

**Torchbearer  
National Security Report**

**How “Transformational”  
is Army Transformation?**



**An AUSA Torchbearer Issue**  
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Today the Army finds itself simultaneously at war (prosecuting campaigns) and transforming (reshaping to meet the emerging challenges of the 21st century). In a dangerous and complex world, the value of America's Army has never been more evident.

Yet some would argue that the U.S. Army's transformation to an "Objective Force" is not in concert with U.S. national strategies and Department of Defense (DoD) guidance. In addition, they surmise, what is currently being articulated as an Army transformation strategy is short on substance and long on rhetoric. Nothing could be further from the truth.

In this installment of AUSA's Torchbearer series, we analyze DoD's operational goals, emerging joint operating concepts, and the Army's Objective Force concepts to provide insights into their connectivity.

We think you will find this report to be a useful resource, and we hope you will continue to look to AUSA for credible analysis of contemporary national security issues.

GORDON R. SULLIVAN  
General, USA Retired  
President

### Contents

Executive Summary .....	3
Introduction .....	4
DoD Perspective .....	4
Joint Perspective .....	5
Army Transformation .....	6
Viewing Army Transformation in Terms of the New National Security Strategy and Joint Concepts .....	8
Army Transformation: Is It Transformational? .....	16
The Way Ahead .....	17
What Must Be Done .....	18
Torchbearer Message .....	19

### Web Links for Additional Information

**Army Vision**

(document) <http://www.army.mil/vision/Documents/The%20Army%20Vision.PDF>  
(homepage) <http://www.army.mil/vision/index.html>  
(Vision links) <http://www.army.mil/vision/links.html>

**GEN Shinseki speeches cited in text**

(AUSA 12 Oct 99 ) <http://www.army.mil/leaders/csa/speeches/991012.htm>  
(Arrival ceremony 23 Jun 99) <http://www.army.mil/leaders/csa/speeches/990622.htm>

**Shallow-Draft High-Speed Sealift and Theater Support Vessel**

<http://www.tacom.army.mil/TSV.htm>  
<http://www.tacom.army.mil/>  
<http://www.austal-ships.com/range/military.cfm>

**Future Tactical Truck System (FTTS)**

<http://www.ssss.com/ssss/milestones.asp>  
<http://www.asc2002.com/summaries/n/NP-19.pdf>  
<http://www.cascom.army.mil/transportation/FTTS.htm>

**Comanche**

[http://www.sikorsky.com/details/1,,CL11\\_DIV69\\_ETI260,00.html](http://www.sikorsky.com/details/1,,CL11_DIV69_ETI260,00.html)



## ***Executive Summary***

The transformation of the U.S. Army to a lean, agile, joint capabilities-based force is ongoing. The Army must accomplish in less than 10 years what traditionally has taken more than 20 years. To do this, the Army set in motion the necessary elements to facilitate change and has accelerated Transformation to the Objective Force in 2008.

Army Transformation is in harmony with Department of Defense (DoD) and joint efforts to transform the armed forces. It is the goal of the Army to build the Objective Force to fully support the national security and military strategies as part of the joint force. Its progress will realize the transformational capabilities outlined by DoD.

The strategy demands that mobile, deployable ground forces be joint and capable of conducting simultaneous and distributed operations across the entire battlespace. This will accomplish the operational objectives of the joint force from deterrence to combat operations to stability operations, all while protecting the homeland. The Objective Force:

- contributes to prompt operations (preemptive attacks, joint raids or other forcible/early entry operations) by increasing the force flow through multiple, simultaneous deployments; and
- provides sustained forces not only for campaigns that require more time, but also for those periods of transition to postcombat and stability operations that are critical in meeting the national security objectives.

**The Objective Force will operate within the framework of a joint force in which it will lead joint forces, be led by a joint force and use joint capabilities at the lowest reasonable level.**

The Objective Force is characterized by an integrated command, control, communications, computers, intelligence, surveillance and reconnaissance (C<sup>4</sup>ISR) architecture—one that is compatible with both current and future forces. **Trained and equipped leaders and informed and networked soldiers at the lowest levels, adapting to the situation, will make decisions.**

The Objective Force is strategically and operationally responsive, an Army that can deploy a unit of action (UA) in 96 hours, a unit of employment (UE) in 120 hours, and five UEs in theater in 30 days using a mix of air, sea and land movement and prepositioned equipment. A joint, interdependent combined-arms team, it deploys directly to the fight at critical nodes and centers of gravity to accomplish operational objectives as part of the joint force across the breadth and depth of the battlespace. Among its capabilities is situational awareness, i.e., the ability to determine at all times not only its own location but also those of both friendly and enemy forces. The UA is self-sustainable for three to seven days of operations and maintains combat power with dramatically reduced theater logistics infrastructure.

The Army must continue to selectively recapitalize and modernize the Current Force, fully field the Interim Force (six SBCTs) by 2008 and field brigade sets of equipment at the rate of three UAs and one UE per year until transformation is complete, in the projected 2030 time frame.

### **Congress must:**

- fully fund the Army's Fiscal Year 2004 President's Budget submission;
- fund DoD at an amount approximating 4 percent of the gross domestic product (GDP); increase the Army's share of the DoD budget to at least 28 percent to maintain readiness while transforming to the Objective Force; and expeditiously fund future commitments of Army forces for unprogrammed contingencies so the Army is not forced to internally reprogram Transformation and readiness dollars; and
- provide additional C-17 airlift capabilities and support and fund Army power-projection platform (AP<sup>3</sup>) initiatives.

**So is Army Transformation transformational? Emphatically yes!**



## Introduction

On 17 September 2002, President George W. Bush released a new National Security Strategy (NSS) that acknowledges the need for the United States to wield its strength and influence in the world to shape it for the better. **Transformation of the Department of Defense (DoD) emerged as one of the key imperatives.** The NSS directs the military, DoD and intelligence agencies to sustain the strategic advantage over any potential adversaries while advancing transformation. It further emphasizes that the military **“must be transformed to focus on how an adversary might fight** [emphasis added] rather than on where and when a war might occur.” Innovation such as capabilities-based forces will be exploited by experimenting with “new approaches to warfare” within the armed forces. Since the Army has already been focusing on Army Transformation for several years, it is useful to evaluate that effort in light of the expectations contained in the new National Security Strategy.

## DoD Perspective

Speaking at the Citadel on 11 December 2001, President Bush, directly addressed the importance of Defense Transformation: “While the threats to America have changed, the need for victory has not. We are fighting shadowy, entrenched enemies—using the tools of terror and guerrilla war—yet we are finding new tactics and new weapons to attack and defeat them. **This revolution in our military is only**

**beginning, and it promises to change the face of battle.”** [emphasis added] The President further emphasized the complexity of the transformation as a result of the U.S. war on terrorism: “What’s different today is our sense of urgency—the need to build this future force while fighting a present war. It’s like overhauling an engine while you’re going at 80 miles an hour. Yet we have no other choice.”

The Department of Defense, as a follow-on to the Quadrennial Defense Review (QDR) of 2001, announced six transformational goals to better focus defense strategy and force structure:

- protect the U.S. homeland and U.S. bases overseas;
- project and sustain power in distant theaters;
- deny U.S. enemies sanctuary;
- protect U.S. space capabilities from enemy attacks;
- use information technology to link U.S. forces; and
- protect U.S. information networks from attack.





Four transformational pillars—the essence of Transformation—build on these long-term DoD goals to ensure that they can be met faster, less expensively and more reliably in the future:

- strengthening joint operations;
- experimenting with new approaches to warfare;
- exploiting U.S. intelligence advantages; and
- developing transformational capabilities.

In a 31 January 2002 address at the National Defense University, Secretary of Defense Donald H. Rumsfeld said, “Our challenge in the 21st century is to defend our cities and our infrastructure from new forms of attack while projecting force over long distances to fight new and perhaps distant adversaries. To do this, we need rapidly deployable, fully integrated joint forces capable of reaching distant theaters quickly and working with our air and sea forces to strike adversaries swiftly, successfully, and with devastating effect. We need improved intelligence, long-range precision strikes, sea-based platforms to help counter the access denial capabilities of adversaries. . . . And we need to make the leap into the information age, which is the critical foundation of [DoD] transformation efforts.”

## **Joint Perspective**

The senior military leadership has provided a series of guidelines (*Joint Vision 2010* and *Joint Vision 2020*) to focus preparations for an uncertain future. *Joint Vision 2010* aimed to keep the United States preeminent in the world—no matter how complex the world became. Released in the late 1990s, *JV2010* was the conceptual template for producing forces for the 21st century that could protect and promote America’s interests worldwide. The end state of *JV2010* was dominance across the entire spectrum of conflict. Information Superiority (IS) and Technological Innovation (TI) were critical “enabling concepts” for the vision. IS and TI enabled achievement of new levels of capability in the concepts of maneuver, strike, logistics and personnel protection. Maneuver became Dominant Maneuver; Strike became Precision Engagement;

Logistics became Focused Logistics; and Personnel Protection became Full Dimensional Protection. To achieve full-spectrum dominance, six critical considerations—doctrine, organization, training, materiel, leadership and people, representing all elements of military power—had to evolve together.

*Joint Vision 2020* (released in June 2000) built upon and extended the conceptual template established by *JV2010* to guide the concept development for America's armed forces. It reiterated several of the intellectual concepts of *JV2010*:

- creation of a force that was dominant across the full spectrum of military operations—persuasive in peace, decisive in war, and preeminent in any form of conflict;
- strategic concepts of decisive force, power projection, overseas presence, and strategic agility; and
- recognition of the importance of technology and technical innovation to the U.S. military and its operations.

*JV2020* went one step further by emphasizing that technological innovation must be accompanied by intellectual innovation leading to changes in organization and doctrine. Only then can the full potential of the joint force be reached. *JV2020* postulated information operations, joint command and control, and multinational and interagency operations as focal points for change.





Joint Chiefs Chairman General Richard B. Myers is developing a *Joint Vision* that will refine and focus *JV2020* by incorporating the transformation goals and pillars from the 2001 QDR and providing an overarching framework to shape the future joint force. Earlier revision efforts call for “joint core competencies” and reinforce the role of Joint Forces Command (JFCOM) in leading joint concept development and experimentation. *JV* will enable the Joint Staff and services to articulate what the future force must have and how that force will operate across the range of military operations to achieve full-spectrum dominance—all based on a clear understanding of the strategic setting, strategic guidance and a capabilities-based approach to joint warfare and crisis resolution.

In addition, the Joint Staff is working to produce an overarching Joint Operating Concept to describe how the force will operate. This document will set the operational context for the transformation of the armed forces of the United States; provide subordinate operating, functional and enabling concepts for future joint operations, as well as joint, service and Defense agency concept development and experimentation; and assist in the development and acquisition of future capabilities across doctrine, organization, training, materiel,



leadership and education, personnel and facilities (DOTMLPF).

General Myers’ view of transformation (as quoted in the 30 September 2002 issue of *Transformation Trends*): “For me, transformation is a lot more than putting wheels on armored vehicles, or making a stealthier aircraft or putting new missiles on submarines. Transformation is about creating new relationships and a new operating culture. In my view, the most important element will take place between the ears of the warfighters.”

## **Army Transformation**

Army Transformation was announced almost four years ago, in 1999. Building on efforts that began with the end of the Cold War, the Army set in motion a comprehensive transformation of all aspects of its culture and capabilities from warfighting to institutional support.

General Eric K. Shinseki, soon after he became the 34<sup>th</sup> Chief of Staff, U.S. Army in June 1999, issued a statement of intent outlining these objectives:

- increasing strategic response;
- improving operational jointness and implementing the goals of *Joint Vision 2010*;
- developing leaders for joint warfighting as well as for implementing change;
- completing the full integration of the active and reserve components;
- manning warfighting units;
- providing for the well-being of soldiers, civilians and family members;
- providing soldiers with the most modern equipment available to ensure technological superiority over all adversaries; and
- continuing the commitment to business improvement and efficiencies.



To accomplish these objectives, on 12 October 1999 (at AUSA's annual Eisenhower Luncheon) General Shinseki announced the release of *Army Vision*:

**Soldiers on point for the nation [are] transforming this, the most respected Army in the world, into a strategically responsive force that is dominant across the full spectrum of operations.**

**Heavy forces must be more strategically deployable and more agile with a smaller logistical footprint and light forces must be more lethal, survivable and tactically mobile. Achieving this paradigm will require innovative thinking about structure, modernization efforts, and spending.**

This concept was already in place when then-Governor Bush stated in a 23 September 1999 speech at the Citadel: "Our forces in the next century must be agile, lethal, readily deployable, and require a minimum of logistical support. We must be able to project our power over long distances, in days or weeks rather than months. . . . **On land, our**

**heavy forces must be lighter. Our light forces must be more lethal. All must be easier to deploy.** And these forces must be organized in smaller, more agile formations."

*Note: Fundamental change and experimentation are nothing new to the United States Army. Its transformation from a small, underfunded force in 1939 to more than 100 divisions (including armored, airborne and amphibious capabilities lacking in the prewar force) by 1945 is just one example of the Army's historical ability to adapt to new circumstances and new technology.*

*After the fall of the Berlin Wall in the late 1980s, the Joint Chiefs of Staff wrestled with planning for the future, which they saw as immediate. General Gordon R. Sullivan was Army Chief of Staff in the wake of the Gulf War. At the time, he pushed "digitization," a project to share data among all soldiers and all combat vehicles in the field of battle.*

*Regarding experimentation, the U.S. Army has had a long tradition of experimentation—as far back*

*as its Louisiana Maneuvers of 1941 that developed the doctrine for combined-arms air/ground operations. The current (2003) deployment of the 4th Infantry Division, the world's only digitized division, to Southwest Asia is testament to revolutionary change through experimentation. The 4th Infantry Division became the Army's first fully digitized division in 2000, following five full years of testing.*





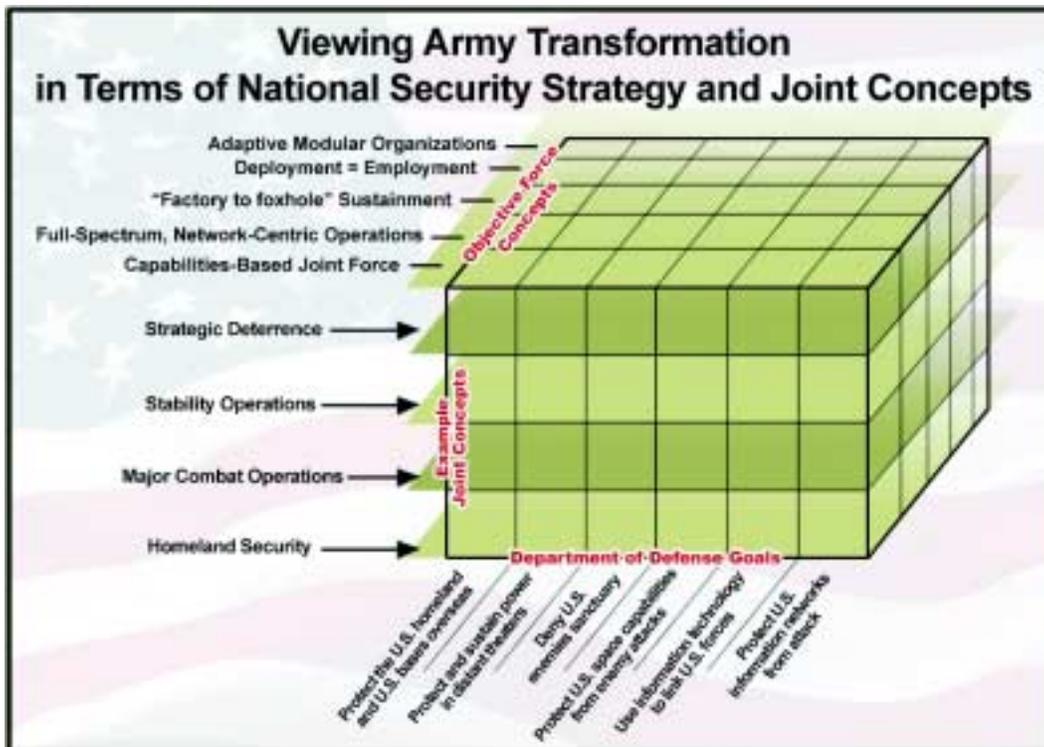
With this as its intellectual underpinnings, in late 1999 the Army developed the Transformation Campaign Plan (TCP), designed across three simultaneous paths to provide:

- a trained and ready Legacy Force—the Current Force—the nation’s “go to war” force) to fight and win decisively now and in the near future;
- an Interim Force, now known as the Stryker Brigade Combat Teams (SBCTs) (the bridge to the future) to meet an operational shortfall that exists between the capabilities of early-arriving light forces and later-arriving heavy forces; and
- a new Objective Force (the future Army) that is strategically responsive and capable of dominating at every point on the spectrum of operations.

In the summer of 1999, the Army had realized that all three capabilities were integral to maintaining near-term readiness while transforming as quickly as possible to the future.

In 2003, present-day forces are protecting the homeland while defending America’s interests abroad. The Stryker Brigade force will attain initial operating capability for one of its six brigades in May 2003, while the Objective Force is nearing concept development completion. That concept calls for the Objective Force to be designed as the force that guarantees the nation’s freedom. As the force of decision, this force will operate as part of the joint force, enabled by and enabling the joint force, leading and supporting joint operations. The force will execute decentralized, adaptive tactical operations achieving operational objectives. Objective Force tactical units will be networked to joint capabilities and information. They will collaborate interactively with the joint force. **Tactical Objective Force units will be joint capabilities-based forces.**

## Viewing Army Transformation in Terms of the New National Security Strategy and Joint Concepts



Department of Defense Transformation goals are clear. The Joint Staff and Joint Forces Command, in conjunction with the services and combatant commands, are developing joint concepts to articulate how the future joint force will operate. The framework for the Army’s transformation plan is in concert with these goals and concepts.

**The key to understanding this harmony is a detailed understanding of the joint force and the Army Objective Force’s role in joint operations.**



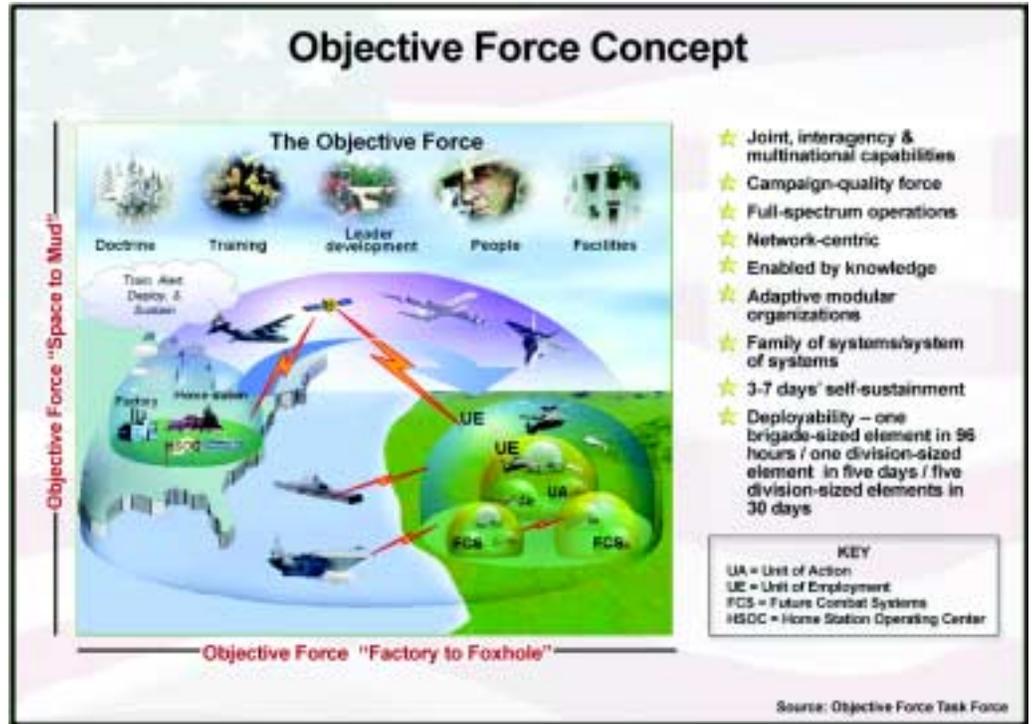
The Objective Force will be organized, manned, equipped and trained to be more strategically responsive, deployable, agile, versatile, lethal, survivable and sustainable across the full spectrum of military operations.

**The Objective Force will operate within the framework of a joint force in which it will lead joint forces, be led by a joint force and use joint capabilities at the lowest reasonable level.**

The Objective Force will comprise modular, scalable, flexible organizations whose leaders are adaptive for prompt and sustained land operations in complex terrain. It will be an adaptable force, able to transition quickly between changes in task, purpose and directions, maneuvering into and out of contact without sapping operational momentum because the Objective Force facilitates joint decentralized operations at the tactical level.

**Trained and equipped leaders and informed and networked soldiers at the lowest levels, adapting to the situation, will make decisions to seize the initiative and accomplish operational objectives with tactical action.**

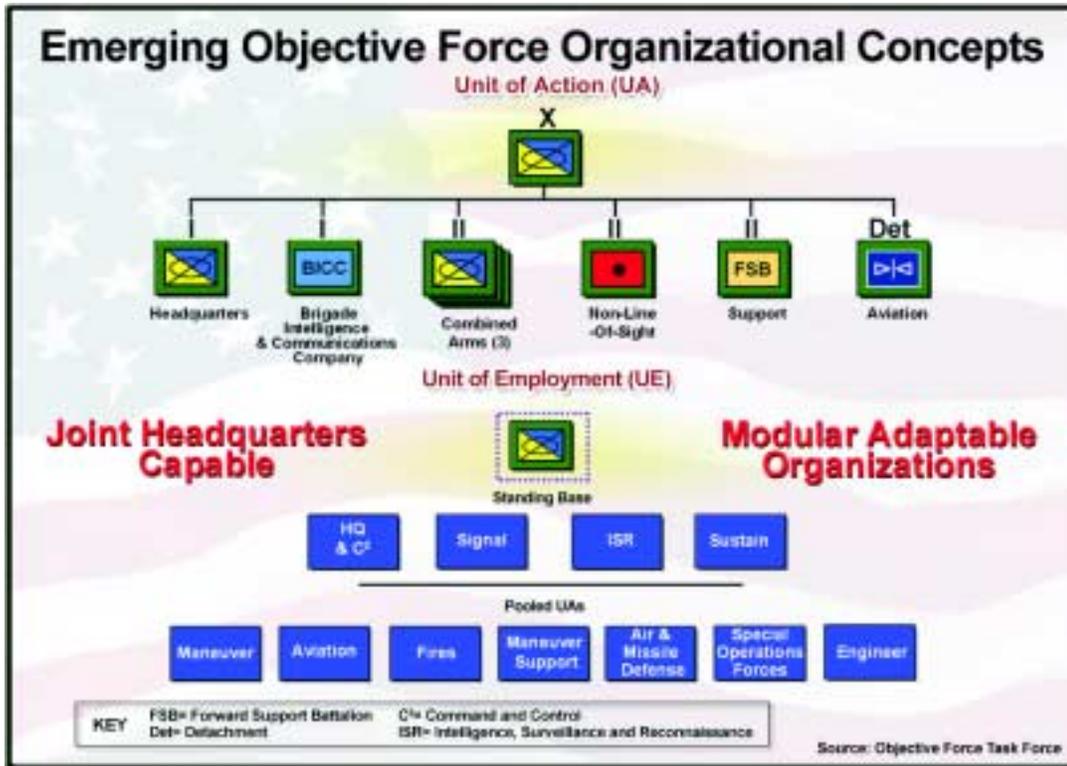
The Objective Force is characterized by an integrated command, control, communications, computers, intelligence, surveillance and reconnaissance (C<sup>4</sup>ISR) architecture—one that is compatible with both current and future forces. The Army Knowledge Enterprise (AKE) enables this knowledge-based force through an architecture that connects “factory to foxhole” and “space to mud.” Soldiers have the requisite communications equipment and knowledge to send and receive the right information, at the right time and in the right place.



The Objective Force will be strategically and operationally responsive, an Army that can deploy a brigade-sized unit of action (UA) in 96 hours, a division-sized unit of employment (UE) in 120 hours, and five division-sized UEs in theater in 30 days using a mix of air, sea and land movement and prepositioned equipment.

A joint, interdependent combined-arms team, it will deploy directly to the fight at critical nodes and centers of gravity to accomplish operational objectives as part of the joint force across the breadth and depth of the battlespace. **Among its capabilities will be situational awareness, i.e., the ability to determine at all times not only its own location but also those of both friendly and enemy forces.**

*Note: For the purpose of this paper, units of action (UAs) are being compared to brigades, and units of employment (UEs) to divisions, but the reader should not make the assumption that these units are analogous to the current “brigade” and “division” respectively. The details of both UAs and UEs are still under development.*



organizations, training, materiel, leader development, people and facilities (DOTMLPF). The Objective Force represents not only a change in the operational Army, but also a change in the institutional Army. It will be soldiers, not technology, that realize the campaign qualities of America's Army, the Objective Force.

### *Capabilities-Based Joint Force*

The Objective Force—an integral component of the joint force—will be organized, manned, equipped

The UA will be self-sustainable for three to seven days of operations and maintains combat power with dramatically reduced theater logistics footprint through increased sustainability reachback access to supplies; sustained distribution; real-time tracking of materiel, equipment and personnel (military, DoD civilian and contractor); commonality of systems and components; and interdependency (interoperability) with joint, interagency and multinational forces.

Objective Force systems will support the joint force with the capabilities for decisive dominant maneuver—horizontal and vertical, day and night—in all weather and terrain as dismounted or mounted combined-arms teams. The Objective Force will provide the best combination of low-observable ballistic protection, long-range acquisition and targeting, and first-round hit-and-kill technologies. These technologies will enable the Objective Force to anticipate and adapt to an adversary's intent and control the situation with networked joint force capabilities.

**The Transformed Army is not just new systems; it is the complete, holistic transformation in doctrine,**

and trained as a joint force, possessing common overarching doctrine, integrated training, commonality and interdependency/interoperability.

Networked joint forces will redefine the current understanding of the term “joint.” The networked joint force of the future will be capabilities-based, not unit-based. In other words, the separate military services will not be task-organized into tactical joint units operating at lower echelons; instead, joint capabilities will be applied transparently throughout the networked joint force at all echelons. For example, at squad level, when a soldier identifies a target, the call for fire will automatically be answered with the most appropriate joint capability for the task—a joint capability is transparently applied at the squad level. Therefore, each unit will be able to operate and adapt more effectively to fluid situations, enabling more decisions at lower levels tied to the common understanding of the operational plan and the situation. As a result, all units will be more adaptive, more lethal, more rapid and more capable of simultaneous, decentralized and distributed operations. **This is jointness redefined.**



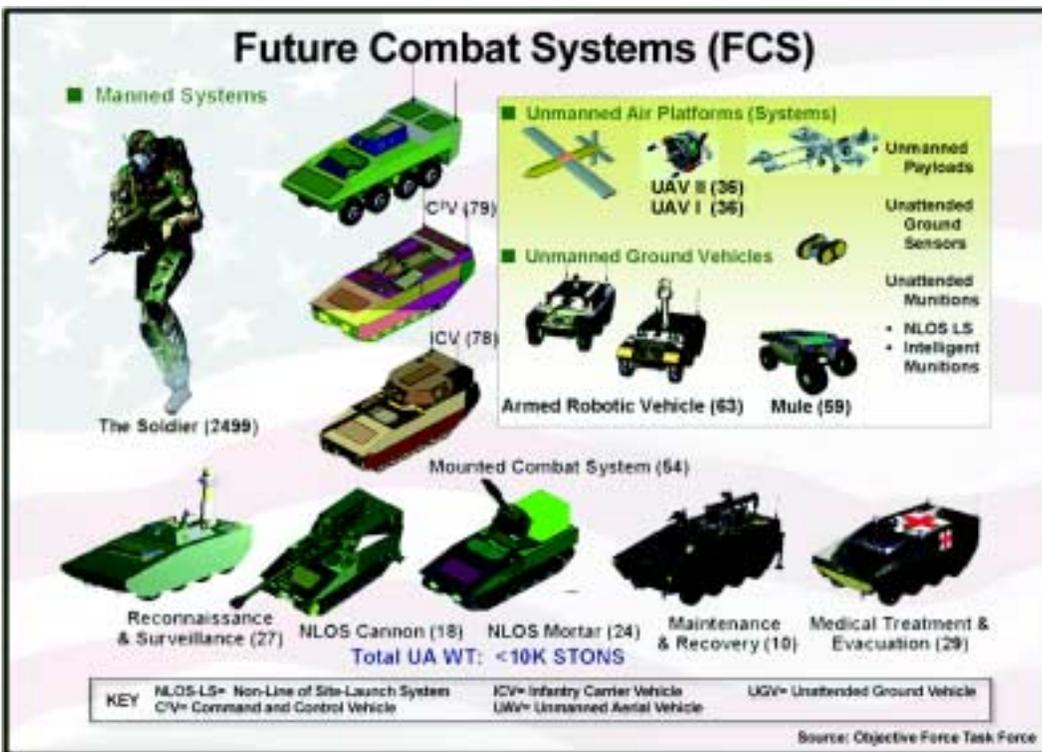
Specifically, the Objective Force will:

- integrate, transfer and partner capabilities throughout the joint force with speed and audacity;
- strengthen the ability of the United States to deter, preclude and limit conflict escalation by providing a multidimensional campaign-quality threat to any potential adversary;
- provide the joint force commander (JFC) precision in execution. Interdependent fires and maneuver will create the synergistic effects of precision strike throughout the joint operations area;
- enable joint fires by empowering the maneuver commander to accurately focus all available destructive fires;
- contribute joint C<sup>4</sup>ISR architecture to the common operating picture, thereby transforming data into knowledge by massing joint capabilities;
- provide operational-level information superiority to the JFC, enabling him to gain and maintain operational initiative;

- provide the essential capability to achieve a decisive victory through the control of terrain, people and resources without resorting to indiscriminate destruction; and
- provide an optimized sustainment footprint and reduced cost of logistics.

### *Full-Spectrum Operations in a Network-Centric Environment*

The future battlefield will be multidimensional, dispersed, continuous and noncontiguous in nature. Operations will take place on land and sea, in air, space and cyberspace. Adversaries will be evolving, sophisticated and adaptive, with asymmetric capabilities. The Objective Force will be designed to provide innovative capabilities to cope with the new operational environment, relying on leaders and soldiers to think and dominate U.S. adversaries with superior capability. It will be able to operate across the entire spectrum of operations from homeland security to major combat operations to stability and support operations.



**The Objective Force and Future Combat Systems (FCS).** The Objective Force will be a networked “system of systems” comprising existing platforms and new capabilities developed to meet the needs of the Army’s future fighting formations. It will include soldiers equipped with Land Warrior technology; a family of 18 integrated, synchronized, manned and unmanned systems; and critical complementary capabilities derived from Comanche and the Future Tactical Truck System (FTTS). A network-centric information architecture

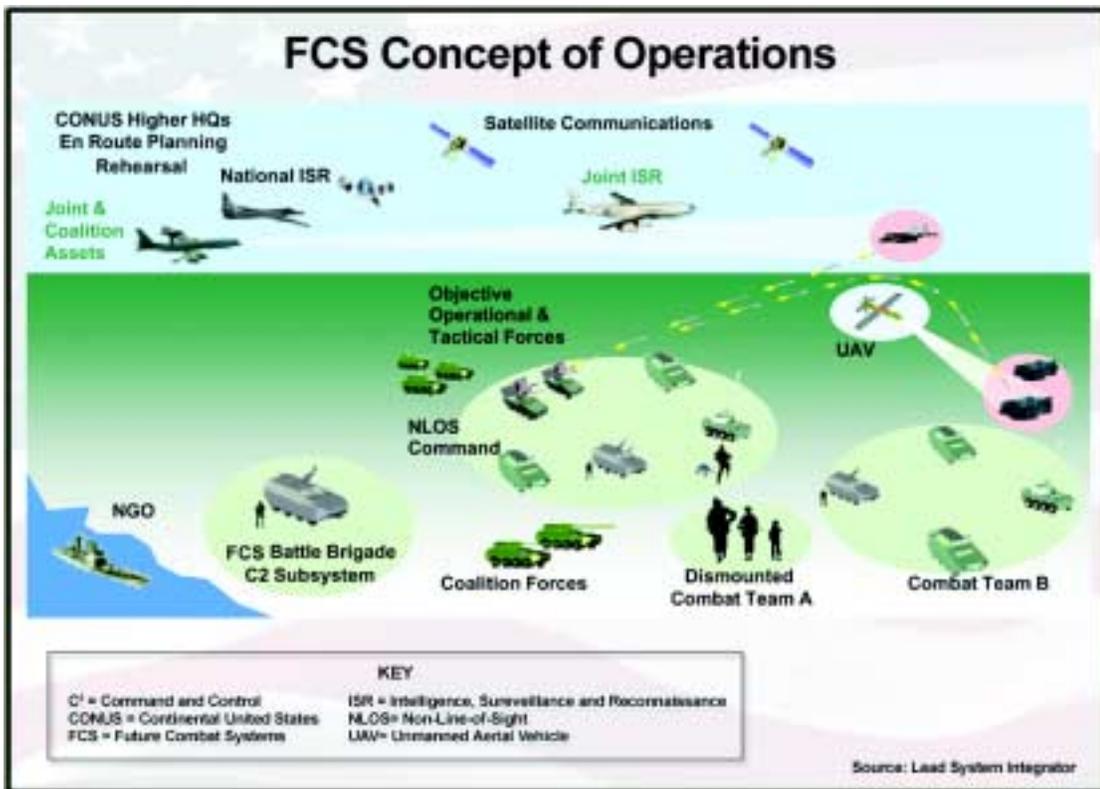


nested within the Global Information Grid (GIG) will connect the Objective Force system of systems. Every Objective Force soldier and platform will be capable of sensing and engaging the enemy by using the synergistic power of the information network enterprise while maintaining the necessary situational awareness of friendly forces. The Land Warrior system, enabled by the Objective Force Warrior Science and Technology efforts, will connect individual soldiers to the network while providing them increased protection and lethality. The FCS will provide the capability to destroy any adversary and control any situation in all conditions and environments, with smaller calibers, greater precision more devastating target effects, and at longer ranges.

The Objective Force's FCS is a transformational approach to meeting the nation's needs. This family of systems will contain eight manned and ten unmanned air and ground system variants. The components of the FCS must be developed and fielded as a complete family of systems in harmony, to achieve the desired warfighting capabilities the nation requires against adaptive, asymmetric

conventional and unconventional adversaries. New weapons, sensors, digital command and control systems, and corresponding training aids, simulators and simulations (TADSS) equipment will be integrated, fielded and upgraded as a unit set. Additionally, the acquisition and requirements development processes are being updated to accommodate the Army's need to rapidly field a networked system of systems through spiral development and an open architecture that allows maturing technological insertions as they occur.

*Note: Rapid spiral transformation is the process for accelerating change from today's Current Forces to tomorrow's forces capable of conducting information-age warfare. The objective is to inject incremental improvements along parallel tracks that enable the emergence of joint transformed capabilities in years rather than decades. This entails the coevolution of concepts, organization, procedures, technology and training. It is part of the set of overall strategies for transforming defense.*



**Network-Centric Operations.** C<sup>4</sup> systems will establish a global infrastructure that enables network-centric operations to be accessible from anywhere in the Objective Force areas of operation. Integrated communications systems will be embedded in every new Objective Force platform. Sensors will provide ISR information, while reporting devices automatically provide friendly-force location and focused logistics information within and across echelons. Radio systems will have



multiband frequencies, high throughput, conforming antenna technology and capabilities to automatically convert from omni to directional operation. Software-defined radios will provide joint interoperability and inherently support networking capabilities. Both radios and some sensors (particularly airborne) will have the capability to act as relays. Aerial and space-based relay assets will provide coverage over wide areas and in communications-restrictive terrain.

provides for network management and computer network defense to be performed at the enterprise level, using efficient and streamlined processes and state-of-the-art technology.

Transparent to the warfighter, network managers monitor, configure and control all aspects of the network and observe changes in network status. Their capabilities include a robust detect, react, respond defense-in-depth against computer network attacks (CNAs). NETOPS—

accomplished as an enterprise across all Army networks—permits the requisite network operation and defense to achieve a high-speed, secure, interoperable Army knowledge enterprise.

**The Army’s network operations capabilities, a key element of joint NETOPS, will be integrated with the joint force. Army NETOPS is capable of assuming control of joint networks when required.**



This “network-centric” view is possible as a result of a complex set of technological advances and changes in tactics, techniques and procedures (TTP). The network will be a mix of several generations of technologies but will still achieve unprecedented levels of robustness, reliability and survivability by using state-of-the-art technologies and digital bridging techniques to ensure interoperability. The Objective Force will possess advanced ISR capabilities and networked sensors to see the enemy in complex urban terrain, through structures and below ground. Advanced technologies will lead to an unprecedented common integrated operational picture providing an ability to see the enemy in part and as a whole, complex, adaptive organization. ISR enablers will include combat identification systems; organic robotic multispectral, disposable sensors; a proliferation of unmanned aerial vehicles (UAVs) and unattended ground vehicles (UGVs); embedded C<sup>4</sup>ISR, special operations forces (SOF) and long-range surveillance detachments; and air and ground reconnaissance operations.

Network Operations (NETOPS) will be a critical function on the future battlefield. The enterprise NETOPS

**Space.** As a space-empowered force, units across the Army, now and even more so in the Objective Force, will routinely exploit military and civilian space systems to support knowledge dominance and decisive victory.

Space is inherently joint, and the Army, as an interdependent member of the space community, relies on space products and services provided by DoD, intergovernmental agencies and commercial space systems. Army forces are interoperable with nonorganic space systems and able to use their capabilities. Additionally, space systems will fully integrate with joint and service air/ground architectures to enhance C<sup>4</sup> and ISR support to the tactical commander.

The Objective Force will routinely exploit communication, intelligence and surveillance, early warning, position/navigation, weather, terrain and environmental space systems integrated through direct links and global broadcasts. The most transformational aspects of space support will be assured and on-demand access, real to near-real time responsiveness, greater capacity, and an enhanced ability to protect space interests and routinely deny space products and services to adversaries.



Space-based systems and the resulting products will significantly increase situational understanding. The fog, friction and uncertainty of warfare will still exist because the adversary is adaptive, but fully integrated space-based systems link units and capabilities across vast distances and provide the commander unprecedented flexibility to collaboratively plan and execute full-spectrum military operations at the time and place of his choosing.

### ***“Factory to Foxhole” Sustainment***

An Objective Force Joint Logistics Corporate Enterprise (JLCE)—comprising an architecture from the strategic to the tactical level—characterizes sustainment. It will begin with the requirements determination process and continue through the total life cycle. The JLCE will enable enhanced strategic responsiveness, a reduced sustainment footprint and reduced cost of logistics, allowing the warfighting commander to employ the full spectrum of capabilities to achieve battlefield dominance.

The JLCE will be formed by a common logistics-operating environment where knowledge is integrated vertically and horizontally from “factory to foxhole” and completely integrated with the common relevant operating picture (CROP). **This environment will facilitate the joint concept of a focused common relevant operating picture or “sense and respond” logistics, enabling sustainers to see, understand and act upon the warfighters’ requirements more rapidly and precisely than ever before.**

Distribution-Based Logistics (DBL)—the fusion of the supply, transportation and information functions to speed delivery (e.g., new ground, sea and aerial

concepts for delivery) and reduce the deployed footprint—will fully integrate industry, Army and joint organizations, infrastructure, processes and automated systems that enhance flexibility and agility to support the full spectrum of operations. Its fundamental principles are velocity over mass; centralized management; direct delivery; minimum essential stocks; two-way flow of resources and time-definite delivery. DBL will provide the means to support joint forces with greater agility and responsiveness.

Demand reduction will decrease the sustainment footprint and enhanced strategic responsiveness while reducing costs and improving readiness. **The decrease in sustainment requirements will be driven by warfighters’ confidence in the sustainment system and capabilities made possible by technological advancements.** Innovative sustainment concepts and capabilities (e.g., increased use of robots; two-level maintenance; improvements in reliability, maintainability and sustainability; and reachback operations) will reduce demand. The adequate resourcing of enablers, designed to reduce consumption, such as hybrid electric power, on-board water generation (i.e., water generation and replenishment at every UA echelon), embedded diagnostics and prognostics, modular systems, platform commonality, and precision munitions, will result in dramatic demand reductions of the big battlefield sustainment drivers—water and fuel as well as maintenance.

### ***Deployment = Employment***

Responsive Army deployment timelines for the joint force have increased the military response options available to the President and Secretary of Defense. The Army’s goal is to deploy a brigade-sized UA anywhere in the world in 96 hours after liftoff, a division-sized UE on the ground in 120 hours, and five division-sized UEs in theater in 30 days, using a mix of air and surface modes as well as leveraging prepositioned equipment and a deployment Information Technology (IT) architecture.





The Objective Force will arrive in theater combat-capable—deployment will be synonymous with employment. This necessary capability for ground forces to rapidly respond, articulated by the Army as 96/120/5-30 deployment timelines, will be possible only when the timelines are accepted and stated as joint requirements.

Transforming deployment capabilities will counter adversaries' strategies of antiaccess and area denial. The transformation of air- and sealift platforms, prepositioning, deployment organizations, training, processes and infrastructure will enable the joint force equipped with the Objective Force to meet deployment objectives to protect U.S. national interests. The joint force's ability to employ ground combat power immediately upon entry into a theater will enhance its operational capability and tactical agility to recognize and seize opportunities. **Technology supporting inter- and intratheater lift platforms for operations in forward and austere environments and en route mission planning and rehearsals for deploying units will facilitate that capability.**

Deployment of the Objective Force will be accomplished with joint and organic Army assets. The Shallow-Draft High-Speed Sealift (SDHSS), Super-Short Take-Off and Landing Aircraft (SSTOL), Heavy Lift Vertical Take-Off and Landing Aircraft (HLVTOL), Theater Support Vessel (TSV) and Ultra-Large Airlifter (ULA), capable of austere port or airfield/landing zone operations, are in various stages of concept development to support joint deployment.

FCS will be sized for a C-130 profile, but the use of other aircraft, such as C-17s and aircraft from the Civil Reserve Air Fleet (CRAF), will not be precluded. Objective Force deployment IT will provide real-time in-transit visibility (ITV) of soldiers, units, cargo and equipment, moving in the Defense Transportation System (DTS), nested in the Global Information Grid and linked to the sustainment enterprise architecture. This concept integrates sustainment packages with ready-to-employ units. Continuous resupply of employed forces requires reachback operations, sense-and-respond logistics and recurring unit-configured loads, all contributing to a reduced logistics footprint. Execution

of this paradigm shift across a distributed battlespace will rely on new vertical and horizontal distribution/sustainment capabilities (i.e., HLVTOL, SSTOL, TSV and Precision Extended-Glide Airdrop Systems, or PEGASYS). Support of these capabilities is critical to achieving the joint goal of operational maneuver from strategic distances.

**Power-Projection Platforms.** Installations will support the Objective Force requirements to deploy echelons in 96 hours, 120 hours and 30 days directly into the battlespace. Deployment facilities will provide the means to meet employment timelines with unit-configured packages that ensure the future force is ready to conduct operations immediately upon arrival. Strategic networked power-projection capabilities at installations will be optimized through forward basing, multiservice basing strategies and deployment configurations. **Installations will conduct proactive, anticipatory master planning efforts resulting in transformed platforms capable of projecting the Objective Force.**

### *Adaptive Modular Organizations*

UEs will be the command and control elements of UAs. They will link the tactical operations to the operational level of war. They will be joint capable and adaptive to the situation. They will plug into and/or receive assets from organic, higher-level Army and joint organizations and therefore adapt to a wide variety of potential operations and maintain a honed readiness through continuous, habitual relationships. UEs, highly tailorable for specific missions and contingencies, will draw from a pool of force





enablers (aviation, fire support, engineer and sustainment). The UE will be the ideal joint headquarters, with multinational and interagency capabilities for campaign planning and execution. UEs will be created when operations approach the high end of combat or demand sustained operations, or when control of multiple organizations or joint organizations is desired.

The UA will be the decisive element within the Objective Force that closes with and destroys the enemy in any operation, against any level of threat, in any environment. It will not be a fixed organization and will have the capability to command and control up to three FCS combined-arms units, one aviation detachment, one Non-Line of Sight-capable artillery unit and one forward support unit, as well as to employ enablers from higher headquarters. It will be able to employ a range of supporting joint and organic capabilities from a UE or a joint task force and to tailor a force with additional capabilities for specific missions across the full spectrum of military operations. The C<sup>4</sup>ISR architecture will enable the UA to increase its span of control.

## **Army Transformation: Is It Transformational?**

Is Army Transformation transformational? Emphatically yes! Army Transformation is in harmony with DoD and joint efforts to transform the armed forces. It is the goal of the Army to build the Objective Force to fully support the national security and military strategies as part of the joint force. Its progress will realize the transformational capabilities outlined by DoD.

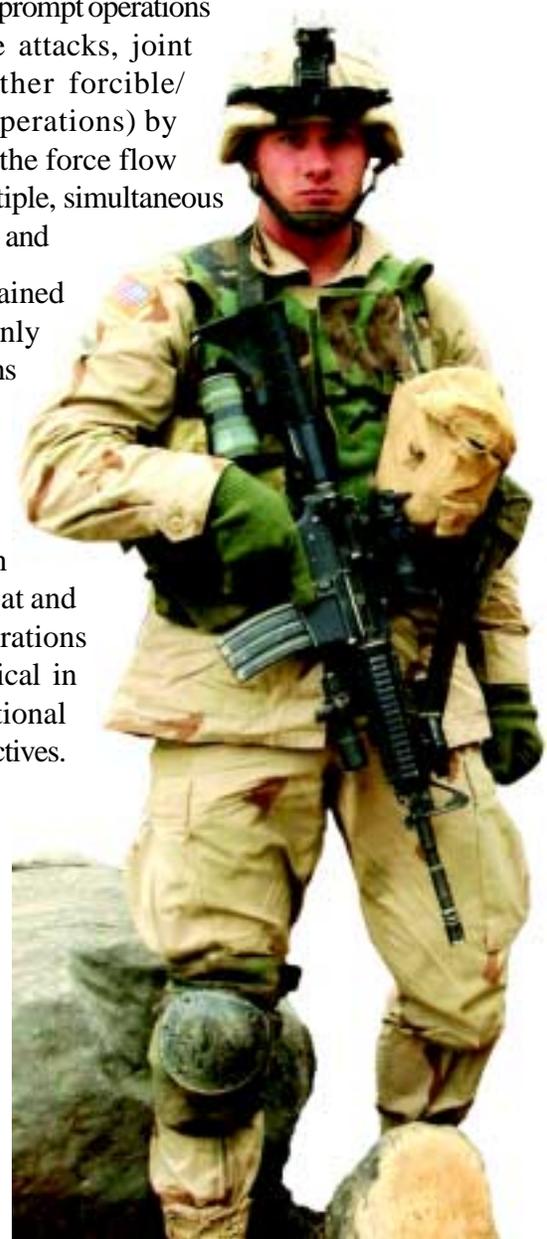
The national strategy calls for a capabilities-based force able to:

- protect the U.S. homeland and U.S. bases overseas;
- project and sustain power in distant theaters;
- deny U.S. enemies sanctuary;
- protect U.S. space capabilities from enemy attacks;
- use information technology to link U.S. forces; and
- protect U.S. information networks from attack.

The strategy demands that mobile, deployable ground forces be joint and capable of conducting simultaneous and distributed operations across the entire battlespace. This will accomplish the operational objectives of the joint force from deterrence to combat operations to stability operations, all while protecting the homeland. The Army's contributions to the joint force will be the capabilities for protection of U.S. national interests.

The Objective Force will:

- contribute to prompt operations (preemptive attacks, joint raids, or other forcible/early entry operations) by increasing the force flow through multiple, simultaneous deployments; and
- provide sustained forces not only for campaigns that require more time, but also for periods of transition to postcombat and stability operations that are critical in meeting national security objectives.



## The Way Ahead

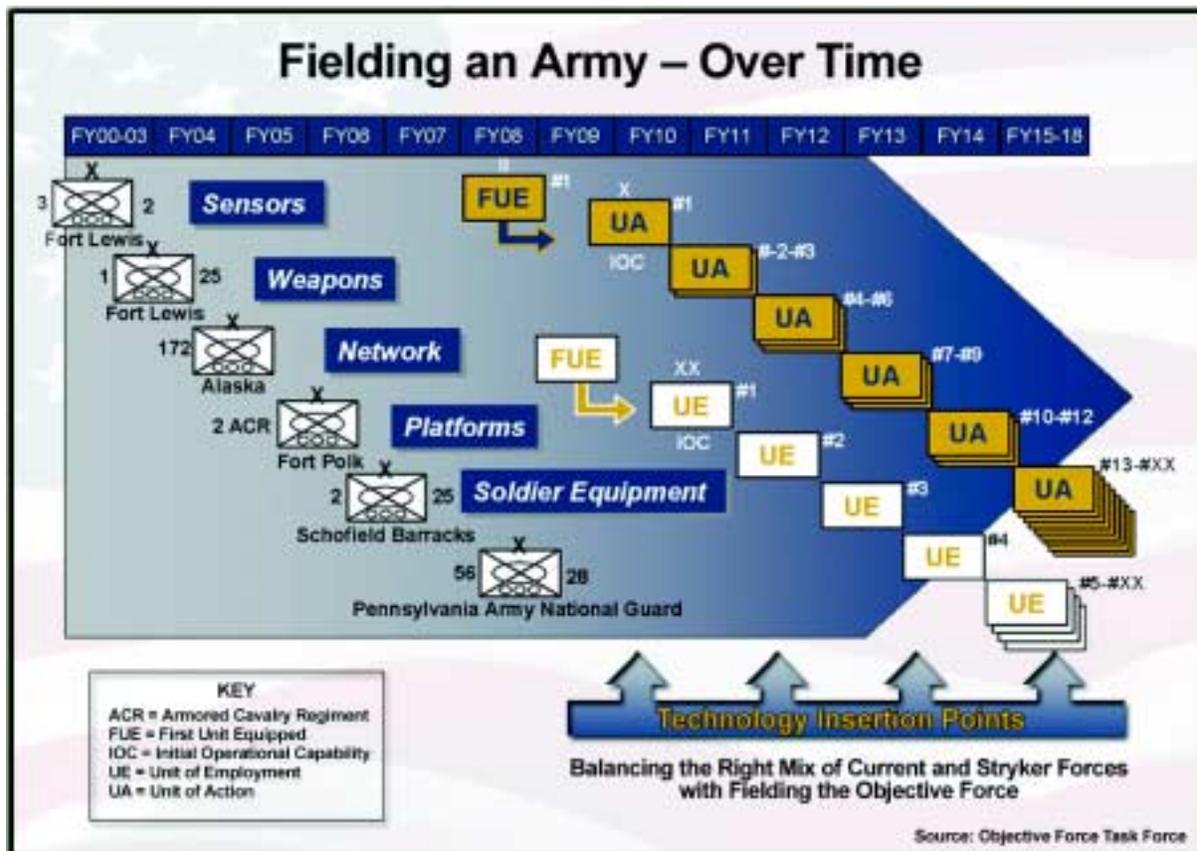
While transforming, the Army will contain differing units that combine to contribute capabilities. These capabilities will be represented by:

- units of employment;
- units of action;
- Stryker Brigade Combat Teams;
- Digital Divisions and Corps; and
- a combination of Current Force and specialty force brigades (airborne, air assault, Special Forces), Army Reserve units, and four multifunctional Army National Guard divisions.

The Army must continue to selectively recapitalize and modernize the Current Force, fully field the interim Stryker Brigade Combat Teams (six SBCTs) by 2008 and field

**brigade sets of equipment** at the rate of three units of action and one unit of employment per year until transformation is complete, in the projected 2030 time frame. The Objective Force will provide the traditional heavy-force campaign overmatch, rapid and flexible SBCTs, and the full-spectrum, precision maneuver-capable UEs and UAs.

The Army requires **sufficient airlift, sealift and prepositioned assets** to support the Objective Force. At the strategic level, the Objective Force will deploy either from forward sanctuaries or from the continental United States. The force will have both expeditionary and campaign qualities; and will be configured for rapid deployment and ready at a moment's notice for sustained operations. At the operational level, the Objective Force will arrive at multiple austere points of entry via air and sealift. Tactically, the Objective Force will deploy and redeploy in tactical aircraft capable of using short fields and unimproved runways.





## **What Must Be Done**

Today the Army finds itself simultaneously *at war* (prosecuting the global war on terrorism) and *transforming* (reshaping to meet the emerging challenges of the 21<sup>st</sup> century). In a dangerous, complex world, the value of America's Army has never been more evident.

The Army's Transformation Campaign Plan is on track and on target, designing a force that **leads** joint operations. It is in harmony with DoD and joint efforts to transform. Funding relationships among the Current, Stryker and Objective forces are fully integrated in Program Objective Memorandum (POM) 04-09, and the first significant elements appear in the Fiscal Year 2003 budget. The Army has inculcated the *Army Vision* across the senior leadership and down to the lowest levels of the organization. Soldiers understand the azimuth for the future and why the Army is moving along that azimuth.

The momentum to achieve the Objective Force is irreversible. Therefore, **Congress and DoD must:**

- fully fund the Army's FY 2004 President's Budget submission;
- fund DoD at an amount approximating 4 percent of the gross domestic product (GDP); increase the Army's share of the DoD budget to at least 28 percent to maintain readiness while transforming to the Objective Force; and expeditiously fund future commitments of Army forces for unprogrammed contingencies so the Army is not forced to internally reprogram Transformation and readiness dollars;
- fully fund and support Stryker Brigade Combat Teams and associated costs to ensure fielding of **six brigades by 2008**;
- fully fund and support research, development, test and evaluation (RDT&E) efforts for the Future Combat Systems (to include the Non-Line-of-Sight Cannon, or NLOS-C) and to achieve First Unit Equipped (FUE) by 2008 and Initial Operational Capability (IOC) by 2010;
- fund and support the prioritized recapitalization and upgrade program for the Current Force to ensure warfighting readiness today;
- fund and field command and control critical information systems, to include the Army Knowledge Enterprise architecture, and support the development of Computer Network Attack and Computer Network Defense capabilities;
- accelerate funding for high-pay-off weapon systems (e.g., Comanche) that support the Army's requirements for the Current, Stryker and Objective forces;
- support Basic Research investment in revolutionary warfighting technologies such as autonomous vehicles, compact power sources, and nanoscience, biometrics, smart structures and materials-by-design;
- continue to fund the Land, Air, Mounted and Objective Force Warrior programs to ensure the overmatch capabilities of soldiers;
- support Advanced Technology Development focusing on maturing critical Objective Force technology (e.g., within the Army's 13 science and technology mission areas);
- provide additional C-17 airlift capabilities by continuing the acquisition of the programmed 134 aircraft and accepting the 60 additional C-17s proposed by industry to the Air Force;
- support and fund Army power-projection platform (AP<sup>3</sup>) initiatives (such as Shallow-Draft High-Speed Sealift and the Theater Support Vessel, or TSV) and the Future Tactical Truck System (FTTS);
- support Applied Research to provide block upgrades to Objective Force systems; and
- fund requirements (e.g., Distribution Management and Reengineering Initiative) to enable the rapid and assured sustainment of forces worldwide across the full spectrum of military operations.

**Ultimately, Transformation is about risk management, striking a balance between readiness today and preparedness tomorrow.**



## *Torchbearer Message*



In 1999, the Army Chief of Staff outlined an Army vision comprising three elements: People, Readiness and Transformation. Guided by that vision, the Army began a timely and profound transformation of structure, equipment, manning, training and resources. Ultimately, Transformation is about risk management, striking a balance between readiness today and preparedness tomorrow.

Within this framework the Army developed a Transformation Campaign Plan designed across three simultaneous paths: a Current Force (the nation's "go to war" capability); an interim force of Stryker Brigade Combat Teams (the bridge to the future as well as a capability between heavy and light forces); and the Objective Force (the future Army, a full-spectrum, network-centric capability designed as an integral part of the joint force).

The Objective Force is organized, manned, equipped and trained to be more strategically responsive, deployable, agile, versatile, lethal, survivable and sustainable across the full spectrum of military operations. **The Objective Force will operate within the framework of a joint force in which it will lead joint forces, be led by a joint force and use joint capabilities at the lowest reasonable level.** The Objective Force comprises modular, scalable, flexible organizations whose leaders are adaptive for prompt and sustained land operations in complex terrain. It is an adaptable force, able to transition quickly between changes in task, purpose and directions, maneuvering into and out of contact without sapping operational momentum because the Objective Force facilitates joint decentralized operations at the tactical level. **Trained and equipped leaders and informed and networked soldiers at the lowest levels, adapting to the situation, make decisions to seize the initiative and accomplish operational objectives with tactical action.**

Army Transformation is in harmony with Department of Defense and joint efforts to transform the armed forces. It is the goal of the Army to build the Objective Force to fully support the National Security Strategy and the National Military Strategy as part of the joint force. Its progress will realize the transformational capabilities as outlined by DoD. The Army's Transformation Campaign Plan is on track and on target, designing a force to lead joint operations.

Congress must recognize this compatibility and resource the Army and DoD accordingly. An investment in the Army today is an investment in America's future.

So *is* Army Transformation transformational? Emphatically yes!

***It is the goal of the Army to build the Objective Force to fully support the National Security Strategy and the National Military Strategy as part of the joint force.***

**The Army's combat power does not wear tracks or wheels—it wears boots.  
... Soldiers remain the centerpiece of our formations.**

*The United States Army Future Statement 2003:  
The Army—At War and Transforming*



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**Institute of Land Warfare  
Association of the United States Army**  
2425 Wilson Boulevard, Arlington, Virginia 22201-3385  
800-336-4570 [www.atisa.org](http://www.atisa.org)