Overview
War transforms armies. Combat accelerates transformation by moving it out of the realm of academic debate and endless speculation about the future to a pragmatic approach focused on fielding new capabilities within new combat formations as soon as possible. In war, transformation means conserving equipment and operational methods that are still relevant while incorporating new technologies, tactics, and organizations that enable victory. It is nearly impossible to replicate in peacetime training the true conditions of land warfare—ambiguity, uncertainty, and above all terror, killing, and exhaustion. For the Army, the best opportunity to transform involves parallel evolution, a method that moves new technologies into combat formations today and explores what the troops will actually do with them in action. With a conflict in progress, this approach is better than trying to predict future uses in an inflexible operational requirements document developed in isolation from the field environment.

Joint, expeditionary warfare demands agile land, sea, and air forces linked by more than simply networked sensors and communication. Brain-to-brain connectivity animated by a cultural predisposition to deploy and fight anywhere on short notice akin to the special operations mindset is equally vital to transformation. Additionally, routine joint training and operations within a joint rotational readiness system are essential to readiness for joint expeditionary warfare. In the new come-as-you-are strategic environment, Army mission-focused force packages must bring the Joint Force Commander the capabilities he needs, whether they be theater missile defense or survivable, mobile, armored fighting vehicles that deliver accurate, devastating firepower.

XVIII Airborne Corps seems ideally positioned to spearhead Army transformation. Scaling, equipping, and organizing existing XVIII Airborne Corps forces for integration as specialized modules of combat power into plug-and-play joint command and control structures, such as the notional Standing Joint Force Headquarters, gives the Army an unprecedented opportunity to pursue new directions in adaptive force design.

What is the strategic purpose for which a transformed American Army should be built? General Washington’s Continental Army was a force-in-being—as long as it existed so did the new United States. General Winfield Scott’s Army was an expeditionary force hastily built solely for the capture of Mexico City. General Grant’s mass mobilization Army was formed by attrition warfare and intended for one purpose: the destruction of the Confederacy. General Marshall’s Industrial Age Army was focused on the defeat of Japan and Germany and very little else.

President Bush provided a clear strategic purpose for the Army in his address to the graduating class of 2002 at West Point: defending the United States at home with an economic mix of civil and military capabilities while the strength of the active land, sea and air forces is employed to attack and destroy the enemy on his own ground. This strategy dictates the requirement for land forces that not only deploy rapidly but are strong enough to perform armed reconnaissance to drive enemy elements into killing zones for destruction by strike assets. Any new force design for the Army must be based on the strategic assumption that Army combat units will be organized for global, joint, expeditionary warfare, with the air and naval services conducting both operational and tactical maneuver and strike.

Lessons from Recent Combat
Before turning to the subject of a new force design, it is useful to reflect on recent combat operations on the ground in Afghanistan and Iraq. What lessons do they hold for future Army force design?

First, the new character of post-Cold War target sets—with dwell times ranging from 30 seconds to 2 minutes—demands the effective integration of maneuver and strike forces within a joint operational framework through networked sensors and communications systems designed to enable Army forces to quickly exploit what they learn.

Second, plentiful networked information cannot replace killing power and inherent survivability, especially in close combat. Perfect situational awareness is a dangerous illusion. Soldiers, sailors, marines, and airmen will never know all that happens inside their...
battlespace, and what they do learn will be of fleeting value. Surprise on the tactical level will persist. Mines, rocket-propelled grenades (RPGs), machine guns, mortars, chemical agents, barbed wire, and air defense systems will remain effective against ground forces, even in this era of air strikes with precision-guided munitions. Armored protection is vital.

Third, experience on the streets of Mogadishu, in the air over Kosovo, and in Afghanistan and Iraq suggests that severe weather, air defenses, complex terrain, and urban environments still make combat a very close fight. Technology has its limits in close combat. Human intelligence, manned reconnaissance, and competent soldiers on the ground are critical to the process of distinguishing the individual with the RPGs from the non-combatant carrying a rake on his back, particularly in close terrain. To be effective in the confusion of 21st century close combat, soldiers and marines must be trained and prepared to exercise independent judgment.

Fourth, responsive and accelerated decision cycles at all levels are essential to hunting down and killing the enemy. Effective integration within a relatively flat, joint command structure is critical to the success of combining special operations forces and conventional Army ground forces with accurate strikes from air and sea. This degree of integration cannot be achieved in restrictive, hierarchical, Cold War command systems suffering from information overload and too many levels of command.

Fifth, battalions and brigades today are too small for either warfighting or post-war security operations. Robust battalions of 800 or more soldiers are necessary to provide the density of boots on the ground needed today in Iraq and Afghanistan. Less overhead and more combat power at the lowest level is an imperative. In addition, activities that were coordinated and executed at division level must now be done at a lower level, hence, the requirement for a robust command and control structure in battlegroups, as well as the joint C4ISR connectivity and enabling capabilities now found only at division and corps.

Ultimately, equipment, personnel, training, organization and other important attributes of a force are shaped by institutional culture. A tradition-bound Army culture largely formed in the 19th century and marginally modified throughout the 20th cannot provide the institutional foundation for a 21st century force simply by embracing networking. Mechanization of the Army was achieved by replacing horses with machines, not by hauling them to the battlefield in trailers. And before the horses could be replaced, many officers who rode them had to go. Attempting to compensate for inherent deficiencies in Army organization and doctrine by binding forces more tightly with networked systems is not transformation. The first step in transformation must be to strengthen the human elements of the force, which then can choose, modify, improve, and employ technology appropriately. Organizational change together with cultural change to cope with the enduring uncertainty of conflict are the critical enablers in network-centric warfare.

Special Operators Point the Way

Dispersed, mobile warfare in the mountains of Afghanistan or the cities of Iraq demands that American soldiers fight in small, cohesive, self-contained formations that possess all the arms of land combat. Adaptation to fight effectively with such a force demands a high standard of battle drill and tactical discipline, because success rests primarily in the hands of company commanders, platoon leaders, squad leaders and individual soldiers. Army forces must be organized in garrison for the way they will deploy and fight on very short notice. The soldiers must know one another well enough to maintain contact in the confusion of combat through routinized battle drill, integrating their movements into the joint fight and employing organic, as well as joint direct and stand-off attack systems to create the shock action that allows them to close with and kill an elusive enemy. Recent fighting provides examples.

In Iraqi Freedom, Army brigades in 3ID and marine regiments in the 1st marine division had to be augmented to operate across the country in a non-contiguous environment. This resulted in the emergence of brigade combat teams (BCTs) ranging from 5,000 to 7,000 men that contained the armed reconnaissance, sustainment, and combat power to operate independently. What they did not have that resided largely at division and corps were the joint C4ISR plugs and the armed reconnaissance. Most important, as they grew in size and complexity, the BCTs were really too challenging for a colonel with a staff of captains, and two majors to handle on an ad hoc basis. Moreover, these ad hoc BCTs were not specialized modules of combat power.

In expeditionary operations the word modular translates as stand alone. The current brigade formations inside divisions cannot stand alone, which is why they were dramatically reinforced during Iraqi Freedom. Thus, new formations that replace brigades or divisions must integrate the command element, the desired capability, and the support element into stand-alone expeditionary force packages. Moving the existing division in smaller pieces does not change the current warfighting paradigm, reduce or eliminate echelons of unneeded C2, or advance jointness on the operational level where it must be seamless. Moving the old force faster cannot create or substitute for a new joint operational architecture tied to a joint operational concept that integrates maneuver, strike, ISR, and sustainment across service lines.

These are some of the reasons for a new command structure that eliminates unnecessary command levels and drives jointness downward in the Army. In formations larger than current brigades,
but smaller than current divisions, brigadier generals commanding 5,000–5,500 man combat maneuver groups (CMGs)-each with a robust staff, including a deputy commander and a chief of staff who are colonels-actually drive the joint C4ISR plugs to lower levels, compressing the tactical and operational levels to the point where maneuver and strike are integrated at a much lower level than is currently possible. There are also other unintended benefits from this approach. One is that eliminating some of the career gates on the Army ladder also changes career patterns, allowing more time for lieutenant colonels and colonels to become educated and joint; something that the current Army career patterns obstruct. This promotes breadth of experience that is not rewarded in a branch-dominated promotion system that reinforces narrowness of experience. Another is the placement of a brigadier general in command on the tactical level. Here the historical record is illuminating.

Accompanying the first infantrymen ashore on June 6, 1944, was Brigadier General Theodore Roosevelt, the only American general officer who arrived with the first wave of troops on D-Day. His influence on the outcome of American landings illustrates the importance of placing a general officer in command of Army forces on the tactical level in the environment of expeditionary warfare. Roosevelt had a crucial decision to make when he realized that the initial assault force had landed two thousand yards south of where they should have on Utah Beach. Without hesitation, Roosevelt adjusted the plan, running among the company commanders telling them precisely where they were and, in view of the lack of enemy resistance where they had landed, directed their movement inland along new routes. “I must have walked twenty miles up and down that beach and over the causeways,” BG Roosevelt would recall. The result was a rapid penetration by American infantry several miles inland that Army intelligence analysts had predicted would take several days. On Omaha Beach, where there was no general officer present, the situation was far more confused and costly in terms of American dead.

**A New Warfighting Paradigm for XVIII Corps**

US Forces can now identify and strike targets quickly and accurately nearly anywhere on the earth’s surface. These conditions create the opportunity for operations with the strategic impact of General MacArthur’s landings at Inchon in 1950 wherever the effects of strikes are concentrated if Army maneuver forces are tightly integrated with the strike and information power of the joint force.

Joint expeditionary forces integrated into plug-and-play joint command and control structures such as the notional standing joint force headquarters (SJFHQ) (figure 1) can exploit these conditions to compel the internal collapse of opponents through maneuver and strike without necessarily relying on destructive, time-consuming attrition warfare or mass armies. In joint expeditionary warfare, mission success is less about the size of the land, sea or air expeditionary forces committed to action than it is about the influence that American expeditionary forces can achieve within a joint operational framework.

In the global war on terrorism, speed is a strategic necessity, but the arriving Army combat forces must also be able to kill in order to survive. There is no point in a return to the Ia Drang valley, where we fielded an Army force that depended on air power for survival. The goal in force design is to provide mission focused capability packages of Army ground forces to destroy hostile or dangerous regimes quickly to minimize the damage the intervention causes and then to provide the shield behind which new, prosperous, and democratic societies can rise. The combat maneuver group proposed here (and described in greater detail in *Transforming Under Fire*) is designed with these missions in mind. (figure 2) A CMG has the combat power to drive an enemy into kill zones for air strikes or to systematically destroy an enemy that refuses to present lucrative target sets to air power. A CMG can control a large area in a post-conflict environment and exploit the synergy that springs from all the arms of a ground combat force and the sustainment within it, while simultaneously capitalizing on the striking power of our air forces.
As an integrated, cohesive, all arms formation, a CMG can provide the necessary critical mass on the ground while operating autonomously inside the joint force. It is designed, in conjunction with other CMGs, to perform the complex, integrative tasks once required only of divisions and corps. CMGs also can deploy in smaller configurations for small-scale operations or with augmentation for larger contingencies, or they can deploy with other modules for larger contingencies. They do not require augmentation from higher Army echelons to be joint interoperable.

These formations can also perform the constabulary duties in Iraq. The British Army has done this for years. In Ulster and Cyprus, everybody, regardless of specialty, pulls security duty with a rifle on the ground. But these missions do not convert the British Army permanently to constabulary only forces. When that duty is over, the formations return to their warfighting equipment and orientation. With unit manning and joint rotational readiness, the same approach can work for the U.S. Army.

Transforming Army forces into mission-focused force packages that can be assembled like LEGO® into larger Joint Operational Forces is part of the process of combining maneuver and strike in new ways to pose more complex threats to new enemies. In Afghanistan and future conflicts, Joint and Combined Force commanders should be free to develop new concepts of operation to employ these modules of specialized combat power as conditions dictate. Special Operations Forces have blazed the path for the conventional force in accomplishing this down to the tactical level. The short scenario that follows illustrates how combat maneuver groups would provide mass in the context of mobile dispersed warfare.

An illustrative example may help illuminate what this building block approach means in operational terms. An anti-Western regime somewhere in North Africa, the Middle East, or Southwest Asia threatens to launch cruise and theater ballistic missiles against American allies in the region and in Europe. In response, the President and Secretary of Defense position a carrier battlegroup (CVBG) and Marine expeditionary unit (MEU) off the coast in close proximity to the hostile power. Once the CVBG and MEU are in place, an air expeditionary force (AEF) operating from bases in the central Mediterranean begins to strike confirmed or suspected weapons of mass destruction sites and to eliminate any air defenses that the enemy can present. To secure the port and set the conditions for follow-on operations, the regional unified commander asks for the use of an Airborne-Air Assault Group with augmentation from an Aviation Combat Group and a light reconnaissance strike group (figure 3).

A plan is devised that involves the use of the CVBG and MEU to seize control of an airport capable of supporting C–17 and commercial air freight roughly 50 kilometers from the port city that is the primary objective. An airborne assault of two Army infantry battalions is organized to reinforce the MEU attack to seize the airport. When the balance of the Army Airborne-Air Assault Group arrives, operations to seize the port will begin. With the port in American hands, the Army prepositioning afloat (APA) set can be disembarked and rapidly deployed inland. A joint force early deploying support group (figure 6) is alerted to fly in and draw equipment from the APA set when it arrives to provide the sustainment backbone for a larger expeditionary force (AEF) operating from bases in the central Mediterranean begins to strike confirmed or suspected weapons of mass destruction sites and to eliminate any air defenses that the enemy can present. To secure the port and set the conditions for follow-on operations, the regional unified commander asks for the use of an Airborne-Air Assault Group with augmentation from an Aviation Combat Group and a light reconnaissance strike group (figure 3).

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expeditionary ground force. All of these forces will be important during the follow-on phase when a corps-size Army-Marine expeditionary force strikes the enemy capital inland.

Simultaneously, the SJFHQ boards the USS Coronado, a naval vessel configured for command and control of joint forces ashore and at sea. Initial operations can be directed from the SJFHQ until the port is securely in U.S. and allied hands, and the joint force commander is ready to begin the advance inland. A timeline for the operation with N day as notification day suggests a 17-day operation from deployment to the arrival of larger Army and Marine combat forces (see figure 4).

In today’s environment of no-notice crisis and conflict, XVIII Airborne Corps forces (figure 5) must be capable of moving rapidly from widely dispersed staging areas overseas and in the continental United States deploying into a crisis or regional conflict and initiating an attack, all without pausing. Such operational responsiveness requires units with high states of readiness. A way to provide ready, deployable Army combat troops is to link a new unit replacement policy to a new training and readiness structure. In this system, equipment and soldiers know when they must be ready to deploy and fight. An example of a readiness and training structure that could provide Army forces for this operation might resemble the structure depicted in figure 6.¹

Because the joint force commander expects a tough fight for control of the port, he requests the “on order” deployment to the airport of an Army air assault task force with augmentation from both an aviation task force and a light reconnaissance strike group (LRSG). The LRSG is a “dispersed mobile warfare” design that employs sensors forward with maneuver elements to provide the coverage needed to exploit the group’s devastating, precise firepower. It has the firepower, mobility, and armored protection to drive any enemy force on the ground into kill zones for air strikes. The decision to augment the Airborne-Air Assault Group with a reconnaissance (recon) squadron from the LRSG adds significant capability to the larger joint force.

Given the limited numbers of UH–60s available in the early phase of the operation, 40 mobile tactical vehicles (light) are drawn for use by the air assault infantry battalions. The superior off-road mobility, fuel efficiency, and armor protection of the platform will be important during the advance to the port and subsequent urban operations. The U.S. Transportation Commander is meanwhile directed by the Chairman of the Joint Chiefs to assemble a mix of C–17, C–5A, and commercial airlift to move the Army expeditionary force in roughly 300 C–17 sortie equivalents to the conflict region as soon as the MEU secures the airport.

In this early phase of the operation, the joint force commander will leave one of the air assault battalions behind while picking up a recon-strike squadron from the LRSG. Together with the MEU, this task force is positioned to make the move from the airport to the port, seizing the facilities for the follow-on phase that includes an advance into the interior. Striking into the country and seizing a commercial airport is consistent with the requirement in the age of weapons of mass destruction to “lean into the enemy’s WMD fire.” For obvious reasons, the enemy will be reluctant to employ chemical, biological, or nuclear weapons against a force operating in close proximity to large population centers. In the event they do, the CI battalions and the joint force support groups contain detection and decontamination elements. While the enemy attempts to cope with the presence of more

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¹ This reorganization provides a ready, Army expeditionary force of roughly 25,000–50,000 troops with equipment on a rotational basis. (7 days a week, 12 months a year)

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**Figure 4. Timeline**

<table>
<thead>
<tr>
<th>N Day</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVBG and MEU deploy</td>
<td>MEU secures airport</td>
<td>AF and LRSS deploy</td>
<td>AF and LRSG # and MEU secure port</td>
<td>APA lands</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

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**Figure 5. 85,000 Army troops reorganized for global joint expeditionary warfare inside XVIII Airborne Corps**

- 82nd Airborne Division
- 101st Airborne Division
- 3rd Armored Cavalry Regiment
- 2nd Armored Cavalry Regiment
- 3rd Armored Cavalry Regiment
- Supporting XVIII Corps Elements
- Elements returning from U.S. Army Europe to XVIII Airborne Corps

*This assumes a reduction in strength of U.S. Army Europe from 63,000 to 23,000 or lower troops.

- B. Airborne-Air Assault Group
- C. Light Reconnaissance-Strike Groups
- D. Aviation Combat Group
- E. Joint Force Support Groups

* Army expeditionary forces would be consolidated into large concentrations stationed at Fort Lewis, Fort Bragg, Fort Campbell, Fort Irwin, and Fort Bliss. These locations provide the forces in closer proximity to Air Force and Marine expeditionary forces to facilitate joint training and planning.

* This reorganization provides a ready, Army expeditionary force of roughly 25,000–50,000 troops with equipment on a rotational basis. (7 days a week, 12 months a year)

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**Figure 6: Notional rotational readiness structure**

<table>
<thead>
<tr>
<th>XVIII Airborne Corps Forces</th>
<th>Training Cycle</th>
<th>Deployment Cycle</th>
<th>Reconstitution Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Airborne-Air Assault Groups</td>
<td>2–3 A-AAGs</td>
<td>2–3 A-AAGs</td>
<td>2–3 A-AAGs</td>
</tr>
<tr>
<td>3 Light Recon-Strike Groups</td>
<td>1 LRSG</td>
<td>1 LRSG</td>
<td>1 LRSG</td>
</tr>
<tr>
<td>8 Aviation Combat Groups</td>
<td>2–3 ACGs</td>
<td>2–3 ACGs</td>
<td>2–3 ACGs</td>
</tr>
<tr>
<td>3 Joint Force Support Groups</td>
<td>1 JFSG</td>
<td>1 JFSG</td>
<td>1 JFSG</td>
</tr>
</tbody>
</table>

Note: Rotating formations in operational readiness cycles links XVIII Airborne Corps to Marine and Air Force expeditionary elements in the same readiness cycles.
than 7,000 Army and Marine combat forces controlling his largest commercial airport and seaport, the rest of the aviation task force and remaining air assault battalion deploy as well. Within days, depending on decisions at the strategic level, a joint expeditionary land force of roughly 25,000 soldiers and 4,000 to 5,000 marines can be on the ground and ready to conduct decisive operations inside the country.

When the airport is secure, the deputy commander for maneuver establishes his command post ashore. Eventually, the LRSG and MEB will advance inland under his command while the early deploying support group and the Airborne-Air Assault Groups secure the port under the deputy commander for sustainment. Meanwhile, the deputy commander for strike operations keeps up the pressure on the enemy inland.

Conclusions

Potent force design and tactics are intimately connected to weapons and communications technologies. Today’s threats are combinations of capability and proliferation. Many nations are developing hypersonic cruise missiles and sophisticated air defenses, but, fortunately, these systems are too sophisticated and too expensive for most of America’s potential enemies to afford and utilize. This will probably change in the future. Simultaneously, the main battle tank remains the most lethal weapon system in close combat, and will continue to be so for many years, as demonstrated on the West Bank in Palestine, and in Afghanistan. It is truly the big hammer. But when the President, the Secretary of Defense, or the regional commander needs a screwdriver, the hammer is not the best choice. This is why Army ground forces require the ability to meet various threats in various environments, but the Army needs weapon systems today that can deliver more than computer slide shows with visually exciting graphics.

Transformation under fire is an opportunity better faced and accepted than ignored and lost. Given the nature of current and future fights, XVIII Airborne Corps is the ideal candidate to spearhead Army transformation. Field Marshal William Joseph Slim, who led British and allied forces in a ruthless jungle war with the Japanese Imperial Army, echoed similar sentiments 55 years ago:

Dispersed fighting, whether the dispersal is caused by the terrain, the lack of supplies, or by the weapons of the enemy, will have two major requirements—skilled and determined junior leaders and self-reliant, physically hard, well-disciplined troops. Success in future land operations will depend on the immediate availability of such leaders and soldiers, ready to operate in small, independent formations.

More fighting in Southwest Asia is inevitable. Using indigenous forces was an attractive alternative in the fall of 2001. But for any of the Afghan forces to fight seriously against future incursions by terrorists from neighboring Pakistan, general-purpose Army and Marine combat forces must provide the backbone of future offensive forces designed to destroy the al Qaeda, Taliban, and any other adversary. Not only will American ground forces do a better job of maneuvering the enemy into killing zones for American strike capabilities, but these forces will also control events on the ground where subsequent political issues are ultimately decided.

In summary, transformational leadership, like leadership in combat, means dispelling fear and frustration with humor, forgiving mistakes made under extreme physical hardship, and making light of adversity because victory without sacrifice and periodic setbacks is an illusion. Change in structure will make unavoidable the shift from the hierarchical “strategic, organizational, and direct leadership” of the Cold War Army to leaders who see change as continuous and necessary and who understand that everyone, both soldiers and civilians, inside the larger Army is a change agent.

American soldiers have the skills; the Army has the technology. What is missing is an appropriate structure and combat leadership philosophy designed to exploit new opportunities.

To win this war on the ground where it is being fought, American forces will have to root out and kill the enemy with the same ruthless determination that gained victory behind the German lines on D-Day, June 6, 1944. With the right warfighting organizations, tactics, technology, and equipment mix, XVIII Airborne Corps can spearhead Army transformation and help win this war in the process.

Leveraging the ongoing conflict to judiciously select from the ideas and technologies of past and present to field new innovative organizations with new capabilities is the answer. It is time to capture this reality and refine concepts and approaches that will transform Army forces now without losing sight of the potential for even more profound change in land warfare over the next twenty years with the impact of undreamed of technology and science.

A truly effects-based approach to warfare begins with understanding the enemy, as well as the relative power of weapons and organizations in a given tactical context. Or to put it in the words of Major General T.J. “Stonewall” Jackson, “there is a power in war more potent than mere numbers.”

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