



The U.S. Army Capstone Concept

19 December 2012



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 19 DEC 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE The U.S. Army Capstone Concept				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Army Training and Doctrine Command (TRADOC),Fort Eustis,VA,23604-5763				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 43	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Foreword

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

For generations, the U.S. Army has proudly served the Nation by winning wars, securing peace, and protecting national interests as part of the joint force. From Yorktown to Sadr City, the men and women of the Army demonstrated the ability to force terms upon our enemies when all other options failed. There are many elements of national power, but a force that can root out and defeat our enemies, and exert control to prevent and end conflict remains the foundation of our Nation's ability to deter aggression. Concurrently, through partnership activities, the Army creates shared values and interests that provide for our long-term security, decreasing the likeliness we have to use force in defense of our Nation.


The Army remains the foundation of our Nation's security, now and into the future, by maintaining a force that prevents miscalculation by potential adversaries, shaping the operational environment, and, when required, winning decisively. Our Army must provide depth and versatility to the joint force; remain agile, responsive, and effective for combatant commanders; and offer options to national security decisionmakers in defense of the Nation at home and abroad.

As the lead document of the Army Concept Framework, TRADOC Pam 525-3-0, *The U.S. Army Capstone Concept* (ACC) describes our vision of the future operational environment, the role of the Army in the joint force, and the broad capabilities required by future Army forces. Greater speed, quantity, and reach of human interaction and increased access to military capabilities make the operational environment more unpredictable and complex, driving the likelihood and consequence of disorder.

The ACC provides a guide to how the Army will apply available resources to overcome these challenges and prevent, shape and win in support of recent strategic guidance. The ACC also serves as the foundation for a campaign of learning that will evaluate and refine its major ideas and required capabilities. Finally, the ACC provides a roadmap for development of a comprehensive investment strategy that will rebalance the Army's force structure, readiness, and modernization efforts in support of national strategy.

TRADOC Pam 525-3-0 establishes that, to meet the challenges of the future operational environment, the Army must maintain a credible capacity to *win decisively* and support combatant commanders across a wide range of military operations at home and abroad. The credibility of our Army, robust, ready, and modernized, underpins our ability to prevent conflict, shape the operational environment, and win the Nation's wars as part of the joint force. Further, the ACC retains the idea of *operational adaptability* as the fundamental characteristic of the Army required to execute a wide variety of missions. The ACC expands operational adaptability to the people and organizations that comprise the institutional Army as well as the operating force. Finally, the ACC also provides insight into the wide array of Title 10 requirements the Army provides the joint force.

The ACC hones the Army's understanding of emerging challenges and informs our preparation for the future, ensuring our Army stands ready to meet the demands that lie ahead. In the end, if we build a capable, credible Army in peace, we are far less likely to use it in war.



ROBERT W. CONE
General, U.S. Army
Commanding

Department of the Army
Headquarters, United States Army
Training and Doctrine Command
Fort Eustis, VA 23604-5763

*TRADOC Pamphlet 525-3-0

19 December 2012

Military Operations

THE U.S. ARMY CAPSTONE CONCEPT

FOR THE COMMANDER:

ROBERT W. CONE
General, U.S. Army
Commanding



CHARLES E. HARRIS, III
Colonel, GS
Deputy Chief of Staff, G-6

History. This is a major revision of United States Army Training and Doctrine Command (TRADOC) Pamphlet (TP) 525-3-0. Because this publication is revised extensively, not all changed portions have been highlighted in the summary of change.

Summary. TP 525-3-0 describes what the future Army must do as part of the joint force to achieve the Nation's strategic objectives. This description is predicated on the Army's enduring missions and the future operational environment, characterized by an era of fiscal constraint. TP 525-3-0 describes the required capabilities the future Army will need to enable the nation to prevent conflict, shape the environment, and win the Nation's wars.

Applicability. This concept guides future force development and supports the Joint Capabilities Integration and Development System process. It also supports Army capabilities development processes described in the Army Capabilities Integration Center (ARCIC) Concepts and Capabilities Guidance, and functions as the conceptual basis for developing subordinate concepts and solutions related to the future force within the doctrine, organization, training, materiel, leadership and education, personnel, facilities (DOTMLPF), domains and policy. This concept applies to all TRADOC, Department of the Army (DA), and Army Reserve component activities that develop DOTMLPF requirements.

*This pamphlet supersedes TRADOC Pamphlet 525-3-0, dated 21 December 2009.

Proponent and supplementation authority. The proponent of this pamphlet is the TRADOC Headquarters, 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, TRADOC ARCIC (ATFC-ED), 950 Jefferson Ave, Fort Eustis, VA 23604-5763.

Suggested improvements. Users are invited to submit comments and suggested improvements via The Army Suggestion Program online at <https://armysuggestions.army.mil> (Army Knowledge Online account required) or via DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Director, TRADOC ARCIC (ATFC-ED), 950 Jefferson Ave, Fort Eustis, VA 23604-5763. Suggested improvements may also be submitted using DA Form 1045 (Army Ideas for Excellence Program Proposal).

Availability. Upon publication, this regulation is available on the TRADOC homepage at <http://www.tradoc.army.mil/tpubs/>.

Summary of Change

TRADOC Pamphlet 525-3-0, The U.S. Army Capstone Concept

This revision, dated 19 December 2012-

- o Changed title (cover page).
 - o New foreword (iii).
 - o Updated assumptions (para. 1-2).
 - o Updated operational environment (chapter 2).
 - o Updated strategic problem, central idea, and solutions (paras. 3-2 to 3-5).
 - o Added a chapter on implications to capability development and the institution (p. 19).
 - o Moved summary to new chapter 5 (p. 24).
 - o Updated required capabilities (appendix B).
 - o Added an appendix on science and technology (appendix C).
 - o Added an appendix on risk of adopting concept (appendix D).
-

Contents

	Page
Chapter 1 Introduction	4
1-1. Purpose	4
1-2. Assumptions	5
1-3. References	6
1-4. Explanation of abbreviations and terms	6
Chapter 2 Operational Context	6
2-1. The future operational environment	6
2-2. Scientific, technological, and social advancements	9
2-3. The Army's responsibilities	9
2-4. Implications for the future	9
Chapter 3 Meeting the Challenges	10
3-1. The future Army	10
3-2. Strategic problem	11
3-3. Central idea	11
3-4. Strategic solution	11
3-5. Components of the solution: Prevent, shape, win	11
3-6. Supporting ideas	15
3-7. Conclusion	18
Chapter 4 Implications to Capability Development and the Institution	19
4-1. Introduction	19
4-2. Doctrine	19
4-3. Organization	19
4-4. Training	200
4-5. Materiel	21
4-6. Leader development and education	21
4-7. Personnel	22
4-8. Facilities	22
4-9. Expeditionary quality of generating forces	22
4-10. Investment policies and strategy	23
Chapter 5 Summary	24
Appendix A. References	25
Appendix B. Key Required Capabilities	27
Appendix C. Army Science and Technology	32
Appendix D. Risk of adopting the Army Capstone Concept (ACC)	34
Glossary	37
Endnotes	39

Figure List

Figure 1-1. Marching orders	4
Figure 2-1. Army strategic planning guidance	6
Figure 3-1. Sustaining U.S. global leadership	10
Figure 4-1. Adapting the Institutional Army	19

Over the past 236 years, the United States Army has proudly served the Nation by winning its wars and securing the peace. Our history is marked by decisive action in a wide range of missions – including regular and irregular warfare, humanitarian assistance operations, engagement with allies to build partner capacity, and support to civil authorities. As part of the joint force, the Army ensures mission accomplishment, guarantees national security interests, compels adversaries, prosecutes military campaigns, and forges a positive difference. It is what the American people expect and what our freedom demands.

Marching Orders, America's Force of Decisive Action

General Raymond T. Odierno

Chief of Staff of the Army

Figure 1-1. Marching orders

Chapter 1

Introduction

1-1. Purpose

a. Purpose of Army concepts.¹

(1) United States (U.S.). Army Training and Doctrine Command (TRADOC) is assigned as the capabilities developer and operational architect for the Army. In these roles, TRADOC designs, develops, integrates, and synchronizes warfighting capability proposals, fosters innovation, and leads change for the Army. To accomplish these tasks, the intellectual must lead the physical. In that regard, TRADOC's campaign of learning informs concepts and capabilities development under Army Capabilities Integration Center's lead.

(2) Concepts describe what is to be done, the Army's conduct of military activities across the range of military operations, and the capabilities required to accomplish those actions. Concepts illustrate how a commander, using military art and science, might employ those capabilities to achieve the desired effects and objectives in the operational environment. Concepts provide capability descriptions for future military operations. Each concept describes problems, the components of potential solutions, and how those components work together to achieve operational success.

(3) Concepts provide the basis for conducting capabilities-based assessments, which are the first analytical step of the Joint Capability Integration Development System process.

b. Purpose of the Army capstone concept.²

(1) The purpose of TRADOC Pamphlet (TP) 525-3-0, *The Army Capstone Concept* (ACC), is to describe the anticipated future operational environment, what the future Army must do based on that environment, and the broad capabilities the Army will require to accomplish its enduring missions successfully in the near to mid-term future. As such, the ACC describes the characteristics of the future Army and its initiative to transition the Army from one focused on

winning two wars, to an expeditionary Army that does many things well. The ACC establishes the foundation for subordinate concepts that will describe how the future Army must fight and identify the required warfighting capabilities essential to ensuring combat effectiveness against the full spectrum of threats the Nation is likely to confront in the future. The ACC is fully nested in the *Capstone Concept for Joint Operations: Joint Force 2020* (CCJO); similarly, the capabilities the ACC describes define Army 2020, the Army's contribution to Joint Force 2020.

(2) The ACC poses and answers three questions:

(a) How does the Army view the future operational environment?

(b) Given the future operational environment, what must the Army do as part of the joint force to win the Nation's wars and execute successfully the primary missions outlined in defense strategic guidance?³

(c) What capabilities must the Army possess to accomplish these missions?

1-2. Assumptions

a. The ACC makes the following assumptions about the future operational environment:

(1) Army forces will be based predominantly in the U.S.

(2) Fiscal constraints will compel the Army to rebalance its modernization, training, and force structure priorities.

(3) The Army will continue to assist with interagency functions as part of unified action.

(4) The space and cyberspace domains will continue to grow more contested, congested, and competitive.

(5) Army forces will deploy from the continental U.S. or forward bases and operate in areas where access is denied and cyberspace capabilities are degraded.

(6) The U.S. Army will remain an all-volunteer force.

(7) The U.S. Army will rely on its Reserve components to meet future commitments.

(8) The Army will be resourced appropriately to conduct security cooperation in support of shape and prevent activities.

b. The ACC uses the assumptions above as the starting point for a grounded projection about the future operational environment. This concept summarizes a broad range of threats and associated operational and tactical challenges that the Army force must address. The ACC then presents a central idea and derives from that idea a strategic solution for the Army. The strategic

solution describes what the Army must do prevent conflict, shape the environment, and win the Nation's wars and outlines the capabilities essential to support combatant commanders.

1-3. References

Required and related publications are listed in appendix A.

1-4. Explanation of abbreviations and terms

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

The United States, and the Army, confronts an increasingly complex environment and an uncertain future.

2012 Army Strategic Planning Guidance

Figure 2-1. Army strategic planning guidance

Chapter 2

Operational Context

2-1. The future operational environment

a. Complexity as an element of the operational environment is not new. However, the lens through which complexity is viewed changes over time. Fog, friction, chance, and uncertainty are all the result of human interaction. Taken together, these interactions produce the complexity in any given environment. The increasing speed at which the effects of conflict appear in the operational environment will continue to challenge commanders. Technological innovations will increase the reach of an adversary, and cultural shifts will further complicate interactions among people and societies. The signature change in the future operational environment is an increasing tempo -- the trend towards a greater number of events and activities over a shorter period of time. As the tempo of human interactions increases, distinguishing between the types and motive of future actors becomes more complicated. Simply knowing where an adversary is maneuvering will no longer be sufficient; leaders must also understand the intent of an adversary in real time. Further, the public's ubiquitous access to information technologies and the ability to communicate instantly through social media introduces aspects of complexity into the operational environment that offer new challenges to the commander. In combination these changes make gaining control of the environment and the adversary more difficult to achieve.⁴

b. The future Army will continue to operate in a complex and uncertain environment. Competition for wealth, resources, political authority, sovereignty, and legitimacy will produce a variety of conflicts between rapidly evolving and adaptive threats in an increasingly competitive but interconnected world.⁵ In an environment of decreasing resources, the Army must plan for a shift in strategic focus while preparing to confront these threats. Furthermore, the distinctions between threats will blur in the future due to the complexity of adversaries, the multiplicity of actors involved, and the ability of threats to adapt rapidly. Adversaries will employ anti-access and area denial strategies, innovative tactics, and advanced technologies to oppose U.S. security

interests. Summarized below are some of the major challenges the future operational environment will present.

c. Rebalancing the focus on the Asia-Pacific and Middle East regions. While the U.S. military continues to protect U.S. national security interests across the globe, it must focus on protecting those interests where they are in most jeopardy. The greatest potential threats to those interests lie in Asia and the Middle East, and the U.S. Army's role extends to both. The Army cannot focus on just one without creating unacceptable risk in the other. The Army must realign its forces and adjust priorities as focus shifts, while seeking to maintain a global equilibrium.

(1) U.S. economic and security interests link inextricably to the Asia-Pacific region, which includes adversaries like North Korea and major competitors such as China. Developments in the arc extending from the Western Pacific and East Asia into the Indian Ocean and South Asia create a mix of evolving challenges and opportunities. U.S. relationships with Asian allies and key partners are critical to the future stability and growth of the region. This region contains seven of the world's ten largest armies.⁶ Not all of these armies are hostile, but many are investing in effective conventional capabilities including armor, air defense, and robotics. While the possibility of a renewed Korean War is remote, there is a distinct potential for the implosion of the communist North Korean regime, an outcome that could result in the loss of control of nuclear weapons and fissile material, not to mention the large-scale humanitarian crisis that would likely occur. Such events may necessitate international response including military intervention. Additionally, China's growth as a military power has resulted in friction throughout Asia and may lead to further instability. The maintenance of peace, stability, free flowing commerce, and U.S. influence will depend in part on an underlying balance of military capability and increased presence.

(2) The greater Middle East remains the most likely place where the U.S. will employ ground forces in defense of vital national interests. These interests include political stability, the defeat of violent extremist organizations, democratic reform, and the strengthening of regional security structures and non-proliferation regimes. Nuclear weapons pose a direct threat to the Gulf Cooperation Council states, North Atlantic Treaty Organization members, and other U.S. partners. Possession of nuclear weapons could spur other regional actors to pursue nuclear programs. Additionally, state sponsorship of terrorists and paramilitary groups throughout the region will contribute to further mistrust, instability, and violence. While U.S. military presence in Afghanistan is projected to decline, the U.S. remains committed to the defeat of al-Qaeda and to preventing the resurgence of the Taliban. In other areas, the U.S. military will continue to sustain bilateral security relationships within the region. Finally, the recent Arab Spring uprisings demonstrate a rapidly changing political dynamic that may present growing security challenges to the U.S. and greater opportunities to adversaries.

d. A wide variety of threats. The U.S. will also confront a diverse group of threats that may include state and non-state actors, paramilitary forces, proxies, insurgents, criminal organizations, terrorists, and technologically-empowered individuals. These threats will oppose American interests using adaptive forces that operate in a decentralized manner to frustrate America's traditional advantages in firepower and mobility and more recent strengths in high-technology airborne systems for intelligence, surveillance, and reconnaissance, and strike.

Sophisticated state and non-state actors will conduct operations by themselves or through proxies to entangle the U.S. in protracted conflicts, test American resolve, or deter action by presenting military situations that may require high levels of casualties and perseverance to solve. Additionally, opportunists will emerge from the environment and exploit the chaos of conflict to pursue a variety of objectives, often changing the character of that conflict over time.

e. Hybrid strategies and tactics. Likely adversaries will employ a combination of regular and irregular tactics and seek technologies that enable them to overcome or avoid U.S. military strengths and exploit perceived weaknesses. Very few nations can match the U.S. in tanks, aircraft, or ships through the foreseeable future. Therefore, many adversaries will invest in advanced anti-tank systems, improvised explosive devices, and anti-materiel weapons to defeat current and projected U.S. capabilities on the ground. Technology investments by potential adversaries make calculated overmatch against U.S. forces a serious threat. In cyberspace, adversaries have conducted complex attacks integrated with military operations and continue to improve their capabilities. Others carry on sophisticated influence operations and leverage cyberspace as a force multiplier to solidify their stake in the global forum. At the operational level, adversaries have made significant efforts to integrate cyber capability and units into their force structure. They may acquire advanced stand-off weapons, such as tandem-warhead rocket propelled grenades and advanced air defense systems, which surpass those seen in recent conflicts and would allow them to achieve maximum effect at relatively low cost. Less capable adversaries will also use a variety of improvised weapons and will likely employ technologies such as global positioning system jammers, homemade radio-frequency weapons, and rudimentary robotics systems to attack the U.S. reliance on technology. With the diffusion of destructive technology, these extremists have the potential to cause catastrophic damage that could directly affect U.S. security and prosperity.

f. Anti-access and area denial. Some adversaries are investing in anti-access and area denial capabilities to counter the U.S. ability to project military force into an operational area with sufficient freedom of action to accomplish assigned missions. Adversary commanders will position forces and capabilities to support rapid precision attack against air and sea ports of debarkation and interrupt the flow of logistics or follow-on forces. Adversaries are developing more capable unmanned aerial platforms that employ global positioning system jammers, and long-range precision strike systems including land attack and air launched cruise missiles. The proliferation of long-range air defense systems presents significant challenges, as adversaries attempt to exclude or limit U.S. access to forward basing and staging areas. Adversaries can also use other elements of national power such as diplomacy, economics, or information to influence regional players and populations to support their anti-access strategies. An important effective first step in anti-access campaigns is information operations that target U.S. popular will and decision makers and focus on deterring U.S. involvement. In many cases, the adversary will also use cyber attacks, terrorist events, and criminal activities to extend reach to U.S. partners and the homeland.

g. Proliferation of weapons of mass destruction (WMD). A growing number of state and non-state actors will continue to pursue nuclear, radiological, biological, and chemical weapons technologies and the ability to employ them against the U.S. and its allies. The proliferation of WMD has the potential to magnify the threats posed by adversaries, giving them more freedom

of action to challenge U.S. interests. Additionally, not-state actors' access to WMD constitutes a major threat to the safety of the Nation, deployed troops, and U.S. allies. The mere possession of WMD by any adversary has a destabilizing effect on entire regions. Failed states and those that lose control of WMD will present the major counter-proliferation challenge for U.S. forces.

h. Economic challenges impacting the U.S., allies, and partners. The ongoing worldwide economic crisis will challenge U.S. ability to sustain a globally responsive military, modernize the force, and build partnerships and coalitions. As U.S. forces decrease in size and capacity, opportunistic adversaries will seek to exploit perceived gaps and influence allies and potential partners. Any perception of a less capable U.S. military could also cause friendly countries to doubt U.S. resolve. Additionally, the economic situation will impact investments in military modernization not just for the U.S., but also its allies and partners. As friendly militaries shrink in size, their research and development budgets will diminish, along with their ability to modernize equipment and facilities. As a result, the gap between their capabilities and those of U.S. forces may increase, impacting their ability to contribute to future coalitions. The effect on adversaries may not be as severe. They will remain able to procure specific capabilities to address U.S. overmatch, which will level the technological playing field over time.

2-2. Scientific, technological, and social advancements

A number of scientific, technological, and social advancements are expected to influence conditions in the future operational environment. Emerging technologies such as autonomous systems, social media, alternative power and energy solutions, and biometrics will become more widespread and have a growing impact on military effectiveness. Anticipating how people apply technology will continue to be as important as the technologies themselves. While technologies are neutral, their application within the context of human interactions determines their ultimate contribution to mankind. Additionally, technologies have the greatest impact on military capabilities when combined with appropriate doctrine and integrated effectively into the organization and training of Army forces provide tremendous advantages and enable those forces to prevent conflict, shape the operational environment, and win the Nation's wars.⁷

2-3. The Army's responsibilities

The Army exists to fight and win the Nation's wars, serve the American people, and protect enduring national interests consistent with applicable U.S., international, and in some cases host nation laws and regulations. Specifically, the Army provides combatant commanders the forces and capabilities necessary to execute the National Security, National Defense, and National Military Strategies.⁸ This global employment of Army forces in peace and war is vital to ensuring equilibrium and balancing risk to our Nation's interests. As such, the Army will remain America's principal land force, organized, trained, and equipped for prompt and sustained combat operations on land to defeat enemy land forces, to seize, hold, and defend land areas, to control terrain, populations and natural resources, and provide forces for long term area security operations abroad, including initial establishment of functioning governance, pending transfer of this responsibility to other authorities.⁹

2-4. Implications for the future

The uncertainty and complexity of the future operational environment will require the Army to respond to a broad range of threats and challenges. Army forces must be prepared to defeat

future threats including those that continuously adapt to avoid U.S. strengths and attack what they perceive as weaknesses. The challenges of the recent economic recession require the Army to rebalance its investment strategy. In this complex, uncertain environment, future enemies of the U.S. will take advantage of the information environment and emerging technological capabilities to avoid what they perceive as U.S. military strengths. Therefore, the Army must pursue emerging technologies to maintain its strengths, address weakness, exploit opportunities, and develop countermeasures to future threat capabilities and maintain its technological advantage over future threats. Finally, the Army will remain America's principal land force, organized, trained, and equipped for prompt and sustained combat operations.

The United States faces profound challenges that require strong, agile, and capable military forces whose actions are harmonized with other elements of U.S. national power. Our global responsibilities are significant; we cannot afford to fail. The balance between available resources and our security needs has never been more delicate.

Sustaining U.S. Global Leadership: Priorities for 21st Century Defense

Figure 3-1. Sustaining U.S. global leadership

Chapter 3

Meeting the Challenges

3-1. The future Army

a. U.S. national strategy is evolving in response to economic challenges and changes in the global balance of power. The President and the Secretary of Defense have given new strategic guidance to articulate priorities for a 21st century defense that sustains U.S. global leadership.¹⁰ This strategic guidance describes a joint force that will be smaller and leaner, but will be agile, flexible, ready, and technologically advanced.

b. In accordance with this guidance, the joint force must access its capabilities and make selective additional investments to succeed in the primary missions of the U.S. Armed Forces: counterterrorism and irregular warfare; deter and defeat aggression; project power despite anti-access and area denial challenges; counter WMD; operate effectively in space, operate effectively in cyberspace; maintain a safe, secure, and effective nuclear deterrent; defend the homeland and provide Defense Support of Civil Authorities (DSCA); provide a stabilizing presence; conduct stability and counterinsurgency operations; and conduct humanitarian, disaster relief, and other operations.¹¹ The Army, as part of the joint force, must provide the land component forces necessary to accomplish each of these primary missions.

c. Further, the CCJO proposes globally integrated operations as a means to meet strategic guidance and the primary missions listed. Globally integrated operations is defined broadly as the means by which globally-postured joint force elements merge quickly to combine needed capabilities to support combatant commands while achieving economies of scale.¹² The Army will conduct operations that provide capabilities within globally integrated operations. How the Army accomplishes this objective is discussed in TP 525-3-1.¹³

3-2. Strategic problem

What must the Army do as part of the joint force to retain its ability to win, protect U.S. national interests, and successfully execute the primary missions outlined in defense strategic guidance in an emerging, complex operational environment in an era of fiscal austerity?

3-3. Central idea

The future Army provides decisive landpower through a credible, robust capacity to win and the depth and resilience to support combatant commanders across the range of military operations in the homeland and abroad. Army forces are uniquely capable of exerting enduring changes in behaviors of populations to attain decision for combatant commanders. Ready, robust, responsive, and regionally engaged Army forces give pause to adversaries, reassure allies, and, when called upon, deliver the punch that defeats enemies and exerts control to prevent and end chaos and conflict. The fundamental characteristic of the Army necessary to provide decisive landpower is operational adaptability -- the ability of Army leaders, Soldiers, and civilians to shape conditions and respond effectively to a broad range of missions and changing threats and situations with appropriate, flexible, and responsive capabilities. Operational adaptability requires flexible organizations and institutions to support a wide variety of missions and adjust focus rapidly to prevent conflict, shape the operational environment, and win the Nation's wars.

3-4. Strategic solution

The Army will remain America's principal land force, organized, trained, and equipped for prompt and sustained combat operations to defeat enemy land forces and to seize, hold, and defend land areas. Army forces provide decisive landpower -- by threat, force, or occupation -- through gaining, sustaining, and exploiting control over land, resources, and people.¹⁴ Future Army forces consisting of leaders, Soldiers, and civilians, trained and educated to exhibit operational adaptability will continue to support the steady-state foundational activities for combatant commanders and will provide versatile, sustainable landpower for a wide range of missions to include the primary missions outlined in defense strategic guidance. This will require the Army to organize, train, and equip based on mission.

3-5. Components of the solution: Prevent, shape, win

a. The components of the solution are three principal and interconnected roles: prevent conflict, shape the operational environment, and win the Nation's wars. The Army will respond to a changing operational environment and new strategic priorities by focusing its forces and capabilities on the requirements of these three roles. By building and preparing a force that is able to prevent, shape, and win, the Army will achieve a level of operational adaptability that makes it a relevant and preferred choice for combatant commanders to meet the demands of national strategy and defend America's interests, both at home and abroad. Even when required to shift focus between these roles, the Army will always retain the ability to conduct its primary mission to fight and win the Nation's wars.

b. **Prevent conflict.** The Army prevents conflict by providing a credible land force that can fight and win to deter adversaries and avert miscalculations; a force that is prepared and

modernized with the capability and capacity to execute the full range of military operations in support of combatant commanders.

(1) Provide trained and ready forces. The Army provides forces in support of combatant commanders and the ability to respond rapidly to unforeseen contingencies.¹⁵

(2) Improve expeditionary capability. The Army projects forces worldwide into any operational setting and conducts operations immediately upon arrival. Expeditionary operations require the ability to deploy quickly to austere areas and shape conditions to seize and maintain the initiative. The Army will leverage the breadth and depth of its means to meet joint commander mission requirements rapidly with scalable and tailored expeditionary force packages that complement other service capabilities. These capabilities will be resident in readily available and trained regionally and globally aligned Army forces. Reducing reliance on intermediate staging bases, ports, and airfields will better enable an expeditionary Army to respond rapidly and attack simultaneously throughout the depth and breadth of a joint operations area (JOA) while diminishing enemy anti-access and area denial capabilities.

(3) Posture forces for influence and deterrence. The Secretary of Defense, in coordination with combatant commanders and key interagency partners, determines the integrated U.S. posture and basing strategy, which aligns forces and bases to deter conflict, respond rapidly to contingency requirements, and enhance U.S. strategic flexibility for force deployment. To address the unique threats of the emerging operational environment, the Army provides strategic and theater missile defense capabilities as well as forces to combat WMD and secure loose fissile material. Assuming its forces will be stationed predominantly in the U.S., the Army must expand its prepositioned stocks at strategic locations to support these combatant command requirements. The Army must also determine the best balance of deployable forces, postured forces, and prepositioned stocks to support conflict prevention and satisfy strategic guidance.

(4) Equip a modern force. To maintain credibility and deter adversaries, the Army must develop and field a versatile and affordable mix of the best equipment available. A well-equipped force with significant overmatch demonstrates a level of dominance over opponents that discourages competition and serves as an example to allies and partners. Such a force allows Soldiers and units to conduct operations successfully across the range of military operations and achieve a level of operational adaptability essential to prevent conflict.¹⁶

(5) Operate in the homeland. The Army conducts operations to support homeland defense and provide DSCA as directed by the President, Secretary of Defense, and combatant commanders. U.S. law and policy constrain the employment of Army forces within the homeland and require the Army to operate as part of unified action. Commanders must understand this unique environment before any major homeland event to shape activities prior to and during execution. The Army provides technical support and flexible organizations which can adapt to this challenging environment. The Army National Guard plays a unique role in homeland defense and DSCA, whether under the mission command of a state governor or federalized in a Title 10 status under the mission command of the President, Secretary of Defense, and supported combatant commander. Homeland operations require greater unity of effort between state-led and federal-led responses and requires a total Army approach.¹⁷

c. *Shape the operational environment.* The Army shapes the operational environment by providing a sustained and stabilizing presence to gain access and understand the situation. Additionally, Army forces build partners and capacity to develop mutual trust and set conditions for future operations. Army forces also support combatant command security cooperation activities across the range of military operations and conduct a wide variety of steady-state activities in support of the joint force. When directed, Army forces also provide humanitarian assistance and disaster relief. The Army's global execution of these activities contributes to stability, ensuring equilibrium and balancing risk to our Nation's interests.

(1) Provide a sustained and stabilizing presence. The Army establishes and sustains strong relationships with other armies to enhance mutual trust and facilitate access, which is critical for success in contingency operations.¹⁸ Using a careful mix of permanent and rotational forward deployed forces, the Army maintains contact with foreign militaries, conducts recurring training and exercises, and demonstrates U.S. enduring commitment to allies and partners in support of U.S. foreign policy. The sustained presence of Army forces also enables them to understand more clearly the populations among which they may operate, the threats they may face, and the character of potential conflicts.

(2) Build partners and capacity. The Army's approach to building partners and capacity relies on comprehensive engagement with partners to co-develop mutually beneficial capabilities and capacities to address shared global interests. Army forces work through and with host nations, regional partners, and indigenous populations to build their self-defense capacity and serve as valuable coalition members, doing so in a culturally attuned manner. These actions contribute to a military posture that not only deters potential adversaries, but also preserves the ability to act if deterrence fails. Capacity building activities also help develop a worldwide forward basing structure that is an essential element of joint force operations to gain and maintain access against adversaries who are increasingly focused on denying U.S. freedom of action in the global commons.¹⁹

(3) Support security cooperation activities. The Armed forces conduct security cooperation activities in support of theater campaign plans to build the capacity of partners to secure populations, protect infrastructure, and strengthen institutions as a means of protecting common security interests, preventing conflict, or prevailing in war. In support of these activities, Army forces integrate the capabilities of regionally aligned conventional and special operations forces in security assistance, security force assistance, foreign internal defense, and security sector reform. Supported by the appropriate policies, legal frameworks, and authorities, the Army leads security force assistance for partner units, institutions, and security sector functions.

(4) Conduct steady-state activities. In addition to its assigned U.S. Code Title 10 functions, the Army also performs an extensive array of executive agent, Army support to other services, common user logistics, and administrative control requirements in support of combatant commanders.²⁰ The Army provides leaders, planners, and staffs to exercise the art and science of mission command over joint forces, critical capabilities to operate in space, cyberspace, and the electromagnetic spectrum, and a network infrastructure for command posts and platforms. Army forces also provide intelligence collection, analysis, and synchronization, as well as

integrated air and missile defense capabilities to protect key infrastructure and facilities. Combatant commanders rely on the Army for civil affairs, military police, engineers, and chemical, biological, radiological, nuclear, and explosive response teams, transportation, legal, human resources, health service support, supply, maintenance, and financial management capabilities.

(5) Provide humanitarian assistance and disaster relief. Army forces possess unique capabilities that can supplement relief agencies or provide support of civil authorities by extending aid to victims of humanitarian crises and natural or manmade disasters, either at home or abroad. When directed, Army forces also support noncombatant evacuation operations or mass atrocity response on an emergency basis.

d. ***Win the Nation's wars.*** The Army wins the Nation's wars as part of the joint force and contributes to the defense of the homeland by providing a credible, robust capacity that is responsive to combatant commanders and has the depth and resilience needed to deliver decisions in any operation. In conflict, Army forces overwhelm enemies to minimize the duration of hostilities and save lives and resources. As the Nation's principal land combat force, the Army retains its ability to deploy forces rapidly, set theaters of operations, conduct unified land operations, and sustain military campaigns while simultaneously defending the homeland and providing DSCA. Ultimately, it is the Army's ability to win wars that gives it the credibility needed to prevent and deter conflict and shape the operational environment.

(1) Deploy rapidly. The Army provides essential elements of a rapidly deployable global response force for any conflict worldwide, and or to support domestic emergencies. Army forces must be capable of forced entry, rapid transition from deployment to employment, and adequate response to any contingency, either alone or until additional forces and capabilities arrive. How rapidly the Army responds is incumbent upon the speed at which knowledge is received and then appropriate action applied. The speed of knowledge and action remain challenged by the time required for operational preparation of the environment, human intelligence, network development, posture and basing, lift, access, basing, and overflight.

(2) Set theaters of operations. The Army also provides forces to set theaters for major contingencies and to enable joint force commanders to seize the initiative and ensure freedom of action. Of prime importance is the positioning of combat forces and intelligence, protection, and sustainment assets required for the prosecution of a campaign.²¹ Major Army responsibilities include statutory U.S. Code Title 10, executive agent, Army support to other services, common user logistics, and administrative control functions and requirements in support of the entire joint or multinational force. These tasks constitute the bulk of the requirements at theater army level to set a theater for subsequent operations.²²

(3) Conduct unified land operations.

(a) Army forces seize, retain, and exploit the initiative to gain and maintain a position of advantage across the range of military operations to prevail in war and create the conditions for favorable conflict resolution.²³ Army forces use combined arms maneuver to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and

psychological advantages over the enemy. They also use wide area security to deny the enemy positions of advantage, consolidate gains, and protect populations, forces, activities, and infrastructure.²⁴ Given projected threats, Army formations require the lethality to win an extended close fight and defeat aggression. They must also be sufficiently robust and protected to endure the effects of multiple, protracted engagements. Army forces must be enabled at echelon to extend their reach throughout the depth of an enemy's formations or territory. To this end, preserving the advantages conferred by mobile protected firepower provides this essential asymmetric advantage to close with and defeat the enemy, sustain momentum, reduce risk, and the exert control necessary to prevent or end chaos to assure success to a combatant commander.

(b) Army forces must be capable of developing the situation through action, in close contact with the enemy and civilian populations, fighting for information, and reassessing the situation to keep pace with the dynamic nature of conflict. Additionally, they must have the means to achieve the desired effect with minimal collateral damage using both lethal and nonlethal means through mission-type orders executed by adaptive leaders skilled in tactics and operational art.

(c) Despite the projected end of major operations in Afghanistan and the Middle East, the Army must also retain the knowledge and skills necessary to conduct counterinsurgency or other stability operations in the future. These operations may be part of either conflict prevention or termination. Future Army forces also require the capability to conduct precise, surgical strikes in hostile, denied, or politically sensitive environments to seize, destroy, capture, exploit, recover, or damage designated targets. Finally, the Army must be capable of conducting operations in support of homeland defense and DSCA while simultaneously conducting other operations. The Army supports homeland defense by providing land, air, cyber, missile defense, and other forces and by conducting operations to combat WMD and counter transnational criminal organizations.

(4) Sustain and conclude military campaigns. The Army must have the ability to support sustained campaigns as long as necessary and close theaters successfully upon termination of a conflict. In so doing, Army forces adapt continuously to unpredictable and often profound changes in the operational environment and JOA as the campaign unfolds.

3-6. Supporting ideas

a. Operate decisively in the land domain while fully accounting for the human aspects of conflict and war. The tendency of adversaries to operate among the people, and the likelihood that ground forces will conduct operations in and around population centers, emphasizes the importance of the human role in warfare. The human aspects of conflict and war reflect the growing importance of conflict prevention and the defeat of enemies who cloak themselves in the human activity of the modern, increasingly interdependent, and virtually connected world of the 21st century. Current doctrine does not adequately address the moral, cognitive, social, and physical aspects of human populations in conflict. Since the purpose of military action is to affect the behavior of human groups in the operational environment toward a defined objective, the Army must improve the doctrinal representation of the operational environment and account for the socio-economic, cognitive, and physical aspects of human activity. Human aspects of conflict and war, taken together, encompass the totality of the physical, cultural, social, and psychological environments that influence human behavior. The success of unified action

depends upon the application of capabilities that influence the perceptions, understanding, and actions of relevant populations and makers.

(1) To operate more effectively in the land domain while fully accounting for the human aspects of conflict and war, the Army requires a warfighting function to capture the tasks and systems that provide lethal and nonlethal capabilities to assess, shape, deter, and influence the decisions and behavior of a people, its security forces, and its government.²⁵ This function provides the intellectual foundation for training, education, and leader development focused on these tasks and systems. Additionally, it institutionalizes the disciplines associated with operations focused on long-term engagement activities and provides a driver for the interdependence of Army conventional and special operations forces.

(2) The current doctrinal construct for unified land operations does not fully account for many of the activities that build partners and their capacity and capability, develop and expand enduring defense relationships, shape the operational environment, conduct security force assistance, and provide a stabilizing presence throughout all phases of joint operations.²⁶ These shaping activities occur simultaneously with decisive action, and often extend before and after specific offensive, defensive, and stability operations or DSCA. To describe the full array of Army actions required in the future operational environment, the Army must adapt its construct for unified land operations to address shaping activities that supplement decisive action.

(3) The Army must achieve special operations and conventional forces interdependence to lock in the advances of the last decade of conflict, more effectively counter future threats, and shape the operational environment.²⁷ Interdependence will increase the effectiveness of long-term shaping activities and improve execution of all missions by combining the capabilities inherent in each force -- that is, to provide complementary and reinforcing effects. The Army must establish a range of personnel, training, and command and support relationships between special operations and conventional forces to achieve the interdependence of activities and operations from tactical to theater levels and across all warfighting functions.

b. Align forces regionally. To improve the Army's ability to prevent, shape, and win, the Army aligns its forces regionally to deliver conventional and special operations forces capabilities in support of combatant command requirements. Regionally aligned forces are those Army units assigned to combatant commands, allocated to a combatant command, and those capabilities distributed and prepared by the Army for combatant command regional missions.²⁸ Regional missions are driven by combatant command requirements which may require an understanding of the, languages, cultures, geography, and militaries of the countries where these forces are likely to be employed. Regionally aligned forces include Army Total Force organizations and capabilities that are: forward stationed; operated in a combatant command area of responsibility, (also providing reach-back); and prepared to support from outside the area of responsibility. Regionally aligned forces improve the Army's ability to prevent and shape through engagement, sustained forward presence, capacity building, and other advise and assist functions. Because of their enhanced regional knowledge and focus, they also better enable the joint force to win when necessary. Aligning forces regionally allows the Army to balance its units economically and equitably.

c. Enhance advisory capabilities. The demand for Army special operations and conventional forces to provide security cooperation and other advisory capabilities will increase. The Army provides security cooperation capabilities to support combatant commander theater campaign plans, and it builds the capacity of partners to secure populations, protect infrastructure, and strengthen institutions. As demand for these capabilities grows, the Army must provide the personnel, training, organizational structures, mission command and leadership, and institutional support needed for planning, assessing, and executing security cooperation activities.

d. Project military power despite anti-access and area denial challenges. To enable the Nation to project military power, the Army must maintain a rapidly deployable and capable global response force, provide deployable joint and coalition-capable headquarters, and conduct entry operations, including forcible entry,²⁹ to defeat anti-access and area denial strategies.³⁰ Army forces must be responsive and powerful enough to impact the joint fight early, and possess the mobility and firepower to enable joint force commanders to develop the situation in close contact with the enemy. Power projection forces rely on a balance of strategic and operational lift, presence, and prepositioning to respond quickly in areas where conflicts may occur.³¹ The Army must also maintain the capability to set theaters of operations in support of joint and multinational forces, whenever and for however long necessary.³² However, offset -- the geographic distance between forces and objectives -- can avoid anti-access and area denial, but anti-access in contested areas is continuous unless eliminated; thus, the Army must work to reduce its dependence on air and sea ports of debarkation.

e. Conduct cyberspace operations. The Army requires a full range of cyberspace and electromagnetic spectrum capabilities to provide commanders the ability to adapt to rapidly changing missions, conduct decentralized operations over wide areas, maintain operational freedom of maneuver, exercise mission command, and gain and maintain the initiative in cyberspace during unified land operations. Because enemies are likely to leverage cyber capabilities to enable their operations and attack and exploit the U.S. and its military forces from cyberspace, the Army must develop the ability to counter cyber threats successfully, mitigate degraded access to cyberspace, and take local actions against enemy cyber capabilities to achieve local effect. Additionally, Army forces must coordinate their efforts across the joint operational cyber framework and with interagency partners, allies, and commercial industry.

f. Conduct space operations. The Army requires access to space capabilities to exercise effective mission command and support combatant commanders. National, civil, commercial, and international space capability providers operate a wide range of systems in space that enable the Army to plan, prepare, and execute unified land operations. The Army relies on these systems to provide rapid worldwide communication and coordination of friendly actions, develop situational awareness, gather information about adversaries, and enable a wide range of joint interdependencies to include direct downlink theater missile warning. To accomplish these tasks, the Army requires leaders and Soldiers trained to initiate and maintain access to space capabilities and who can mitigate attempts to deny, degrade, and disrupt that access.

g. Achieve war termination objectives. Future Army leaders must understand the combatant commander's objectives for war termination. War termination objectives should achieve the President and Secretary of Defense national strategic objectives and provide outcomes that will

endure. This is accomplished by collaboration, synchronization, and coordination in the use of the diplomatic, informational, military, and economic instruments of national power. In such situations, military power is used in conjunction with the other instruments of national power to advance and defend U.S. values, interests, and objectives. To accomplish this integration, the services and Department of Defense (DOD) agencies interact with non-DOD agencies and organizations to ensure mutual understanding of the capabilities, limitations, and consequences of military and nonmilitary actions as well as the understanding of endstate and termination requirements.³³

h. Adapt force generation and maintain an operational reserve. The Army will require an adaptive force generation model to support rapid and sustained operations. The Army must provide depth to the Nation's land forces by maintaining access to a viable operational reserve. Additionally, the Reserve component must organize, train, and equip as part of an integrated expeditionary force to ensure rapid response in support of the Nation's defense at home and abroad. Finally, the Army must determine the mix of capabilities, formations, and equipment of an operational reserve that ensures versatility for the joint force and provides for sustained combat or other operations on land.

i. Preserve and enhance the all-volunteer force. The Army must continue to provide trained and ready forces to support combatant commanders and to conduct its enduring missions.

(1) Recruit and retain quality Soldiers. As the economy improves and recruitment standards increase, the Army will be challenged by a shortage of qualified personnel to meet the new standards. Similarly, a reduction in military force, potential changes to benefits, and the uncertainty of a continuing military career could impact retention of the best and brightest. Thus, the Army must continue to refine its accessions processes to attract, select, and place people in ways that match talents and skills to the tasks of any given specialty, while retaining the best of the combat-hardened veterans.

(2) Promote a positive environment for Soldiers and families. The Army must continue to adapt programs and policies that reduce the impact of the Army missions on Army life. Financial incentives, health and education benefits, family care, employment preferences, and morale, welfare, and recreational activities are vital to a positive environment. The Army must also adjust career patterns to continue to provide challenging and rewarding opportunities for individuals and their families, keeping both Soldier and family actively engaged.

3-7. Conclusion

As part of the joint force, the Army will retain its ability to win, protect U.S. national interests, and successfully execute the primary missions outlined in defense strategic guidance. The future Army must maintain a credible, robust capacity to win decisively and the depth and resilience to support joint force commanders across the range of military operations in the homeland and abroad. Additionally, the Army must expand operational adaptability to include flexible organizations and adaptable institutions able to rapidly reorganize, properly equip, and train versatile, sustainable land forces to conduct a specific primary mission.

As the Army changes to meet [its] new strategy, we will continue to adapt business operations to ensure we provide trained and ready forces at best value to the Nation.

Under Secretary of the U.S. Army, Dr. Joseph W. Westphal

Figure 4-1. Adapting the institutional Army

Chapter 4

Implications to Capability Development and the Institution

4-1. Introduction

To build an Army that is able to prevent, shape, and win requires expanding the idea of operational adaptability from the operating force to the generating force and the broader institutional Army. Looking to the future, the Secretary of the Army has challenged the institutional Army to become more innovative and efficient. Charged with organizing, manning, equipping, training, and sustaining Soldiers, the institutional Army must become more adaptive to better develop and field trained and ready units that can meet combatant commander demands and execute the requirements of national strategy.³⁴

4-2. Doctrine

Over the last decade, the Army has learned valuable lessons and developed a better understanding of 21st century warfare. With the assistance of web-based technology, the Army has a unique opportunity to codify this knowledge in doctrine and preserve it for future generations. To truly revolutionize the way the Army develops and shares doctrine, it must first restructure the body of knowledge and identify the principles critical to the Army as the Nation's land force of decisive action. The Army will continue to pursue *Doctrine 2015*, a process which will transform its doctrinal base to deliver critical knowledge to the point of need that is concise, accessible, and current. This process streamlines both the number and length of doctrinal manuals while leveraging technologies to inject fresh and contemporary knowledge into Army doctrine, changes that have been developed, applied, and proven in the field by Soldiers.

4-3. Organization

a. In support of the requirements to prevent, shape, and win, the Army will make a number of important force design changes. Headquarters at echelons above brigade must offer joint force commanders an effective and readily available means to exercise mission command over joint and coalition forces for operational warfighting, security cooperation, and Army responsibilities to set the theater, including Army support to other services and Army DOD executive agent responsibilities. They must be resilient enough to enable sustained campaigns where and when required and also provide access to information over a robust digital network.

b. Given the need for greater tactical flexibility and endurance, modular brigade combat teams require increased combat power and the ability to employ pooled resources to gain

efficiencies where prudent. Maneuver units also require organic horizontal and vertical construction capabilities and enhanced breaching, route clearance, and gap crossing capabilities to improve force protection, enhance mobility in complex and urban terrain, and enable capacity building efforts. Additionally, they require greater ability to develop intelligence from the bottom up and collect, process, exploit, and disseminate critical but perishable information.

c. Army and joint commanders at echelons above brigade require capabilities dedicated to answering information requirements in their areas of responsibility, influence, and interest through reconnaissance and surveillance and to satisfy security requirements under future conditions. The Army will improve the ability to collect, analyze, fuse, and disseminate information and intelligence at echelons above brigade, and to provide security over wide areas. Associated formations will answer operational-level intelligence requirements and cover gaps in the JOA across the full range of military operations. The Army will also improve the ability of its formations to fight for and exploit information, and develop the situation in close contact with the enemy and local populations.

d. Finally, the joint force often has great difficulty getting capable Army forces to the point of employment in time to impact the joint fight and achieve cross-domain synergy.³⁵ Cross-domain synergy is the complementary -- vice merely additive -- employment of capabilities in different domains, such that each enhances effectiveness and compensates for vulnerabilities of the others in some combination that will provide the freedom of action required by the mission.³⁶ To ensure that combatant commanders have assets needed for cross-domain synergy, the Army will develop new formations trained for specific missions and contingencies and available as early entry forces for a variety of purposes. Such formations make the Army more responsive to the needs of joint force commanders and enable the joint force to achieve decision rapidly.

4-4. Training

a. Through training, the Army will prepare to conduct the range of military operations in complex environments. In support of this intent, leaders and Soldiers must be able to transition rapidly between offensive, defensive, and stability operations or providing DSCA while understanding the military fundamentals that remain the same in any type of operation. Preparation for future operations must include a broad range of missions characterized by complexity, uncertainty, continuous transitions between operations, protracted time, information overload, and adaptive enemies. Home station training programs must begin with the squad and other small units and build through all echelons, providing opportunities for adaptive, integrated learning that translates through an appropriate mix of live, virtual, constructive, and gaming environments connected through the network. This provides the ability to experience a combat training center-like event at home station. Training scenarios used at home station, combat training center rotations, and while deployed must portray realistic threats that require Army forces to develop competence in complex environments.

b. Army schoolhouses must provide training that supports the conduct of unified land operations and develops operational adaptability. Operational forces will reach directly to centers and schools for proponent doctrine and updates, training and training management strategies, and training products including warfighter and other training support packages. Thus,

adaptation to change will require the Army to modify how it learns while recognizing that Army units must learn the right things, and must learn them quickly.³⁷

4-5. Materiel

a. Over the last decade, the Army has benefited from various rapid acquisition processes implemented to expedite delivery of materiel solutions to an Army at war. To sustain these processes in the future, the Army will adapt its approach to acquisition to expand the characteristics of rapid acquisition in the institution. The rapid equipping force is an example of an organization charged with providing to deployed Army units specialized capabilities to affect the outcome of current operations. It focuses on commercial or government off-the-shelf solutions, as well as rapid prototyping, to deliver capabilities to warfighters as quickly as possible. The capabilities development for rapid transition process is the Army's semi-annual method for identifying the best time-sensitive materiel and non-materiel solutions the Army should incorporate as programs of record throughout the force. Additionally, the rapid fielding initiative provides a variety of new equipment to deployed or deploying forces. The Army will institutionalize these processes to sustain the best of these approaches while also leveraging the experience of leaders and Soldiers who participate in rapid development. Rapid development must remain an integral component of the deliberate acquisition process.

b. The Army must be able to provide the right equipment at the right time and place to its Soldiers and units. To support this requirement, future acquisition efforts emphasize not only materiel solutions, but also the necessary training and training support systems, as well as leader development capabilities, as part of modernization plans. Additionally, the Army must align its equipment modernization across the requirements, programming, and acquisition communities, to include the industrial base. The Army must also focus its science and technology efforts on concept-based requirements while fostering innovation that empowers, unburdens, and protects Soldiers. Finally, the Army must maintain its technological and human science advantages by pursuing advances in the human sciences that optimize Soldier performance.

4-6. Leader development and education

a. One of the Army's greatest competitive advantages resides in its ability to learn faster and adapt more quickly than its adversaries. The current pace of technological change challenges the Army's ability to maintain this edge over potential adversaries. In the highly competitive global learning environment where technology provides nearly ubiquitous access to information, the Army cannot risk failure through complacency, lack of imagination, or resistance to change. Outpacing adversaries is essential to maintain the Army's credibility and fulfill its responsibilities to the Nation as the force of decisive action. The Army must develop its capacity for accelerated learning that extends from organizational levels to the individual Soldier, and tests their knowledge, skills, and abilities in the most unforgiving environments.

b. To facilitate the necessary level of adaptation, Army forces empower increasingly lower echelons of command with the capabilities, capacities, authorities, and responsibilities needed to think independently and act decisively, morally, and ethically. Decentralized execution guided by the tenets of mission command places increased responsibility on Soldiers to make decisions

with strategic, operational, and tactical implications. Employing combined arms teams in this way demands a working knowledge of the environment and an understanding of the geopolitical, cultural, linguistic, technical, and tactical factors that impact operations. When Soldiers are deployed outside an assigned regional affiliation, a foundation in cross-cultural competence will enable them to quickly acquire the necessary knowledge and skills to succeed in other cultures.

c. Leader development and education programs must offer opportunities for all Army personnel to provide input into course content throughout their careers. Such input adds to the body of knowledge and utilizes the recent operational experience of veterans as learning facilitators. Army leader development and education programs must account for prior knowledge and experience by assessing competencies and tailoring instruction to Soldiers' existing experience levels. These programs must also adjust to take advantage of changes in leader and Soldier experiences over time.

4-7. Personnel

a. To accomplish complex missions with fewer Soldiers, the Army must improve its overall approach to accessions, initial military training, career field management, and career lifecycle policies. Army personnel policies must manage and apply talent more effectively to maximize individual potential and emphasize the value and necessity of investment in the Army's most valuable resource, its Soldiers and civilians. An appropriate emphasis on the human dimension fosters development of the physical, cognitive, social, and moral aspects of Army personnel and enables them to contribute more effectively to mission accomplishment.³⁸ Army personnel management policies will require significant modification to accommodate these demands.

b. Additionally, the Army must act to leverage its greatest war dividend, the experienced leaders and Soldiers who have learned invaluable lessons and gained irreplaceable experience during the last decade of extended conflict. In the past, the term "war dividend" typically referred to the benefits of wartime technological innovations or spinoffs gained during conflict. However, the most important dividend lies in the human capital the Army must retain to be successful. As the Army becomes a smaller, leaner force, it must take advantage of this war dividend and reinvest it in the future.³⁹ These experienced leaders form the backbone of all future leadership development efforts.⁴⁰

4-8. Facilities

The Army must also have a strategy for installation management that supports future force design and force mix with the best possible facilities. Additionally, the Army needs to reinvest in the centers and schoolhouses of the active and Reserve components to ensure future forces train and prepare for all contingencies. Facilities improvements must support the continued integration of active and Reserve components for planning, training, and operations. Facilities planners must also anticipate one or more new rounds of base realignment and closure as the Army reduces in end strength.

4-9. Expeditionary quality of generating forces

a. The generating force consists of a wide array of Army organizations whose primary mission is to generate and sustain Army forces and capabilities for employment by combatant commanders.⁴¹ Generating force organizations possess unique capabilities that are necessary either to support deployed forces through reachback or to function in an operating force role by deploying assets forward into theaters of operations. Generating force organizations must exhibit the same expeditionary mindset as the operating force, blurring the distinction between both and producing a more effective total Army that can prevent, shape, and win.

b. A smaller Army will rely even more heavily on generating force capabilities to accomplish many tasks, especially in steady-state or prolonged operations. The demands of the future will change the way the Army leverages the generating force, resulting in a significant increase in support in both capabilities and capacities.⁴² Many future operations, especially those conducted to shape the environment, will require unique skills and abilities that reside exclusively in the generating force. It is essential that the Army retain these capabilities in adequate supply to support operational requirements. These organizations will adapt to operate in smaller, task organized teams that enhance their ability to respond more rapidly and efficiently.

4-10. Investment policies and strategy

a. As the Army reduces in size, it must also make and sustain selected investments and put policies and strategies in place to mitigate the risk associated with a smaller force. It must posture the force to respond quickly to unforeseen requirements or changes in strategic guidance that require the Army to stop or reverse its drawdown. The Army must also plan to regenerate forces and capabilities in response to these changes. Regeneration employs reorganization and mobilization of the existing Army, coupled with reconstitution and capabilities development to expand the force. Regeneration relies on the combination of intellectual capital, concepts, and methods to produce increased capabilities and capacity as quickly as possible.

b. The Soldier is the central figure in the development of a comprehensive, concept-driven investment strategy that prioritizes programs and accurately forecasts budget and lifecycle costs. This investment strategy must enable the Army to see across the entire force, from TRADOC and FORSCOM to the Army Materiel Command and the Installation Management Command, and more effectively coordinate the multitude of programs and systems in the Army budget. In making investment decisions, the Army will ensure that the network-enabled Soldier remains at the core of a smaller, more capable Army. To reflect the problems and required capabilities identified in Army concepts, the Army will employ a formation-based approach to capabilities development and align this approach with its various capability portfolios.⁴³ This approach ensures the Army's investment strategy prepares both Soldiers and units for missions in a complex and unpredictable operational environment.

c. Facing a future of constrained resources and changing priorities, the Army will continue to reform its acquisition processes. As part of this reform, the Secretary of the Army is taking steps to revalidate, modify, or terminate programs based on affordability and the Army's needs.⁴⁴ In support of these reforms, the Army employs a 2-year concept-to-capabilities development process and is working to provide the acquisition community greater clarity with respect to future requirements. These changes allow the entire Army to be more responsive to strategic

guidance, the operating environment, and lessons learned. This biennial process yields more affordable force modernization strategies that enable the Army to invest in the right capabilities consistent with analysis of current and future operational environment.⁴⁵

d. To meet the challenges facing combatant commanders, Army leaders will adapt force structure and reduce modernization efforts to ensure readiness. The Army will provide a capable network, balance readiness-modernization force structure efforts to ensure uncompromised readiness, and field a ground combat vehicle. The priority for modernization efforts must remain focused on the Soldier, the squad, the network, mobility, and survivability.

Chapter 5

Summary

a. The ACC describes the anticipated future operational environment, what the future Army must do based on that environment, and the broad capabilities the Army will require to accomplish its enduring missions successfully. The future operational environment includes economic challenges which will impact the U.S., and its allies and partners; a U.S. shift in strategic focus towards the Asia-Pacific region while maintaining a presence in the Middle East, and continued proliferation of WMD. The environment is uncertain and complex and its threats include: criminal organizations, terrorists, states and no-state actors, insurgents, transnational groups, proxies, technologically-empowered individual, and paramilitaries. These are increasing in number and capabilities, and may operate as regular, irregular, or hybrid threats that can and will challenge conventional military forces. Enemies will use anti-access and area denial, and advanced threat tactics and technologies, to challenge U.S. forces.

b. Given the future operational environment, the ACC also describes what the Army must do as part of the joint force to protect U.S. national interests and successfully execute the primary missions, of the U.S. Armed Forces. The Army must maintain a credible, robust capacity to win decisively and the depth and resilience to support combatant commanders across the range of military operations in the homeland and abroad. This places a premium on operational adaptability, the fundamental characteristic of the Army—a quality that Army leaders, Soldiers, and civilians possess based on critical thinking, comfort with ambiguity and decentralization, a willingness to accept prudent risk, and an ability to make rapid adjustments based on a continuous assessment of the situation. Operational adaptability requires resilient Soldiers and cohesive teams that are able to overcome the psychological and moral challenges of combat, proficient in the fundamentals, masters of the operational art, and cognizant of the human aspects of conflict and war. It also requires flexible organizations and adaptable institutions that are tailored and scaled to support a wide variety of missions and adjust focus rapidly to prevent conflict, shape the operational environment, and win the Nation's wars. Finally, the Army must adapt its institutions in response to lessons learned and the future operational environment. This will require a comprehensive investment strategy based on operational adaptability and flexible organizations. A key resource for this investment strategy will be the war dividend of experienced leaders and Soldiers. It will also require that the Army set strategy-based and fiscally prudent priorities, carefully balancing the readiness of its forces with critical modernization and end strength investments.

c. Army forces consisting of leaders, Soldiers, and civilians, trained and educated to be operationally adaptable, continue to support the steady-state foundational activities for combatant commanders and provide versatile, sustainable, land forces for a wide range of missions as outlined in defense strategic guidance. The capabilities the Army must possess to prevent conflict, shape the operational environment, and win the Nation's wars are described throughout the ACC. The Army is an adaptive, flexible, and combat-hardened Army used to meet challenges. Regardless of the future challenges, the Army will continue to execute its responsibilities in a professional and honorable manner.

Appendix A

References

Section I

Required References

This section contains no entries.

Section II

Related References. Army regulations, DA pams, field manuals, Army doctrine publications (ADP), and DA forms are available at Army Publishing Directorate Home Page

<http://www.usapa.army.mil> TRADOC publications and forms are available at TRADOC Publications at <http://www.tradoc.army.mil/tpubs>.

ADP 1

The Army

ADP 3-0

Unified Land Operations

Army Regulation 71-9

Warfighting Capabilities Determination

Army Special Operations Capabilities Integration Center Capabilities Development Integration Directorate, United States Army John F. Kennedy Special Warfare Center and School. (2012). Special Operations White Paper. Available upon request through the proponent.

Capstone Concept for Joint Operations

Department of the Army. (2012, April 19). 2012 Army Strategic Planning Guidance.

Department of the Army (2012, March 1). 2012 Annual Report on Business Transformation, Providing Readiness at Best Value. Retrieved from <http://usarmy.vo.llnwd.net/e2/c/downloads/239492.pdf>

Department of the Army. (2012, April 2). Army Profession Campaign Annual Report. Retrieved from <http://cape.army.mil/Army%20Profession/ArmyProfession.php>

Dick, C.J. (2003, April). *The Future of Conflict: Looking Out to 2020*, Conflict Studies Research Center. Camberley: UK. Retrieved from <http://www.isn.ethz.ch>

DOD (2012, January 4). Sustaining U.S. Global Leadership: Priorities for 21st Century Defense. Retrieved from http://www.defense.gov/news/Defense_Strategic_Guidance.pdf

DOD Directive 5100.01

Functions of the Department of Defense and Its Major Components

DOD Directive 7045.20

Capability Portfolio Management

Field Manual 1-01

Generating Force Support for Operations

Gaining and Maintaining Access: An Army-Marine Corps Concept. (2012, March). Retrieved from <http://www.quantico.usmc.mil/activities/?sectionequalsigncdi>

Gray, C. (2005, April). Transformation and Strategic Surprise. Strategic Studies Institute. Retrieved from <http://www.strategicstudiesinstitute.army.mil/pdffiles/pub602.pdf>

Heidelberg Institute for International Conflict Research. (2012, February 23). Conflict barometer 2011. Retrieved from <http://www.hiik.de/en/index.html>

Hix, B., Smith, M. (2012, October). Armor's asymmetric advantage. *Armed Forces Journal*, 16, 18-20, 33. Retrieved from <http://www.armedforcesjournal.com>

International Institute for Strategic Studies. (2011). The Military Balance 2011; The annual assessment of global military capabilities and defence economics. London: Routledge. Retrieved from <http://www.iiss.org/publications/military-balance/the-military-balance-2011/>

Joint Publication 5-0

Joint Operational Planning

Joint Operational Access Concept

Odierno, R.T. (2012, January). Marching Orders. 38th Chief of Staff, U.S. Army. America's Force of decisive Action. Retrieved from <http://armylive.dodlive.mil/index.php/2012/01/csa-marching-orders/>

Odierno, R.T. (2012, August). Remarks at World Affairs Council of Northern California. [As delivered]. Retrieved from http://www.army.mil/article/86263/August_24_2012_CSA_Remarks_at_World_Affairs_Council_of_Northern_California_As_Delivered/

Perkins, D. (2012, February 23). Defining the war dividend [video file]. Retrieved from <http://www.youtube.com/watch?v=6FawC09rxHA&feature=endscreen&NR=1>

TRADOC G2. (2012, August). Operational Environments to 2028: The Strategic Environment for Unified Land Operations. Available by request from proponent.

TP 71-20-3

The U.S. Army Training and Doctrine Command Concept Development Guide

TP 525-8-1

TRADOC Generating Force Study, Innovation and Adaptation in Support to Operations

TP 525-8-2

The U.S. Army Learning Concept for 2015

TP 525-8-4

The U.S. Army Concept for Building Partner Capacity 2016-2028

TRADOC Regulation 71-20

Concept Development, Capabilities Determination, and Capabilities Integration

U.S. Army Capabilities Integration Center. (2011, April 14). Setting the Theater: Future Army forces at the strategic and operational levels. Available by request from proponent.

U.S. Army Capabilities Integration Center. (2012, June 15). Integrated Capabilities Development Team Charter Seventh Warfighting Function. Available by request from proponent.

Appendix B

Key Required Capabilities

This appendix identifies new, critical, or different capabilities required to fight and win in future armed conflict. They are not all encompassing. TP 525-3-1, the Army functional concepts, and the leadership directed concepts will refine the following broad capabilities.

B-1. Mission command

a. The future Army requires the capability to provide leaders, Soldiers, and organizations grounded in military tactical and technical competencies, skilled in applying the principles of mission command, and capable of employing the mission command system within the operational environment in support of unified land operations.

b. Future Army forces require the capability to gain and maintain a cyber electromagnetic activities advantage to deny, disrupt, degrade, or destroy enemy cyber and electromagnetic warfare capabilities within the operational environment to enable decisive action in unified land operations.

c. The future Army requires the capability to provide leaders and staffs expert in applying operational art and the operations process, enabled by knowledge management of organized and distributed data and information shared within the operational environment to succeed across decisive action in unified land operations.

d. Future Army forces require the capability to synchronize themes, messages, and actions in operations to inform U.S. and global audiences, influence foreign audiences, and affect adversary and enemy decision making within the operational environment to succeed in unified land operations.

e. The future Army requires the capability to achieve special operations and conventional force interdependence through a range of personnel, educational, training, command, and support relationships across all activities and operations within the operational environment to support unified land operations.

f. Future Army forces require a coherent and integrated network of command posts, air and ground platforms, dismounted leaders and Soldiers, and sensors linked by a suite of mission command applications, information services, and communication infrastructure to synchronize all elements of combat power for success in unified land operations.

g. The future Army requires the capability to provide human and technical connectivity and interoperability that enables the joint force, Army, and partners to share information in an appropriate format, protect information from adversaries, and manage the network in support of unified action.

h. The future Army requires the capability to operate, defend, and attack within, through, and from cyberspace across all functions within the operational environment to gain cross-domain synergy in support of unified action.

i. The future Army requires the capability to provide leaders and Soldiers that understand how and when adversaries employ cyberspace operations and cyber capabilities, how to mitigate adversary actions, and how to respond to gain and maintain the cyber advantage within the operational environment in support of unified land operations.

j. The future Army requires the capability to exercise mission command over forces and capabilities that are part of a joint cyber infrastructure and operate throughout the operational environment in support of unified land operations.

k. The future Army requires the capability to provide leaders and organizations who understand the capabilities, limitations, products, and enhancements that space systems and forces provide to sustain access to space capabilities within the operational environment in support unified land operations.

l. Future Army forces require the capability to gain and maintain assured access to space capabilities and defend space-based assets within the operational environment to ensure access to the capabilities and assets in support of unified land operations.

m. Future Army forces require the capability to deny or disrupt threat access to space-based capabilities and to degrade the ability of enemies to employ such capabilities against friendly forces within the operational environment in support of unified operations.

n. Future Army forces require the ability to gain and maintain assured access to space, defend space-based assets, and replenish critical space-based capabilities in support of unified land operations.

B-2. Intelligence

a. Future Army forces require the capability to synchronize intelligence analysis, information collection, and the Intelligence Enterprise in home station and complex environments to better understand the operational environment and develop the intelligence necessary for decisive operations in support of unified land operations.

b. Future Army forces require the capability to conduct intelligence analysis of requirements and collected information at all echelons down to company level and below using all available data, information, and products in home station and complex environments to assist commanders in understanding the operational environment and decision making in support of unified land operations.

c. Future Army forces require the capability to execute technical and human collection across the doctrinal intelligence disciplines, interagency and nongovernmental organizations as result of the conduct of combined arms, air and ground reconnaissance, surveillance, security, and intelligence operations within the operational environment to support commanders' situational understanding and decision making in support of unified land operations.

B-3. Movement and maneuver

a. The future Army requires the capability to provide forces that can establish strategic mobility and operational reach to gain positions of advantage while avoiding or overcoming adversary or enemy employment of anti-access and area denial capabilities to respond to a broad range of threats and challenges within the operational environment in support of unified action.

b. Future Army forces require the capability to fight for, collect, and exploit information in close contact with the enemy and civilian populations through continuous physical reconnaissance, persistent surveillance, and human intelligence, enabled by responsive process, exploitation, and dissemination capabilities to develop the contextual understanding to defeat enemy countermeasures, compensate for technological limitations, and adapt continuously to changing situations within the operational environment in support of unified action.

c. Future Army forces require the capability to protect the homeland in depth to protect the citizens, vital assets, and critical infrastructure from threats and hazards within the operational environment in support of unified action.

d. The future Army requires the capability to provide manpower, assured mobility, firepower, and protection to close with and defeat the enemy in and among the populace, to fight for information, conduct effective reconnaissance and security operations, decentralize operations, and adapt continuously to the operational environment in support of unified action.

e. Future Army forces require the capability to conduct and sustain large force operations (corps and division) in the context of campaigns within the operational environment to conduct decisive operations in support of unified action.

f. Future Army forces require the capability to conduct security force assistance and civil military operations in a multinational environment with partners and among diverse populations to support allies and partners, protect and reassure populations, and isolate and defeat enemies within the operational environment in support of unified action.

B-4. Fires

a. Future Army forces require the capability to access and authorize employment of joint and multinational fires to support operations over wide areas in complex terrain enabling Army commanders to gain, maintain, and exploit positions of advantage in support of unified action.

b. Future Army forces require offensive and defensive fires capability to deter, disrupt, degrade, or destroy threat capabilities, pre-empt enemy actions, and protect friendly forces and other critical assets abroad and in the homeland in support of unified action.

B-5. Protection

a. Future Army forces require the capability to protect forces, partners, vital assets, critical infrastructure, and civilian populations from threats and hazards to preserve combat power and freedom of action within the operational environment in support of unified action.

b. Future Army forces require the capability to support civil authorities within the homeland to mitigate the effects of hazards and provide recovery efforts from the results of attacks, major disasters, and other emergencies to citizens, vital assets, and critical infrastructure in support of decisive action.

B-6. Sustainment

a. Future Army forces require the capability to mobilize and deploy; they must also rapidly receive, stage, move, and integrate people, supplies, equipment, and units, especially into austere areas of operations using advanced technologies to avoid and/or mitigate enemy anti-access and area denial capabilities and ensure freedom of action in support of unified land operations.

b. The future Army requires the capability to provide decentralized sustainment (logistics, personnel services, and health service support), in anti-access and area denial environments to all echelons of conventional and unconventional forces that enables decisive action by leaders at lower echelons to provide commanders with operational adaptability in support of unified land operations.

c. 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 within the operational environment to sustain operations in support of unified action.

d. The future Army requires the capability to provide the joint force common user logistics, port and terminal operations, detainee operations, mortuary affairs, postal administration, and sustainment forecasts to set and operate theaters in support of unified action.

e. Future Army forces require the capability to enable rapid combat power regeneration during all phases of unified land operations to extend operational reach and prolong endurance.

B-7. Seventh warfighting function

a. The future Army requires the capability to manage the tasks and systems that provide lethal and nonlethal capabilities, to assess, shape, deter, and influence people, governments, militaries and the operational environment in support of unified action.

b. The future Army requires closer interdependence of special operations and conventional forces focused on engagement, capacity building, and other shaping activities to support unified land operations.

c. Future Army forces require the capability to work through and with host nations, regional partners, and indigenous populations in a culturally attuned manner within the operational environment in support of unified action.

d. Future Army forces require the capability and capacities to engage with partners on a sustained basis to address shared interests and enhance partners' security, governance, economic development, essential services, rule of law, and other critical functions as part of unified action.

B-8. Training and leader development

a. Future Army forces require the capability to train and educate leaders, Soldiers, and civilians using a continuous adaptive learning model that develops the initial, functional and professional skills, knowledge and attributes to provide the fundamental technical and tactical competence necessary to conduct decisive action in support of unified land operations.

b. The future Army requires the capability to provide leaders at all echelons who are critical and creative thinkers with highly refined problem solving skills that can process data and

information into usable knowledge to develop strategic thinkers in decisive action in support of unified land operations.

c. The future Army requires the capability to train units in a tough realistic environment, adapting training as the mission, threat, or operational environment changes, to provide trained and ready forces capable of conducting missions across the range of military operations in support of unified land operations.

d. The future Army requires the capability to resource, organize, train, and equip cohesive combined arms teams able to employ the full range of joint and Army capabilities to fight and win across the range of military operations in support of unified land operations.

e. The future Army requires the capability to continually assess and adapt in order to direct and align modernization, readiness, and capability development processes to ensure that the operating force has the doctrine, training, education, and materiel needed to fight and win within the operational environment in support of unified land operations.

f. The Army requires the ability to see across the entire force, from TRADOC and FORSCOM to Army Materiel Command and Installation Management Command, to better assess and coordinate the impact of its programs and systems on Army resources in support of unified land operations.

g. The Army requires versatile organizations and units that exhibit operational adaptability, support a wide variety of missions, and adjust focus rapidly to prevent conflict, shape the operational environment, and win the Nation's wars.

B-9. Human dimension

The future Army requires increased military and social competence by its leaders and Soldiers, raising physical and cognitive excellence to gain advantage and maximize investments in them. This includes the capability to match the quality and characteristics of leaders, Soldiers, and civilians to the most appropriate Army occupational specialty and branch requirements within the context of greater efficiency in support of unified land operations.

Appendix C

Army Science and Technology

C-1. U.S. Army application of technology

The Army will consider the military application of technology as well as factors that tend to limit the reach of technology, such as enemy countermeasures, limits of human cognition, geography, culture, and political factors. While surveillance, information, and precision strike capabilities have improved the joint force's ability to see its forces, identify visible enemy forces, share information, and apply joint combat power, it is clear that these capabilities cannot alone deliver rapid or decisive victories in isolation when confronting determined, adaptive enemies in complex environments. Further, technology cannot uncover the opaque intentions, dynamic relationships, and covert actions of human groups. Advances in human sciences can deliver the

improvements in human potential needed to work synergistically with new technology. Technological innovation, if combined with appropriate doctrine and integrated effectively into the organization and training of Army forces can provide tremendous advantages for future missions or operations.

C-2. Army science and technology investment areas

a. The vision and required capabilities from the ACC inform broad investment areas for Army science and technology. The Army's top science and technology investment areas and strategies are woven through the narrative of the body of the concept and discussed briefly below. They are not all inclusive, but a point of entry in science and technology capabilities discussions. All investment areas directly or indirectly support the central or supporting ideas of the ACC and confirm the direction identified by warfighter outcomes and the Army equipment modernization plan.

b. Mission command. Investments in mission command capabilities and systems allow the Army to network the force, improve common situational understanding, facilitate mission command on the move, and achieve the interoperability necessary to enable effective unified action. Investments in mission command are also needed to ensure that the Army maintains a cyber electromagnetic activities advantage over adversaries.

c. Intelligence. Investments in intelligence capabilities and systems enable small units to avoid surprise and large units to achieve surprise. Investments will develop precision collection abilities, accelerate data-to-decision timeframes, and support counterproliferation efforts on a larger scale. Investments must also enable the rapid understanding of the human aspects of the operational environment, and facilitate the synchronization of intelligence analysis and information collection to allow leaders to quickly seize and maintain the initiative.

d. Movement and maneuver. Investments in movement and maneuver capabilities and systems enable assured mobility, vertical maneuver, strategic mobility, operational reach, and unmanned ground autonomy. These investments will enable the Army to conduct operations necessary to achieve decisive outcomes.

e. Fires. Investments in fires capabilities and systems improve the conduct of air defense, increase the ability to access and authorize employment of joint and multinational fires, create scalable effects, and enable dismounted target acquisition. Investments will develop long-range, ground-based fires while maintaining precision. These capabilities will enable the Army with asymmetric advantages to support expeditionary operations by engaging stationary or moving targets with long-range precision missile fires, and providing air and missile defense to defeat anti-access and area denial strategies.

f. Protection. Investments in protection help augment and develop current and new protection capabilities and systems, enhance combat identification, and increase the ability to detect hazards on the move. These investments support rapid response to protect forces, partners, vital assets, critical infrastructure, and civilian populations from threats and hazards.

g. Sustainment. Investments in sustainment capabilities and systems promote advances in supply chain logistics management, improve force health protection, assist the development of expeditionary and energy efficient base camps, and enable more decentralized logistics. These advancements support the Army's expeditionary capability and ability to provide the sustained presence needed to shape the operational environment. Investments in power and energy capabilities and systems improve the quality of life for the Soldier. Investments are needed to create lighter and more compact high-density energy sources, to improve the energy efficiency of base camps, to cultivate effective power and energy management, and enhance energy agility. These investments will significantly reduce the logistics footprint and therefore contribute to the Army's expeditionary capability, ability to conduct unified land operations, and to provide a sustained presence in forward deployed locations.

h. Seventh warfighting function. Investments in the seventh warfighting function help to develop means to facilitate effective communications across cultural and language barriers and increase cultural awareness. Investment is also needed to provide the capability to manage lethal and nonlethal capabilities to assess, shape, deter, and influence the behavior of a people, its security forces, and its government. This allows the U.S. to operate more effectively with host nations, regional partners, and indigenous populations in support of unified action.

i. Training and education. Investments in training allow the Army to create efficient, versatile, integrated, and effective home station and mission command-centric training that accelerates individual learning. Investment helps build persistent and adaptable training and education infrastructures.

j. Human dimension. Investments in the human dimension help decrease the Soldier's physical load, improve assessment, readiness, and resilience of the Soldier, ease the Soldier's cognitive demands, and improve experiential judgment earlier. Complex human interaction in the operational environment, the character of conflict, and new operational modes put a premium on the quality of military and social competence of leaders and Soldiers. Raising their physical and cognitive capabilities is vital to gaining advantages over adversaries and maximizing the Army's investment in its personnel.

Appendix D

Risk of adopting the Army Capstone Concept (ACC)

D-1. Risk within the ACC

a. The CCJO identifies eight areas of risk created if the concept is adopted. As the ACC supports the CCJO, these risks apply equally to the ACC. The CCJO risks are described briefly below. Detailed descriptions of each are in the CCJO.⁴⁶

(1) *Communications required by the CCJO may be unavailable.* Greatest risk lies in the non-availability of a robust, global communications network due to enemy operations, budgetary shortfalls, failure of technological improvements, and others.

(2) *Partners may be unable or unwilling to integrate.* Without integration, the utility of the CCJO declines.

(3) *Advanced technology may prove unaffordable.* Advanced technologies discussed in the CCJO may prove prohibitively expensive in a time of restricted budgets.

(4) *Overemphasis on decentralization may lead to lack of coordination and inefficient use of scarce resources.* Reliance on smaller units of action, if taken to the extreme, could drive the U.S. military to inadequate and/or unaffordable force structure. Balance is paramount.

(5) *Armed Forces may fail to achieve required level of global agility.* Factors influencing agility include forces that are rapidly deployable with access to sufficient lift that is postured to deploy these forces globally.

(6) *Standardization may lead to decreased diversity, flexibility, versatility, and effectiveness.* Standardization threatens the idea of jointness as the complementary employment of diverse service capabilities.

(7) *Elimination of redundancies may lead to operational brittleness and risk.* Eliminating some redundancies takes away options or other courses of action.

(8) *Emphasis on organizational flexibility may limit operational effectiveness.* Effective integration between services requires much more than just bringing units together under organizational flexibility. It requires familiarity, trust, and teamwork, which develop over time.

b. If adopted, Army concepts carry their own inherent risks. These risks inform experimentation and wargaming which follows concept development. They also serve as guideposts when developing priorities within the Army. The ACC highlights five significant areas of risk. They are discussed below.

(1) *The capability of the joint force to deploy the Army rapidly may not be available.* The greatest risk to the Army's ability to project into a JOA is the capacity of strategic lift. If the joint force is unable to maintain the capacity to support theater contingency plans and steady state demands, then this delays the arrival of land forces, yielding initiative to the enemy. To mitigate risk, the Army must consider deployability during DOTMLPF development. Army leaders, in conjunction with the leaders of the other services, must identify the requirements for strategic lift, and leverage unified action partners to reduce demands.

(2) *Funding may degrade the ability of the Army to maintain and regenerate capabilities.* Army Reserve components may not be accessible during all aspects of the force generation model. Reserve components would revert to a strategic reserve, limiting the ability of the Army to rapidly project in response to a crisis. Additionally, without incentives to retain capabilities, the Nation's industrial base's ability to expand production of critical military technologies and weapons systems rapidly may be lost. To mitigate these risks, Army force generation models must remain flexible enough to surge forces as needed. Army leaders must set strategy-based

and fiscally prudent priorities, carefully balancing the readiness of its forces with critical modernization and end strength investments.

(3) *The Army training strategy may be under resourced.* Army training capabilities may not allow units to employ a combination of live-virtual-constructive and gaming environments. Additionally, the ability to replicate combat training center experiences at home station may not be resourced. To mitigate risk, Army leaders must resource units to train units at the expense of modernization. The Army must also develop less technology-dependent approaches to training as an alternative.

(4) *The Army may not be adequately resourced to support all theater campaign plans.* The ability for Army forces to shape the environment is at risk if the demand for Army force structure increases and/or operational tempo funding decreases beyond current projections. To mitigate risk, Army forces must utilize a combination of cyberspace operations and physical presence to gain understanding, build partners, and conduct training. Army leaders must also ensure the DOD adequately resources joint and multinational exercises. Additionally, the Army must leverage the National Guard's state partnership program to meet the demands of the combatant commander's campaign plan.

(5) *The Army may not have sufficient capability to conduct cyberspace operations in a contested environment.* Army forces may not be effective at operating in cyberspace without investment in training and leader development, and personnel recruitment and retention. Freedom of action in cyberspace may be challenged if the Army does not meet these needs. The Army assumes additional risk if acquisition reform does not allow for rapid acquisition of technologies. To mitigate risk, Army forces must train routinely in degraded cyberspace and space environments, develop doctrine to conduct cyberspace operations, and include cyberspace operations in Soldier and civilian professional development programs. Army leadership must recommend changes to policy and U.S. code to ensure access to advanced technology.

c. To mitigate these risks, the Army's campaign of learning will examine alternatives and identify additional methods and courses of action to reduce the impact assuming risk may have on mission accomplishment.

D-2. Risk within the Army Concept Framework

As the Army develops the documents which make up the Army Concept Framework, additional risks may appear. The Army's execution of the Joint Capabilities and Integration Development System will provide solutions which mitigate those risks.

Glossary

Section I Abbreviations

ACC	Army Capstone Concept
ADP	Army doctrine publication
CCJO	Capstone Concept for Joint Operations
DOD	Department of Defense
DODD	Department of Defense Directive
DOTMLPF	doctrine, organization, training, materiel, leadership and education, personnel, and facilities
DSCA	Defense Support of Civil Authorities
JOA	joint operations area
JOAC	Joint Operational Access Concept
TP	TRADOC Pamphlet
TRADOC	U. S. Army Training and Doctrine Command
U.S.	United States
WMD	weapons of mass destruction

Section II Terms

anti-access

Those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area. (JOAC 2012).

area denial

Those actions and capabilities, usually of shorter range, designed to limit an opposing force's freedom of action within an operational area. (JOAC 2012).

Army capstone concept

A holistic future concept that is a primary reference for all other concept development and drives the development of subordinate concepts. (TRADOC Regulation 71-20-3).

building partner capacity

The outcome of comprehensive interorganizational activities, programs, and engagements that enhance the ability of partners for security, governance, economic development, essential services, rule of law, and other critical government functions. (ADP 3-0, TP 525-8-4).

conventional forces

1. Those forces capable of conducting operations using nonnuclear weapons. 2. Those forces other than designated special operations forces. (JP 3-05).

cross-domain synergy

The complementary vice merely additive employment of capabilities in different domains such that each enhances the effectiveness and compensates for the vulnerabilities of the others. (JOAC 2012).

global commons

Areas of land, air, sea, space, and cyberspace that belong to no one state.

landpower

The ability -- by threat, force, or occupation -- to gain, sustain, and exploit control over land, resources, and people.

special operations

Operations requiring unique modes of employment, tactical techniques, equipment and training often conducted in hostile, denied, or politically sensitive environments and characterized by one or more of the following: time sensitive, clandestine, low visibility, conducted with and/or through indigenous forces, requiring regional expertise, and/or a high degree of risk. (JP 3-05).

Section III

Special abbreviation and terms

human dimension

That which encompasses the social, physical, and cognitive components of Soldier, civilian, leader, and organizational development and performance essential to raise, prepare, and employ the Army in unified land operations.

mobile protected firepower

Forces with cross-country mobility, lethal firepower, and effective armor protection.

operational adaptability

The ability to shape conditions and respond effectively to changing threats and situations with appropriate, flexible, and timely actions.

regionally aligned forces

Those Army units assigned to combatant commands, allocated to a combatant command, and those capabilities distributed and prepared by the Army for combatant command regional missions.

special operations and conventional forces interdependence

The deliberate and mutual reliance by one force on another's inherent capabilities designed to provide complementary and reinforcing effects. Integration and interoperability are subsets of interdependence.

Endnotes

- ¹ Army Regulation 71-9.
- ² TRADOC Regulation 71-20.
- ³ 2012 Army Strategic Planning Guidance, annex A.
- ⁴ Colin Gray, Transformation and Strategic Surprise, 7.
- ⁵ Heidelberg Institute for International Conflict Research.
- ⁶ International Institute for Strategic Studies; Hackett, James (ed.) The Military Balance 2011. London: Routledge.
- ⁷ See appendix C.
- ⁸ ADP 1.
- ⁹ DOD Directive 5100.01.
- ¹⁰ Sustaining U.S. Global Leadership: Priorities for 21st Century Defense. 2012.
- ¹¹ 2012 Army Strategic Planning Guidance, 3.
- ¹² Capstone Concept for Joint Operations, 4.
- ¹³ To be published following the release of the ACC.
- ¹⁴ Landpower is the primary means to impose the Nation's will on an enemy, by force when necessary; establish and maintain a stable environment that sets the conditions for political and economic development; address the consequences of catastrophic events, both natural and manmade, to restore infrastructure and reestablish basic civil services; and support and provide a base from which joint forces can influence and dominate the air and maritime domains of an operational environment.
- ¹⁵ Chief of Staff of the Army Marching Orders.
- ¹⁶ 2012 Army Posture Statement, 6.
- ¹⁷ The total Army is defined in 2012 Army Strategic Planning Guidance as Active, Guard, Reserve, and Civilian, 2.
- ¹⁸ Chief of Staff of the Army Marching Orders.
- ¹⁹ TP 525-8-4, iii.
- ²⁰ Setting the Theater white paper, 25.
- ²¹ Setting the Theater, 4.
- ²² Setting the Theater, 25.
- ²³ ADP 3-0, 1.
- ²⁴ ADP 3-0, 6.
- ²⁵ 7th Warfighting Function Integrated Capabilities Development Team Charter, 2012.
- ²⁶ The doctrinal construct is ADP 3-0, iv.
- ²⁷ Special operations and conventional force interdependence, as discussed in the ACC, is defined in the glossary.
- ²⁸ Definition approved by CSA 25 October 2012.
- ²⁹ Gaining and Maintaining Access, 13.
- ³⁰ Joint Operational Access Concept, ii.
- ³¹ Sustaining U.S. Global Leadership, 4.
- ³² Setting the Theater, 9.
- ³³ JP 5-0.
- ³⁴ Department of the Army, 2012 Annual Report on Business Transformation, Providing Readiness at Best Value, 2.
- ³⁵ JOAC.
- ³⁶ JOAC.
- ³⁷ TP 525-8-2.
- ³⁸ TP 525-3-7.
- ³⁹ LTG David Perkins, Commanding General, Combined Arms Center, Fort Leavenworth, Kansas, discusses how Leader Development and Training must utilize the experience of our battle tested Soldiers to reinvest in the Army, at the Winter Association of the United States Army Symposium, February. 23, 2012, Fort Lauderdale, Florida.
- ⁴⁰ Army Profession Campaign Annual Report, 12.
- ⁴¹ Field Manual 1-01.
- ⁴² TP 525-8-1.
- ⁴³ A capability portfolio is a collection of grouped capabilities as defined by Joint Capability Areas and the associated DOTMLPF programs, initiatives, and activities. Capability portfolio management. The process of integrating, synchronizing, and coordinating DOD capabilities needs with current and planned DOTMLPF investments within a capability portfolio to better inform decision making and optimize defense resources.
- ⁴⁴ Department of the Army Annual Report on Business, 5.
- ⁴⁵ TRADOC Regulation 71-20.
- ⁴⁶ CCJO, 14-15.