

USAWC STRATEGY RESEARCH PROJECT

**TRANSFORMATION -- HERDING THE CATS  
TOWARDS SERVICE INTERDEPENDENCE**

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This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

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# Report Documentation Page

Form Approved  
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>03 MAY 2004</b>		2. REPORT TYPE		3. DATES COVERED -	
4. TITLE AND SUBTITLE <b>Transformation - Herding the Cats Towards Service Interdependence</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) <b>Thomas Pope</b>				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>U.S. Army War College, Carlisle Barracks, Carlisle, PA, 17013-5050</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT <b>See attached file.</b>					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES <b>41</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			



## ABSTRACT

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TITLE: Transformation – Herding the Cats Towards Service Interdependence

FORMAT: Strategy Research Project

DATE: 27 February 2004 PAGES: 41 CLASSIFICATION: Unclassified

U.S Department of Defense efforts in transforming the military is a daunting task. Adapting to a security environment shaped by faceless threats, globalization and the emergence of the information age requires a change in Service culture. The purpose of this paper is to identify several of the challenges the U.S. military faces in preparing for the future. Central to these challenges is the evolution of joint warfare to an operational art form requiring interdependence among the Services. This evolution requires a culture change that facilitates gaining economies and efficiencies among the Services while meeting operational and budget realities. Two overarching impediments to progress include the Services' reluctance to adopt a shared vision on the use of military capabilities and reluctance at the highest levels for implementing a dramatic cultural shift. This paper analyzes these and other factors affecting military transformation and offers several actions and way points, which may be useful in navigating through the fog of change.



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## TRANSFORMATION – HERDING THE CATS TOWARDS SERVICE INTERDEPENDENCE

As we prepare for the future, we must think differently and develop the kinds of forces and capabilities that can adapt quickly to new challenges and to unexpected circumstances. We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise and the way we fight... There will be no moment at which the Department is “transformed.” Rather, we are building a culture of continual transformation.<sup>1</sup>

—Donald H. Rumsfeld  
Secretary of Defense  
Transformation Planning Guidance

Transformation has become the mantra for change in the Pentagon and the defense establishment. Described as a continual process of adapting to meet future requirements, it will be imperative to aggressively approach the future with a common understanding of why, when and how to change. To secure our nation’s global and domestic interests concurrent with integrating rapid advances in technology will require the efficient expenditure of resources and development of joint integrating concepts and capabilities. To execute transformation effectively, the military will need to embrace and nurture a culture of interdependence. Authentic transformation will require the entire military establishment to embrace changes in the sometimes redundant and overlapping roles, missions, and functions of individual Services.

The collapse of the Soviet Union and the emergence of the information age have re-defined the near-term and future international security environment. The process of assessing the new strategic and operational environment and defining U.S. interests within the new security landscape is fraught with uncertainty and confusion. The 9/11 terrorists attack clearly demonstrated current threats to our security, but the nature of future threats remains unclear. These threats include traditional armed violence as well as indirect and unconventional challenges to U.S. interests around the world and most pointedly at home. The security challenges we experienced and organized for in the industrial and bipolar environment of the 20<sup>th</sup> Century are likely gone forever.<sup>2</sup>

However, what is beginning to emerge is that economic constraints coupled with rapid and increasingly expensive technological advances will require the U.S military to transform the way it thinks about the application of its capabilities. This change in “thinking” is complicated by the organizational climate. Much debate and Service parochialism coupled with seemingly conflicting guidance disrupts today’s military transformation efforts within DOD. The resultant confusion must be reduced in order to provide a clearer orientation within the Department and to

successfully balance the realities of current operations with transformational necessities. Analogous to the bombing of Pearl Harbor in 1941, events of 9/11, armed conflicts in Afghanistan, Iraq and the Global War on Terrorism have helped focus transformation efforts. The necessary synchronization of Service transformations requires DOD to make tough decisions and put in place appropriate forcing functions and benchmarks which will drive a defense culture of interdependence and an efficient military establishment capable of meeting future national security challenges.

### **THE CHALLENGE OF TRANSFORMATION – CHANGING GEARS**

Defense transformation has occurred throughout history as military forces either proactively or reactively adapted to the realities of the strategic and operational environment. According to the DOD, “transformation is a process that shapes the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people and organizations that exploit our nation’s advantages and protect against our asymmetric vulnerabilities to sustain our strategic position, which helps underpin peace and stability in the world.”<sup>3</sup> The challenge for current defense transformers is to transition this concept into practice. Unlike most historic defense transformations there are no easily identifiable battlefield failures or discernable threats to orient transformation efforts – or so it would appear. U.S. military preeminence and a position of global hegemony may in fact hamper current transformation efforts especially with no clearly identified threat or peer competitors.

This paper proposes that Service interdependency is a critical aspect and enabler of DOD’s transformation efforts. But before making this case it is important to define what it means. According to the DOD dictionary the term “joint force” connotes two or more services operating under a single joint force commander.<sup>4</sup> Effective joint operations imply the ability to integrate military capabilities at the appropriate time and place to achieve objectives. In the past, the terms “joint” and “joint force” really described a condition which encompasses the entire force and has been linked more closely to a culture of joint deconfliction and interoperability. The concept of interdependence is the next step in joint operations. It effectively generates a synergy between the Services that requires capabilities of each service in order to conduct cohesive, efficient, and effective operations. Service interdependence moves beyond Service interoperability and deconfliction by allowing the Joint Force Commander to maximize complementing capabilities to achieve desired effects more efficiently thereby maintaining scarce resources for follow-on or simultaneous missions.

Historically, nations that have accepted the status quo while in a position of superiority have been dethroned over time. Their lack of vision and efforts to adapt to the security environment left them vulnerable to defeat by unforeseen threats to their pre-eminence. The rationale for transformation in the absence of discernable threats and the perceived gap in capabilities between the U.S. military and potential future threats is unconvincing. Without a credible threat, DOD has embraced an approach to defense planning focused on potential capabilities of possible threats as the foundation for shaping the force. OSD has built a transformation program based on information technology in order to “maintain our overwhelming military advantage in support of strategic objectives.”<sup>5</sup> The underlying assumption is that evolutionary improvements to current forces will be inadequate to meet future threats and challenges in the information age. As a result we need a military that is fundamentally joint, able to gain and maintain decision superiority, and conduct distributed operations which will enable it to mass effects across the battle space.<sup>6</sup> In support of the need to transform, the Commander-in-Chief, George Bush, postulated a military for the 21<sup>st</sup> Century, which would be more expeditionary – lighter, more mobile, more lethal and more capable of striking with precision from across the globe.<sup>7</sup> Meeting the Commander’s intent requires transformers to assess current strategic and operational security trends and postulate a unifying concept for the future.

Documentation such as the Quadrennial Defense Review, OSD Transformation Planning Guidance, Joint Transformation Roadmap, Joint Vision 2020 and supporting Joint Doctrine do not provide a clear, unifying concept for future Joint Warfare for the application of military capabilities required to meet political objectives. Symptomatic of these challenges are disconnects between OSD’s vision and Service Transformation Road Maps and supporting budget requests for ‘03. While all the services are on board with the need to transform and have interpreted that as a need to become more expeditionary, the missing piece to the enigma is how they are to function as an interdependent joint team. However, to help guide the transformation efforts a series of abstract Joint Operating Concepts (JOCs) and Joint Functional Concepts (JFCs) are being developed by the Joint Staff, staffed with the Services and approved by the Secretary of Defense. Once completed, these concepts are intended to provide a representation of how the joint force will be used in the future and help define the areas of Service interdependency.<sup>8</sup>

These concepts are a critical first step towards the transformation of the military. The greatest impediment to that step is not technology but one of culture. According to Secretary Rumsfeld, “All the high-tech weapons in the world won’t transform the U.S. Armed Forces

unless we transform the way we think, train, exercise and fight.”<sup>9</sup> This requires a common vision and general consensus of where each Service and each service member fits into these future operational concepts. Charged with conceptualizing the future fight, BG David A. Fastabend from the Army’s Transformation office, offers a view: “The Army’s picture of future war is intuitively obvious to those who have immersed themselves in this effort for the last two years... If we do not offer a simple, clear picture of how we fight, our concept will be supplanted by simpler, *narrow images that are easy to sell but impossible to execute.*”(emphasis added)<sup>10</sup> Fighting as an interdependent force is a revolutionary change from how U.S. military operations have been conducted in the past. Such a change requires an understanding of service and inter-agency unique capabilities and trust and dependence between the services gained through a common operating picture, education, training and defense bureaucracies focused more on jointness than Service parochialism. To effectively adapt to the consequences of uncertainty and adversity, defense culture must encourage innovation within a framework that conceptually drives interdependency and integrated joint operational capabilities.<sup>11</sup>

## **THE OPERATIONAL ENVIRONMENT**

The 21<sup>st</sup> century security environment is characterized by the confluence of rapidly advancing technology, economic and cultural globalization, offset by intensifying culture clashes, and regional power struggles. In the face of global turmoil, the U.S. is in a position to maintain its influence by attempting to shape the international landscape in a fashion favorable to American interests. Whether one applies Samuel Huntington’s theory of cultural fault lines, a three-tiered approach to nation-state intentions, or OSD’s emerging theory in “gaps of instability” caused by disconnect[s] from the core of globalized countries,”<sup>12</sup> the cords which held the Cold War world together have been cut. Unlike the Cold War we should anticipate an environment in which adversaries are not easily deterred. The concept of peaceful coexistence may not be a feasible option given the intentions of our enemies and our vulnerabilities.

Success and failures during the Cold War and post-Cold War do, however, provide a starting point for the future. The National Security Strategy (NSS) charges the defense establishment to adapt itself to the future in order to assure, dissuade, deter and defeat threats to the nation.<sup>13</sup> Refining our alliances and defense relationships around the world<sup>14</sup> remain essential tasks to shaping the future security environment.<sup>15</sup> Closely tied to our refined defense relationships will be the ability to adapt our current Cold War force posture to one that reflects the ability to maintain regional influence and respond quickly to crises.<sup>16</sup> Over the last thirty plus years our ability to build a powerful nuclear force, conventional force and gain complete control

of the “commons”<sup>17</sup> through superior air, space and sea power has provided a military capable of meeting challenges to vital U.S. interests. That said, our aversion to fully embrace low-intensity conflict and nation building since the failures of Vietnam, have focused defense establishment culture on high-intensity conflict and strategies of attrition which have not always been compatible with full spectrum operations.<sup>18</sup> Operations in Iraq, Afghanistan, Haiti and the Balkans indicate a need to structure the future force to both win decisively the combat maneuver phase and set the conditions for winning the peace with effective follow-on stability and reconstruction operations.

Since the end of the Cold War, it has been more difficult to obtain conclusive military victory against asymmetric or irregular enemies who refuse to quit because they cannot be decisively defeated in the conventional sense. In many areas of potential and actual conflict the population has little to gain in retaining the status quo or supporting a Western view of peace. Most would rather work towards a “peace” fashioned in their own terms. Creating a military that is adaptive to new threats while maintaining a force capable of deterring and decisively defeating conventional threats creates a vicious condition of sharply competing demands and deep organizational paradoxes. Asymmetric threats may effectively attack our information networks through cyber attacks and our image through sophisticated media propaganda. The perpetrators may operate dispersed in complex terrain among the general population in order to counter our ability to attack them directly with stand-off weapons. Linked to transnational groups and criminal organizations they have the ability to obtain weapons of mass destruction, access to satellites, high-tech communications and ample quantities of sophisticated weaponry. Their ability to mask themselves among the population provides them increased protection by exploiting our western morality and causing us to constrain our operations. U.S. forces in direct contact with the enemy today are fighting on a battlefield on which the “strong is weak because of his morals” and the weak gains strength from his audacity, ability to shape world opinion and access to inexpensive high tech technology niche capabilities.<sup>19</sup>

However, our ability to respond to these asymmetric threats cannot obviate our ability to defeat future peer competitors. The requirement to maintain our own healthy alliances is critical to this requirement. Even with our substantial military capability, we may not be able to go it alone against a future first-rate alliance. Moreover, it is unrealistic and infeasible for the U.S. military to police the world when most of the world benefits. Similarly, our military power must now be used to protect and secure our own borders further constraining its global employment. The front lines now include the homeland.

Given the proliferation of conventional military technologies and weapons of mass destruction, it is difficult to predict what lies on the horizon. Undoubtedly, wealthy nations will no longer have a monopoly on military might. Applying the logic of capabilities vice threat based strategy; it seems prudent to include a China-like capability to war-game against the current force structure strategy described in the QDR.<sup>20</sup> According to a paper published in 2000 by a strategist at the Chinese Army War College, China should pursue a strategy of "War Under High-Technology Conditions," in order to defeat the U.S. Their plan is similar to our own vision of future warfare in that they intend to disrupt our information flow and strike at our forces in theater with a combination of stealth and precision missiles and aircraft." In addition the strategy called for the development of doctrinal approaches to rapid and destructive operations which would paralyze us through heavy casualties and attacks on information systems.<sup>21</sup> They have also been reported as forming rapid response divisions within the Army to complement the more offensive, high-tech and information focused strategy.<sup>22</sup> China is a country with great military strength, considerably greater than Iraq. They have a very large conventional military with modern aerospace, land and sea forces as well as nuclear weapons and conventional ballistic missiles. As a possible regional aggressor, how would the U.S. respond to an aggressive China-like capable threat in the future? Could we execute the current 1-4-2-1 strategy if engaged with a near-peer competitor? Based on advancements in technology and the lack of a definable threat on the horizon, some assume we can. Notwithstanding, pundits have argued the need to review force planning assumptions and required capabilities based on a perceived mismatch of strategy to resources. The nature and context of current operations appears to indicate a willingness by our leaders to accept risk in the face of uncertainty. As we execute the current strategy devoid of actual high-intensity conflict, the war on terrorism coupled with stability and reconstruction operations is consuming. Should our current global commitments and willingness to accept risk collide with the emergence of a capable and unexpected threat, the consequences could be severe. The only thing relatively certain in the future security environment is continued global instability and the likelihood of new challenges to U.S. interests by factions with increased lethality and capability.

The development of integrated and interdependent service capabilities provides a feasible approach to increasing overall military capabilities within constrained resources. It facilitates the efficient and effective expenditure of limited resources in order to meet these future challenges while continuing to conduct near-term operational requirements. Managing a dramatic change in service cultures is a key enabler for the transformation to joint interdependency and is consistent with the capability-based approach prescribed in the DPG.

## **JOINT VISION 2020 AND EMERGING JOINT OPERATING CONCEPTS**

JV 2020 served as the conceptual underpinning for defense transformation theory and concept development. This vision has been criticized by many for its over-reliance on high-tech weaponry and information dominance to achieve decisive results. JV 2020 competes with the more traditional approach to force development. It recognizes that achieving political objectives requires military operations across a continuum that may not always be conducive to direct action or against a threat which fought or thought by western rules. While technology has been heralded by many futurists as critical for insuring the U.S. can meet its future security objectives, its effective integration into our vision of interdependent joint warfare is only one piece of the transformation puzzle. Linking technology with military strategy and operational concepts requires intellectual objectivity and unbiased analyses of all future roles of the military.

The azimuth for transformation identified by JV 2020 provided the start point for leveraging lessons learned from the process of joint concept development and experimentation flavored by operational experience gained since 9/11. Today the Department has gravitated towards a more comprehensive and inclusive view of future full spectrum operations and its requirements. The refined direction of joint operations is emerging in the JOCs and JFCs, which attempt to bridge strategy and capabilities for joint operations 15-20 years in the future.<sup>23</sup> The attributes characterizing the transformed joint force are: fully integrated; networked to allow for dispersed operations; adaptable and tailorable to mission requirements; and expeditionary. The vision postulates a force possessing information superiority, organized and equipped for decentralized operations and lethal in all conditions and environments. Lofty goals, but these attributes and operating concepts provide more refined direction than existed just six months ago.

Attaining these goals and converting the operating concepts into reality will be expensive and will likely require an interdependent joint team. In the past, joint forces have evolved from separate service organizations whose operations were de-conflicted to allow for mostly collateral operations within clearly defined Service boundaries. In order to move beyond collateral operations, transformation must partition the battle-space into well-defined capability requirements and compare those segmented areas with current and future Service capabilities. This analysis will identify areas of capability overlap and also capability shortfalls. The concepts must fill the voids by designating Service responsibilities to fill shortfalls and simultaneously eliminate Service redundancies. This will allow us to shed unnecessary force structure and

focus development efforts on improving genuine capability shortfalls. The JOCs and JFCs require a force that can dominate the battle space and act effectively to achieve campaign objectives.

Joint interdependence will efficiently maximize the effects gained by complementary and supporting capabilities while minimizing individual service and joint force's vulnerabilities. The joint force should be able to capitalize on the lessons of past operations, and through the coordinated integration of advanced technologies and the use of tested organizational designs, produce a superior force capability across a wide range of conditions. Gaining confidence in operating interdependently and depending on other Services and agencies to provide a critical capability for mission success is a dramatic culture change, a change that can likely be effected through training and operations during peace and war. In a future operational environment requiring rapid action based upon current but perishable intelligence, we may not have the luxury of applying Cold War linear Service and inter-agency stove-piped methods and still be successful. An example of Service culture change driven by emerging joint concepts and cost in manpower and dollars is the Army's recent decision to reduce artillery systems and rely on joint fires. This dependency allows the Army to increase military police and other low density / high demand units to meet current and future requirements. A cultural change – definitely, but only the first step in a more dramatic culture shift. An indicator of a larger change would be relying on the Marine Corps for all force entry capability and eliminating Army Airborne force structure.

Perhaps one of the toughest cultural barriers facing the military is redefining the relevance of the Reserve Components (RC) in the international security environment. Mired in political interests and Cold War structure, the RC has capabilities that provide strategic depth to reinforce military operations overseas as well as capabilities useful to homeland defense.<sup>24</sup> In July of 2003, The Council on Foreign Relations sponsored an independent study of the status of emergency responders in the U.S. What the task force uncovered was a system that was not only under-funded but woefully unprepared nearly two years after the terrorist attack of 9/11. A culture shift, which embraces the capabilities and increased necessity for DOD to support homeland defense within our borders, cannot be overlooked in defense transformation. The operational concepts driving joint interdependence are also analogous to those required for transforming homeland defense.

The development of JOCs and JFCs provide the conceptual framework that guides the efficient development of interdependent Service capabilities across the full spectrum of joint operating requirements. Balancing the realities of the current security environment and those

anticipated in 2020 allows the development of relevant structures, processes and joint mindset necessary for truly integrated joint operations now and in the future.

### **SETTING THE CONDITIONS FOR CULTURE CHANGE**

Creating Service interdependency requires aggressive senior leader intervention. Transformation is generating a necessary mindset of creating “born-joint” organizations, systems, and facilities.<sup>25</sup> The recent strengthening of the joint acquisition process and aggressive joint concept development and experimentation programs, that heretofore have been almost exclusively the prerogatives of the individual Services, reflect this trend. Linking related Service programs to the capabilities specified in joint concepts is the cultural shift the Services must make to internalize interdependency.

Transforming a defense culture mired in independent, self-sufficient force capability, and wedded to the Cold War paradigm will not be easy. “Professional soldiers are traditionally laggard in facing and adopting changes, especially radical changes that upset proven methods and the ways in which we have been doing things for years past.”<sup>26</sup> The bulk of the original DOD transformation approaches reflect JV 2020 concepts that focused mainly on engaging a traditional enemy quickly and decisively with high-tech joint forces. Since 9/11 and subsequent campaigns in Iraq and Afghanistan there has been a shift in the conceptual framework that reflects the difficulty of breaking an enemy’s will and captures the human and asymmetric nature of full spectrum operations. Changing a culture within the defense department, will likely require the Administration and Congress to also internalize these emerging operational concepts. Since they will play a critical oversight role, Congress must also move beyond their traditional perception of war as depicted in movies and books.

This cultural change must occur at the Service level as well but is increasingly more difficult as technology will likely redefine traditional boundaries between Services. Having embraced the concept of expeditionary operations, each of the Services have developed high-tech solutions to meet the stated vision of JV 2010 and 2020 with little regard to interdependence or redundancies. Their programs reflect a rather parochial need to secure their budgets and preserve or limit cuts to end strength.<sup>27</sup> Success in Iraq and Afghanistan provided a basis for refining the operational concepts while demonstrating the power of information superiority, dominant maneuver, precision engagement, focused logistics and full-dimensional protection.<sup>28</sup> Some have called this a natural progression of joint warfighting, which reflects the operational evolution from simple interoperability to interdependence on the modern battlefield.<sup>29</sup> However, to continue this momentum will require Services to follow the Army Chief

of Staff's lead and consider themselves first as members of a joint team providing capabilities to the Joint Force Commander.<sup>30</sup>

Historically, significant defense reform has only been achieved through legislative pressure. "It is unrealistic to expect any large bureaucratic structure, military or civilian, to act in the national interests if the action includes reforms and changes that threaten the status quo. The military suppresses those that agitate for change."<sup>31</sup> The needed Congressional mandates would be analogous to the National Security Act of 1947, which defined military roles and functions for the Cold War, and the Goldwater Nichols Act that paved the way to changes in joint warfare. A similar legislative reform process would intensify the debate and result in the assessment of the entire security establishment, not just the organizational changes and reforms required of the future military force. Fundamental alignment of DOD, interagency and service roles, functions, and processes require a top-down analysis and possible realignment to meet future security challenges.

Accomplishing this level of legislative momentum will empower the necessary reforms needed to transform the military culture for the 21<sup>st</sup> Century. DOD processes that produce more specific and clearly defined concepts, authoritative doctrine, born-joint organizations and systems linked to efficient and effective interdependent operations can drive cultural change. These changes dictate a need for the Services to focus on their unique core roles and missions, shed superfluous, ancillary and redundant capabilities, and increase their reliance on the other Services for non-core capabilities. The impediments are not whether the AF or Navy need the Joint Strike Fighter, the Marines the Osprey or the Army FCS and additional Civil Affairs. The issue is clearly defining where Service capabilities fit in support of the NSS and within Joint Operational and Joint Functional Concepts in order to achieve full spectrum dominance for the nation.

#### **GETTING ON BOARD FOR A CULTURE CHANGE**

The debate over who won the war [OIF] has started. The true answer is that the U.S. military did. Army, Air Force, Marines, Special Operations and Naval aviation each played a role and played it well. Remove any one of the Services and their unique capabilities, and the campaign could certainly have had a different, lengthier and less decisive outcome.<sup>32</sup>

—Senior U.S. Military Commander  
Operation Iraqi Freedom

The challenges of transformation far exceed those outlined above. The difficulty of breaking the Cold War paradigm and grappling with a new security environment requires the

DOD transformation efforts to turn inward and apply their capabilities approach to the development of a “campaign quality force” that embraces the concept of Service interdependence. It is not the intent of this paper to fully analyze the strategy of transformation, but only to frame some of the issues, which if addressed, provide some degree of clarity and a common direction. History has shown that successful defense transformations are problematic – in this case, it is made even more challenging by the uncertainty of the security environment in the twilight of the industrial age and the absence of a serious peer competitor. That said, the current tension of balancing operational requirements to win the Global War on Terrorism while transforming the defense culture and security structure of the nation requires a clear strategy to guide the transformers. The transformation must account for both current and future operational and strategic environments and address the possible threats across the full spectrum of conflict. Current DOD transformation guidance and emerging operating concepts are the first step down this path – as they have identified transformation of the military culture as the essential task to building this common framework. What’s needed now are actions, which carry us beyond the general concepts and provide the specificity necessary to refine military functions and missions within the projected battle-space.

The diversity and complexity of the modern battlefield will no longer permit the luxury of sequential phasing and operations characterized by independent, deconflicted or even interoperable joint actions. Applying the unique and complementary capabilities of each Service synergistically towards desired campaign effects provides the joint team a formidable edge. To be effective we must change the way we think about the application of military power and the roles, functions and missions within the Services and the Department of Defense.

Much has already been done and many tough decisions made to set us down the path of transformation. However, the following are several critical indicators reflecting progress towards Service interdependency and integrated joint operations. These indicators can be used by senior leaders to gauge the success of the transformation effort.

- a. Implementation of effects based operations. Joint operations actually being conducted and guided by clearly described “effects.” Effects that resonate down through all echelons and guide both maneuver and targeting, and that are relevant from the political end-state back to the line of departure.
- b. Development of authoritative doctrine and corresponding forces capable of full spectrum operations. Clearly articulated and understood concepts for the application of military capabilities across the full spectrum of operations. A corresponding campaign quality force, which provides the President and Joint Force Commanders the capabilities they need when, where and how they need them. Will the military be used to support an approach of proactive engagement and full spectrum capability?

Will it also be able to deter through intimidation by pre-emptive or immediate response with decisive precision attacks?

- c. Creation of streamlined and adaptive standing joint headquarters. Low level joint force organizations and functional commands with supporting doctrine, training programs, and synchronized operational rotation cycles, that facilitate effective interdependent joint operations. Organizations integrated, where necessary, with inter-agency and multi-national forces. Formed, trained and employed as a team, these organizations would reduce the tension and initial inefficiency of ad hoc organizations in an environment characterized by complexity, compressed reaction and response times and operational uncertainty.
- d. Increased leader training emphasis on Service interdependence and Joint Operating and Functional Concepts. The development of mandated Service leadership training through formal classroom training and inter-Service exchange programs for all senior Captains and above and senior operations non-commissioned officers and sergeants majors. The establishment of educational programs that are inherently Joint. Establishing an artificial boundary for training only those earmarked for joint staff positions undermines the desired changes in Service cultures. Also the establishment of Service "educational leads" for cross-service functional areas.
- e. A restructured Reserve Component relevant to National security needs. Existence of a restructured and mission focused RC organizations with improved overall homeland security application and geared to meet the needs of the expeditionary active component forces. A two-tiered RC force fully capable of: 1) expeditionary reinforcements to the active component; and 2) a more integrated and relevant element of homeland security and defense.
- f. Refined, and where necessary, redefined laws and guidance that bind the U.S. security establishment. Major reforms to traditional, unwritten and emergent roles, functions and missions of the Services, combatant commanders and defense agencies as they relate internally to requirements within DOD and externally with other executive agencies. The institutionalizing of Service interdependency through bureaucratic re-engineering with refinements to Title 10, DOD Directive 5100.1, and if necessary, a follow-on to the Goldwater-Nichols Act.
- g. Synchronized Service and DOD Transformation roadmaps. Published Service roadmaps, that reflect the development of complementary Service capabilities and meet the Joint Force Commander's operational requirements today and potential requirements of the future. Roadmaps, which are in synch with Joint Operating and Functional Concepts that, unambiguously delineate task, purpose and responsibility and eliminate redundancies and capability overlaps.

Making genuine progress on transformation will be difficult without a shared vision of how we intend to apply military capabilities across the operational continuum. This joint vision of the future military requires leadership, civilian and uniformed, to make and implement difficult and controversial decisions.<sup>33</sup> In order to provide the Nation and Combatant Commanders the tools they need, the Services must view their contributions within the context of an interdependent

joint team. The mechanism for cultural transformation requires an almost wholesale change in how we do business: changes in joint organizations and processes which include greater cross-Service integration of doctrine, organizations, training, material, leadership, education and facilities. The way we live, train and interact in peace and garrison should reflect the way that we fight in war. The ability to work effectively in the information age as an interdependent joint team will mark a successful shift in defense culture and a positive indicator of progress along the transformation continuum.

WORD COUNT = 5, 227



## ENDNOTES

<sup>1</sup> Secretary Rumsfeld provides a general azimuth for transformation in the Forward of the *Transformation Planning Guidance*, (Washington, D.C.: The Pentagon, April 2003), p. 1. Structuring the U.S. military establishment to meet future requirements was a part of the current Bush Administration's election platform. The need to transform the military to meet future requirements is generally not disputed amongst the defense community. The military continues to reflect the Cold War paradigm, which must be adapted to meet the nation's future security requirements. Within the TPG, the DOD identifies an overall strategy of implementing transformation consisting of three parts: 1) transformed culture; 2) transformed process; and 3) transformed capabilities. (Ibid, pp. 8-9) Initiated in 2001, pundits of transformation have been at odds with answering the what, why and how of transformation. The perception of many is that OSD is pushing for a more efficient, low cost, and high-tech approach to security without fully acknowledging the realities of modern warfare across the entire operational continuum. It would appear the basis for transformation friction lies in three major areas: 1) balancing near-term operational risks and requirements with a security environment which has not been defined; 2) an unclear vision of what role the military is intended to play in the future; and 3) the evolution of joint warfare to a new level which requires service interdependence. Secretary Rumsfeld offers a broader view of the role of U.S. military forces in "Transforming the Military," *Foreign Affairs* (May/June 2002). In it, Mr. Rumsfeld talks to several of the challenges of transforming the force. Amongst the literature concerning military transformation, revolutions and steps towards modernization, two stand out for providing a picture of the challenges of military change: the work of Eliot A. Cohen and John Gooch in *Military Misfortunes: the Anatomy of Failure in War*, (New York: The Free Press, 1990); and MacGregor Knox and Williamson Murray, *The Dynamics of Military Revolution 1300-2050*, (United Kingdom: Cambridge University Press, 2001).

<sup>2</sup> Much has been written on the future disorder of the world. Clearly the paradigm of order and power understood with the Cold War no longer exists. Several factors are shaping our current and security environment not the least of which are the repercussions of the end of bipolarity. Prior to her appointment as National Security Advisor, Condoleezza Rice wrote an article in *Foreign Affairs* entitled "Promoting the National Interest," (January/February 2000) which highlighted the azimuth of the current Administration and identification of an uncertain security environment. This think piece coupled with the works of Samuel Huntington in "The Clash of Civilizations," *Foreign Affairs* (Summer 1993) and Benjamin R. Barber in *Jihad vs. McWorld*, (New York: Ballantine Books, 1995) offer a daunting view of the future. Tensions between nation-states and regional actors fueled by competing cultures, globalization and the transition from the industrial to information age are shaping a world not easily understood or defined by established methods and experiences. Asymmetrical threats, intranational organizations and faceless enemies challenge traditional boundaries, alliances and power.

<sup>3</sup> *Transformation Planning Guidance*, p. 3. The theme of transformation – adapting to meet future requirements is relatively consistent in DOD documents. However, it has become a buzzword for changes to structure, capabilities and processes that have often been defined as modernization or evolutionary in the past. Whilst many have taken to arguing the validity of terms, energy may be better spent on identifying the needs of the future as compared to a current defense culture of attrition based warfare ingrained with the orderly and Service-centric approach to military operations. The friction among transformers is deciding if transformation is driving technology or if technology is driving transformation. Services traditionally founded in target centric and less direct human contact have found themselves at odds with those operating in the gray zone of combat – an area which defines success as not merely winning

battles but instead one focused on winning the campaign by securing the peace and political objectives. The tension of what success on the battlefield means is one of the root causes of transformation debate – efficiency vs. effectiveness. To gain an appreciation for the struggle between the opposing camps quickly, one need only read Arthur K. Cebrowski in “The American Way of War,” *Transformation Trends – 13 January Issue*, (Washington, D.C.: The Pentagon, 13 January 2004); Antulio J. Echevarria’s *An American Way of War or Way of Battle*, (Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 4 February 2004); and Fredrick W. Kagan’s “A Dangerous Transformation” in *Opinion Journal*, (November 12, 2003).

<sup>4</sup> According to the DoD Dictionary “joint force” is a general term applied to a force composed of significant elements assigned or attached, of two or more Military Departments operating under a single joint force commander. U.S. Joint Chiefs of Staff, *Department of Defense Dictionary of Military and Associated Terms, JP 1-02*, (Washington, D.C.: The Joint Chiefs of Staff, 12 April 2001), p. 227. Seems simple enough however, “joint operations”, a general term for describing military actions conducted by joint or Service forces in a specific relationship (e.g., supporting, supported), do not in and of themselves create joint forces. Evolving from the transformation process and Operation Enduring Freedom and Operation Iraqi Freedom is joint synergy. Enabled in part by information technology and blurring of traditional Service and operational boundaries in today’s battle space, joint synergy is emerging as a foundational concept for transformation. Viewing the term as applied to campaign planning, joint synergy, leading to interdependence requires each of the Services to understand their unique and supporting roles to the overall sum of the military parts. The significant culture change is for the Services to understand that none of them can achieve campaign objectives independently, nor are any of them invulnerable alone. The modern and future battlefield is too complex and the battle space too all encompassing to revert to old ways of deconflicted or simply interoperable joint operations. A good interpretation of OSD’s vision of how we will have to fight in the future to include constructive criticisms can be found in Douglas A. MacGregor’s recent book – *Transformation Under Fire: Revolutionizing How America Fights*, (Westport, CT: Praeger Publishers, 2003).

<sup>5</sup> *Transformation Planning Guidance*, p. 4. The overwhelming advantage intended by OSD is not the same as the strategy of overwhelming force envisioned by the Powell doctrine. The advantage gained by superior knowledge-enabled forces which can apply precision and decisive force implies a transition from overwhelming attrition based warfare to overmatched forces able to out think and act quicker and with greater precision – efficient and less expensive. This new approach has been categorized by Max Boot in his article “The New American Way of War,” *Foreign Affairs* (July/August 2003), pp. 41-58 as moving from applying strategies of attrition based primarily on the behemoth weight of numbers vice one of tactical and strategic brilliance. This application of force is giving way to a more effective and humane approach but also one that may be more dangerous if we allow the charm of technology to obviate the requirements for troops on the ground. His seminal work on small wars – *Savage Wars of Peace: Small Wars and the Rise of American Power*, (New York: Basic Books 2002) illustrates the importance of understanding the full spectrum of conflict.

<sup>6</sup> TPG, pp. 1-10. In an uncertain operational environment, DOD has approached the future with a bent towards mastering information technology as a means of gaining the upper hand over the enemy. Linking all the battlefield players through a shared vision of the battle space is an achievable goal. Today’s efforts to develop a Joint Common Operating Picture as outlined in the *Battle Space Awareness Functional Concept* (February 2004); *Joint Command and Control Functional Concept* (February 2004) and *Draft Joint Battle Management Command and Control*

*Roadmap* (December 2003) indicate we are headed in the right direction. More importantly though is a recognition in joint concepts that information superiority is a goal the achievement of which should not be assumed. Network centric warfare does not imply perfect intelligence and 100% information dominance. It does however, attempt to increase lethality of the joint effort by providing collaborative efforts and a common picture. War in the future will be one characterized by a battle of the sensors – human, machine or something in between whose efforts can be used to the advantage of the commander. A perspective on network enabled warfare can be found in an article by the former VCJCS, Admiral William A. Owens, "The Once and Future Revolution in Military Affairs," *Joint Forces Quarterly* (Summer 2002), pp. 55-61 in which he postulates that technology will provide the capability to see the battlefield with unprecedented fidelity. Written prior to the invasion of Iraq and current GWOT operations, current Joint Operating Concepts reflect a more realistic view of war than that envisioned by either the Admiral or JV 2020. The *JOC for Major Combat Operations* (16 December 2003), p. 4 acknowledges that "despite unimaginable advances in sensor and information technologies, the fog, friction, uncertainty, complexity, and chaos surrounding war and combat endure, especially when facing an intelligent and determined adversary or multiple adversary."

<sup>7</sup> President Bush's theme for transformation has been echoed by Secretary Rumsfeld in numerous White House and OSD documents and speeches. Probably one of the most telling pieces of guidance from the President is in the *National Security Strategy*, (Washington, D.C.: The White House, September 2002), p. 29 in which he says "The major institutions of American national security were designed in a different era to meet different requirements. All of them must be transformed." The military vision reflected in JV 2020 and recent joint concepts is a force that is expeditionary and interdependent. The QDR which emerged nearly simultaneously with the NSS identified a capabilities approach to force structure design and force posturing. These efforts were completed prior to 9/11 and well before OIF, OEF and current GWOT efforts. A RAND analysis of the strengths and weaknesses of this approach, the QDR process and final product provides additional insights into many of the challenges facing transformation. John Y. Schrader, Leslie Lewis and Roger Allen Brown, *Quadrennial Defense Review 2001: Lessons for Managing Change in the Department of Defense*, (Santa Monica, CA, RAND, 2003). Pundits of the 2001 QDR have argued its lack of depth in providing a strategy for supporting the mobility, and infrastructure for JV 2020, an apparent mismatch of strategy to force structure, and a coherent supporting link to homeland defense.

<sup>8</sup> Joint Operations Concepts introduces a family of joint concepts that complement the Capabilities-based methodology for joint warfighting. These concepts are intended to link strategy to capabilities both in terms of how we apply military capabilities and force planning. While many are still being developed, the draft versions reflect many of the lessons learned from recent operations. The overall family of transformational joint operations concepts is intended to have 4 JOCs (major combat operations, stability operations, homeland security and strategic deterrence) and 5 functional concepts (battlespace awareness, command and control, force application, focused logistics and protection). Together these concepts are intended to link strategy to capabilities 20 years in the future and more closely link joint, interagency and multinational operational efforts. The operational concepts developed the furthest at this writing are: U.S. Department of Defense. *Battlespace Awareness: Functional Concept*. V 2.1. Washington, D.C.: Department of Defense, 2003; U.S. Department of Defense. *Focused Logistics Joint Functional: Concept*. Washington, D.C.: Department of Defense, December, 2003; U.S. Department of Defense. *Force Application Functional Concept*. Washington, D.C.: Department of Defense, February 2004; U.S. Department of Defense. *Joint Command and Control: Functional Concept*. Washington, D.C.: Department of Defense, February, 2004; U.S.

Department of Defense. *Joint Operations Concepts*. Washington, D.C.: Department of Defense, November 2003; U.S. Department of Defense. *Major Combat Operations Joint Operating Concept*. Version 0.9, Draft Working Paper. Washington, D.C.: Department of Defense, 16 December 2003; U.S. Department of Defense. *Protection Joint Functional Concept*. Version 1.0. Washington, D.C.: Department of Defense, 31 December 2003; and U.S. Department of Defense. *Stability Operations Joint Operating Concept*. Version 0.85, Draft Working Paper Pending USJFCOM/J9 Approval. Washington, D.C.: Department of Defense, 16 December 2003.

<sup>9</sup> Donald Rumsfeld, "Transforming the Military," *Foreign Affairs* (May/June 2002), p. 29. Often criticized for his seemingly technological orientation towards future force structure, the most common theme within OSD and the Army is a need to change culture in order to adapt and apply emerging joint warfighting concepts. VADM (Ret) Arthur Cebrowski cautions those studying change to "keep in mind that at the heart of transformation is behavioral change – that is, the forces are able to behave in a different way, ... frequently new equipment can catalyze new behavior and make new tactics possible, and that's laudable. But, it's behavior that counts – new tactics, new processes, new doctrine, new organizational structures, new information flows. That's where the transformation is, and it all involves people advancing new ideas." Paul Stone, "Transformation: Why You Should Care," *American Forces Press Service*, (31 December 2003), p. 1. An examination of the historical evolution of warfare and the enabling aspect of technology linked to structure and doctrine can be found in Richard A. Gabriel's and Karen S. Metz's *Short History of War: The Evolution of Warfare and Weapons*, (Carlisle Barracks: U.S. Army War College, SSI, 30 June 1992). This short collection of case studies provides a companion to the work by Stephen Peter Rosen on challenges of military change in peacetime and war based on lessons from the World War I and World War II era. *Winning the Next War: Innovation and the Modern Military*, (Ithaca, NY: Cornell University Press, 1991).

<sup>10</sup> Colonel David A. Fastabend. "The Elusive Operational Concept," *Army*, June 2001, p. 44. Keeping current with the transformation efforts, debates and experiments is like trying to catch a series of fast moving trains on different spurs headed in the same general direction. The empowering of JFCOM with future joint experimentation, training and doctrine has improved transformation efforts. JFCOM's recent efforts to produce joint operating concepts and joint functional concepts have helped orient Service efforts which should be reflected in the next series of transformation roadmaps.

<sup>11</sup> Disagreements and debate exist on the nature of warfare and appropriate applications of military capabilities to best serve the nation. This friction evolves from a technocentric focus on precision operations to an emerging evolution of concepts which acknowledges broader operational requirements. A maturing view of future warfare is evident when one crosswalks JV 2010 to JV 2020 to current Joint Operating Concepts. JV 2010 seems to focus on leveraging technology to achieve greater effectiveness. JV 2020 takes future warfare a step further introducing the idea of decision superiority and placing a greater emphasis on full spectrum dominance. While making progress in coming to a consensus, tension still exists in the role of technology in how wars will be fought and the means by which we will compel the enemy to act appropriately. It would appear that technological utopians believe war will become an essentially frictionless exercise during which war is nothing more than dealing out punishment in doses of precision-calculated attacks intended to keep the populace in check. Pundits of the high-tech solution have argued the future will be characterized by asymmetric attacks and the focus should be on countering more of a low-intensity threat while maintaining a credible high-intensity capability. 9/11 and ongoing operations in Iraq and Afghanistan have been invaluable

in forcing the architects of transformation to go back to the table and assess their views of combat and the capabilities required. To gain a better understanding of the opposing views read: Harlan Ullman and James Wade Jr., *Shock and Awe: Achieving Rapid Dominance*, Washington, D.C.: NDU Press (1996); and a differing view by Alvin H. Bernstein and Martin Libicki in "High-tech: The Future Face of War?(A Debate)," *Commentary Magazine* (January 1998) available from [http://www.findarticles.com/cf\\_0/m1061/nl\\_v105/20106533/print.jhtml](http://www.findarticles.com/cf_0/m1061/nl_v105/20106533/print.jhtml) accessed 14 January 2004; and John T. Correll, "What Happened to Shock and Awe?" *Airforce Magazine* (November 2003), available from <http://216.239.57.104/search?q=cache:4QXqbNh-JrsJ:www.afa.org/magazine/nov2003/1103> accessed 15 January 2003.

<sup>12</sup> No one can predict the future security environment. An emerging view within OSD of the future describes a new security paradigm characterized by "disconnectedness" between a functioning core of states and institutions operating within the construct of globalization, those disconnected with the core and those between the two. This "gap" area is where future struggles will take place. See Barnett, Thomas P.M. "The Pentagon's New Map." *Esquire*. 1 March 2003. Available from <http://www.nwc.navy.mil/newrulesets/ThePentagonsNewMap.htm>. Internet. Accessed 30 December 2003 for a more detailed explanation. This view is similar both in terms of geographical areas, cultural tensions and political challenges to those described by many to include: Samuel Huntington in "The Clash of Civilizations?" *Foreign Affairs* (Summer 1993), pp. 22-49; Robert Kaplan's "The Coming Anarchy," *The Atlantic Monthly* (February 1994), pp. 44-76; Benjamin R. Barber, *Jihad vs. McWorld*, (New York: Ballantine Books, 1995); and Ralph Peter's *Beyond Baghdad: Postmodern War and Peace*, (Mechanicsburg, PA: Stackpole Books, 2003). A tiered approach to capabilities leading to possible intentions and means of using force to attain their goals can be found in the work of Douglas C. Lovelace Jr., *The Evolution in Military Affairs: Shaping the Future U.S. Armed Forces*, (Carlisle Barracks: U.S. Army War College, SSI, 16 June 1997). In his view the future security environment will be characterized by a three-tier construct which will require us to apply different variations of military power to achieve our objectives. These three tiers are: 1) modern, stable, information based democratic and international market based economies. They will most likely have access to nuclear weapons and/or other WMD and view traditional approaches to warfare as ineffective. They will likely prefer alliances and indirect soft power approaches to threaten U.S. interests and will be more inclined to apply international sanctions and measures to regional and global issues of stability; 2). primarily the newly industrializing states which favor economic nationalism and cultural particularism. As they struggle to get to the level of First Tier nations they will likely focus on a strategy of regional hegemonies which will dictate weapon proliferation to include that of WMD. They will be more inclined to engage in sustained land operations or campaigns for the good of the future. When appropriate they will apply state sponsored terrorism as an indirect approach to gain strategic advantage; 3) tier three comprise mainly non state actors characterized by gangs, terrorist groups and warlords with little capability to sustain conventional combat. Their weapon of choice will be guerilla and terrorists tactics.

<sup>13</sup> The National Security Strategy (NSS) recognizes the complex and volatile security environment of the 21<sup>st</sup> Century that will require the defense establishment to operate effectively across a wider and more complex spectrum of operations. In order to meet future challenges, President Bush directed the administration to "transform all the major institutions of American security" and "reaffirm the essential role of American military strength." In meeting these requirements the "military must: 1) assure allies and friends; 2) dissuade future military competition; 3) deter threats against U.S. interests, allies and friends; and 4) decisively defeat any adversary if deterrence fails." NSS, p. 29. The tenets for security have remained relatively

constant in the macro sense for much of the post-Cold War period. President Bush's speeches in 2001 as well as recently reiterate the direction of U.S. defense policy. Compare the president's speech 11 December 2001 to Citadel Cadets available from <http://www.whitehouse.gov/news/releases/2001/12/print/20011211-6.html> accessed 15 January 2004; and his remarks at the Heritage Foundation 11 November 2003 available from <http://www.heritage.org/Press?Commentary/bush111103.cfm?RenderforPrint=1> accessed 30 December 2003. The twist to foreign and defense policy added by President Bush is his stated and demonstrated willingness to act preemptively and without sanctions from the UN or NATO if needed. Some of the possible second order effects of a preemptive strategy can be found in Brian Dunn's article "Transforming USAREUR for a Strategy of Preemption," *Military Review* (November/December 2003), pp. 15-20; and Tom Barnett's think piece in OSD's *Transformation Trends – 18 November Issue* entitled "Where—Not When – Preemption Makes Sense." In addition, initial feedback on the recent budget submission suggests there may be holes in what transformation and strategy suggest as the force structure required and the one being paid for in the budget. See David Wood, "Flawed Concept: Critics say defense spending doesn't reflect the realities of a post-9/11 world" *Army Times* (19 January 2003), pp. 22-23.

<sup>14</sup> As in the past alliances and partnerships will be an integral part of defense policy and transformation efforts. U.S. global interests generally require western friendly and stable environments. As witnessed with our influence in NATO and Korea, the U.S. "provides its European and Asian partners with security protection and access to American markets, technology, and supplies within an open world economy. In return these countries agree to be reliable partners who provide diplomatic, economic, and logistical support for the United States as it leads the wider Western postwar order." See John G. Ikenberry's "America's Alliances in the Age of Unipolarity" unpublished paper, Georgetown University (1 April 2003) p. 9, for a current perspective of alliances in the future. In recent memory the role of NATO as a means of promoting western ideals and stability provides a model of success and an alliance adapting to meet security requirements globally in the interests of its member nations. In the future we should expect to see alliances formed for the security of like-minded nations and intranational organizations not only as a means to protect themselves from outside adversaries but also as a stabilizing force for potential rivalry within the alliance as the future regional and global security landscape is formed to meet state interests. Many have argued that transformation is leading us down the path of unilateral military options and alliances. Understanding the military role in the future alliance structure is a part of understanding how to shape the force structure to meet future requirements. Tied to the issue of alliances is how the U.S. plans, if at all, to shape the security environment with forward military presence. The current debate on the future relevance of NATO and the U.S. role within it provides an illustrative example of the debate on transforming the alliance structure.

<sup>15</sup> Huba Wass de Czege and Antulio J. Enchevarria offer a perspective of defense strategy, which focuses on setting the conditions prior to conflict. "The basic approach of a strategy of positive ends would be to build and enlarge a circle of stakeholders committed to creating conditions for a profitable and enduring peace – thereby reducing the potential for crises—and to preparing response mechanisms for coping successfully when crises do occur." This proactive approach coupled with one of selective engagement may be the direction for post-Cold War defense policy needed in uncertain times as it implies the need to shape uncertainty in lieu of reacting to it. See *Toward a Strategy of Positive Ends*, Carlisle Barracks: U.S. Army War College, September 2001), p. iii.

<sup>16</sup> As the landscape changes, we can no longer rely on Cold War containment or force posturing strategies. According to OSD, the future “forward presence will be valued more than strategic deployment from home, necessitating a major force posture shift from current conditions where 80% of the force is CONUS based.” Arthur K. Cebrowski in “The American Way of War, ” *Transformation Trends – 13 January Issue*, Washington, D.C.: The Pentagon, 13 January 2004) p. 4. In order to meet the transformation objective of responding quickly with decisive force the Department of Defense is developing plans which will refine forward presence along fault lines and “gaps of instability” in order to be able to respond quickly. Forward presence also provides the U.S. the ability to shape the environment they may have to fight in either through the reinforcement of existing alliances and agreements or through the establishment of new ones. What became apparent in the later portion of the Clinton era and is very evident with the current Administration, is maintaining global primacy requires a strategy which includes an increasing reliance on military power. Some of the force adjustments which may be required include the forward positioning of forces in Eastern and Central Europe at locations which provide easy access to the Middle East, the Mediterranean Sea and which also promote regional stability and development efforts (Bulgaria, Romania, Poland, and Hungary). Forward presence in Central Asia with easy access to Iran, China, India and Pakistan may promote regional stability as well as position assets to react quickly to likely conflicts. Learning from the instability generated with the fall of the Shah in Iran in 1979, it may also be prudent to position U.S. military assets in the Arab monarchies surrounding Saudi Arabia. Hedging a future which includes a period of internal struggle in Saudi and/or Iran it is not beyond the scope of transformation efforts to adjust defense strategy for likely conflict – lines of operation which appear to follow Huntington’s “fault lines” and Barnett’s “gaps” separating those thriving under globalization and those disconnected from the rest of the world.

<sup>17</sup> Barry Posen offers an insightful view of the importance of the U.S. maintaining superiority of the “commons” -- the air, space and sea. “Command of the commons is the key military enabler of the U.S. global power position. It allows the United States to exploit more fully other sources of power, including its own economic and military might as well as the economic and military might of its allies. Command of the commons also helps the United States to weaken adversaries, by restricting their access to economic, military, and political assistance. Command of the commons has permitted the United States to wage war on short notice even where it has had little permanent military presence.” Barry Posen, “Command of the Commons,” *International Security*, (Summer 2003), p. 9. The contested zone according to Posen will be the area where we face true uncertainty in the form of emerging conventional high-tech capabilities and adaptable asymmetrical threats in complex terrain – on land.

<sup>18</sup> Since the fall of the Berlin Wall, military contingency operations have focused mainly on operations for which we have been the least prepared. With the exception of Desert Storm and Desert Fox, operations have been focused at the lower end of the spectrum – an area unbecoming the Cold War paradigm of conventional high-intensity combat. “Our Vietnam experience and its aftermath left in the hearts and minds of many leaders an aversion to anything falling outside classical operational tasks.” Montgomery C. Meigs “Unorthodox Thoughts About Asymmetric Warfare,” *Parameters*, (Summer 2003), p. 13. As the most powerful nation in the world, we have been challenged to impose our will in Vietnam, Lebanon, and Somalia. In addition difficulty in coming to closure in Panama, Haiti, Bosnia and Kosovo indicate the American way of war may require more than a revamping of culture grounded in attrition warfare. In a security environment formed by cultural and economic fault lines and shaped by a mix of conventional and irregular armies full spectrum dominance is essential. Winning the battles may provide the vision of what we are comfortable labeling as war but

unless we can win the peace we will only weaken our ability to deter further aggression and instability. General Meigs' article offers a very insightful look at an aspect of culture which challenges today's transformation efforts – the reluctance to acknowledge lessons learned from contingency operations from Vietnam through Baghdad. Low intensity conflict, asymmetric and idiosyncratic threats have shaped the security environment and characterized the types of military operations we have experienced in the post-Cold War environment. From his unique perspective as a professor of history and practitioner in combat and peace operations since Vietnam, Meigs suggests that much of what we need to consider for transformation is offered in operational lessons learned. "We have had units operating in the new world that was exploited by al Qaeda for at least a decade. Ironically, the desire to maintain the highest possible readiness for high-intensity conflict has in part disguised a reluctance to accept a return to the potentially contaminating environment of low-intensity conflict, even while our troops were operating in that environment. The spectrum of violence is continuous. There should not be a discontinuity between theory and military practice in a world in which our military will be summoned, with little warning, to operate throughout the entire spectrum." These ideas have been reinforced by many others studying transformation who feel the vision of future military operations is lacking a perspective of the entire operational continuum. See also James J. Carafano "The U.S. Role in Peace Operations: Past, present, and Perspectives for the Future" Heritage Foundation Lecture #795 (14 August 2003), available from [http://www.heritage.org/Research/National\\_Security/hl795.cfm](http://www.heritage.org/Research/National_Security/hl795.cfm) accessed 4 January 2004. James Fallows, "Blind into Baghdad," *The Atlantic Monthly*, (January/February 2004), pp. 53-74 highlights the challenge at all levels to move beyond the rhetoric of transformation into actions which clearly define the military role in the future.

<sup>19</sup> Melissa Applegate, *Preparing for Asymmetry as Seen thru JV 2020*, (Carlisle Barracks: U.S. Army War College, September 2001) pp. 4-10. Another view of the difficulty in achieving political ends is offered by Donald Chisholm, "The Risk of Optimism in the Conduct of War," *Parameters* (Winter 2003/2004) available from <http://proquest.umi.com/pqdweb?index=26&did=000000515440211&SrchMode=3&sid=1&Fmt> accessed 15 January 2004.

<sup>20</sup> The Fall 2001 Quadrennial Defense Review Report (QDR) was issued nearly concurrently with the NSS. This QDR further refined the direction of transformation. The capability-based approach for force planning led to development of an acceptable risk assessment in maintaining the current force that could accomplish four fundamental tasks: 1) defend the U.S.; 2) deter aggression and coercion in four key regions; 3) swiftly defeat aggression in overlapping major conflicts while preserving the option to conduct a decisive victory in one of the conflicts to include a possible regime change or occupation; and 4) conduct a limited number of small scale contingencies. (QDR, p. 17) While critics of the 1-4-2-1 strategy argued against its validity as based on a reliance on a Cold War paradigm, and reliance on U.S. high-tech superiorities, much has transpired since the Fall of 2001. The NSS and QDR coupled with Joint Vision 2010, Joint Vision 2020, DOD Transformation Planning Guidance, Defense Planning Guidance, Joint Operations Concepts, and Service Transformation Guidance and Roadmaps set a general but often contradictory direction. A poignant view can be found in David Isenberg and Ivan Elands comments about the QDR in "Empty Promises: Why the Bush Administration's Half-Hearted Attempts at Defense reform Have Failed," *Policy Analysis* (11 June 2002), pp. 2-20.

<sup>21</sup> Robert Karniol, "Power to the People", *Janes Defence Weekly*, (12 July 2000) as quoted by Thomas S. Szvetez in "Global Strike Task Force: A Strategic Renaissance" USAF Air

University, (April 2001), p. 14. Szvetez's research provides insight into the potential threat and capabilities of China. Additionally, more qualitative data can be found in *The Military Balance of Power*, IISS (2003/2004), a perspective on the potential for China to be a regional military power and capable militarily of threatening the region if not the U.S. homeland.

<sup>22</sup> See Toshi Yoshihara, *Chinese Information Warfare: A Phantom Menace or Emerging Threat*, (Carlisle Barracks: U.S. Army War College, SSI November 2001) and Andrew Scobell ed., *The Costs of Conflict: The Impact on China of a Future War*, (Carlisle Barracks: U.S. Army War College, SSI, October 2001) for a more critical analysis of the direction Chinese defense policy may be headed.

<sup>23</sup> See DOD, *Joint Operations Concepts* (November 2003) for a general overview then consider the perspectives offered by John A. Gentry "Doomed to Fail: America's Blind Faith in Military Technology," *Parameters* (Winter 2002/2003); and Peter Wilson's "An Alternative Future Force: Building a Better Army," *Parameters* (Winter 2003/2004) both available from <http://proquest.umi.com/pqdweb?index=2&did=000000515440231&SrchMode=3&sid=1&Fmt>, both accessed 5 January 2004.

<sup>24</sup> See CFR study on *Emergency Responders: Drastically Underfunded, Dangerously Unprepared* New York (2003) to better understand the some of the shortfalls in homeland defense. Transformation efforts in this area, while recognized by the Department of Defense as needed, have not taken on the same intensity as homeland security efforts. Partly because of the creation of Homeland Security and part because the boundaries between the two organizations remains foggy. Maintaining National Guard relevance to national defense needs requires a culture change of World War III mobilization and deployment to one of greater relevance to the current and future battlefields. With roughly 47% of the nation's military, the National Guard should have capabilities we can capitalize on. See James J. Carafano, "The Reserves and Homeland Security: Proposals, Progress, Problems Ahead," *CSBA Backgrounder* (19 June 2002) available at [www.csbaonline.org/4Publications/Archive/B.20020619.The\\_Reserves\\_and\\_H/B.20020619.The\\_Reserves\\_and\\_H.htm](http://www.csbaonline.org/4Publications/Archive/B.20020619.The_Reserves_and_H/B.20020619.The_Reserves_and_H.htm) accessed 30 December 2003.

<sup>25</sup> "Born joint" signals a culture change. In a recent briefing by the JFCOM Commander, Admiral E.P. Giambastiani highlights the fact that transformation is refining processes and culture to a more joint approach to concepts and resources. However, he also recognizes that we have not changed the culture and the term "born joint" is more of a question than a statement of fact. See the Admiral's "Remarks presented to AFCEA West at the "Born Joint?" Conference" San Diego CA (4 February 2004) available from <http://www.jfcom.mil/newslink/storyarchive/2004/sp021004.htm> accessed 11 February 2004 for a good summary of the challenges and direction of joint transformation.

<sup>26</sup> LTG Gavin in 1947 as quoted by Douglas MacGregor, *Transformation Under Fire: Revolutionizing How America Fights*, (Westport, CT: Praeger Publishers, 2003), p. 91. Moving service cultures from one of parochialism to one of joint first will be a challenge. One of the signals that we are moving towards a culture change is the creation of a joint lessons learned team to look at OIF. This is the first time in recent history that there has been a concerted effort to gather operational level lessons from a joint perspective and quickly get them into the concept development and experimentation process for transformation. The effectiveness of this first real joint attempt remains to be seen. The Services have traditionally done this and looked at things through their own lenses of warfare and there has not been a priority effort placed on

gathering joint lessons and getting them into a system that can address them. According to ADM Giambastiani, three key lessons learned from recent operations are: 1) "The U.S. DOES NOT send any individual Service to conduct major operations but instead deploys its military as a joint force"; 2) "the power of a coherently joint force is now greater than the sum of our separate Service, interagency and coalition capabilities;" and 3) 'Speed kills' – not just physical speed, but mental speed and situation awareness. It reduces decision and execution cycles, creates opportunities, denies an enemy options and speeds his collapse." See the Admiral's "Remarks presented to AFCEA West at the "Born Joint?" Conference" San Diego CA (4 February 2004) available from <http://www.jfcom.mil/newslink/storyarchive/2004/sp021004.htm> accessed 11 February 2004.

<sup>27</sup> With the exception of the latest Army transformation roadmap, the Service transformation plans represent the culture challenge facing transformation – they focus on service self preservation and reflect a go it alone attitude. The defense bureaucracy has been focused on Service competition for resources and attention as a means of promoting their interests. Historically, joint warfare was a clash of theories and bureaucratic obstinance. Budget, acquisition processes, training programs, organizations and doctrine have all supported Services developing their own agendas in support of the national security. JV 2020 does not define the concept nor the term of joint interdependence so it is understandable that the Services have not applied it to their transformation plans. The new joint operational concepts developed at the end of CY 2003 and early CY 2004 provide a cloudy idea of what joint interdependence means and the importance of the "joint first" concept. Understanding this fact, it is inappropriate to imply the Services are not acting on behalf of the nations best interests – they are operating within the bureaucracy defined by the Department both in terms of processes, operational concepts and doctrine. See U.S. Department of the Air Force. *America's Air Force: Vision 2020*. Washington, D.C.: U.S. Department of the Air Force, 2003; and U.S. Department of the Air Force. *The USAF Transformation Flight Plan*. Washington, D.C.: U.S. Department of the Air Force, 2003 for the AF pre-Joint Operational Concept views of transformation. The naval perspective can be found in U.S. Department of the Navy. *Naval Power 21...A Naval Vision*. Washington, D.C.: U.S. Department of the Navy, October 2002; and U.S. Department of the Navy. *Naval Transformation Roadmap: Power and Access...From the Sea*. Washington, D.C.: Department of the Navy, 2003 for a perspective of, or lack of, Service interdependence. The Army's latest transformation concept was released near simultaneously with the drafts of Joint Operational Concepts in late 2003. See U.S. Department of the Army, *Army Transformation Roadmap 2003*. Washington, D.C.: U.S. Department of the Army, 2003; and U.S. Department of the Army. *United States Army: The Way Ahead*. Washington, D.C.: U.S. Department of the Army, 2003. That said though, the weight of Service parochialism and skepticism will remain a deterrent to fully embracing the idea of interdependence if it is viewed as causing organizational changes and paradigm shifts from that which uniformed members are comfortable. A good case study of Service survival is the near termination of the Marines after WWII, a fight which has shaped their culture of parochialism today. See Victor H. Krulak's *First to Fight: An Inside View of the U.S. Marine Corps*. Annapolis, MD: Naval Institute Press, 1984 and Frank Marutollo "A Good Bowl of 'Chowder' Saved Marine Corps Following WWII." *Marine Corps Gazette*. (December 1978): 22-33, for a synopsis of how the Marines survived and the rationale of why we need a Marine Corps.

<sup>28</sup> The overall goal of transformation described in JV 2020 is the creation of a force that is , enabled by information superiority and dominant across the full spectrum of military operations through dominant maneuver, precision engagement, focused logistics and full dimensional

protection. U.S. Joint Chiefs of Staff, *Joint Vision 2020*. Washington, D.C.: U.S. Government Printing Office, June 2000: 1-2.

<sup>29</sup> See William A. Owens, "Making the Joint Journey." *Joint Forces Quarterly* (Spring 2003): 22-32; and James L. Locher III, "Taking Stock of Goldwater-Nichols." *Joint Forces Quarterly* (Spring 2003): 34-40 for a review of the evolution of joint warfare. In addition, Robert D. Worley's analysis of the challenges and requirements of operating joint headquarters, highlights the fact that getting to joint interdependence will take more than evolutionary inertia it will take a new way of thinking. *W(H)ither Corps?* Carlisle Barracks: U.S. Army War College, Strategic Studies Institute (August 2001).

<sup>30</sup> An essential element of moving transformation forward is to establish a common frame of reference for joint operations so the Services can develop a joint perspective and clear task and purpose for where they fit into the plan. This joint perspective then provides a common understanding of the execution of joint warfare and enables the Department as a whole to move from a Service centric view to one of a joint environment that everyone operates in as a member of the team. The Army's Chief of Staff, General Schoomaker, has provided the impetus for culture change from parochialism to jointness by declaring himself a joint officer first and an Army officer second. The Army's transformation plan mirrors this philosophy and signals the potential for a change in culture. Past Army transformation concepts and terminology framed the Army's efforts as providing a force that could fight and win the nation's war. Today, the transformation vision has a very purple hue as it describes a "campaign quality Army with a Joint and Expeditionary Mindset." An army whose unique contribution to the fight is "campaign quality combat, combat support and combat service support capabilities necessary to conduct sustained land warfare; ..." (As an Army,) "the challenge we must address is how to transform our organizations, processes, doctrine, and culture so that we are better able to provide this contribution to the Joint Force in a more prompt and rapid manner." The new CSA's emphasis and vision of jointness is moving beyond just the rhetoric of transformation concepts and roadmaps and is beginning to be included in doctrine development. Of significance is the recognition in the foundation of Army doctrine FM 1 – The Army. According to the Army Transformation Roadmap, "Enduring capabilities of Army forces in support of the Joint Force [emphasis added] include shaping the security environment, executing prompt response, mobilizing the Army, forcible entry operations, sustained land dominance, and support for civil authorities. This represents a change that will be reflected in the next update of Field manual 1, The Army." See U.S. Department of the Army. *United States Army: The Way Ahead*. Washington, D.C.: U.S. Department of the Army, 2003, pp. 1 and 3; and U.S. Department of the Army. *Army Transformation Roadmap 2003*. Washington, D.C.: U.S. Department of the Army, 2003, p. 1-1 respectively.

<sup>31</sup> See MacGregor, p. 242 for a discussion of some of the bureaucratic reengineering required to establish the structure and culture that won the Cold War. MacGregor takes his analysis the next step and offers bureaucratic solutions to the future. These types of forcing functions may be required to get beyond the concept stage for transformation culture changes.

<sup>32</sup> Comments of senior military commander to the U.S. Army War College class in Carlisle, Pennsylvania on 7 January 2004.

<sup>33</sup> Adapting to meet future challenges is not a new requirement for either the military or political organizations or businesses. An understanding of how difficult it is to change large organizations such as the military is aptly illustrated by Peter F. Drucker, *The Essential Drucker*:

*The Best of Sixty Years of Peter Drucker's Essential Writings on Management*, (New York: HarperBusiness, 2001) with a business perspective. Political change is clearly described in Crane Briton's *The Anatomy of Revolution*, (New York: Vintage Books, 1938).

## BIBLIOGRAPHY

- Alberts, David S., John J. Garstka and Frederick P. Stein. *Network Centric Warfare: Developing and Leveraging Information Superiority*, 2<sup>nd</sup> ed. Washington, D.C.: C4ISR Cooperative Research Program, CCRP Publication Series, August 1999.
- Applegate, Melissa. *Preparing For Asymmetry: As Seen Through the Lens of Joint Vision 2020*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, September 2001.
- Association of the United States Army. *How "Transformational" is Army Transformation?* Arlington, VA: Association of the United States Army, Institute of Land Warfare, February 2003.
- Barber, Benjamin R. *Jihad vs. McWorld*. New York: Ballantine Books, 1995.
- Barnaby, Frank, ed. *Future War: Armed Conflict in the Next Decade*. New York: Facts on File Publications, 1984.
- Barnett, Thomas. "The Pentagon's New Map." *Esquire*. 1 March 2003. Available from <http://www.nwc.navy.mil/newrulesets/ThePentagonsNewMap.htm>. Internet. Accessed 30 December 2003.
- Barnett, Thomas. "Where – Not When – Preemption Makes Sense." *Transformation Trends – 18 November Issue*. Available from <http://www.nwc.navy.mil/newrulesets/PreemptionMakesSense.pdf>. Internet. Accessed 30 November 2003.
- Bernstein, Alvin H. and Martin Libicki. "High-tech: The Future Face of War? (A Debate)." *Commentary Magazine*, January 1998. Database on-line. Available from LookSmart's FindArticles. Accessed 14 January 2004.
- Boot, Max. "The New American Way of War." *Foreign Affairs* (July/August 2003): 41-58.
- Boot, Max. *Savage Wars and the Rise of American Power*. New York: Basic Books, 2002.
- Brinton, Crane. *The Anatomy of Revolution*. New York: Vintage Books, 1938.
- Bush, George W. "President Speaks on War Effort to Citadel Cadets." 11 December 2001, Available from <http://www.whitehouse.gov/news/releases/2001/12/print/20011211-6.html>. Internet. Accessed 15 January 2004.
- Bush, George W. "Remarks by the President of the United States at the Heritage Foundation President's Club Luncheon." 11 November 2003. Available from <http://www.heritage.org/Press?Commentary/bush111103.cfm?RenderforPrint=1>. Internet. Accessed 30 December 2003.
- Bush, George W. *The National Security Strategy of the United States of America*. Washington, D.C.: The White House, September 2002.
- Carafano, James Jay. "Post-Conflict and Culture: Changing America's Military for 21<sup>st</sup> Century Missions," Heritage Lecture #810. 20 November 2003. Available from

- <http://www.heritage.org/Research/NationalSecurity/HL810.cfm> . Internet. Accessed 30 December 2003.
- Carafano, James Jay. "The Reserves and Homeland Security: Proposals, Progress, Problems Ahead." *CSBA Background* 19 June 2002. Available from [http://www.csbaonline.org/4Publications/Archive/B.20020619.TheReserves\\_and\\_H/B.20020619.The\\_Reserves\\_andH.htm](http://www.csbaonline.org/4Publications/Archive/B.20020619.TheReserves_and_H/B.20020619.The_Reserves_andH.htm) . Internet. Accessed 30 December 2003.
- Carafano, James Jay. "The U.S. Role in Peace Operations: Past, Perspective, and Prescriptions for the Future." 14 August 2003. Available from <http://www.heritage.org/Research/NationalSecurity/hl795.cfm> . Internet. Accessed 30 December 2003.
- Cebrowski, Arthur K. "Testimony before the Senate Armed Services Committee's Emerging Threats and Capabilities Subcommittee." *Transformation Trends – 17 March Issue*. Washington D.C.: The Pentagon. 14 March 2003.
- Cebrowski, Arthur K. "The American Way of War." *Transformation Trends – 13 January Issue*. Washington D.C.: The Pentagon. 13 January 2004.
- Cebrowski, Arthur K. "Planning a Revolution: Mapping the Pentagon's Transformation." The Heritage Foundation Lectures and Seminars, Washington, D.C., 13 May 2003.
- Chisholm, Donald. "The Risk of Optimism in the Conduct of War." *Parameters* (Winter 2003/2004): 114. Database on-line. Available from ProQuest. Accessed 15 January 2004.
- Clark, Vern. "Sea Power 21: Projecting Decisive Joint Capabilities," *United States Naval Institute. Proceedings*. Annapolis: October 2002. Vol. 128. Database on-line. Available from ProQuest. Accessed 18 October 2003.
- Cohen, Eliot A. and John Gooch. *Military Misfortunes: The Anatomy of Failure in War*. New York: The Free Press, 1990.
- Correll, John T. "What Happened to Shock and Awe?," *Air Force Magazine*, November 2003. Available from <http://www.afa.org/magazine/nov2003/1103shock.pdf>. Internet. Accessed 15 January 2004.
- Crane, Conrad C. and W. Andrew Terrill. *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, February 2003.
- Drucker, Peter F. *The Essential Drucker: The Best of Sixty Years of Peter Drucker's Essential Writings on Management*. New York: HarperBusiness, 2001.
- Dunn, Brian J. "Transforming USAREUR for a Strategy Preemption," *Military Review* (November/December 2003): 15-20.
- Echevarria, Antulio J. II. "Interdependent Maneuver for the 21<sup>st</sup> Century." *Joint Force Quarterly* (Spring 2003): 95-103.

- Echevarria, Antulio J. II. *An American Way of War or Way of Battle?* Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 4 February 2004.
- Echevarria, Antulio J. II. *Rapid Decisive Operations: An Assumptions-based Critique.* Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, November 2001.
- Ekbladh, David. "How to Build a Nation." *Wilson Quarterly* (Winter 2004): 12-20.
- Fallows, James. "Blind Into Baghdad." *The Atlantic Monthly*, January/February 2004, 53-74.
- Fastabend, David A. "That Elusive Operational Concept." *Army*, June 2001, 37-44.
- Field, Kimberly C. and Robert M. Perito. "Creating a Force for Peace Operations: Ensuring Stability with Justice." *Parameters* (Winter 2002/2003): 77. Database on-line. Available from ProQuest. Accessed 15 January 2004.
- Gabriel, Richard A. and Karen S. Metz. *A Short History of War: The Evolution of Warfare and Weapons.* Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 30 June 1992.
- Gentry, John A. "Doomed to Fail." *Parameters*, Winter 2002/2003. Database on-line. Available from ProQuest. Accessed 15 January 2004.
- Giambastiani, E.P. *Remarks Presented to AFCEA West "Born Joint?" Conference.* Available from <http://www.jfcom.mil/newslink/storyarchive/2004/sp021004.htm> . Internet. Accessed 11 February 2004.
- Huntington, Samuel P. "The Clash of Civilizations?" *Foreign Affairs* (Summer 1993): 22. Database on-line. Available from ProQuest. Accessed 15 January 2004.
- Ikenberry, G. John. *America's Alliances in the Age of Unipolarity.* Unpublished paper for U.S. Army War College XIV Strategy Conference, Carlisle PA, April 2003.
- Isenberg, David and Ivan Eland. "Empty Promises Why the Bush Administration's Half-Hearted Attempts at Defense Reform Have Failed." *Policy Analysis*. 442 (11 June 2002), 2-20.
- Jablonsky, David. "Army Transformation: A Tale of Two Doctrines." In *Transforming Defense*, ed. Conrad C. Crane, 45-88. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, December 2001.
- Kagan Frederick W. "The Art of War." *The New Criterion* Journal on-line. Available from <http://host45.ipowerweb.com/-newcite/cgi-bin/printpage.php> . Internet. Accessed 14 January 2004.
- Kagan, Frederick W. "A Dangerous Transformation." *Opinion Journal*. Journal on-line. Available from <http://www.opinionjournal.com/extra/?id=110004289> . Internet. Accessed 16 January 2004.
- Kagan, Frederick W. "Did We Fail in Afghanistan?" *Commentary Magazine*, March 2003. Database on-line. Available from LookSmart's FindArticles. Accessed 15 January 2004.

- Kagan, Frederick W. "War and Aftermath." *Policy Review Online* August and September 2003. Journal on-line. Available from [http://www.policyreview.org/aug03/kagan\\_print.html](http://www.policyreview.org/aug03/kagan_print.html). Internet. Accessed 14 January 2004.
- Kagan, Frederick W. "Why Our Troops Should Stay in 'Old Europe'," *Commentary Magazine*, May 2003, 30-34.
- Kaplan, Robert D. "The Coming Anarchy." *The Atlantic Online*. Journal on-line. Available from <http://www.theatlantic.com/politics/foreign/anarchy.htm>. Internet. Accessed 5 February 2004.
- Kelleher, Patrick N. "Crossing Boundaries: Interagency Cooperation and the Military." *Joint Force Quarterly* (Autumn 2002): 104-110.
- Knox, MacGregor and Williamson Murray, eds. *The Dynamics of Military Revolution 1300-2050*. Cambridge, United Kingdom: Cambridge University Press, 2001.
- Krepinevich, Andrew F. "The Army and Land Warfare: Transforming the Legions." *Joint Force Quarterly* (Autumn 2002): 76-82.
- Krulak, Victor H. *First to Fight: An Inside View of the U.S. Marine Corps*. Annapolis, MD: Naval Institute Press, 1984.
- Kugler, Richard L. and Hans Binnendijk. "Choosing a Strategy." In *Transforming America's Military*, ed. Hans Binnendijk. Washington, D.C.: National Defense University Press, 2002.
- Langton, Christopher, ed. *The Military Balance 2003, 2004*. London: Oxford University Press for The International Institute for Strategic Studies, October 2003.
- Locher, James L. III. "Taking Stock of Goldwater-Nichols." *Joint Force Quarterly* (Spring 2003): 34-40.
- Lovelace, Douglas C. Jr. *The Evolution in Military Affairs: Shaping the Future U.S. Armed Forces*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, 16 June 1997.
- MacGregor, Douglas A. *Transformation Under Fire: Revolutionizing How America Fights*. Westport, CT: Praeger Publishers, 2003.
- Marutollo, Frank. "A Good Bowl of 'Chowder' Saved Marine Corps Following WWII." *Marine Corps Gazette*. December 1978, 22-33.
- Matthews, Lloyd J., ed. *Challenging the United States Symmetrically and Asymmetrically: Can America be Defeated?* Carlisle Barrack: U.S. Army War College, Strategic Studies Institute, July 1998.
- Matthews, William. "Is the U.S. Military Too Small?" *Defense News*, 12 January 2004. Available from <https://www.us.army.mil/portal/jhtml/earlyBird/Jan2004/e20040112247773.html>. Internet. Accessed 12 January 2004.

- Meigs, Montgomery C. "Unorthodox Thoughts About Asymmetric Warfare." *Parameters* (Summer 2003): 4-18.
- Murray, Williamson. "Innovation: Past and Future." *Joint Force Quarterly* (Spring 2003): 23-32.
- Murray, Williamson. "The Evolution of Joint Warfare." *Joint Force Quarterly* (Summer 2002): 30-37.
- Owens, William A. "Making the Joint Journey." *Joint Force Quarterly* (Spring 2003): 76-79.
- Owens, William A. "The Once and Future Revolution in Military Affairs." *Joint Force Quarterly* (Summer 2002): 55-61.
- Peters, Ralph. *Beyond Baghdad: Postmodern War and Peace*. Mechanicsburg, PA: Stackpole Books, 2003.
- Posen, Barry. "Command of the Commons." *International Security* (Summer 2003): 5-46.
- Record, Jeffrey. *Bounding the Global War on Terrorism*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, December 2003.
- Rice, Condoleezza. "Promoting the National Interest." *Foreign Affairs* (January/February 2000): 45. Database on-line. Available from ProQuest. Accessed 15 January 2004.
- Rosen, Stephen Peter. *Winning the Next War: Innovation and the Modern Military*. Ithaca, New York: Cornell University Press, 1991.
- Roxborough, Ian. "From Revolution to Transformation: The State of the Field." *Joint Force Quarterly* (Autumn 2002): 68-75.
- Rudman, Warren B., Richard A. Clarke, and Jamie F. Metz. *Emergency Responders: Drastically Underfunded, Dangerously Unprepared*. Report of an Independent Task Force Sponsored by the Council on Foreign Relations. New York: Council on Foreign Relations, 2003.
- Rumsfeld, Donald H. "Transforming the Military," *Foreign Affairs* (May/Jun 2002): 20-32.
- Rumsfeld, Donald. "Secretary Rumsfeld Speaks on '21<sup>st</sup> Century Transformation' of U.S. Armed Forces." Transcript of remarks and question and answer period. Fort McNair, Washington D.C., National Defense University, 31 January 2002.
- Scales, Robert H. *America's Army in Transition: Preparing for War in the Precision Age*. Army Issue Paper No. 3. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, November 1999.
- Scales, Robert H. *America's Army: Preparing for Tomorrow's Security Challenges*. Army Issue Paper No. 2. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, November 1998.
- Schrader, John Y., Leslie Lewis, and Roger Allen Brown. "Quadrennial Defense Review 2001." Documented briefing. Santa Monica, CA: National Defense Research Institute, RAND, 2003.

- Scobell, Andrew, ed. *The Costs of Conflict: The Impact on China of a Future War*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, October 2001.
- Starck, Peter. "General Calls For Separate Defenses." *Washington Times*, 20 January 2004, p. 15. Available from <https://www.us.army.mil/portal/jhtml/earlyBird/Jan2004/e20040120250310.html>. Internet. Accessed 20 January 2004.
- Stone, Paul. "Transformation: Why You Should Care." *American Forces Press Service*. 31 December 2003.
- Szvetecz, Thomas S. *Global Strategic Task Force: A Strategic Renaissance*. Research Report. Maxwell Air Force Base, AL: ACSC Air University, April 2001.
- U.S. Department of Defense. *Battlespace Awareness: Functional Concept*. V 2.1. Washington, D.C.: Department of Defense, February 2004.
- U.S. Department of Defense. *Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces*. Washington, D.C.: Department of Defense, 24 May 1995.
- U.S. Department of Defense. *Directive Number 5100.1*. Washington, D.C.: Department of Defense, 1 August 2002.
- U.S. Department of Defense. *Draft Joint Battle Management Command and Control Roadmap*. Draft Version 1.2. Washington, D.C.: U.S. Department of the Army, 12 December 2003.
- U.S. Department of Defense. *Focused Logistics Joint Functional: Concept*. Washington, D.C.: Department of Defense, December, 2003.
- U.S. Department of Defense. *Force Application Functional Concept*. Washington, D.C.: Department of Defense, February 2004.
- U.S. Department of Defense. *Joint Command and Control: Functional Concept*. Washington, D.C.: Department of Defense, February, 2004.
- U.S. Department of Defense. *Joint Operations Concepts*. Washington, D.C.: Department of Defense, November 2003.
- U.S. Department of Defense. *Joint Transformation Roadmap*. Pre-Decision Draft. Washington, D.C.: Department of Defense, 3 November 2003.
- U.S. Department of Defense. *Major Combat Operations Joint Operating Concept*. Version 0.9, Draft Working Paper. Washington, D.C.: Department of Defense, 16 December 2003.
- U.S. Department of Defense. *Military Transformation: A Strategic Approach*. Washington, D.C.: Director, Force Transformation, Office of the Secretary of Defense, Fall 2003.
- U.S. Department of Defense. *Protection Joint Functional Concept*. Version 1.0. Washington, D.C.: Department of Defense, 31 December 2003.
- U.S. Department of Defense. *Quadrennial Defense Review Report*. Washington, D.C.: Department of Defense, 30 September 2001.

- U.S. Department of Defense. *Report of the Defense Science Board Task Force on DoD Logistics Transformation, Volume 2*. Washington, D.C.: Department of Defense, December 1998.
- U.S. Department of Defense. *Stability Operations Joint Operating Concept*. Version 0.85, Draft Working Paper Pending USJFCOM/J9 Approval. Washington, D.C.: Department of Defense, 16 December 2003.
- U.S. Department of Defense. *The Defense Science Board 1998 Summer Study Task Force on DoD Logistics Transformation, Volume 1, Final Report*. Washington, D.C.: Department of Defense, December 1998.
- U.S. Department of Defense. *The Defense Science Board 1998 Summer Study Task Force on Joint Operations Superiority in the 21<sup>st</sup> Century, Volume 1*. Washington, D.C.: Department of Defense, October 1998.
- U.S. Department of Defense. *Training Transformation Implementation Plan*. Washington, D.C.: Office of the Under Secretary of Defense for Personnel and Readiness, 10 June 2003.
- U.S. Department of Defense. *Transformation Planning Guidance*. Washington, D.C.: Department of Defense, April 2003.
- U.S. Department of the Air Force. *Air Force Basic Doctrine*. Air Force Doctrine Document 1. Washington, D.C.: U.S. Department of the Air Force, September 1997.
- U.S. Department of the Air Force. *America's Air Force: Vision 2020*. Washington, D.C.: U.S. Department of the Air Force, 2003.
- U.S. Department of the Air Force. *The USAF Transformation Flight Plan*. Washington, D.C.: U.S. Department of the Air Force, 2003.
- U.S. Department of the Army. *Army Transformation Roadmap 2003*. Washington, D.C.: U.S. Department of the Army, 2003.
- U.S. Department of the Army. *The Army Future Force: Decisive 21<sup>st</sup> Century Landpower*. Washington, D.C.: U.S. Department of the Army, 26 August 2003.
- U.S. Department of the Army. *The Army in 2020 White Paper*. Washington, D.C.: U.S. Department of the Army, 1 November 2003.
- U.S. Department of the Army. *The Army*. Army Field Manual 1. Washington, D.C.: U.S. Department of the Army, 14 June 2001.
- U.S. Department of the Army. *The Way Ahead: Relevant and Ready*. Washington, D.C.: U.S. Department of the Army, 2003.
- U.S. Department of the Navy. *Naval Power 21...A Naval Vision*. Washington, D.C.: U.S. Department of the Navy, October 2002.
- U.S. Department of the Navy. *Naval Transformation Roadmap: Power and Access...From the Sea*. Washington, D.C.: Department of the Navy, 2003.

- U.S. Department of the Navy. *Naval Warfare*. Naval Doctrine Publication 1. Washington, D.C.: U.S. Department of the Air Force, 28 March 1994.
- U.S. Joint Chiefs of Staff, *Joint Vision 2020*. Washington, D.C.: US Government Printing Office, June 2000.
- U.S. Joint Chiefs of Staff. *Department of Defense Dictionary of Military and Associated Terms*. Joint Publication 1-02. Washington, D.C.: U.S. Joint Chiefs of Staff, 12 April 2001.
- U.S. Joint Chiefs of Staff. *Doctrine for Joint Operations*. Joint Publication 3-0. Washington, D.C.: U.S. Joint Chiefs of Staff, 10 September 2001.
- U.S. Joint Chiefs of Staff. *Joint Doctrine for Campaign Planning*. Joint Publication 5-00.1. Washington, D.C.: U.S. Joint Chiefs of Staff, 25 January 2002.
- U.S. Joint Chiefs of Staff. *Joint Doctrine for Military Operations Other Than War*. Joint Pub 3-07. Washington, D.C.: U.S. Joint Chiefs of Staff, 16 June 1995.
- U.S. Joint Chiefs of Staff. *Joint Force Capabilities*. Joint Publication 3-33. Washington, D.C.: U.S. Joint Chiefs of Staff, 13 October 1999.
- U.S. Joint Chiefs of Staff. *Joint Warfare of the US Armed Forces*. Joint Pub 1. Washington, D.C.: U.S. Joint Chiefs of Staff, 11 November 1991.
- U.S. Joint Chiefs of Staff. *Operation of the Joint Capabilities Integration and Development System*. Washington, D.C.: U.S. Joint Chiefs of Staff, available from [http://216.239.53.104/uncleasam?q=cache:TOPQN5nSqyUJ:www.dtic.mil/cjcs\\_dir](http://216.239.53.104/uncleasam?q=cache:TOPQN5nSqyUJ:www.dtic.mil/cjcs_dir) accessed 14 January 2004.
- Ullman, Harlan K. and James P. Wade with L.A. "Bud" Edney, Fred M. Franks, Charles A. Horner, Jonathan T. Howe, and Keith Brendley. *Shock and Awe: Achieving Rapid Dominance*. Washington, D.C.: National Defense University, Institute for National Strategic Studies, (ACTIS), November 1996.
- Vane, Michael A. and Robert M. Toguchi. "The Enduring Relevance of Landpower: Flexibility and Adaptability for Joint Campaigns." *The Land Warfare Papers* 44 Arlington, VA: AUSA, (October 2003).
- Wallace, William S. Briefing to the U.S. Army War College, Carlisle PA, 7 January 2004.
- Wass de Czege, Huba and Antulio J. Echevarria II. "Landpower and Future Strategy: Insights from the Army after Next." *Joint Force Quarterly* (Spring 1999): 62-69.
- Wass de Czege, Huba and Antulio J. Echevarria II. *Toward a Strategy of Positive Ends*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, September 2001.
- Wilson, Peter A., John Gordon IV, and David E. Johnson. "An Alternative Future Force: Building a Better Army." *Parameters* (Winter 2003/2004): 19. Database on-line. Available from ProQuest. Accessed 15 January 2004.

Wishnick, Elizabeth. *Growing U.S. Security Interests in Central Asia*. Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, October 2002.

Worley, D. Robert. *W(H)ither Corps?* Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, August 2001.

Yoshihara, Toshi. *Chinese Information Warfare: A Phantom Menace Or Emerging Threat?* Carlisle Barracks: U.S. Army War College, Strategic Studies Institute, November 2001.

