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**The Enduring Relevance of Landpower:
Flexibility and Adaptability
for Joint Campaigns**

Michael A. Vane

and

Robert M. Toguchi

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by Michael A. Vane and Robert M. Toguchi

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Foreword

Landpower is the essence of our Army, and the successful exercise of American military power in the 21st century will require the core competencies that only landpower can provide. This requires an Army that is not only overwhelming in its technology but also structured and trained to easily and seamlessly meld with other service elements to form joint expeditionary forces. The Army, as America's premier land force, must be prepared for operations of uncertain duration, launched with little warning against a diversity of foes.

This paper highlights the relevance of landpower and its principal provider, the Army, to the flexibility and adaptability of joint campaigns. It briefly describes the current and emerging volatile security environment, including the Global War on Terrorism, that has served to influence our national security needs and capabilities. Within this broad context, the paper reveals how landpower, as part of a joint force, can meet those unique demands. It reinforces the relevance of landpower competencies to the future security environment, where joint forces may be the prime executor of the nation's military power.

These capability-based competencies would be enough to satisfy any search for relevance, but the paper also discusses a transforming Army whose contributions to an interdependent joint force will enhance the joint force commander's multidimensional options across the range of military operations.

GORDON R. SULLIVAN
General, United States Army Retired
President

October 2003

The Enduring Relevance of Landpower: Flexibility and Adaptability for Joint Campaigns

The primary goal of Army Transformation is the development of the Future Force—a strategically responsive, precision maneuver force, dominant across the range of military operations. . . . The ultimate measure of success of the Future Force, therefore, will be its contribution to future joint operations.

*The Army Future Force: Decisive 21st Century Landpower*¹

Introduction

The National Security Strategy (NSS) describes a volatile security environment in which the United States faces a broad array of threats requiring a wider spectrum of operations and a more complex range of operating conditions than previously faced.² It requires new ways of thinking and operating to meet dilemmas across the full range of military operations. Land forces must be multidimensional and capabilities-based, able to prevent, protect against and effectively respond to attacks by conventional and unconventional forces, terrorists, criminal organizations and other threats. They must also support civil authorities at home and abroad. In addition, the uneven process of globalization highlights the dangers the nation may face, where countries or regions disconnected from the process pose special risks.³ Significantly, these include places where land forces have already proven their worth and others where they will be indispensable to assuring deterrence, conducting stability or support operations, or ensuring military victory when required. Such places include the tense Middle East and Persian Gulf, Northeast and South Asia, and unstable parts of sub-Saharan Africa and Latin America. The continuing urbanization of many of these regions underscores the need for flexible and adaptable land forces capable of operating in diverse environments.

To meet the needs of the NSS in the face of such challenges, the Army Future Force is a comprehensive conceptual expression of joint-interdependent, integrated, air-ground maneuver operations. Conducted within the overarching framework of future joint concepts, it will provide combatant commanders with a decisive land force capability. Army Future Force units will conduct operational maneuver from strategic distances. They will arrive at multiple entry points with the ability to rapidly conduct distributed and continuous combined-arms, air-ground operations. These units will be capable of continuous day and night operations in open, close or

complex terrain conditions. This dominant maneuver capability throughout the battlespace will disintegrate, dislocate and destroy the coherence of any enemy's capability to resist. In combat, Army tactical units will be able to maneuver into positions of advantage. They will be able to engage enemy forces beyond the range of their weapons, destroy them with precision fires and maneuver, and, when necessary, tactically assault them at any time and place of their choosing. These characteristics are inherent in the Army Vision⁴ and future operational capabilities.

These are unique capabilities that the Army desires as the primary provider of landpower to the joint force. Still, there are some in the defense community who question the relevance of advanced ground force capabilities for the future security environment. Some argue that other military capabilities, such as long-range precision strike, smart munitions, robust surveillance and loitering aerial platforms, could substitute for many of the ground capabilities envisioned by the Army. Additionally, some critics argue that the Army is too cumbersome, too heavy and too slow to respond to the demanding timelines of future crisis situations. While taking such challenging questions seriously, the real issue is whether landpower capabilities remain relevant to the security environment of the 21st century. More specifically, the question is whether U.S. land forces remain relevant to future joint campaigns. To address these questions requires an understanding of the meaning of landpower and the unique and critical capabilities that are essential to winning a joint campaign in the future security environment. The fact is that landpower, defined as "the ability in peace, crisis, and war to exert prompt and sustained influence on the achievement of national objectives on or from land,"⁵ brings a significant degree of flexibility and adaptability to the joint campaign, which cannot be replicated. Insights from futuristic wargames and studies, from military history and from recent operations and deployments reinforce the criticality of land forces to the joint campaign.⁶

Joint Concepts

The Army can best contribute to improved joint capabilities by developing its force with a joint perspective from the very beginning, transforming from our past practices of deconfliction to greater joint interdependence. Force development begins with an appreciation of the future operational environment—that appreciation must be codeveloped with the joint community. It then proceeds to development of operational concepts—those [Army] concepts must be fully nested in joint operational concepts. Finally, that inherently joint Army concept drives every dimension of our force: doctrine, organization, training, materiel, leader development, people, and facilities.

General Peter J. Schoomaker
Army Chief of Staff⁷

In addition to the NSS, the emerging joint framework for future operations is guiding the development of future land force operational capabilities. Jointness is a complex condition that ranges from simple deconfliction at one end of the spectrum

through service integration to full interdependence at the other. In operation, jointness exists in many forms depending on mission requirements. Its exact characteristics are neither constant nor simply articulated, and it is this fact that represents the greatest challenge in preparing joint concepts. However, the current Global War on Terrorism (GWOT), taking place on a variety of fronts, validates one inarguable fact that every concept must account for: The employment of joint forces fundamentally relies on the core competencies of land-, sea- and airpower singularly or in various combinations, to include special operations. Joint force commanders (JFCs) “must establish early control of all battlespace dimensions—air, land, sea, space, and information—and focus power against the critical elements of the adversary’s structure—key capabilities, decisive points, and centers of gravity—moving thereby from the attrition-based campaigns of the past to more rapid decision via disintegration of the enemy’s forces and will to fight.”⁸

Joint concepts are shaping the future today. Key operational concepts such as rapid, decisive and effects-based operations are potential joint solutions for achieving success. Integral to these concepts is the need for strategic responsiveness during all phases of an operation, from deployment through decisive actions and redeployment. The ability to quickly seize the initiative, well demonstrated in Operation Iraqi Freedom, is also key. During Operation Iraqi Freedom, the U.S. military attained dominance in the air swiftly, and ground operations began on the third day after the commencement of operations. This was followed by the unprecedented dominant maneuver of ground forces in conjunction with precise and massive precision engagement from the air and elsewhere, resulting in the arrival of U.S. forces in the center of Baghdad within 20 days. According to one account, “The initial speed of the advance was breathtaking, with the Third Infantry Division (ID) sprinting some 200 miles in three days—far faster than its predecessor, the 24th ID, had traveled during the first Gulf War.”⁹

Application of overmatching and simultaneous combat power (fires, interdiction, strike, maneuver and information) to achieve early decision through sustained joint operations has also proven its worth in Afghanistan and Iraq. Also demonstrated was the ability of the joint force to provide a continuous and comprehensive level of situational understanding and knowledge to make operational success more likely. Clearly, joint concepts are improving the way the U.S. military explores new methods and approaches to its capabilities and operational performance. As joint concepts further mature through experimentation and analysis of lessons learned, they will drive even greater leaps in U.S. military capabilities. One of these is joint interdependence, which connotes the ability to leverage and to integrate the capabilities of each of the services.

It is clear that many recent U.S. military operations have been joint by nature and at increasingly lower echelons. To obtain the necessary synergies important to rapidly resolving conflict in future contingencies, a joint task force (JTF) headquarters will be required to assist in the integration of highly interdependent components from the services. Each contributes unique capabilities to the joint force, and land forces will

be a core element, in many cases providing command and control capabilities. JTF headquarters and the responsiveness they provide improve the U.S. capability to strike adversaries or support other contingencies before adversaries can set the conditions for their own success and before the adverse effects of crises reach unacceptable levels.

New defense guidance and progress toward enhanced joint capabilities signal the increasing complexity and ambiguous nature of current and future operations in a changed geostrategic environment. Strategic victory may require the employment of more than just military capabilities and may rely heavily on the orchestration of interagency, nongovernmental and multinational efforts. The more means, both military and nonmilitary, that U.S. decisionmakers can access, the more likely it is that the right combination of capabilities will be found to deal with the wider spectrum of conflict and challenges. Landpower capabilities provide combatant commanders with a plethora of strategic options and tools. U.S. military history is replete with examples of the ability of land forces to succeed against ambiguous asymmetric threats, even in protracted conflicts. Land forces can operate in complex terrain, integrate coalition capabilities, establish necessary presence, and have flexible and adaptable organizations ready to perform a variety of missions across the spectrum of operations.

Land Force Core Competencies

*The Army will remain capable of fighting and winning our Nation's wars and will be prepared to perform any other missions across the spectrum of conflict. The Army's core competencies enable Army forces to carry out any mission, **anytime, anywhere in the world.***

Field Manual 1, *The Army*¹⁰

America's land force missions include homeland security, statutory support to combatant commanders as they execute the current Global War on Terrorism, and preparation for other assigned missions in defense of U.S. national interests. All of this must be done while transforming for the future. Land force core competencies are indispensable to accomplishing these national defense missions.

Shaping the international security environment is one of the land force's essential core competencies. In many cases the presence of land forces deters threats and regional crises. One can imagine a different course of history, for example, if Allied ground forces had remained in Germany following World War I, as they did after World War II. Or consider the consequences had land force presence in significant numbers not been a constant of our defense posture in the last half of the 20th century and the early years of the 21st century, especially in places like Korea. Needless to say, land force presence in Iraq today is a *sine qua non* for achieving U.S. goals. As of 30 September 2002, for example, the Army had 104,140 troops deployed in foreign countries, the Navy 23,421, the Marine Corps 4,935, and the Air Force 53,340.¹¹ While the numbers and places may have changed, hundreds of thousands of

soldiers remain outside the territory of the United States since 1950. In 1950, for example, there were 229,143 soldiers outside the United States of a total of 593,167, with 108,786 in Japan, as part of the occupation force following the war with that country. In 1960, 314,000 of 877,749 soldiers were outside the United States. With the Cold War in progress there were 226,000 soldiers in Europe. In September 2002, by contrast, 104,140 of 486,542 soldiers were outside the United States, with only 1,858 in Japan and a total in Europe of 59,137 (about a fourth of the numbers there in 1960). According to *The 2003 Army Posture Statement*, “Today more than 198,000 soldiers remain deployed and forward stationed in 120 countries around the globe, conducting operations and training with our friends and allies. Decisively engaged in the joint and combined fight against global terrorism, soldiers are serving with distinction—at home and abroad. Soldiers from both the active and the reserve component have remained ‘on point’ for the nation in the Balkans for seven years, in Saudi Arabia and Kuwait for 12 years, in the Sinai for 21 years, and in Korea and Europe for over 50 years.”¹² Moreover, Army Special Forces, human intelligence resources and other intelligence assets are unique land force capabilities that combatant commanders routinely use to promote security cooperation. Shaping the security environment through presence and engagement activities is particularly effective since it reassures allies and signals a strong and enduring U.S. commitment. With this commitment come credibility and a signal that the United States will remain involved in regional peace and security. Land forces have been and continue to be a primary means for shaping the security environment, and land forces are critical to such work.

Land forces also bind coalition operations. Nearly all U.S. allies and potential adversaries have some sort of land force, but many of them lack a viable navy or air force. In some cases U.S. land forces are the sole means of creating relationships with those foreign militaries, and they do this on the ground, where they meet with military and civilian leaders; train administrators, educators and law enforcement personnel; mingle with the populace; and gain cultural and geographic familiarity. Similarly, land forces work with interagency and nongovernmental organizations operating on the ground to ameliorate the effects of conflict or disaster. When conflicts arise, land forces will have a distinct advantage from their in-country experience that will make them better able to conduct extremely precise operations to capture, segregate or secure key adversary objectives. Familiarity with a foreign area will also assist mission accomplishment in noncombat situations.

A second important core competency is providing a prompt strategic response capability. By being strategically responsive, land forces can provide deterrence within the land domain. Many potential adversaries believe the United States lacks the commitment and willingness to place combat troops on the ground in harm’s way. Apparent reluctance to commit forces often creates the appearance—to friends and foes alike—of U.S. weakness. Rapidly deployable land forces provide extraordinary flexibility and versatility to strengthen the perception of U.S. resolve and commitment. They send a strong message to any potential foe, which can deter aggressive actions. Also, a credible land force presence can serve to meter and ameliorate the

potential for unstable situations to escalate into a general war. Ground forces are scalable. They are able to deter conflict outright, limit its escalation or preclude early enemy success by providing a multidimensional threat to a potential adversary.

As is evident in the initial insights gleaned from the congressionally mandated Millennium Challenge 2002 joint exercise, the near-term development of the Stryker Brigade Combat Team (SBCT) has considerably improved U.S. strategic response capability. Today and in the future, the strategically responsive, full spectrum-capable, modular, scalable and highly maneuverable Stryker brigades of armored vehicles will arrive in days rather than weeks and provide unique advantages to JFCs. The Army Future Force can only serve to further enhance the strategic responsiveness of the land force as the cornerstone of theater land deterrence. Without landpower, deterrence suffers.

Time is always an important consideration in warfare. When a crisis erupts, adversaries often move quickly to create anti-access barriers. To counter that capability, seizing and retaining the initiative will be essential to any future joint campaign. Leveraging a suite of multidimensional joint capabilities to achieve early strategic responsiveness is much preferred over employment of single-dimensional solutions to neutralize an enemy's early advantages of time and space. With an enhanced degree of strategic responsiveness, U.S. forces will achieve positional advantage by threatening or attacking enemy centers of gravity and vulnerable decisive points to achieve dislocation, disintegration and destruction. JFCs will need the rapid projection of scalable and modular combined-arms formations tailored in force capability packages to meet the requirements of each contingency. Rapidly deployable land forces provide the JFC with such capabilities and with many options for entry and shaping operations, thus enabling a more rapid transition to decisive operations.

New capabilities are making the operational force more responsive. Through the purposeful orchestration of prepositioned equipment both afloat and ashore, self-deployment, and airlift and sealift, land forces can rapidly put "boots on the ground" anywhere in the world. Land force leaders, of course, understand the value added of air and naval contributions to strategic response. Accordingly, they work aggressively to promote interdependence that transcends the exclusive competence of any single service in order to create the synergy of combined arms and joint combat power. Land forces depend, to a large degree, on the lift capabilities of air and naval forces. Still, it is primarily the land force, once there, that establishes presence, occupies, possesses, controls or destroys. Missiles interdict, but only ground units can both destroy and occupy. Fully equipped and responsive soldiers from the continental United States or overseas bases provide upon arrival an immediate capability for decisive operations.

When required, land forces can mobilize reserves to generate additional manpower quickly. This is another core competency. The reserve components can provide the national leadership with the added flexibility to address changing circumstances with adequate forces and to surge for prolonged and sustained operations if necessary.

Since 1990, for example, “Army Reserve soldiers have deployed to support every American military operation. More than 84,000 of America’s citizen-soldiers took part in the 1990–91 Persian Gulf War, and some 30,000 Army Reserve soldiers have served as nation-builders in Bosnia and Kosovo. Since the September 11, 2001 terror attacks, 75,000 soldiers in the Army Reserve have been engaged in the global war on terror; and nearly 8,000 Army Reserve soldiers deployed to Operation Iraqi Freedom”¹³

The ability to conduct forcible-entry operations is another core competency of land forces. Multidimensional land forces provide combatant commanders with a forcible-entry capability that enhances the joint capability to achieve tactical and operational surprise. Land forces can also seize multiple objectives simultaneously, thereby complicating an adversary’s ability to react. Finally, forcible-entry operations provide the force protection necessary for seizing, securing and retaining critical forward operating bases.

A fifth core competency is the capability to sustain land dominance and achieve a lasting decision. This lasting decision occurs when commanders win decisive operations through close combat that destroys the enemy’s will to resist. In land operations a final decision requires the capability to seize, occupy, retain or control terrain, people and resources through destruction, or presence, or a combination of both. Only soldiers on the ground provide the capability to control the land environment by ensuring that no territory or forces are out of reach of landpower. In some conflicts, a final decision often requires the capability to destroy a regime’s forces (such as the enemy’s land forces, police and security elements) in detail. Such a decision may be swift, but it may not ensure the desired political results in a campaign or war. Remote precision strikes from only one dimension of military power will not provide this capability, as was demonstrated during Operations Iraqi Freedom and Enduring Freedom (in Afghanistan). These operations are but two examples of the inherent capability of ground forces to conduct sustained operations. Land forces are trained, equipped and organized to control land, populations and situations for extended periods. Airpower cannot remain in fixed positions. Once aircraft expend their fuel and ammunition, they must disengage and be replaced or refueled and rearmed. Land forces are designed to be sustained in place without leaving the immediate battlespace, thus they can continue to deliver firepower and maneuver to control the land area and enemy actions.

In the information age, where increased sensitivity to and concern for collateral damage is pervasive, forces on the ground are better able to “discriminate” among combatants, noncombatants and protected targets, such as churches and national monuments. Discrimination is possible because land forces can loiter, observe darting figures, sense local circumstances and threats, and react deliberately. Mistakes certainly occur in the heat of battle, but for the most part there is no substitute for “boots on the ground” for picking targets and providing accurate battlefield damage assessments. The best sensor remains a human on the ground.

Land forces can also establish and maintain postconflict stability to achieve a lasting decision. The Army has an extensive array of engineer, transportation, health service, civil affairs, psychological operations, communications and other capabilities needed for stability and support operations, and they are without peer in the world. Other land force competencies that support sustained land dominance include:

- effects-based precision fires and maneuver, which give the JFC operationally decisive capabilities.
- information superiority. Land forces can effectively degrade an enemy's will to resist through interoperable ground-, air- and space-based information capabilities.
- experienced land force commanders, their skills honed by joint and multinational training. Exercises and operations produce leaders and staffs who can effectively command and control joint and multinational forces.

The last major core competency is the ability to support civil authorities. Land forces provide a host of unique capabilities to support civil authorities in domestic and international contingencies. These capabilities protect people and infrastructures and help prepare for crisis. In the event of major national disasters, support to civil authorities is considered an essential military mission.

Modern Warfare is Joint Warfare

As we consider the nature of warfare in the modern era, we find that it is synonymous with joint warfare.

Joint Publication 1, *Joint Warfare of the Armed Forces of the United States*¹⁴

Since every crisis situation is different and military planners cannot definitively predict the exact circumstances of every possible contingency, JFCs require multi-dimensional forces, which include land forces as part of a capabilities-based joint force. Land forces furnish the operational flexibility to modulate the application of combat power to each unique environment, each phase of the conflict and each operational situation. By virtue of their inherent versatility, ground forces provide numerous options and the best capability for modulated actions that extend beyond simple destruction by fire (for example, the operational objective to control crossing sites over the Tigris-Euphrates River). Joint strike packages may provide a single option to destroy the sites. Land forces, by contrast, can destroy them; render them unusable for specific periods of time; control, defend or use them; deny their use; or put in place temporary means of crossing to augment or replace them.

Land forces also provide JFCs with the option of employing the five basic forms of maneuver—envelopment, turning movement, infiltration, penetration and frontal attack. These serve to hinder or deny adversaries freedom of maneuver; push them off key terrain; or drive them into areas that allow the use of available indirect and aerial fires to fix and destroy them. Ground forces provide the President, the Secretary of

Defense and JFCs with many viable strategic, operational and tactical options for joint, combined and multinational operations.

In austere environments, land forces can deny adversaries sanctuary in urban and complex terrain such as buildings, subterranean structures, caves and tunnels. Left untouched, adaptive adversaries can expand and leverage sanctuaries to their advantage. Quite often land forces are the forces capable of denying those opportunities. Land forces are needed to dig out the enemy from these areas and destroy them in detail.

Land forces provide overwhelming combat power for fighting and winning wars, and a variety of capabilities for conducting other full-spectrum operations. Combat power—the ability to fight—is the total means of destruction or disruptive force, or both, that a military unit or formation can apply against an adversary at a given time.¹⁵ It creates overwhelming effects at the decisive time and place to defeat an enemy. JFCs use the combined-arms formation in complementary, reinforcing and asymmetric ways to force the enemy to mass for decisive engagement by indirect-fire weapons and aircraft.

The depth and breadth of America's land force capabilities provide combatant commanders important and flexible options to meet short-term and extended theater operational requirements. Only ground forces can efficiently control complex terrain and separate the enemy from friendly or neutral groups of the population. The United States has had to demonstrate repeatedly its commitment to put forces on the ground to deter aggression, to achieve a regime change, or to create a stable environment for the operations of other agencies. Historically, land forces are the element of choice for these complex contingencies and environments. Since ground forces are America's largest military organization, they can endure these missions over longer periods with less negative effect than other forms of military power. Capable and determined adversaries with powerful military forces, large populations and large territories are seldom defeated quickly. Achieving a lasting decision in these instances requires the ability to conduct sustained, multidimensional joint operations. Land forces provide a significant share of these essential and adaptable campaigning qualities.

The Army's Commitment to Jointness

The U.S. Army demonstrates commitment to joint interdependence by its significant support to other services through execution of mandated joint responsibilities for logistics, ground lines of communication, engineering, control of prisoners of war, and other responsibilities. The Army's robust combat service support resources enable it to sustain itself and provide support to other U.S. and multinational forces. In addition, the Army provides essential capabilities to the joint command, control, communications, intelligence, surveillance and reconnaissance (C⁴ISR) structure, filling in gaps and enhancing capabilities for real-time intelligence, human intelligence, combat assessment and communications. Similarly, unique ground unit capabilities in the areas of aviation, health, military police, ground security and construction further support the entire joint force. These unique Army

capabilities are indispensable to joint interdependence and contribute immensely to interagency and multinational efforts as well.

Recent experiences reinforce the need for effective land forces that can achieve a decision rather than merely setting the conditions for one. Today in Iraq, ground forces are providing security, helping to construct transportation facilities, rooting out enemies of the Iraqi people, and assisting reconstruction. During the Afghan campaign of 2002, precision air strikes were critical, but they neither annihilated properly dug-in opposition nor fixed and finished the enemy. Tight integration of precision strike and ground maneuver was needed to destroy opposition forces. In the 1999 Kosovo operation, the air war created the conditions for negotiations, but it was the commitment of ground forces that created the stability that now exists. Troops on the ground are continuing to prevent encroachment by Serbs and others who want to redraw boundaries. Similarly, in 1995 during Operation Deliberate Force in Bosnia, the threat of NATO airpower did not significantly deter Serbia from carrying out its military objectives. It took the deployment of ground forces to create the conditions for the Dayton Accords. In Operation Desert Storm, months of strike operations demoralized the Iraqi army, fragmented its command structure and sharply reduced its combat capabilities, but did not achieve decision. The four-day ground war led to Iraqi surrender and political settlement. During Operation Just Cause in Panama in 1989, vital joint lift positioned U.S. forces in-country to execute effective combat operations, but the collapse of the enemy defenses and the surrender of Noriega were the result of soldiers on the ground. In Grenada in 1983, joint lift and air support were necessary to enable land forces to invade the island and establish control. But once again landpower provided the decisive element within the overall joint force.

A Transforming Army

Preparing for the future will require us to think differently and develop the kinds of forces and capabilities that can adapt quickly to new challenges and to unexpected circumstances.

Donald H. Rumsfeld
Secretary of Defense¹⁶

If land forces already have so many useful competencies and qualities, why is it critical to transform them now? Part of the answer is to meet the ever-increasing mismatch between strategic requirements and available ground force strength. Also, the security environment is changing; current and potential adversaries are adapting and fighting differently; and advanced technology is readily available to U.S. adversaries in world markets. As noted earlier, *The 2003 Army Posture Statement* reports that 198,000 soldiers are forward-based or deployed in 120 countries around the globe.¹⁷ This is a 215 percent increase in the number of deployed soldiers since Fiscal Year 2001, and it has taken place simultaneously with a 37 percent reduction of active duty strength since 1989. Land force leaders are working to soften the impact of this increased personnel tempo (PERSTEMPO). Whatever the results,

America's land force is challenged to meet the needs of the changing security environment. Only through transformation can this be achieved.

Significant steps are being taken to create a culture of innovation and creativity at the Army's institutional and operational levels. The Army is exploring new combinations of concepts, personnel, organizations and technology to meet the adaptive threat environment and ever-increasing strategic demands. Toward that end, the Army's leadership has begun major initiatives to institutionalize transformation as a continuous process of profound change.¹⁸ This Land Force Transformation, as part of the wider Defense Transformation, encompasses a holistic approach to change to better meet the demands of the NSS and the needs of the JFC. In its most basic form, transformation is about changing the way the Army deploys, fights, sustains and uses information. Ultimately, this transformation will provide the future JFC with the requisite capabilities to assure friends and allies; dissuade military competition; deter aggression and coercion; and, when necessary, decisively defeat any adversary. Transformation will serve the nation and its most basic interests.

The Army is actively seeking opportunities to foster such an environment from the bottom up and the top down. In Army professional schools, instructors are exploring use of the "constructivist" teaching method to stimulate creative thinking. This method offers problems for students to solve but does not provide a set "school" approach for doing so. Constructivist teaching has led to measurable results, allowing students to achieve the required level of subject mastery in a third less time than conventional methods. Innovative thinking will be important to those employing the future land force. Concepts such as those developed for the Army Future Force will assist in sparking creativity in future generations of leaders and soldiers.

The recent Afghanistan experience demonstrates again that conflicts can and will arise unexpectedly. Success in these unforeseen situations requires adaptive doctrine, organizations, training, leaders and soldiers who have the best material and facilities available. In such circumstances, innovative thinking and willingness to try different options are essential. A good example of this is the use of innovative ways to generate cooperation and confidence in a local populace for intelligence purposes. This becomes as important as high-technology equipment and external sources such as satellites, intelligence agency feeds and foreign intelligence sources. The ability to create and improve day-to-day soldier communication and negotiation skills with local nationals becomes an intelligence combat multiplier that could be decisive in the conflict. Analysis of lessons learned from deployments and engagements will also be important to the development of adaptive tactics, techniques and procedures for future operations. The decisive role of landpower is evident in many of the lessons (old and new) from operations in Afghanistan and Iraq. Among these is the importance of speed, which was apparent in the rapid commencement of land operations on the third day of military operations in Iraq and the advance on Baghdad within eight days. Compared to the first Gulf War, this maneuver took one-fourth of the time. Also evident was the "ability to act on intelligence rapidly, in minutes, instead of days and even

hours,” particularly in urban operations where armored forces were able to move rapidly into urban areas without forward screening by infantry.¹⁹

Transformation will provide JFCs with strategically responsive and dominant landpower that will enable them to achieve decisive outcomes in the joint fight. Future JFCs will have the ability to leverage the synergy among networked leaders, soldiers, sensors and weaponry to develop the situation, a capability already demonstrated to a great degree in Afghanistan. Additionally, JFCs will be able to maneuver forces to positions of advantage in a distributed, noncontiguous battlespace, and either destroy adversaries or compel them to abandon their sanctuaries and face destruction by joint force precision fires (often directed by special operations forces).

Operational concepts are important and help to inform practitioners on how warfighting will be conducted in the future battlespace. Conceptual changes affect not only land forces but also joint and combined forces. Landpower transformation supports ongoing joint conceptual and experimentation efforts. The Army Future Force concepts will also be fully supportive of a joint capabilities-based force. These concepts will also provide the necessary intellectual underpinnings to match the requirements of the joint concept.

Future operations will require adaptive joint concepts that serve to integrate and synchronize joint capabilities within a distributed, multidimensional battlespace. The Army will continue to work with the Joint Staff, United States Joint Forces Command (USJFCOM) and the Office of the Secretary of Defense to develop and refine future joint concepts. Investments in joint concepts will be integral to ensuring that land force transformation efforts fully support the needs of the future JFC.

Army Future Force concepts will nest within joint concepts to maximize the capabilities inherent in all the U.S. armed forces in concert with the special capabilities of other players within the interagency community, nongovernmental agencies, multinational partners and the commercial sector. Early interaction with these players, routine cooperative relations and information sharing will serve to enhance the integrated operations of the future.

To provide the necessary and critical mid-term combat overmatch capabilities required for implementing the Joint Vision and the National Strategy, the Army plans to create six Stryker Brigade Combat Teams. These are optimized for smaller-scale contingencies and are capable of winning decisively in major combat operations only with significant augmentation. The primary purpose of the SBCT is to serve as a hedge for a recognized gap in current Army capabilities. An SBCT has several unique features that provide the JFC with increased operational and tactical flexibility to execute fast-paced, distributed, noncontiguous operations. It has a Reconnaissance, Surveillance and Target Acquisition Squadron that provides both human intelligence capabilities and unmanned aerial vehicles. Its military intelligence and signal companies, working through a digitally enabled command and control “bridge,” leverage theater and national assets to create an information-enabled force. And the SBCT will be more deployable and sustainable than other armored forces.

As Army force structure continues to transform, modular, fully interoperable Army Future Force units will provide the JFC with a capability to bypass choke points and enemy strong points and to strike directly at enemy tactical and operational targets. Army Future Force units will arrive capable of simultaneous, distributed and continuous day and night combined-arms operations in all weather and terrain conditions. Logistics transformation will provide the joint force with equal or greater logistical support even while substantially reducing the logistic footprint. As an information-enabled force, land force formations will input to and leverage the joint C⁴ISR network. As a knowledge-based force, the Army Future Force will exploit the power of advanced information and space-based technologies to have network-centric battle command fully integrated within the joint, interagency and multinational framework. Army Future Force formations will contribute to and exploit the joint Common Relevant Operational Picture (CROP) to achieve vastly greater decision superiority.

For most of the 20th century, land forces employed combat units with distinct, standardized unit structures such as the regiment, the battalion and the company. These combat formations served the Army and the nation well. However, in the 21st century many ongoing missions cover the full spectrum of military operations. These full-spectrum missions require new mixes of capabilities that traditional unit structures are not always capable of providing. The new defense strategy calls for agility and flexibility. Hence, change in organizational structure is essential. The new structure design makes land force organizations more flexible, modular, tailorable and capable of matching unit capabilities to meet fluid situations and the changing needs of the future global security environment.

These new organizational structures are a key element of the Army Future Force, which will be strategically responsive and provide overmatching lethality with advanced survivability and versatility to the JFC. Leveraging advances in information technology, the new structure will transition smoothly and rapidly among missions, tactical engagements and battles with minimal organizational adjustment. Upon arrival in-theater, the structure will be self-sustaining for three to seven days, and then require only a reduced logistics footprint for continued operations.²⁰

The new design will comprise the tactical warfighting echelons of the Army Future Force, filling the same role as today's brigades and lower-echelon units. These units will enable the joint force to achieve sustained land dominance, forced entry, vertical envelopment and special operations. The new Army Future Force units will be able to direct major operations and decisive land campaigns in future joint operations.

Operations in the future will be widespread and noncontiguous in nature. Operational success will depend on aptly applied leadership, maneuver, firepower, protection and exponentially enhanced information and knowledge. Army Future Force units will employ operational maneuver across strategic distances into places several thousand miles away from the continental United States. This dynamic apportionment and orchestration of military power in any direction or dimension

supports the NSS. The potential for Army units with a “combinational capability” to seamlessly and dynamically combine and recombine disparate joint combat capabilities on the move will also be a U.S. advantage. These units will have the ability to rapidly plan, rehearse, execute and sustain repeatedly in the battlespace to optimize joint operations in a distributive environment.

Leader development for the Army Future Force will also contribute to joint operations and campaigns by orchestrating the assignment and education of soldiers at every level, from private to general, to embrace joint theory, doctrine, history, and tactics, techniques and procedures. This will develop their potential to serve competently in jointly born units throughout their professional lives, often in positions of authority and in command and control of joint forces.

Army Future Force units will conduct operations interdependently with other services to achieve national objectives. Combat in the future will require more than the specific organic capabilities of an individual or service unit alone. Many military tasks will experience greater success with the concerted efforts of several service capabilities employed as an integrated and interdependent whole. The Army Future Force will have the potential, with its joint enablers, to participate in and dynamically orchestrate joint arms operations at an unprecedented pace and level of effectiveness.

The Army Future Force will also employ networked fires, a system of systems that will provide JFCs with real-time capability to employ full-dimension fires across the battlespace. The systems will be fully integrated and interdependent with land force, joint, multinational and interagency capabilities. This networked capability will use all of the advantages of the joint community to deliver precise munitions against an enemy’s decisive points and centers of gravity. The future JFC will be able to orchestrate and synchronize the full panoply of long-range strike assets.

Future joint engagements will be characterized by a new operational construct that will develop the situation in and out of contact, and employ a balanced combination of standoff fires, precise maneuver and rapid assault at multiple locations simultaneously. The future JFC will be able to employ future land force units by directing the continuous integration of powerful small joint units, moving along multiple, noncontiguous lines of operation to objective areas that are force-oriented, while engaging the adversary with organic and external, overmatching and precise supporting fires until culmination, when standoff or close combat assault destroys remaining enemy forces.

Conclusion

The geostrategic environment of the 21st century requires a transformed U.S. military, including its land forces. No one can accurately predict the next threat to the United States and its vital interests, or the methods by which adversaries will prosecute those threats. Waiting for the adversary to strike without developing adequate U.S. defense capabilities relinquishes the advantage and could result in severe consequences for the United States. The GWOT, current threats to the U.S.

homeland and the proliferation of advanced weapons and technologies all highlight the critical need to transform the land force. The result will be a capability-based joint force prepared and ready to dominate any situation across the spectrum of operations. While the future security environment remains uncertain, the need for the Army to have the best trained, best led and best equipped soldiers in the world to provide to the joint force will not change.

Land forces will be transformed to be more responsive, deployable, versatile, agile, lethal, survivable and sustainable in every type of military operation. They have proven to be the instrument of choice to achieve durable strategic results and advantage. The diverse capabilities of the land force contribution to the joint force will help provide the right forces, at the right time, in the right places to maintain stability, to deter coercion and to fight and win if deterrence fails. Soldiers will continue to be essential in joint force land operations because they expand a JFC's range of options. Ground forces are inherently durable, self-sustaining and self-replenishing. Land forces can exercise direct, continuing, discriminating and comprehensive control over land, people and resources. "Boots on the ground" continue to characterize a force of enduring relevance in meeting U.S. global military challenges.

Endnotes

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- ² The White House, *The National Security Strategy of the United States* (Washington, D.C.: U.S. Government Printing Office, September 2002).
- ³ See Thomas P. M. Barnett, “The Pentagon’s New Map,” *Esquire*, March 2003; and Anthony H. Cordesman, “The Military in a New Era: Living with Complexity” in Steven J. Flanagan, Richard L. Kugler and Ellen L. Frost, Eds., *The Global Century: Globalization and National Security* (Washington, D.C.: National Defense University Press, June 2001), pp. 394–395.
- ⁴ Office of the Chief of Staff, Department of the Army, *The Army Vision* (<http://www.army.mil/vision/index.html>).
- ⁵ This definition is derived from William T. Johnson, *Redefining Land Power for the 21st Century* (Carlisle, Pa.: Strategic Studies Institute, U.S. Army War College, 1998), p. 6. Klaus Knorr, in Chapter 1 of *Military Power and Potential* (Lexington, Mass.: D.C. Heath, 1970) defines power as “the ability to influence behavior.”
- ⁶ See, for example, BG Michael A. Vane and Richard J. McCallum, Ph.D., “The Army—A Strategically Responsive Force,” *ARMY*, February 2003.
- ⁷ Opening Statement of General Peter J. Schoomaker, Army Chief of Staff, Before the Senate Armed Services Committee, Washington, D.C., 29 July 2003.
- ⁸ *The Army Future Force: Decisive 21st Century Landpower*, p. 2.
- ⁹ Max Boot, “The New American Way of War,” *Foreign Affairs*, July/August 2003, p. 47.
- ¹⁰ Field Manual (FM) 1, *The Army* (Washington, D.C.: Headquarters, Department of the Army, 14 June 2001), p. 24.
- ¹¹ Department of Defense, *Worldwide Manpower Distribution by Geographical Area*, 30 September 2002.
- ¹² *A Statement on the Posture of the United States Army 2003* Presented to the Committees and Subcommittees of The United States Senate and the House of Representatives, First Session, 108th Congress, p. 1.
- ¹³ Office of the Chief, Army Reserve, *The Army Reserve: An Overview* (www.army.mil/usar/pdfs/ArmyReserve-Overview.pdf, accessed 25 September 2003). (Richard Rinaldo and John Mandeville contributed significantly in the research effort to provide timely and relevant data for this paper.)
- ¹⁴ Joint Publication (JP) 1, *Joint Warfare of the Armed Forces of the United States* (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 10 January 1995 edition), p. I-1.

- ¹⁵ See JP 01-2, *Department of Defense Dictionary of Military and Associated Terms* (Washington, D.C.: Department of Defense, 12 April 2001, as amended through 5 September 2003), p. 97.
- ¹⁶ Remarks as delivered by Secretary of Defense Donald H. Rumsfeld, National Defense University, Fort McNair, Washington, D.C., 31 January 2002.
- ¹⁷ Honorable Thomas E. White, Secretary of the Army, and General Eric K. Shinseki, Army Chief of Staff, *2003 Army Posture Statement: The Army—At War and Transforming* (Washington, D.C.: Office of the Chief of Staff, U.S. Army, 11 February 2003) (<http://www.army.mil/aps/2003/extras/pdfs/statement.pdf>).
- ¹⁸ United States Army, *The Army Transformation Roadmap* (Washington, D.C.: U.S. Government Printing Office, 28 June 2002).
- ¹⁹ Prepared Testimony of Secretary of Defense Donald H. Rumsfeld for the Senate Armed Services Committee, Washington, D.C., 9 July 2003 (<http://www.defenselink.mil/speeches/2003/sp20030709-secdef0363.html>).
- ²⁰ U.S. Army Training and Doctrine Command Pamphlet (TRADOC PAM) 525-3-90, *The United States Army Objective Force Operational and Organizational Plan for Maneuver Unit of Action*, 22 July 2002, p. 6 (<http://www.atsc.army.mil/TSAID/UnitofAction.asp>).