AOC, 51 subject matter experts from 21 separate joint and Army functions and organizations conducted a collaborative writing workshop. This workshop examined eight types of operations to set the context for discussion of organizational and functional roles, capability gaps, and interdependencies with other functions. The workshop considered how the Army would execute the seven core operational actions in context of future scenarios.

condition similar to that of the Israelis before the 2006 Second Lebanon War: expert at COIN, but less prepared for sophisticated hybrid opponents."

House, Jonathan M. (1984). Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, Doctrine, and Organization (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1-6.

FM 3-0, glossary-3.

The concept of combined arms will expand as technological advancements in robotics, artificial intelligence, and unmanned vehicles create additional capabilities that are efficient, viable, affordable, and easily integrated with combined arms forces.

FM 3-0. 4-7.

<sup>32</sup> FM 3-0. Combat power is defined as "the total means of destructive, constructive, and information capabilities that a military unit/formation can apply at a given time." Army forces generate combat power by converting potential into effective action. Glossary-3.

<sup>33</sup> ACC, 19. <sup>34</sup> Ibid, 20.

<sup>35</sup> Ibid, 19.

<sup>36</sup> The AOC includes the addition of protecting forces; expanding upon the tactical task of security and area security operations, wide area security protects populations and other assets to deny advantages to enemies. According to FM 3-90, area security is a form of security operations conducted to protect friendly forces, installations, routes, and actions within a specific area. This differs from FM 3-0 February 2008, 3-11.

FM 3-90 p12-2; the fundamentals of security operations are to provide early and accurate warning, provide reaction time and maneuver space, orient on the force or facility to be secured, perform continuous reconnaissance, and maintain enemy contact.

ACC. 20.

39 Nadia Schadlow, War and the Art of Governance. Parameters, Autumn 2003, 86.

<sup>40</sup> Summary, Commander's Appreciation and Campaign Design. 41

Schultz, Jr., R. H & Godson, R. Intelligence Dominance A Better Way Forward in Iraq. 3.

42 Clausewitz, On War - fog of war; "Many intelligence reports in war are contradictory; even more are false, and most are uncertain."

43 Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan, MG Michael T. Flynn, USA, CPT Matt Pottinger, USMC, and Paul D. Batchelor, Defense Intelligence Agency, Joint Center for Operational Analysis Journal, vol XI, issue 3, fall 2009, 71.

James A. Dewar, Carl H. Builder, William M. Hix, Morlie H. Levin, Assumption-based planning, RAND 1993.

45 Drilling for certainty http://www.nytimes.com/2010/05/28/opinion/28brooks.html.

<sup>46</sup> Summary, Commander's Appreciation and Campaign Design.

47 James Surowiecki (2005) Wisdom of Crowds. Random House. Chapter 3 Summary.

<sup>48</sup> Elina Hiltunen "The Future Sign And Its Three Dimensions" The Finland Futures Research Centre. 2007. A weak future signal is an early warning of change, which typically becomes stronger by combining with other signals. The significance of a weak future signal is determined by the objectives of its recipient, and finding it typically requires systematic searching. A weak future signal requires: (i) support, (ii) critical mass, (iii) growth of its influence space, and dedicated actors, i.e. 'the champions' in order to become a strong future signal, or to prevent itself from becoming a strong negative signal. A weak future signal is usually recognized by pioneers or special groups, not by acknowledged experts.

Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan, MG Michael T. Flynn, USA, CPT Matt Pottinger, USMC, and Paul D. Batchelor, Defense Intelligence Agency), Joint Center for Operational Analysis Journal, vol XI, issue 3, fall 2009, 71.

As van Creveld points out, the more important the human element in any situation, the greater the uncertainty involved. Any command system must be adapted to accommodate the level of uncertainty involved in performing the task at hand. van Creveld, 268.

Odierno, R. Brooks, N., & Mastracchis, F. (2008, 3rd Quarter). "ISR Evolution in the Iraqi Theater," Joint Forces Quarterly 50 (55). Retrieved from The U.S. Army Professional Writing Collection at http://www.army.mil/professional/writing/volumes/volume6/august 2008/8 08 4.html.

<sup>52</sup> FM 5-0, 3-1.

<sup>53</sup> Transitions Panel Paper, Panel Two, Unified Quest Future Warfare Study, Decentralized Operations Seminar, recommended the following as the canon of Army doctrine: FM 3-0, FM 6-0, FM 3-90, FM 5-0, FM 3-24, FM 7-0, FM 3-07, FM 6-22, and FM 7-15, 4 February 2010, 2.

An example would be battlefield circulation or leader presence at a civil-military meeting.

<sup>55</sup> The fundamentals of security operations are provide early and accurate warning, provide reaction time and maneuver space, orient on the force or facility to be secured, perform continuous reconnaissance, and maintain enemy contact.

The fundamentals of reconnaissance are: ensure continuous reconnaissance, do not keep reconnaissance assets in reserve, orient on the reconnaissance objective, report information rapidly and accurately, retain freedom of maneuver, gain and maintain enemy contact, and develop the situation rapidly.

ISR is used throughout Army lexicon when only one element of the acronym applies.

<sup>58</sup> Based on experience in recent operations in Iraq and Afghanistan, these resources may include one or more of the following: joint fires controllers, human intelligence capabilities, unmanned aerial systems, signals intelligence capabilities, satellite communications, document exploitation, weapons intelligence, explosive ordnance disposal, engineers, and civil affairs.

Unified Quest 10: Organize for Maneuver paper, 18 May 2010. Routine augmentations and risks taken in brigade task organization in current operations illustrate a number of organizational shortcomings. Future force design decisions must be based on the foundation of combined arms maneuver capability in the context of extended land campaigns.

The Complex Web Defense Experiment conducted at the Mounted Maneuver Battle Lab in July 2008 concluded that the heavy brigade combat team reconnaissance squadron, operating using a force design update organization with cavalry troops organized with Abrams tanks and Bradley cavalry fighting vehicles, enhanced the heavy brigade combat team's freedom of maneuver to close with and defeat threats in the close fight. During the simulation, the augmented heavy brigade combat team closed capability gaps of existing organizations by distinguishing combatants and non-combatants within a complex urban environment and securing lines of communications.

Unified Quest senior working group and simulation exercise observations in discussions from operational panel members in Central Command and Africa Command regional panels, 26-30 April 2010.

<sup>62</sup> Decentralized Operations Doctrine Panel Paper, "Across the full-spectrum of operations, the [brigade] needs increased engineer capabilities in order to adequately perform its assigned missions." "The battalion has insufficient engineer capacity and capability," 3.

<sup>63</sup> Ibid. "The current battalion level authorization does not provide an adequate communications infrastructure to allow the commander to communicate to subordinate units across wide areas," 2.

<sup>64</sup> Ibid. "Depending on the environment and other factors, requirement to support operations will be varied between decentralized and centralized operations. Sustainment requirements may also change as a result of the transition [between centralized and decentralized operations]," 2; "Decentralized units must have sufficient organic or attached sustainment capability to maintain the force, or have timely and reliable access to sustainment capabilities," 5; *Decentralized Operations Doctrine Panel Paper*, "Sustainment units are currently not adequately equipped to conduct operations in a decentralized environment," 2.

<sup>65</sup> Capstone Concept for Joint Operations, 25.

<sup>66</sup> A good example of how to incorporate partners in training, education, and leader development is the 10th Mountain Division's specialty skills initiative. This program incorporates representatives from various interagency partners in pre-deployment training, as well as planning and execution of full-spectrum operations. In addition, Army leaders work in conjunction with partners to identify ways to employ joint, interagency, and combined capabilities at lower tactical echelons.

<sup>67</sup> Education in negotiation and mediation techniques is a gap in leaders' education that can be filled with self-study until the military begins to incorporate this instruction into its formal education programs. For relevant work conducted in this area by the Harvard Negotiation Project, see <u>www.pon.harvard.edu/research/projects/hnp.php3</u>. For a book useful in connection with preparing for negotiation and mediation in a counterinsurgency environment, see Roger Fisher and Daniel Shapiro, *Beyond Reason: Using Emotions as You Negotiate* (New York: Viking, 2005).

<sup>68</sup> TRADOC Pam 525-3-0, 19. *Transitions Panel Paper*, Panel One, Unified Quest Future Warfare Study, Decentralized Operations Seminar, 4 February 2010, 4.

<sup>69</sup> Land Operations 2021: The Force Employment Concept for Canada's Army of Tomorrow, 8.

<sup>70</sup> Strategic corporal and tactical generals - <u>http://www.brookings.edu/articles/2009/summer\_military\_singer.aspx</u>

<sup>71</sup> Maneuver Warfare – An Anthology, 146.

<sup>72</sup> High levels of unit cohesion reduce the likelihood of breakdowns in discipline that result in immoral or unethical conduct. Such breakdowns are often traced to ignorance, uncertainty, fear, or combat trauma. Ignorance of the mission and environment, or a failure to internalize the professional military ethic may cause Soldiers to break the sacred trust that binds them to society and each other. Uncertainty combines with the persistent danger of combat to incite fear in both individuals and units. Leaders must strive not only to reduce uncertainty for their Soldiers, but also to build confident units. Confidence serves as a bulwark against fear and its corrosive effect on morale, discipline, and combat effectiveness. Fear experienced over time or a traumatic experience can lead to combat trauma, which in turn, often manifests itself in rage and actions that compromise the mission.

<sup>73</sup> As General Stanley McChrystal stated in his training guidance to the international security assistance force in Afghanistan, "Master the basics.
Become an expert in your field. Whatever your job, train on it, over and over again, so you can accomplish the routine tasks, routinely." Counterinsurgency Training Guidance, 10 November 2009.
<sup>74</sup> Historically, successful Army leaders have consistently promoted strong morale, cohesion, and mental preparation in their subordinates. In

<sup>74</sup> Historically, successful Army leaders have consistently promoted strong morale, cohesion, and mental preparation in their subordinates. In units with strong bonds, Soldiers reflect their leader's professional values and report that core Soldier values are very important to them. Without such bonding and positive leadership, some otherwise highly cohesive units have adopted dysfunctional norms and behaviors. This socialization process reflects the Soldier's internalization of these values as his or her own. For more detail, see TRADOC PAM 525-3-7, Page 9.

<sup>75</sup> Unified Quest 10: Organizing the Army for Ground Maneuver paper, 3.

<sup>76</sup> Unified Quest 10: Decentralized Operations paper, 1.

<sup>77</sup> ACC, 16.

<sup>78</sup> Analytic work from recent years supports the requirement for such a capability at corps and division level. The September 2007 RAND study, *Reconnaissance Capability for the Division*, examined the ability of the battlefield surveillance brigade to collect intelligence. The study concluded that this brigade lacked the mobility, survivability, and combat power to conduct effective reconnaissance because of its inability to fight for information. Additionally, an organizational based assessment completed in 2008 identified critical capacity gaps in the battlefield surveillance brigade that prevented it from delivering the "see first, understand first" capability sought in the 2005 TRADOC Pam 525-3-0.

<sup>79</sup> Corps and Division Joint, Interagency, and Multinational Operations Tactics, Techniques, and Procedures Gap Analysis, No. 08-37, June 2008, Combined Arms Center, Ft. Leavenworth, KS.

<sup>80</sup> Commander's Appreciation and Campaign Design, 12.

<sup>81</sup> As cited above, the 10<sup>th</sup> Mountain Division has already developed a pilot program to train these skills. 10<sup>th</sup> Mountain Division Specialty Skills Initiative Pilot Update, 19 February 2010.

<sup>82</sup> 15 July 2009 memorandum from MG Robert Caslen, CG Multinational Division North, Contingency Operating Base Speicher, Iraq, to COL David Teeples, Chief of Armor, Subject: Response to White Paper for Full-spectrum Cavalry Regiment.

<sup>83</sup> DOD QDR Report 2010. Washington, D.C., viii.

<sup>84</sup> Counterinsurgency Training Guidance, 10 November 2009. Guidance from GEN McChrystal to his command states that language skills can be as important as combat skills.

<sup>85</sup> Unified Quest 10: Regional Alignment of Future Army Forces paper 7 May 2010, 2.

<sup>86</sup> DOD QDR Report 2010. Washington, D.C., 11.

<sup>87</sup> For a detailed discussion of the three dimensions, refer to TRADOC Pam 525-3-3.

<sup>88</sup> DOD QDR Report 2010. Washington, D.C., 39.

<sup>89</sup> Shadlow, War and the Art of Governance., 86. "The U.S. entered virtually all of its wars with the assumption that the government of the opposing regime would change or that the political situation would shift to favor U.S. interests. During the Spanish-American War, the U.S. sought to change the governments of Cuba and Puerto Rico, and succeeded. During the Civil War, Washington was determined to change the way the South was governed. In Panama in 1989, the U.S. ousted Manuel Noriega, and the war did not end until the regime against which U.S. forces had fought was out of power and political stability had resumed."

<sup>90</sup> Nadia Schadlow, War and the Art of Governance, Parameters, Autumn 2003, 88.

91 Ibid., ES-2.

<sup>92</sup> Homeland Defense and Civil Support Joint Operating Concept, Version 2.0, 9.

<sup>93</sup> DOD QDR Report 2010. Washington, DC, vii.

<sup>94</sup> Ibid, 13.

95 Commanders must also understand the legal authorities and limitations of the Foreign Assistance Act when conducting security force assistance.

Admiral Mike Mullen, Chairman Joint Chiefs of Staff, speech, Kansas State University, 03 March 10.

97 Seabasing is the rapid deployment, assembly, command, projection, reconstitution, and re-employment of joint combat power from the sea, while providing continuous support, sustainment, and force protection to select expeditionary joint forces without reliance on land bases within a joint operations area. These capabilities expand the operational maneuver options, and facilitate assured access and entry from the sea. Seabasing Joint Integrating Concept, 11.

National strategy to combat weapons of mass destruction 2002.

DOD QDR Report 2010. Washington, D.C., .iv.

<sup>100</sup> Ibid, 7.

<sup>101</sup> Ibid, vii.

<sup>102</sup> Joint Publication 1-02; Chairman of the Joint Chiefs of Staff Memo 19 August 2009.

<sup>103</sup> Space Posture Review, 2010

<sup>104</sup> DOD has begun a Space Posture review, which is a legislatively-mandated review of U.S. national security space policy and objectives, conducted jointly by the Secretary of Defense and the Director of National Intelligence. The review analyzes the relationship between military and national security space strategy and assesses space acquisition programs, future space systems, and technology development. The review covers a ten-year period beginning February 1, 2010.

<sup>105</sup> Ibid, vi.

<sup>106</sup> Preventing Genocide, A Blueprint for U.S. Policy Makers, xvii.

<sup>107</sup> Ibid.

<sup>108</sup> Preventing, 25-26.

<sup>109</sup> Preventing, xviii.

<sup>110</sup> A Leader Development Strategy for a 21<sup>st</sup> Century Army, Headquarters U.S. Army TRADOC, 25 November 2009, 1.

<sup>111</sup> GEN Martin E. Dempsey, Our Army's Campaign of Learning, Landpower Essay No. 09-3, November 2009, 4.

<sup>112</sup> FM 7-0, 1-5.

<sup>113</sup> Talent Wardynski, 9-10.

<sup>114</sup> Scales, MG (RET) Robert H. Too Busy to Learn, Proceedings, 34.

<sup>115</sup> The five official UN languages in addition to English are Arabic, Chinese, French, Russian, Spanish.

<sup>116</sup> The course of the irregular conflicts in both Afghanistan and Iraq demonstrate the truth of this statement. Justin Kelly and Michael Brennan, Alien: How Operational Art Devoured Strategy, Strategic Studies Institute, U.S. Army War College, Carlisle, PA, September 2009, 66-67. The course of the irregular conflicts in both Afghanistan and Iraq demonstrate the truth of this statement. <sup>117</sup> David W. Barno, LTG, USA (Ret), *Building the Army We Need: Shaping the Right Force for the 21st Century*, unpublished draft paper, used

by permission of the author.

Dr. Tami Davis Biddle, "Educating Senior Military Officers: Observations from the Carlisle Parapet," US Army War College, Carlisle Barracks, PA, 19. (Used with permission.)

<sup>119</sup> Biddle, 9.

<sup>120</sup> Jus in bello, translated as justice in war, are agreements defining limits on acceptable conduct while already engaged in war. Also considered "rules of war." The Geneva Conventions are a set of jus in bello.

<sup>121</sup> Biddle, 15.

<sup>122</sup> "The Army Profession and Its Ethic, CSA White Paper, Don Snider et al. Center for the Army Professional Ethic.

<sup>123</sup> Part of the Soldier's creed: I will always place the mission first. I will never accept defeat. I will never quit. I will never leave a fallen comrade.

<sup>124</sup> Christopher Coker, The Warrior Ethos: Military Culture and the War on Terror, 135-138.

<sup>125</sup> "The Army Profession and Its Ethic," Draft CSA White Paper, Don Snider et al. Center for the Army Professional Ethic.

<sup>126</sup> For the Army values, see <u>www.goarmy.com/life/living\_the\_army\_values.jsp</u>. For comprehensive analyses of the Army profession and military ethics, see Don Snider and Lloyd Mathews, eds., The Future of the Army Profession: Revised and Expanded Edition (McGraw Hill, 2005). The counterinsurgency manual states that "the Nation's and the profession's values are not negotiable and that "violations of them are not just mistakes; they are failures in meeting the fundamental standards of the profession of arms." FM 3-24, *Counterinsurgency*, 7-1. <sup>127</sup> Don. M. Snider and Gayle Watkins. eds., The Future of the Army Profession, 291.

<sup>128</sup> Samuel P. Huntington, The Soldier and the State, Cambridge: Harvard University Press, 1957, p8.

<sup>129</sup> Richard H. Kohn, *Tarnished Brass: Is the U.S. Military Profession in Decline?*, World Affairs, Spring 2009, 4.

<sup>130</sup> MAJ Robert L. Green, Army Professional Military Leader Development, Army Magazine, December 2009, 46.

<sup>131</sup> Nagl, et al. Keeping the Edge: Revitalizing America's Military Officer Corps, Center for New American Security, February 2010, 16.

<sup>132</sup> FM 1-02. Strategic mobility – The capability to deploy and sustain military forces worldwide in support of national strategy.

133 FM 1-02. Operational reach – The distance and duration across which a unit can successfully employ military capabilities. Operational reach is a function of protection, sustainment, endurance, and relative combat power.

<sup>134</sup> DOD QDR Report 2010. Washington, D.C., and Resource Management Decision 700.