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Workshop Introducing Innovation and Risk: Implications of Transforming the Culture of DoD

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PREFACE

This document was prepared for the Office of Force Transformation under a task titled "Introducing Risk and Innovation: Implications of Transforming the Culture of the Department of Defense."

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EXECUTIVE SUMMARY

BACKGROUND

On 21–22 October 2003, the Institute for Defense Analyses hosted a workshop on issues facing the Department of Defense (DoD) in transforming its culture from the today's Industrial Age to one more prepared for and accepting of the Information Age. The workshop, sponsored by the Office of Force Transformation, was driven by the awareness that force transformation depends not only on new technology, but also on the development of new organizational relationships and an operating culture within DoD. The workshop cast a wide net with the objective of determining the optimum cultural traits for an Information Age force and then specifying the means that would be most effective in achieving these desired outcomes. To meet this objective, the workshop was structured to produce actionable recommendations concerning cultural change organized around the following three issues:

- Cultural changes that enable/facilitate transformation—critical changes in DoD culture that could lead, enhance, and accelerate the DoD transformation from an Industrial Age culture to an Information Age culture.
- Obstacles to be overcome—effects and cultural traits that impede transformation and innovation.
- Means to achieve the desired outcomes—ways in which cultural transformation can be influenced, positively or negatively.

The results of the workshop are summarized in three sets of findings, or take aways, one set for each of the three workshop issues, and in five recommended actions. The take aways and recommendations are based upon the workshop presentations and discussions, especially the discussions in breakout sessions. The results provide a set of hypotheses concerning the optimum cultural traits for an Information Age DoD and a set of actions for transforming the culture of DoD. This report is not intended to be a complete record of the discussions of the workshop, but a focused summary intended to capture the insights of the participants on the three issues in terms of actionable recommendations.

FINDINGS

Culture and Transformation

- A lot of good things are going on with regard to transformation, but no consensus about what constitutes transformation exists.
- That little agreement about current or desired cultural attributes exists is a barrier to change.
- Culture change is an integral component of successful transformation; it cannot be viewed separately from transformation.

Obstacles to Culture Change

- Transformation is not viewed as an essential component of future organizational effectiveness.
- The business operating systems of DoD and the Services—their constraints and complexities—are not well understood at the mid-level. The combat operating systems of different Services are not well understood across the Services.
- Enablers for target behaviors, related to joint innovation and risk-taking are often lacking.

Methods for Changing Culture

- Leadership is a decisive factor. Leader selection and development is a fulcrum for organizational change.
- Measurement is a change technique. Defining what to measure defines what needs to change.

RECOMMENDATIONS

1. **Use strategic communications to transmit the new culture. State what is expected in clear goals and measurable objectives:**
   - Develop forums for success stories and experiential learning about transformation and about organizational change.
   - Focus on events that link the visionary language of transformation to the gritty needs of operators and action officers.
2. **Leverage the education and training system to address deficiencies in knowledge about transformation, joint operations, and other key competencies:**
   - Define an initial set of cultural attributes that describe an Information Age Force.

- Create simulation environments for improving awareness and understanding of the nature of future conflicts, not just tools for the analytic community.

3. **Empower action by reducing cultural barriers and increasing behaviors related to jointness, innovation, and risk-taking:**
    - Create a common relevant operating picture of the Military Departments. (Put organizational charts in a common frame of reference or create crosswalks.)
    - Develop a crosswalk between Service battlefield functional areas (e.g., close fire support).
    - Develop exercises that demonstrate the operation and interaction of the business operating systems of a Service or of DoD (personnel, training, etc.) in meeting an objective or goal. A similar approach could be used to improve understanding of battlefield operating systems in a joint environment.
    - Establish a database of what is being accomplished in the field to improve joint operations. Many actions are not directed or tracked by HQ.
    - Establish incentives for straight Service-to-Service interactions (e.g., fund Service-to-Service workshops on key issues).

4. **Leverage leadership to lead cultural change:**
    - Select leaders at all levels that can model success. This will require identifying what success looks like at each different level.
    - Provide leaders with skills and tools to lead change and reward innovation.

5. **Assess the current status of transformation**

I. INTRODUCTION

On 21–22 October 2003, the Institute for Defense Analyses hosted a workshop on the implications of transforming the culture of the Department of Defense (DoD) from the today's Industrial Age to one more prepared for and accepting of the Information Age. New concept-technology pairings have been the principal focus of force-transformation efforts, but the broader issue of culture has not received the same level of attention. The workshop, sponsored by the Office of Force Transformation, was driven by the awareness that force transformation depends not only on new concepts and technologies, but also on the development of new organizational relationships and a new operating culture. The workshop cast a wide net with the objective of determining the optimum cultural traits for an Information Age force and then specifying the means that would be most effective in achieving these desired outcomes.

Culture is a major determinant of individual behavior in organizations and the resulting performance of the organization. The premise of the workshop was twofold. First, as the United States transforms from an Industrial Age to an Information Age military and responds to a new national security paradigm, DoD requires additional capabilities and a corresponding cultural transformation that increases the value of joint interdependence, innovation, and prudent risk taking. Second, as the direction of force transformation is focused, accelerating the process of cultural change will force the DoD transformation into the Information Age.

Organizational culture is a powerful determinant of organizational performance and an organization's ability to sustain change. Consider NASA. Following a detailed investigation of the Columbia disaster, the Columbia Accident Investigation Board concluded that the organizational causes of the accident were rooted in the Space Shuttle Program's history and culture: "In the Boards view, NASA's organizational culture and structure had as much to do with this accident as the External Tank foam."[1]

Dr. Carafano (2003) provided another example of the importance of culture in determining organizational performance in his workshop presentation. First, he explained that while the military's role in warfighting is unquestioned, its responsibilities in peace

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1 *Columbia Accident Investigation Board Report,* Volume 1, August 2003, p.177.

operations are both controversial and poorly understood. Although post-conflict activities are an integral part of any military campaign in which U.S. forces are required to seize territory, such as the post-war occupations of Germany or Japan, American troops rarely excel at this mission. Second, he analyzed the obstacles to conducting post-conflict missions more effectively, concluding they are largely cultural in origin.

Post-conflict operations also illustrate the importance of cultural congruence with organizational changes to prevent "snapback." Although post-conflict activities have been an integral part of military campaigns in which U.S. forces are required to seize territory, they have never been incorporated into mainstream military thinking in any major, systematic way. Carafano (2003) called this the rhythm of habits; Kotter (1995) pointed out the need to change this "rhythm": "Until new behaviors are rooted in social norms and shared values, they are subject to degradation as soon as the pressure for change is removed."

The workshop was structured to produce actionable recommendations concerning cultural change organized around three issues:

- Cultural changes that enable/facilitate transformation—critical changes in DoD culture that could lead, enhance, and accelerate the DoD transformation from an Industrial Age culture to an Information Age culture.
- Obstacles to be overcome—effects and cultural traits that impede transformation and innovation.
- Means to achieve the desired outcomes—ways in which cultural transformation can be influenced.

The workshop agenda (Appendix A) was designed to facilitate a discussion of these issues using a mix of invited presentations, panel discussions, and breakout sessions. The presentations provided background information, while the panels supported discussion of the issues. The three breakout sessions, which targeted cultural modeling, barriers and methods of change, and transforming culture, provided a forum for discussion of the three issues of cultural change. The focus of the discussions was on cultural change, not specific transformational changes in the operating forces. An assessment of specific changes, and how and why they are occurring within the context of the DoD force transformation, would be useful in understanding and fostering cultural change in support of force transformation.

Before the workshop, participants were sent read aheads (Appendix B) to provide a common knowledge base among participants. About 40 scholars, defense analysts, mid-

level (O5 and O6) military officers from Service HQ and education activities, and a few general officers attended the workshop (Appendix C).

Briefing charts from the presentations are available on the OFT Web site <http://www.oft.osd.mil/> under "OFT Initiatives." This report summarizes the workshop into a series of findings and recommendations, concerning the three workshop issues. It is not intended to be a complete record of all of the discussions of the workshop, but rather a focused summary that captures the insights of the participants on the three issues in terms of actionable recommendations. Presentations and individual discussions are used to amplify or highlight particular results. The results reflect the quality, professionalism, and knowledge of the participants.

II. WORKSHOP FINDINGS

The results of the workshop will be discussed in terms of three sets of findings, one for each of the three workshop issues, and five recommended actions. The results provide a set of hypotheses concerning the optimum cultural traits for an Information Age DoD and a set of actions for transforming the culture of DoD. The findings (this chapter) and recommendations (Chapter III) are discussed in turn.

A. FINDINGS: DEFINING A TRANSFORMATIONAL CULTURE

There are three main findings concerning culture and transformation. The central thread in these findings is the need for an improved understanding of both force transformation and culture.

There were many points of agreement concerning culture and transformation, but there was little agreement on what constituted transformation. Although there was strong agreement that good things were happening in the field under the label of force transformation, what constituted force transformation remained in doubt:

- What is the "commander's intent" for force transformation?
- What would "good" look like?
- Is force transformation more than net-centric warfare?
- How would we know force transformation if we saw it?
- What are the measures of progress?

Participants in this workshop are not alone in questioning what constitutes force transformation; a similar lack of agreement was found in a recent survey of about 1,900 students at intermediate and senior Service colleges (Mahnken and FitzSimonds, 2003). Further, the underlying concepts of transformation do not appear to be well understood by mid-level officers. DoD leaders have provided high-level strategic vision through the "Transformation Planning Guidance" and other documents, as well as numerous speeches and presentations (Table II-1), but the linkages between that vision and action are often unclear. Transformation guidance has focused on essential strategic concepts, offering a general overview and direction on policy issues, but it has not provided sufficient, useful guidance for the many decision-makers and action officers that must be involved in any implementation. Force transformation is a journey, not a destination, albeit one that is not

well described. When a significant waypoint in force transformation is a culture that will enable continuing change, such description is essential. Note that change is always easier to recognize or understand in hindsight (Table II-2).

Table II-1. Leadership Vision of Transformation

"And so I've asked the Secretary of Defense to review America's Armed Forces and prepare to transform them to meet emerging threats,"—President George W. Bush, 27 Feb 2001
"We must transform not only our armed forces, but also the Department that serves them by encouraging a culture of creativity and prudent risk-taking.…All the high-tech weapons in the world won't transform our Armed Forces, unless we change the way we think, train, exercise and fight—Secretary Rumsfeld, National Defense University, 31 January 2002.
"I cannot yet tell you what transformation is. I am comfortable with the idea that if we had no new toys and we simply changed our mindset that we would transform significantly"—GEN Peter Pace, VCJCS, National War College Convocation, 14 August 2002.
"Transformation is about creating new relationships and a new operating culture"—GEN Myers, CJCS, National Press Club, 13 September 2002.
"Transformation is first and foremost about changing culture. Culture is about behavior—about people—their attitudes, their values and their beliefs. What we believe, what we value, and our attitudes about the future are ultimately reflected in our actions—in our strategies and processes, and the decisions that emerge from them"—testimony of Art Cebrowski, Director of Office of Force Transformation, before the Senate Armed Services Committee's Emerging Threats and Capabilities Subcommittee, 14 March 2003.
"The outcome we must achieve: fundamentally joint, network-centric, distributed forces capable of rapid decision superiority and massed effects across the battlespace"—Secretary Donald H. Rumsfeld, April 2003.

Table II-2. Do We Know Innovation and Transformation When We See It?

Evolving long-term goals driving innovation and transformation—airpower goals of: • Anywhere, anytime • No place to hide
Continuous evolution as the path to revolutionary capabilities • The Army coming out of Vietnam vs. the Army in Desert Storm
Evolution to a revolutionary change • Evolving IR guided air-to-air missiles to the point of all-aspect capability—drastically changed air combat tactics • Evolving armored vehicle armament to the point of single-shot kill at combat speeds
An enabler that fundamentally changed key drivers—precision weapons • Change from massing forces to massing effects • Changed driver from lethality to targeting—from combat platforms to target information

Source: Welch (2002)

Participants generally viewed force transformation as one more task to be accomplished, not as a change in how tasks are accomplished. Adding to this confusion over the elements of change, is an apparent mismatch between the Office of the Secretary of Defense (OSD) and the Services on the rate of change required for transformation. Because the Services are not static organizations, transformation means changing an ongoing process of change. Not being able to understand or to articulate what constitutes force transformation makes it difficult to communicate the need for a greater rate of change or to understand the ways in which transformation may be different from ongoing programs and accompanying change.

Definitions and leadership quotes and observations may set the stage, but concrete examples of transformation are required to effectively communicate to the many decision-makers and action officers involved in implementing force transformation. For example, the definition of transformation provided by the "Transformation Planning Guidance"[2] lacks the specific articulation of the missions or attributes of the transformed force to suggest the relevance of existing systems, concepts, processes, and organizations to the transformation objectives or how those attributes are to be measured. There is a need to connect strategy to objectives and connect objectives to actions in the minds of decision-makers and action officers. Although "Transformation Planning Guidance" outlines a systematic process for transformation, it was not perceived to be a systematic process for change. For people to participate, they need to understand the process by which this change will occur and the advantages to them and their Services from active participation.

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2 "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.'" "Transformation Planning Guidance," April 2003, p. 3, http://www.oft.osd.mil/library/library_files/document_129_Transformation_Planning_Guidance_April_2003_1.pdf.

Table II-3. What We Know About Culture

Culture is learned from experience and the interpretation of experience.
Culture operates at different levels of awareness: values, beliefs, attitudes, and behavior.
There is no monolithic American military culture. • Each Service has a different culture and subcultures, reflecting different historical antecedents and differences in operating environments. • Culture looks more similar from the outside than from the inside (e.g., military vs. civilian, Army vs. Navy, conventional vs. SOF, or SEALS vs. Rangers)
Change is characteristic of military culture: • Evolution of doctrine • Social Issues: Volunteer force and integration of the races and sexes
Inertia is characteristic of military culture: • UAVs • Armor • Battleships

We understand a lot about organizational culture in general and about the culture of the military in particular (Table II-3). GEN (Ret.) Welch described U.S. military culture at the workshop:

- Highly responsive and committed to civilian political control.
- Accustomed to changing missions and demands.
- Willing to change dramatically, but at a pace that ensures continued readiness to respond to a variety of contingencies.
- Risk-taking leadership, but not gamblers.
- Military outcome well understood and compelling—national security outcomes often not known for decades.

Although not comprehensive, this list generates broad agreement. On the other hand, the individual items are difficult to operationalize and do not provide a common understanding. For example, consider the difficulty in operationalizing the difference between risk-taking and gambling.

Mr. Shiraki of Hay Group presented a systematic approach to the assessment of an organization's current and future (desired) culture called Targeted Culture Modeling. Targeted Culture Modeling is an assessment process developed by Hay Group in which participants "order" 56 attributes (behaviors or activities) that define a work culture into 7 categories that follow a bell-shaped curve of the degree of organizational reward or support. The organization's culture is defined by which attributes are encouraged and

which are discouraged by the organization. This approach can also be used to classify organizations into different cultural models or sets of attributes that tend to cluster. The technique has been successfully used in a wide variety of industry and government settings to pinpoint areas of consensus, identify gaps between current and future work culture, and provide a context for action planning to reduce gaps and increase alignment with the target culture. Workshop discussions and breakout sessions demonstrated little agreement among workshop participants on specific attributes or behaviors. There appeared to be agreement on some broad cultural attributes such as jointness, but the attributes are not considered in terms of specific behaviors or activities. Targeted Culture Modeling could be used to produce an assessment and description of current and desired DoD culture in terms of behaviors and activities. However, this would require a systematic sampling effort of a wider range of military personnel to achieve consensus.

Culture is an inherently fuzzy concept. It is a characteristic shared by members of a group and can be usefully examined from multiple perspectives. Dr. Emily Goldman used three organizational models (natural system, rational system, and open system) after Dr. Graham Alison (1971) to illustrate that different organizational paradigms provide different diagnostic insights for thinking about change and to identify obstacles and enablers. Different perspectives on culture also result from different definitions of culture. Thus, Dr. Michael Vlahos focused not on operating culture directly, but on the question of identity. A key example is the heroic mythos of defending the United States as a central focus of the military. On the other hand, Dr. Anna Simons discussed the content and structure of social relations within the organization as the critical factor in culture change. Her primary example was the Special Forces A-team design that has worked successfully for over 50 years. Each definition provides a different perspective for understanding the culture of an organization and for evaluating the actions required to change an organization's culture. Each of these perspectives on organizational culture is useful in understanding culture; a systematic analysis of the implications for action of different organizational models and definitions would be useful in structuring a strategic plan for culture change. (See Table II-4.)

Table II-4. Definitions and Perspectives on Culture

Definitions and Perspectives on Culture:
• Subjective side of organizational life phrase covering intangible factors such as values and attitudes. • Organizational identity: it answers the question, Who am I? based on the mission and mythic national narrative of the military. (Dr. Michael Vlahos) • Software of the mind: persistent patterns of behavior that people use to get things done in an organization. • Culture is what people do when not told what to do. (Dr. Elizabeth Gibson) • Institution's rule set: norms of behavior and shared values. • The content and structure of social relations in an organization, based upon the allocation of tasks. (Dr. Anna Simons)

Common to most of these perspectives is the view that culture is learned from experience and the interpretation of experience. To transmit or to change culture, you need to change the experience people have within an organization and change how that experience is interpreted, or both. Traditional mechanisms are used by the military to communicate the operating culture:

- Recruitment, especially with a volunteer force.
- Performance appraisal and promotion systems.
- Socialization and rites of passage.
- Education and training systems.
- Stories, legends, and myths about key people and events.
- Leadership and the behavior modeled by leaders.
- Organization design and structure.

Organizational behavior represents an organization's adaptation to its environment: to what works or a reaction to what doesn't work. To change a culture, new behaviors and their related attitudes, beliefs, and values need to be rewarded with success. If the culture is to reinforce transformation, then an understanding of transformation is important. Changing DoD's culture cannot be divorced from the success of force transformation.

B. FINDINGS: OBSTACLES TO CULTURE CHANGE

Why is change hard? The difficulty of transformation was a constant theme of the workshop. The difficulty of organizational change is not unique to DoD or to military

organizations. All organizations resist rapid or radical change. All change has an element of disruption—it can reduce reliability, efficiency, and performance in the short term, and it can devalue experience and routines. Some have suggested that military organizations are among the three organizations most resistant to change; the other two being the Church and higher education. Yet change, even transformational change, has occurred and is continuing to occur. GEN (Ret.) Welch highlighted several recent examples in his presentation (Table II-2). In his presentation, MG (Ret.) Scales provided examples from both Operation Enduring Freedom and Operation Iraqi Freedom of a new operating culture that reflects jointness, innovation, and prudent risk-taking beginning to emerge in the field (see Scales, 2003; Williamson and Scales, 2003). The three findings from the workshop concerning obstacles to cultural change, reflect the eclectic mix of participants (See Table II-5).

Table II-5. Findings: Obstacles to Culture Change

Findings—Obstacles to Culture Change:
• Transformation is not viewed as an essential component of future organizational effectiveness. • The business operating systems of DoD and the Services, their constraints and complexities, are not well understood at the mid-level. The combat operating systems of different services are not well understood across Services. • Enablers for target behaviors related to joint innovation and risk-taking are often lacking.

First, related to the lack of understanding of force transformation discussed earlier, is the perceived lack of a systematic process for transformation. Although the "Transformation Planning Guidance" provides a systematic process for transformation, this was viewed as a bureaucratic procedure and not as a process for organizational change. DoD-directed force transformation was viewed as another task, not an essential component of future organizational effectiveness. This perception that DoD force transformation is separate from Service programs for new systems and programs that are derived from perceived operational shortcomings is a significant barrier to force transformation.

A second significant obstacle is the complexity of the operating systems of DoD. (This lack of understanding of business operating systems between the Services and DoD may also be reflected in a lack of understanding of combat operating systems across

Services.) The business operating systems (e.g., personnel system, training system, or PPBES) of DoD did not appear to be well understood by many of the participants. The personnel system in particular is seen as a major barrier to force transformation. It is perceived as constraining flexibility and encouraging careerism. Even so, none of the Services have an integrated human resources system; different Commands own different pieces of it. Many of the complaints about the personnel system reflect decisions made in other parts of the human resources system in the Services and are not based upon congressional or legal constraints (e.g., time in position at a given rank with some exceptions is a Service decision). Unless individuals understand the operating systems, they don't know where the leverage points are, what to change, or how to change it to accomplish transformation.

There was also a concern over perceived legal constraints in Titles 10, 32, and 5. The current situation appeared similar to the Army in the early 1980s, when a special inspection of Army Modernization, by the Army Inspector General (IG), identified lack of knowledge of the constraints and complexities of the operating systems of the Army as a major barrier to modernization. The Army worked to correct this deficiency through analyses, developing how-to guides, and providing training in "how the Army runs" for all general officers, equivalents, and later for field-grade officers assigned to major headquarters.

Third, desired behavior, such as Service interdependence, often lacks key enablers. For example, at the action level there is no common, relevant operating picture of the military department headquarters (HQs). Being able to identify counterparts or similar programs in another Service is important if cooperation between Services or jointness is to become a reality. People often overestimate the value of their own expertise and knowledge—and underestimate the value of what they may gain through inter-Service or joint actions. Action officers are perennially overworked. If it's too hard to identify a counterpart, it simply won't happen. Most of the common sources of resistance to change were brought up during the workshop, with a focus on organizational, rather than personal, obstacles (Table II-6). Some of these obstacles may be unique to the military and because of the size and scope of national security may require study in their own right. However, for many of these obstacles, a systematic process to identify and eliminate sources of resistance to change would accelerate force transformation.

Table II-6. Common Sources of Resistance to Change

At the Individual Level	At the Organizational Level
• Fear of the unknown • Self-interest—What's in it for me? • Selective attention and retention—overwork • Habit • Need for security • Re-valuing of skills and knowledge • Selection and reward • Threats to individual (and to unit identity)	• Threats to power and influence • Perceived system constraints on action • Lack of trust • Different perceptions and goals • Bureaucratization • Resource limitations • Fixed investments • Interorganizational agreements • Egalitarian presumption—one size fits all • Rewards and incentives mismatch

C. FINDINGS: METHODS FOR CULTURAL CHANGE

The discussion of methods for changing culture flowed from the discussion of barriers to change. The primary concern was the importance of leader selection and development. Leadership was seen as the critical factor in transformation. Leader selection and development were seen as the fulcrum for organizational change to a new paradigm that values joint interdependence, innovation, and prudent risk taking. Second, revision of the officer/noncommissioned officer (NCO) education and training system was seen as essential to producing leaders with the required competencies to lead transformation at all levels and to lead an Information Age force. Leader development and required leader competencies were not discussed in detail because these issues have been the focus of two recent efforts: "The Military Officer in 2030," 13–23 July 2003, organized by the Director, Net Assessment, and the "Wye River Senior Leader Learning Workshop," 26–28 August 2003, sponsored by the Office of force transformation. The task leader of the first effort, Dr. Anna Simons, was a participant in IDA's workshop; a draft summary of the Wye River workshop was provided to participants as a read ahead, and Mr. John Gartska briefed the results at IDA's workshop.

Methods of change can be summarized in terms of the two general levers available to leaders for changing organizational culture: (1) human resources and (2) processes and systems (Table II-7). These levers change the people, the experience people have in the organization, and how that experience is interpreted. The first lever, human resources, works by changing individual experiences and the interpretation of experiences. This lever tends to be incremental in its impact. The second lever, which is

based upon organizational structure, tends to be more radical or disruptive as new force structure or weapons systems are introduced. This lever works as a catalyst by forcing changes in tasks or in interpersonal dynamics—the way in which the organization operates. For example, Dr. Carafano's proposal for special post-conflict units could require a set of initiatives to change the Services' education, career professional development patterns, and organization. Accomplishing these changes would require the integrated use of these two levers of organizational change. These levers and the related actions are not new, but they have not been integrated into a systematic approach to transformation.

A second finding is the important role of measurement as a tool for organizational and cultural change. Dr. Elizabeth Gibson's presentation illustrated the use of measurement in a large-scale, culture-deep transformational change she led at Best Buy in the late 1990s. At the core of that effort was a focus on three areas:

- Head—thinking and understanding
- Heart—emotional and motivational
- Hands—behavioral.

Success required change in all three arenas, however, the discussion in the workshop focused upon the importance of measurement in changing organizations and culture. Successful change cannot occur without measurement and accountability. What gets measured is what will get changed. Measurement is a change technique that identifies what needs to change and forces accountability. For example, readiness assessment and reporting represent a critical component of DoD measurement systems. These systems can have an enormous impact on changing the operating force and the operating culture.

Table II-7. Levers for Changing Culture

Cultural Lever I: Human Resources

Education and Training System

- Officer/NCO Education
- Collective Training

Personnel system

- Assignments
- Officer/NCO evaluation system
- Selection/promotion system (instructions to boards)
- Decorations and awards (incentives)

Senior leaders

- Signals (PR/PA: internal and external)
  - Marketing department
  - Communications
  - Oversight and measurement
- Symbolic acts and actions

Cultural Lever II: Processes and Systems

Introduce new weapon systems

- Field experimentation
- Demonstration

Create new organizational structures

- Change the chain of command
- New operating relationships or missions

III. RECOMMENDED ACTIONS

The discussion of action permeated the workshop and reflected the concern or perspective that there was a need to harness ongoing effforts concerning force transformation, rather than the need to overcome resistance to force transformation. These discussions are summarized in five interrelated recommended actions. Two (strategic communications and training and education) focus on communicating the new rule set, on helping people connect the dots from the strategic vision of transformation to action. The other three (leadership, empower action, and assess current status) focus on facilitating the development of a transformational culture. The recommended actions are summarized in Table III-1.

Table III-1. Recommended Actions

A.	Use strategic communications to transmit the new culture. State what is expected in clear goals and measurable objectives.
B.	Leverage the education and training system to address deficiencies in knowledge about transformation, joint operations, and other key competencies.
C.	Empower action by reducing cultural barriers and increasing behaviors related to jointness, innovation, and risk-taking.
D.	Leverage leadership to lead cultural change.
E.	Assess the current status of transformation.

A. STRATEGIC COMMUNICATIONS

The first recommendation is to communicate the new culture, explain the new rule set, and improve the force's understanding of both. Strategic communications should be used to transmit the new culture and to provide forums for the stories (both successes and failures) about key people and events that exemplify the new culture. For example, the many important examples of joint interdependence from Operation Iraqi Freedom, the Combined Air Operations Center (CAOC), and other recent operations are not widely known by the force. Stories about the CAOC and those contained in Bob Scales's two

recent books, *Yellow Smoke* and *The Iraq War* (with Williamson Murray), are far more effective in communicating the new culture than the usual planning guidance. The intent of these forums should be to provide credible stories and information on transformation activities, not simply more lessons learned, and to build a community of practice analogous to <http://companycommand.com> for ground-force company commanders. These forums should have specific objectives, offer an experiential component where feasible, and provide recognition for participants. Strategic communications should be used to communicate and to celebrate transformation.

Another type of forum could be a senior-level conference on force transformation to connect vision to objectives through strategy. Senior leaders may need to take some time together to sort out what transformation in action is all about. Organized as the culminating event of a series of workshops, such a conference could enable senior leaders to provide more concrete guidance and direction to the many participant communities in force transformation.

B. LEADERSHIP

Leaders are the primary transmitters of culture. For example, a survey report by Prosci, "2003 Best Practices in Change Management," reported that employees want to hear messages about change from two people: the CEO and their immediate supervisor. Leaders provide the organizational focus and rewards, which reinforce and embed the culture, current or new. The recommendation recognizes the importance of leaders and leadership especially within DoD. The need to leverage leaders to promote cultural change is an integral element of force transformation. First is the need to identify leaders who can model success, who can lead transformation, and who can transmit the new culture. This will require identifying what success looks like at each different level. Leaders also need to be informed about how to influence change. Three leader skills were seen as crucial: identifying success, measuring successes, and providing feedback and interpretation to the people they lead. Measurement of process, status, and effectiveness was seen as a significant leadership tool. Measurement should address all three areas of human change:

- Head—communicate the rationale for change and the new rule set.
- Heart—relate transformation to performance and to self-interest: decorations, awards, and other recognition.
- Hand—develop and provide feedback necessary for new learning and development of skills at all levels

Second is the need to develop leaders with the competencies needed to lead transformation at all levels.

C. TRAINING AND EDUCATION

What is it? What are the new skills and where can they be acquired? Everything the force does that is not war is training or education. The training and education system represents one of the major levers available to leaders to enable change. It is a system designed to identify knowledge and skill requirements and provide them to the force. If the hypothesis that lack of knowledge and understanding of the operating systems of DoD is a significant barrier to transformation is validated, then this system can be tasked to provide the required knowledge and skills.

A key action supporting strategic communications and training and education is to develop an initial set of cultural attributes that represents the new culture. This could be accomplished in a series of 1-day targeted culture-modeling workshops that sample uniformed personnel from each of the senior military schools and other units and activities, including a set of general or flag officer using collaboration by e-mail, to identify a set of cultural attributes describing an Information Age force. This process would identify those attributes, ranking them in terms of relative importance, and relate them to different cultural models (e.g., functional, process, time-based, and network). The results of the workshops also could be integrated into an initial operational description of the future Information Age culture and used to (1) define "success" and establish what "good" looks like and (2) develop an initial set of progressive performance measures for different individual components of transformation (knowledge, or cognitive; emotional and motivational; and how-to, or skills).

A second action is to provide tools for people to develop an improved awareness and understanding of force transformation. Simulation gaming has been used by the analytic community to explore the dimensions of future warfare and it is widely used to enhance understanding of strategy and to teach strategic thinking. For example, National Defense University has used a simulation gaming environment of the Peloponnesian War for this purpose. Interactive simulation gaming environments could be adapted or developed to provide players with concrete examples of the broad concepts of transformation. These environments could provide experiential learning in which participants are rewarded for Joint over single-Service operations, for innovation over repetition, and for taking risks, but not gambling. Transformation gaming simulations could be developed as a single-player desktop game for use in the schoolhouse or in the

field. Simulation environments also could be developed as multiplayer games, providing more complex player interactions in uncertain environments.

D. EMPOWER ACTION

Behavior often follows the principle of least effort. Especially in periods of rapid change, existing organizational procedures and processes may inhibit rather than enable the desired changes in behavior. Unless altered, the old procedures and processes signal that the new behaviors may not be as important as stated. In fact, the old procedures and processes may reward continuing the current behavior at the expense of the new, transformational behavior. Representative actions that create enablers that empower jointness are identified in Table III-1. A systematic effort to identify and eliminate barriers and to create enablers that empower desired behaviors of interdependence, innovation, and risk-taking would leverage current force transformation efforts and thus signal the importance of these efforts.

E. ASSESS CURRENT STATUS

After 3 years, what is the status of transformation? There is the impression of good things happening. Instances of a new culture of jointness, innovation and prudent risk-taking have been found in Operation Enduring Freedom and in Operation Iraqi Freedom (Scales, 2003; Murray and Scales, 2003). However, there has not been a systematic look at the progress and direction of transformation based on a clear roadmap and milestones of progress. Do instances of a new operating culture reflect local leadership, resources, mission, or other factors? An important source of understanding and potential synergies could be obtained through an assessment of Service perspectives and Combatant Command views on the direction of transformation, including successes and failures in transformation efforts; obstacles, areas of ambiguity, and potential solutions; and relationships between Services and areas of potential synergy; relationships between Service and OSD efforts. The focus would not be on a report card, but rather a description of lessons learned in force transformation that could be used to enhance current and future efforts.

IV. FINAL THOUGHTS

The workshop successfully grappled with some of the issues facing DoD in transforming the culture from today's Industrial Age to one more prepared for and accepting of the Information Age. The workshop provided a set of findings and a set of actionable recommendations. Time precluded coming to grips with the issues of technology, innovation, and transformation. Presentations by Dr. Steve Andriole and by Dr. John Kao provided provocative insights into these issues. Dr. Andriole discussed the relationship between technology and change, highlighting the way technology impact can be manipulated through the control of critical success factors. Dr. Kao pointed out that innovation must be designed, described how to decode elements of innovative cultures and mindsets, and explained how to get started. Dr. Kao's Innovation Manifesto (2002) provides an introduction to his thinking on innovation. Grappling with the issues of the relationship of culture to innovation and technology remain for another day.

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APPENDIX A
WORKSHOP AGENDA

Institute for Defense Analyses
Alexandria, VA 22311

Tuesday, October 21, 2003

0700	Registration and Coffee	
0800	GEN Larry Welch US Air Force, Retired President Institute for Defense Analyses	Welcome and Opening Comments
0820	Dr. Ed Johnson Institute for Defense Analyses	Introduction & Overview
0840	Mr. Terry Pudas Deputy Director, Force Transformation	Defense Transformation
0930	Mr. Jeff Shiraki	Directed Culture Modeling Exercise Hay Management Consultants
1130	Mr. John Garstka Asst. Director, Force Transformation	Workshop on Leader Learning Framework
1215	Lunch Speaker: MG (Ret.) Bob Scales	
1330	Chair, LTG (Ret.) Walt Ulmer Breakout Group Chairs	Panel, Current vs. Desired Culture
1430	Chair, Dr. David Segal Dr. Michael Vlahos Dr. Anna Simons Mr. Brenden Sargeant	Military Culture
1530	Break	
1600	Dr. Steve Andriole Villanova University	Technology Congruence
1700	Conclusion	

1730-1900 Reception

Wednesday, October 22, 2003

0730	Coffee	
0800	Chair, Dr. George Huber Dr. Emily Goldman Dr. James Carafano	Changing Culture
0900	Elizabeth Gibson RHR International	Big Change at Best Buy (with exercise)
1030	Breakout Session (Barriers and Methods for Change)	
1200	Chair, Dr. George Huber Breakout Group Chairs	Barriers and Methods for Change
1230	Lunch Speaker: Dr. John Kao	Innovation and Transformation
1400	Breakout Session (Transforming Culture)	
1500	Break	
1530	Senior Review Panel Chair, LTG John LeMoyne	Breakout Group Reports and Summary Discussions

1700 Conclusion

APPENDIX B
LIST OF READ AHEADS

APPENDIX B—LIST OF READ AHEADS

READ AHEADS

Barnett, T. P. M. (2003). "The Pentagon's New Map." *Esquire*, 174-179 and 228.

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APPENDIX C
LIST OF PARTICIPANTS

APPENDIX C—LIST OF PARTICIPANTS

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13. SUPPLEMENTARY NOTES

14. ABSTRACT

On 21–22 October 2003, the Institute for Defense Analyses hosted a workshop on issues facing DoD in transforming its culture from the today's Industrial Age to one more prepared for and accepting of the Information Age. The workshop, sponsored by the Office of Force Transformation, provided findings and recommendations on three issues: (1) cultural changes that could enable or facilitate transformation, (2) obstacles to be overcome that impede transformation and innovation, and (3) means to achieve the desired outcomes. We concluded that although many good activities relating to transformation are ongoing, transformation itself is not well understood. Transformation is seen as just another task among many, not one critical to future organizational success. Organizational change techniques exist, but no systematic change process is in place.

15. SUBJECT TERMS

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