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Future Joint Operations

Bridging the Gap Between Concepts and Doctrine

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Preface

This Joint Warfighting Center (JWFC) Pamphlet for Future Joint Operations (PFJO) supports the transformation objectives and responsibilities described in United States Joint Forces Command (USJFCOM) publication Toward Transformation 2001.

The primary purpose of the PFJO and supporting work is to facilitate changes to joint doctrine based on the good ideas and other results that emerge from the Joint Experimentation (JE) program and other transformation initiatives. An important secondary purpose is to periodically summarize concepts and experimentation objectives for participants in key events such as Exercise MILLENNIUM CHALLENGE 2002 (MC 02). This version of the PFJO provides the philosophy for accomplishing these purposes as we approach MC 02.

Success in this endeavor will require a close working relationship with the JE Program and awareness of Joint Staff, combatant command, and Service conceptual efforts and other transformation-related initiatives. We must also determine a process and organization of supporting documents that will capture, assess, compare, and integrate key ideas that could improve joint doctrine in the near term. We currently envision a subordinate set of JWFC pamphlets, as described in Section IV, that will help stimulate discussion of emerging doctrinal issues in the joint community.

Although this pamphlet summarizes some of the concept elements contained in USJFCOM's joint experimentation concepts such as Rapid Decisive Operations (RDO), readers should refer to the approved RDO integrating concept (version 2.0), the Joint Force Headquarters (JFHQ) Concept of Employment for MC 02, and other relevant concept papers for details. Readers can review current versions of these papers on the USJFCOM Joint Experimentation Directorate (J-9) unclassified website [www.je.jfcom.mil](http://www.je.jfcom.mil). Access the "J-9 Web Portal" and sign up for an account; then enter the "Concept Development" knowledge community.

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"Transforming America's defense for the 21st century will require a long-
standing commitment from our country and its leaders. Transformation
is not a goal for tomorrow, but an endeavor that must be embraced in
earnest today. The challenges the Nation faces do not loom in the
distant future, but are here now."

Donald H. Rumsfeld
Secretary of Defense
Quadrennial Defense Review Report 2001
Section I — Transformation

The Role of the Pamphlet for Future Joint Operations

The Pamphlet for Future Joint Operations (PFJO) supports the transformation objectives and responsibilities described in US Joint Forces Command publication Toward Transformation 2001 by strengthening the relationship between joint concepts and doctrine. Specifically, the PFJO will serve as a bridge between concepts and doctrine by examining the potential near-term impact of Joint Experimentation (JE) Program products and other transformation initiatives on joint doctrine.

The conceptual basis for this PFJO resides currently in the Rapid Decisive Operations (RDO) integrating concept and the functional concepts that comprise USJFCOM’s JE Program for RDO. The RDO overview provided in Section II is consistent with the 31 Jan 02 RDO White Paper. However, the PFJO eventually will describe new or different conceptual constructs when considering how to apply RDO ideas and experimentation results to current doctrine.

The PFJO is a “living” document. JWFC will refine it between major experiments, as JE Program concepts progress through the concept development life cycle, and as other transformation initiatives mature. The knowledge gained from experiments and other assessment events will be considered through the doctrine lens to identify near-, mid-, and long-term doctrine implications. We intend to focus on JE results that have the greatest potential to quickly improve joint doctrine.

The remainder of Section I will touch on USJFCOM’s transformation philosophy and how the doctrine development process can help support the transformation effort. Section II summarizes the key concept elements contained in the RDO concept white paper. Section III discusses MILLENIUM CHALLENGE 2002 (MC 02) as the next...
Transforming for the Future

To transform means to change the nature, function, or condition of something or to markedly alter its appearance or form. To transform the way our Armed Forces fight requires a significantly improved level of interoperability and synergy in seven key areas: doctrine; organization; training; materiel; leadership and education; personnel; and facilities (DOTMLPF). The goal is to develop the full set of DOTMLPF capabilities that best accomplish operational requirements projected for the middle of the next decade and achieve Joint Vision (JV) 2020’s “full spectrum dominance.” The PFJO will focus on the doctrine component of the DOTMLPF model.

Our military has been moving in recent years from the Cold War threat-based approach to force structure to a concept of capabilities-based transformation. This reflects the fact that we cannot predict with confidence what nation, combination of nations, or non-state actors will pose threats to United States’ interests or those of our friends and allies a decade from now. We can, however, anticipate the capabilities an adversary could employ to coerce its neighbors or to deter the United States from assisting its friends and allies.

A number of established programs and new initiatives contribute to the transformation process. Established efforts include the Joint Vision Implementation Master Plan, the USJFCOM JE Program, and the CJCS Requirements Generation System. Other Joint Staff initiatives include the Joint Operational Architecture effort (begun in spring 1996), the Joint Operational Framework (a recent initiative of the Joint Requirements Oversight Council), and concept development efforts by the Joint Warfighting Capabilities Assessment Panels in the areas of dominant maneuver, precision engagement, and command and control. Understanding the relationships between these initiatives will facilitate the efforts between the various organizations that have transformation responsibilities.

4 Chairman of the Joint Chiefs of Staff, Joint Vision 2020, June 2000, p. 34.
Joint Vision 2020

Joint Vision 2020 builds upon and extends the conceptual template established by JV 2010 to guide the continuing transformation of America's Armed Forces. The primary purpose of those forces has been and will continue to be to fight and win the Nation's wars. The goal of the transformation described in the Vision is the creation of a force that is dominant across the full range of military operations—“...persuasive in peace, decisive in war, preeminent in any form of conflict.”

Joint Vision 2020 confirms the direction of the ongoing transformation of operational capabilities and emphasizes the importance of further experimentation, exercises, analysis, and conceptual thought, especially in the arenas of information operations, joint command and control, and multinational and interagency operations. The Vision recognizes the importance of technology and technical innovation to US military operations. At the same time, it emphasizes that technological innovation must be accompanied by intellectual innovation leading to changes in organizations and doctrine. Only then can we reach the full potential of the joint force—decisive capabilities across the range of military operations.

The Vision is centered on the joint force in 2020, a date that defines a general analytical focus rather than a definitive estimate or deadline. JV 2020 provides a vector for the continuing evolution of the joint force and the wide-ranging program of exercises and experimentation being conducted by the Services, US Joint Forces Command, and other combatant commands. Based on the Joint Vision Implementation Master Plan, many capabilities will be operational well before 2020, while others will continue to be explored and developed through exercises and experimentation.

Toward Transformation 2001

Transformation is USJFCOM's main effort, with a focus on implementing the concepts and capabilities described in JV 2020. This effort requires balancing today's tasks with tomorrow's anticipated requirements. As the chief advocate for jointness, USJFCOM maximizes the Nation's future and present military capabilities by developing joint concepts; conducting experiments; recommending joint requirements; advancing interoperability; conducting joint training; and providing ready CONUS-based forces and capabilities to support other combatant commanders and domestic requirements. A solid foundation of joint doctrine underpins these critical tasks.

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5 Ibid, p. 36
6 Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3010.02A, Joint Vision Implementation Master Plan (JIMP), 15 April 2001. The JIMP provides policy and guidance and defines a process that will translate emerging joint operational concepts and associated DOTMLPF recommendations into joint warfighting capabilities. The Joint Staff J7 is proponent for the JIMP.
USJFCOM’s *Toward Transformation 2001* summarizes the Command’s transformation responsibilities and approach to future change. The publication covers key elements of the RDO integrating concept and establishes the following broad transformation objectives that will help the Armed Forces of the United States implement JV 2020:

- **Near-term**: Selected elements of our Armed Forces develop and demonstrate capabilities needed to execute RDO by 2005.
- **Mid-term**: Selected elements of our Armed Forces gain threshold JV 2020 capabilities by 2010.
- **Long-term**: Our Armed Forces achieve full spectrum dominance as described in JV 2020 by 2020.

USJFCOM’s *Command Transformation Strategy*, currently in draft, will describe specific goals, objectives, and responsibilities associated with our transformation activities. The PFJO supports the Command’s goals and objectives by introducing a process to efficiently migrate good ideas and lessons learned that emerge from concept development, experimentation, and other initiatives into joint doctrine, with a specific focus on developing near-term RDO capabilities by 2005.

## Doctrine and Transformation

Arguably, changing our doctrine—how we fight—is the most fundamental way we can change our military institution. Joint doctrine is not resident just in the set of approved joint doctrine publications. More loosely interpreted, doctrine is also what we teach about joint operations in Service and joint professional military education (JPME) and our joint training programs. As a vehicle to help change doctrine, the PFJO can stimulate discussion of emerging doctrinal issues in JPME programs.

> "The joint doctrine development process provides the conceptual basis by which Armed Forces assess, review, and revise doctrine and concepts for the future." — Joint Pub 1

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7 Commander in Chief US Joint Forces Command publication *Toward Transformation 2001*, May 2001, describes USJFCOM's mission, the CINC's vision, and the approach to transformation. It can be viewed on the USJFCOM “Knowledge Today” classified web site (http://157.224.120.250/) by clicking the following in sequence: “Staff Functions”; “Strategic Planning”; and “Strategic Transformation Book”.

8 US Joint Forces Command publication *Command Transformation Strategy 2001*, currently in draft, describes the outcome, goals, objectives, and responsibilities associated with USJFCOM's transformation activities.

9 For the purpose of this discussion, the term "doctrine" is meant to include the "tactics, techniques, and procedures" pubs as well as the "above-the-line" pubs like JP 3-0, *Doctrine for Joint Operations*. 

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Figure 1 shows the current “above-the-line” publications in the joint doctrine hierarchy. These include the “capstone” pubs (JP 1 and JP 0-2), the “keystone” pubs (JP 1-0 through 6-0), and other selected joint doctrine pubs. Good ideas and lessons learned that emerge from concept development could affect any publication in the hierarchy.

![Joint Doctrine Hierarchy Diagram]

For example, the examination of “effects-based planning,” “operational net assessment,” and other RDO constructs (see Section II) could impact on several joint doctrine pubs sooner rather than later. Likewise, intuitively beneficial command and control concepts and technology enhancements could have a near-term impact on pubs such as JP 2-0, JP 3-0, and JP 5-00.2 (Joint Task Force Planning Guidance and Procedures). The PFJO and supporting pamphlets will explore these and other conceptual issues to assess the potential impact on joint doctrine.

Approved joint doctrine pubs embody concepts for operating with extant capabilities. We also can write near-term concepts that use current capabilities in new and innovative ways not described in joint doctrine. Once validated, these concepts could result in faster changes to current doctrine pubs through an enhanced doctrine development process.

"To develop anything, the underlying thought and reason must govern, and then the organization must be built up to meet it."

Brigadier General Billy Mitchell

From a JV 2020 perspective, concepts should typically focus on new ways and means with which the joint force commander (JFC) can meet operational challenges of

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[10] There are an additional 102 “below-the-line” joint doctrine and TTP publications in the hierarchy.
the next decade (mid-term concepts) using advanced technologies and capabilities, many of which are not yet developed. Such concepts require concept developers to project the nature of the environment 10-20 years in the future and describe the advanced DOTMLPF capabilities required to operate successfully in that environment. However, this process of forecasting the future often uncovers ideas that can change the ways joint forces organize for operations and employ current capabilities—ideas that can have an immediate impact on established doctrine. **There should be a close relationship between the concept and doctrine development processes.**

**Concept Assessment and Refinement**

USJFCOM uses a variety of activities to assess the utility of joint concepts. These include discussion-focused workshops; empirically based activities such as limited objective experiments (LOE), advanced concept technology demonstrations (ACTD), and simulations; and large events such as wargames and exercises that could combine several types of assessment means. Examples of large events include the summer 2000 *RDO* Wargame, UNIFIED VISION 2001 (UV 01, conducted May 2001), and MC 02 (scheduled for Jul-Aug 2002). Concept developers use results of these events to refine their concepts and to identify potential DOTMLPF changes. Joint experimentation is the primary way that USJFCOM investigates integrated joint concepts in events such as MC 02. However, other USJFCOM essential tasks—such as joint force training, requirements determination, and development of interoperability solutions—reach out in conjunction with experimentation to link to the major programs and processes by which the military will transform during the next 20 years.
Section II — The RDO Concept

USJFCOM investigated the RDO concept and supporting functional concepts in a series of events during the past two years. The last major event was UV 01 (Apr-May 01). This was a four-week, concept-refinement experiment that featured a pre-crisis, experimental, theater-strategic, collaborative planning process followed by the formation of a functionally integrated JTF headquarters that conducted combat operations in a small-scale contingency. The next major event, MC 02, will continue the investigation. This section highlights RDO and key concept elements that MC 02 will examine.

An RDO Overview

While the RDO integrating concept focuses on a high-end, small-scale contingency, many RDO constructs such as effects-based planning (EBP) and operational net assessment (ONA) are relevant to other missions along the range of operations as well. Although the following section provides a recap of RDO constructs—the basis for MC 02 experimentation objectives—the reader should consider these ideas with a broader perspective. The information in this section is consistent with the 31 Jan 02 RDO draft version 2.0 White Paper and will be revised as the RDO concept is refined.

RDO Concept Description

The RDO concept presents a model for combat operations in which we, not our opponent, dictate the terms of the fight. The intent is to assault the adversary asymmetrically with our significant military capabilities, in conjunction with other instruments of national power, to preclude the opponent’s options and seize the operational and strategic initiative. We will deny him the opportunity to achieve objectives, and generate in the opponent a sense of inevitable failure and defeat.

Adaptive Adversaries: The Compelling Challenge

How do we, in a matter of days, project sufficient national power across global distances and coerce, compel, or defeat a capable regional power that could have—

- A “home field” advantage
- High-technology weapons systems
- Localized, numerically superior conventional forces
- Modern anti-access capabilities
- Asymmetric ways and means including weapons of mass effects, information operations to attack our national and coalition will, and concurrent terrorist attacks against our homeland.
- Tolerance for military and civilian casualties
The broad concept of RDO is based on two interrelated phases. The first is deliberate and continuous preparation, focusing on development of detailed, pre-crisis knowledge about the adversary, contingency planning for combat operations, and execution of the CINC’s theater engagement plan. At national- and theater-strategic levels, the United States will attempt to influence and deter an adversary by using diplomatic, information, and economic instruments of national power, supported by relevant military flexible deterrent options. If deterrence fails, RDO provide the capability to rapidly and decisively coerce, compel, or defeat the adversary to accomplish our strategic objectives without a lengthy campaign or an extensive buildup of forces. Actions in this phase are enabled by ONA and other prehostility actions, many of which continue from the previous phase.11

What makes RDO rapid? The goal of RDO is to accomplish the objectives of the campaign with speed and timing that is superior, absolutely and relatively, to the speed of the adversary. This concept suggests several enabling capabilities:

- **Knowledge**: detailed understanding of the adversary and ourselves
- An established joint headquarters element with a ready, responsive joint command and control (C2) system
- An early start to planning; timely decisions
- A compressed decision process
- Forward presence and rapid movement
- Tailored forces and sustainment
- Intense high tempo of operations

What makes RDO decisive? To be decisive, we want to impose our will on the adversary by breaking his coherence and defeating his will and ability to fight. Enabling capabilities include—

- **Knowledge**: identify and affect what is most valuable to the adversary
- An effects-based planning and execution process
- Information superiority, dominant maneuver, and precision engagement to apply synchronized precision effects to generate overwhelming shock
- Responsive C2 systems and shortened response cycle
- Relentlessness

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11 This “influence, deter, coerce, compel, defeat, transition” structure is different from—and starts earlier than—the current operational phasing described in Joint Pub 3-0, page III-18 which refers to “deter/engage, seize initiative, decisive operations, and transition.”
RDO Concept Elements

The RDO concept currently discusses its concepts and ideas under three major categories: knowledge, C2, and operations. These concepts embody the four characteristics of future operations—"knowledge-centric," "coherently joint," "fully networked," and "effects-based."

Decision makers, enabled by study, judgment, and experience, convert information into knowledge and situational understanding. These are the keys to decision superiority—the ability to make better decisions faster than the adversary. Knowledge-centric operations postulate that the more knowledge we can create and share about the adversary, the operational environment, and ourselves, the more we can focus our capabilities to produce desired effects with less risk of unintended consequences and more efficient expenditure of national resources. Knowledge reduces uncertainty, facilitates deployment of precisely tailored capabilities, and enables increased speed and decisive action. The RDO concept discusses three important constructs in the "knowledge" category.

- **Operational Net Assessment (ONA)**—a process that uses a coherent knowledge base to link national objectives and power to apply integrated diplomatic, information, military, and economic (DIME) options that influence an adversary’s perceptions, decision making, and elements of will.

- The **Common Relevant Operational Picture (CROP)**—a presentation of timely, fused, accurate, assured, and relevant information that can be tailored to meet the operational requirements of the joint force. The information is common to every organization and individual involved in a joint operation. The CROP, in concert with a robust collaborative planning environment, enables the joint force to achieve the high level of situational understanding necessary for RDO.

- **Joint Intelligence, Surveillance, and Reconnaissance (JISR)** uses a networked approach to the management of JISR assets that integrates data from multiple sources into a fused information picture to support the quick-paced demands of effects-based operations. A system-of-systems architecture will enable the JISR and multinational intelligence communities to be fully integrated into operational planning and will allow dynamic control of sensors and platforms.

What we actually do with a knowledge advantage is key to success. **Adaptive joint command and control (AJC2)** takes advantage of information technologies and capabilities provided by the CROP and the knowledge gained through ONA and JISR. The JFC synchronizes activities in time, space, and purpose, acting to achieve the desired effects that support planned objectives. Expanding that process to include relevant
agencies and multinational collaboration considerations involves changes to both planning and execution. A key AJC2 construct is the **Standing Joint Command and Control Element (SJC2E)**, comprised of 50 or more people under the daily control of a dedicated flag officer. This group would be assigned to a geographic CINC and embedded in his staff. **Joint interactive planning** enables a transition from hierarchical serial planning to parallel collaborative planning so as to reduce decision cycle times and increase tempo. A refined collaboration process between the military and other agencies will enable the coordinated application of all instruments of national power. **Multinational operations** present special challenges and benefits to **RDO**. Our multinational partners can provide key assets, legitimacy, and political support that enable **RDO**.

**Operations** is the third major **RDO** concept category. It has two major components: the **application of military power** and **operational enablers**. Using the military instrument of national power at the operational level requires the integration of **dominant maneuver (DM)**, **precision engagement (PE)**, and **information operations (IO)**. Military operations are also supported by an interrelated set of operational enablers that includes concepts and processes for **assured access**, **rapid force deployment**, **agile sustainment operations**, and **full-dimensional protection**.

At the operational level, the United States will combine and balance its military capabilities of DM, PE, and IO in conjunction with other instruments of national power to produce the desired effects to achieve strategic objectives. Each capability will be integrated with the others to create opportunities and reinforce the impact on adversary critical vulnerabilities. It is by applying this comprehensive arsenal of capabilities in an integrated fashion against critical vulnerabilities that operations will be decisive more rapidly than before.

**RDO** identifies four operational enablers: **Assured Access**; **Rapid Force Deployment**; **Agile Sustainment Operations**; and **Full-dimensional Protection**.

- **Assured Access** is the ability to set battlespace conditions necessary to bring the joint force within operational reach of critical vulnerabilities that lead to an adversary’s center(s) of gravity. The joint force requires dimensional superiority only for the duration and at locations required to support mission accomplishment. Operations to ensure this include building strong alliances to isolate the adversary, achieving “temporal” dimensional superiority, and gaining and maintaining access (diplomatic, informational, and geographic).

- **Rapid force deployment** is the basis for rapid power projection. The focus is not just on rapidly deploying forces, but rather how to rapidly project sufficient combat power to support the JFC’s concept of operations. Execution of the joint deployment process in support of **RDO** will be less linear. Joint deployment concepts supporting **RDO** must enable the introduction of joint forces directly into the operational area ready for combat. The future Joint
Operation Planning and Execution System (JOPES) must provide joint force planners the capability to access current force readiness and deployment data, package that information for use during deployment planning and execution, track the movement of relative combat power, and manage change during mission execution.

- **Agile sustainment operations.** Operational sustainment of RDO forces hinges on the ability to support them in noncontiguous operational areas. Joint operations will be effectively and efficiently sustained through distributed, transportation-based, globally networked, and reachback-supported logistic capabilities. This concept envisions distributed basing, both afloat and ashore, using direct delivery of mission-configured loads to sustain distributed forces throughout the battlespace. Intermediate staging and support bases could be used as necessary to support the generation of desired effects. These bases would exist only as long as required to support a particular joint action. Joint total asset visibility systems will permit greater precision and efficiency in sustainment operations. Sustainment information will be included in the CROP.

- **Full-dimensional protection (FDP)** exists when the joint force can achieve a decisive outcome with an acceptable degree of risk. Considerations for protecting the force must extend beyond the immediate battlespace. Our military forces must be able to conduct decisive operations despite our adversaries’ use of a wide range of capabilities, including IO and terrorist attacks, or the presence of asymmetric threats during any phase of these operations. FDP incorporates a complete array of combat and noncombat actions, including IO, in offensive and defensive operations.

### Supporting Functional Concepts

A number of functional concepts provide the additional detail required so that MC02 can examine key RDO constructs. The documents listed below should be available on the Joint Experimentation unclassified website (see the PFJO Preface for access instructions). The Concept White Papers are typically generic in nature, while the more detailed concepts of operations (CONOPS) and tactics, techniques, and procedures (TTP) documents are specifically for MC 02 execution. MC 02 training will be based largely on these CONOPS and TTP documents.

- **Operational Net Assessment.** A Concept White Paper, CONOPS, and TTP.

- **Effects-based Operations (EBO).** An EBO Concept White Paper, an Effects-based Planning and Assessment CONOPS, and separate TTP for both Effects-based Planning (EBP) and Effects-based Assessment.
• **Joint Interactive Planning (JIP).** A Concept White Paper and JIP CONOPS. There is a close relationship between JIP and EBP.

• **Collaborative Information Environment (CIE).** The CIE CONOPS document links the CROP and JIP and relates closely to the SJFHQ concept.

• **Standing Joint Force Headquarters.** An SJFHQ CONOPS, a JTF Information Management Plan, and an Experimental Standing Joint Command & Control Element (ESJC2E) TTP for the Information & Knowledge Management Team (for MC 02, the terms SJFHQ and ESJC2E might be used interchangeably). An extensive SOP for the JTF headquarters is also under development for MC 02. **Appendix A** provides an expanded discussion of the SJFHQ.
Section III — MILLENNIUM CHALLENGE 2002

Exercise MILLENNIUM CHALLENGE 2002—the premier joint experiment for 2002—is next in a series of large-scale events that continue to examine and refine key elements of the RDO concept. Conducted by USJFCOM, MC 02 is a joint, computer-assisted field exercise with embedded joint and Service experimentation. It is both a live and virtual field event, and is the culminating point for assessing how we can conduct RDO in this decade. USJFCOM will conduct MC 02 in the Western Ranges of the United States. The event will incorporate lessons learned and implications from UV 01 and will examine our ability to conduct an RDO in the 2007 time frame using current (2002) forces and capabilities.

Since the RDO concept provides the conceptual basis for experiments and events such as MC 02, USJFCOM established an RDO experimentation hypothesis for MC 02. Additional detailed hypotheses will be developed for specific events. For example, the text box on the next page contains the MC 02-specific experimentation hypothesis and broad objectives. Objectives of any event that investigates RDO should link back to the fundamental RDO experimentation hypothesis. The RDO hypothesis could be revised between events and in future versions of the white paper.

MC 02 Overview

The purpose of MC 02 is to: refine the RDO concept; develop precise, actionable DOTMLPF recommendations; and refine the goals, objectives, and way ahead for OLYMPIC PATH and PINNACLE PATH series of experiments12 and other transformation events. There are separate objectives associated with both the exercise and the experiment. MC 02 will incorporate all military Services and special operations forces that will participate with elements representative of their future force concepts such as the Air Force's Aerospace Expeditionary Force and the Army's Brigade Combat Teams. The XVIII Airborne Corps headquarters will function as the joint force headquarters. Anticipated deliverables for MC 02 include the following:

- An assessment of a standing core headquarters concept for JTF planning and execution.
- An understanding of reach-back mechanics and collaborative tools and processes.

12 OLYMPIC PATH (FY02 – FY04) is dedicated to implementing the SJFHQ. The PINNACLE PATH (FY02 – FY05) focuses on RDO in the next decade.
• An assessment of the role and process of ONA.
• An assessment of EBO as a process.
• Doctrine recommendations that that enhance a CINC’s ability to engage and respond to regional contingencies.

USJFCOM developed a number of warfighting challenges to be examined under each of the five experiment objectives. These challenges help specify what the joint force needs to be able to demonstrate in MC 02 to accomplish each of the experiment objectives. These challenges also relate back to the various functional concepts mentioned in Section II. The MC 02 Experiment Analysis Plan further divides the challenges into tasks and subtasks to support detailed concept assessment.

**MC 02 Exercise Objectives**

- Demonstrate potential linkage of Western Ranges to show feasibility for the purposes of joint training and experimentation.
- Demonstrate integration of live and simulated actions in an environment that feeds situational awareness at the operational level.
- Look for DOTMLPF recommendations that provide near-term improvements to joint operations.
- Provide a joint environment at the operational level that facilitates experimentation and is OPTEMPO efficient.
- Develop goals and objectives for future USJFCOM transformation events.

**MC 02 Experiment Hypothesis**

**IF** an enhanced joint force headquarters is informed by an ONA and employs EBO which utilize the full range of our national capabilities, **THEN** the 2007 joint force will be able to conduct RDO against a determined 2007 adversary.

**MC 02 Experiment Objectives**

Assess the capability of the joint force to—
- Establish and maintain knowledge superiority.
- Set the conditions for decisive operations by seizing and exploiting the initiative, posturing the joint force, establishing the nature of the operation, and shaping the environment,
- Assure access into and through the battlespace to provide sufficient freedom of action,
- Conduct effects-based operations, and
- Sustain itself, specifically to deliver sustainment to combat units in synchronized non-contiguous operations,

_in order to execute a Rapid Decisive Operation in this decade._

**MC 02 Exercise Objectives**

- Demonstrate potential linkage of Western Ranges to show feasibility for the purposes of joint training and experimentation.
- Demonstrate integration of live and simulated actions in an environment that feeds situational awareness at the operational level.
- Look for DOTMLPF recommendations that provide near-term improvements to joint operations.
- Provide a joint environment at the operational level that facilitates experimentation and is OPTEMPO efficient.
- Develop goals and objectives for future USJFCOM transformation events.

**Experiment Objective 1.** Establish and maintain knowledge superiority.

*Warfighting Challenges:*

- Establish a valid Common Operational Picture (COP) and CROP
- Maintain collaborative capabilities
- Achieve cohesive operations quickly
- Synchronize the Joint Intelligence Preparation of the Battle Space process with the ONA process
- Integrate planning, approval and execution of IO into EBO

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**Notes:**

13 USJFCOM publication *USJFCOM Experiment Analysis Plan (Draft)*, 14 December 2001, p. 2. This plan addresses the intent, scope, concept, and methodology for analysis of concepts during MC 02. It is available at [www.je.jfcom.mil](http://www.je.jfcom.mil) in the **MC 02 Analysis** room of the Experimentation Department.
• **Experiment Objective 2.** Rapidly set the conditions for decisive operations.

  **Warfighting Challenges:**
  - Establish advantageous positions for decisive operations
  - Protect joint force vulnerability to disruption, especially ISR and logistics infrastructure
  - Integrate EBO into the current joint planning process

• **Experiment Objective 3.** Assure access into and through the battlespace.

  **Warfighting Challenges:**
  - Provide selective dimensional superiority
  - Establish operational reach
  - Provide force protection

• **Experiment Objective 4.** Conduct decisive EBO.

  **Warfighting Challenges:**
  - Develop extensive understanding of adversary’s total warmaking capability to conduct EBO
  - Integrate full joint capabilities against tactical level objectives
  - Synchronize the application of the full range of joint capabilities to engage decisive points in time and space

• **Experiment Objective 5.** Sustain itself, specifically to deliver sustainment to combat units in synchronized non-contiguous operations.

  **Warfighting Challenge:**
  - Provide agile sustainment

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**The MC 02 Adversary**

MILLENIUM CHALLENGE 2002 will focus on joint operations in the 2007 time frame in a high-end SSC, with potential escalation to major theater war. The adversary is a country (or major faction in a country) that has seized islands belonging to a neighboring nation in a waterway that borders both. This occurs in a region with a complex ethnic and political landscape—a region that will challenge US forces in terms of both geographic access and supporting infrastructure. In addition to creating a regional crisis, the adversary interrupts international shipments of oil and other shipping, exacerbating existing world economic problems. The adversary possesses weapons of mass effects (WME) that it has threatened to use against surrounding countries to prevent them from supporting international efforts to reopen the waterway. **The joint**
force’s mission will be to prevent employment of WME, defeat the adversary’s offensive capabilities, restore pre-hostility territorial integrity, and re-establish regional security and freedom of navigation.

**Follow-on Events**

Recommendations for change will continue to be developed through a process that examines objectives, issues, and questions and matches them with a set of experiments. Additional major joint integrating experiments are planned. While MC 02 focuses on how we might conduct RDO in this decade, other experiments in the OLYMPIC PATH series will investigate the ability to conduct an RDO in the next decade. The OLYMPIC VISION series will further refine functional concept elements and associated DOTMLPF change recommendation packages.
Section IV — Linking Concepts and Doctrine

Responsive changes to joint doctrine based on JE Program products require a close working relationship between the concept development and doctrine development functions and processes. Several areas of interaction can promote this relationship, although available resources will determine the level of involvement. Figure 2 generally reflects various potential interactions between JWFC’s doctrine subject matter experts (SME) and the JE Program to expedite changes to joint doctrine.

The Joint Vision implementation process (see footnote 6) provides for disciplined development, analysis, and co-evolution of DOTMLPF capabilities. The PFJO will consider how we might supplement this process by finding ways to accelerate the migration of good ideas into joint doctrine. This involves analysis of candidate ideas and preparation of joint doctrine proposals by JWFC in accordance with JP 1-01, Joint Doctrine Development System. For example, JWFC could develop joint doctrine...
proposals for those potential doctrine changes that Commander in Chief USJFCOM recommends in a DOTMLPF change package. Doctrine SMEs will also attempt to identify other potential beneficial changes to joint doctrine that could emerge from concept development and experimentation results. These would be analyzed and submitted— independent of the formal DOTMLPF change process— as joint doctrine proposals. They could even be included as recommended changes to an existing pub that is undergoing formal assessment, thus expediting the refinement of joint doctrine.

Over time, the PFJO will identify ideas from the JE Program and other initiatives for potential near-term application to joint doctrine. We intend to capture, assess, compare, and integrate these ideas in a series of JWFC pamphlets. We will base the pamphlets on five broad categories that correspond to the key constructs in JV 2020 and a “Capstone” category that captures overarching constructs. For example, the Information Superiority category is a logical “basket” for ideas related to ONA, CROP, JISR, and IO. Any of the MC 02 Warfighting Challenges described in Section III (and their subordinate tasks) can be considered in one or more of these idea categories. These categories also relate closely to the primary operational-level tasks in Version 4.0 of the Universal Joint Task List (UJTL), thus linking JV 2020 constructs, UJTL tasks, and current joint doctrine. Additional JWFC pamphlets will analyze specific ideas for their potential relevance to current joint doctrine. The results of this analysis could lead to a formal joint doctrine proposal. We will examine this strawman framework of pamphlets and associated processes in conjunction with MC 02 and describe our approach in more detail in a later version of the PFJO.

Since current doctrine describes joint operations with extant capabilities, we must view future-oriented concepts and other transformation ideas through the doctrine “lens” to determine if they are relevant and executable in today’s environment. Even a concept focused on 2015 and based on materiel capabilities not yet available can contain process and organizational constructs that could improve today’s operations. Likewise, a near-term concept, validated through experimentation, might be irrelevant to current doctrine if resource or policy decisions do not support the construct. As we seek viable joint doctrine proposals, the process of analyzing concepts for near-term applicability will likely require some “translation” or reframing of the ideas to accommodate current policy, resources, and other factors.

See Appendix B for an example of how we might apply one of the many RDO constructs to current joint doctrine.
Appendix A
The Standing Joint Force Headquarters

This appendix provides additional information on one of the key JE constructs—the Standing Joint Force Headquarters. In his Nov 01 JE guidance memo to USCINCJFCOM (footnote 1), the Chairman of the Joint Chiefs of Staff stated, “Your focus of effort will be on the development of a standing joint force headquarters model no later than the end of Fiscal Year (FY) 2004 and capable of implementation by all regional Commanders-in-Chief (CINCs) by FY05.” The discussion in this Appendix is taken primarily from the RDO concept and the SJFHQ Concept of Employment for MC 02 (17 Aug 01).

The Standing Joint Command and Control Element

By current design, the SJFHQ is not staffed in peacetime to be a fully functional operational headquarters without significant augmentation, mission specific “plugs,” and liaisons. Thus, the RDO concept focuses on a construct called the SJC2E. This element—a key component of RDO—is intended to provide each geographic CINC with a trained and equipped, in-place, joint C2 capability specifically organized to reduce the time required to establish a fully functional JTF headquarters. This enables continuity in planning and operations from peacetime through execution and transition due to the SJC2E’s understanding of potential crisis areas, its use of collaboration tools, and the in-place capability to integrate effects-based planning into a range of component and supporting headquarters.

The SJC2E is envisioned as a staff organization operating under direction of a flag officer. It is permanently staffed with joint personnel who collaboratively plan, prepare, and train with other CINC staff elements and designated component planning cells for specified contingencies within the CINC’s area of responsibility (AOR). The SJC2E develops standardized JTF procedures for ONA, EBP, and effects-based operations within the AOR. As a crisis develops, the SJC2E will shift rapidly and seamlessly from planning to execution.

The RDO White Paper envisions three possible options for SJC2E employment (Figure 3). The CINC’s selection depends on the scope of the contingency, scale of potential contingency response forces, and estimated duration of operations. During UV 01, the SJC2E organized and operated as in Case 1, with a CINC-assigned flag officer as the JFC and augmented to serve as the CINC’s forward operational JTF
command element. During MC 02, the SJC2E will organize and operate as shown in **Case 2**, providing specific “plugs” and augmentees to XVIII Airborne Corps to enable it to conduct and support EBO. The organization will facilitate the transition of the XVIII Airborne Corps from peacetime, operational Service-oriented headquarters to a JTF headquarters by providing the continuity in planning and operations required to support an RDO response to the experiment scenario. The experiment will exercise extensive reach-back capabilities in order to access fixed-base support as well as other resources. In **Case 3**, the CINC functions as the JFC. The SJC2E could remain as part of the CINC’s headquarters or could deploy as its forward element.

The CINC focuses the SJC2E on prioritized potential contingency areas within the AOR. Pre-crisis focus for these areas includes developing the information and knowledge necessary to prepare relevant contingency plans. This EBP takes the form of an ONA, with contingency plans (CONPLANs and OPLANs) as important products. The SJC2E staff is organized cross-functionally to facilitate CINC J5-led pre-crisis planning and preparation that sets the stage for early crisis identification and successful crisis response. It also provides an ability to more precisely focus the CINC’s theater engagement plan for these areas.

The SJC2E develops and maintains relationships with key enabling organizations that provide expertise in specific areas and specialties. These relationships are established through a network of collaboration early in the planning process and become the basis for expanding the SJC2E’s core capabilities as a crisis develops. A robust reach-back system maintains these relationships during deployment and
execution, reducing the need for a large forward C2 footprint. The SJC2E employs a collaborative information grid which links it to the CINC headquarters, JTF components, centers of excellence (COE), and various agencies, to provide the expertise required for a knowledge-centric, precise response to each contingency. By providing augmentation and “plugs” to XVIII Airborne Corps during MC 02, the SJC2E will use this same collaboration grid to enable the Corps to quickly adapt processes that support EBO.

The Joint Interagency Coordination Group

A JE supporting concept proposes the creation of a Joint Interagency Coordination Group—“JIACG,”—that provides the CINC a capability to collaborate effectively with other US government civilian departments and agencies. For experimentation purposes, the JIACG is an interagency staff group at the CINC’s headquarters that establishes regular, timely, and collaborative working relationships between civilian and military operational planners.

This CINC organization provides the JFC with a mechanism to represent military planning through the CINC to other agency campaign planning efforts, and to facilitate information sharing on diplomatic, informational and economic planning activities. The core JIACG staff is composed of a small number (10-12) of agency experts (both physical and virtual depending on the theater-unique requirements)—accredited to the CINC and lead by a senior Foreign Service Officer or NSC official—who have habitual relationships within the planning communities.

The JIACG—participates in CINC deliberate, crisis, and transition planning; presents civilian agency perspectives, approaches, capabilities, and limitations; provides habitual links to civilian agency planners; arranges interfaces on interagency activities; and conducts outreach to key civilian planners in the region. For ONA development and effects-based planning and execution, the JIACG provides the JFC with the links to synchronize JTF operations with efforts of other US government departments and agencies.

Conclusion

The SJC2E construct has significant potential to help USJFCOM accomplish the CJCS guidance on the Standing Joint Force Headquarters and to enable the joint community to realize the objective of conducting RDO in this decade. For more information on the SJC2E, see the RDO concept, the SJFHQ Concept of Employment, and the Experimental Standing Joint Command and Control Element (E-SJC2E) TTP for MC 02 (all located at www.je.jfcom.mil).

14 The “JIACG” construct is contained in the RDO concept and in the interagency concept white paper A Concept for Improving U.S. Interagency Operational Planning and Coordination, Version 1.0, January 2001. It is available at www.je.jfcom.mil.
Appendix B
The Changing Nature of Military Operations

Joint Vision 2020, concepts such as RDO, and the results of various concept assessment events help us understand how joint operations might change in the future. The RDO overview in Section II highlighted EBO, ONA, and other ideas that could transform the way a joint force operates in the next decade. If accepted and resourced, these ideas could enhance joint operations in the near term as well, though perhaps not to the same degree. As we examine these constructs with a near-term perspective, we will also consider the related ideas in other transformation initiatives such as the JWCA concept development efforts and the Joint Staff’s Joint Operational Framework initiative.

Section IV introduced the idea that we will view concepts and other ideas through a doctrine “lens” to help assess their potential near-term application to joint doctrine. This appendix provides an example of how we might consider the impact of one of the many RDO constructs on current joint doctrine. This example is for illustration only and has not yet been analyzed sufficiently to determine if it should be proposed as a change to current joint doctrine. The following discussion of “capstone characteristics” and “coherent joint operations” would fall into the “capstone” idea category mentioned in Section IV.

Potential Capstone Characteristics of Future Joint Operations

Although the RDO concept focuses on joint operations in a high-end SCC, continuing refinement of the concept has identified four key characteristics that could describe fundamental differences between today’s operations and those of the near future, across the full range of military operations. The RDO paper suggests that future operations will be coherently joint, knowledge-centric, effects-based, and fully networked.

Coherent Joint Operations, discussed later in this appendix, might eventually be considered as a potential capstone theme for future joint doctrine, much as Services often associate overarching themes with concepts and doctrine. The potential applicability of this theme to doctrine stems from a number of sources, including
“coherently joint,” one of the RDO concept’s capstone characteristics. In RDO, “coherently joint” suggests that key capabilities of future joint forces must be "born joint," with an early investment in developing Service and functional components that are fully interoperable from the start rather than continuing to struggle with incremental interoperability adjustments. Interoperability objectives and solutions should extend to other US agencies as well as considering enhancements that facilitate coordination and collaboration with potential coalition partners. “Coherently joint”—which focuses on interoperability—and Coherent Joint Operations are not synonymous.

Possession of superior knowledge could enable radical changes in future joint operations. The power of sophisticated future information systems will provide unprecedented knowledge and understanding of the adversary, our own forces, the environment, and the battlespace. This enhanced situational understanding will reduce operational risk, enable decision superiority, and dramatically increase the pace, coherence, and effectiveness of operations. This will help the JFC focus the joint force’s capabilities efficiently to produce desired effects. This does not imply that future operations will not be dangerous and intense, but knowledge-centric capabilities could enable us to get the job done with fewer forces than we have in the past.

An “effect” is the physical, functional, or psychological outcome, event, or consequence that results from specific military or non-military actions. Effects-based operations, as described in the RDO concept paper, focus on understanding the full range of direct and indirect effects that we can achieve by applying the right balance of our elements of national power against the adversary and designing the campaign accordingly.

Pervasive networking capabilities will encompass the full array of sensors, engagement assets, and C2 systems. This will greatly facilitate collaboration, decision-making, and real-time response to developing situations. Networking will also compress or eliminate many sequential and stovepiped processes, thus facilitating innovative organizational changes that could flatten echelons and shrink organizational footprints in the battlespace.

Coherent Joint Operations

With the Goldwater-Nichols Act, Congress intended that the military integrate individual Service capabilities into a more efficient joint team. In a 1996 Joint Forces Quarterly (JFQ) article, CINC US Atlantic Command (now USJFCOM) described his view of how joint operations have evolved from the “specialized” joint efforts of the

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early 1990s to today’s “synergistic” joint operations. Specialized joint operations (such as the 1990-91 Persian Gulf Conflict) employed a variety of sophisticated (but often redundant) Service capabilities with an effort to deconflict rather than integrate Service-operations. In synergistic joint operations (such as Operation JOINT ENDEAVOR in Bosnia, 1996), JFCs leverage a more developed base of common joint doctrine to orchestrate separate Service capabilities in mutually supporting operations toward common tactical objectives. The JFQ article suggested that joint operations should progress from synergistic to “coherent” as the next logical step in the evolution of joint warfare (Figure 4). **Coherent Joint Operations** could be a potential capstone framework and theme that might facilitate how we consider the impact of new ideas and capabilities on doctrine within the next five years. This framework derives primarily from two sources: the 1996 JFQ article and the ongoing RDO concept development that proposes “coherently joint” as a potential capstone characteristic of future operations.

At USJFCOM, our near-term efforts focus on the SJFHQ as a vehicle to help achieve **headquarters integration** of joint, interagency, and coalition capabilities in pursuit of JV 2020’s full spectrum dominance. This is a transitional step—roughly equivalent to “synergistic joint” in the JFQ article—toward the goal of a **transformed joint force** capable of coherently joint, fully integrated actions.16

In addition to the JFQ article, other sources have considered the notion of coherency in joint operations. For example, a 1995 National Defense University publication, *Dominant Battlespace Knowledge*, said that “coherent joint operations” can be viewed as approaching combat as a single process by an integrated joint force that has the ability to see, understand, adjust, and communicate better and faster than ever before.17

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16 Toward Transformation 2001, p. 29.
Consistent with the JFQ article, **Coherent Joint Operations** could be viewed to consist of fully integrated actions of joint forces at all levels that seamlessly integrate the natural battle rhythms and cycles of land, sea, air, and space operations in unified action to accomplish any mission across the range of military operations. **Three key components comprise this proposed description.**

First, future joint actions must be **fully integrated**. This does not mean that Services should sacrifice their core competencies, but that the joint community should develop a set of national military core competencies supported by relevant joint doctrine, fully interoperable systems, associated training and leader development programs, and a military culture shift that accommodates the enduring theme, "joint warfare is team warfare."  

Next, **Coherent Joint Operations** must assimilate the differences between natural battle rhythms and cycles of land, sea, air, and space operations. This recognizes that there are basic differences in the ways that military capabilities are employed in these four media. This becomes even more complex if we consider the electromagnetic spectrum as an operational medium. Finally, operations are conducted in the context of **unified action** to achieve common operational and tactical objectives. This recognizes that the joint force typically will operate with interagency and multinational partners, necessitating clear and effective command and control structures in an environment of consensus and compromise.  

Even in US unilateral operations, successful RDO likely will require the right combination of DIME elements of national power. This makes effective operations with other US agencies essential.

The example in this appendix—and others to be identified later—will be analyzed in supporting documents to determine their potential impact on current joint doctrine.

**Pamphlet for Future Joint Operations**

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18 Chairman of the Joint Chiefs of Staff, Joint Pub 1, p. III-4.

“History does not long entrust the care of freedom to the weak or the timid.”

President Dwight D. Eisenhower
Inaugural address, 20 January 1953