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**AN ASSESSMENT OF THE ROLE OF THE  
RESERVE COMPONENT IN MILITARY  
TRANSFORMATION**

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## **AN ASSESSMENT OF THE ROLE OF THE RESERVE COMPONENT IN MILITARY TRANSFORMATION**

“The military challenges of the 21<sup>st</sup> century, coupled with the aging of key elements of the U.S. force structure, require a fundamental transformation of our military forces.”

—*A National Security Strategy for a New Century*,  
The White House, October 1998

### **OVERVIEW**

This paper assesses the integration of the active (AC) and reserve components (RC) in military transformation. It provides policy makers an overview of the RC's current involvement in Department of Defense (DOD) initial transformation activities and highlights issues and opportunities. The premise of the assessment was that the RC would fully participate in military transformation since it comprises about 50 percent of the Total Force. The assessment team believes that RC participation at the front end of the process would facilitate transformation activities, assist the AC in maintaining an appropriate balance between ongoing operations and the transformation activities, and result in more effective use of the RC in the transformed force.

The assessment indicates that individual and joint-service organizations recognize that military transformation requires RC participation in both transformation processes and in the transformed force. But implementation of RC participation varies widely across defense agencies. We recommend that the Assistant Secretary of Defense for Reserve Affairs create a focal point for RC transformation issues to actively monitor and support DOD's individual and collective activities as we move forward.

### **BACKGROUND**

Current national military strategy (NMS) is based on three key elements: shape (the international environment), respond (to the full spectrum of crises), and prepare now (for an uncertain future). Future threats are expected to be

...fluid and unpredictable. U.S. forces are likely to confront a variety of challenges across the spectrum of conflict, including efforts to deny our forces access to critical regions, urban warfare, information warfare, and attacks from



chemical and biological weapons. To meet these challenges, we must transform our forces by exploiting the revolution in military affairs (RMA).<sup>1</sup>

Current forces are not expected to be fully transformed until 2030.

While the “respond” and “shape” pieces of both the national security strategy (NSS) and the NMS focus on near- and mid-term readiness, the “prepare now” element combines modernization and transformation activities to produce long-term capabilities. Prepare now “requires that we keep our forces ready for shaping and responding requirements in the near term, *while at the same time* evolving our unparalleled capabilities to ensure we can effectively shape and respond in the future.” [Emphasis in original.]<sup>2</sup>

*Joint Vision 2010 (JV2010)* provides

...the conceptual template for joint operations and warfighting in the future.... [The] key enablers of information superiority and technological innovation will transform the current concepts of maneuver, strike, protection, and logistics into the new operational concepts of dominant maneuver, precision engagement, focused logistics, and full-dimensional protection. Turning these concepts into reality will help us conduct decisive operations in any environment, a characteristic *JV2010* calls ‘full spectrum dominance.’ *JV2010* rests on the foundations of information superiority and technological innovation.<sup>3</sup>

The assessment team looked at transformation as the process through which the services will change their fundamental concepts to effectively meet national defense requirements in the 2015–2030 period. Fundamental concepts are the way the services view their roles in national defense, how they organize and resource themselves to conduct operations, and how they prepare to conduct independent, joint, and combined operations. The process applies to both the AC and RC. The transformation process must consider doctrine, organization, training, materiel, leadership and education, people, and facilities (DOTMLPF).

## METHODOLOGY

An assessment team consisting of members of the Office of the Assistant Secretary of Defense for Reserve Affairs and analysts from the Institute for Defense Analyses met with each of the services to answer these questions:

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<sup>1</sup> The national security strategy further emphasizes the “interlocking revolutions” of RMA and revolution in business affairs (RBA), and that “only with both” will U.S. forces “have unchallenged superiority in the 21<sup>st</sup> century.”

<sup>2</sup> *A National Security Strategy for a New Century*, The White House, October 1998.



- What is the service plan for transformation?
- How is the service organized to execute the plan?
- What are the roles planned for the RC during transformation?
- What is the service vision for its AC and RC in the transformed operational concepts and force structure?
- What constraints would preclude optimized use of the service RC and what actions are recommended for reducing or eliminating them?

In addition to our meetings with the services, we drew upon structured interviews with selected DOD national strategy experts, the Joint Forces Command, and the Joint Staff. The September 1999 report of the Defense Science Board, *DOD Warfighting Transformation*, also proved helpful in our deliberations. The assessment team looked at transformation in terms of three pillars of the revolution in military affairs—organization, doctrine, and equipment.

Our goal was to answer the above questions service by service. The answer to the first question regarding service plans established an “end state” against which to compare current transformation activities. Once the goal of transformation activity was identified, it was possible to ask the questions about the roles of the RC in the transformed force and the transformation process and about any constraints and possible remedies to integrated use of the RC.

### **GENERAL OBSERVATIONS**

- Our assessment occurred at the beginning of a complex process that will continue over the next 15 to 30 years. The assessment team found that each of the DOD agencies is involved in transformation activities, yet the level and type of RC involvement varies widely among the various agencies. In some cases, the role of the RC is well established and clearly articulated; in others, it is not.
- Military transformation is a complex web of organizations, processes, activities and experiments. There are numerous opportunities for RC involvement. The assessment team believes the level of RC participation will increase as general awareness of the full spectrum

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<sup>3</sup> *Joint Vision 2010.*



of transformation activities is more widely known and understood; and as organizational structures and processes to facilitate transformation are implemented.

- Military transformation is taking place in the context of a larger, global transformation, including the revolution in business affairs (RBA). Globalization of world markets, fueled by stunning advances in information technology, is creating a new future for developed and developing nations alike. Several individuals that we interviewed put forward the idea that some members of the RC may be uniquely situated in their civilian jobs to be involved in this global transformation and could provide DOD with expertise and advanced applications of emerging concepts.
- National leaders believe military transformation is important. However, overarching guidance does not contain direction concerning the important role the RC could play in the transformation process. While *JV 2010* emphasizes integration among services, integration with allies, integration with industry, and integration with other governmental agencies, it does not emphasize AC/RC integration. The assessment team believes that the absence of such guidance creates the potential for inconsistent, even insufficient, attention to RC considerations by the services.
- The Joint Staff and U.S. Joint Forces Command believe that AC/RC integration is a touchstone of military transformation, but that it must be accomplished by the services. The joint community is focused on joint experimentation and coordination with other government agencies and with industry as the key elements of their transformation activities. The joint agency personnel that the assessment team spoke to are receptive to including the RC in their experimentation efforts.
- Our discussions with agency personnel showed that there is a universal concern with adequate resources for transformation. Although there is no current DOD cost estimate, there is no doubt that transformation will require substantial resources. It is also projected that DOD's top line will remain relatively flat. Faced with these two realities, it makes good sense for the joint agencies and the services to use the RC when they can. Just as the services now receive from the RC relief from today's high operational tempo, they can also use the RC to maintain the pace of transformation.



- The transformation sought by U.S. armed forces is characterized by an increased reliance on communications and information technology, including target acquisition, precision guided munitions, intelligence, reconnaissance, and command and control functions. Also, as *JV2010* recognizes, successful transformation will require substantial changes in the area of logistics, a field in which the RC plays quite prominently.

### **U.S. ARMY ASSESSMENT**

**Overview:** *The new Chief of Staff of the Army (CSA) has articulated a new vision for the Army that emphasizes rapid deployment, greater mobility, more lethality, and a smaller logistics footprint in support of the commander in chief's operational requirements. Senior Army leadership is committed to transforming the Army into a fully integrated force. This commitment is best exemplified by the inclusion of the RC in transformation plans. The assessment team believes that more use of the RC in experimentation and other transformational activities could accelerate the Army's mid-term transformation and assist in maintaining the difficult balance between ongoing operations and the need to transform.*

**Service Plan for Transformation:** Since the end of the Cold War, the Army has pursued several new concepts—Louisiana Maneuvers, Force XXI, Army After Next (AAN), digitization, and advanced warfighting experiments (AWE). These concepts and activities have developed into a new service vision called the Objective Force. The Army is planning to convert five to seven brigades to an interim suite of lighter equipment in the next few years. On a rotational basis, National Guard brigades will pick up the operational responsibilities of the units being converted. Digitization is another element of the Army's transformation plan. It involves integrated and automated use of sensor, target acquisition, and communication technology to greatly improve situational awareness on the battlefield. This will permit smaller, more lethal Army vehicles to survive on the battlefield without being weighed down by the armor of today's force. When successful, digitization will represent a revolutionary leap forward in combat capability. Current Army plans call for all active corps, divisions and brigades and all the combat divisions and brigades in the RC to be digitized by FY2015.

**Service Organization to Execute the Plan:** The Office of the Deputy Chief of Staff for Operations and Plans (DCSOPS) has the responsibility to develop, articulate and disseminate the chief of staff's vision for a transformed Army. One example of how the Army is preparing and



organizing for the future is the Army Digitization Office (ADO) that is using the 4<sup>th</sup> Infantry Division as a test bed for experimentation. In addition, advanced warfighter experiments exemplify how the Army is testing and evaluating future operational concepts and doctrine.

The Army is exploring ways to facilitate its transformation process. One initiative is “spiral development,” which links users in the field with developers in schools and with contractors to co-evolve military doctrine, tactics and organizations along with systems, hardware and software in an iterative process. Advanced organizational concepts, such as self-deploying “battle teams,” with improved mobility and lethality are being closely examined. The Army has also established the Warfighting Rapid Acquisition Program (WRAP) to facilitate the acquisition of successful products of the experimentation process.<sup>4</sup>

**Role of the RC during Transformation:** The current inclusion of all RC combat brigades and divisions in the digitization master schedule, and the use of two enhanced separate brigades on a rotational basis to fill AC shortfalls during the transformational period, represent a significant integration of the RC into AC transformation plans. However, the RC has not participated in the series of advanced warfighting experiments, one of the Army’s most important, forward-thinking developments. This kind of use of the RC could free active units designated for experimentation to be used instead for operational requirements.

**Service Vision for AC and RC in Transformed Operational Concepts and Force Structure:** Senior Army leadership is committed to transforming the Army into a fully integrated force. The way ahead is not clear at this time. There are many challenges to overcome, including the lag in modernized equipment in the RC, particularly in the combat divisions of the Army National Guard. This is particularly the case for equipment related to command and control, a critical focus of transformation.

**Constraints to Optimized Use of the RC and Recommended Actions:** The Army might be able to pursue transformation with less disruption to high-priority active units by more RC involvement in experimental transformation activities. In addition, consideration could be given to increasing RC involvement in the combat support/combat service support areas. Given the importance of expeditious and flexible logistic support to the transformed force and the primacy

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<sup>4</sup> *Report of the Defense Science Board Task Force on DoD Warfighting Transformation*, Office of the Under Secretary of Defense for Acquisition and Technology, Washington, D.C., September 1999.



of the RC in providing such support, it is very important that the RC be integrally involved in this aspect of transformation planning.

### U.S. NAVY ASSESSMENT

**Overview:** *The Navy's doctrine for the 21<sup>st</sup> century, Forward ... From the Sea, continues to evolve. Despite the operational complexities associated with a tripartite force (surface combatants, submarines, and naval aviation), the Navy has clearly articulated the challenges it will face in the next 15 to 30 years. Individual reservists of the Naval Reserve Force are making a small but potentially significant contribution to the transformation effort.*

**Service Plan for Transformation:** Senior Navy leadership has initiated a variety of comprehensive studies on a wide range of transformation issues and has dedicated offices and resources to the effort. The principle challenge for the surface fleet is whether the Navy should transform to a "many small ship navy," or retain its emphasis on fewer large platforms. The capability to provide increased firepower from relatively small platforms and the need for a common suite of communications, electronics and computer technology (a technological baseline) for all platforms is the focus of the debate.

Submarines expect to retain their strategic, nuclear role, and analysts are investigating ways in which submarines may make an increased tactical contribution, particularly in littoral warfare operations. Naval aviators anticipate a new "super carrier" for the 21<sup>st</sup> century, but the debate centers on what kind of airframes will be supported. Some have argued that the transition will result in larger numbers of unmanned aerial vehicles (UAVs) and unmanned aerial combat vehicles (UACV). Then the need for a super carrier may come into question.

Another major focus is network-centric warfare in which ships of all kinds function as an integrated network to focus on a set of targets. Sensors will allocate targets to the most appropriate platform. This ring-of-fire concept will be a force multiplier, particularly in defense of the fleet. This approach places emphasis on what the Navy calls "targeteers," of whom many are in the Naval Reserve and have been called up for operational missions.

**Service Organization to Execute the Plan:** The Navy's Strategy and Policy Division (N51) has responsibility for oversight of both the Navy's transformational activities and integration of the



Naval Reserve. In 1998, the Navy established the Naval Warfare Development Center at the Naval War College to serve as the “custodian of our Navy’s future.”<sup>5</sup> The Navy is also conducting Fleet Battle Experiments, a program that involves dedication of the USS *Coronado* as a floating battle laboratory. They are also introducing their Integrated Warfare Architectures (IWAR) process into the Planning, Programming and Budgeting System, and the Office of Naval Research is conducting advanced concept technology demonstrations in support of transformation.

**Role of the RC during Transformation:** Individual reservists in the Naval Reserve are making a small but potentially significant contribution to the transformation effort. One example is the use of individual reservists to augment and support advanced concept technology demonstration projects and other projects of the Office of Naval Research. The projects vary from such things as Extending the Littoral Battlespace (ELB) advanced concept technology demonstration to using naval reservists as instructors at the Defense Systems Management College to teach the course Integrating Science and Technology Products into Acquisition. Another is naval reservists’ participation on every integrated product team (IPT) involved in the development and assessment of IWARs.

**Service Vision for AC and RC in Transformed Operational Concepts and Force Structure:** The Navy’s doctrine continues to evolve. The Navy wants to make more effective and efficient use of technology, particularly as expressed in the concepts of land attack (e.g., ring of fire), theater air and missile defense, undersea warfare (including organic mine countermeasures), and network-centric warfare. Despite the focus on increased firepower capability for littoral operations, network-centric warfare, and force protection, the future implications of operational concepts and force structure remain uncertain.

**Constraints to Optimized use of the RC and Recommended Actions:** Better and more focused use might be made of the RC in the Navy’s Fleet Battle Experiment series and in concept testing. The Navy has a high proportion of reservists in its intelligence operations. The Naval Reserve could be fully involved in the development of advanced collection and dissemination systems.

The Naval Reservist’s role in current transformation activities is limited, although individual Selected Reserves personnel provide staff augmentation to some transformation activities. Since

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<sup>5</sup> “Future Fleet,” a September 1999 article in *Government Executive*, by Katherine McIntire Peter.

the Naval Reserve has specified mission areas, which will be affected by transformation, failure to include these in the transformation process and in the transformed Navy will be a constraint to optimized use of the RC and may result in operational shortcomings.

## **U.S. AIR FORCE ASSESSMENT**

**Overview:** *Force reductions at the end of the Cold War caused changes in the way the Air Force organizes and operates. The new era emphasizes the following core competencies: air and space superiority, precision employment, global attack, rapid global mobility, information superiority, and agile combat support.*

**Service Plan for Transformation:** The Air Force began anticipating and preparing for change in the early 1990s. In 1995, the previous chief of staff commissioned a seminal study, *Air Power 2025*. Published the following year, *Air Power 2025* set the stage for continuing assessment and analyses of future requirements and capabilities. Today, such thinking is embodied in *The Future Total Force* (FTF), a study that the current Air Force chief has made the basis for the Air Force's future.

One emerging Total Force concept is "blended leadership"—an organizational management approach that is designed to maximize use of new technological developments through analysis of skill utilization.<sup>6</sup> The Air Force is also intent on exploiting technology and taking advantage of DOD's ability to integrate processes—two keys to transformation. The Air Force has recently put into effect the Expeditionary Aerospace Force (EAF) concept to take into account that the Air Force is no longer a forward-based force. The Aerospace Expeditionary Force (AEF) is the force package approach the Air Force will use in the future. The RC is a full partner in the AEFs.

**Service Organization to Execute the Plan:** The Office of the Chief of Staff of the Air Force is the focal point for Air Force transformation activities. The AEF has redefined how the three Air Force components will train, deploy, and operate together. The 10 AEF organizations are comprised of fighters, bombers, tankers and tactical airlifters from active and reserve components. Strategic airlift, surveillance, reconnaissance, space, and command and control assets support these. In addition, the Air Force strategy is to leverage the RBA to provide funds

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<sup>6</sup> *The Future Total Force: Raising the Bar for Force Integration*, a brochure prepared and produced by the Air Force National Defense Review Staff, Arlington, Virginia, 1999.



for transformation. One aspect of the Air Force plan to use the RBA to help finance the RMA is a continuing shift of missions to the RC where drilling reservists can provide the needed capability at reduced cost.

**Role of the RC during Transformation:** The Air Force has had success in integrating its active and reserve components in meaningful ways across the full operational spectrum. Recent organizational changes in force structure and roles have placed greater emphasis on the RC in some missions, particularly in transportation and strategic deterrence. The Air Force has a balance between reserve and active wings (and between active and reserve forces in the AEFs). This has helped the Air Force to become more efficient without sacrificing effectiveness.

**Service Vision for AC and RC in Transformed Operational Concepts and Force Structure:**

As the future unfolds, the balance between the AC and RC will likely shift further. Integration of active and reserve components will continue to be a feature as the Air Force transforms to a dominant role in space and seeks continued air dominance in wars to minimize personnel casualties. The biggest challenge to the Air Force in transformation is the potential for UAVs and UACVs to remove pilots from cockpits. If the Air Force achieves some degree of substitution of unmanned platforms for manned aircraft, the impact can be expected to affect the RC.

**Constraints to Optimized Use of the RC and Recommended Actions:** A constraint on the use of the RC may be the ability of the Air Force to attract and retain personnel with high technical skills. Members of the Air Force Reserve and Air National Guard spend more time on active duty in comparison to reservists of the other services.

Because the Air Force has focused on the AEF concept, it is too soon to understand how a farther-reaching transformation will affect either the Air Reserve Components or the Air Force as a whole. The transformation to the AEF is changing how the Air Force performs its traditional activities. A longer-term shift that emphasizes new platforms and space operations would add a new dimension to Air Force operations.

## **U.S. MARINE CORPS ASSESSMENT**

**Overview:** *The imperative for change in the Marine Corps came from its senior leaders' concern to ensure that the Corps adapted to a changing world. The Corps has retained its core focus on*



*fighting and winning battles, being an adaptive force, and being prepared for rapid commitment to any contingency mission. The Marine Corps' future operational concept for the future, called Operational Maneuver from the Sea (OMFTS) will leverage new technology, such as unmanned aerial vehicle and remote sensors. The Marine Corps practice a high degree of integration of the RC and AC in its organizations and operational plans.*

**Service Plan for Transformation:** The Marine Corps' plan for transformation is stated in the commandant's vision of OMFTS, which will serve the Marines into the 21<sup>st</sup> century. To implement OMFTS, the Marine Corps plan to acquire specific equipment and technology to support the concept. This concept envisions deploying sizable Marine Corps elements to operational objectives up to 100 or more miles inland and supporting them from a sea base rather than built up areas. The Marine Corps will still be an amphibious force, but will rely considerably less on traditional amphibious landings on beaches. Some of the new equipment and technology the Marine Corps need to achieve OMFTS include the V-22 Osprey tilt-rotor aircraft and a new, faster amphibious assault vehicle with an enhanced on-land capability. The Corps is looking at UAVs for reconnaissance and to facilitate command and control. They are also pursuing a new suite of deployable sensors that will facilitate information and intelligence activities.

**Service Organization to Execute the Plan:** The proponent for transformational activities in the Marine Corps is the commandant's office. As the Marines move toward their vision of OMFTS, they are seriously examining a variety of organizational options, including use of amphibious brigade-sized units for more flexible commitment and maneuver. The Marine Corps, with participation by units of the Selected Marine Corps Reserve, is conducting warfighting experiments under the Sea Dragon program to test its advanced operational concepts.

**Role of the RC during Transformation:** Integration of AC and RC in the Marine Corps, including combat units, is fairly well established. To assist in the transformation, the RC has been used in advanced concept and operational test bed experiments and studies.

A good example of the Marine Corps' application of the Total Force principle is its Combat Development System (CDS). The CDS is an integrated system of functional area processes and functions overseen by major supporting establishment organizations, such as the Marine Corps Combat Development Command, the Marine Corps Materiel Command, the Aviation



Department, and the Plans, Policies and Operations Department. Marine Corps reservists routinely fill staff positions in these organizations, thereby playing an ongoing role in the CDS.

**Service Vision for AC and RC in Transformed Operational Concepts and Force Structure:**

Marine Force Reserve units and personnel are intended to be an integral part of future Marine Corps operational concepts and force structure. The Marines are not trying to change what they do, but how they do it.

**Constraints to Optimized Use of the RC and Recommended Actions:** The assessment team believes that there are few constraints to optimal use of Marine Corps reservists and reserve units in the transformed force.

**U.S. COAST GUARD ASSESSMENT**

**Overview:** *Unlike the other Armed Forces, the Coast Guard uses both its AC and RC to perform its core functions around the clock every day. Despite this effective use of the Total Force, the Coast Guard is stressed because requirements for maritime defense, counter-drug operations, fisheries patrol, search and rescue, and boating safety have increased while funding and strength have decreased.*

*In the 1990s the Coast Guard transformed the Coast Guard Reserve from a Cold War augmentation force to support the Navy in wartime to a full partner with the active Coast Guard in performing their core functions. Under the new approach, Coast Guard reservists do the same things as their active counterparts. This provides operating tempo relief in peacetime and augmentation when called to active duty for emergencies. This major integration of the RC with the AC transformed Coast Guard organization and administration into a single set of integrated units and unified pay, personnel management, and billet authorization systems.*

**Service Plan for Transformation:** In the near future the Coast Guard seeks to take advantage of new technology to make its operations more efficient and effective. It also plans to replace its aging fleet of cutters and standardize its variegated fleet of small boats, while maintaining emphasis on boating safety and aids to navigation.



The program to provide new ships for maritime defense out to 200 nautical miles from the U.S. coasts is called Deepwater. The idea is to apply modern technology in ship design and electronics to provide a new fleet of high-endurance cutters that can meet demanding requirements for maritime interception, fisheries patrol, and search and rescue. Deepwater is “an acquisition project consisting of ships, aircraft, communications and sensors designed to work together to increase [the] service’s operational effectiveness.”<sup>7</sup>

The Coast Guard would also like to standardize its boats at shore stations and find new ways to conduct search and rescue operations more efficiently using new surveillance and communications methods. New technology for maritime navigation may allow the aid to navigation program to be accomplished more efficiently than in the past without any reduction in effectiveness.

**Service Organization to Execute the Plan:** The Coast Guard is adequately organized to prepare for and accomplish its transformation programs. Task forces have been formed at Coast Guard headquarters to provide focus for the transformation. Contractors have been asked to provide integrated visions for sensors, platforms and command and control architectures to perform the kinds of search and interdiction missions for which the Coast Guard is responsible.

**Role of the RC during Transformation:** Because of the fully integrated nature of the active and reserve components in the Coast Guard, drilling reservists are playing an active and meaningful role in the process of planning and implementing Coast Guard transformation.

**Service Vision for AC and RC in Transformed Operational Concepts and Force Structure:** Transformation of the Coast Guard to accomplish expanding missions with constrained funding will require changes in Coast Guard force structure and operational concepts. New cutters will require smaller crews. New methods of surveillance will allow ships and aircraft to respond directly to the locations of emergencies instead of having to search for them. New designs for boats may allow reservists to play a greater role in aids to navigation and boating safety.

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<sup>7</sup> *Coast Guard* (special issue), LCDR John Fitzgerald, 1999. For more information on Deepwater, visit the Coast Guard’s World Wide Web site at: [www.uscg.mil/deepwater](http://www.uscg.mil/deepwater).



**Constraints to Optimized Use of the RC and Recommended Actions:** There are few constraints on the effective use of drilling reservists to assist in the transformation of the Coast Guard or to accomplish Coast Guard tasks.

### **THE JOINT STAFF**

The Joint Staff, particularly the Joint Doctrine Division (J7), is involved in transformation activities from a doctrinal standpoint. The J7 focus is related directly to the commanders in chief's operational requirements. The J7 is sponsoring the development of a joint implementation master plan (JIMP) for *JV2010* that will coordinate feedback and analysis from the joint experimentation process. It will provide a vehicle for systematic review of institutional changes in doctrine, organization, training, materiel, leadership and education, people and facilities (DOTMLPF) precipitated by transformation.

### **JOINT FORCES COMMAND**

The Joint Forces Command (JFCOM), which is mandated by DOD to be responsible for joint experimentation, takes a long-term view of transformation—out to 2030 or beyond. The agency at JFCOM responsible for most of the transformation activities is J9 (Joint Experimentation), which was established formally in October 1998.

JFCOM's J9 has the charter to synchronize concept development and experimentation of the four military services. The first of the major joint experiments will be in 2004, and will be based on several years of preliminary tests and concept development and coordination with the services. J9 has developed characteristics that they consider essential for transformation: a concept-based iterative process, aggressive red teaming, tolerance for surprise, and early and vigorous involvement of key stakeholders.

The following joint experimentation concepts will be exercised: rapid decisive operations (RDO), attack operations against critical mobile targets, joint interactive planning, common relevant operational picture (CROP), adaptive joint command and control, and focused logistics enabling early decisive operations.



JFCOM's J9 has done extensive work on a complex and demanding charter. To ensure synchronization of effort in transformation across the services, for example, the office has surveyed all the services to see which offices and organizations were doing something relevant to the six joint experimentation concepts. Fifty-nine service entities performing some function highly relevant to transformation were identified. This illustrates the extent of the synchronization challenge. It also shows how much each of the services are involved in some way, even if it is only a small part, in the transformation process.

### CONCLUSION

The following table summarizes the findings of the assessment team regarding the five questions posed at the beginning of the paper.

The RC can assist in maintaining current capabilities to conduct shape and respond missions as articulated in the national military strategy while others are involved in transformation. The RC is a resource to facilitate timely conduct and completion of transformation activities, including the experimental activity that is central to transformation. Inclusion of the RC in the transformation mission will ensure the ability of the RC to participate fully in the transformed force.

Involvement by the Office of the Assistant Secretary of Defense for Reserve Affairs can enhance the interface among the services, Joint Staff, and U.S. Joint Forces Command required to achieve the desired end-state of transformation. This involvement can serve as a focal point for AC/RC integration within the services and for the effective use of reservists in Joint Staff and CINC staff activities.



**Status of RC in Service Transformation Activities**

<b>Service</b>	<b>Plan for Transformation</b>	<b>Organization for Transformation</b>	<b>Role of the RC During Transformation</b>	<b>AC and RC Roles After Transformation</b>	<b>Constraints and Actions</b>
<b>Army</b>	New vision, transformation beginning, impact of CSA being felt	CSA is focus, new office in DCSOPS, resources provided	Backfill for AC units, could make more use of RC in experiments	Will be transformed like the AC, e.g., digitization	Limited use of RC in experiments
<b>Navy</b>	Based on warfighting community, i.e., surface, submarines, naval aviation	Offices, resources dedicated, no structural change yet	RC members are used in experiments, RC units could be more involved	Not fully addressed; Intel, CSAR/SPEC-WAR, MIUW need close look	Incomplete exploration of RC roles; RC mission areas need attention
<b>Air Force</b>	Vision is articulated in <i>Air Power 2025</i>	CSAF is focus, EAF, AEF implementation	Integrated and involved; will help make transformation affordable	RC already part of AEFs, future could change	PERS-TEMPO
<b>Marine Corps</b>	Operational Maneuver from the Sea	Marine Corps Combat Development Command	Well integrated, involved in test bed experiments	Same level of integration and roles as currently envisioned	Few constraints
<b>Coast Guard</b>	Initiatives, including Deepwater	Task force based, contractor assisted	Fully integrated	Fully integrated	Few constraints

**RECOMMENDATIONS**

The assessment team has three recommendations that are sensible and will improve the status of the RC in the transformation process and in the transformed force. We also believe these actions are important to the long-term success of transformation of the Total Force.

We suggest that completion of the assessment be announced and that a copy of it be provided to each of the services, the Joint Staff, and JFCOM. The intent of the Assistant Secretary of Defense for Reserve Affairs to take an active role in monitoring and supporting the services' individual and collective transformation activities should be made clear. It is important to establish a primary action office within the Office of the Assistant Secretary of Defense for Reserve Affairs to monitor and coordinate transformation actions, to include participation in the execution of the JIMP. We further recommend that the Deputy Assistant Secretary for Readiness, Training and Mobilization continue in this role for the immediate future.



AAN	Army After Next
AC	Active component
ADO	Army Digitization Office
AEF	Aerospace Expeditionary Force
AWE	advanced warfighting experiments
CDS	Combat Development System
CINC	commander in chief
CROP	common relevant operational picture
CSA	Chief of Staff of the Army
DCSOPS	Deputy Chief of Staff for Operations and Plans
DOD	Department of Defense
DOTMLPF	doctrine, organization, training, materiel, leadership and education, people, and facilities
EAF	Expeditionary Aerospace Force
ELB	Extending the Littoral Battlespace
IPT	integrated product team
IWAR	Integrated Warfare Architectures
JFCOM	Joint Forces Command
JIMP	joint implementation master plan
NMS	national military strategy
NSS	national security strategy
RBA	revolution in business affairs
RC	Reserve component
RDO	rapid decisive operations
RMA	revolution in military affairs
UACV	unmanned aerial combat vehicles
UAV	unmanned aerial vehicles
WRAP	Warfighting Rapid Acquisition Program





